Appendix A

Dudek Environmental Technical Report

Environmental Evaluation of
Potential Alternatives

Ventura Compressor Station Modernization Project

MARCH 2022

Prepared for:

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APN	Assessor's Parcel Number
ATC	Authority to Construct
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CHRIS	California Historical Resources Information System
CHSC	California Health and Safety Code
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CY	cubic yards
dB	decibel
dBA	A-weighted decibel
FHSZ	fire hazard severity zone
GHG	greenhouse gas
HCWC	Habitat Connectivity and Wildlife Corridor
HFTD	High Fire-Threat District
L_{eq}	energy equivalent level
LRA	Local Responsibility Area
MLV	mainline valve
MT	metric tons
NRHP	National Register of Historic Places
NO_x	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
PM_{10}	coarse particulate matter
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SOAR	Save Open-Space and Agricultural Resources
SoCalGas	Southern California Gas Company
SRA	State Responsibility Area
USFWS	U.S. Fish and Wildlife Service
VCAPCD	Ventura County Air Pollution Control District

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1 Introduction

1.1 Project Background

Southern California Gas Company (SoCalGas) is the owner and operator of the existing Ventura Compressor Station, located at 1555 North Olive Street in the City of Ventura, California. SoCalGas has prepared a "Feasibility Study of Potential Alternatives – Ventura Compressor Station Modernization Project" (Feasibility Study; SoCalGas 2022), which evaluates the feasibility of potential alternative site locations and equipment configurations for the planned Ventura Compressor Station Modernization Project (Planned Project). The Feasibility Study addresses the operational needs of the integrated natural gas pipeline system. The existing Ventura Compressor Station Site (Existing Site) currently provides compression, powered by natural gas engine-driven compressors, to move natural gas within the existing pipeline system to customers both within the City of Ventura (the City) and north of the City along the Central Coast, to meet local distribution needs as well as supply the La Goleta Storage Field.

The Existing Site's compression equipment was installed in the 1980s. Due to changes to the operating environment of SoCalGas's integrated natural gas pipeline transmission system, the functionality of the existing 40-year-old equipment, the ability to maintain compression on existing pipelines, and the critical importance of maintaining adequate natural gas inventory in the La Goleta Storage Field, SoCalGas is proposing to modernize the Ventura Compressor Station. This modernization would include replacement of three existing natural gas compressors with four new natural gas compressors within a new compressor building and other associated improvements (i.e., the Planned Project).

1.2 Purpose of Evaluation

Dudek was retained by SoCalGas to prepare an environmental evaluation as part of the Feasibility Study of potential alternative site locations and equipment configurations to the Planned Project. Dudek is a 700-person national, multidisciplinary environmental and engineering firm founded in 1980 and is ranked as one of the top 120 U.S. Environmental Firms (Engineering News-Record 2021). This environmental evaluation is prepared in response to requests from the California Public Utility Commission (CPUC). The CPUC requested that SoCalGas prepare a feasibility study that: (1) fully analyzes all options considered for the compressor station upgrade; (2) provides the basis for rejecting any alternatives that were considered, including but not limited to electric compressors for all or part of the project; (3) discusses all alternative sites that were considered but rejected and SoCalGas's reasons for rejecting them; and (4) provides an explanation of how the project factors into both local and statewide safe and reliable service and the state's decarbonization goals.

The purpose of this evaluation is limited to the environmental considerations of the Planned Project, the alternative sites, and the two alternative technologies. The scoring criteria presented in Section 3.1 of this evaluation, as provided by SoCalGas, serve as the basis of the environmental evaluation. Dudek conducted a desktop environmental analysis based upon the Planned Project and alternative-related information provided by SoCalGas, which is based upon reasonable assumptions detailed within the Feasibility Study. No site visits were conducted and existing conditions at each site may vary slightly from what was analyzed. However, a good-faith effort was made to accurately assess the environmental considerations set forth in Section 3.1. SoCalGas' Feasibility Study considers several other criteria, such as purpose, need, and objectives of the compressor modernization project, essential site criteria, and cost and schedule considerations, which are outside the scope of Dudek's evaluation.

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2 Alternative Options

Alternatives to the Planned Project at the Ventura Compressor Station were developed including feedback from the community as part of SoCalGas's Town Hall meetings hosted in October 2021. All alternatives suggested by the community during the Town Hall meetings and comment period were considered as part of the Feasibility Study. All proposed alternatives were screened based on the ability of an alternative to meet the foundational purpose, need, and objectives of the Planned Project, as stated by SoCalGas in their Feasibility Study (see Section 1.2, Purpose of Evaluation). If an alternative met the foundational purpose, need and objectives, the alternative was carried forward for further consideration based on its ability to comply with SoCalGas's identified essential site criteria, including property acreage requirements, Federal Aviation Administration (FAA) compatibility, and avoidance of Federal Emergency Management Agency (FEMA) mapped floodways. A total of five sites, with two technology options at each site, qualified for further evaluation. A brief discussion of technology alternatives and each of the evaluated alternative sites is provided below and discussed in SoCalGas's Feasibility Study.

2.1 Technology Options

The two technology options described below were determined to meet SoCalGas's operational needs and comply with emissions thresholds, and therefore were evaluated at each potential site.

2.1.1 Natural Gas

The existing Ventura Compressor Station uses three natural gas compressors, each of which is rated at 1,100 horsepower (HP). The Natural Gas Option includes the use of only natural gas engine-driven compressor technology at each potential alternative location, including the Existing Site.[1] The Planned Project would include replacement of the three existing 1,100 HP natural gas engine-driven compressors (referred to in this evaluation as *natural gas compressors*) with new, more efficient equipment, consisting of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. The new compressors and infrastructure would meet all applicable regulatory requirements, including those associated with environmental, engineering, and safety standards. Other planned structures on the Existing Site include a new warehouse building, new office building, and stormwater infiltration basins. The Natural Gas Option at all of the evaluated alternative sites would include development of a facility similar to that described above for the Planned Project at the Existing Site. One variation is the County Line Site, which would require one additional compressor for the Natural Gas Option when compared to the other sites.

2.1.2 Hybrid (Natural Gas and Electric)

The Hybrid Option would require construction of new infrastructure, similar to the Natural Gas Option. However, instead of installing four natural gas compressors, the Hybrid Option would include two new 1,900 HP natural gas compressors and two new 1,900 HP electric motor-driven compressors (referred to in this evaluation as *electric compressors*) installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric

[1] The natural gas compressors are the same for all alternatives; only the technology of the driver is different. Either a natural gas engine or an electric motor may drive a compressor. For ease of reference in this evaluation, we are referring to the natural gas engine-driven compressors as *natural gas compressors* and the electric motor-driven compressors as *electric compressors*.

service capacity and therefore would require an on-site electrical substation for the Hybrid Option. The new compressors and infrastructure would meet regulatory requirements, including those associated with environmental, engineering, and safety standards. Other planned structures under consideration for each alternative site would include a new warehouse building, a new office building, and stormwater infiltration basins. The Hybrid Option at all the evaluated alternative sites would include development of the same on-site facilities, with the exception of the County Line Site, which would require one additional electric compressor for the Hybrid Option when compared to the other sites.

2.2 Alternative Sites

This section provides a brief overview of the five alternative sites that are evaluated in this analysis. For each alternative site, both natural gas and hybrid technologies are described below and evaluated in accordance with the methodology outlined in Section 3.2, Evaluation Methodology. For a detailed description of site characteristics at each location, please refer to the Feasibility Study prepared by SoCalGas and dated March 2022. Table 1 provides an overview of the alternative sites.

Table 1. Ventura Compressor Modernization Project Potential Alternative Sites

Alternative	Identified by	Land Use/ Zoning	Location
Option 1A: Existing Site – Natural Gas (Planned Project)	SoCalGas	Industry/M-2	Existing site of the current Ventura Compressor Station – Approximately 8.42 ac parcel located on the west side of the City of Ventura
Option 1B: Existing Site – Hybrid			
Option 2A: Avocado Site – Natural Gas	Community	Open Space/ AE–40 ac	Approximately 15.06 ac agricultural site located approximately 3,000 ft west of the existing Ventura Compressor Station, on privately held land currently developed with an avocado orchard within the County of Ventura
Option 2B: Avocado Site – Hybrid			
Option 3A: Ventura Steel – Natural Gas	SoCalGas	Industrial/M3–10,000 sf	Approximately 10.00 ac industrial site located approximately 8,000 ft north of the existing Ventura Compressor Station within the County of Ventura
Option 3B: Ventura Steel – Hybrid			
Option 4A: Devil's Canyon Road – Natural Gas	Community	Open Space/OS–160 ac/HCWC	Approximately 12.88 ac oil extraction site located approximately 6,000 ft to the north of the existing Ventura Compressor Station on the west side of SR-33 within the County of Ventura
Option 4B: Devil's Canyon Road – Hybrid			

Table 1. Ventura Compressor Modernization Project Potential Alternative Sites

Alternative	Identified by	Land Use/ Zoning	Location
Option 5A: County Line – Natural Gas	SoCalGas	Open Space/AE–40 ac	Approximately 12.33 ac vacant parcel of land designated and zoned for agriculture located within County of Ventura at the Santa Barbara County line approximately 12 mi northwest of the existing Ventura Compressor Station
Option 5B: County Line – Hybrid			

Notes: ac = acre; ft = feet; sf = square feet; HCWC = Habitat Connectivity and Wildlife Corridors overlay zone; SR = State Route; mi = miles.

2.2.1 Existing Site

The Existing Site is the location of the Planned Project. The Planned Project was developed by SoCalGas and consists of the existing approximately 8.42-acre compressor station site located within the City of Ventura (Figure 1, Project Location – Existing Site). The site is zoned for industrial purposes and owned by SoCalGas. Land use on site consists of a compressor station, which has been present since at least 1923 and has existed in its current configuration since the 1980s. The site is fully graded and developed and is connected to the existing natural gas pipeline system. An approximately 2.53-acre temporary construction staging area would be located adjacent to the west side of the Existing Site.

No road improvements, pipeline extensions, or other permanent off-site infrastructure would be necessary to construct the Planned Project (the Natural Gas Option) or the Hybrid Option on the Existing Site.

2.2.2 Avocado Site

This alternative, which was suggested by members of the public, consists of an approximately 15.06-acre site located approximately 3,000 feet west of the Existing Site on the existing pipeline corridor within the jurisdiction of the County of Ventura (the County; Figure 2, Project Location – Avocado Site). The surrounding area is primarily developed with agricultural uses and oil/gas fields, and the nearest residence is approximately 0.7 miles away. The Avocado Site itself is undeveloped hillside land adjacent to an avocado orchard.

Development of this site would require the following new off-site infrastructure: (1) widening, regrading, and paving of Taylor Ranch Road to be a minimum of 24 feet wide with less than a 20% grade to meet Fire Department standards; (2) approximately 0.18 miles of a new pipeline system with two mainline valves that would tie into the existing natural gas system pipelines; and (3) subterranean utility lines beneath the existing Taylor Ranch Road that would tie into existing facilities at West Main Street. An approximately 5.63-acre temporary construction staging area would be located at the base of Taylor Ranch Road and West Main Street. For the Hybrid Option, approximately 0.83 miles (including 30 new poles) of off-site aboveground electrical utility extensions would also be required.

2.2.3 Ventura Steel Site

This alternative was developed by SoCalGas and consists of an approximately 10.00-acre site located approximately 7,000 feet north of the Existing Site, to the east of North Ventura Avenue within County jurisdiction (also within the City's sphere of influence) (Figure 3, Project Location – Ventura Steel Site). This site is relatively flat and there are existing active oil wells on site.

Development of this site would require the following new off-site infrastructure: (1) approximately 1.61 miles of subterranean pipeline system beneath the alignment of North Ventura Avenue that would tie into the existing natural gas system pipelines; (2) approximately 3.16 miles of a subterranean pipeline system through oil/gas fields and undeveloped hillsides that would tie into the existing natural gas system pipelines using two mainline valves; (3) a 121-foot depressurization line; and (4) 3,600 linear feet of a new permanent 12-foot-wide road for construction access to the new pipeline corridor. The pipelines would be constructed in a phased process within North Ventura Avenue to minimize the extent of required lane closures, ensure adequate northbound–southbound traffic flow during roadway construction, and allow for adequate space between the new pipelines and existing utility lines. An approximately 4.69-acre temporary construction staging area would be located north of the Ventura Steel Site. For the Hybrid Option, approximately 0.02 miles of off-site aboveground electrical utility extensions (including 2 new poles) would also be required.

2.2.4 Devil's Canyon Road Site

This alternative was suggested by members of the public and consists of an approximately 12.88-acre site located approximately 5,300 feet northwest of the Existing Site within County jurisdiction (Figure 4, Project Location – Devil's Canyon Road Site). The site is relatively flat. It has been previously developed with oilfield operations and is currently partially occupied by oil wells.

Development of this site would require the following new off-site infrastructure: (1) approximately 0.97 miles of a subterranean pipeline system beneath Devil's Canyon Road that would tie into the existing natural gas system pipelines using two mainline valves and (2) minor upgrades to an approximately 0.36-mile-long existing access road to accommodate the project. An approximately 6.27-acre construction staging area would be located northwest of the intersection of Shell Road and Ventura River Trail, approximately 0.25 miles from the existing access road to the Devil's Canyon Road Site. For the Hybrid Option, approximately 0.85 miles of off-site aboveground electrical utility extensions (including 40 new poles) would also be required.

2.2.5 County Line Site

This alternative was developed by SoCalGas and consists of an approximately 12.33-acre site located within Ventura County at the Santa Barbara County line. This site is approximately 11 miles northwest of the Existing Site, generally on the existing natural gas pipeline corridor (Figure 5, Project Location – County Line Site). This site is on a hillside, and it would require a large amount of grading to construct the compressor station in this hillside area.

Development of this site would require the following new off-site infrastructure: (1) approximately 1.15 miles of a subterranean pipeline system with two mainline valves that would tie into the existing natural gas system pipelines and (2) approximately 0.47 miles of improvements to the existing access road so it is a minimum of 24 feet wide with less than a 20% grade, meeting Fire Department standards. An approximately 3.92-acre staging area would be directly northwest of the County Line Site. For the Hybrid Option only, approximately 0.27 miles of off-site aboveground electrical utility extensions (including 15 new poles) would also be required. Additionally, the County Line Site would require construction of an additional compressor for both the Natural Gas Option and the Hybrid Option. This site would require five new natural gas compressors for the Natural Gas Option and would require two new natural gas compressors and three new electric compressors for the Hybrid Option.

3 Environmental Evaluation Methodology

The following section describes the methodology that was used in the environmental evaluation of the potential alternatives. The scoring and ranking of all alternatives are provided in Chapter 4, Environmental Scoring and Ranking, and a detailed discussion of each environmental topic area is provided in Chapter 5, Ranking Analysis.

3.1 Scoring Criteria

As shown in Table 2, a detailed numeric ranking system was developed for the environmental topic areas, which includes operational considerations and construction considerations (for both on-site construction and off-site construction).

Table 2. Scoring Criteria

Topic Area	Ranking			
	0	1-2-3	4-5-6	7-8-9
Operational Considerations				
Aesthetics/ Visual Resources	Substantially alters a defined scenic resource, as determined by adopted plans (e.g., scenic vistas, scenic highways, ridgelines)	Substantially alters the character of a site and/or its surroundings and is highly visible	Minimally alters the character of a site and/or its surroundings and is highly visible	Project is either not visible or does not alter the character of the surrounding community
Air Quality	NO_x emissions ≥12 tons per year	NO_x emissions ≥8 tons per year but <12 tons per year	NO_x emissions ≥4 tons per year but <8 tons per year	NO_x emissions <4 tons per year
CalEnviroScreen	91% to 100% pollution burden	61% to 90% pollution burden	31% to 60% pollution burden	1% to 30% pollution burden
Greenhouse Gas Emissions	GHG emissions ≥50,000 MT/yr CO_2e	GHG emissions ≥25,000 MT/yr CO_2e but <50,000 MT/yr CO_2e	GHG emissions ≥10,000 MT/yr CO_2e but <25,000 MT/yr CO_2e	GHG emissions <10,000 MT/yr CO_2e
Land Use Designation	Non-industrial/manufacturing zone and adjacent to sensitive receptors	Industrial/manufacturing zone and adjacent to sensitive receptors	Non-industrial/manufacturing zone and not adjacent to sensitive receptors	Industrial/manufacturing zone and not adjacent to sensitive receptors
Noise (Operations Assuming 80 dBA)	≥65 dBA at the property line, taking into account non-industrial land uses[a]	≥55 dBA but <65 dBA at the property line, taking into account non-industrial land uses[a]	≥45 dBA but <55dBA at the property line, taking into account non-industrial land uses[a]	<45 dBA at the property line, taking into account non-industrial land uses[a]
Wildfire	Within a very high fire hazard severity zone	Within a high fire hazard severity zone	Within a moderate fire hazard severity zone	Not within a fire hazard severity zone
On-Site Construction Considerations				
Air Quality	NO_x emissions ≥80,000 pounds and PM_{10} ≥10,000 pounds	NO_x emissions <80,000 pounds and ≥40,000 pounds and PM_{10} emissions <10,000 pounds and ≥6,000 pounds	NO_x emissions <40,000 pounds and ≥8,000 pounds and PM_{10} emissions <6,000 pounds and ≥2,000 pounds	NO_x emissions <8,000 pounds and PM_{10} <2,000 pounds

Table 2. Scoring Criteria

Topic Area	Ranking			
	0	1-2-3	4-5-6	7-8-9
Cultural Resources	Significant cultural resources are present and the project has the potential to impact the significance of those resources	Significant cultural resources are present and project impacts would be less than significant with minimization measures incorporated in the project, or the project is in a location that is highly sensitive for potentially significant cultural resources	Significant cultural resources are present, but project does not have the potential to impact the significance of those resources, or the project is in a location that is moderately sensitive for potentially significant cultural resources	No significant cultural resources are present based on records search results and the project is in a location that is not sensitive for potentially significant cultural resources
Greenhouse Gas Emissions	GHG emissions ≥20,000 MT CO_2e	GHG emissions ≥10,000 MT CO_2e but <20,000 MT CO_2e	GHG emissions ≥5,000 MT CO_2e but <10,000 MT CO_2e	GHG emissions <5,000 MT CO_2e
Natural Resources	Site contains sensitive plant or animal species and/or habitats or wetlands that would be directly impacted and require mitigation	Site is adjacent to sensitive plant or animal species and/or habitats or wetlands that would be indirectly impacted and would require mitigation	Site contains or is adjacent to plant or animal species and/or habitats that would be directly or indirectly impacted but would not require mitigation	No sensitive biological resources on site or no potential to affect sensitive biological resources
Noise (Assuming 100+ dBA at Site)	Non-industrial land uses[a] are located within 0–50 feet of site construction (≥90 dBA or greater)	Non-industrial land uses[a] are located within 51–100 feet of site construction (<90 dBA to ≥84 dBA)	Non-industrial land uses[a] located within 101–250 feet of site construction (<84 dBA to ≥75 dBA)	Non-industrial land uses[a] located greater than 251 feet from site construction (<75 dBA)
Slope, Topography, and Grading	Average slope of property is equal to or greater than 40%; substantial over-excavation/recompaction requiring ≥75,000 CY	Average slope of property is 30%–39%; moderate over-excavation/recompaction requiring ≥25,000 but <75,000 CY	Average slope of property is 20%–29%; minimal over-excavation/recompaction requiring ≥10,000 CY but <25,000 CY	Average slope of property is less than 20%; negligible/no over-excavation/recompaction requiring <10,000 CY

Table 2. Scoring Criteria

Topic Area	Ranking			
	0	1-2-3	4-5-6	7-8-9
Traffic – Construction	Heavy truck traffic (i.e., import/export) through residential areas or roadway-constrained areas for 1 year or longer	Heavy truck traffic (i.e., import/export) through residential areas or roadway-constrained areas for 6 months to less than 1 year	Heavy truck traffic (i.e., import/export) through residential areas or roadway-constrained areas for less than 6 months	Heavy truck traffic (i.e., import/export) NOT occurring through residential areas or roadway-constrained areas
Off-Site Construction for Routing Utilities Considerations				
Air Quality[b]	Substantial linear construction (e.g., ≥15,000 feet)	Moderate linear construction (e.g., ≥10,000 but <15,000 feet)	Minimal linear construction (e.g., ≥5,000 and <10,000 feet)	None or negligible linear construction (e.g., <5,000 feet)
Cultural Resources	Significant cultural resource(s) are present and the project has the potential to impact the significance of those resources	Significant cultural resource(s) are present and project impacts will be less than significant with minimization measures incorporated in the project; or, the project is in a location that is highly sensitive for potentially significant cultural resources	Significant cultural resources are present, but project does not have the potential to impact the significance of that resource; or, the project is in a location that is moderately sensitive for potentially significant cultural resources	No significant cultural resources are present based on records search results and the project is in a location that is not sensitive for potentially significant cultural resources.
Greenhouse Gas Emissions	GHG emissions ≥2,000 MT CO_2e	GHG emissions ≥1,000 MT CO_2e but <2,000 MT CO_2e	GHG emissions ≥500 MT CO_2e but <1,000 MT CO_2e	GHG emissions <500 MT CO_2e
Natural Resources	Site contains sensitive plant or animal species and/or habitats or wetlands that would be directly impacted and would require mitigation	Site is adjacent to sensitive plant or animal species and/or habitats or wetlands that would be indirectly impacted and would require mitigation	Site contains or is adjacent to plant or animal species and/or habitats that would be directly impacted but would not require mitigation	No sensitive biological resources on site or no potential to affect sensitive biological resources

Table 2. Scoring Criteria

Topic Area	Ranking			
	0	1-2-3	4-5-6	7-8-9
Noise (Assuming 100+ dBA at Site)	Non-industrial land uses[a] are located within 0–50 feet of site construction (>90 dBA or greater)	Non-industrial land uses[a] are located within 51–100 feet of site construction (≤90 dBA to >84 dBA)	Non-industrial land uses[a] located within 101–250 feet of site construction (≤84 dBA to >75 dBA)	Non-industrial land uses[a] located greater than 251 feet from site construction (≤75 dBA)
Traffic – Roadway Construction	Substantial roadway construction on existing roads (e.g., lane closures of more than 5,001 feet)	Moderate roadway construction on existing roads (e.g., lane closures of 2,501 to 5,000 feet)	Minimal roadway construction on existing roads (e.g., lane closures of 501 to 2,500 feet)	None or negligible roadway construction (e.g., lane closures of less than 500 feet)
Utilities/Service Systems	Substantial off-site ground disturbance (more than 100,000 square feet)	Moderate off-site ground disturbance (99,999 to 50,000 square feet)	Minimal off-site ground disturbance (49,999 to 25,000 square feet)	Negligible off-site ground disturbance (less than 24,999 square feet)

Notes: NO_x = oxides of nitrogen; ≥ = greater than or equal to; < = less than; GHG = greenhouse gas; MT/yr = metric tons per year; CO_2e = carbon dioxide equivalent; FHSZ = fire hazard severity zone; dBA = A-weighted decibel; CY = cubic yard.

[a] For noise, the scoring assessment location is where the noise level crosses the boundary of the nearest non-industrial (residential, commercial, or institutional [e.g., school] zoned property or at the location of the nearest occupied structure of an agricultural land use (e.g., inhabited house of a farm or vineyard).

[b] As the linear distance of off-site construction increases, the emissions from heavy equipment and ground disturbance would also increase.

3.2 Evaluation Methodology

The site names used in this environmental evaluation refer to the alternative site locations for the compressor station (e.g., Avocado Site, Ventura Steel Site, County Line Site); however, additional components, such as staging areas and ancillary improvements such as off-site pipelines, mainline valve (MLV) stations, and/or roadway improvements, are also identified and evaluated, as applicable. "On site" refers to land area accommodating the compressor station and associated infrastructure, while "off site" refers to any required components or improvements not located within the boundaries of the compressor station land area. To adequately evaluate each topic area, the following methodologies were used.

3.2.1 Aesthetics/Visual Resources

Public visibility to each alternative site was assessed based on aerial maps and KML files of alternative sites and infrastructure/components. Scenic resources and vantage points including scenic highways and public trails were identified via review of adopted plans (specifically, the 2005 Ventura General Plan), the State Scenic Highway System managed by the California Department of Transportation (Caltrans), and the public database of trails maintained by the AllTrails application (alltrails.com). The severity of view alteration of/to a known scenic resource and alteration of existing visual character was determined based on assumed visual prominence of construction and operations at the analyzed site as experienced from available vantage points, as well as the approximate distance between the analyzed site and available vantage point, the estimated duration of view exposure, and the presence (or lack thereof) of comparable development and visual contrasts in the viewshed.

For the rubric determination, the following criteria were used to determine the score for each alternative:

- **Ranking 0:** Due to proposed characteristics of components (e.g., bulk, scale) or site location, the project alternative would be visible and would result in the substantial alteration (either through blockage or interruption) of a view from a defined scenic resource (e.g., scenic vista, scenic highway) or development of the project alternative would substantially alter or disturb a defined scenic landscape resource such as a ridgeline.
- **Ranking 1-2-3:** Due to proposed characteristics of components (e.g., bulk, scale), site location, or use, the project alternative would be highly visible to viewers in the surrounding area and would result in noticeable (and substantial) contrast with surrounding development, uses, or landscape elements.
- **Ranking 4-5-6:** While highly visible due to proposed characteristics of components (e.g., bulk, scale) or site location, the project alternative is overall compatible with existing uses in the surrounding area and would result in generally weak contrast with existing development and/or landscape elements.
- **Ranking 7-8-9:** Due to proposed characteristics of components (e.g., bulk, scale), site location, or intervening screening elements (e.g., vegetation, development, terrain), the project alternative is not visible (or is well screened) from public and private vantage points in the surrounding area. Alternatively, the project alternative is compatible with existing uses in the surrounding area and would result in no contrast with existing development and/or landscape elements.

3.2.2 Air Quality and Greenhouse Gas Emissions

Yorke Engineering LLC, an environmental consulting firm with expertise in air quality and greenhouse gas (GHG) matters, evaluated the air quality and GHG impacts from construction (on site and off site) as well as operational impacts of each equipment configuration at each potential alternative site location. The full air quality and GHG emissions analysis and supporting data are included as Attachment 1, Air Quality and Greenhouse Gas Emissions Analysis, of this evaluation.

3.2.2.1 Operational Considerations

Representative Data

For operational emissions for the Natural Gas Option, calculations for the four new proposed natural gas engines were taken from the Authority to Construct (ATC) application that was submitted to the Ventura County Air Pollution Control District (VCAPCD) in March 2020 for the Ventura Compressor Station Modernization Project at the Existing Site. Operational emissions for the Hybrid Option were based on only having two of the natural gas compressors operating, plus additional GHG emissions associated with the indirect electricity needed to operate two electric compressors. Operational emissions for the Natural Gas Option equipment configurations were assumed to be the same at all analyzed sites, with the exception of County Line, which would require an additional compressor. Similarly, the Hybrid Option would have similar operational emissions across all sites, with the exception of the County Line Site, which would require an additional electric compressor and therefore have additional indirect GHG emissions associated with the electricity needed to operate it. It is assumed the additional electricity required for electric compressors would not be supplied from the Southern California Edison (SCE) Green Tariff.

Emission Factors and Calculations

As noted above, operational emissions for the Natural Gas Option for the four proposed 1,900 HP engines were based on the ATC application submitted to the VCAPCD for modernization of the existing Ventura Compressor Station. These emissions calculations relied on the engine manufacturer's data, as well as standard natural gas fired combustion for the proposed engines and took into account emission reductions associated with installation of emissions control equipment to satisfy VCAPCD's best available control technology requirements. The analysis conservatively assumes that the Natural Gas Option would operate all compressors 24 hours per day, 7 days per week (i.e., 8,760 hours per unit per year). In practice, the compressors typically operate between 3,000 to 4,000 hours per unit per year; however, for ease of quantification in this analysis, a conservative assumption was made.

Operational oxides of nitrogen (NO_x) emissions for the Hybrid Option were scaled based on two, rather than four, natural gas-fired engines. The analysis conservatively assumes that the Hybrid Option would operate all compressors (both natural gas and electric) 24 hours per day, 7 days per week. As stated above, the compressors are not operated full-time; however, for ease of quantification in this analysis, a conservative assumption was made.

The Western Electricity Coordinating Council (WECC) California and Mexico subregion (CAMX) emission factor was used to estimate indirect GHG emissions for electricity use for the electric compressors under the Hybrid Option. This factor is an average of the regional power mix, accounting for renewable energy generation as well as fossil-fueled generation, to determine an average emission factor for pounds of CO_2e per megawatt-hour produced. The

analysis conservatively assumes that the Hybrid Option will operate all compressors (both natural gas and electric) 24 hours per day, 7 days per week.

3.2.2.2 On-Site Construction Considerations

To standardize across variations, common phases of a construction project were grouped into activity categories. Rankings of sites within the rubric are based on construction activities expected at each site:

- **Grading – Flat:** grading on a relatively flat surface, without any major elevation changes needed
- **Grading – Elevated:** grading where large amounts of earthwork may be involved, including excavation of hillsides, and typically involves more equipment than Grading – Flat
- **Power Line:** linear construction for new or upgraded electrical transmission lines; includes trenching and power pole erection as well as pulling and reconductoring of lines
- **Pipeline – Street:** linear construction for new gas pipeline under existing roadway to connect into existing main lines, and includes equipment used for trenching, backfilling, and paving
- **Pipeline – Open Space:** linear construction for new gas pipeline in undeveloped land to connect into existing main lines, and includes trenching and backfill
- **Compressor Station:** construction of the footprint of the new facility and structures housing the new compressor station equipment
- **Substation:** construction of a new substation at the compressor facility

For each alternative site, the activity-based emission factors were generated to evaluate the air quality and GHG impacts from the various construction activities given site conditions (see Table 3). These activities are based on the typical phases of a compressor station construction project and were applied to the various alternatives depending on the site-specific construction requirements. On-site construction emissions include site preparation, grading, and construction within the footprint of the future compressor station. Activity-based emission factors used for this evaluation are Grading – Flat, Grading – Elevated, Compressor Station, and Substation (where applicable). These factors represent the maximum emissions per unit of measure to provide a conservative estimate.

Representative construction equipment and schedule data from other recent, similar pipeline and compressor station modernization projects were extracted for input into the California Emissions Estimator Model (CalEEMod) to estimate construction emissions. Equipment inventories were developed based on representative project phases and consolidated to correlate to the activity categories above.

Table 3. On-Site Construction Activity-Based Emission Factors

Construction Activity	NO_x (lb/acre)	Exhaust PM_{10} (lb/acre)	CO_2e (MT/acre)
Grading – flat	1,855	495	224
Grading – elevated	5,186	675	822
Compressor station	2,678	512	395
Substation	2,081	118	466

Notes: NO_x = oxides of nitrogen; lb/acre = pounds per acre; PM_{10} = coarse particulate matter; CO_2e = carbon dioxide equivalent; MT/acre = metric tons per acre.

Emission Factors and Calculations

To generate emission factors for the various construction activities, CalEEMod version 2020.4.0 was used. CalEEMod is the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant and GHG emissions associated with the construction and operation of projects. The model quantifies direct emissions from construction and vehicle use, as well as indirect emissions such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The mobile source emission factors used in the model, published by the California Air Resources Board (CARB), include the Pavley standards and Low Carbon Fuel Standards. The emissions model also identifies project design features, regulatory measures, and selectable mitigation measures to reduce criteria pollutant and GHG emissions, along with calculating the benefits achieved from the selected measures. CalEEMod was developed by the California Air Pollution Control Officers Association in collaboration with California air districts. Default land use data (e.g., emission factors, trip lengths, meteorology, source inventory) were provided by the various California air districts such as VCAPCD to account for local requirements and conditions.

