City of Blythe

Ocean Pacific Energy Company
Compressed Natural Gas Fueling Station
and
Power Generation Project

CEQA Exemption
In-Fill Development Project

Prepared for:

City of Blythe
Community Development Department
235 N. Broadway
Blythe, CA 92225

March 2025

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Ocean Pacific Energy Company
Compressed Natural Gas Fueling Station and
Natural Gas-Fired Power Generation Project, City of Blythe

1. Project Title:	Ocean Pacific Energy Compressed Natural Gas Fueling Station and Natural Gas-Fired Power Generation Project
2. Lead Agency Name and Address:	City of Blythe 235 N. Broadway Blythe, CA 92225
3. Contact Person and Phone Number:	Mallory Crecelius Interim City Manager & City Clerk (760) 922-6161
4. Project Location:	South of Interstate 10 and east of Intake Boulevard/State Route 95 in the City of Blythe Assessor's Parcel Number 869-210-012 NW Portion, Section 3, T 7 S, R 23 E, SBB&M USGS Blythe Quadrangle, 7.5-minute Series 33°36'09.81" N Lat., 114°34'11.37" W Long. (Approximate center of site.)
5. Project Sponsor's Name and Address:	Ocean Pacific Energy Company 32122 Camino Capistrano, Suite 100 San Juan Capistrano, CA 92675 Contact: Tim Nelligan (310) 801-8685
6. General Plan and Zoning Land Use Designation:	C-G (General Commercial)

Purpose of the Categorical Exemption

This California Environmental Quality Act (CEQA) exemption report has been prepared by the City of Blythe in conformance with CEQA review requirements for the proposed CNG / RNG Fueling Station and Power Generation Project. The Project Description is detailed in the following section, followed by a record of the supporting analyses that were used to make the determination that the proposed project qualifies for an exemption from CEQA. In summary, the City has determined that the CNG fueling station project is categorically exempt as an In-fill Development Project as defined in section 15332 of the CEQA Guidelines.

Project Description

Ocean Pacific Energy Company (OPE) has applied to the City of Blythe for approval to build and operate a retail compressed natural gas (CNG) heavy duty vehicle fueling station. The proposed project would be located on a leased 4.85-acre site within a property of 78.48 acres (APN 869-210-012) south of Interstate 10 and east of U.S. Route 95 (referred to as Intake Boulevard in the City of Blythe). (See Figure 1: Project Site Location within the City of Blythe, Figure 2: Project Site and Surrounding Land Uses, and Figure 3: Site Plan.)

The fueling station will serve primarily heavy duty CNG vehicles and will offer public retail and behind the fence fueling. OPE intends to obtain primarily renewable natural gas (RNG) for most of the transportation fuel dispensed. SoCalGas supplied RNG will be sourced from dairy farms and similar sources and will have a negative carbon score. The RNG will be transported to the fueling station through an underground utility pipeline, with onsite storage. The fueling facility will compress fuel prior to dispensing to vehicles.

The CNG equipment compound consists of an area that is protected with steel and concrete filled bollards three feet tall and fenced off with a service gate and man gate for access. Inside the compound there will be a maximum three (3) electric driven compressors that take the pipeline RNG supplied by the utility via underground pipeline, compress it and deliver it to the RNG fuel dispensers where it is dispensed into the trucks. This facility dispenses compressed RNG in real-time, thereby eliminating large amounts of diesel fuel delivery and storage that would typically be associated with this type of facility.

The project also includes three natural gas microturbines on site that will supply all necessary electrical power to the project. A parcel split is not proposed or required for this project. Construction is expected to occur from May 2025 through February 2026.