Each representative equipment inventory was entered into CalEEMod, along with an average duration of equipment use and a unit measurement appropriate to the construction activity involved. For example, *per acre* was used for grading and *per mile* was used for pipeline construction. The CalEEMod simulations were run to determine the amount of pollutants that would be emitted for construction during each activity. After the selected scenarios were run, the emissions were normalized to produce the emission factors that can be applied to scale for each location based on the types and amount of activity required. Emission factors were identified as associated with either an on-site or an off-site construction activity.

On-site construction emissions included site preparation, grading, and construction within the footprint of the compressor station location being evaluated. Activity-based emission factors used for this evaluation are grading – flat, grading – elevated, compressor station, and substation (where applicable). Emission factors for these activities are shown in Table 3. These factors represent the maximum emissions per unit of measure to provide a conservative estimate.

3.2.2.3 Off-Site Construction Considerations

Off-site construction emissions include those from equipment used for pipeline, power line, and road work. Activity-based emission factors used for this evaluation are pipeline – street, pipeline – open space, and power line.

Emission factors for these activities are shown in Table 4. These factors represent the maximum emissions per unit of measure to provide a conservative estimate.

Table 4. Off-Site Construction Activity-Based Emission Factors

Construction Activity	NO_x (lb/mile)	Exhaust PM_{10} (lb/mile)	CO_2e (MT/mile)
Power line	1,308	55	166
Pipeline – street	1,815	83	186
Pipeline – open space	725	36	78
Roads	1,815	83	186

Notes: NO_x = oxides of nitrogen; lb/mile = pounds per mile; PM_{10} = coarse particulate matter; CO_2e = carbon dioxide equivalent; MT/mile = metric tons per mile.

Ranking Criteria for Operations

The ranking ranges for operational NO_x emissions are as follows:

- **Ranking 0:** ≥12 tons/year
- **Ranking 1-2-3:** ≥8 tons/year but <12 tons/year
- **Ranking 4-5-6:** ≥4 tons/year but <8 tons/year
- **Ranking 7-8-9:** <4 tons/year

The ranking ranges for GHG emissions are:

- **Ranking 0:** ≥50,000 MT/yr CO_2e
- **Ranking 1-2-3:** ≥25,000 MT/yr CO_2e but <50,000 MT/yr CO_2e
- **Ranking 4-5-6:** ≥10,000 MT/yr CO_2e but <25,000 MT/yr CO_2e
- **Ranking 7-8-9:** <10,000 MT/yr CO_2e

Rubric Ranking Criteria for On-Site Construction

In the ranking rubric, air quality for the on-site construction activities is rated according to the amount of off-road construction equipment on site and duration of activity. The NO_x and coarse particulate matter (PM_{10}; particulate matter with an aerodynamic diameter of 10 microns or less) emissions were combined to provide one ranking score.

- **Ranking 0:** NO_x emissions ≥80,000 pounds and PM_{10} emissions ≥10,000 pounds
- **Ranking 1-2-3:** NO_x emissions <80,000 pounds and ≥40,000 pounds and PM_{10} emissions <10,000 and ≥6,000 pounds
- **Ranking 4-5-6:** NO_x emissions <40,000 pounds and ≥8,000 pounds and PM_{10} emissions <6,000 and ≥2,000 pounds
- **Ranking 7-8-9:** emissions <8,000 pounds and PM_{10} emissions <2,000 pounds

The GHG impact is rated according to the metric tons of CO_2e that are directly produced (from construction equipment on site) and indirectly produced (i.e., resulting from activities related to construction but not immediately on site).

- **Ranking 0:** ≥20,000 MT CO_2e
- **Ranking 1-2-3:** ≥10,000 MT CO_2e but <20,000 MT CO_2e
- **Ranking 4-5-6:** ≥5,000 MT CO_2e but <10,000 MT CO_2e
- **Ranking 7-8-9:** <5,000 MT CO_2e

Rubric Ranking Criteria for Off-Site Construction

In the ranking rubric, scoring for air quality impacts from off-site construction is based on the total length of the linear construction associated with each site and was calculated based on mapping data. As the linear distance of off-site construction increases, the emissions from heavy equipment and ground disturbance would also increase. Ranking levels were set to best differentiate the potential impacts for each site.

- **Ranking 0:** Substantial; ≥15,000 feet
- **Ranking 1-2-3:** Moderate; ≥10,000 and <15,000 feet
- **Ranking 4-5-6:** Minimal; ≥5,000 and <10,000 feet
- **Ranking 7-8-9:** Negligible; <5,000 feet

The GHG impact is rated according to the metric tons of CO_2e that are directly produced (from the types of construction equipment expected for the linear components) and indirectly produced (i.e., resulting from activities related to construction but not directly from the equipment used).

- **Ranking 0:** ≥2,000 MT CO_2e
- **Ranking 1-2-3:** ≥1,000 MT CO_2e but <2,000 MT CO_2e
- **Ranking 4-5-6:** ≥500 MT CO_2e but <1,000 MT CO_2e
- **Ranking 7-8-9:** <500 MT CO_2e

3.2.3 CalEnviroScreen

CalEnviroScreen is a mapping tool managed by the California Office of Environmental Health Hazard Assessment (OEHHA) that helps identify California communities that are most affected by many sources of pollution and where people are often especially vulnerable to pollution's effects. The CalEnviroScreen model uses environmental, health and socioeconomic information to produce scores for every census tract in the state. Scores from each census tract are compared and areas with a higher score are ones that experience a higher pollution burden than areas with low scores (OEHHA 2022a). The CalEnviroScreen data show the combined Pollution Burden scores for the Census tracts, which are made up of indicators from the Exposures and Environmental Effects components of the CalEnviroScreen model. Pollution Burden represents the potential exposures to pollutants and the adverse environmental conditions caused by pollution.

The pollution burden scores are based on Census Tract and are not site or technology specific. Therefore, the pollution burden scores would be the same for a site regardless of whether the Natural Gas or Hybrid Options are constructed.

After the percent of pollution burden has been determined using the CalEnviroScreen maps, scores were assigned based on the following criteria:

- **Ranking 0:** 100% to 91% Pollution Burden
- **Ranking 1-2-3:** 90% to 61% Pollution Burden
- **Ranking 4-5-6:** 60% to 31% Pollution Burden
- **Ranking 7-8-9:** 30% to 0% Pollution Burden

3.2.4 Cultural Resources

The primary objective of the cultural resource analysis is to determine if cultural resources exist within the boundaries of each alternative site and, if so, the extent to which the proposed project would impact any significant cultural resources. For purposes of this analysis, a "significant resource" is defined as a cultural resource, either archaeological (at or beneath the ground surface) or built (an extant structure) that has the potential to uniquely contribute to the understanding of historic or prehistoric periods.

The cultural resources analysis considered multiple sources of information to determine not only the presence of known cultural resources but the potential for yet unidentified cultural resources to exist within each alternative site and, the potential impact the proposed project might have on cultural resources. The data sources that were used to analyze the presence or potential for presence of cultural resources includes a review of SoCalGas's database of the California Historic Resources Information System (CHRIS) archaeological site records and previously conducted cultural resource studies; state and local historic landmark and inventory lists; historic maps and aerial photographs; and various sources that provide information about the natural environment. Following is a summary of the methodology used for each data and rubric ranking criteria.

3.2.4.1 Records Search and Literature Review

The general purpose of a cultural resource database records search and literature review is to:

- Identify previously recorded cultural resources that may be located within the current study area.
- Determine whether the current study area has been subjected to previous cultural resource investigations, including pedestrian surveys, subsurface testing, information gleaned from archaeological monitoring or inadvertent discoveries.
- Ascertain what previously conducted cultural resource studies and site records for previously identified cultural resources reveal regarding the potential for unknown cultural resources to exist within the current study area.

The data gleaned from the records search is considered in concert with the study location's site conditions, both natural and human induced, to determine whether a proposed project has the potential to impact a significant cultural resource. Additionally, the potential for yet unknown cultural resources to be impacted should be

considered, especially if the current study area has not yet been physically studied employing field methods such as a pedestrian survey and subsurface testing.

The records search conducted for this analysis employed SoCalGas's in-house database of the CHRIS records and studies, using data obtained from the Southern Central Coastal Information Center (SCCIC) and SoCalGas's internal collection of cultural reports/records. The search of the SoCalGas CHRIS database included previously recorded cultural resources and investigations within a 1-mile radius of each alternative site. The following lists were also reviewed for this study: National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the California Points of Historical Interest, and the California Historical Landmarks. Each site record for those cultural resources identified within a 1-mile radius were reviewed to better understand the nature of the resource. If the resource(s) were located outside of the on- or off-site locations for the project alternative, they were reviewed for traits that may reveal potential for unknown resources to exist within the project alternative boundaries. If a cultural resource had been identified within the project alternative boundaries, the site record was reviewed to determine whether the resource as described fit the aforementioned definition for a significant resource. Finally, for built cultural resources a 500-foot buffer surrounding the resource was employed to assess the potential for the project to impact the built resource. This is a conventional buffer for built environment studies as certain project conditions have the potential to indirectly impact a built resource. The records search results and analysis are summarized within each section respective to the alternative sites. Additionally, detailed records search results utilized in the analysis are provided in Attachment 2, Cultural Resources Analysis.

3.2.4.2 Archival Research, Historic Maps and Aerial Photographs

Historic topographic maps and aerial photographs were consulted through the Nationwide Environmental Title Research LLC to better understand any natural or human-made changes to the alternative site locations and surrounding properties over time. A review of all available historic aerial photographs was conducted and included the following years: 1947, 1967, 1978, 1980, 1984, 1994, 2005, 2009, 2010, 2012, 2014, 2016, and 2018 (NETR 2021a). Through careful comparative review of historic aerials, changes to the landscape of a study area may be revealed. Disturbance to the study area is specifically important as it helps determine if soils within the study area are capable of sustaining intact archaeological deposits. Additionally, historic aerials have the potential to reveal whether a study area was subjected to alluvial deposits by way of flooding, debris flows or mudslides, as well as placement of artificial or foreign fill soils that may have buried intact archaeological deposits. A review of available topographic maps was conducted and included the following years: 1904, 1910, 1918, 1921, 1938, 1946, 1952, 1955, 1961, 1964, 1966, 1968, 1972, 2012, 2015, and 2018 (NETR 2021b). Topographic maps depict not only elevation of the study area as well as the areas surrounding it, but they also illustrate the location of roads and some buildings. Although topographic maps are not comprehensive, they are another tool in determining whether a study area has been disturbed and sometimes to what approximate depth.

3.2.4.3 Natural Landscape Setting

A review of the current natural setting as well as historical natural settings was conducted to understand the potential for yet unknown archaeological sites within the project alternative sites. Depending on the type of site, archaeological resources tend to be located in areas with consistent natural traits including within close proximity to fresh water sources and habitats for exploitation of flora and faunal food sources and locals that are safe from natural events such as flooding, debris flows and mudslides. Additionally, similar to historic aerial photographs and topographic maps, understanding the current natural landscape in contrast to the previous landscape traits is an

excellent tool in determining potential ground disturbance. Those sources that were employed to better understand the natural environment include Chumash Ethnobotany (Timbrook 2007), California Native Plant Society Inventory of Rare and Endangered Plants (Inventory) (CNPS 2022a); Calflora's What Grows Here database (Calflora 2022); CDFW Biogeographic Information and Observation System (CDFW 2022b); CDFW California Sensitive Natural Communities (CDFW 2021); Vegetation - Ventura County GIS data layer (David Magney Environmental Consulting 2008); USFWS National Wetlands Inventory data (USFWS 2022b).

3.2.4.4 Rubric Scoring Criteria

For the rubric determination, the following criteria were used to determine the score for each alternative:

- Ranking 0:
  - Records Search and Literature Review: as a result of the records search, a significant cultural resource(s) has been identified within the project alternative boundaries (or within 500 feet for built cultural resources) and implementation of the project has the potential to impact the significance of that resource(s).
- Ranking 1-2-3:
  - Records Search and Literature Review: as a result of the records search, a significant cultural resource(s) has been identified within the project alternative boundaries (or within 500 feet for built cultural resources), but implementation of the project will incur less than significant impacts with minimization measures incorporated; or
  - Historic Maps and Aerial Photographs and Natural Landscape Setting: evidence available through review of historic aerial photographs, topographic maps, and resources capable of revealing current and previous natural landscape traits demonstrate that the project alternative is in a location that is highly sensitive for potentially significant cultural resources.
- Ranking 4-5-6:
  - Records Search and Literature Review: as a result of the records search, a significant cultural resource(s) has been identified within the project alternative boundaries (or within 500 feet for built cultural resources), but implementation of the project does not have the potential to impact the significance of that resource(s); or
  - Historic Maps and Aerial Photographs and Natural Landscape Setting: evidence available through review of historic aerial photographs, topographic maps, and resources capable of revealing current and previous natural landscape traits demonstrate that the project alternative is in a location that is moderately sensitive for potentially significant cultural resources.
- Ranking 7-8-9:
  - Records Search and Literature Review: as a result of the records search, no significant cultural resource(s) has been identified within the project alternative boundaries (or within 500 feet for built cultural resources); and
  - Historic Maps and Aerial Photographs and Natural Landscape Setting: evidence available through review of historic aerial photographs, topographic maps, and resources capable of revealing current and previous natural landscape traits demonstrate that the project alternative has been subjected to considerable ground disturbance and is in a location that is not sensitive for potentially significant cultural resources.

3.2.5 Land Use

Information contained in the land use analysis is based on site reconnaissance, satellite imagery from Esri and Google Earth, the County General Plan, the County Code of Ordinances, the County Geographic Information Systems (GIS) County View application, the City of Ventura (City) General Plan, the City Municipal Code, and GIS data prepared by Dudek and SoCalGas. Other sources consulted are listed in Section 6, References Cited.[2] Attachment 3, Land Use and Zoning Maps, details the General Plan Land Use Designations and Zoning Classifications for each of the five prospective sites.

In the ranking rubric, scoring for land use considers the currently applicable on-site zoning as well as the site's proximity to sensitive receptors. The four ranking levels are as follows:

- **Ranking 0:** The alternative is within a non-industrial/manufacturing zone and is adjacent to sensitive receptors.
- **Ranking 1-2-3:** The alternative is within an industrial/manufacturing zone and is adjacent to sensitive receptors.
- **Ranking 4-5-6:** The alternative is within a non-industrial/manufacturing zone and is not adjacent to sensitive receptors.
- **Ranking 7-8-9:** The alternative is within an industrial/manufacturing zone and is not adjacent to sensitive receptors.

Land Use Ranking Criteria Definitions

***"...sensitive receptors"*:**	Per California Health and Safety Code (CHSC) Section 25200.21, sensitive receptors shall include "schools, childcare facilities, residences, hospitals, elder care facilities, and other sensitive locations."
"...within a non-industrial/manufacturing zone":	The alternative is located within a land area or parcel with a County or City of Ventura zoning designation that does not support the types of uses required for operation of a Natural Gas Option or Hybrid Option compressor station (e.g., agricultural, open space).[3]
"...within an industrial/ manufacturing zone":	The alternative is located within a land area or parcel with a County or City of Ventura zoning designation that supports the types of uses required for operation of a Natural Gas Option or Hybrid Option compressor station (e.g., industrial, manufacturing).

[2] The official title for the City and County is "San Buenaventura"; however, this document refers to the jurisdictions as the City and County of "Ventura," which is the common nomenclature.

[3] CPUC has overarching authority of natural gas utilities. Article XII, Section 8 of the California Constitution establishes CPUC's preemptive authority over matters over which the Legislature has granted CPUC regulatory powers. CPUC decisions, as well as California courts, have confirmed CPUC's preemptory powers. As such, no local discretionary (e.g., rezone, land use) permits would be required because CPUC has preemptive jurisdiction over the siting, construction, maintenance, and operation of natural gas facilities in California. CPUC's authority does not preempt special districts, such as air quality management districts, other state agencies, or the federal government. Additionally, SoCalGas would still have to obtain all ministerial permits from local jurisdictions.

"...adjacent to sensitive receptors":	The parcel(s) on which the alternative site is located share(s) a boundary or boundaries with an adjacent parcel with zoning that would suggest CHSC designated sensitive receptors are present (e.g., residential, institutional). OR The site is within 500 feet of a CHSC designated sensitive receptor (e.g., a school, childcare facility, residence) or is within 500 feet of a parcel with zoning that would suggest CHSC designated sensitive receptors are present (e.g., residential, institutional).
"...not adjacent to sensitive receptors"	The parcel(s) on which the alternative site is located *do(es) not* share a boundary(ies) with an adjacent parcel with zoning that would suggest CHSC designated sensitive receptors are present (e.g., residential, institutional). OR The site *is not* within 500 feet of a CHSC designated sensitive receptor (e.g., a school, childcare facility, residence) or within 500 feet of a parcel with zoning that would suggest CHSC designated sensitive receptors are present (e.g., residential, institutional).

In addition to the criteria described above, the rubric determination also takes into consideration the presence of active, on-site gas and oil wells. The Avocado, Ventura Steel, and Devil's Canyon Road Sites are located either fully or partially within an active oil/gas field (e.g., Ventura Oil Field), while the Existing Site is located approximately 0.5 miles south of the oil/gas field boundary (DOC 2019, 2022). The total number of wells—if any—present on a given site will be noted in the land use analysis subsections for each alternative.

Because the ranking criteria as described would have little to no impact on the technology used for the compressor station, the same score is applied to both the Natural Gas Options and the Hybrid Options.

California Public Utility Commission Preemptory Powers

CPUC has preemptory powers as relates to discretionary permitting, which have been confirmed by California courts. As such, no local discretionary land use (e.g., rezone, land use) permits would be required on any of the site locations to the extent that CPUC's preemptive jurisdiction applies to the siting, construction, maintenance, and operation of natural gas facilities in California. Nonetheless, this analysis uses the land use criteria to assess the compatibility of siting a compressor station at a potential site.

3.2.6 Natural Resources

The purpose of this review was to determine whether special-status plant and wildlife species are known to occur in the vicinity of or within the study area. The following data sources were reviewed to assist with the desktop assessment of biological resources and are included in Attachment 4, Natural Resources Analysis, of this evaluation:

- U.S. Fish and Wildlife Service (USFWS) Critical Habitat and Species Occurrence Data (2022a)
- USFWS National Wetlands Inventory data (USFWS 2022b)
- National Hydrography Dataset and Watershed Boundary Dataset (USGS 2022)

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CDFW 2022a)
- California Native Plant Society Inventory of Rare and Endangered Plants (Inventory) (CNPS 2022)
- Calflora's What Grows Here database (Calflora 2022)
- CDFW Biogeographic Information and Observation System (CDFW 2022b)
- CDFW California Sensitive Natural Communities (CDFW 2021)
- Vegetation - Ventura County GIS data layer (David Magney Environmental Consulting 2008)
- CDFW California Natural Community Conservation Plans, April 2019 (CDFW 2019)
- Google Earth desktop application (Google 2022)

The California Natural Diversity Database and California Native Plant Society Inventory were queried based on the USGS 7.5-minute topographic quadrangle map for where the alternatives are located, as well as the surrounding eight USGS 7.5-minute quadrangle maps. The results of the queries are provided in Attachment 4. The purpose of this review was to determine whether special-status plant and wildlife species are known to occur in the vicinity of or within the study area. Other literature reviewed included A Manual of California Vegetation, Online Edition (CNPS 2022b); the California Natural Community list (CDFW 2021) (provided in Attachment 4); and the CDFW Special Animals List (CDFW 2022c).

The California Natural Diversity Database and critical habitat data are illustrated in Figure NR-1, and the vegetation and National Wetlands Inventory data are illustrated in Figure NR-2 (see Attachment 4 for all NR [Natural Resources] figures).

For the rubric determination, the following criteria were used to determine the score for each alternative:

- Ranking 0 (sensitive resources would be impacted):
  - Sensitive Species (Plant/Animals): the alternative would directly impact designated critical habitat or suitable habitat of a federal/state listed species that has recent (within 50 years) records (CDFW 2022a) within 0.25 miles of the alternative.
  - Sensitive Habitats: the alternative would directly impact vegetation that is considered sensitive by CDFW (2021) that typically require compensatory mitigation.
  - Wetlands: the alternative would directly impact features that have been recorded in the National Wetlands Inventory (USFWS 2022b) that typically require compensatory mitigation.
- Ranking 1-2-3 (the lower the score the higher the probability of indirect impacts occurring to sensitive resources due to the resources proximity to the project limits):
  - Sensitive Species (Plant/Animals): the alternative is adjacent to (within 500 feet of)[4] designated critical habitat or suitable habitat of a federal/state listed species that has recent (within 50 years) records (CDFW 2022a) within 0.25 miles of the alternative or contains suitable habitat of non-listed sensitive species within 3 miles, and avoidance and minimization measures (e.g., seasonal constraints, pre-construction surveys, noise monitoring, erosion control, etc.) cannot eliminate the potential of indirectly impacting the sensitive species.

[4] The U.S. Fish and Wildlife Service typically uses 500 feet as the outer distance for determining potential indirect impacts for many species, including least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*).

  - Sensitive Habitats: avoidance and minimization measures would be expected to avoid indirect impacts that require compensatory mitigation to the features.
  - Wetlands: avoidance and minimization measures would be expected to avoid direct and indirect impacts that require compensatory mitigation to the features.
- Ranking 4-5-6 (the lower the score the higher the probability of indirect impacts occurring to the resource):
  - Sensitive Species (Plant/Animals): the alternative is adjacent to (i.e., within 500 feet of) designated critical habitat or suitable habitat of a federal/state listed species that has recent (within 50 years) records (CDFW 2022a) within 0.25 miles of the alternative or contains suitable habitat of non-listed sensitive species within 3 miles, and avoidance and minimization measures (e.g., seasonal constraints, pre-construction surveys, noise monitoring, erosion control) are likely to avoid or eliminate the potential of indirectly impacting the sensitive species.
  - Sensitive Habitats: avoidance and minimization measures would be expected to avoid direct and indirect impacts that require compensatory mitigation to the features.
  - Wetlands: avoidance and minimization measures would be expected to avoid direct and indirect impacts that require compensatory mitigation to the features.
- Ranking 7-8-9 (the highest score [9] indicates that the alternative is within an already developed environment, while the lesser scores indicate partially developed or heavily disturbed sites):
  - Sensitive Species (Plant/Animals): the alternative is not adjacent to (i.e., within 500 feet of) designated critical habitat or suitable habitat of a federal/state species that has recent (within 50 years) records (CDFW 2022a), does not contain suitable habitat for non-listed sensitive species, and is not adjacent to sensitive habitats or wetlands.
  - Sensitive Habitats: the alternative does not contain or is not adjacent to this sensitive resource.
  - Wetlands: the alternative does not contain or is not adjacent to this sensitive resource.

3.2.7 Noise

Noise modeling was completed to evaluate the potential operational impacts and construction impacts (on site and off site) for each of the two technology configurations at the five alternative site locations. The operation noise analysis output, depicted as noise level contours, are included within Attachment 5, Noise Modeling Output Figures, and visually display the modeled operation noise for each of the 10 scenarios.

3.2.7.1 Operational Considerations

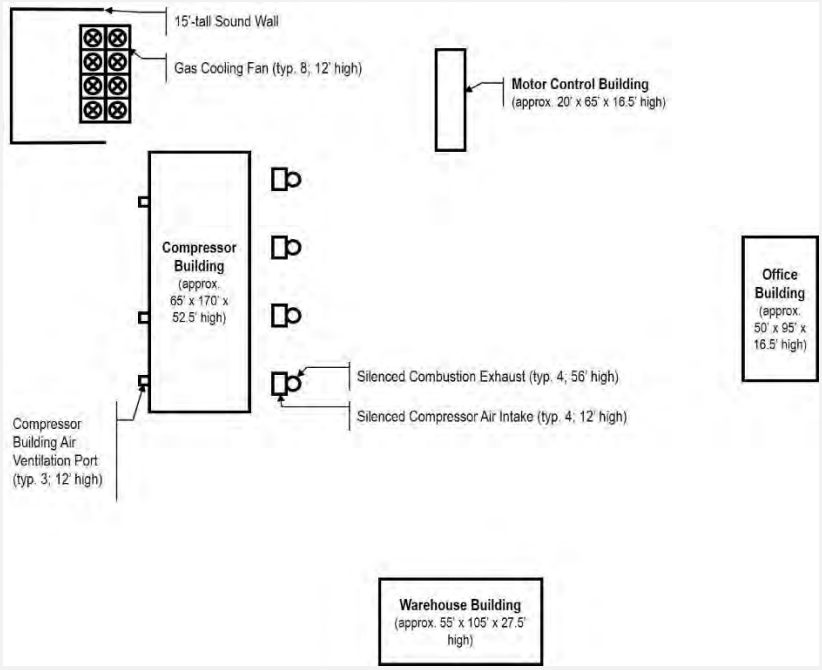
The analysis assumes that operation of the new gas compressor station would be 24 hours per day, 7 days per week and would feature durable operations noise control and sound abatement measures incorporated into the facility design. A noise emission level of 80 A-weighted decibels (dBA) is assumed for operations, but there is no associated distance value for reference; therefore, the following detailed assumptions were made as follows:

- The 80 dBA noise emission level is a sound pressure level at a reference distance of 1 meter (3.28 feet) from the source of sound emission.

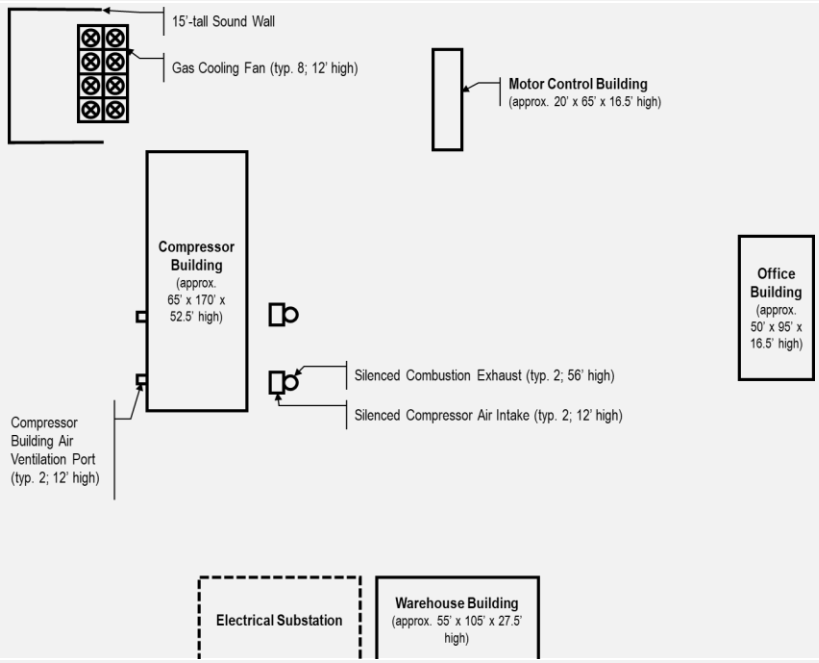
- It was assumed the facility would feature typical major noise-producing components, such as the compressor unit air intakes and combustion exhausts, the new compressor building and its ventilation system, and a gas cooling system.

The analysis assumes the layout for any of the compressor station options would be similar to what is shown in Exhibit 1, Conceptual Compressor Station for Noise Assumptions, with features differing based on the source of power to drive the compressors (either a Natural Gas Option or a Hybrid Option). For the County Line – Natural Gas alternative, however, the layout would feature an additional fifth compressor unit air intake and combustion exhaust along the same side of the building.

Exhibit 1. Conceptual Compressor Station for Noise Assumptions



NATURAL GAS OPTION



HYBRID OPTION

Note: Assumed gas compressor station facility layouts (*top*: four compressors, each powered with natural gas combustion; *bottom*: hybrid [i.e., two compressors powered by natural gas and two others within compressor building powered by electric motors]). Indicated heights are with respect to a common grade level.

For the Natural Gas Option and Hybrid Option per Exhibit 1, an outdoor noise prediction model was prepared to analyze aggregate noise emission from the operating components. These components are listed as follows:

Natural Gas Option:

- Each of the following was assigned a 91 dBA sound power level (i.e., yielding 80 dBA energy equivalent level [L_{eq}] sound pressure level at 1 meter) point-type source: compressor air intake, compressor building air ventilator, combustion exhaust, and natural gas cooling system fan cell.
- Compressor building façade (for each of four: north, east, south, west) modeled with a vertical area source having sound power level density of approximately 77.3 dBA per square meter of façade exterior surface.

Hybrid Option:

- Each of the following was assigned a 91 dBA sound power level (i.e., yielding 80 dBA L_{eq} sound pressure level at 1 meter): compressor air intake, compressor building air ventilator, combustion exhaust, natural gas cooling system fan cell, and electrical substation transformer.
- Compressor building façade (for each of four: north, east, south, west) modeled with a vertical area source having sound power level density of approximately 74.3 dBA per square meter of façade exterior surface. Note that the magnitude is less based on the assumption that there are only two natural gas compressors within the building, in contrast with four per the Natural Gas Option.

For purposes of this analysis, the added fifth operating compressor for the County Line alternative would not change the compressor building façade noise radiation—the change in aggregate noise level from four to five identical compressor units, per acoustic principles, would be less than 1 decibel (dB).

The prediction model assumed that the new compressor station buildings and feature layout, as depicted in Exhibit 1, would generally be centrally located within the boundary of the studied site alternative so that the buildings as sized and spaced apart in relation to one another would fit. By adopting this convention and using Exhibit 1 layouts (and therefore location of operational sound sources within a facility) commonly for each of the five site alternatives, the prediction model enabled an estimate of aggregate operational facility noise at the relevant property boundaries.

For noise, the scoring assessment location is where the noise level crosses the boundary of the nearest non-industrial (residential, commercial, or institutional [e.g., school] zoned property or at the location of the nearest occupied structure of an agricultural land use (e.g., inhabited house of a farm or vineyard). Consistent with the scoring rubric, assessment of facility operation noise at the property boundary (or at the nearest boundary of a non-industrial land use) would break out as follows:

- **Ranking 0:** ≥65 dBA at the property line, taking into account non-industrial land uses
- **Ranking 1-2-3:** ≥55 dBA but <65 dBA, taking into account non-industrial land uses
- **Ranking 4-5-6:** ≥45 dBA but <55 dBA, taking into account non-industrial land uses
- **Ranking 7-8-9:** <45 dBA, taking into account non-industrial land uses

The Attachment 5 figures display predicted aggregate operational noise from the studied scenarios superimposed atop semi-transparent aerial images of the facility site surroundings, thus showing where expected decibel levels would occur and thus substantiate the scoring values.

3.2.7.2 On-Site Construction Considerations

The scoring rubric quantity ranges for on-site construction noise emission reflect the application of geometric divergence (a.k.a., the "6 dB per doubling of distance" rule of thumb for sound propagation from a point source or an area source having a dimension that is small compared to the distance to the receiver) as sound travels away from the construction site. In other words, the greater the distance between construction activity and the studied receiver, the lower the noise exposure level and thus the higher rubric scoring opportunity. Assumptions made to support the on-site construction analysis include the following:

- Since each site alternative requires site-wide disturbance (e.g., grading) and/or the erection of a perimeter solid wall (consistent with the Feasibility Study assumptions), then the site parcel boundary conservatively defines the location of construction activity (e.g., grading occurs up to the boundary line, and installation of the wall itself would—of course—be on or just within the boundary line).
- While details of the specific construction activities and involved equipment on site to install the new gas compressor station are not known, and although construction would take place throughout the whole site, it is assumed the aggregate noise emission of a set of concurrently operating construction equipment would emanate sound as if from a point source on the boundary of the property parcel. The assumed combined magnitude of concurrently operating on-site construction equipment noise propagating from this point position is 90 dBA L_{eq} at 50 feet, which would be consistent with anticipated sample reference L_{max} (at 50 feet) sound emission data from the Federal Highway Administration Roadway Construction Noise Model User's Guide.

Based on these parameters and assumptions, this rubric was scored per the following criteria:

- **Ranking 0:** Where on-site construction noise exposure at the nearest non-industrial land use is expected to be $\geq$90 dBA L_{eq}, corresponding with a source-to-receptor distance of less than 50 feet
- **Ranking 1-2-3:** Where on-site construction noise exposure at the nearest non-industrial land use is expected to <90 dBA and $\geq$84 dBA L_{eq}, and when the source-to-receptor distance is between 51 and 100 feet
- **Ranking 4-5-6:** Where on-site construction noise exposure at the nearest non-industrial land use is expected to be <84 dBA and $\geq$75 dBA L_{eq}, and when the source-to-receptor distance is between 101 and 250 feet
- **Ranking 7-8-9:** Where on-site construction noise exposure at the nearest non-industrial land use is expected to be <75 dBA L_{eq}, and when the source-to-receptor distance is greater than 251 feet

The assessment position to determine scoring is where the predicted construction noise level from the site parcel boundary crosses the boundary of the nearest non-industrial (residential, commercial, or institutional [e.g., school] zoned property or at the location of the nearest occupied structure of an agricultural land use (e.g., inhabited house of a farm or vineyard).

3.2.7.3 Off-Site Construction Considerations

For off-site construction, the following assumption was made: an "off-site" construction activity could include new road construction or upgrading of an existing access route, installation of a new pipeline segment or electrical connection, or constructing a new mainline valve (MLV). For purposes of predictive assessment and corresponding scoring herein, the aggregate construction noise emission level from a set of concurrently operating equipment to perform such off-site activities would be the same as described for on-site activities (90 dBA L_{eq} at 50 feet) The scoring granularity for off-site construction activity is also the same as presented for on-site construction activity.

3.2.8 Slope, Topography, and Grading

The primary considerations of the slope, topography, and grading ranking criteria are: (1) to quantify and analyze the average slope of the main compressor station site; and (2) to quantify and analyze the grading requirements for the on-site construction scenario. The four ranking levels for slope, topography, and grading are as follows:

- **Ranking 0:** The average slope of the property is greater than 40% and/or substantial over-excavation/recompaction requires ≥75,000 cubic yards (CY).
- **Ranking 1-2-3:** The average slope of property is 30%–39% and/or moderate over-excavation/recompaction requires >25,000 but <75,000 CY.
- **Ranking 4-5-6:** The average slope of property is 20%–29% and/or minimal over-excavation/recompaction requires ≥10,000 CY but <25,000 CY.
- **Ranking 7-8-9:** The average slope of property is less than 20% and negligible/no over-excavation/ recompaction requires <10,000 CY.

Slope, Topography, and Grading Criteria Definitions

***"…the property"*:**	The land area or parcel on which the main compressor station site is located.
"…over-excavation/recompaction"	The over-excavation or recompaction (i.e., grading) of soils and/or other fill materials, often requiring import to or export from the site.
"…substantial":	Construction of the on-site component(s) would require over-excavation/ recompaction of materials ≥75,000 CY.
"…moderate":	Construction of the on-site component(s) would require over-excavation/ recompaction of materials ≥25,000 but <75,000 CY.
"…minimal":	Construction of the on-site component(s) would require over-excavation/ recompaction of materials ≥10,000 CY but <25,000 CY.
"…negligible/no":	Construction of the on-site component(s) would require over-excavation/ recompaction of materials equivalent to <10,000 CY.

"...on-site component(s)" The components located within the site boundaries identified to support the Natural Gas Option or Hybrid Option compressor station.

Slope Methodology

Percent slope was calculated using Esri's Spatial Analyst Toolset and a digital elevation model (DEM) acquired from the U.S. Geological Survey (USGS) 3D Elevation Program (3DEP). In addition to the spatial analysis, a weighted average methodology was used to better capture the ranking score criteria, which breaks down the site acreage into "classes" based on their slope. The classes were defined manually as 0%–10%, >10%–20%, >20%–30%, etc. The topography and slope maps for each of the five sites are provided in Attachment 6. Calculations were made based on the minimum, average, and maximum slope percentages within each range class (e.g., for the 0%–10% range, averages were calculated for each site at 0%, 5%, and 10% for the corresponding acreage). The average slope range calculations for each site are provided within the Slope, Topography, and Grading discussions of Chapter 5, Ranking Analysis.

Grading Methodology

The grading calculations were provided by SoCalGas and are expressed in cubic yards (CY). Determination of grading significance was informed by the County Department of Public Works' discretionary grading permit triggers, which provide that any project where the average grade exceeds 10% and the amount of excavation or fill exceeds 10,000 CY shall be subject to discretionary review (County of Ventura 2022).

Because the on-site grading requirements and slope considerations would be the same for both the Natural Gas Option and Hybrid Option, the same ranking is given to both alternatives. Off-site grading requirements may be discussed for informational purposes but are not given significant weight in the ranking calculations, per the specified criteria (see Section 3.1, Scoring Criteria).

3.2.9 Traffic

3.2.9.1 On-Site Construction

The traffic evaluation scoring for each alternative is based on the potential length of time that heavy truck traffic would travel through residential areas or roadway-constrained areas to support on-site construction. The evaluation focuses on public roadways that could be affected by project-related congestion. While minor consideration is given to construction occurring on private access roads, for the purposes of this evaluation, private access roads are not considered to be constrained roadways, as they are not subject to commuter traffic. Dudek identified the existing roadways providing direct access to the alternative sites and reviewed the City and County roadway classifications as appropriate, the existing land uses along those roadways, and the estimated schedule of import and export activities. These criteria only evaluate construction duration involving heavy truck traffic (i.e., import/export of soils or materials via dump trucks and oversized vehicles) and location (i.e., using roadways adjacent to residential areas or roadways that are constrained due to urban/commuter traffic). Roadway-constrained areas are identified as local public roads (as opposed to major highways and arterials that are designed to accommodate heavy truck traffic). The analysis does not quantify existing traffic volumes or the number of heavy trucks traveling through an area.

The rubric ranking criteria for on-site construction are summarized below.

- **Ranking 0:** Heavy truck traffic would travel through either residential areas or roadway-constrained areas for 1 year or longer. Roadway-constrained areas are identified as local public roads (as opposed to major highways and arterials that are designed to accommodate heavy truck traffic).
- **Ranking 1-2-3:** Heavy truck traffic would travel through either residential areas or roadway-constrained areas for 6 months to less than 1 year. The lower the score the higher the potential for impacts occurring due to schedule duration, proximity of sensitive land uses, travel on a public road, or a combination of these factors.
- **Ranking 4-5-6:** Heavy truck traffic would travel through either residential areas or roadway-constrained areas for less than 6 months. The lower the score the higher the potential for impacts occurring due to schedule duration, proximity of sensitive land uses, travel on a public road, or a combination of these factors.
- **Ranking 7-8-9:** Heavy truck traffic would not likely occur through residential areas or roadway-constrained areas. The lower the score the higher the potential for impacts occurring due to schedule duration, proximity of sensitive land uses, travel on a public road, or a combination of these factors.

3.2.9.2 Off-Site Construction

The traffic evaluation for the off-site construction for routing of utilities rates each alternative on the extent of roadway construction on existing roads. Similar to the criteria above, the evaluation focuses on trenching within public roadways. While these criteria are focused on the extent of construction on existing public roads, the characteristics (e.g., urban, rural) of the existing roadways, whether public or private, are considered to provide a more refined level of evaluation.

The rubric ranking criteria for off-site construction are summarized below.

- **Ranking 0:** Off-site routing alignment and trenching requires that substantial roadway construction (e.g., lane closures greater than 5,001 feet) would occur on existing public roads.
- **Ranking 1-2-3:** Off-site routing alignment and trenching requires that moderate roadway construction (e.g., lane closures of 2,501 to 5,000 feet) would occur on existing public roads. The lower the score the higher the potential for impacts occurring due length of trenching required, number of roadway crossings, or a combination of these factors.
- **Ranking 4-5-6:** Off-site routing alignment and trenching requires that minimal roadway construction (e.g., lane closures of 501 to 2,500 feet) would occur on existing public roads. The lower the score the higher the potential for impacts occurring due length of trenching required, number of roadway crossings, or a combination of these factors.
- **Ranking 7-8-9:** Off-site routing alignment and trenching requires that no roadway construction or negligible roadway construction (e.g., construction less than 500 feet) would occur on existing public roads. The lower the score the higher the potential for impacts occurring due length of trenching required, number of roadway crossings, or a combination of these factors.

3.2.10 Utilities/Service Systems

The analysis of utilities/service systems was based primarily on the need for utility extensions and associated ground disturbance required to develop the alternative sites. Off-site ground disturbance for both the Natural Gas and Hybrid Options considered under this analysis would include the off-site construction of the following:

- The new natural gas pipeline system, including pipelines and depressurization lines, is required to connect to the existing pipeline system. For this assessment, the square footage of trenching was calculated using the linear feet of the trench width for the new pipeline system and a trench width of 28 inches.
- A new mainline valve (MLV) station would be required at each connection location where a new pipeline system would connect to the existing natural gas pipeline system. The ground disturbance was calculated assuming 50 feet by 75 feet of disturbance to accommodate the new valve station, depending on the configuration of the existing pipeline system.
- New utility infrastructure (water, sewer, and electrical) would be required to serve the on-site staff operations at the Avocado Site and County Line Alternatives. For this assessment, the square footage of trenching was calculated using the linear feet of the trench width for the new pipelines and a trench width of 3 feet.
- The Hybrid Option would also include ground disturbance for the construction of new footings for the electrical line interconnection from sites to the existing SCE system. This calculation assumes pole foundations would be 2 feet by 7 feet and spaced approximately every 100 to 150 feet.

The square footage for all ground disturbance associated with the estimated energy and utility-related construction was calculated based on the site-specific information prepared for each alternative.

The rubric scoring was determined based on the estimated total square footage of ground disturbance and the scoring rubric ranking of 0 to 9 was categorized as follows:

- **Ranking 0:** >100,000 square feet of off-site ground disturbance
- **Ranking 1-2-3:** Between 99,999 and 50,000 square feet of off-site ground disturbance
- **Ranking 4-5-6:** Between 49,999 and 25,000 square feet of off-site ground disturbance
- **Ranking 7-8-9:** <24,999 square feet of off-site ground disturbance

3.2.11 Wildfire

The purpose of the wildfire evaluation is to evaluate whether the alternative site locations—particularly for the land areas containing the compressor station—are located within fire hazard severity zones (FHSZs), as determined by the California Department of Forestry and Fire Protection (CAL FIRE).[5] According to the Ventura County Fire Protection District, the State of California's Strategic 2018 Fire Plan anticipates that "trends in wildland fires will continue. The effects of climate change, prolonged drought, tree mortality, and development into the wildland urban interface will continue to increase the number and severity of wildland fires" (VCFPD 2021). The typical fire season in Ventura County begins in May or June, with vegetative fuel loads reaching "critical moisture levels" in late summer and early fall (VCFPD 2021). Together with the advent of strong east winds (Santa Anas) throughout the County, this environment produces the perfect conditions for "catastrophic fire weather" (VCFPD 2021). All site alternatives under consideration are located within the Ventura or Casitas Fuel Beds, which act as an unbroken distribution of vegetative

[5] According to the Office of the State Fire Marshall (OSFM), the FHSZ maps evaluate "hazard" as opposed to "risk." Hazard is based on "…the *physical conditions that create a likelihood and expected fire behavior* over a 30 to 50 year period without considering short-term modifications such as fuel reduction effort" while "risk" is evaluates the "*potential damage a fire can* do to the area under existing conditions, including any modifications such as fuel reduction projects, defensible space, and ignition resistant building construction" (OSFM 2022).

fuel sources, including oak woodland, chaparral, coastal sage scrub, and grass (VCFPD 2021). The fuel beds are bordered by State Route (SR) 150 to the east and the Santa Barbara–Ventura County line to the west (VCFPD 2021). Together these fuel beds have sustained over a dozen large scale fires (e.g., more than 300 acres), the most recent being the Thomas Fire in December 2017, which burned approximately 281,893 acres (VCFPD 2021).

In the ranking rubric, scoring for wildfire considers the site's FHSZ. The four ranking levels are as follows:

- **Ranking 0:** The alternative is within a very high fire hazard severity zone
- **Ranking 1-2-3:** The alternative is within a high fire hazard severity zone
- **Ranking 4-5-6:** The alternative is within a moderate fire hazard severity zone
- **Ranking 7-8-9:** The alternative is not within a fire hazard severity zone

3.2.11.1 Wildfire Ranking Criteria Definitions

CAL FIRE Fire Hazard Severity Zones

The FHSZ classifications are based on "a combination of how fire will behave and the probability of flames and embers threatening buildings" (OSFM 2022). The model places an emphasis on the spread of burning embers, as these embers can travel long distances in the wind and can ignite surrounding vegetation and infrastructure (OSFM 2022). A region is divided into discrete areas, which vary in size based on such factors as topography and land use (e.g., from 20-acre urban areas to larger wildland zones with a minimum of 200 acres). Each area receives a score for flame length, embers, and the likelihood of the area burning, which are then averaged over the zone area. The final zone classes for "very high," "high," and "moderate" fire hazard severity are based on the average area scores across the zone(s) (OSFM 2022).

The CAL FIRE FHSZ maps differentiate between State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs) (CAL FIRE 2017; OSFM 2022). According to CAL FIRE and the Office of the State Fire Marshal (OSFM), the SRA is "land where the State of California is financially responsible for the prevention and suppression of wildfires," while the LRA denotes areas where *local* governments have financial responsibility for the prevention and suppression of wildfires (CAL FIRE 2017; OFSM 2022). Most notably, in SRAs there are three levels of fire hazard severity: moderate, high, and very high, while the LRA model only recognizes a single fire hazard severity level (very high) (OSFM 2022).

Additional Scoring Criteria

After the determination has been made for the type of FHSZ present on site, within each scoring criteria range, points were added or subtracted based on three primary factors:

- **Proximity to other FHSZs**: Considerations include whether the site is on the outskirts or far removed from a FHSZ or surrounded by a FHSZ.
- **Availability of vegetative fuel load**: While all sites are located within an identified fuel bed area, special considerations include whether the site is located in an urban area or is located in an open space area with an abundance of natural fuel (e.g., grassland, woodland, chaparral) on and/or adjacent to an open space area.
- **Reliance on electricity/electrical transmission:** Considerations include whether the an electrical interconnect is required to power the compressor station would be required, and if aboveground

transmission lines used to power the compressor station would be extensive, isolated, and/or traveling through a CPUC High Fire-Threat District. Sites (see discussion below), which would represent an increased wildfire risk to the surrounding community (CPUC 2021a, 2021b).

CPUC Fire-Threat Maps and the High Fire-Threat District

In October 2007, "devastating wildfires driven by strong Santa Ana winds burned hundreds of square miles in Southern California. Several of the worst wildfires were reportedly ignited by overhead utility power lines and aerial communication facilities near power lines" (CPUC 2021a). In response to these wildfires, the CPUC Fire-Threat Map was created.[6] The CPUC Fire-Threat Map is a statewide map showing areas where there is a higher risk for power line fires igniting and spreading rapidly (CPUC 2021a). The Tier 2 and Tier 3 fire-threat areas on the CPUC Fire-Threat Map are integrated into the designated CPUC High Fire-Threat District (HFTD) maps, which also include Tier 1 High Hazard Zones (HHZs) from the U.S. Forest Service/CAL FIRE joint map of Tree Mortality HHZs (CPUC 2021a). Tier 1 HHZs are zones near communities, roads, and utility lines, and are a direct threat to public safety (CPUC 2021a). Tier 2 fire-threat areas outline areas where there is a higher risk (including likelihood and potential impacts on people and property) from utility related wildfires (CPUC 2021a). Tier 3 fire-threat areas outline areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility related wildfires (CPUC 2021a). Electric utilities and communication infrastructure within areas identified as CPUC "high fire threat areas" (e.g., areas within the HFTD), are required to adopt additional fire-safety regulations, as provided by CPUC Rulemaking 08-11-005 and General Order 95 (CPUC 2021a).

Because the HFTD is intended to "represent an area based upon mapping products (i.e., CPUC Fire-Threat Map) developed specifically for the purpose of scoping [electrical and communications] utility regulations," the HFTD is incorporated into the analysis for the hybrid compressor station technology options, which, depending upon the alternative, may require additional electrical utility infrastructure, including above-ground electrical poles and associated overhead electrical conduit (CPUC 2021a).

The applicable CAL FIRE FHSZ and CPUC HFTD maps are provided in Attachment 7.

[6] According to CPUC, "…[t]he main people handling the development of the CPUC Fire-Threat Map was a group of utility mapping experts known as the Peer Development Panel (PDP), with oversight from a team of independent experts known as the Independent Review Team (IRT). The members of the IRT were selected by CAL FIRE and CAL FIRE served as the Chair of the IRT. The development of CPUC Fire-Threat Map includes input from many stakeholders, including investor-owned and publicly owned electric utilities, communications infrastructure providers, public interest groups, and local public safety agencies" (CPUC 2021a).

4 Environmental Scoring and Ranking

Table 5 summarizes the scoring of each of the environmental criteria for the five sites for both the Natural Gas and Hybrid Options, as detailed below. Scores for the operational, on-site construction, and off-site construction considerations were totaled, and an overall environmental score was calculated.

The scores in the "Operational Considerations" category were multiplied by a factor of 10. The scores were weighted because operational considerations would have long-term implications for the environment over the life of the modernization project and thus should be considered as more consequential, whereas short-term construction activities are temporary. The factor of 10 was determined to be appropriate by considering the duration of construction impacts in the context of the life of the project. The duration of site construction activities would vary according to site-specific considerations described in Chapter 2, Alternative Options, and the average length of construction activity for all 10 development scenarios would be 3.8 years. The anticipated useful lifespan of the modernization project is estimated to be 40 years. As such, increasing the numeric scoring for the "Operational Considerations" category by a factor of 10 was determined to adequately capture the environmental consequences of short-term construction vs. long-term operational impacts.

Table 5. Environmental Scoring Rubric

Topic Areas	Existing Site		Avocado Site		Ventura Steel Site		Devil's Canyon Road Site		County Line Site	
	Natural Gas	Hybrid	Natural Gas	Hybrid	Natural Gas	Hybrid	Natural Gas	Hybrid	Natural Gas	Hybrid
Operational Considerations										
Aesthetics/Visual	8	8	0	0	6	5	8	7	0	0
Air Quality	1	5	1	5	1	5	1	5	0	5
CalEnviroScreen	1	1	2	2	3	3	2	2	2	2
Greenhouse Gas Emissions	3	5	3	5	3	5	3	5	2	4
Land Use Designation	1	1	6	6	9	9	6	6	6	6
Noise	4	4	9	9	7	8	8	9	4	6
Wildfire	8	8	2	1	0	0	2	1	3	2
Subtotal	*26*	*32*	*23*	*28*	*29*	*35*	*30*	*35*	*17*	*25*
Subtotal (×10)	*260*	*320*	*230*	*280*	*290*	*350*	*300*	*350*	*170*	*250*
On-Site Construction Considerations										
Air Quality	6	6	0	0	6	6	6	6	2	2
Cultural Resources	8	8	6	6	7	7	7	7	8	8
Greenhouse Gas Emissions	8	8	2	2	8	8	8	8	4	4
Natural Resources	9	9	8	8	9	9	4	4	6	6
Noise	3	3	9	9	9	9	9	9	7	7
Slope, Topo, and Grading	8	8	0	0	8	8	8	8	3	3
Traffic – Construction	6	6	7	7	9	9	9	9	2	2
Subtotal	*48*	*48*	*32*	*32*	*56*	*56*	*51*	*51*	*32*	*32*

Table 5. Environmental Scoring Rubric

Topic Areas	Existing Site		Avocado Site		Ventura Steel Site		Devil's Canyon Road Site		County Line Site	
	Natural Gas	Hybrid	Natural Gas	Hybrid	Natural Gas	Hybrid	Natural Gas	Hybrid	Natural Gas	Hybrid
Off-Site Construction for Routing Utilities Considerations										
Air Quality	9	9	2	0	0	0	5	3	5	4
Cultural Resources	8	8	6	6	8	8	6	7	7	6
Greenhouse Gas Emissions	9	9	7	6	4	4	7	7	9	9
Natural Resources	8	8	0	0	0	0	0	0	8	8
Noise	9	9	9	9	0	0	9	9	0	0
Traffic-Roadway Construction	9	9	7	7	0	0	7	7	7	7
Utilities/Service Systems	9	9	4	4	1	1	3	3	4	4
Subtotal	*61*	*61*	*35*	*32*	*13*	*13*	*37*	*35*	*39*	*38*
Total Environmental Score	**369**	**429**	**297**	**344**	**359**	**419**	**389**	**437**	**241**	**320**

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5 Ranking Analysis

5.1 Existing Site

The scoring rationale for each of the environmental topic areas for the Existing Site Alternative is described below.

5.1.1 Natural Gas Option

5.1.1.1 Operational Considerations

5.1.1.1.1 Aesthetics and Visual Resources

The Existing Site is partially screened from motorists on SR-33, an eligible State Scenic Highway (Caltrans 2022). Existing structural development to the east of the SR-33 corridor, and state route median and shoulder terrain and vegetation, routinely obstructs the Existing Site from the view of passing motorists. Eligible State Scenic Highways are routinely identified as scenic by the local jurisdiction, which has yet to adopt (or draft) a corridor protection plan that would install development controls or consideration over properties within the viewshed of the highway in question. Where visible, the duration of views to the Existing Site will be brief (lasting seconds) and the compressor building would not substantially block or interrupt available views to hills and mountains to the east of SR-33 that are identified as a major visual component of Ventura in the Final Environmental Impact Report for the City's existing General Plan (City of Ventura 2005b). Due to their assumed height of 15 feet or less, the office trailer, storage containers, and access roads are not anticipated to be visible from SR-33.

Due to distance and the presence of intervening terrain, vegetation, and development, the Existing Site is not visible from U.S. Route 101, an eligible state scenic highway. For the same reasons, potential development on the site would not be visible from U.S. Route 101 (or from Ventura Avenue, a locally designated scenic corridor; City of Ventura 2005b) and as such, would not alter the character of the community as experienced from U.S. Route 101 (or from Ventura Avenue).

Lastly, while the Existing Site is within the viewshed of elevated vantage points available at Grant Park (located approximately 0.85 miles to the southeast of the Existing Site and at an approximate elevation of 370 feet above mean sea level), potential development at the property is not anticipated to be visually prominent. The valued view available at Grant Park (a locally designated scenic corridor; City of Ventura 2005b) and more specifically, at Father Serra Cross, is generally focused to the south (toward the ocean). Views to the narrow valley to the west and east of SR-33 are available from the Father Serra Parking Lot; however, due to the elevational difference between Grant Park and the Existing Site, and the presence of existing development on the site, potential development would not result in any blockage or interruption of an identified scenic resource (such as local hillsides). For these reasons, potential development would have a nominal effect on the visual character of the community. Based on the assessment provided above, this alternative received a score of 8 points.

5.1.1.1.2 Air Quality

The Natural Gas Option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the

Air Quality and Greenhouse Gas Emissions Analysis (AQ/GHG Analysis) in Attachment 1, the natural gas-powered compressor station is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption.

Operation of the natural gas compressors is calculated to result in 11 tons/year of NO_x emissions. As such, the Natural Gas Option would fall within the ≥8 tons/year but <12 tons/year category, which would score from 1 to 3. Because 11 tons/year is closer to the upper end of the NO_x emissions range, the Natural Gas Option received a score of 1 point.

5.1.1.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Existing Site is in Census Tract 6111002300, which has a population of approximately 6,534. This tract has a total pollution burden score of 87%, which took into consideration the exposure indicator and environmental effect scores in Table 6 (OEHHA 2022b). This score means that this census tract has more pollution burden than 87% of all census tracts within California.

Table 6. Pollution Burden for Census Tract 6111002300

Exposure Indicator	Score (Percentile)
Ozone	27
Fine Particulate Matter ($PM_{2.5}$)	29
Diesel Particulate Matter	51
Pesticides	97
Toxic Releases	18
Traffic	39
Drinking Water Contaminants	66
Lead in Housing	79
Cleanups	83
Groundwater Threats	90
Hazardous Waste	89
Impaired Water	59
Solid Waste	36
Pollution Burden	**87**

Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Existing Site received a score of 1 point because a pollution burden of 87% is within the 81% to 90% scoring range.

5.1.1.1.4 Greenhouse Gases

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of carbon dioxide (CO_2) equivalent (MT CO_2e) that are directly produced from equipment and indirectly produced as a result of activities related to

operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). Indirect GHG emissions for the operation of the natural-gas facilities were not quantified for the Natural Gas Option because anything attributable to indirect GHG emissions would be consistent across all the proposed alternative sites and would be minimal.

The estimated emissions for the Natural Gas Option were calculated to be 27,836 MT CO_2e/year, which would fall within the $\geq$25,000 MT CO_2e/year but <50,000 MT CO_2e/year category and therefore would score from 1 to 3. Since 27,836 MT CO_2e/year is closer to the lower end of the emission range, the Natural Gas Option received a score of 3 points.

5.1.1.1.5 Land Use Designation

Regional Site Location

As shown in Figure 1, the approximately 8-acre Existing Site is located within the City of Ventura on North Olive Street, slightly west of SR-33. The on-site components are located within a single Assessor's Parcel Number (APN), APN 680142030, which has the same boundaries as the existing compressor station (City of Ventura 2022a; 2022b). Adjacent APNs impacted by the temporary staging area include APN 8888159266; APN 680142020; APN 680142100; APN 680142220; APN 680142065; APN 680142070; and APN 680132015. Under existing conditions, regional access to the site is via U.S. Route 101 (City of Ventura 2022a; 2022b).

Surrounding Land Uses

The General Plan Land Use and Zoning maps in Attachment 3 show the land use and zoning on and adjacent to the Existing Site (including off-site components). Land uses adjacent to the Existing Site include the City General Plan land use designations of Industry to the north, west, and south. There is a small parcel (APN 680090340) designated Industry adjacent to the northeast corner of the Existing Site, which separates the property from North Olive Street (the site borders this parcel for approximately 190 feet). Although zoned M-2 (General Industrial Zone) and designated for industrial/manufacturing uses, according to a desktop analysis, this APN appears to include a single-family residence (Google Maps 2021; City of Ventura 2021), which would be considered a "sensitive receptor" as it applies to the land use analysis. The Existing Site is located on the west side of North Olive Street, which is approximately 60 feet wide. The land uses on the east side of North Olive Street include several sensitive receptors, including E.P. Foster Elementary School, which is a potential historic landmark (City of Ventura 2022a; 2022b), and residences to the east (City of Ventura 2005a). The adjacent land areas to the north, west, and south and the parcel adjacent to the Existing Site's northeast corner (APN 680090340) are zoned M-2, per the City of Ventura zoning ordinance (City of Ventura 2021; 2022b). The parcels adjacent to the Existing Site on the east side of North Olive Street include zoning for R-1 (Single Family Zone) and M-1 (Limited Industrial Zone). Other zoning east of the Existing Site and North Olive Street include C-2 (General Commercial Zone), RPD (Residential Planned Development), R-2 (Two-Family Zone), and R-3 (Multiple Family Zone) (City of Ventura 2020, 2021).

Project Component Land Uses

The Existing Site's operational components are located within a single APN (APN 680142030), which has the same boundaries as the compressor station. As shown on the General Plan Land Use and Zoning maps in Attachment 3, the current City of Ventura land use (Industry) and zoning (M-2) designations for the property (and staging area

located immediately adjacent to the southwest of the compressor station site) support industrial and manufacturing uses. The City's General Plan describes the Industry land use as encouraging "intensive manufacturing, processing, warehousing and similar uses, as well as light, clean industries and support offices" (City of Ventura 2005a). Allowable uses within the M-2 zone include Utility or Equipment Substations, which are defined as "electrical substations, *natural gas pumping stations*, transmitters, or translators, and utility relay or monitoring facilities" (emphasis added; City of Ventura 2021, Section 24.115.3440 and 24.262.030).[7] As such, selection of the Natural Gas Option or Hybrid Option is consistent with the existing land use and zoning designations. Additionally, the staging area would be located on land immediately west of the Existing Site that is also designated Industry and zoned M-2. However, the staging area would be removed once the site becomes operational and therefore it is not incorporated into the operational land use analysis.

Evaluation and Score

All operational components are located within parcels with City zoning that supports industrial and/or manufacturing uses (City of Ventura 2021; County of Ventura 2005a); however, the nearest sensitive receptor (residence) is located adjacent to the eastern property line of the Existing Site. In addition, while industrial and/or manufacturing uses are also located adjacent to the Existing Site parcel to the north, west, and south, the predominant uses on the east side of North Olive Street include a public elementary school (E.P. Foster Elementary School) and various residential uses. As such, within the ranking criteria range of 1 to 3, "Industrial/manufacturing zone and adjacent to sensitive receptors," the Existing Site received a score of 1 point, due in large part to its proximity to sensitive receptors, which include a single-family residence adjacent to the compressor station site on APN 680090340 and a public school (E.P. Foster Elementary School) on the east side of North Olive Street.

5.1.1.1.6 Noise

The nearest non-industrial land use to the Existing Site is the adjacent single-family home in the northeast corner of the property. Based on the assessment provided in Attachment 5, Noise Modeling Output Figures, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (as defined in Section 3.2.7, Noise) of less than 55 dBA. Therefore, this alternative received a score of 4 points.

5.1.1.1.7 Wildfire

As shown on the SRA and LRA FHSZ Maps in Attachment 7, none of the operational components of the Existing Site are located within an FHSZ. The nearest very high FHSZ is located approximately 0.23 miles east of the existing compressor station site, while the nearest high FHSZ is located approximately 0.27 miles to the west on the west side of the Ventura River corridor (CAL FIRE 2022). The site is also located in a non-vegetated, urban area. Therefore, based on the ranking score range of 7 to 9 for sites not within an FHSZ, the Existing Site Alternative received a score of 8 points. The site did not receive a 9 because of its relative proximity to high and very high FHSZs to the west and east, as well as its location within a known fuel bed (Ventura Fuel Bed) that could still present a hazard (VCFPD 2021).

[7] The "Utility or Equipment Substations" use type is be permitted within the M-2 Zone subject to the provisions of Chapter 24.262 of the zoning code, and further provided that a use permit is approved pursuant to Chapter 24.520 (City of Ventura 2021).

5.1.1.2 On-Site Construction Considerations

5.1.1.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} were calculated from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station. For the purposes of the earthwork required to inform the air quality analysis, it was estimated that the site consisted of flat areas that required minimal grading. The total NO_x and PM_{10} emissions from on-site construction of the Existing Site Alternative – Natural Gas Option are shown in Table 7.

Table 7. On-Site Construction Emissions: Existing Site – Natural Gas

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	872	233
Grading – elevated	0	0
Compressor station	10,578	2,022
Substation	0	0
Total[a]	**11,450**	**2,255**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The amount of on-site diesel equipment would be minimal, and the duration of grading activities would be limited. NO_x emissions would be in the <40,000 pounds and ≥8,000 pounds range and PM_{10} emissions would be in the <6,000 pounds and ≥2,000 pounds range. Therefore, this alternative received a score of 6 points.