Figure 1: Project Site Location Within the City of Blythe

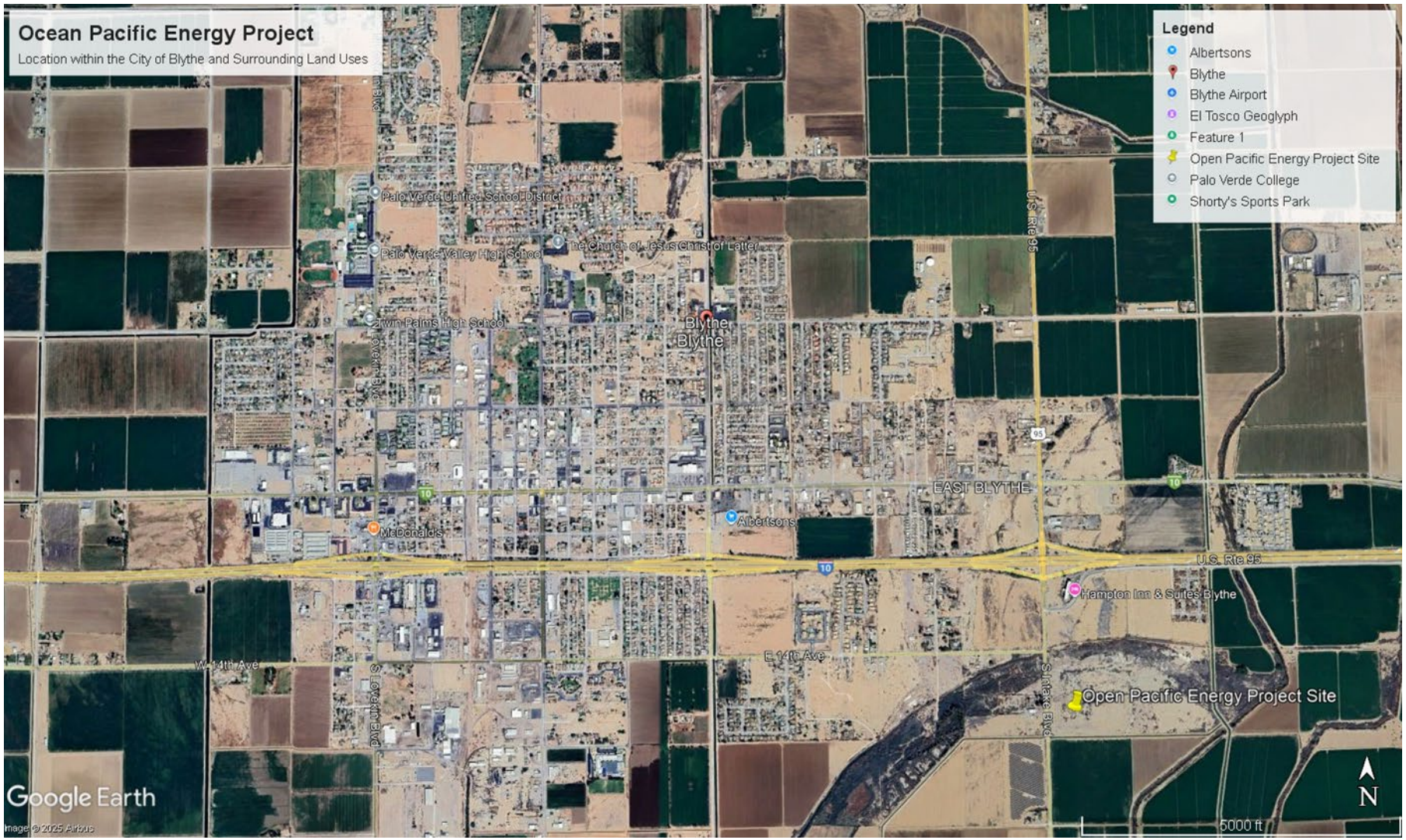