5.1.1.2.2 Cultural Resources

A total of 19 cultural resources have been previously recorded within a 1-mile radius of the Existing Site; however, no significant cultural resources have been identified on the Existing Site. One cultural resource comprising two buildings that are older than 45 years is present on site. The buildings were evaluated in 2021 and were found ineligible for listing in the NRHP or the CRHR or for designation as Historic Landmarks or Points of Interest; therefore, they are not significant resources (Sapphos 2021). The closest off-site resource is P-56-152841, a built environment resource located 0.18 miles to the southeast, that was formally evaluated and found ineligible for listing in the NRHP or the CRHR or for designation as Historic Landmarks or Points of Interest and is therefore not significant. No resources listed on any federal, state, or local registry are located within the Existing Site.

A total of 47 previously conducted studies have been undertaken within a 1-mile radius of the Existing Site between 1973 and 2021. Sapphos (2021) conducted a built environment study and evaluation of two buildings on the Existing Site. In addition, one of these studies, VN-02627, addressed the on-site portion of the Existing Site; however, it did not include a pedestrian survey or subsurface testing and no recommendations regarding existence or treatment of cultural resources were provided (King 1993).

The Existing Site has been subject to ground disturbance at least as early as 1923 when SoCalGas began installing a wide variety of compressor station equipment to upgrade an already existing gas plant site. Ground disturbance

associated with operation and maintenance of the SoCalGas facility occurs regularly on site. The Existing Site is located approximately 1,148 feet east of the Ventura River, 2.6 miles north of the Pacific Ocean, and 3.8 miles south of the Santa Ynez Mountains. It is not close to a natural landmark capable of depositing sediment, such as a river or the base of a foothill; therefore, it has a low potential for unknown archaeological material to be buried under natural sediment.

In summary, no known significant cultural resources exist within the Existing Site. Although the on-site component of the Existing Site has not been subjected to a pedestrian survey, the considerable and continual ground disturbance extending over 100 years and the lack of resources identified within close proximity suggests that the potential for yet unknown and intact cultural resources is low. Therefore, the Existing Site is in a location that is not sensitive for potentially significant cultural resources. Based on the above findings, the on-site component of the Existing Site received a score of 8 points.

5.1.1.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station were calculated. The total GHG emissions from on-site construction of the Existing Site Alternative are shown in Table 8.

Table 8. On-Site GHG Construction Emissions: Existing Site – Natural Gas

Activity	Total CO_2e Emissions (MT)
Grading – flat	105
Grading – elevated	0
Compressor station	1,560
Substation	0
Total[a]	**1,666**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The GHG emissions for on-site construction are anticipated to be below the 5,000 MT CO_2e threshold. Accordingly, this alternative received a score of 8 points.

5.1.1.2.4 Natural Resources

The Existing Site is fully developed and partially occupied with buildings from the existing compressor station operations. The Existing Site is surrounded by development and is not adjacent to (within 500 feet of) natural, open space habitat, as shown in Figure NR-2A in Attachment 4. No sensitive plant or animal species have been recorded on or adjacent to the Existing Site, as shown in Figure NR-1A in Attachment 4 and none are expected due to the developed conditions. As such, the Existing Site is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands on site and received a score of 9 points.

5.1.1.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (single-family residence adjacent to Existing Site) would be approximately 85 dBA at a distance of 90 feet, and thus between 50 and 100 feet from the construction activity; therefore, this alternative received a score of 3 points.

5.1.1.2.6 Slope, Topography, and Grading

The topography and slope maps in Attachment 6 show the slope for the Existing Site and surrounding area. The site is located in an urban area, which has been previously graded and improved, resulting in a subtle slope range of between 0% and 10%, for the both the compressor site and the surrounding area. Based on conceptual engineering analysis, grading for this site would entail approximately 4,500 CY of over-excavation/recompaction under the footprint of the various on-site structures. For the purposes of this analysis, 4,500 CY would be considered "negligible" as this amount, together with the average slope of the property, would not exceed the thresholds for a grading permit (County of Ventura 2022). Additionally, a slope of less than 10% indicates a high-ranking score is appropriate, as it does not exceed the 20% slope threshold defined in the scoring criteria (see Section 3.1). The average slope range calculations for the site are provided in Table 9.

Table 9. Average Slope Calculations

Class Range	% Slope Range	Acres	% Slope	Avg Avg	% Slope	Min Avg	% Slope	Max Avg
Existing Site – 8.42 Acres								
Site Classes: 0%–10%	0%–10%	8.42	5%	0.42	0%	0	10%	0.84
Site Averages				*5%*		*0%*		*10%*

As such, within the score range of 7 to 9, where the "average slope of the property is less than 20%" and "negligible/no over-excavation/recompaction is required" (see Section 3.1), the Existing Site received a score of 8 points.

5.1.1.2.7 Traffic

The Existing Site is in an industrial area, with direct access to the site from U.S. Route 101 to SR-33 to Stanley Avenue and Olive Street. Stanley Avenue and Olive Street are both classified as secondary arterials in the City of Ventura General Plan (City of Ventura 2005a), which provide access to primary arterials, other secondary arterials, and collector streets, with some access to local roads and major traffic-generating land uses. With direct access to the site provided via highways and arterials, vehicles traveling to/from the project site would not traverse through a road-constrained area. Furthermore, access to the site via a driveway at least 24 feet wide is currently available on Olive Street and would be maintained to meet SoCalGas and emergency responder access requirements.

Construction of the compressor station, including pad grading, buildings, and compressors, would take approximately 24 to 36 months. However, heavy earthwork is assumed to occur for less than 6 months because the site is already developed, and no major import/export of soils or materials via dump trucks and oversized vehicles would be needed. While industrial and/or manufacturing uses are located adjacent to the Existing Site

parcel to the north, west, and south, the predominant uses on the east side of North Olive Street include a public elementary school (E.P. Foster Elementary School) and various residential uses. Because construction would occur for less than 6 months but would occur near some residential uses and a school, this alternative received a score of 6 points.

5.1.1.3 Off-Site Construction Considerations

5.1.1.3.1 Air Quality

The Existing Site Alternative would not require any new off-site linear construction. Therefore, this alternative received a score of 9 points.

5.1.1.3.2 Cultural Resources

A total of 19 cultural resources have been previously recorded within a 1-mile radius of the off-site staging area for the Existing Site; however, no significant cultural resources have been identified within the staging area. The closest resources are two buildings on the Existing Site and P-56-000849, a prehistoric site located 0.37 miles west of the staging area. No resources listed on any federal, state, or local registry are located within the staging area.

Similar to the Existing Site, a total of 47 previously conducted studies have been undertaken within a 1-mile radius of the staging area between 1973 and 2021. Only VN-02627 addressed the off-site staging area, but it did not include a pedestrian survey or subsurface testing for resources (King 1993).

According to the historic aerial photographs and topographic maps, the staging area has been subject to ground disturbance at least as early as 1947 through at least as late as 1994, including structure and road construction, grading, installation of utilities, and pavement and demolition. The staging area is not close to a natural landmark capable of depositing sediment, such as a river or the base of a foothill; therefore, it has a low potential for unknown archaeological material to be buried under natural sediment.

In summary, although the off-site component of the Existing Site has not been subjected to a cultural resource study that specifically addressed the site, there are no known cultural resources within the off-site staging area. The property has been subject to considerable ground disturbance for at least 70 years and the staging area is not located close to a natural landmark capable of depositing sediment and burying yet unidentified cultural resources. Therefore, the potential for unknown and intact cultural resources is low and the off-site staging area is in a location that is not sensitive for potentially significant cultural resources. Based on the above findings, the staging area for the Existing Site received a score of 8 points.

5.1.1.3.3 Greenhouse Gases

This alternative would not require off-site linear construction; therefore, total GHG contribution would be zero. This alternative received a score of 9 points.

5.1.1.3.4 Natural Resources

No new off-site infrastructure pipelines, natural gas pipelines, or access roads are necessary for the Natural Gas Option.

The proposed off-site staging area is within a developed area, no sensitive plant or animal species have been recorded on it, and none are expected due to the developed conditions. However, the staging area is within 500 feet of riparian habitat associated with the Ventura River that has been designated as critical habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) and southern steelhead (*Oncorhynchus mykiss* pop. 10). SR-33 is expected to provide a substantial barrier between the staging area and the Ventura River. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands in off-site areas. However, due to the proximity of the staging area to the sensitive riparian habitat, this alternative received a score of 8 points.

5.1.1.3.5 Noise

The Existing Site Alternative – Natural Gas Option would not involve any planned off-site construction activities. As such, there would be no noise exposure associated with off-site construction activity for this alternative, which therefore received a score of 9 points.

5.1.1.3.6 Traffic

Construction of the Existing Site Alternative would occur entirely on site, with no roadway construction required because there would be no required pipeline construction. The staging area is immediately adjacent to the east of the Existing Site and would not require any roadway access. Therefore, this alternative received a score of 9 points.

5.1.1.3.7 Utilities/Service Systems

The Existing Site Alternative would not require additional utilities or service systems because the infrastructure required to operate the existing compressor station would be used to operate the proposed compressor station. Therefore, this alternative received a score of 9 points.

5.1.2 Hybrid Option

5.1.2.1 Operational Considerations

5.1.2.1.1 Aesthetics and Visual Resources

There would be no difference in potential effects to aesthetics and visual resources between the Hybrid Option and the Natural Gas Option. As with the components of the Natural Gas Option, scenic views to components would generally be available from mobile vantage points and would not block scenic views to area hillsides and would not result in substantial alteration of existing visual character. For these reasons, potential development would have a nominal effect on the visual character of the community. Based on the assessment provided above, this alternative received a score of 8 points.

5.1.2.1.2 Air Quality

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, the Hybrid Option is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption. The Hybrid Option has fewer

internal combustion engines and thus fewer direct emissions than the Natural Gas Option. The replacement of two of the internal combustion engines with two electric compressors of equivalent horsepower would essentially cut the expected direct emissions in half.

Operation of the Hybrid Option was calculated to result in 5.6 tons/year of NO_x emissions. As such, the Natural Gas Option would fall within the ≥4 tons/year but <8 tons/year category, which would score from 4 to 6. Because 5.6 tons/year is in the middle of the NO_x emissions range, the hybrid technology received a score of 5 points.

5.1.2.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Existing Site is in Census Tract 6111002300, which has a population of approximately 6,534. This tract has a total pollution burden score of 87%, which means that this census tract has more pollution burden than 87% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Existing Site received a score of 1 point because a pollution burden of 87% is within the 81% to 90% scoring range.

5.1.2.1.4 Greenhouse Gases

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). The total direct GHG emissions would be 13,918 MT CO_2e/year and indirect GHG emissions would be 5,500 MT CO_2e/year from operational activities at the Existing Site.

The shift from the Natural Gas Option to a Hybrid Option reduces the localized emissions of criteria pollutants and direct GHG emissions, but the increased power demand from the electric compressors would increase indirect GHG emissions depending on how the required power is generated. The estimated emissions for the hybrid technology were calculated to be 19,418 MT CO_2e/year, which would fall within the ≥10,000 MT CO_2e/year but <25,000 MT CO_2e/year category and would score from 4 to 6. Because 19,418 MT CO_2e/year is in the middle of the emission range, the Hybrid Option received a score of 5 points.

5.1.2.1.5 Land Use Designation

All the operational Existing Site Alternative – Hybrid Option components are located on parcels with City zoning that supports industrial and/or manufacturing uses (City of Ventura 2021). While industrial and/or manufacturing uses are also located adjacent to the Existing Site to the north, west, and south, the nearest sensitive receptor is located adjacent to the eastern property line of the Existing Site. In addition, the predominant uses on the east side of North Olive Street include a public elementary school (E.P. Foster Elementary School) and various residential uses. As such, within the ranking criteria range of 1 to 3, Industrial/manufacturing zone and adjacent to sensitive receptors, the Existing Site received a score of 1 point, due to its proximity to sensitive receptors adjacent to the site and east of North Olive Street.

5.1.2.1.6 Noise

The nearest non-industrial land use to the Existing Site is the adjacent single-family home in the northeast corner of the property. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (as defined in Section 3.2.7) of less than 55 dBA. Therefore, this alternative received a score of 4 points.

5.1.2.1.7 Wildfire

Although the Hybrid Option would have increased reliance on electrical power for the compressor station, the existing electrical utility infrastructure would be sufficient to provide power to the site. In addition, the site is within an urban area, where the immediate electrical utility infrastructure does not pass through a CPUC HFTD (CPUC 2021b) or a CAL FIRE FHSZ (CAL FIRE 2022). Based on the highest ranking score range of 7 to 9 for sites not within an FHSZ, the Existing Site Alternative received a score of 8 points. The site received a slightly reduced score due to its relative proximity to high and very high FHSZs to the west and east, which could still represent a hazard, as well as its location within a known fuel bed (i.e., Ventura Fuel Bed) (VCFPD 2021).

5.1.2.2 On-Site Construction Considerations

5.1.2.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} were calculated from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station. The total NO_x and PM_{10} emissions from on-site construction of the Existing Site Alternative – Hybrid Option are shown in Table 10.

Table 10. On-Site Air Quality Construction Emissions: Existing Site – Hybrid

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	872	233
Grading – elevated	0	0
Compressor station	10,578	2,022
Substation	1,311	74.3
Total[a]	**12,761**	**2,329**

Note: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The amount of on-site diesel equipment would be minimal, and the duration of grading activities would be limited. NO_x emissions would be in the <40,000 pounds and ≥8,000 pounds range and PM_{10} emissions would be in the <6,000 pounds and ≥2,000 pounds range. Therefore, this alternative received a score of 6 points.

5.1.2.2.2 Cultural Resources

There are no differences in the Existing Site Alternative's results for on-site construction considerations as it relates to cultural resources for the Hybrid Option when compared to the Natural Gas Option. Therefore, this alternative received a score of 8 points.

5.1.2.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station were calculated. The total GHG emissions from on-site construction of the Existing Site Alternative are shown in Table 11.

Table 11. On-Site GHG Construction Emissions: Existing Site – Hybrid

Activity	Total CO_2e Emissions (MT)
Grading – flat	105
Grading – elevated	0
Compressor station	1,560
Substation	294
Total[a]	**1,959**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The GHG emissions for on-site construction are anticipated to be well below the <5,000 MT CO_2e threshold. Accordingly, this alternative received a score of 8 points.

5.1.2.2.4 Natural Resources

The Hybrid Option would not alter any conditions related to on-site natural resources and this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands on site. Therefore, the Hybrid Option received a score of 9 points.

5.1.2.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use for the Hybrid Option for this alternative would be the same as the Natural Gas Option; therefore, the Hybrid Option received a score of 3 points.

5.1.2.2.6 Slope, Topography, and Grading

The Hybrid Option would have the same slope, topography, and grading requirements as the Natural Gas Option. As such, within the score range of 7 to 9, where the "average slope of the property is less than 20%" and "negligible/no over-excavation/recompaction is required" (see Section 3.1, Scoring Criteria), the Hybrid Option also received a score of 8 points.

5.1.2.2.7 Traffic

There would be a negligible difference between construction of the Hybrid Option and the Natural Gas Option. Construction of the compressor station, including pad grading, buildings and compressors, and electrical interconnection would take approximately 30 to 36 months, with major earthwork occurring for less than 6 months and briefly passing through residential areas. Access to the site would be the same as the Natural Gas Option. Therefore, this alternative received a score of 6 points.

5.1.2.3 Off-Site Construction Considerations

5.1.2.3.1 Air Quality

Scoring for off-site air quality impacts were based on the total amount of off-site linear construction required for the alternative. The Existing Site currently has an electrical line servicing the site and no additional off-site construction would be required. Therefore, this alternative received a score of 9 points.

5.1.2.3.2 Cultural Resources

There are no differences in results for off-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 8 points.

5.1.2.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions for off-site construction are anticipated to be 0 MT CO2e because no off-site construction would be required. Accordingly, this alternative received a score of 9 points.

5.1.2.3.4 Natural Resources

No new off-site infrastructure is necessary for the Hybrid Option. Construction of the Hybrid Option would require the same off-site staging area to be used. Therefore, this alternative also received a score of 8 points.

5.1.2.3.5 Noise

No predicted off-site construction noise exposure would occur for this alternative; therefore, the alternative received a score of 9.

5.1.2.3.6 Traffic

Construction of the Hybrid Option would be the same as the Natural Gas Option because no roadway construction on existing roads would be required. Therefore, this alternative received a score of 9 points.

5.1.2.3.7 Utilities/Service Systems

The Existing Site Alternative would require no off-site ground disturbance because the infrastructure required to operate the existing compressor station would be used to operate the Hybrid Option. For the Hybrid Option, the

existing electrical lines on site would be used and no additional construction would be required. Therefore, this alternative received a score of 9 points.

5.2 Avocado Site

The scoring rationale for each of the environmental topic areas for the Avocado Site Alternative is described below.

5.2.1 Natural Gas Option

5.2.1.1 Operational Considerations

5.2.1.1.1 Aesthetics and Visual Resources

The Avocado Site encompasses high-elevation hillside terrain and includes a ridgeline visible from SR-33. The site is also briefly visible from Ventura Avenue and other locally designated scenic corridors, including Grant Park. While terrain adjacent to the site has been developed, such development is limited to agriculture (row crops); therefore, development of a compressor station would be highly visible and would contrast with the existing character of local hillsides and ridgelines.

Because development of the Avocado Site would be visible from identified scenic corridors and a scenic highway (Ventura Avenue, Grant Park, and SR-33) and would result in the substantial alteration of a ridgeline and a prominent visual component of the local landscape (i.e., hillsides), this alternative received a score of 0 points.

5.2.1.1.2 Air Quality

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, the natural gas-powered compressor station is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption.

Operation of the natural gas compressors is calculated to result in 11 tons/year of NO_x emissions. As such, the Natural Gas Option would fall within the ≥8 tons/year but <12 tons/year category, which would score from 1 to 3. Because 11 tons/year is closer to the upper end of the NO_x emissions range, the Natural Gas Option received a score of 1 point.

5.2.1.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Avocado Site is in Census Tract 6111001206, which has a population of approximately 778. This tract has a total pollution burden score of 79%, which took into consideration the exposure indicator and environmental effect scores in Table 12 (OEHHA 2022b). This score means that this census tract has more pollution burden than 79% of all census tracts within California.

Table 12. Pollution Burden for Census Tract 6111001206

Exposure Indicator	Score (Percentile)
Ozone	27
Fine Particulate Matter ($PM_{2.5}$)	17
Diesel Particulate Matter	10
Pesticides	88
Toxic Releases	14
Traffic	75
Drinking Water Contaminants	45
Lead in Housing	58
Cleanups	72
Groundwater Threats	67
Hazardous Waste	76
Impaired Water	90
Solid Waste	80
Pollution Burden	**79**

Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Avocado Site received a score of 2 points because a pollution burden of 79% is within the 71% to 80% scoring range.

5.2.1.1.4 Greenhouse Gases

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). Indirect GHG emissions for the operation of the natural-gas facilities were not quantified for the Natural Gas Option since anything attributable to indirect GHG emissions would be consistent across all the proposed alternative sites.

The estimated emissions for the all-Natural Gas Option were calculated to be 27,836 MT CO_2e/year, which would fall within the $\geq$25,000 MT CO_2e/year but <50,000 MT CO_2e/year category and therefore would score from 1 to 3. Because 27,836 MT CO_2e/year is closer to the lower end of the emission range, the Natural Gas Option received a score of 3 points.

5.2.1.1.5 Land Use Designation

Regional Site Location

As shown in Figure 2, the Avocado Site is in southwest Ventura County, located slightly east of SR-33 and the City of Ventura, approximately 3,800 feet west of the Existing Site on North Olive Street. The Avocado Site lies across a

small portion of two larger APNs within Ventura County: APN 060031017 to the north (Northern Parcel) and APN 060031018 to the south (Southern Parcel). Under existing conditions, regional access to the Avocado Site is provided via U.S. Route 101 to Taylor Rancho Road; however, construction of a new compressor station at this location would require improvements to the roadway to accommodate emergency access. This roadway extent would be accessible directly from U.S. Route 101 via West Main Street. The Avocado Site would require the construction of one off-site staging area; however, because the staging area would not be required during the operational phase of the Avocado Site Alternative, this area is not discussed further in this section.

Surrounding Land Uses

As shown on the General Plan Land Use and Zoning maps in Attachment 3, the surrounding land uses of the Avocado Site are predominantly open space and agricultural, with minimum lot sizes ranging from 1 to 160 acres. These include the County General Plan (2020) land use designation of Open Space in all directions, as well as County zoning of Agricultural Exclusive (AE-40); Coastal Agricultural (CA-40) to the south; Open Space (OS-160) to the north, west, and east; Rural Agriculture (RA-1) to the east; and a Habitat Connectivity and Wildlife Corridor (HCWC) overlay zone to the east running along the Ventura River riparian corridor west of SR-33 (County of Ventura 2021). The Avocado Site is not adjacent to any sensitive receptors. The nearest sensitive receptor is a residence located approximately 0.7 miles away.

Project Component Land Uses

The General Plan Land Use and Zoning maps in Attachment 3 show that the approximately 15-acre Avocado Site, MLV stations, and the required access road are all located on privately held lands in Ventura County, the portions of which are currently developed with agricultural uses.

The northern half of the Avocado Site lies within APN 060031017 (Northern Parcel), a 557-acre parcel with a land use designation of Open Space (County of Ventura 2020; 2021). According to the Ventura County General Plan (2020) the "Open Space [General Plan land use] designation encompasses land, as defined under Section 65560 of the [California] Government Code, as any parcel or area of land or water which is essentially unimproved and devoted to an open-space use" (County of Ventura 2020). Zoning for the northern parcel is predominantly AE-40, which has a minimum lot area of 40 acres (County of Ventura 2008, Section 8103-0). The AE-40 zone is intended to preserve agricultural land and protect these areas from "nonrelated uses" that could have a negative impact on the County's agriculture industry (County of Ventura 2008, Section 8104-1.2). Although APN 060031017 also includes a small segment of CA-40 zoning to the west and a HCWC overlay designation to the east, the northern half of the Avocado Site is entirely within land area zoned AE-40 (County of Ventura 2021).

The southern half of the Avocado Site lies within APN 060031018 (Southern Parcel), a 562.79-acre parcel that also has a Ventura County land use designation of Open Space (County of Ventura 2020; 2021). Zoning for the Southern Parcel includes primarily AE-40 on the northern half, and CA-40 on the southern half, both of which have a minimum lot area of 40 acres (County of Ventura 2008a, Section 8103-0; 2012, Section 8175-2[c]; 2021). The Southern Parcel also includes an HCWC overlay zone to the east running along the Ventura River riparian corridor; however, the southern half of the plot identified for the Avocado Site is entirely within land area zoned AE-40 (County of Ventura 2021). Required improvements to 2.37 miles of Taylor Ranch Road to provide construction access to the Avocado Site would take place within land area zoned CA-40-sdf (slope-density formula), with a slope ranging from 0% to 35% (County of Ventura 2012, Section 8175-2[c]).

Notwithstanding the CPUC's preemptory authority discussed in Section 3.2.5, Land Use, the selection of the Avocado Site would require changes to existing land use and zoning for the on-site location to facilitate the types of operational uses required by the project. Selection of the Avocado Site would also likely require a lot split, because the existing on-site parcels are each several hundred acres in size. In addition, the underlying land use of the Avocado Site is included in the County of Ventura Measure C, Save Open-Space and Agricultural Resources Initiative—2050 (SOAR), which states that "lands designated as Agricultural, Rural, or Open Space on the County of Ventura's General Plan will remain so designated until December 31, 2050 unless the land is redesignated … by vote of the people or redesignated by the Board of Supervisors for the County of Ventura" (County of Ventura 2016). Further, the Board of Supervisors may only elect to redesignate said land uses to more "intensive" uses if "certain findings can be made, including (among other things) that the land is proven to be unsuitable for any form of utilitarian use, and redesignation is necessary to avoid an unconstitutional taking of property without just compensation" (County of Ventura 2016). While this does not explicitly impact the ranking as defined by the scoring criteria, the SOAR designation has been incorporated into the land use analysis and scoring for both the Natural Gas and Hybrid Options. The SOAR initiative was initially adopted by vote in 1998 and set to expire in December 2020; however, the initiative was extended by vote to 2050 after readoption in 2016.

Oil Wells

While the Avocado Site lies partially within the active Ventura Oil Field, there are no active wells present on site (DOC 2019, 2022).

Evaluation and Score

All Avocado Site Alternative – Natural Gas Option operational components are located within and/or adjacent to parcels with County zoning that does not support industrial and/or manufacturing uses. Additionally, the primary compressor station site is within an area governed by the SOAR initiative. No portion of the site is adjacent to any sensitive receptors. The nearest industrial land use to the Avocado Site is approximately 0.75 miles to the northeast (APN 068001001), while the nearest sensitive land use is approximately 0.76 miles to the east (APN 0680163255). Based on the above analysis and using the scoring criteria for a site which is within a Non-Industrial/ manufacturing zone not adjacent to sensitive receptors (Section 3.1, Scoring Criteria), the Avocado Site Alternative – Natural Gas Option received a score of 6 points. Within the 4 to 6 point range, the score was influenced by the following factors: (1) while the primary compressor station for the Avocado Site would be located partially within the active Ventura Oil Field, there are no active wells on site, which suggests the potential for oil/gas exploration but does not create complications related to active well operations, and (2) while the Avocado Site is zoned for agricultural use and is part of active agricultural parcels, aerial views of the site show no current crop production on the main compressor station site.

5.2.1.1.6 Noise

The nearest non-industrial land use to the Avocado Site is approximately 0.7 miles to the east. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (as defined in Section 3.2.7) of less than 35 dBA. Therefore, this alternative received a score of 9 points.

5.2.1.1.7 Wildfire

All operational components of the Avocado Site are located within an SRA FHSZ within the Casitas Fuel Bed (VCFPD 2021; CAL FIRE 2022). As shown on the FHSZ Maps in Attachment 7, approximately one-third of the compressor station for the Avocado Site would be within a very high FHSZ, while the rest of the site, as well as the access road and all ancillary equipment, are within a high FHSZ. Therefore, based on the ranking score range of 1 to 3 for sites within high FHSZs, the Avocado Site Alternative – Natural Gas Option received a score of 2 points due to (1) a portion of the site being located in a very high FHSZ and (2) the presence of vegetative fuel sources in the surrounding areas, particularly the unimproved areas to the north and east (Radeloff 2010; VCFPD 2021).

5.2.1.2 On-Site Construction Considerations

5.2.1.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} were calculated from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station. For the purposes of the earthwork required to inform the air quality analysis, it was estimated that the site consisted of mostly hillside/elevated land and some flat areas that required grading. The total NO_x and PM_{10} emissions from on-site construction of the Avocado Site Alternative are shown in Table 13.

Table 13. On-Site Construction Emissions: Avocado Site – Natural Gas

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	1,150	307
Grading – elevated	74,886	9,747
Compressor station	10,578	2,022
Substation	0	0
Total[a]	**86,614**	**12,076**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The Avocado Site is very hilly and would require a large amount of grading to be suitable for use. The Avocado Site currently has no industrial development. Emissions are greater than 80,000 pounds for NO_x and 10,000 pounds for PM_{10}; therefore, this alternative received a score of 0 points.

5.2.1.2.2 Cultural Resources

A total of 74 cultural resources have been previously recorded within a 1-mile radius of the Avocado Site; however, there are no resources within a 0.25-mile radius of the site and no cultural resources have been identified within the Avocado Site. Additionally, no resources listed on any federal, state, or local registry are located on the Avocado Site.

A total of 120 previously conducted studies have been undertaken within a 1-mile radius of the Avocado Site between 1973 and 2021. Investigations VN-519 (Singer 519) and VN-688 (Singer and Atwood 1987) included conducting pedestrian surveys in portions of the Avocado Site and provide recommendations that the general area

surrounding the Ventura River be avoided and left unaltered until further studies can be conducted, including archaeological and ethnographic analyses to determine the exact nature and scope of the potential resources. The authors also express that the general area should be considered culturally and/or scientifically significant.

According to the historic aerial photographs and topographic maps, the Avocado Site has remained undeveloped and covered in vegetation since at least 1904. The Avocado Site is located approximately 1,970 feet east of the Ventura River, 1.5 miles north of the Pacific Ocean at the southern base of the Santa Ynez Mountains. The Avocado Site is close to the base of the Santa Ynez Mountains, which are capable of having deposited alluvial sediments, likely prior to human habitation of the area, and also within a foothill area capable of having deposited colluvial sediments during human habitation of the area. Therefore, the Avocado Site has potential for unknown archaeological material to be buried under natural alluvial sediment.

In summary, the Avocado Site and the surrounding area have been subjected to multiple cultural resource studies, yet no cultural resources have been identified on site or within a 0.25-mile radius. Considering the lack of previous disturbance, potential alluvial and colluvial deposits capable of burying unidentified cultural resources, and the recommendations of two previous studies, the potential for yet unknown and intact cultural resources to exist is moderate. Therefore, the Avocado Site is in a location that is moderately sensitive for potentially significant cultural resources. Based on the above findings, the on-site components of the Avocado Site received a score of 6 points.

5.2.1.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. Acreages for grading were based on the "new disturbance" areas from the construction assumptions and the total GHG emissions from on-site construction of the Avocado Site Alternative are shown in Table 14.

Table 14. On-Site GHG Construction Emissions: Avocado Site – Natural Gas

Activity	Total CO_2e Emissions (MT)
Grading – flat	139
Grading – elevated	11,870
Compressor station	1,560
Substation	0
Total[a]	13,569

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The GHG emissions for on-site construction are anticipated to fall within the $\geq$10,000 MT CO_2e to <20,000 MT CO_2e range. This would be due to an increase in the amount of off-road equipment usage that would be needed to properly grade the site for use. Accordingly, this alternative received a score of 2 points.

5.2.1.2.4 Natural Resources

The Avocado Site is within undeveloped open space that was previously mapped as *Salvia mellifera–Salvia leucophylla* association[8] (David Magney Environmental Consulting 2008), as shown in Figure NR-2B in Attachment 4. This association is not a sensitive habitat (CDFW 2021). Based on recent aerial imagery, portions of the site have been disturbed but shrubs are still present, and there is shrub-dominated habitat to the north and west of the site and orchards to the south and east. No wetlands or riparian habitat have been previously recorded or are visible on aerial imagery. No sensitive plant or animal species have been recorded on or adjacent to the site, as shown in Figure NR-2B in Attachment 4. The 27 sensitive plant and animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur on the site. As such, the Avocado Site Alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands on site, and it received a score of 8 points due to the presence of natural vegetation within the site's limits.

5.2.1.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which is more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; therefore, the site received a score of 9.

5.2.1.2.6 Slope, Topography, and Grading

The topography and slope maps in Attachment 6 show the slope for the Avocado Site and surrounding area. The site itself is currently being used for agriculture. The average slope range calculations for the site are provided in Table 15.

Table 15. Average Slope Calculations

Class Range	% Slope Range	Acres	% Slope	Avg Avg	% Slope	Min Avg	% Slope	Max Avg
Avocado Site – 15.06 Acres								
Site Classes: 0%–70%	0%–10%	0.08	5%	0	0%	0	10%	0.01
	>10%–20%	0.54	15%	0.08	10%	0.05	20%	0.11
	>20%–30%	1.7	25%	0.43	20%	0.34	30%	0.51
	>30%–40%	6.52	35%	2.28	30%	1.96	40%	2.61
	>40%–50%	3.75	45%	1.69	40%	1.5	50%	1.88
	>50%–60%	2.13	55%	1.17	50%	1.07	60%	1.28
	>60%–70%	0.34	65%	0.22	60%	0.2	70%	0.24
Site Averages				*39%*		*34%*		*44%*

As shown above, the on-site slope ranges from a low of 0% to a high of over 60%, with a site average of approximately 39%. Based on conceptual engineering analysis, grading for this site would entail approximately 1.3 million CY of over-excavation/recompaction, which would be balanced on site. Relative to the size and type of

[8] An association is a vegetation classification unit defined by a diagnostic species, a characteristic range of species composition, general form or appearance, and distinctive habitat conditions (Jennings et al. 2006).

project, the required over-excavation/recompaction of more than 1.3 million CY would be considered substantial. Additionally, an average slope of almost 40% exceeds several of the slope thresholds defined by the scoring criteria (see Section 3.1). Therefore, because the average slope of the property is greater than 40% and/or substantial over-excavation/recompaction is required, the Avocado Site Alternative received a score of 0 points.

5.2.1.2.7 Traffic

The Avocado Site is approximately 3,800 feet west of the existing Ventura Compressor Station. The site has direct access from U.S. Route 101 to Taylor Ranch Road. The Avocado Site, whether the Natural Gas or the Hybrid Option, would require a new access road at least 24 feet in width and with a slope not exceeding 20%. Taylor Ranch Road is a narrow, unpaved road currently used for crop access that could be widened and improved with asphalt or other paving to meet the site's access requirements.

The surrounding area is primarily developed with agricultural uses and low-density residential development (the nearest residence is approximately 0.33 miles away) and the site is used for agriculture. Construction of the compressor station, including pad grading, access road, on-site utility installations, buildings, and compressors would require substantial amounts of grading and would take approximately 60 to 70 months, with heavy earthwork estimated to occur for more than 1 year.

While construction of the Avocado Site would continue for more than 1 year, heavy truck traffic would not occur on a constrained roadway, because direct access to Taylor Ranch Road (private road) is provided via a major highway (U.S. Route 101). However, because construction would impact Taylor Ranch Road, which might occasionally be used for access to the avocado groves, this alternative received a score of 7 points.

5.2.1.3 Off-Site Construction Considerations

5.2.1.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Natural Gas Option at the Avocado Site would require construction of approximately 982 linear feet of a pipeline system to connect to the existing main pipelines. It would also require grading, widening, and paving of approximately 12,315 linear feet of the existing road to accommodate plant traffic to the new site. The linear construction totals approximately 13,297 feet, which is in the moderate range. Therefore, this alternative received a score of 2 points.

5.2.1.3.2 Cultural Resources

A total of 74 cultural resources have been previously recorded within a 1-mile radius of the Avocado Site off-site components; however, no cultural resources have been identified within the off-site components of the Avocado Site. The closest resources to the off-site components of the Avocado Site are P-56-000481 and P-56-000849; a third prehistoric site, P-56-120026, is located 0.2 miles west of the Access Road. A site record summary of the cultural resources P-56-000481 and P-56-000849 is provided below.

- P-56-000481 is a prehistoric archaeological milling stone site located on the west terrace bank of the Ventura River within very close proximity of the off-site staging area and access road. Surface collection of artifacts included manos, metates, hammerstones, and flakes consisting of quartzite, jasper, and

chalcedony. The site was recorded in 1976 by M. Capelli and R. Browne, who noted the site appeared to date to the Oak Grove Period. The site record does not mention the occurrence of subsurface testing, so it is assumed the site boundary is based on surface observation and that the subsurface extent has yet to be determined.

- P-56-000849 is a prehistoric archaeological site comprising ground stone artifacts including hundreds of biface manos, metate fragments, and other tools. The site is located on top of an ancient terrace west of the Ventura River about 2.5 kilometers (1.6 miles) due north of the river mouth, within very close proximity of the off-site access road and according to the site record, near a buried gas line and cattle trough. The site was recorded in 1987 by Clay A Singer, who noted that subsurface testing had not occurred at the site but depth of archaeological deposits was suspected to be more than 50 centimeters (20 inches). The site record acknowledges that the site has been impacted by mechanical clearing operations and cattle grazing but no signs of large-scale disturbance or that of significant depth has occurred.

No resources listed on any federal, state, or local registry are located within the off-site components of the Avocado Site.

A total of 120 previously conducted studies have been undertaken within a 1-mile radius of the off-site components of the Avocado Site between 1973 and 2021. Investigations VN-519 (Singer 519) and VN-688 (Singer and Atwood 1987) conducted pedestrian surveys in portions of the off-site components and provide recommendations that the general area surrounding the Ventura River be avoided and left unaltered until further studies can be conducted, including archaeological and ethnographic analyses to determine the exact nature and scope of the potential resources. The authors also expressed that the general area should be considered culturally and/or scientifically significant.

According to the historic aerial photographs and topographic maps, the off-site components have been subject to ground disturbance. The off-site staging area has been subject to agricultural ground disturbance since at least 1967. The off-site access road component has been previously disturbed by road grading and construction at least as early as 1904. Some portions of the off-site pipeline component do not appear to have been previously disturbed, where other portions appear to be disturbed by agricultural use. With the exception of small portions, the off-site components are not within close proximity to a natural landmark capable of depositing sediment and therefore have a low potential for unknown archaeological material to be buried under natural sediment.

In summary, no known cultural resources are present within the off-site components of the Avocado Site. A majority of the off-site components of the Avocado Site have been subject to considerable ground disturbance for over 100 years, including road grading construction and agricultural use, with a small portion of the pipeline component appearing to have remained undisturbed. Generally, the off-site components of the Avocado Site are not located close to a natural landmark capable of depositing sediment and burying yet unidentified cultural resources, and no cultural resources have been identified within the off-site components of the Avocado Site.

However, three cultural resources have been identified within a 0.25-mile radius and two of them are very close to portions of the off-site component. These resources have not been subjected to subsurface testing but based on the site description, both cultural resources appear to be significant and may include buried deposits that potentially extend into the off-site components. If the adjacent resources do extend into the access road and staging area, the Avocado Site Alternative would have a potential to impact a significant resource; however, the adjacent resources' current site boundaries do not extend into the off-site components. Therefore, the off-site components

of the Avocado Site are in a location that is moderately sensitive for potentially significant cultural resources. Based on the above findings, the off-site components of the Avocado Site received a score of 6 points.

5.2.1.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the compressor station were calculated. The total GHG emissions from off-site construction of the Avocado Site Alternative are shown in Table 16.

Table 16. Off-Site GHG Construction Emissions: Avocado Site – Natural Gas

Activity	Total CO_2e Emissions (MT)
Power line	0
Pipeline – street	0
Pipeline – open space	15
Road construction	433
Total[a]	**448**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be close to the <500 MT CO_2e threshold. Therefore, this alternative received a score of 7 points.

5.2.1.3.4 Natural Resources

This alternative would require improvements to the access road and two new pipeline corridors. Grading of 12,600 linear feet of Taylor Ranch Road would be needed and is primarily within orchards, but there are portions that are in areas previously mapped as *Salvia mellifera–Salvia leucophylla* association (David Magney Environmental Consulting 2008), as shown in Figure NR-2B in Attachment 4. The proposed road improvements cross five linear wetland features (mapped as riverine) that could be impacted by road improvement. The proposed pipeline corridors and tie-ins are primarily within the adjacent orchards and would not cross any riverine features. The proposed staging area consists of developed lands and areas of potential coastal sage scrub based upon available imagery. No sensitive plant and animal species have been recorded on or adjacent to (within 500 feet of) the off-site components, as shown in Figure NR-1B in Attachment 4. The 27 sensitive plant and animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur in the off-site areas. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species and habitats in off-site areas, but there may be impacts to wetlands off site due to access road improvements; therefore, the alternative received a score of 0 points.

5.2.1.3.5 Noise

Predicted off-site construction noise exposure at the nearest non-industrial land use (as defined in Section 3.2.7), which is more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; therefore, the alternative received a score of 9 points.

5.2.1.3.6 Traffic

The Avocado Site Alternative would require grading, trenching, and natural gas pipeline installation in the agricultural fields adjacent to the site, but not beneath existing roadways. Additionally, other utility connections for electrical, potable water, sewer, and telecommunications would be conducted via trenching beneath Taylor Ranch Road. This alternative would require resurfacing and widening Taylor Ranch Road to 24 feet to meet SoCalGas and emergency responder access requirements. There would be no construction on public roadways, because Taylor Ranch Road is a private unpaved road used to provide access to the agricultural fields. While construction would impact Taylor Ranch Road, there would be no construction on public roadways that could cause new congestion or exacerbate existing traffic conditions. Therefore, this alternative received a score of 7 points.

5.2.1.3.7 Utilities/Service Systems

The Avocado Site Alternative – Natural Gas Option would require approximately 41,528 square feet of off-site ground disturbance for pipelines and utilities and approximately 7,500 square feet for the MLV connections, for a total of approximately 49,028 square feet of off-site ground disturbance. All off-site ground disturbance is summarized in Table 17 and would be conducted within and surrounded by non-urbanized and agricultural land; therefore, it would not impact urban roadways or otherwise impede commuter traffic.

Table 17. Off-Site Ground Disturbance: Avocado Site – Natural Gas

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (to the east)	3,019
Pipeline Corridor 2 (to the south)	1,563
Utility Lines	36,945
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*41,528*
Mainline Valve Connections	
Mainline Valve Connection 1	3,750
Mainline Valve Connection 2	3,750
Subtotal Off-Site Ground Disturbance – Mainline Valve Connections	*7,500*
Depressurization Line	
Depressurization Line	0
Subtotal Off-Site Ground Disturbance – Depressurization Line	*0*
Electrical Pole Footings	
Electrical Pole Footings	0
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*0*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**49,028**

Note:

[a] Totals may not sum precisely due to rounding.

This alternative received a score of 4 points because of the minimal amount of off-site ground disturbance required.

5.2.2 Hybrid Option

5.2.2.1 Operational Considerations

5.2.2.1.1 Aesthetics and Visual Resources

Due to the need for approximately 30 new 50-foot-high electrical poles to accommodate the anticipated electrical demand and because a number of the poles would be visible from SR-33 (and could cross the scenic highway), the Hybrid Option would potentially result in greater visual impacts comparative to the Natural Gas Option. However, because both options would require over 650,000 CY of new disturbance on hillside and ridgeline terrain and would substantially alter the existing terrain, the Hybrid Option received a score of 0 points.

5.2.2.1.2 Air Quality

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, the Hybrid Option is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption. The Hybrid Option has fewer internal combustion engines and thus fewer direct emissions than the Natural Gas Option. The replacement of two of the internal combustion engines with two electric compressors of equivalent horsepower would essentially cut the expected direct emissions in half.

Operation of the Hybrid Option was calculated to result in 5.6 tons/year of NO_x emissions. As such, it would fall within the $\geq$4 tons/year but <8 tons/year category, which is scored from 4 to 6. Because 5.6 tons/year is in the middle of the NO_x emissions range, the Hybrid Option received a score of 5 points.

5.2.2.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Avocado Site is in Census Tract 6111001206, which has a population of approximately 778. This tract has a total pollution burden score of 79%, which means that this census tract has more pollution burden than 79% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Avocado Site received a score of 2 points because a pollution burden of 79% is within the 71% to 80% scoring range.

5.2.2.1.4 Greenhouse Gases

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). The total direct GHG emissions would be 13,918 MT CO_2e/year and indirect GHG emissions would be 5,500 MT CO_2e/year from operational activities at the Avocado Site.

The shift from the Natural Gas Option to a Hybrid Option reduces the localized emissions of criteria pollutants and direct GHG emissions, but the increased power demand from the electric compressors would increase indirect GHG emissions depending on how the power that is used is generated. The estimated emissions for the hybrid technology were calculated to be 19,418 MT CO_2e/year, which would fall within the ≥10,000 MT CO_2e/year but <25,000 MT CO_2e/year category and therefore would score from 4 to 6. Because 19,418 MT CO_2e/year is in the middle of the emission range, the Hybrid Option received a score of 5 points.

5.2.2.1.5 Land Use Designation

In addition to the components previously discussed in Section 5.2.1.1.5, the hybrid alternative would require 30 new electrical poles and approximately 3,000 linear feet of overhead electrical line to accommodate the anticipated electrical demand. The electrical interconnect would have an underlying land use designation of Open Space (County of Ventura 2020) and zoning of AE-40 (County of Ventura 2008) and CA-40-sdf (County of Ventura 2012). Based on the above analysis and using the scoring criteria for a site that is within a Non-industrial/manufacturing zone and not adjacent to sensitive receptors, the Avocado Site Alternative – Hybrid Option received a score of 6 points. Within the 4 to 6 point range, the score was influenced by the following factors: (1) while the primary compressor station site is located partially within the active Ventura Oil Field, there are no active wells on site, which suggests the potential for oil/gas exploration but does not create complications related to active well operations, and (2) while the Avocado Site is zoned for agricultural use and is part of active agricultural parcels, aerial views of the site show no current crop production on the main compressor station site.

5.2.2.1.6 Noise

The nearest non-industrial land use to the Avocado Site is approximately 0.7 miles to the east. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (as defined in Section 3.2.7) of less than 35 dBA. Therefore, this alternative received a score of 9 points.

5.2.2.1.7 Wildfire

Due to the exposed nature of the electrical interconnect—30 poles and 3,000 linear feet of overhead electrical lines along Taylor Ranch Road—located in a Tier 3 HFTD, the electrical interconnect would represent an increased fire risk to the surrounding community due to potentially downed power lines (see maps in Attachment 7). Therefore, based on the ranking criteria for sites within high FHSZs, the Avocado Site Alternative – Hybrid Option received a score of 1 point, because the entirety of the electrical interconnect would travel through an HFTD.

5.2.2.2 On-Site Construction Considerations

5.2.2.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} were calculated from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station. The total NO_x and PM_{10} emissions from on-site construction of the Avocado Site Alternative are shown in Table 18.

Table 18. On-Site Construction Emissions: Avocado Site – Hybrid

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	1,150	307
Grading – elevated	74,886	9,747
Compressor station	10,578	2,022
Substation	1,311	74
Total[a]	87,925	12,150

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The Avocado Site is very hilly and would require grading and excavation to be suitable for use. The Avocado Site currently has no industrial development. The Hybrid Option would also require additional construction activity for a substation. The total NO_x emissions are greater than 80,000 pounds and PM_{10} emissions are greater than 10,000 pounds; therefore, this alternative received a score of 0 points.

5.2.2.2.2 Cultural Resources

There are no differences in the results for on-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 6 points.

5.2.2.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station were calculated. The total GHG emissions from on-site construction of the Avocado Site Alternative are shown in Table 19.

Table 19. On-Site GHG Construction Emissions: Avocado Site – Hybrid

Activity	Total CO_2e Emissions (MT)
Grading – flat	139
Grading – elevated	11,870
Compressor station	1,560
Substation	294
Total[a]	13,862

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The Hybrid Option would require the construction of a substation on the site, thus increasing the amount of on-site GHG emissions when compared to the Natural Gas Option. The GHG emissions for on-site construction are anticipated to fall within the >10,000 MT CO_2e to <20,000 MT CO_2e range. This would be due to an increase in the amount of off-road equipment usage that would be needed. Accordingly, this alternative received a score of 2 points.

5.2.2.2.4 Natural Resources

The Hybrid Option would not alter any conditions related to on-site natural resources and as such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands on site. Because of this lack of impact and considering the presence of natural vegetation within the site's limits, the alternative received a score of 8 points.

5.2.2.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; therefore, this alternative received a score of 9 points.

5.2.2.2.6 Slope, Topography, and Grading

The Hybrid Option would include an electrical interconnect, requiring approximately 60 CY of additional grading. This additional grading does not impact the ranking because the over-excavation required for the electrical alignment is a relatively negligible amount, compared to the overall amount. In addition, per the scoring criteria provided in Section 3.1, the slope, topography, and grading scenarios for the site, regardless of the electrical interconnect requirement, already qualify the site for a score of 0 points.

5.2.2.2.7 Traffic

There would be a negligible difference between construction of the Hybrid Option and the Natural Gas Option related heavy truck traffic for on-site construction activity. Therefore, this alternative received a score of 7 points.

5.2.2.3 Off-Site Construction Considerations

5.2.2.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Hybrid Option at the Avocado Site would require construction of approximately 982 linear feet of a pipeline system to connect to the existing main pipelines. It would also require grading, widening, and paving of approximately 12,315 linear feet of the existing road to accommodate compressor plant traffic to the new site. In addition, approximately 4,359 linear feet of electrical interconnect would be required to accommodate the increased demand from the electric compressors. The linear construction would total approximately 17,656 feet, which is in the substantial range. Therefore, this alternative received a score of 0 points.

5.2.2.3.2 Cultural Resources

There are no differences in the results for off-site construction considerations for the Hybrid Option and the Natural Gas Option; therefore, this alternative received a score of 6 points.

5.2.2.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the future compressor station were calculated. The total GHG emissions from off-site construction of the Avocado Site Alternative are shown in Table 20.

Table 20. Off-Site GHG Construction Emissions: Avocado Site – Hybrid

Activity	Total CO_2e Emissions (MT)
Power line	137
Pipeline – street	0
Pipeline – open space	15
Road construction	433
Total[a]	**585**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be just above the <500 MT CO_2e threshold. Therefore, this alternative received a score of 6 points.

5.2.2.3.4 Natural Resources

The Hybrid Option would require new off-site electric poles to connect the station to the existing SCE transmission line. The alternative requires 3,000 linear feet of overhead electrical line, with 30 poles, that is primarily through orchards but is also in areas previously mapped as *Salvia mellifera–Salvia leucophylla* association (David Magney Environmental Consulting 2008), as shown in Figure NR-2B in Attachment 4. The electrical line alignment also intersects four ephemeral wetland features (riverine); however, it is assumed that the poles can be sited outside the limits of these features. The proposed staging area consists of developed lands and areas of potential coastal sage scrub based upon available imagery. The same off-site staging area would be required for the Hybrid Option. No sensitive plant and animal species have been recorded on or adjacent to (within 500 feet of) the off-site components, as shown in Figure NR-1B in Attachment 4. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species and habitats in off-site areas, but there may be impacts to wetlands off site due to access road improvements. Therefore, this option also received a score of 0 points.

5.2.2.3.5 Noise

Predicted off-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; therefore, this alternative received a score of 9 points.

5.2.2.3.6 Traffic

Construction of the Hybrid Option would be the same as the Natural Gas Option, with the exception of the extension of electrical utilities. However, no roadway construction on existing roads for electrical utilities would be required. Therefore, this alternative received a score of 7 points.

5.2.2.3.7 Utilities/Service Systems

The Avocado Site would require approximately 41,528 square feet of off-site ground disturbance for pipelines and utilities, approximately 7,500 square feet for the MLV connections, and an additional 420 square feet of off-site ground disturbance required for electrical poles, for a total of 49,448 square feet of off-site ground disturbance. All off-site ground disturbance is summarized in Table 21 and would be conducted within and surrounded by non-urbanized and agricultural land; therefore, it would not impact urban roadways or otherwise impede commuter traffic.

Table 21. Off-Site Ground Disturbance: Avocado Site – Hybrid

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (to the east)	3,019
Pipeline Corridor 2 (to the south)	1,563
Utility Lines	36,945
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*41,528*
Mainline Valve Connections	
Mainline Valve Connection 1	3,750
Mainline Valve Connection 2	3,750
Subtotal Off-Site Ground Disturbance – Mainline Valve Connections	*7,500*
Depressurization Line	
Depressurization Line	0
Subtotal Off-Site Ground Disturbance – Depressurization Line	*0*
Electrical Pole Footings	
Electrical Pole Footings	420
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*420*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**49,448**

Note:

[a] Totals may not sum precisely due to rounding.

The additional disturbance for the electrical poles would not substantively alter the amount of off-site ground disturbance required; therefore, this alternative received a score of 4 points.

5.3 Ventura Steel Site

The scoring rationale for each of the environmental topic areas for the Ventura Steel Site is described in this section.

5.3.1 Natural Gas Option

5.3.1.1 Operational Considerations

5.3.1.1.1 Aesthetics and Visual Resources

The Ventura Steel site is located within the local valley landscape to the east of SR-33 (and east of Ventura Avenue). While the site is visible from SR-33, the valley landscape has been visibly altered by previous development including oil wells, storage tanks, storage yards, and wooden and metallic siding structures supporting industrial and commercial businesses. Development of the site with the Natural Gas Option would not result in damage to a scenic resource (the site encompasses relatively flat and previously developed terrain) and would not obstruct or otherwise degrade an existing view to a valued scenic resource such as hillsides. Construction of off-site pipelines is likely to result in temporary contrasting lines and scars on hillsides that would be visible from SR-33; however, due to the temporal nature of the disturbance (which would revegetate over time) and the degraded character of the visible oil/gas uses in the vicinity, pipeline installation is not anticipated to create substantial effects to existing visual character. Development of this site would require a permanent access road (approximately 3,600 feet long by 12feet wide) that would result in linear visual disturbance on hillside visible from SR-33. However, as stated above, the presence of oil and gas infrastructure in the nearby SR-33 viewshed would reduce the severity of visual character effects. It should be noted that while adjacent to Ventura Boulevard, the site and segment of the roadway are north of the scenic corridor boundaries as identified by the City of Ventura (City of Ventura 2005b). Lastly, the Ventura Steel Site is not anticipated to be visible from Grant Park due to the presence of an intervening ridgeline that effectively blocks the site from view of Grant Park visitors.

Development of the Ventura Steel Site with the Natural Gas Option would minimally alter the existing visual character and the site is minimally to moderately visible from an identified scenic resource (i.e., SR-33, an eligible state scenic highway). However, contrasting lines and hillside scars created by the construction of off-site pipelines and a permanent access road lowers the overall score associated with development of the Ventura Steel Site, which received a score of 6 points.

5.3.1.1.2 Air Quality

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, the natural gas-powered compressor station is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption.

Operation of the natural-gas only compressors is calculated to result in 11 tons/year of NO_x emissions. As such, the Natural Gas Option would fall within the $\geq$8 tons/year but <12 tons/year category, which is scored from 1 to 3. Because 11 tons/year is closer to the upper end of the NO_x emissions range, the Natural Gas Option received a score of 1 point.

5.3.1.1.3 CalEnviroScreen

As shown on the OEHHA CalEnviroScreen 4.0 Maps, the Ventura Steel Site is in Census Tract 6111001204, which has a population of approximately 3,036. This tract has a total pollution burden score of 69%, which took into consideration the exposure indicator and environmental effect scores in Table 22 (OEHHA 2022b). This score means that this census tract has more pollution burden than 69% of all census tracts within California.

Table 22. Pollution Burden for Census Tract 6111001204

Exposure Indicator	Score (Percentile)
Ozone	47
Fine Particulate Matter ($PM_{2.5}$)	23
Diesel Particulate Matter	2
Pesticides	61
Toxic Releases	18
Traffic	23
Drinking Water Contaminants	65
Lead in Housing	81
Cleanups	64
Groundwater Threats	67
Hazardous Waste	77
Impaired Water	77
Solid Waste	59
Pollution Burden	**69**

Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Ventura Steel Site received a score of 3 points because a pollution burden of 69% is within the 61% to 70% scoring range.

5.3.1.1.4 Greenhouse Gases

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). Indirect GHG emissions for the operation of the natural-gas facilities were not quantified for the Natural Gas Option since anything attributable to indirect GHG emissions would be consistent across all the proposed alternative sites.

The estimated emissions for the Natural Gas Option were calculated to be 27,836 MT CO_2e/year, which would fall within the $\geq$25,000 MT CO_2e/year but <50,000 MT CO_2e/year category and therefore would score from 1 to 3.

Because 27,836 MT CO_2e/year is closer to the lower end of the emission range, the Natural Gas Option received a score of 3 points.

5.3.1.1.5 Land Use Designation

As shown on Figure 3, the approximately 10.00-acre Ventura Steel Site is located within the County of Ventura, approximately 0.31 miles north of the City of Ventura boundary, and within the City's spere of influence (City of Ventura 2022, 2022), slightly west of SR-33. The Ventura Steel Site's on-site components are located across portions of several APNs, including APN 063021012 (8.77 acres), APN 063022014 (3.46 acres), APN 063022015 (1.49 acres), APN 063022016 (1.68 acres), and a slim portion of APN 063021009 (County of Ventura 2021). Under existing conditions, regional access to the site is provided by Ventura Avenue via SR-33 and U.S. Route 101.

Surrounding Land Uses

The General Plan Land Use and Zoning maps within Attachment 3 show the land use and zoning on and adjacent to the Ventura Steel Site (including off-site components). Land uses adjacent to the Ventura Steel Site include the County General Plan land use designations of Industrial to the north, west, and south, as well as Open Space directly adjacent and to the east. The adjacent land areas to the north, west, and south are zoned M-3 (General Industrial Zone with a 10,000-square-foot lot area minimum), per the County of Ventura non-coastal zoning ordinance (County of Ventura 2008; 2021). The parcel adjacent to the southeast corner of the site is zoned OS-160, requiring a minimum lot area of 160 acres, with an additional parcel located approximately 78 feet to the east zoned AE-40 which has a minimum lot size requirement of 40 acres (County of Ventura 2008). The Ventura Steel Site is not adjacent to any sensitive receptors. The nearest sensitive land use is a residentially zoned parcel (APN 0690151105) in the City of Ventura, approximately 0.33 miles to the south of the site boundary.

Project Component Land Uses

The Ventura Steel Site's operational components are located across portions of several APNS within the County. As shown in the General Plan Land Use and Zoning maps in Attachment 3, the current County of Ventura land use and zoning for the compressor station site are Industrial and M-3, which has a 10,000-square-foot lot area minimum. The Ventura Steel Site Alternative would require over 19,000 feet of additional pipeline. There are two main pipeline corridors proposed: one would be located primarily in the public right-of-way along Ventura Avenue connecting to an existing pipeline on the existing compressor station site (City of Ventura 2022, 2022). The other would be located east of the City's urban area skirting the City/County boundary line (see Attachment 3, Figure LU-1C, Land Use – Ventura Steel). This corridor would travel through County parcels with a land use designation of Open Space as well as a City parcel with a land use designation of Neighborhood Low (County of Ventura 2020; City of Ventura 2005a). Zoning for these parcels includes Residential Planned Development (RPD) (City), OS-160 (County), AE-40 (County), and M-3 (County). Because the compressor station site would be located on land areas designated for industrial and/or manufacturing uses, selection of this alternative would be consistent with existing land use and/or zoning. Additionally, the proposed staging area for the Ventura Steel Site Alternative would be spread across multiple parcels to the northeast of the compressor station site, all of which are similarly designated Industrial and zoned M-3; however, this component would be removed once the site becomes operational and is therefore not incorporated into the operational land use analysis.

Oil Wells

The Ventura Steel Site is located within the south-central portion of the active Ventura Oil Field (DOC 2022). According to the U.S. Department of Conservation (DOC 2022), there are at least 11 currently active wells located on the proposed compressor station site, in addition to a number of active wells operating in the near vicinity.

Evaluation and Score

This Ventura Steel Site is in an interface area between urban/suburban and open space/agricultural uses just north of the City line. It is proposed on land areas designated for industrial and/or manufacturing uses and not adjacent to any sensitive receptors. Industrial and/or manufacturing uses are located adjacent to the site to the north, west, and south, and the predominant land uses to the east of the site are open space and agricultural (County of Ventura 2020). Within the ranking criteria range of 7 to 9, "Industrial/manufacturing zone and not adjacent to sensitive receptors," the Ventura Steel Site Natural Gas Option received a score of 9 points.

5.3.1.1.6 Noise

The nearest non-industrial land use to the Ventura Steel Site is a residentially zoned parcel in the City of Ventura approximately 0.33 miles to the south of the site boundary. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (as defined in Section 3.2.7) of less than 40 dBA. Therefore, this alternative received a score of 7 points.

5.3.1.1.7 Wildfire

All the operational components of the Ventura Steel Site are partially within an SRA or LRA very high FHSZ (CAL FIRE 2022). As shown on the FHSZ Maps in Attachment 7, the majority of the proposed compressor station site is within a very high FHSZ, and both off-site MLV stations and the majority of the eastern pipeline corridor are also within a very high FHSZ. The compressor station site is classified as a non-vegetated area within the Ventura Fuel Bed and is located immediately adjacent and to the west of a vegetated area within the Ventura Fuel Bed (Radeloff 2010; VCFPD 2021). While the eastern pipeline corridor would be undergrounded, access roads would still be required for maintenance and would be located in an unimproved, high fuel load area. As such, workers would be exposed to very high FHSZ conditions, particularly in the later summer and early fall. Therefore, based on the ranking score range for sites "within a very high fire hazard severity zone," the Ventura Steel Natural Gas Option received a score of 0 points because (1) the main project component (the compressor station) is predominantly within a very high FHSZ and adjacent to a very high FHSZ and (2) the pipeline corridor to the east is predominantly within a very high FHSZ and vegetated fuel load area, which would present a fire hazard for workers, particularly during the fire season.

5.3.1.2 On-Site Construction Considerations

5.3.1.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} were calculated from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station. For the purposes of the earthwork required to inform the air quality analysis, it was

estimated that the site consisted of flat areas that required minimal grading. The total NO_x and PM_{10} emissions from on-site construction of the Ventura Steel Site are shown in Table 23.

Table 23. On-Site Construction Emissions: Ventura Steel – Natural Gas

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	872	233
Grading – elevated	0	0
Compressor station	10,578	2,022
Substation	0	0
Total[a]	**11,450**	**2,255**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The Ventura Steel Site is flat, the amount of on-site diesel equipment would be minimal, and the duration of grading activities would be limited. The total emissions are in the <40,000 pounds and ≥8,000 pounds range for NO_x and the <6,000 pounds and ≥2,000 pounds range for PM_{10}; therefore, this alternative received a score of 6 points.

5.3.1.2.2 Cultural Resources

A total of 18 cultural resources have been previously recorded within a 1-mile radius of the Ventura Steel Site; however, no cultural resources have been identified on the Ventura Steel Site. One resource within a 0.25-mile radius of the Ventura Steel Site was identified and is summarized below:

- P-56-001109H is a historic site known as the Nordhoff Spur of the Ventura River and Ojai Valley Railroad, the first and only spur to enter the Ojai Valley. This linear site is approximately 275 feet west of the Ventura Steel Site. The track has been removed but the grade is still present, and portions of the railroad have been repurposed to accommodate cyclists and horses as part of the Ojai Trail. Because the railroad has been removed and the potential of intact archaeological deposits to exist is unlikely, this cultural resource is not considered significant.

No resources listed on any federal, state, or local registry are located within the Ventura Steel Site.

A total of 55 previously conducted studies have been undertaken within a 1-mile radius of the Ventura Steel Site between 1974 and 2014. Of these 55 reports, 11 reports (VN-214, VN-228, VN-1102, VN-1634, VN-1752, VN-1849, VN-1851, VN-2534, VN-2541, VN-2627, and VN-3117) address portions of the Ventura Steel Site. Most of the recommendations provided in the overlapping reports were meant to address concerns associated with the study area addressed in each report, portions of which are outside the Ventura Steel Site, and the recommendations do not appear to be intended to mitigate any specific cultural resources. It does not appear that the existing buildings located within the Ventura Steel Site have been previously evaluated, and it appears as if at least some of the buildings are older than 45 years.

According to the historic aerial photographs and topographic maps, the Ventura Steel Site has been subject to ground disturbance at least as early as 1952 and continuing through at least 2014, including construction of structures and likely grading and installation of utilities and pavement. The Ventura Steel Site is located

approximately 1,970 feet east of the Ventura River, 3 miles north of the Pacific Ocean, and 1.75 miles south of the Santa Ynez Mountains. The Ventura Steel Site is not within close proximity to a natural landmark capable of depositing sediment, such as a river or the base of a foothill, and therefore has a low potential for unknown archaeological material to be buried under natural sediment.