Figure 2: Project Site and Surrounding Land Uses

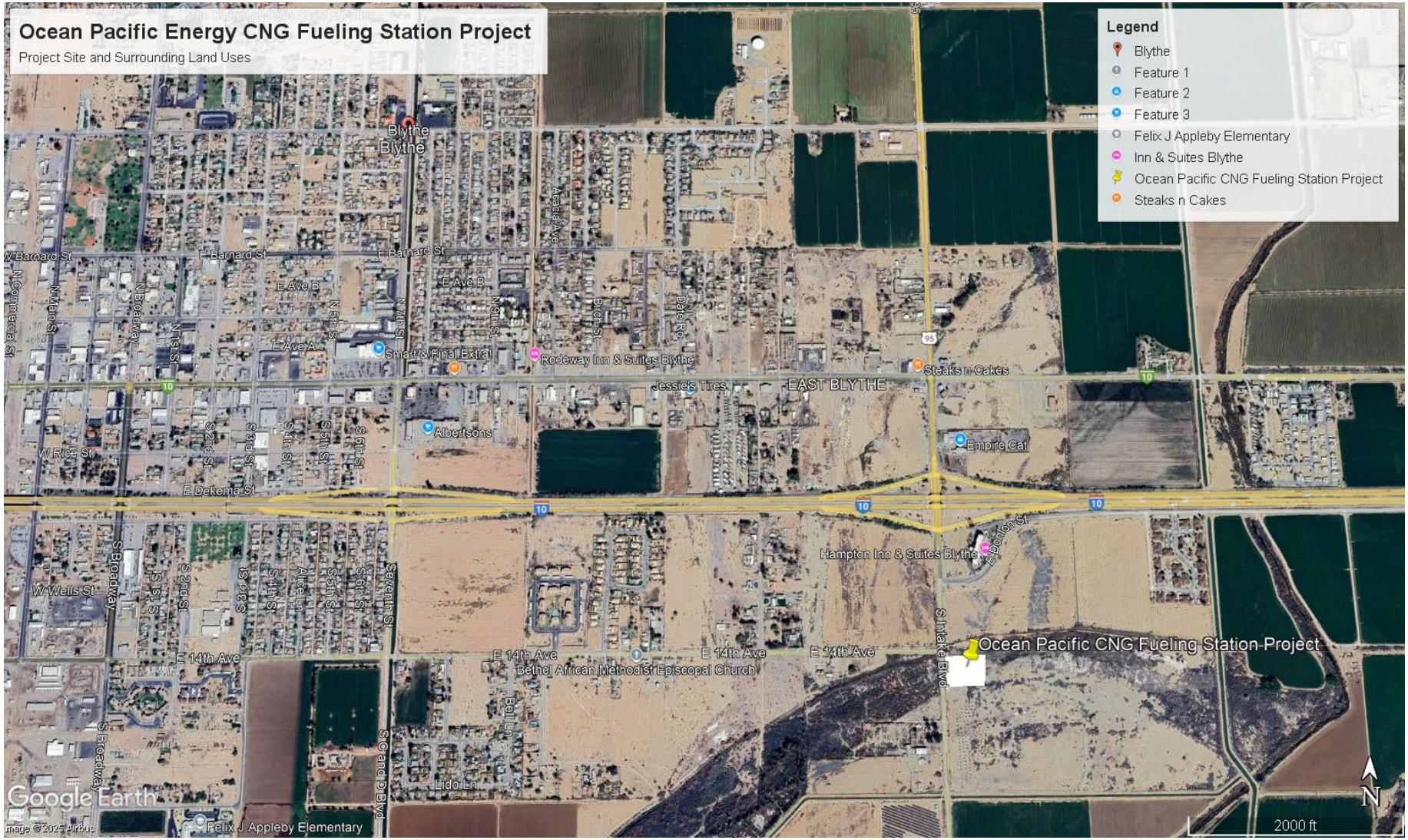
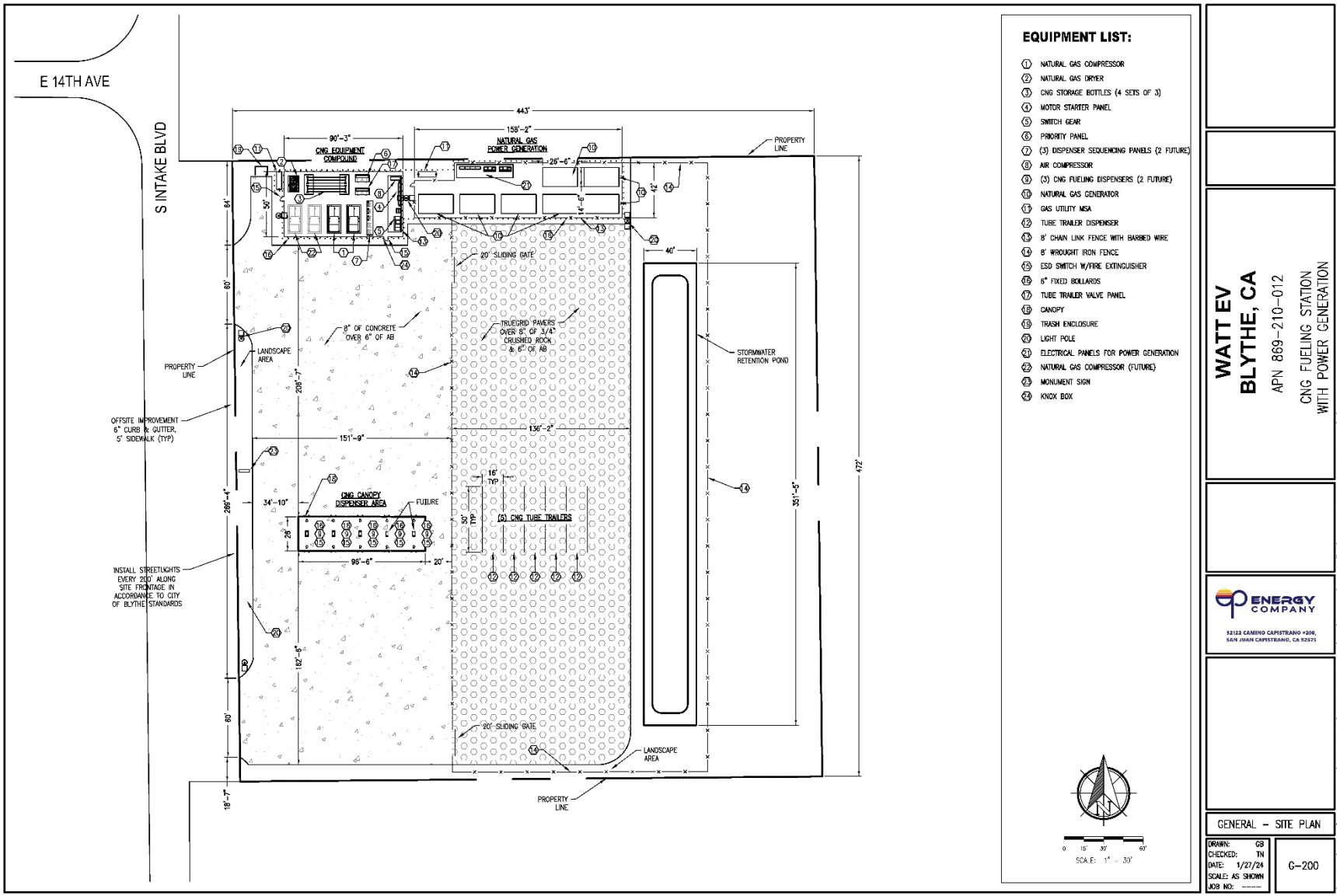