In summary, no known significant cultural resources exist within the Ventura Steel Site and only one known cultural resource is located within 0.25 miles; however, this resource is not considered significant. Some of the on-site buildings are older than 45 years; thus, the buildings could be historic due to their age. However, the buildings have not been evaluated and their significance is not known. Continual ground disturbance and lack of resources identified within close proximity to the site suggests that the potential for yet unknown and intact archaeological resources is low, and the on-site component of the Ventura Steel Site has an unknown sensitivity for built environment cultural resources. Thus, the project is in a location that is not sensitive for potentially significant cultural resources. Based on the above findings, the on-site component of the Ventura Steel Site received a score of 7 points.

5.3.1.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total GHG emissions from on-site construction of the Ventura Steel Site Alternative are shown in Table 24.

Table 24. On-Site GHG Construction Emissions: Ventura Steel – Natural Gas

Activity	Total CO_2e Emissions (MT)
Grading – flat	105
Grading – elevated	0
Compressor station	1,560
Substation	0
Total[a]	**1,666**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The GHG emissions for on-site construction are anticipated to be well below the <5,000 MT CO_2e threshold. Accordingly, this alternative received a score of 8 points.

5.3.1.2.4 Natural Resources

This alternative is within a developed area; however, there is some scattered ruderal vegetation present on site.[9] The site is adjacent to developed areas on the north, south, and west, and the area to the east was previously mapped as developed, due to oil extraction facilities, but shrubs and ruderal vegetation are present in this area on

[9] "Ruderal" refers to vegetation that is often composed of invasive species, whether exotic or native, that have expanded in extent and abundance due to human disturbances (Faber-Langendoen et al. 2014).

aerial imagery. Undisturbed open space habitat to the north of the oil extraction facilities has previously been mapped as *Salvia mellifera–Salvia leucophylla* association (David Magney Environmental Consulting 2008), as shown in Figure NR-2C in Attachment 4, which is not a sensitive community (CDFW 2021). No sensitive plant or animal species have been recorded on or adjacent to (within 500 feet of) the site, as shown in Figure NR-1C in Attachment 4. The 33 sensitive plant and animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur on the site. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands on site, and received a score of 9 points.

5.3.1.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; therefore, this alternative received a score of 9 points.

5.3.1.2.6 Slope, Topography, and Grading

The topography and slope maps in Attachment 6 show the slope for the Ventura Steel Site and surrounding area. The land area for this site is located in an interface zone between urban/suburban and agricultural/open space uses near the northeastern boundary of the City of Ventura. The average slope range calculations for the site are provided in Table 25.

Table 25. Average Slope Calculations

Class Range	% Slope Range	Acres	% Slope	Avg Avg	% Slope	Min Avg	% Slope	Max Avg
Ventura Steel Site – 10.00 Acres								
Site Classes: 0%–30%	0%–10%	8.97	5%	0.45	0%	0	10%	0.9
	>10%–20%	0.98	15%	0.15	10%	0.1	20%	0.2
	>20%–30%	0.05	25%	0.01	20%	0.01	30%	0.02
Site Averages				*6%*		*1%*		*11%*

The site has been previously graded and developed, resulting in an average on-site slope of approximately 6%. The surrounding area is similarly improved to the north, west, and southeast, with slopes of less than 20%. Based on conceptual engineering analysis, grading for the on-site components would entail approximately 4,500 CY of over-excavation/recompaction. In addition, the access road would require approximately 1,600 CY of over-excavation/recompaction, however, this would take place off site. For the purposes of this analysis, a total of 6,100 CY, together with a slope of less than 10%, would be considered "negligible." Additionally, an average slope of approximately 6% would suggest a high-ranking score is appropriate, as it would not exceed the 20% slope threshold defined in the scoring criteria (see Section 3.1). As such, within the score range of 7 to 9, where the "average slope of the property is less than 20%" and "negligible/no over-excavation/recompaction is required," the Ventura Steel Site received a score of 8 points.

5.3.1.2.7 Traffic

The Ventura Steel Site Alternative is an industrial site located approximately 8,000 feet north of the Existing Site. The Ventura Steel Site has direct access from U.S. Route 101 to SR-33 to the Shell Road interchange and North Ventura Avenue. The County of Ventura General Plan (Ventura County 2020) classifies Shell Road as a minor road and North Ventura Avenue as a collector. North Ventura Avenue is also identified in the General Plan as a major County Road. Although Shell Road is classified as a minor road, trucks would travel to and from the interchange for approximately 1,800 feet or less along this road. Therefore, with direct access to the site provided via highways and a major County roadway, the project is not considered to travel through a road-constrained area. Furthermore, access to the site is provided by multiple driveways off North Ventura Avenue and East Shell Road that currently meet SoCalGas and emergency responder access requirements.

Construction of the compressor station, including pad grading, access road, on-site utility installations, buildings, and compressors, would take approximately 36 to 48 months, with major earthwork and heavy truck traffic occurring for less than 1 year due to the flat/graded nature of the property. Given the location of the site and sufficient existing access, heavy trucks would not travel through residential areas or roadway-constrained areas. Therefore, this alternative received a score of 9 points.

5.3.1.3 Off-Site Construction Considerations

5.3.1.3.1 Air Quality

Scoring for air quality impact from off-site construction was based on the distance of linear construction of the proposed pipeline, power line, and access road construction. The Natural Gas Option at the Ventura Steel Site would require extensive construction of approximately 26,786 linear feet of pipeline systems to connect to existing main pipelines and approximately 3,600 linear feet of access road construction. The linear construction totals approximately 30,386 linear feet, which is above the substantial range. Therefore, this alternative received a score of 0 points.

5.3.1.3.2 Cultural Resources

A total of 19 cultural resources have been previously recorded within a 1-mile radius of the off-site components of the Ventura Steel Site; however, no cultural resources have been identified within the off-site components. There is only one resource within a 0.25-mile radius of the off-site component of the Ventura Steel Site, which is P-56-001109H (Nordhoff Spur of the Ventura River and Ojai Valley Railroad). This resource has been described previously and is not considered a culturally significant resource. No resources listed on any federal, state, or local registry are located within the off-site components of the Ventura Steel Site.

A total of 56 previously conducted studies have been undertaken within a 1-mile radius of the off-site components of the Ventura Steel Site between 1974 and 2021. Of these 55 studies, 4 (VN-01851, VN-02534, VN-02541, and VN-003177) address portions of the off-site components of the Ventura Steel Site, and not all off-site components have been subject to a cultural resources study. Recommendations provided in the reports that are relevant to the off-site components are comprehensive in nature and appear to be developed as preemptive measures.

According to the historic aerial photographs and topographic maps, the off-site components of the Ventura Steel Site have been subject to ground disturbance at least as early as 1947, including structure and road construction, grading, and installation of utilities and pavement. The off-site staging area component has been subject to ground disturbance since at least 1947, including grading, construction, and subsequent demolition of cisterns occupied by an orchard, and as result has been subjected to ground disturbance for more than half a century. Portions of the off-site pipeline components have been previously disturbed by road grading and construction, as well as occupation of an oil facility, and other portions do not appear to have been previously disturbed. The off-site components are not close to a natural landmark capable of depositing sediment, such as a river or the base of a foothill; therefore, it has a low potential for unknown archaeological material to be buried under natural sediment.

In summary, no known cultural resources exist within the off-site components of the Ventura Steel Site. The off-site components of the Ventura Steel Site have been subject to multiple cultural resources studies, yet no cultural resources have been identified within the off-site component boundary. Continual ground disturbance and lack of resources identified within close proximity suggests that the potential for yet unknown and intact cultural resources to exist is low. Therefore, the off-site components of the Ventura Steel Site are in a location that is not sensitive for potentially significant cultural resources. Based on the above findings, the off-site components of the Ventura Steel Site received a score of 8 points.

5.3.1.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the compressor station were calculated. The total GHG emissions from off-site construction of the Ventura Steel Site Alternative are shown in Table 26.

Table 26. Off-Site GHG Construction Emissions: Ventura Steel – Natural Gas

Activity	Total CO_2e Emissions (MT)
Power line	0
Pipeline – street	599
Pipeline – open space	144
Road construction	126
Total[a]	**870**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be in the ≥500 MT CO_2e but <1,000 MT CO_2e range. Therefore, this alternative received a score of 4 points.

5.3.1.3.4 Natural Resources

No electrical interconnect is proposed for this alternative, but three pipeline corridors are proposed. One of the proposed pipeline corridors is within Ventura Avenue to the west of the site and is within the developed roadway and highly disturbed areas. The other two proposed pipeline corridors and associated tie-ins are within the oil

extraction facilities to the east and into areas previously mapped as non-native grasslands (at the series level but mapped as *Danthonia californica* association [David Magney Environmental Consulting 2008], or California oat grass, which is a species that has not been recorded in Ventura County) and *Salvia mellifera–Salvia leucophylla* association, as shown in Figure NR-2C in Attachment 4. These pipeline corridors cross one linear wetland feature (mapped as freshwater forest/shrub wetland), which may be impacted during construction. A proposed access road would be constructed for portions of the eastern proposed pipeline corridors. The proposed staging area is adjacent to the northwest of the site within developed areas. No sensitive plant or animal species have been recorded on or adjacent to (within 500 feet of) the proposed pipeline corridors, access roads, or staging area, as shown in Figure NR-1C in Attachment 4. Coastal whiptail (*Aspidoscelis tigris stejnegeri*) and American badger (*Taxidea taxus*), both CDFW Species of Special Concern, have potential to occur in the eastern proposed pipeline corridors and associated access road; however, only avoidance and minimization measures would be needed to prevent impacts to the species. The remaining 31 sensitive plant or animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur within the off-site areas. As such, this alternative is not expected to directly or indirectly impact sensitive habitats or sensitive plant or animal species, but it may directly impact wetlands in off-site areas; it received a score of 0 points.

5.3.1.3.5 Noise

Due to pipeline installation along Ventura Avenue, predicted off-site construction noise exposure at the nearest non-industrial land use, which would be between 0 and 50 feet from the construction activity for this alternative, received a score of 0 points.

5.3.1.3.6 Traffic

The Ventura Steel Site Alternative would require natural gas pipelines to be constructed beneath Ventura Avenue, requiring grading, trenching, and pipeline installation and potentially acquisition of additional pipeline right-of-way. Construction of the Ventura Steel Site Alternative would require road closures on Ventura Avenue. Roadway construction would be phased to ensure that disruption for lane closures would still allow for adequate roadway functions and emergency access. To maintain traffic flow, one lane would be closed for 6 months and then the alternate lane would be closed for 6 months, with traffic control measures in place for the duration of the work. Pipeline Corridor 1 would require 9,398 linear feet of pipelines located within Ventura Avenue. Because construction would require lane closures greater than 5,000 linear feet, this alternative received a score of 0 points.

5.3.1.3.7 Utilities/Service Systems

The Ventura Steel Site Alternative would require approximately 78,561 square feet of off-site ground disturbance for pipelines, approximately 282 square feet of depressurization line, and approximately 7,500 square feet for the MLV connections, for a total of approximately 86,343 square feet of off-site ground disturbance. One pipeline route would be within open space/hillside areas and surrounded by non-urbanized land and would not impact urban roadways or otherwise impede commuter traffic. The other pipeline route would be constructed beneath the alignment of North Ventura Avenue, which is a primary thoroughfare for commuter traffic in the area. Pipeline construction would require staged construction, with one pipeline trenched, constructed, and completed beneath one portion of the road, followed by the second pipeline's trenching, construction, and completion. This staged construction within North Ventura Avenue would be required to minimize the extent of required lane closures,

ensure adequate northbound–southbound traffic flow during roadway construction, and allow for adequate space between pipelines and avoidance of existing utility lines. All off-site ground disturbance is summarized in Table 27.

Table 27. Off-Site Ground Disturbance: Ventura Steel – Natural Gas

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (North Ventura Avenue)	39,685
Pipeline Corridor 2 (Hills)	38,876
Utility Lines	0
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	78,561
Mainline Valve Connection	
Mainline Valve Connection 1	3,750
Mainline Valve Connection 2	3,750
Subtotal Off-Site Ground Disturbance – Mainline Valve Connection	7,500
Depressurization Line	
Depressurization Line	282
Subtotal Off-Site Ground Disturbance – Depressurization Line	282
Electrical Pole Footings	
Electrical Pole Footings	0
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	0
Total Off-Site Ground Disturbance for All Construction Elements[a]	**86,343**

Note:

[a] Totals may not sum precisely due to rounding.

This alternative received a score of 1 point because of the moderate amount of off-site ground disturbance required.

5.3.2 Hybrid Option

5.3.2.1 Operational Considerations

5.3.2.1.1 Aesthetics and Visual Resources

Compared to the Natural Gas Option, which would not include new electrical poles, the Ventura Steel Site – Hybrid Option would require approximately 37 electrical poles to extend to an existing electrical line to the San Nicholas Circuit. The installation of poles would slightly expand the viewshed of project components and would result in some additional view degradation, although the surrounding area currently includes multiple utility poles/lines that traverse the area and Ventura Avenue. Therefore, compared to the Natural Gas Option, the Hybrid Option would result in slightly increased potential impacts to aesthetics and visual resources and received a score of 5 points.

5.3.2.1.2 Air Quality

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, the Hybrid Option is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption. The Hybrid Option has fewer internal combustion engines and thus fewer direct emissions than the Natural Gas Option. The replacement of two of the internal combustion engines with two electric compressors of equivalent horsepower would essentially cut the expected direct emissions in half.

Operation of the Hybrid Option was calculated to result in 5.6 tons/year of NO_x emissions. As such, the Natural Gas Option would fall within the ≥4 tons/year but <8 tons/year category, which would score from 4 to 6. Because 5.6 tons/year is in the middle of the NO_x emissions range, the Hybrid Option received a score of 5 points.

5.3.2.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Ventura Steel Site is in Census Tract 6111001204, which has a population of approximately 3,036. This tract has a total pollution burden score of 69%, which means that this census tract has more pollution burden than 69% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Ventura Steel Site received a score of 3 points because a pollution burden of 69% is within the 61% to 70% scoring range.

5.3.2.1.4 Greenhouse Gases

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). The total annual direct GHG emissions would be 13,918 MT CO_2e/year and indirect GHG emissions would be 5,500 MT CO_2e/year from operational activities at the Ventura Steel Site.

The shift from natural gas to a Hybrid Option reduces the localized emissions of criteria pollutants and direct GHG emissions, but the increased power demand from the electric compressors would increase indirect GHG emissions depending on how the power that is used is generated. The estimated emissions for the Hybrid Option were calculated to be 19,418 MT CO_2e/year, which would fall within the ≥10,000 MT CO_2e/year but <25,000 MT CO_2e/year category and therefore would score from 4 to 6. Because 19,418 MT CO_2e/year is in the middle of the emission range, the Hybrid Option received a score of 5 points.

5.3.2.1.5 Land Use Designation

The Hybrid Option would not require the installation of extensive off-site electrical infrastructure. Within the ranking criteria range of 7 to 9, “Industrial/manufacturing zone and not adjacent to sensitive receptors,” the Ventura Steel Site Alternative – Hybrid Option received a score of 9 points.

5.3.2.1.6 Noise

The nearest non-industrial land use to the Ventura Steel Site is a residentially zoned parcel in the City of Ventura approximately 0.33 miles to the south of the site boundary. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use of less than 40 dBA. Therefore, this alternative received a score of 8 points.

5.3.2.1.7 Wildfire

The main project component (the compressor station) is predominantly within a very high FHSZ and is adjacent to a very high FHSZ. In addition, the location of off-site components in a very high FHSZ would present a hazard to workers. As such, the Ventura Steel Hybrid Option received a score of 0.

5.3.2.2 On-Site Construction Considerations

5.3.2.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} were calculated from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station. The total NO_x and PM_{10} exhaust emissions from on-site construction of the Ventura Steel Site are shown in Table 28.

Table 28. On-Site Construction Emissions: Ventura Steel – Hybrid

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	872	233
Grading – elevated	0	0
Compressor station	10,578	2,022
Substation	1,311	74
Total[a]	**12,761**	**2,329**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The property is flat, with a minimal amount of new disturbance area requiring grading. The Hybrid Option would require the construction of a substation, slightly increasing the amount of NO_x and PM_{10} emissions when compared to the Natural Gas Option. The total emissions are in the <40,000 pounds and ≥8,000 pounds range for NO_x and <6,000 pounds and ≥2,000 pounds range for PM_{10}; therefore, this alterntaive received a score of 6 points.

5.3.2.2.2 Cultural Resources

There are no differences in the results for on-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 7 points.

5.3.2.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the future compressor station were calculated. The total GHG emissions from on-site construction of the Ventura Steel Site Alternative are shown in Table 29.

Table 29. On-Site GHG Construction Emissions: Ventura Steel – Hybrid

Activity	Total CO_2e Emissions (MT)
Grading – flat	105
Grading – elevated	0
Compressor station	1,560
Substation	294
Total[a]	**1,959**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The Hybrid Option would require the construction of a substation on the site, thus increasing the amount of on-site GHG emissions when compared to the Natural Gas Option. The expected GHG emissions for on-site construction would be well below the <5,000 MT CO_2e threshold. Accordingly, this alternative received a score of 8 points.

5.3.2.2.4 Natural Resources

The Hybrid Option would not alter any conditions related to on-site natural resources and as such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands on site, and received a score of 9.

5.3.2.2.5 Noise

Predicted on-site construction noise exposure at the nearest non-industrial land use, which would be more than 1,000 feet from the construction activity for this alternative, received a score of 9 points.

5.3.2.2.6 Slope, Topography, and Grading

The Hybrid Option would include an electrical interconnect, requiring approximately 74 CY of additional over-excavation/recompaction to install the required electrical poles. The electrical interconnect does not impact the ranking because the additional earthwork required (74 CY) is a relatively negligible amount and the total cubic yardage for the project site would remain under 10,000 (County of Ventura 2022). As such, within the score range of 7 to 9, where the "average slope of the property is less than 20%" and "negligible/no over-excavation/ recompaction is required" (see Section 3.1, Scoring Criteria), the Ventura Steel Site received a score of 8 under both compressor station technology scenarios.

5.3.2.2.7 Traffic

There would be a negligible difference between construction of the Hybrid Option and the Natural Gas Option related to heavy truck traffic for on-site construction activity. Therefore, this alternative received a score of 9 points.

5.3.2.3 Off-Site Construction Considerations

5.3.2.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Hybrid Option at the Ventura Steel Site would require the extensive construction of approximately 26,786 linear feet of pipeline systems to connect to existing main pipelines and approximately 3,600 linear feet of access road construction. In addition, approximately 122 linear feet of electrical interconnect would be required to accommodate the increased demand from the electric compressors. The linear construction totals approximately 30,508 linear feet, which is far above the substantial range. Therefore, this alternative received a score of 0 points.

5.3.2.3.2 Cultural Resources

There are no differences in results for off-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 8 points.

5.3.2.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the compressor station were calculated. The total GHG emissions from off-site construction of the Ventura Steel Site Alternative are shown in Table 30.

Table 30. Off-Site GHG Construction Emissions: Ventura Steel – Hybrid

Activity	Total CO_2e Emissions (MT)
Power line	4
Pipeline – street	599
Pipeline – open space	144
Road construction	126
Total[a]	**873**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be in the ≥500 MT CO_2e but <1,000 MT CO_2e range. Therefore, this alternative received a score of 4 points.

5.3.2.3.4 Natural Resources

The Hybrid Option would require new off-site electric poles needed to connect the station to the existing SCE transmission line. The proposed electrical interconnect would require two new electrical poles, but it is assumed that these poles would be within developed or disturbed areas. The same three pipeline corridors (two of which

could impact wetlands) and off-site staging area would be required for the Hybrid Option and the Natural Gas Option. As such, this alternative is not expected to directly or indirectly impact sensitive habitats or sensitive plant or animal species, but it may directly or indirectly impact wetlands in off-site areas; therefore, it received a score of 0 points.

5.3.2.3.5 Noise

Predicted off-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7) would be greater than 90 dBA and between 0 and 50 feet from the construction activity for this alternative; therefore, this alternative received a score of 0 points.

5.3.2.3.6 Traffic

Off-site construction of the Hybrid Option would be the same as the Natural Gas Option, with the exception of the extension of electrical utilities. This alternative would require natural gas pipelines to be constructed beneath Ventura Avenue, requiring grading, trenching, and pipeline installation and potentially acquisition of additional pipeline right-of-way and road closures on Ventura Avenue. Roadway construction would be phased to ensure that disruption for lane closures would still allow for adequate roadway functions and emergency access. To maintain traffic flow, one lane would be closed for 6 months and then the alternate lane would be closed for 6 months, with traffic control measures in place for the duration of the work. However, no roadway construction on existing roads for electrical utilities would be required. Therefore, this alternative received a score of 0 points.

5.3.2.3.7 Utilities/Service Systems

The Ventura Steel Site Alternative – Hybrid Option would require approximately 78,561 square feet of off-site ground disturbance for pipelines and utilities, approximately 282 square feet of depressurization line, approximately 7,500 square feet for the MLV connections, and an additional 28 square feet of footings for the required electrical poles, for a total of approximately 86,371 square feet of off-site ground disturbance. As with the Natural Gas Option, for the Hybrid Option one pipeline route would be within open space/hillside areas and surrounded by non-urbanized land and would not impact urban roadways or otherwise impede commuter traffic. The other pipeline route would be constructed beneath the alignment of North Ventura Avenue, which is a primary thoroughfare for commuter traffic in the area. Pipeline construction would require staged construction, with one pipeline trenched, constructed, and completed beneath one portion of the road, followed by the second pipeline's trenching, construction, and completion. This staged construction within North Ventura Avenue would be required to minimize the extent of required lane closures, ensure adequate northbound–southbound traffic flow during roadway construction, and allow for adequate space between pipelines and avoidance of existing utility lines. All off-site ground disturbance is summarized in Table 31.

Table 31. Off-Site Ground Disturbance: Ventura Steel – Hybrid

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (North Ventura Ave)	39,685
Pipeline Corridor 2 (Hills)	38,876
Utility Lines	0

Table 31. Off-Site Ground Disturbance: Ventura Steel – Hybrid

Construction Element	Square Feet
Pipelines and Utilities	
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*78,561*
Mainline Valve Connection	
Mainline Valve Connection 1	3,750
Mainline Valve Connection 2	3,750
Subtotal Off-Site Ground Disturbance – Mainline Valve Connection	*7,500*
Depressurization Line	
Depressurization Line	282
Subtotal Off-Site Ground Disturbance – Depressurization Line	*282*
Electrical Pole Footings	
Electrical Pole Footings	28
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*28*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**86,371**

Note:

[a] Totals may not sum precisely due to rounding.

The additional disturbance for the electrical poles would not substantively alter the amount of off-site ground disturbance required; therefore, this alternative received a score of 1 point.

5.4 Devil's Canyon Road Site

The scoring rationale for each of the environmental topic areas for the Devil's Canyon Road Site is described in this section.

5.4.1 Natural Gas Option

5.4.1.1 Operational Considerations

5.4.1.1.1 Aesthetics and Visual Resources

The Devil's Canyon Road Site is relatively flat and has been visually altered by previous oil/gas related development. The implementation of the Natural Gas Option would not alter an identified scenic resource, such as hillside or ridgeline terrain, because the site is located on previously developed land that included industry-related structures. Further, the site presents minimal visibility from SR-33 because existing roadside-adjacent trees and vegetation regularly blocks the site from view of passing motorists. Thus, the site is not highly visible from most publicly accessible vantage points in the surrounding area including roads, scenic corridors, parks, and the Ojai–Ventura Bike Path. Given the lack of public visibility, this alternative received a score of 8 points.

5.4.1.1.2 Air Quality

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, the natural gas-powered compressor station is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption.

Operation of the natural gas compressors is calculated to result in 11 tons/year of NO_x emissions. As such, the Natural Gas Option would fall within the ≥8 tons/year but <12 tons/year category, which would score from 1 to 3. Because 11 tons/year is closer to the upper end of the NO_x emissions range, the Natural Gas Option received a score of 1 point.

5.4.1.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Devil's Canyon Road Site is in Census Tract 6111001206, which has a population of approximately 778. As described in Section 5.2.1.1.3, CalEnviroScreen, this tract has a total pollution burden score of 79%, which means that this census tract has more pollution burden than 79% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Devil's Canyon Road Site received a score of 2 points because a pollution burden of 79% is within the 71% to 80% scoring range.

5.4.1.1.4 Greenhouse Gases

This option would include the installation of four new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). Indirect GHG emissions for the operation of the natural-gas facilities were not quantified for the Natural Gas Option because anything attributable to indirect GHG emissions would be consistent across all the proposed alternative sites.

The estimated emissions for the all-Natural Gas Option were calculated to be 27,836 MT CO_2e/year, which would fall within the ≥25,000 MT CO_2e/year but <50,000 MT CO_2e/year category and therefore would score from 1 to 3. Because 27,836 MT CO_2e/year is closer to the lower end of the emission range, the Natural Gas Option received a score of 3 points.

5.4.1.1.5 Land Use Designation

Regional Site Location

As shown on Figure 4, the proposed Devil's Canyon Road Site is in southwest Ventura County, located slightly east of SR-33 and the City of Ventura, approximately 6,000 feet northwest of the Existing Site. The Devil's Canyon Road Site and all on-site project components are located within a single approximately 336-acre parcel (APN 060031016), with off-site components—including two existing transmission pipelines and two MLV stations (one at the terminus of each proposed pipeline)—located on portions of adjacent APN 060031015, APN 060031017, APN 060031018, and APN 060030004. Regional access to the site is currently provided from SR-33 via U.S. Route 101.

Site access from the highway is provided by an existing access road and bridge approximately 28 feet in width that crosses the Ventura River, also located within APN 060031016.

Surrounding Land Uses

The surrounding land uses of the Devil's Canyon Road Site are predominantly open space and agricultural, with minimum lot sizes ranging from 40 to 160 acres. These include the County General Plan (2020) land use designation of Open Space in all directions, as well as County zoning of AE-40 to the southwest; OS-160 to the north, south, west, and east; and an HCWC overlay zone to the east running along the Ventura River riparian corridor west of SR-33 (County of Ventura 2021). The nearest industrial land use (County—Industrial) and zoning (County—General Industrial Zone [M-3] with a 10,000-square-foot lot area minimum) is located approximately 1,300 feet to the east on the east side of SR-33 (APN 068001001) (County of Ventura 2021). The Devil's Canyon Road Site is not adjacent to any sensitive receptors. The nearest sensitive land use is a residentially zoned parcel (APN 0690141135) in the City of Ventura, approximately 0.54 miles east of the site boundary on the east side of SR-33.

Project Component Land Uses

As shown on the General Plan Land Use and Zoning maps in Attachment 3, the approximately 15-acre Devil's Canyon Road Site, MLV station, and the required access road are all located on privately held lands within Ventura County. The site selected for the compressor station is currently developed with oil extraction uses. The Devil's Canyon Road Site and all on-site project components are located on a portion of much larger single parcel (APN 060031016, approximately 336 acres) that has an underlying County General Plan land use designation of Open Space (County of Ventura 2020; 2021) and County zoning of OS-160, requiring a minimum parcel size of 160 acres (County of Ventura 2008). Although largely extending off site, the Devil's Canyon Road Site's two required ancillary pipelines and MLV station would also be within land areas designated as Open Space and zoned OS-160 (County of Ventura 2008, 2020, 2021). According to the currently available aerial views, the proposed site for the off-site MLV station appears to be developed with an active avocado orchard. As previously discussed in Section 5.2.1.1.5, the open space designation is applied to parcels or areas of land that are essentially unimproved and devoted to an open-space use. The OS-160 designation allows for generally passive uses, including preservation of natural resources, managed production of resources, outdoor recreation, and areas requiring special management due to hazardous or special conditions (e.g., earthquake fault zones, unstable soil areas, flood plains, high fire severity areas), among others (County of Ventura 2008, Section 8104-1.1). Oil and gas exploration and production is permitted with a conditional use permit (County of Ventura 2008, Section 8105-4).

The selection of the Devil's Canyon Road Site is not consistent with existing land use and zoning for the on-site location to facilitate the types of operational uses required by the project. In addition, the underlying land use of the compressor station site is included in the County of Ventura Measure C, SOAR Initiative—2050 (County of Ventura 2016).

Oil Wells

The Devil's Canyon Road Site is located within the south-central portion of the active Ventura Oil Field (DOC 2022). According to the U.S. Department of Conservation (DOC 2022), there are at least five currently active wells located on the proposed compressor station site, in addition to a number of active wells operating in the near vicinity.

Evaluation and Score

All the Devil's Canyon Road – Natural Gas Option's operational components are located within parcels with County zoning that does not support industrial and/or manufacturing uses. Additionally, the primary compressor station site is within an area governed by the SOAR initiative. No portion of the site is adjacent to any sensitive receptors. The nearest industrially zoned land use parcel is approximately 0.25 miles to the east of the compressor station boundary (APN 068001001), while the nearest sensitive land use is a residentially zoned parcel (APN 0690141135) in the City of Ventura, approximately 0.54 miles from the Devil's Canyon Road Site (County of Ventura 2021). The proposed staging area is located within a parcel zoned for industrial uses; however, this feature would not be required during project operation and is therefore not incorporated into this land use analysis. Additionally, the primary compressor station site is within an area governed by the SOAR initiative. Based on the above analysis and using the scoring criteria for a site that is within a "Non-Industrial/manufacturing zone and not adjacent to sensitive receptors," the Devil's Canyon Road – Natural Gas Option received a score of 6 points.

5.4.1.1.6 Noise

The nearest non-industrial land use to the Devil's Canyon Road Site is a residentially zoned parcel in the City of Ventura approximately 0.54 miles to the east of the site boundary on the east side of SR-33. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (as defined in Section 3.2.7) of less than 40 dBA. Therefore, this alternative received a score of 8 points.

5.4.1.1.7 Wildfire

All operational components of the Devil's Canyon Road Site are fully or partially within FHSZ and within the Casitas Fuel Bed (VCFPD 2021; CAL FIRE 2022). As shown on the FHSZ Maps in Attachment 7, a little over half of the compressor station site is within a very high FHSZ, while the rest, along with the required MLV, are within a high FHSZ. The access road passes through a high, moderate, and very high FHSZ. Given the ranking criteria for sites within high FHSZs, the Devil's Canyon Road – Natural Gas Option received a score of 2 points because the portion of the site located in a very high FHSZ and the presence of vegetative fuel sources in the surrounding areas (Radeloff 2010; VCFPD 2021).

5.4.1.2 On-Site Construction Considerations

5.4.1.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. For the purposes of the earthwork required to inform the air quality analysis, it was estimated that the site consisted of flat areas that required minimal grading. The total PM_{10} exhaust emissions from on-site construction of the Devil's Canyon Road Site are shown in Table 32.

Table 32. On-Site Construction Emissions: Devil's Canyon Road – Natural Gas

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	872	233
Grading – elevated	0	0
Compressor station	10,578	2,022
Substation	0	0
Total[a]	**11,450**	**2,255**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The Devil's Canyon Road Site is generally flat, the amount of on-site diesel equipment would be minimal, and the duration of grading activities would be limited. NO_x emissions would be in the <40,000 pounds and ≥8,000 pounds range and PM_{10} emissions would be in the <6,000 pounds and ≥2,000 pounds range; therefore, this alternative received a score of 6 points.

5.4.1.2.2 Cultural Resources

A total of 12 cultural resources have been previously recorded within a 1-mile radius of the Devil's Canyon Road Site; however, no cultural resources have been identified within the Devil's Canyon Road Site. There are no cultural resources within a 0.25-mile radius of the Devil's Canyon Road Site, nor are there any resources listed on any federal, state, or local registry within the on-site component of the Devil's Canyon Road Site.