Figure 3: Site Plan



The General Plan and zoning land use designation is General Commercial (C-G) which does allow for development of vehicle fueling stations. Electrical generation facilities are also allowed in the C-G zone with approval of a use permit. The site is now vacant and there will be no demolition of existing buildings and/or asphalt/concrete. Surrounding land uses include the approved WattEV Charging Station and Interstate-10 to the north, a Hampton Inn Hotel to the north, a residential apartment complex to the northeast, and agricultural lands to the south and west. The balance of the surrounding parcel to the east and south was utilized by the City as a dump and transfer station until it was closed in the early 1980s. The parcel has been approved by the City for development of a photovoltaic solar-power generation facility intended to support the Watt EV charging station. The 34-acre property to the northwest across Intake Boulevard is currently vacant and is also zoned for general commercial development.

The project site is entirely within the City of Blythe and will connect to City services for water; however, sewer connection is not required for this development which will be equipped with portable toilets. It will also be served by the City's police and fire department. The CNG station will be supplied from the existing SoCal Gas Company pipelines adjacent to the northern edge of the project site. All equipment and facilities will conform to the City of Blythe and Riverside County Fire Department Standards and applicable State and federal standards.

Compressed Natural Gas Fueling Station

The fueling station will provide cardlock CNG fueling for trucks and vehicles and is proposed to operate 24 hours a day, 7 days a week. The station will only serve CNG-powered vehicles (i.e., no gasoline or diesel fueling or EV charging). The proposed project would receive natural gas from SoCal Gas's High-Pressure Main, (SL-SL 41-148 through approximately 244 feet of 6-inch diameter steel pipeline. The CNG compressors will compress the pipeline gas which will then be stored onsite and dispensed into CNG vehicles and tube trailers.

There will not be a permanent, occupied building onsite. There will be a fueling canopy approximately 96 feet long and 26 feet wide, with a total surface area of 2,500 square feet. In addition to the canopy, the above ground equipment for the CNG compression station and power generation equipment will take up approximately 11,000 square feet. The CNG station will be unattended/remote monitored. Staff will include one technician visit each week, and one janitorial visit two times per month. The CNG fueling station is estimated to generate up to 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 morning peak hour trips and 25 afternoon peak hour trips.

Natural Gas-Fired Power Generation Facility

The generation station would include three 200-kilowatt (kW) natural gas microturbines with a 500 kilowatt-hour (kWh) battery. The natural gas microturbines would operate for a combined four hours per day, 365 days per year. The microturbines are operated within an enclosure for appearance and noise attenuation. Power generation is for facility operations. Any excess power will be sold to the adjacent WattEV electrical vehicle charging station.

Required Approvals

The project requires site plan approval from the City of Blythe, and City approval of a Use Permit for the natural gas energy generation facility. An operating permit will also be required to be obtained from the Mojave Desert Air Quality Management District (MDAQMD). The City is the lead agency for completing environmental reviews to satisfy the requirements of the California Environmental Quality Act (CEQA). Other than the MDAQMD permit, no other required State or local approvals have been identified at the time the application was submitted to the City.

CEQA Guidance

As the Lead Agency under CEQA, the City of Blythe has undertaken this environmental assessment and determined that the proposed development qualifies for a Categorical Exemption as an Infill Development Project (State CEQA Guidelines §15332). This CE document has been prepared to describe the proposed project and assess each of the criteria required to qualify for the exemption. The document will also assess the CEQA exceptions to use of an exemption to satisfy the findings needed to support the findings. Based upon this assessment, it does not appear that the proposed project or project site has any environmental sensitivity that would preclude use of a Categorical Exemption.

Categorical Exemption

Based upon review of the CEQA Guidelines, the City has determined that the proposed Project is exempt under the categorical exemption for in-fill development projects as defined in CEQA Guidelines §15332. The applicable criteria for exemption are identified as follows.

15332. IN-FILL DEVELOPMENT PROJECTS

Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

(e) The site can be adequately served by all required utilities and public services.

Note: Authority cited: Section 21083, Public Resources Code. Reference: Section 21084, Public Resources Code

Findings:

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

The City's General Plan land use and zoning classification on the subject Project site is C-G - General Commercial, which does allow operation of a wide variety of retail businesses, including vehicle fueling and charging stations. Therefore, the proposed Project is determined to be consistent with the applicable general plan designation and applicable general plan policies, and with the City's zoning designation and regulations.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

The proposed CNG fueling station and power generation project is located entirely within the City of Blythe on a ±4.85-acre project site, south of interstate 10 and east of Intake Boulevard / U.S. Route 95. Surrounding land uses include Interstate 10 and a Hampton Inn and Suites hotel to the north, an apartment complex to the northeast, and a variety of commercial and residential uses to the northwest and west. A City approved electric vehicle charging station (WattEV) with ancillary solar power generation facility is located on adjacent property directly north, east and south of the OPE site and is in final stages of pre-construction review proceeding grading and construction.

The OPE project site lies within the perimeter of City core lands that have been developed in urban uses for decades, including the site's previous use of the property as a part of its City waste transfer station. The City of Blythe is an economically disadvantaged community and is actively pursuing economic development to benefit the community and provide employment opportunities to its residents. The City considers all lands within its boundaries that are designated for urban uses (residential, commercial, industrial, manufacturing or municipal uses) in its General Plan and zoning code to be urban use lands. Surrounding areas of the City are substantially developed in urban uses and designated for future commercial development. On that basis, the City has determined that this project site does meet the criteria of being within City limits, no more than five acres and substantially surrounded by urban uses.

(c) The project site has no value as habitat for endangered, rare or threatened species.

The site and surrounding lands have been in urban use for decades, including the City's waste transfer station, residential and commercial development, and regional transportation corridors (U.S. Highway 95 and Interstate 10). The project site is currently vacant, but is surrounded on its north, south and east sides by property that has been approved for development of an electric vehicle charging station and solar energy generation project. The project site is not located in proximity to any wetlands, wildlife refuge, or lands protected under a special habitat conservation or management plan. The Project Site does not have the habitat values to support any sensitive species, particularly compared to nearby irrigated agricultural lands and the Colorado River corridor. It is determined therefore that the site has no meaningful habitat value for any special-status species, and that a standard measure imposed by the City for protection of nesting birds is applicable as a condition of construction approval and provides adequate species protection for construction at this project site. (See "*Applicable City Standard Conditions of Approval*" section below.)

(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

Traffic: The proposed project is a relatively small fueling station in an area of the City with multiple fueling services primarily serving pass by traffic on the Interstate 10 and U.S. Route 95 corridors. A traffic analysis was prepared for the project as required by the City and reported the CNG fueling station would generate up to 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 morning peak hour trips and 25 afternoon peak hour trips. (See Appendix A: Urban Crossroads, Inc., *OP Energy CNG Station Traffic Analysis*; January 31, 2025).

Project related trips will generate low volume traffic on roadway segments within the City of Blythe that operate well below capacity and that do not experience any congestion under existing conditions. The analysis determined that the intersections of Intake Boulevard (U.S Route 95)/14th Avenue (#1) and Intake Boulevard (U.S. Route 95)/I-10 east bound ramps (#2) are anticipated to operate at an acceptable level of service with the installation of traffic signals and turn lane improvements for General Plan (2045) conditions. The City will require that the project pay a fair share contribution for participation in the provision of improvements to provide traffic signals (when needed) as it does for all projects.

Noise: Noise generating equipment for the CNG compressors at the CNG Fueling Station, including the microturbines, operate at low levels estimated to be approximately a maximum of 70 to 75 decibels. CNG / RNG vehicles are also quiet and produce approximately 10 decibels less noise than the diesel trucks they are replacing.[1] The CNG Fueling Station Project's power generation microturbines are contained and operated within a housing for noise attenuation. At the northern property boundary where the microturbines are located, noise levels are expected to be a maximum of approximately 70 to 75 decibels or less. The City of Blythe General Plan Noise Element recommends discouraging industrial, commercial or other noise generating land uses if resulting noise levels will exceed 65 dB Ldn (or CNEL) at the boundary areas of planned or zoned noise sensitive land uses.[2] Noise-sensitive land uses are identified to include residential developments, schools, hospitals, rest homes and long-term medical care facilities, and churches.

[1] (New Collection Trucks Reduce Emissions & Noise Pollution | Sustainable Stanford, accessed 03/26/25

[2] City of Blythe, 2007. *City of Blythe General Plan 2025, Noise Element.*

The nearest noise receptor to the microturbines at the northern project site boundary will be the planned WattEV electric vehicle charging station, a commercial land use that is not sensitive to noise, which will be naturally attenuated by distance to less than 65 decibels at the convenience facilities building and charging ports. The nearest noise-sensitive land uses include the Hampton Inn & Suites Hotel located approximately 1,000 feet north of the microturbines and the Casa Encinas at River Heights Apartment Complex located approximately 2,000 feet northeast. Natural noise attenuation at those distances will diminish the sound of the microturbines to less than 50 decibels, essentially non-detectable levels, particularly since both of these noise-sensitive land uses are located within about 200-400 feet of Interstate 10, which is the dominant source of noise affecting those properties day and night. Therefore, approval of the proposed project would not result in significant impacts related to noise.