A total of 58 previously conducted studies have been undertaken within a 1-mile radius of the Devil's Canyon Road Site between 1974 and 2021. Of these 58 studies, 1 addresses approximately 5% of the Devil's Canyon Road Site and recommends the general area surrounding the Ventura River be avoided and left unaltered until further studies can be conducted, including archaeological and ethnographic analyses to determine the exact nature and scope of the potential resources. The author also expressed that the general area should be considered culturally and/or scientifically significant.

According to the historical aerial photographs and topographic maps reviewed, the Devil's Canyon Road Site has been disturbed as early as 1947, including road and building construction and grading associated with industrial development. The Devil's Canyon Road Site is located approximately 492 feet east of the Ventura River, 2.3 miles north of the Pacific Ocean and at the southern base of the Santa Ynez Mountains. The Devil's Canyon Road Site is within close proximity to the base of the Santa Ynez Mountains, which are capable of depositing sediment; therefore, the site has potential for unknown archaeological material to be buried under natural alluvial sediment.

In summary, no known cultural resources are present within the Devil's Canyon Road Site. The Devil's Canyon Road Site has been minimally addressed by one cultural resources study; however, the surrounding area has been subjected to multiple cultural resources studies and no significant cultural resources have been identified within a 0.25-mile radius. The considerable and continual ground disturbance extending over 70 years and the lack of resources identified within close proximity suggests that the potential for yet unknown and intact cultural resources is low. Therefore, the Devil's Canyon Road Site is in a location that is not sensitive for potentially significant cultural

resources. Based on the above findings, the on-site component of the Devil's Canyon Road Site received a score of 7 points.

5.4.1.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total GHG emissions from on-site construction of the Devil's Canyon Road Alternative are shown in Table 33.

Table 33. On-Site GHG Construction Emissions: Devil's Canyon Road – Natural Gas

Activity	Total CO_2e Emissions (MT)
Grading – flat	105
Grading – elevated	0
Compressor station	1,560
Substation	0
Total[a]	**1,666**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The expected GHG emissions for on-site construction are well below the <5,000 MT CO_2e threshold. Accordingly, this alternative received a score of 8 points.

5.4.1.2.4 Natural Resources

This alternative is primarily within a developed area (oil extraction facilities), with the very southeast corner previously mapped as *Salix lasiolepis* association (David Magney Environmental Consulting 2008), which is typically associated with riparian habitat (i.e., the Ventura River). The site has developed areas (oil extraction facilities) to the north and west, and riparian habitats to the south and east. No sensitive plant or animal species have been recorded on site; however, the site is adjacent to the Ventura River (to the east of the site), it has designated critical habitat for southwestern willow flycatcher and southern steelhead, and it has records for the federal and state listed least Bell's vireo (*Vireo bellii pusillus*); in addition, two CDFW Species of Special Concern, western pond turtle (*Emys marmorata*) and two-striped gartersnake (*Thamnophis hammondii*), have nearby records. Avoidance and minimization measures could be used if needed to prevent direct impacts to these 5 species and their associated riparian habitat; the remaining 29 sensitive plant or animal species and habitats with previously recorded occurrences within 3 miles have low potential to occur or are not expected to occur on site. As such, this alternative may indirectly impact sensitive habitats or sensitive animal species and received a score of 4 points.

5.4.1.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; thus, the alternative received a score of 9 points.

5.4.1.2.6 Slope, Topography, and Grading

The topography and slope maps in Attachment 6 show the slope for the Devil's Canyon Road Site and surrounding area. The site has been previously graded and developed and currently supports an oil extraction facility with multiple active wells. The average slope range calculations for the site are provided in Table 34.

Table 34. Average Slope Calculations

Class Range	% Slope Range	Acres	% Slope	Avg Avg	% Slope	Min Avg	% Slope	Max Avg
Devil's Canyon Road Site – 12.88 Acres								
Site Classes: 0%–30%	0%–10%	11.98	5%	0.6	0%	0	10%	1.2
	>10%–20%	0.71	15%	0.11	10%	0.07	20%	0.14
	>20%–30%	0.19	25%	0.05	20%	0.04	30%	0.06
Site Averages				*6%*		*1%*		*11%*

The on-site slope ranges from a low of 0% to a high of over 30%, with a site average of approximately 6% Based on conceptual engineering analysis, grading for this site would entail approximately 4,500 CY of over-excavation/ recompaction. For the purposes of this analysis, a total of 4,500 CY, together with a slope of less than 10%, would be considered "negligible." As such, within the score range of 7 to 9, where the "average slope of the property is less than 20%" and "negligible/no over-excavation/recompaction is required" (see Section 3.1, Scoring Criteria), the Devil's Canyon Road Site received a score of 8 points.

5.4.1.2.7 Traffic

The Devil's Canyon Road Site would be located an at existing oil extraction site located approximately 6,000 feet to the north of the existing Ventura Compressor Station, on the west side of SR-33. The site is located in an industrial and agricultural area. The site has direct access from U.S. Route 101 to SR-33 to the Shell Road/Mill Canyon Road interchange to Shell Road and Devils Canyon Road. Shell Road (west of SR-33) and Devils Canyon Road are both unpaved roads with negligible vehicular traffic and are primarily used for private access to the oil/gas field. Therefore, with direct access to the site provided via major highways, the project is not considered to be in a road-constrained area. Furthermore, access to the site is provided by multiple driveways off Shell Road that meet SoCalGas and emergency responder access requirements. It is assumed that the existing access serving the site is sufficient.

Construction of the compressor station, including pad grading, access road, on-site utility installations, buildings, and compressors, would take approximately 24 to 30 months, with major earthwork occurring for less than 1 year due to the flat/graded nature of the property. Given the location of the site and sufficient existing access, heavy trucks would not travel through residential areas or roadway-constrained areas. Therefore, this alternative received a score of 9 points.

5.4.1.3 Off-Site Construction Considerations

5.4.1.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Natural Gas Option at the Devil's Canyon Road Site would require construction of approximately 5,135 linear feet of new pipeline systems, as well as approximately 1,892 linear feet of access road work. The linear construction totals approximately 7,027 linear feet, which is in the middle of the minimal range. Therefore, this alternative received a score of 5 points.

5.4.1.3.2 Cultural Resources

A total of 12 cultural resources have been previously recorded within a 1-mile radius of the off-site components of the Devil's Canyon Road Site; however, no cultural resources have been identified within the off-site components. The only resource within a 0.25-mile radius of the off-site component of the Devil's Canyon Road Site is the P-56-001109H (Nordhoff Spur of the Ventura River and Ojai Valley Railroad), which was determined not to be a significant resource and was previously described in Section 5.3.1.2.2. No resources listed on any federal, state, or local registry are located within the off-site components of the Devil's Canyon Road Site.

A total of 58 previously conducted studies have been undertaken within a 1-mile radius of the off-site components of the Devil's Canyon Road Site between 1974 and 2021. Two of these studies address approximately 5% of the off-site components of the Devil's Canyon Road Site. Only VN-00519 (Singer 1987) surveyed portions of the pipeline system and MLV station and recommends the general area surrounding the Ventura River be avoided and left unaltered until further studies can be conducted including archaeological and ethnographic analyses to determine the exact nature and scope of the potential resources. The author also expressed that the general area should be considered culturally and/or scientifically significant.

According to the historical aerial photographs and topographic maps reviewed, the off-site components of the Devil's Canyon Road Site have been disturbed at least as early as 1904 with industrial development as well as road grading and construction. The off-site staging area component has been disturbed as early as 1947 with industrial cisterns and evidence of grading. The off-site access road component along Mill Canyon Road and Devil's Canyon Road has been developed as a roadway at least as early as 1904. The off-site roadway and pipeline components appear to have also been developed as a roadway at least as early as 1904.

A segment of the off-site pipeline component intersects the Ventura River, which is capable of depositing sediment, and therefore has potential for unknown archaeological material to be buried under natural sediment. The Ventura River would have served as a freshwater resource in prehistoric and historic periods. Some of the off-site components appear to be too close to the river to be a hospitable location for habitation due to the propensity for flooding. Other components are farther from the river, increasing the potential for the area to be hospitable to habitation. However, depending on the depth and timing of depositional sediment as well as the depth of previous disturbance, unknown cultural resources, if present, may have been destroyed, displaced, and/or buried deeper than the proposed depth of disturbance. Conversely, some off-site components of the Devil's Canyon Road Site are located within a potentially sensitive area because of the close proximity to a freshwater source.

In summary, no known cultural resources exist within the off-site components of the Devil's Canyon Road Site. The off-site component of the Devil's Canyon Road Site has been minimally addressed by previous cultural resources studies. However, the surrounding area has been subjected to multiple cultural resource studies with only one non-significant cultural resource identified within a 0.25-mile radius. Considering the continual ground disturbance extending over 100 years and the lack of resources identified within close proximity to the off-site components, the potential for yet unknown and intact cultural resources is low. Therefore, the off-site component of the Devil's Canyon Road Site is in a location that is not sensitive for potentially significant cultural resources. Based on the above findings, the off-site component of the Devil's Canyon Road Site received a score of 7 points.

5.4.1.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the compressor station were calculated. The total GHG emissions from off-site construction of the Devil's Canyon Road Alternative are shown in Table 35.

Table 35. Off-Site GHG Construction Emissions: Devil's Canyon Road – Natural Gas

Activity	Total CO_2e Emissions (MT)
Power line	0
Pipeline – street	181
Pipeline – open space	0
Road construction	67
Total[a]	**248**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be in the <500 MT CO_2e range. Therefore, this alternative received a score of 7.

5.4.1.3.4 Natural Resources

No electrical interconnect is proposed for this alternative. The proposed staging area is within a developed area but adjacent to a wetland feature (freshwater forested/shrub wetland). The proposed tie-in is within an orchard and the proposed pipeline corridor is also within developed areas (oil extraction facilities) and areas previously mapped as *Salvia mellifera–Salvia leucophylla* association (David Magney Environmental Consulting 2008), as shown in Figure NR-2D in Attachment 4. The pipeline corridor crosses one linear wetland feature (mapped as riverine). The access road improvements are not expected to occur on the bridge or within the support structures and footings within the Ventura River. The pipeline corridor and access road improvements are within 500 feet of designated critical habitat for southwestern willow flycatcher and southern steelhead and records for the federally and state-listed least Bell's vireo and two CDFW Species of Special Concern (western pond turtle and two-striped gartersnake), as shown in Figure NR-1D in Attachment 4. The remaining 29 sensitive plant or animal species and habitats with previously recorded occurrences within 3 miles have low potential to occur or are not expected to occur in off-site areas. Avoidance and minimization measures could be used if needed to prevent direct impacts to the five species listed

above and to their riparian habitat; however, a wetland feature is crossed by the pipeline corridor. As such, this alternative may indirectly impact sensitive animal species and directly and indirectly impact wetlands in adjacent off-site areas; therefore, it received a score of 0 points.

5.4.1.3.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; thus, the alternative received a score of 9 points.

5.4.1.3.6 Traffic

The Devil's Canyon Road Site would require the construction of pipelines through the oil/gas hillside area, requiring grading, trenching, and pipeline installation and potentially acquisition of additional pipeline right-of-way. The project would require construction of 5,280 linear feet of new pipeline within or near Devil's Canyon Road. It is assumed that there would be moderate construction on Devil's Canyon Road, with the potential for lane closures along several segments (representing at least 2,500 linear feet). However, Devil's Canyon Road is a private unpaved road and is primarily used for private access to the oil/gas field.

Construction would have some impact on Devil's Canyon Road; however, there would be no construction on public roadways that could cause new congestion or exacerbate existing traffic conditions. Therefore, this alternative received a score of 7 points.

5.4.1.3.7 Utilities/Service Systems

The Devil's Canyon Road Site – Natural Gas Option would require approximately 47,927 square feet of off-site ground disturbance for pipelines and approximately 7,500 square feet for the MLV connection, for a total of approximately 55,427 square feet of off-site ground disturbance. All off-site ground disturbance is summarized in Table 36 and would be conducted within and surrounded by non-urbanized and industrial land.

Table 36. Off-Site Ground Disturbance: Devil's Canyon Road – Natural Gas

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (Devil's Canyon Road)	23,963
Pipeline Corridor 2 (Also Devil's Canyon Road)	23,963
Utility Lines	0
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*47,927*
Mainline Valve Connection	
Mainline Valve Connection	7,500
Subtotal Off-Site Ground Disturbance – Mainline Valve Connection	*7,500*
Depressurization Line	
Depressurization Line	0

Table 36. Off-Site Ground Disturbance: Devil's Canyon Road – Natural Gas

Construction Element	Square Feet
Subtotal Off-Site Ground Disturbance – Depressurization Line	*0*
Electrical Pole Footings	
Electrical Pole Footings	0
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*0*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**55,427**

Note:

[a] Totals may not sum precisely due to rounding.

Therefore, this alternative received a score of 3 points because of the moderate amount of off-site ground disturbance required.

5.4.2 Hybrid Option

5.4.2.1 Operational Considerations

5.4.2.1.1 Aesthetics and Visual Resources

Implementation of the Hybrid Option at the Devil's Canyon Road Site would require the installation of approximately 40 electrical poles to connect to an existing SCE subtransmission line. Although electrical poles are likely to be visible from public roads due to their height and the number of poles needed, electrical poles are commonplace throughout the area and are unlikely to require substantial alteration of an identified scenic resource or result in substantial alteration of existing character that encompasses previous on-site development and oil well sites in the hillsides to the west. As with the Natural Gas Option, development of the site with a compressor building and other associated infrastructure/features would generally be obscured from public view due to the presence of existing vegetation that blocks the site from most public roads, accessible vistas, and trails. Therefore, due to new electrical pole installation, this alternative received a score of 7 points.

5.4.2.1.2 Air Quality

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, the Hybrid Option is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption. The Hybrid Option has fewer internal combustion engines and thus fewer direct emissions than the Natural Gas Option. The replacement of two of the internal combustion engines with two electric compressors of equivalent horsepower would essentially cut the expected direct emissions in half.

Operation of the Hybrid Option was calculated to result in 5.6 tons/year of NO_x emissions. As such, the Hybrid Option would fall within the $\geq$4 tons/year but <8 tons/year category, which would score from 4 to 6. Because 5.6 tons/year is in the middle of the NO_x emissions range, the Hybrid Option received a score of 5 points.

5.4.2.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the Devil's Canyon Road Site is in Census Tract 6111001206, which has a population of approximately 778. As described in Section 5.2.1.1.3, this tract has a total pollution burden score of 79%, which means that this census tract has more pollution burden than 79% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the Devil's Canyon Road Site received a score of 2 points because a pollution burden of 79% is within the 80% to 71% scoring range.

5.4.2.1.4 Greenhouse Gases

This option would include the installation of two new 1,900 HP natural gas compressors and two new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). The total direct GHG emissions would be 13,918 MT CO_2e/year and indirect GHG emissions would be 5,500 MT CO_2e/year from operational activities at the Devil's Canyon Road Site.

The shift from natural gas to a Hybrid Option reduces the localized emissions of criteria pollutants and direct GHG emissions, but the increased power demand from the electric compressors would increase indirect GHG emissions depending on how the power that is used is generated. The estimated emissions for the hybrid technology were calculated to be 19,418 MT CO_2e/year, which would fall within the $\geq$10,000 MT CO_2e/year but <25,000 MT CO_2e/year category and therefore would score from 4 to 6. Because 19,418 MT CO_2e/year is in the middle of the emission range, the Hybrid Option received a score of 5 points.

5.4.2.1.5 Land Use Designation

The Devil's Canyon Road – Hybrid Option would require the installation of approximately 40 electrical poles and associated overhead electrical conduit to connect to an existing subtransmission line; however, the location and underlying land use(s) of the electrical interconnect are not primary considerations for the land use criteria as described in Section 3.1 and as such, do not significantly influence the score for this site. All the Devil's Canyon Road – Hybrid Option's operational components are located within parcels with County zoning that does not support industrial and/or manufacturing uses. Additionally, the primary compressor station site is within an area governed by the SOAR initiative. No portion of the site is adjacent to any sensitive receptors. The nearest industrially zoned land use parcel is approximately 0.25 miles to the east of the compressor station boundary (APN 068001001), while the nearest sensitive land use is a residentially zoned parcel (APN 0690141135) in the City of Ventura, approximately 0.54 miles from the site (County of Ventura 2021). Using the scoring criteria for a site which is within a "Non-Industrial/manufacturing zone and not adjacent to sensitive receptors," the Devil's Canyon Road – Hybrid Option received a score of 6 points.

5.4.2.1.6 Noise

Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (defined per Section 3.2.7) of less than 35 dBA. Therefore, this alternative received a score of 9 points.

5.4.2.1.7 Wildfire

The Hybrid Option alternative would require installation of 40 poles and associated overhead electrical lines to provide adequate power to the compressor stations. Due to the exposed nature of the electrical interconnect—traveling through a Tier 3 HFTD—the electrical interconnect could represent an increased fire risk to the surrounding community due to potentially downed power lines (CPUC 2021a; 2021b) (see maps in Attachment 7). As such, the Hybrid Option received a score of 1 point. This score is due to the location of the electrical interconnect within a Tier 3 HFTD and the number of required poles/exposed length of conduit within a Tier 3 HFTD (CPUC 2021a; 2021b; Radeloff 2010; VCFPD 2021).

5.4.2.2 On-Site Construction Considerations

5.4.2.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total NO_x and PM_{10} emissions from on-site construction of the Devil's Canyon Road Site are shown in Table 37.

Table 37. On-Site Construction Emissions: Devil's Canyon Road – Hybrid

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	872	233
Grading – elevated	0	0
Compressor station	10,578	2,022
Substation	1,311	74.3
Total[a]	**12,761**	**2,329**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The amount of on-site diesel equipment would be minimal, and the duration of grading activities would be limited. The Hybrid Option would also require additional construction activity for a substation. NO_x emissions would be in the <40,000 pounds and ≥8,000 pounds range and PM_{10} emissions would be in the <6,000 pounds and ≥2,000 pounds range. Therefore, this alternative received a score of 6 points.

5.4.2.2.2 Cultural Resources

There are no differences in results for on-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 7 points.

5.4.2.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total GHG emissions from on-site construction of the Devil's Canyon Road Alternative are shown in Table 38.

Table 38. On-Site GHG Construction Emissions: Devil's Canyon Road – Hybrid

Activity	Total CO_2e Emissions (MT)
Grading – flat	105
Grading – elevated	0
Compressor station	1,560
Substation	294
Total[a]	**1,959**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The GHG emissions for on-site construction are anticipated to be well below the <5,000 MT CO_2e threshold. Accordingly, this alternative received a score of 8 points.

5.4.2.2.4 Natural Resources

The Hybrid Option may directly or indirectly impact wetlands that support sensitive wildlife species and habitat. As such, this alternative may indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands adjacent to the site, and received a score of 4 points.

5.4.2.2.5 Noise

The nearest non-industrial land use to the Devil's Canyon Road Site is a residentially zoned parcel in the City of Ventura approximately 0.54 miles to the east of the site boundary on the east side of SR-33. Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; thus, the alternative received a score of 9 points.

5.4.2.2.6 Slope, Topography, and Grading

The Hybrid Option would include an electrical interconnect, requiring approximately 80 CY of over-excavation/recompaction in addition to the 4,500 CY required for the on-site components. The additional 80 CY does not impact the ranking because the over-excavation is a relatively negligible amount and the total cubic yardage for the project site would remain under 10,000 (County of Ventura 2022). As such, within the score range of 7 to 9, where the "average slope of the property is less than 20%" and "negligible/no over-excavation/ recompaction is required" (see Section 3.1, Scoring Criteria), the Devil's Canyon Road Site received a score of 8 points.

5.4.2.2.7 Traffic

There would be a negligible difference between construction of the Hybrid Option and the Natural Gas Option related to heavy truck traffic for on-site construction activity. Therefore, this alternative also received a score of 9 points.

5.4.2.3 Off-Site Construction Considerations

5.4.2.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Hybrid Option at the Devil's Canyon Road Site would require construction of approximately 5,135 linear feet of new pipeline systems, as well as approximately 1,892 linear feet of access road work. In addition, approximately 4,507 linear feet of electrical interconnect would be required to accommodate the increased demand from the electric compressors. The linear construction totals approximately 11,534 linear feet, which is in the moderate range. Therefore, this alternative received a score of 3 points.

5.4.2.3.2 Cultural Resources

There are no differences in results for off-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 7 points.

5.4.2.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the future compressor station were calculated. The total GHG emissions from off-site construction of the Devil's Canyon Road Alternative are shown in Table 39.

Table 39. Off-Site GHG Construction Emissions: Devil's Canyon Road – Hybrid

Activity	Total CO_2e Emissions (MT)
Power line	141
Pipeline – street	181
Pipeline – open space	0
Road construction	67
Total[a]	**389**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be in the <500 MT CO_2e range. Therefore, this alternative received a score of 7 points.

5.4.2.3.4 Natural Resources

The proposed electrical interconnect for this alternative is within developed areas with areas of shrubs and crosses one wetland feature (freshwater forested/shrub wetland) and one sensitive habitat (southern coast live oak riparian forest); however, individual pole siting could avoid or minimize impacts to wetlands and sensitive habitats. The proposed tie-in is within an orchard and the proposed pipeline corridor is within developed areas (oil extraction facilities) and areas previously mapped as *Salvia mellifera–Salvia leucophylla* association (David Magney Environmental Consulting 2008), as shown in Figure NR-2D in Attachment 4. The same staging area would be required for the Hybrid Option. The proposed pipeline corridor would cross one wetland feature. As such, this alternative may indirectly impact sensitive animal species in adjacent habitats and directly impact sensitive habitats or wetlands in off-site areas; therefore, it received a score of 0 points.

5.4.2.3.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (as defined in Section 3.2.7), which would be more than 1,000 feet from the construction activity, would be less than 64 dBA for this alternative; thus, the alternative received a score of 9 points.

5.4.2.3.6 Traffic

Construction of the Hybrid Option would be the same as the Natural Gas Option, with the exception of the extension of electrical utilities. However, no roadway construction on existing roads for electrical utilities would be required. Therefore, this alternative received a score of 7 points.

5.4.2.3.7 Utilities/Service Systems

The Devil's Canyon Road – Hybrid Option would require approximately 47,927 square feet of off-site ground disturbance for pipelines, approximately 7,500 square feet for the MLV connection, and 636 square feet of footings required for electrical poles, for a total of 55,978 square feet of ground disturbance. All off-site ground disturbance is summarized in Table 40 and would be conducted within and surrounded by non-urbanized and industrial land.

Table 40. Off-Site Ground Disturbance: Devil's Canyon Road – Hybrid

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (Devil's Canyon Road)	23,963
Pipeline Corridor 2 (Also Devil's Canyon Road)	23,963
Utility Lines	0
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*47,927*
Mainline Valve Connection	
Mainline Valve Connection	7,500
Subtotal Off-Site Ground Disturbance – Mainline Valve Connection	*7,500*

Table 40. Off-Site Ground Disturbance: Devil's Canyon Road – Hybrid

Construction Element	Square Feet
Depressurization Line	
Depressurization Line	0
Subtotal Off-Site Ground Disturbance – Depressurization Line	*0*
Electrical Pole Footings	
Electrical Pole Footings	560
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*560*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**55,987**

Note:

[a] Totals may not sum precisely due to rounding.

The additional disturbance for the electrical poles would not substantively alter the amount of off-site ground disturbance required; therefore, this alternative received a score of 3 points.

5.5 County Line Site

The scoring rationale for each of the environmental topic areas for the County Line Site Alternative is described below.

5.5.1 Natural Gas Option

5.5.1.1 Operational Considerations

5.5.1.1.1 Aesthetics and Visual Resources

The County Line Site is within the viewshed of SR-150 (an eligible state scenic highway) over an approximately 0.7-mile-long segment extending north from approximately Rincon Hill Road. Over this segment, the site is occasionally blocked from view by nearby native vegetation and agricultural crops; however, site development is likely to remain visible above adjacent vegetation due to the inclusion of hillsides on the County Line Site. Depending on the location of grading limits, development of the site could result in substantial alteration to the established visual character of a scenic roadway and to the open space character of the surrounding areas including the currently undeveloped site. Both the visual character of scenic roadways and the open space character of lands outside of existing communities are identified as scenic resources in the Ventura County General Plan (County of Ventura 2020). Due to the potential visibility of site development, potentially available views from a scenic roadway/eligible state scenic highway, and the existing undeveloped and open space character of the site, development of the Natural Gas Option received a score of 0 points.

5.5.1.1.2 Air Quality

This option would include the installation of five new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG

Analysis in Attachment 1, the natural gas-powered compressor station is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption.

Operation of the natural gas compressors is calculated to result in 14 tons/year of emissions. As such, the Natural Gas Option would fall within the >12 tons/year category. Therefore, the Natural Gas Option received a score of 0 points.

5.5.1.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the County Line Site is in Census Tract 6111001206, which has a population of approximately 778. As described in Section 5.2.1.1.3, this tract has a total pollution burden score of 79%, which means that this census tract has more pollution burden than 79% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the County Line Site received a score of 2 points because a pollution burden of 79% is within the 71% to 80% scoring range.

5.5.1.1.4 Greenhouse Gases

This option would include the installation of five new 1,900 HP natural gas compressors equipped with state-of-the-art emission control technology that would be installed in a new compressor building. As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). Indirect GHG emissions for the operation of the natural-gas facilities were not quantified for the Natural Gas Option since anything attributable to indirect GHG emissions would be consistent across all the proposed alternative sites.

The estimated emissions for the all-Natural Gas Option were calculated to be 34,795 MT CO_2e/year, which would fall within the $\geq$25,000 MT CO_2e/year but <50,000 MT CO_2e/year category and therefore would score from 1 to 3. Because 34,795 MT CO_2e/year is in the middle of the emission range, the Natural Gas Option received a score of 2 points.

5.5.1.1.5 Land Use Designation

Regional Site Location

As shown on Figure 5, the County Line Site is in southwest Ventura County, located just west of the Ventura County–Santa Barbara County line, and approximately 22.18 miles east west and slightly north of the Existing Site. The County Line Site lies across a small portion of two larger APNs within Ventura County: APN 008016048 to the northeast and APN 008016047 to the southwest. Regional access to the site and the adjacent staging area—located directly to the northeast of the compressor station site—is via U.S. Route 101 to SR-10/Rincon Road.

Surrounding Land Uses

As shown on the General Plan Land Use and Zoning maps within Attachment 3, the surrounding land uses of the County Line Site are predominantly open space and agricultural, with minimum lot sizes ranging from 40 to 160 acres (County of Ventura 2021). These include County General Plan (2020) land use designations of Open Space in all directions, as well as zoning of AE-40 to the northeast and southeast, OS-160 to the northeast, and

CA-40 to the northwest and southwest (County of Ventura 2021). Land uses northwest of SR-150/Rincon Road and the Santa Barbara County line are also predominantly open space and agriculture, including the County of Santa Barbara Comprehensive Plan (2016) land use designation of Agriculture II, and a minimum parcel size of 100 acres (A-II-100) (County of Santa Barbara 2016; 2021). While the County Line Site compressor station site is not directly adjacent to any sensitive receptors, according to the currently available aerial views, there appears to be a residential development (e.g., sensitive land use area) located approximately 0.24 miles to the northeast.

Project Component Land Uses

The approximately 12.33 acres County Line Site compressor station site is located within Ventura County. The proposed locations for much of the required pipelines and off-site MLV station, and the County Line tie-in for depressurization would be on currently developed land, including approximately 0.93 miles of existing dirt roadway and several operational agricultural lots. All the operational components are within parcels with County General Plan (2020) land use designations of Open Space and County zoning of either CA-40 (Coastal Agricultural; minimum lot size of 40 acres) (County of Ventura 2008) or AE-40 (Agricultural Exclusive; minimum lot size of 40 acres) (County of Ventura 2012). While the County Line Site is located on part of an active agricultural parcel, the available aerial views of the site appear to show no current crop production.

The selection of the County Line Alternative would require changes to for a compressor station would not be is not consistent with the existing land use and zoning for the on-site location to facilitate the types of operational uses required by the project. In addition, Additionally, the primary compressor station site is within an area governed by the SOAR initiative.

Oil Wells

The County Line Site is adjacent to a small, abandoned oil field (e.g., Rincon Creek) (DOC 2019). There are no active wells present on or adjacent to the site (DOC 2022).

Evaluation and Score

While the County Line Site Natural Gas Option's compressor station site is not directly adjacent to any sensitive receptors (i.e., within 500 feet), all the site's operational components are located within parcels with County zoning that does not support the types of industrial and/or manufacturing uses required by the project. Additionally, the primary compressor station site is within an area governed by the SOAR initiative. While the County Line Site is part of an active agricultural parcel, the currently available aerial views of the site show no current crop production. The nearest industrially designated land use to the County Line Site is 0.83 miles to the southeast (APN 060010030). The nearest sensitive land use to the compressor station site is approximately 0.24 miles away. Using the scoring criteria for a site that is within a Non-Industrial/manufacturing zone and is not adjacent to sensitive receptors, the County Line – Natural Gas Option received a score of 6 points.

5.5.1.1.6 Noise

The nearest non-industrial land use to the County Line Site is a residential area located approximately 0.24 miles to the northeast of the site. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-

industrial land use (defined per Section 3.2.7) of less than 55 dBA. Therefore, this alternative received a score of 4 points.

5.5.1.1.7 Wildfire

As shown on the SRA and LRA FHSZ Maps in Attachment 7, approximately two-thirds of the County Line Site is located within a very high FHSZ (CAL FIRE 2022). The other third of the site is located within a moderate FHSZ (CAL FIRE 2022). All operational project components are located within a vegetated area of a known fuel bed (i.e., Casitas Fuel Bed) (Radeloff 2010; VCFPD 2021). Because this site is located on the westernmost edge of a very high FHSZ and because the surrounding area to the north, south, and west are identified as being moderate FHSZs, this site received a score of 3 points under the scoring criteria. The score of 3 is provided with an understanding that the site is not within a high FHSZ; however, portions of the site are within both very high and moderate FHSZs, and the site is bordered by moderate FHSZs to the north, west, and south (CAL FIRE 2022).

5.5.1.2 On-Site Construction Considerations

5.5.1.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. For the purposes of the earthwork required to inform the air quality analysis, it was estimated that the site consisted of hillside/elevated land and flat areas that required grading. The total NO_x and PM_{10} emissions from on-site construction of the County Line Site are shown in Table 41.

Table 41. On-Site Construction Emissions: County Line – Natural Gas

Activity	Total NO_x Emissions (lb)	Total PM_{10} Exhaust Emissions (lb)
Grading – flat	8,218	2,193
Grading – elevated	41,021	5,339
Compressor station	10,578	2,022
Substation		0
Total[a]	**59,817**	**9,555**

Notes: NO_x = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The County Line Site is very hilly and would require substantial grading to be suitable for use. The County Line Site currently has no industrial development. NO_x emissions would be in the <80,000 pounds and ≥40,000 pounds range and PM_{10} emissions would be in the <10,000 pounds and ≥6,000 pounds range; therefore, this alternative received a score of 2 points.

5.5.1.2.2 Cultural Resources

A total of 5 cultural resources have been previously recorded within a 1-mile radius of the County Line Site; however, no cultural resources have been identified within the site and there are no resources within a 0.5-mile radius of the

County Line Site. Additionally, no resources listed on any federal, state, or local registry are located within the on-site component of the County Line Site.

A total of 28 previously conducted studies have been undertaken within a 1-mile radius of the County Line Site between 1962 and 2014. Of these 28 studies, none addresses the County Line Site.

According to the historic aerial photographs and topographic maps, the County Line Site has been subject to ground disturbance at least as early as 1947 because it was occupied by an orchard from at least 1947 until 2002. The County Line Site is located approximately 787 feet east of Rincon Creek, 8,825 feet north of the Pacific Ocean, and 1.3 miles south of the Santa Ynez Mountains. The County Line Site is not close to a natural landmark capable of depositing sediment, such as a river or the base of a foothill; therefore, it has a low potential for unknown archaeological material to be buried under natural sediment.

In summary, no known cultural resources exist within the County Line Site or within close proximity. Although the on-site component of the County Line Site has not been subjected to a cultural resource study, the continual ground disturbance and lack of resources identified within close proximity suggests that the potential for yet unknown and intact cultural resources is low. Therefore, the on-site component of the County Line Site in a location that is not sensitive for potentially significant cultural resources. Based on the above findings, the on-site component of the County Line Site received a score of 8 points.

5.5.1.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total GHG emissions from on-site construction of the County Line Alternative are shown in Table 42.

Table 42. On-Site GHG Construction Emissions: County Line – Natural Gas

Activity	Total CO_2e Emissions (MT)
Grading – flat	992
Grading – elevated	6,502
Compressor station	1,560
Substation	0
Total[a]	**9,055**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The GHG emissions for on-site construction are anticipated to fall slightly under the <10,000 MT CO_2e threshold. Accordingly, this alternative received a score of 4 points.

5.5.1.2.4 Natural Resources

Based on aerial imagery, this alternative is located on a former orchard, leaving disturbed habitat and some shrub growth in the eastern portion of the site that may include species of the historically mapped lower montane mixed chaparral. A linear wetland feature (mapped as freshwater emergent wetland) is located along the southern

boundary. No sensitive plant or animal species have been recorded on or adjacent to the site. The 15 sensitive plant and animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur on the site. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species or sensitive habitats on site but may directly or indirectly impact on-site and adjacent wetlands; therefore, it received a score of 6 points.

5.5.1.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (defined per Section 3.2.7), the apparent occupied farmhouse east of Rincon Road, which would be between 250 and 500 feet from the construction activity, would be less than 75 dBA for this alternative; therefore, this alternative received a score of 7 points.

5.5.1.2.6 Slope, Topography, and Grading

The topography and slope maps in Attachment 6 show the slope for the County Line Site and surrounding area. The site itself currently supports agricultural uses and does not appear to have been subject to previous substantial grading or other intensive use-type improvements. The on-site slope ranges from a low of 0% to a high of over 60%, with a site average of approximately 26%. The average slope range calculations for the site are provided in Table 43.

Table 43. Average Slope Calculations

Class Range	% Slope Range	Acres	% Slope	Avg Avg	% Slope	Min Avg	% Slope	Max Avg
County Line Site – 12.33 Acres								
Site Classes: 0%–70%	0%–10%	1.48	5%	0.07	0%	0	10%	0.15
	>10%–20%	2.95	15%	0.44	10%	0.3	20%	0.6
	>20%–30%	3.39	25%	0.85	20%	0.68	30%	1.02
	>30%–40%	2.35	35%	0.82	30%	0.71	40%	0.94
	>40%–50%	1.8	45%	0.81	40%	0.72	50%	0.9
	>50%–60%	0.3	55%	0.17	50%	0.15	60%	0.18
	>60%–70%	0.07	65%	0.05	60%	0.04	70%	0.05
Site Averages				*26%*		*21%*		*31%*

Based on conceptual engineering analysis, grading for this site would entail approximately 600,000 CY of over-excavation/recompaction. The grading requirements for the County Line Site are substantially greater than the other sites (with the exception of the Avocado Site at 1.3 million CY), due in large part to the fact that this site is in a relatively unimproved area and is surrounded to the south and east by slopes in exceedance of 30%. The average slope within the area that would be developed is also approximately 26%. As such, the County Line Site received a score of 3 points, with the understanding that grading would be substantia, and the slope would be less impactful on the constructability than the established ranking criteria would suggest.

5.5.1.2.7 Traffic

The County Line Alternative would be located on a vacant parcel of land at the county line between Santa Barbara and Ventura Counties. The area is primarily developed with agricultural uses and low-density residential

development. The site has direct access from U.S. Route 101 to SR-150 to Avocado Hill Road, an existing dirt access road. Access to the site via a minimum 24-foot-wide driveway would be needed to meet SoCalGas and emergency responder access requirements. The width of the existing access road varies, and some portions would need to be widened and graded to achieve an acceptable grade suitable for fire truck access. Construction of the compressor station, including pad grading, access road, on-site utility installations, buildings, and compressors, would take approximately 60 to 70 months, with major earthwork occurring for approximately 1 year due to the amount of grading required.

While construction of the County Line Site would occur for approximately 1 year, heavy truck traffic would not travel on a constrained roadway. However, heavy truck travel would occur near low-density residential uses along SR-150 and would also impact Avocado Hill Road (a private road). Therefore, this alternative received a score of 2 points.

5.5.1.3 Off-Site Construction Considerations

5.5.1.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Natural Gas Option at the County Line Site would require construction of approximately 5,650 linear feet of a pipeline system to connect to an existing main pipeline and approximately 2,499 linear feet of access road improvements. The linear construction totals approximately 8,149 linear feet, which is in the minimal range. Therefore, this alternative received a score of 5 points.

5.5.1.3.2 Cultural Resources

A total of 5 cultural resources have been previously recorded within a 1-mile radius of the County Line Site search; however, no cultural resources have been identified within the off-site components of the County Line Site. There is one resource within a 0.5-mile radius of the off-site component of the County Line Site, a historic building (P-56-152756) approximately 500 feet northwest of the off-site component pipeline system. No resources listed on any federal, state, or local registry are located within the off-site components of the County Line Site.

A total of 28 previously conducted studies have been undertaken within a 1-mile radius of the off-site components of the County Line Site between 1962 and 2014. Of these 28 studies, 3 address the off-site components of the County Line Site. Approximately 5% of the off-site components of the County Line Site, including portions of the access road widening, electrical interconnect, pipeline system, depressurization line, and staging area, have been previously surveyed and are documented by studies conducted in 1981, 1983, and 2012 (VN-00636, VN-00426, and VN-03064). Only one of the reports (VN-00426) provides recommendations including an inadvertent discovery clause and archaeological monitoring recommendation.

According to the historic aerial photographs and topographic maps, the off-site components of the County Line Site have been subject to ground disturbance at least as early as 1947. The staging area portion of the off-site component of the County Line Site was occupied by an orchard from at least 1947 until 2009 and historic aerials show evidence of grading disturbance beginning in 2018. The potential access road and pipeline remain partially undisturbed at least as early as 1904 to present where other portions have been disturbed by road grading and construction.

Portions of the off-site components of the County Line Site are within close proximity to Rincon Creek, which is capable of depositing sediment. Therefore, some components have potential for unknown archaeological material to be buried under natural sediment. Although Rincon Creek would have served as a freshwater resource in prehistoric and historic periods, the off-site components appear to be too close to be a hospitable location for habitation due to the propensity for flooding. Depending on the depth and timing of depositional sediment as well as the depth of disturbance incurred as a result of road construction and agricultural activities, unknown cultural resources, if present, may have been destroyed, displaced, and /or buried deeper than the proposed depth of disturbance. These conditions are in part the reason previous cultural resources studies have recommended an inadvertent discovery clause and archaeological monitoring.

In summary, no known cultural resources exist within or in close proximity to the off-site component of the County Line Site. One built resource is located approximately 500 feet northwest of the off-site pipeline component. The continual ground disturbance and lack of resources identified within close proximity suggest that the potential for yet unknown and intact cultural resources is low. However, consideration should be given to the proximity of Rincon Creek to the staging area and other off-site components outside the floodplain of the creek in that the creek would have served as a freshwater resource in prehistoric and historic periods, presenting a hospitable location for habitation. Thus, the off-site component of the County Line Site is in a location that is moderately sensitive for potentially significant cultural resources and the off-site components of the County Line Site received a score of 6 points.

5.5.1.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the future compressor station were calculated. The total GHG emissions from off-site construction of the County Line Alternative are shown in Table 44.

Table 44. Off-Site GHG Construction Emissions: County Line – Natural Gas

Activity	Total CO_2e Emissions (MT)
Power line	0
Pipeline – street	0
Pipeline – open space	84
Road construction	87
Total[a]	**171**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be well below the <500 MT CO_2e threshold. Therefore, this alternative received a score of 9 points.

5.5.1.3.4 Natural Resources

No electrical interconnect is proposed for this alternative. The proposed pipeline corridors, associated tie-ins, and access road improvements are within orchards, and one linear wetland feature (mapped as freshwater

forested/shrub wetland) is crossed. However, based upon aerial imagery, this feature appears to have been removed by the creation of the orchard. The 15 sensitive plant and animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur on the site. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands in off-site areas, and received a score of 8 points due to the low potential for the wetland feature.

5.5.1.3.5 Noise

Predicted off-site construction activity noise exposure level, associated with potential pipeline and access road locations east of Rincon Road and apparently in the vicinity of the Rincon Del Mar Ranch property, at the nearest non-industrial land use (defined per Section 3.2.7), which would be between 0 and 50 feet from the construction activity, would be approximately 90 dBA for this alternative; therefore, this alternative received a score of 0 points.

5.5.1.3.6 Traffic

The County Line Alternative would require the construction of a pipeline system through the oil/gas hillside area, requiring grading, trenching and pipeline installation and potentially acquisition of additional pipeline right-of-way. The project would construct 5,280 linear feet of new pipeline, with some segments of the pipeline occurring along Avocado Hill Road. It is anticipated that minimal roadway construction would be needed and there would be less than 2,500 feet of lane closures. Avocado Hill Road is a private dirt road with low traffic volumes that is primarily used to access the agricultural fields, and there would be no construction on public roadways. Therefore, this alternative would receive a score of 7 points.

5.5.1.3.7 Utilities/Service Systems

The County Line Site – Natural Gas Option would require approximately 27,470 square feet of off-site ground disturbance for pipelines and utilities, approximately 7,500 square feet for the MLV connection, and approximately 3,197 square feet of depressurization line for a total of approximately 38,167 square feet of off-site ground disturbance. All off-site ground disturbance summarized in Table 45 would be conducted within and surrounded by non-urbanized and industrial land and would not impact urban roadways or otherwise impede commuter traffic.

Table 45. Off-Site Ground Disturbance: County Line – Natural Gas

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (to the Northeast)	19,973
Utility Lines	7,497
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*27,470*
Mainline Valve Connections	
Mainline Valve Connection 1	3,750
Mainline Valve Connection 2	3,750
Subtotal Off-Site Ground Disturbance – Mainline Valve Connections	*7,500*

Table 45. Off-Site Ground Disturbance: County Line – Natural Gas

Construction Element	Square Feet
Depressurization Line	
Depressurization Line	3,197
Subtotal Off-Site Ground Disturbance – Depressurization Line	*3,197*
Electrical Pole Footings	
Electrical Pole Footings	0
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*0*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**38,167**

Note:

[a] Totals may not sum precisely due to rounding.

This alternative received a score of 4 points because of the minimal amount of off-site ground disturbance required.

5.5.2 Hybrid Option

5.5.2.1 Operational Considerations

5.5.2.1.1 Aesthetics and Visual Resources

With the exception of approximately 15 new electrical poles, there would be no difference between construction of the Hybrid Option and the Natural Gas Option. New poles are likely to be visible from SR-150, which, based on the presence of existing poles along the roadway, would not result in substantial view obstruction or alteration of existing visual character. As with the Natural Gas Option, construction and operation of the Hybrid Option is likely to be visible from SR-150 and required construction activities including vegetation removal and grading would alter the general open space and agricultural character of the surrounding landscape. Therefore, this alternative received a score of 0 points.

5.5.2.1.2 Air Quality

This option would include the installation of two new 1,900 HP natural gas compressors and three new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, the Hybrid Option is assumed to operate 24 hours a day, 7 days a week, which is a conservative assumption. The Hybrid Option has fewer internal combustion engines and thus fewer direct emissions than the Natural Gas Option. The Hybrid Option would replace three of the internal combustion engines with three electric compressors of equivalent horsepower. Even though an additional electric compressor is required for the County Line Site, the NO_x emissions would remain the same for the Hybrid Option when compared to the other sites, since two natural gas compressors would be required for all Hybrid Options.

Operation of the Hybrid Option was calculated to result in 5.6 tons/year of NO_x emissions. As such, the Hybrid Option would fall within the ≥4 tons/year but <8 tons/year category, which would score from 4 to 6. Because 5.6 tons/year is in the middle of the NO_x emissions range, the Hybrid Option received a score of 5 points.

5.5.2.1.3 CalEnviroScreen

OEHHA CalEnviroScreen 4.0 Maps indicate that the County Line Site is in Census Tract 6111001206, which has a population of approximately 778. As described in Section 5.2.1.1.3, this tract has a total pollution burden score of 79%, which means that this census tract has more pollution burden than 79% of all census tracts within California (OEHHA 2022b). Therefore, based on the ranking score range of 1 to 3 for sites with a 61% to 90% pollution burden, the County Line Site received a score of 2 points because a pollution burden of 79% is within the 71% to 80% scoring range.

5.5.2.1.4 Greenhouse Gases

This option would include the installation of two new 1,900 HP natural gas compressors and three new 1,900 HP electric compressors installed in a new compressor building. The Hybrid Option would also require 5 megawatts in electric service capacity. As detailed in the AQ/GHG Analysis in Attachment 1, the Hybrid Option is assumed to operate 24 hours per day, 7 days per week, which is a conservative assumption. = As detailed in the AQ/GHG Analysis in Attachment 1, GHG impacts are rated according to the metric tons of CO_2 equivalent that are directly produced from equipment and indirectly produced as a result of activities related to operations but not immediately on site (e.g., as a result of electricity generated elsewhere that is used on site). The total direct GHG emissions would be 13,918 MT CO_2e/year and indirect GHG emissions would be 8,250 MT CO_2e/year from operational activities at for the County Line Site.

The shift from natural gas to a Hybrid Option reduces the localized emissions of criteria pollutants and direct GHG emissions, but the increased power demand from the electric compressors would increase indirect GHG emissions depending on how the power that is used is generated. The estimated emissions for the hybrid technology were calculated to be 22,168 MT CO_2e/year, which would fall within the ≥10,000 MT CO_2e/year but <25,000 MT CO_2e/year category and therefore would score from 4 to 6. Because 22,168 MT CO_2e/year is near the top of the emission range, the Hybrid Option received a score of 4 points.

5.5.2.1.5 Land Use Designation

The County Line Site Hybrid Option would require 15 new electrical poles as well as overhead electrical line to accommodate the anticipated electrical demand. The electrical interconnect would have an underlying land use designation of Open Space (County of Ventura 2020) and zoning of AE-40 (County of Ventura 2008) and CA-40-sdf (County of Ventura 2012). However, the location and underlying land use(s) of the electrical interconnect are not primary considerations for the land use criteria as described in Section 3.1 and as such, do not significantly influence the score for this site.

While the Hybrid Option's compressor station site is not directly adjacent to any sensitive receptors, all the site's operational components are located within parcels with County zoning that does not support the types of industrial uses required by the project. Additionally, the primary compressor station site is within an area governed by the SOAR initiative. While no current crop production is occurring within the footprint of the compressor station, the site

has historically been used as an orchard. The nearest industrially designated land use to the County Line Site is 0.83 miles to the southeast (APN 060010030). Using the scoring criteria for a site that is within a Non-Industrial/manufacturing zone and is not adjacent to sensitive receptors, the County Line – Hybrid Option received a score of 6 points.

5.5.2.1.6 Noise

The nearest non-industrial land use to the County Line Site is a residential area located approximately 0.24 miles to the northeast of the site. Based on the assessment provided in Attachment 5, the prediction model enabled an estimate of aggregate operational facility noise at the property boundaries or at the nearest boundary of non-industrial land use (defined per Section 3.2.7) of less than 50 dBA. Therefore, this alternative received a score of 6 points.

5.5.2.1.7 Wildfire

In addition to the presence of a very high FHSZ, due to the exposed nature of the electrical interconnect, consisting of 15 poles and associated overhead electrical lines running through a Tier 2 HFTD, the electrical interconnect could represent an increased fire risk to the surrounding community due to potentially downed power lines (see maps in Attachment 7). Due to this increased risk, the County Line – Hybrid Option received a score of 2 points.

5.5.2.2 On-Site Construction Considerations

5.5.2.2.1 Air Quality

As detailed in the AQ/GHG Analysis in Attachment 1, on-site construction emissions of NO_x and PM_{10} from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total PM_{10} exhaust emissions from on-site construction of the County Line Site are shown in Table 46.

Table 46. On-Site Construction Emissions: County Line – Hybrid

Activity	Total NO_x Emissions (lb)	Total PM_{10} Emissions (lb)
Grading – flat	8,218	2,193
Grading – elevated	41,021	5,339
Compressor station	10,578	2,022
Substation	1,311	74.3
Total[a]	**61,128**	**9,629**

Notes: NOx = oxides of nitrogen; lb = pounds; PM_{10} = coarse particulate matter.

[a] Totals may not sum precisely due to rounding.

The County Line Site is hilly and would require grading and excavation to be suitable for use. The County Line Site currently has no industrial development. The Hybrid Option would also require additional construction activity for a substation. NO_x emissions would be in the <80,000 pounds and ≥40,000 pounds range and PM_{10} emissions would be in the <10,000 pounds and ≥6,000 pounds range. Therefore, this alternative received a score of 2 points.

5.5.2.2.2 Cultural Resources

There are no differences in the results for on-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 8 points.

5.5.2.2.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from on-site activities such as site preparation, grading, and construction within the footprint of the compressor station were calculated. The total GHG emissions from on-site construction of the County Line Alternative are shown in Table 47.

Table 47. On-Site GHG Construction Emissions: County Line – Hybrid

Activity	Total CO_2e Emissions (MT)
Grading – flat	992
Grading – elevated	6,502
Compressor station	1,560
Substation	294
Total[a]	9,348

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

The expected GHG emissions for on-site construction would fall just below the <10,000 MT CO_2e threshold. Accordingly, this alternative received a score of 4 points.

5.5.2.2.4 Natural Resources

The Hybrid Option would not alter any conditions related to on-site natural resources. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species or sensitive habitats on site but it may directly or indirectly impact on-site and adjacent wetlands; therefore, it received a score of 6 points.

5.5.2.2.5 Noise

Predicted on-site construction activity noise exposure level at the nearest non-industrial land use (defined per Section 3.2.7), the apparent occupied farmhouse east of Rincon Road, which would be between 250 and 500 feet from the construction activity, would be less than 75 dBA for this alternative; therefore, the alternative received a score of 7 points.

5.5.2.2.6 Slope, Topography, and Grading

In addition to the analysis above, the Hybrid Option would include an electrical interconnect, requiring approximately 30 CY of additional grading. This additional grading does not impact the ranking due to the fact the electrical interconnect over-excavation is a relatively negligible amount, and the grading for the rest of the site is substantial (600,000 CY). As such, the County Line Site received a score of 3 points under the Hybrid Option.

5.5.2.2.7 Traffic

There would be a negligible difference between construction of the Hybrid Option and the Natural Gas Option related to heavy truck traffic for on-site construction activity. Therefore, this alternative received a score of 2 points.

5.5.2.3 Off-Site Construction Considerations

5.5.2.3.1 Air Quality

Scoring for air quality impacts from off-site construction was based on the total distance of linear construction of the proposed pipeline system, power line, and access road construction. The Hybrid Option at the County Line Site would require construction of approximately 5,650 linear feet of a pipeline system to connect to an existing main pipeline and approximately 2,499 linear feet of access road improvements. In addition, approximately 1,405 linear feet of electrical interconnect is required to accommodate the increased power requirements for the electric compressors. The linear construction totals approximately 9,554 feet, which is at the top of the minimal range. Therefore, this alternative received a score of 4 points.

5.5.2.3.2 Cultural Resources

There are no differences in the results for off-site construction considerations for the Hybrid Option and the Natural Gas Option. Therefore, this alternative received a score of 6 points.

5.5.2.3.3 Greenhouse Gases

As detailed in the AQ/GHG Analysis in Attachment 1, the GHG emissions (expressed in MT CO_2e) resulting from off-site activities such as construction of power lines, pipelines, and roads outside the footprint of the compressor station were calculated. The total GHG emissions from off-site construction of the County Line Alternative are shown in Table 48.

Table 48. Off-Site GHG Construction Emissions: County Line – Hybrid

Activity	Total CO_2e Emissions (MT)
Power line	45
Pipeline – street	0
Pipeline – open space	84
Road construction	87
Total[a]	**216**

Notes: GHG = greenhouse gas; CO_2e = carbon dioxide equivalent; MT = metric tons.

[a] Totals may not sum precisely due to rounding.

GHG emissions from off-site construction would be well below the <500 MT CO_2e threshold. Therefore, this alternative received a score of 9 points.

5.5.2.3.4 Natural Resources

The proposed electrical interconnect is within orchards. The proposed pipeline corridors, associated tie-ins, and access road improvements are within orchards, and one linear wetland feature (mapped as freshwater forested/shrub wetland) is crossed. However, based upon aerial imagery, this feature appears to have been removed by the creation of the orchard. The 15 sensitive plant and animal species and habitats with previously recorded occurrences within 3 miles have a low potential to occur or are not expected to occur on the site. As such, this alternative is not expected to directly or indirectly impact sensitive plant or animal species, sensitive habitats, or wetlands in off-site areas, and received a score of 8 points due to the low potential for the wetland feature.

5.5.2.3.5 Noise

Predicted off-site construction activity noise exposure level, associated with potential pipeline and access road locations east of Rincon Road and apparently in the vicinity of the Rincon Del Mar Ranch property, at the nearest non-industrial land use (defined per Section 3.2.7), which would be between 0 and 50 feet from the construction activity, would be approximately 90 dBA for this alternative; therefore, the alternative received a score of 0 points.

5.5.2.3.6 Traffic

Construction of the Hybrid Option would be the same as the Natural Gas Option, with the exception of the extension of electrical utilities. However, no roadway construction on existing roads for electrical utilities would be required. Therefore, this alternative also receives a score of 7 points.

5.5.2.3.7 Utilities/Service Systems

The County Line – Hybrid Option would require approximately 27,470 square feet of off-site ground disturbance for pipelines and utilities, approximately 7,500 square feet for the MLV connection, approximately 3,197 square feet of depressurization line, and 200 square feet of footings for the electrical poles for a total of approximately 38,377 square feet of off-site ground disturbance. All off-site ground disturbance summarized in Table 49 would be conducted within and surrounded by non-urbanized and industrial land.

Table 49. Off-Site Ground Disturbance: County Line – Hybrid

Construction Element	Square Feet
Pipelines and Utilities	
Pipeline Corridor 1 (to the Northeast)	19,973
Utility Lines	7,497
Subtotal Off-Site Ground Disturbance – Pipelines and Utilities	*27,470*
Mainline Valve Connections	
Mainline Valve Connection 1	3,750
Mainline Valve Connection 2	3,750
Subtotal Off-Site Ground Disturbance – Mainline Valve Connections	*7,500*

Table 49. Off-Site Ground Disturbance: County Line – Hybrid

Construction Element	Square Feet
Pipelines and Utilities	
Depressurization Line	
Depressurization Line	3,197
Subtotal Off-Site Ground Disturbance – Depressurization Line	*3,197*
Electrical Pole Footings	
Electrical Pole Footings	210
Subtotal Off-Site Ground Disturbance – Electrical Pole Footings	*210*
Total Off-Site Ground Disturbance for All Construction Elements[a]	**38,377**

Note:

[a] Totals may not sum precisely due to rounding.

The additional disturbance for the electrical poles would not substantively alter the amount of off-site ground disturbance required and this alternative received a score of 4 points.

5.6 Ranking of Alternatives

Upon completion of the rubric scoring, the final tallies for each of the alternative sites and technology options were compared. The final scoring range for the alternatives is shown in Table 50.

Table 50. Alternative Ranking Based on the Environmental Scoring Rubric

Alternative Sites	Technology Options	Operational Considerations Ranking (×10)	On-Site Construction Considerations Ranking	Off-Site Construction for Utilities Considerations	Total Score
Option 4: Devil's Canyon Road Site	B. Hybrid	350	51	35	**437**
Option 1: Existing Site	B. Hybrid	320	48	61	**429**
Option 3: Ventura Steel Site	B. Hybrid	350	56	13	**419**
Option 4: Devil's Canyon Road Site	A. Natural Gas	300	51	37	**389**
Option 1: Existing Site (Planned Project)	A. Natural Gas	260	48	61	**369**
Option 3: Ventura Steel Site	A. Natural Gas	290	56	13	**359**
Option 2: Avocado Site	B. Hybrid	280	32	32	**344**

Table 50. Alternative Ranking Based on the Environmental Scoring Rubric

Alternative Sites	Technology Options	Operational Considerations Ranking (×10)	On-Site Construction Considerations Ranking	Off-Site Construction for Utilities Considerations	Total Score
Option 5: County Line Site	B. Hybrid	250	32	38	**320**
Option 2: Avocado Site	A. Natural Gas	230	32	35	**297**
Option 5: County Line Site	A. Natural Gas	170	32	39	**241**

As previously discussed in Chapter 4, Environmental Scoring and Ranking, the scores in the "Operational Considerations" category were multiplied by a factor of 10. The scores were weighted because operational considerations would have long-term implications for the environment over the life of the modernization project and thus should be considered as more consequential, whereas short-term construction activities are temporary. The factor of 10 was determined to be appropriate by considering the duration of construction impacts in the context of the life of the project. The duration of site construction activities would vary according to site-specific considerations described in Section 2, Alternative Options, and the average length of construction activity for all 10 development scenarios would be 3.8 years. The anticipated useful lifespan of the modernization project is estimated to be 40 years. As such, increasing the numeric scoring for the "Operational Considerations" category by a factor of 10 was determined to adequately capture the environmental consequences of short-term construction vs. long-term operational impacts.

As shown in Table 50, the alternative with the greatest point total is the Devil's Canyon Road – Hybrid Option, with a score of 437. This is followed in ranking by the Existing Site – Hybrid Option and the Ventura Steel – Hybrid Option. These three sites and technologies scored within 18 points of each other. Overall, the Hybrid Option at each site scored higher than the Natural Gas Option at that same site.

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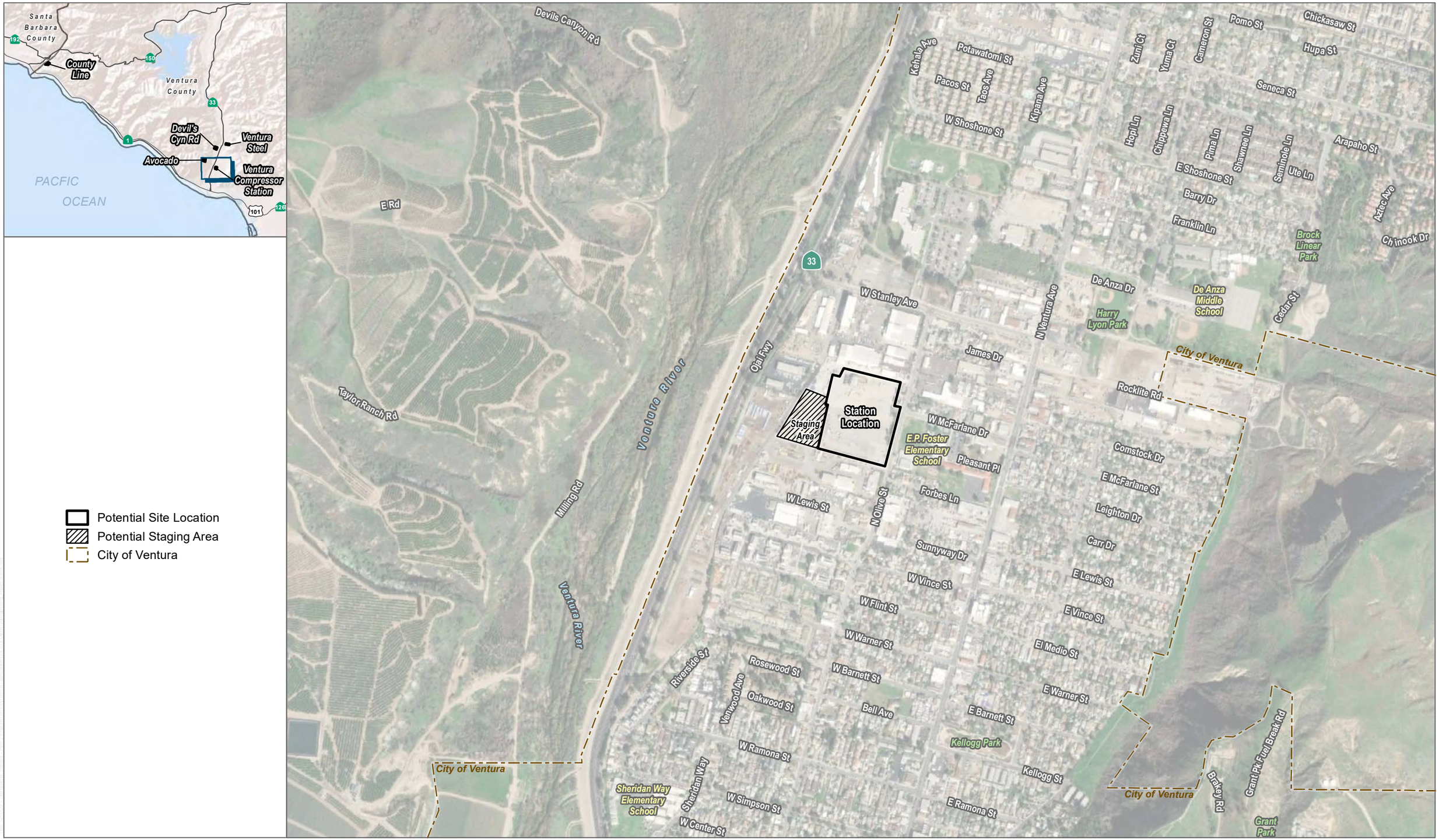

SOURCE: Esri and Digital Globe, Open Street Map

DUDEK

0 355 710 Feet

FIGURE 1

Project Location - Existing Site

Ventura Compressor Station Modernization Project

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SOURCE: Esri and Digital Globe, Open Street Map

DUDEK

0 550 1,100 Feet

FIGURE 2

Project Location - Avocado Site

Ventura Compressor Station Modernization Project

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- Potential Site Location
- Potential Staging Area
- Potential Tie-in
- Potential Depressurization Line
- Potential Electrical Interconnect*
- Potential Pipeline
- Potential Access Road
- City of Ventura

** For hybrid option only*

SOURCE: Esri and Digital Globe, Open Street Map

DUDEK

0 500 1,000 Feet

FIGURE 3

Project Location - Ventura Steel Site

Ventura Compressor Station Modernization Project

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- Potential Site Location
- Potential Staging Area
- Potential Tie-in
- Potential Electrical Interconnect*
- Potential Pipeline
- Potential Access Road
- City of Ventura

* For hybrid option only

SOURCE: Esri and Digital Globe, Open Street Map

DUDEK

0 550 1,100 Feet

FIGURE 4

Project Location - Devil's Canyon Road Site

Ventura Compressor Station Modernization Project

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Potential Site Location
Potential Staging Area
Potential Tie-in
Potential Depressurization Line
Potential Electrical Interconnect*
Potential Pipeline
Potential Access Road**
County Boundary

** For hybrid option only*

*** Includes subterranean utilities*

SOURCE: Esri and Digital Globe, Open Street Map

DUDEK

0 250 500 Feet

FIGURE 5

Project Location - County Line Site

Ventura Compressor Station Modernization Project

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