Air Quality and Greenhouse Gases: As a part of this assessment of the proposed project, a technical analysis of air quality and greenhouse gas emissions was prepared by the RCH Group. Their assessment is presented in Appendix B of this report and its conclusions are summarized here. Intermittent construction emissions that occur from activities such as site-grading, microturbine installation, and CNG fueling station construction were evaluated. Long-term operational emissions would also occur from mobile vehicles and natural gas generators. This air quality analysis focuses on daily and annual emissions from construction and operational activities and is consistent with the methods described in the Mojave Desert Air Quality Management District (MDAQMD) CEQA and Federal Conformity Guidelines.

The air quality analysis includes a review of criteria pollutant emissions such as carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO2), volatile organic compounds (VOC) as reactive organic gases (ROG), particulate matter less than 10 micrometers (coarse or PM10), and particulate matter less than 2.5 micrometers (fine or PM2.5). GHG emissions include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O).

The analysis concludes that construction of the project would be below all MDAQMD significance thresholds and would adhere to the required BMPs, ensuring a less than significant impact. The operation of the project would be below all MDAQMD significance thresholds and would not significantly contribute to air pollution or deteriorate local air quality conditions. Furthermore, the project aligns with federal, State, and local plans, policies, and regulations. All air quality and GHG emissions impacts would be less than significant for CEQA purposes.

A related aspect of air quality and GHG emissions is energy use. As a part of this assessment of the proposed project, a technical analysis of energy use was also prepared by the RCH Group to address specific questions included in Appendix G of the CEQA Guidelines. Their assessment is presented in Appendix C of this report and its conclusions are summarized here. The energy analysis quantifies project construction and operational energy usage based on project-specific details from project engineers regarding energy usage for the CNG fueling station and generators. The project would consume natural gas to generate electricity. The technical analysis provides current information on energy settings encompassing the consumption of various energy resources such as electricity and petroleum fuels within the project. Regulatory setting information at the federal, State, and local levels related to energy and energy conservation is included. This analysis segments energy use calculations into construction and operational activities, considering different energy consumption types such as petroleum fuels and electricity. A comparative analysis has been conducted to evaluate the project's energy use estimates against statewide, regional, and local energy use data. The assessment is designed to determine whether the project leads to wasteful, inefficient, or unnecessary energy consumption. In addition, the project's energy use estimates are compared to relevant State and local plans for renewable energy and energy efficiency to ensure consistency.

The energy use analysis concludes that the project would require the consumption of petroleum-based fuels during construction and electricity and natural gas during long-term operations (the project is expected to generate its required electricity). The CNG fueling station would reduce regional gasoline and diesel fuel consumption for the lifetime of the project. Project energy consumption would not be considered wasteful, inefficient, or unnecessary. The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and all energy impacts would be less than significant for CEQA purposes.

Project construction would generate short-term emissions of air pollutants, including fugitive dust (such as wind-blown dust) and equipment exhaust (via tailpipe or stack) emissions. In the absence of best management practices, construction activities may result in significant quantities of dust affecting local visibility and PM10 concentrations on a temporary and intermittent basis during construction. All construction projects in the region are required to comply with MDAQMD Rule 403 (Fugitive Dust) and all other applicable MDAQMD rules. The City of Blythe General Plan 2025 Air Quality Element requires best management practices (BMPs) for air quality. These are included in the *Applicable City Standard Conditions of Approval* section below.

Water Quality: During construction, grading and excavation for pipelines and utilities can result in erosion and discharge of soils off site. As for all construction projects in the State, the project will be required to develop and implement a project-specific Stormwater Pollution Prevention Plan (SWPPP)[3] which is designed to reduce potential adverse impacts to surface water quality during the period of construction. The SWPPP must identify the locations and types of construction activities requiring implementation of erosion control "best management practices" (BMPs) to prevent soil erosion and stormwater runoff.

Operational water use will be minimal including a closed loop microturbine cooling system and landscape irrigation system. Portable toilets will be regularly service for proper disposal and will not discharge to the City's wastewater treatment system. No part of the project will result in discharge of any contaminants that could affect local or regional water quality. Therefore, it is concluded that the proposed project will not result in any significant effects on water quality.

In conclusion, it is determined that the project has no potential to cause significant effects or impacts related to traffic, noise, air quality or water quality.

(e) The site can be adequately served by all required utilities and public services.

The City's water and sewer lines do extend to the property, and connection to these lines will be done subject to review and approval of the City Engineer. The City's water supply system relies upon groundwater from the Palo Verde Valley aquifer which is constantly recharged by deep percolation from up to 104,500 acres of irrigated farmland in the Valley. The existing water supply system can serve a population of more than 26,000; (source: General Plan 2025, p.5-12) in a City with an existing population of about 18,066 (2025), a decrease of about 13% since the 2010 census, but currently growing at about one-percent annually since the 2020 census[4]. The City's wastewater treatment plant has a design capacity for 2.4 million gallons per day (mgd) with current average flows of about 1.5 mgd; (source: General Plan 2025, p. 5-13).

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[3]) In conformance with the Construction General Permit (CGP) (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ. A Notice of Intent (NOI) to implement a SWPPP must be submitted to the State Water Resources Control Board (SWRCB) who will issue a Waste Discharge Identification (WDID) number. The SWPPP and WDID must be kept on site during the period of construction.

[4] www.*WorldPopulationReview.com/us-cities/california/blythe*, accessed March 24, 2025

Frontier Communications and Direct TV provide cable, satellite, and internet services and will serve this project with communications services. The site lies entirely within the City and is therefore provided City police and fire services. Waste disposal service is provided throughout the City under contract with CR&R Inc., including this project site. The site is also served by the City's school system, which is not applicable to this commercial fueling station project. For these reasons, it is determined that the site can be adequately served by all required utilities and public services.

Consideration of Exceptions from Exemption

Based upon review of the CEQA Guidelines, the City has determined that the proposed project has no conditions as defined in CEQA Guidelines §15300.2 that would make it ineligible for the applicable categorical exemption. Exceptions for use of an exemption may occur when a project has any of the following conditions:

- A significant cumulative impact as one of successive projects of the same type in the same place, over time.

- If there is a reasonable possibility that the project will have a significant effect on the environment.

- A project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway.

- A project located on a property identified on any hazardous materials list compiled pursuant to Section 65962.5 of the Government Code.

- A project which may cause a substantial adverse change in the significance of a historical resource.

The proposed CNG Fueling Station project is not directly related to any successive projects of the same type in the City of Blythe that could result in an adverse cumulative effect. Assuming the approved WattEV project will be developed as planned, the CNG / RNG fueling station will be located adjacent to vehicle charging station, which was accounted for in the traffic analysis cited above. As described in each of the analyses above, no unusual circumstances exist on or around this designated commercial property that could result in a reasonable possibility of having significant adverse effects on the environment.

Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality. The proposed project includes the development of a small CNG fueling station located within a designated commercial zone in the City of Blythe. Traffic, noise and air quality effects will be minimal and typical of or lower than fueling station uses throughout the City. The project site will be connected to the City's water system, and no expansion of any utility system is required or proposed. The project site has no value as habitat for endangered, rare or threatened species. The site and surrounding lands have been in urban use for decades, including commercial and residential development, major transportation corridors, and as a community dump / waste transfer station. The project site is entirely within the City of Blythe adjacent to and in proximity to urban land uses and is not located in proximity to any wetlands, wildlife refuge, or lands protected under a special habitat conservation or management plan.

No designated scenic highway is in proximity to the proposed project site. As shown in figures 1 and 2 above, State Route 95 lies on the western project site boundary and Interstate 10 is located approximately one-tenth mile north of the site, but neither is an officially designated State Scenic Highway, and there are no State Scenic Highways from which the property is visible.

The site is not on any EnviroStor list maintained by the Department of Toxic Substances Control[5]. There are 10 sites listed in Riverside County, none of which are in or near the City of Blythe. On the hazardous materials Cortese list[6] there are four sites listed within approximately 10,000 feet of the project site which are listed as "Closed" and "No further action". None of the sites is in close proximity to the project site.

There are no historic resources located on or in the vicinity of the property, and there is no potential for such resources to be impacted by construction or operation of the project

Based upon this review, it is concluded that there are no conditions applicable to the project site that would qualify as exceptions to use of an exemption for the CNG / RNG Fueling Station project.

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[5] (www.calepa.ca.gov/sitecleanup/corteselist/ ; accessed March 27, 2025)

[6] (www.envirostor.dtsc.ca.gov/public/map/?myaddress=Blythe; accessed March 27, 2025)

Applicable City Standard Conditions of Approval

The City imposes applicable measures for protection of air quality, biological resources and cultural resources that although not expected at this site, could potentially be encountered during grading and excavation for construction of the project. Each of these measures are listed below.

Air Quality

MDAQMD Rule 403 (Fugitive Dust) and the City of Blythe General Plan 2025 Air Quality Element requires the following best management practices (BMPs).

BMP AQ-1*: The Applicant shall control fugitive dust emissions during construction as follows:*

- *During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by regular watering, paving of construction roads or other dust-preventive measures.*
- *All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day.*
- *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 15 mph averaged over a 1-hour period.*
- *All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.*
- *The area disturbed by demolition, clearing, grading, earth moving, or excavation operations shall be minimized at all times.*
- *Portions of the construction site to remain inactive longer than a period of 3 months shall be seeded and watered until a vegetative cover is grown.*
- *All on-site roads shall be paved as soon as feasible or watered periodically or chemical stabilized.*

BMP AQ-2*: The Applicant shall control exhaust emissions during construction by maintaining equipment engines in good conditions and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for long periods.*

Biological Resources

Measure BIO-1: Pre-Construction Nesting Bird Surveys

If the removal of trees, shrubs, or other potential nesting habitat must occur during the general bird breeding season (February 1 to August 31), a qualified biologist shall conduct a nesting bird survey within 7 days of removal activities to determine the presence or absence of nesting birds. If no active nests are found during the pre-construction surveys, no additional action shall be required. If an active nest is found, the nest and an appropriate buffer shall be avoided. The initial size of the avoidance buffer shall be 300 feet for passerines and 500 feet for raptors and shall be reduced at the discretion of the qualified biologist depending on the species and level of disturbance. Activities shall be allowed to proceed within the avoidance buffer once the young have fledged and the nest is confirmed to be no longer active, as determined by the qualified biologist.

Cultural Resources

Measure CULT-1: Uncovered Cultural Resources and Human Remains

The project Applicant and its contractors would be required to adhere to all City and State procedures, including CEQA Guidelines Section 15064.5, regarding stoppage of work, handling of uncovered resources, and notification of proper authorities to ensure that the project would not have an adverse effect on such resources. Since these are enforced by the City and State, they are not considered mitigation measures and will be implemented as regulatory requirements.

City of Blythe General Plan Policy 25:

1. *In the event that any cultural resources are discovered during clearing, grading or construction, project operations shall cease until a qualified archaeologist has evaluated the situation. Following the evaluation, the project sponsor shall implement recommendations provided by the archaeologist, in consultation with the City, that are consistent with State law.*
2. *If human skeleton remains are encountered during construction of a project, the County Coroner shall be notified. If the remains are Native American, the coroner has 24-hours to notify the Native American Heritage Commission.*

3. *Any cultural resources found on the proposed project site will be recorded or described in a professional report and submitted to the University of California at Riverside.*

Eligibility Conclusion

Based on the facts set forth above, the City hereby determines that the proposed OPE CNG/RNG Fueling Station and Power Generation project does qualify as an in-fill development project and is exempt from further CEQA review pursuant to CEQA Guidelines §15332, and none of the possible exceptions to these exemptions defined in CEQA apply. Should the City Council approve the proposed project, a Notice of Exemption will be filed with the County Clerk and State Clearinghouse as described in the CEQA Guidelines §15062 (c) (2).

Signed: _____ Date: March 28, 2025

Name: Mallory Crecelius
Title: Interim City Manager & City Clerk

Persons and Agencies Consulted

City of Blythe

- Mallory Crecelius, Interim City Manager

Planning Review Committee (PRC)

- Planning Department
- Fire Department
- Police Department
- Building Department
- Public Works Department / Engineering
- Palo Verde Irrigation District
- Mojave Desert Air Quality Management District

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Appendix A:

OP Energy CNG Station Traffic Analysis

Urban Crossroads, Inc., January 31, 2025

URBAN | CROSSROADS

OP ENERGY CNG STATION

TRAFFIC ANALYSIS

PREPARED BY: Janette Cachola | jcachola@urbanxroads.com
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Reference Number	Agency	Date
16345-04 TA Report.docx	City of Blythe	January 31, 2025

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LIST OF EXHIBITS

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DIF	Development Impact Fee
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
MUTCD	Manual on Uniform Traffic Control Devices
N/A	Not Applicable
PHF	Peak Hour Factor
Project	OP Energy CNG Station
RIVTAM	Riverside Transportation Analysis Model
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
TA	Traffic Analysis
tsf	Thousand Square Feet

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1.0 INTRODUCTION

This report presents the results of the traffic analysis (TA) for the proposed OP Energy CNG Station ("Project"), which is located south of 14th Avenue and east of S Intake Boulevard in the City of Blythe as shown on Exhibit 1-1.

The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project and recommend improvements to achieve acceptable circulation system operational conditions. This TS has been prepared based in accordance with the County of Riverside's Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled (December 2020) as the City of Blythe uses the County LOS/VMT analysis guidelines. (1) To ensure that this TS satisfies the City of Blythe's traffic study requirements, Urban Crossroads, Inc. prepared a traffic study scoping package for review by City staff. The TS Scope is included in Appendix 1.1.

1.1 PROJECT OVERVIEW

The Project is proposed to consist of 5 CNG canopy dispensers, 15 CNG tube trailer spaces, and additional equipment. Access to the Project will be provided directly to S. Intake Boulevard. For the purposes of this analysis, the cumulative Project analysis scenario focuses on Year 2030.

Trips generated by the Project's proposed land uses have been based on trip-generation statistics for a similar project located at 1601 E. First Street, Santa Ana. (2) The proposed Project is estimated to generate a net total of 501 two-way vehicle trip-ends per day with 43 AM peak hour trips and 25 PM peak hour trips (actual vehicles). In terms of passenger car equivalents (PCEs), the Project is anticipated to generate a total of 774 PCE trip-ends per day with 64 AM peak hour PCE trips and 38 PM peak hour PCE trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.2 ANALYSIS SCENARIOS

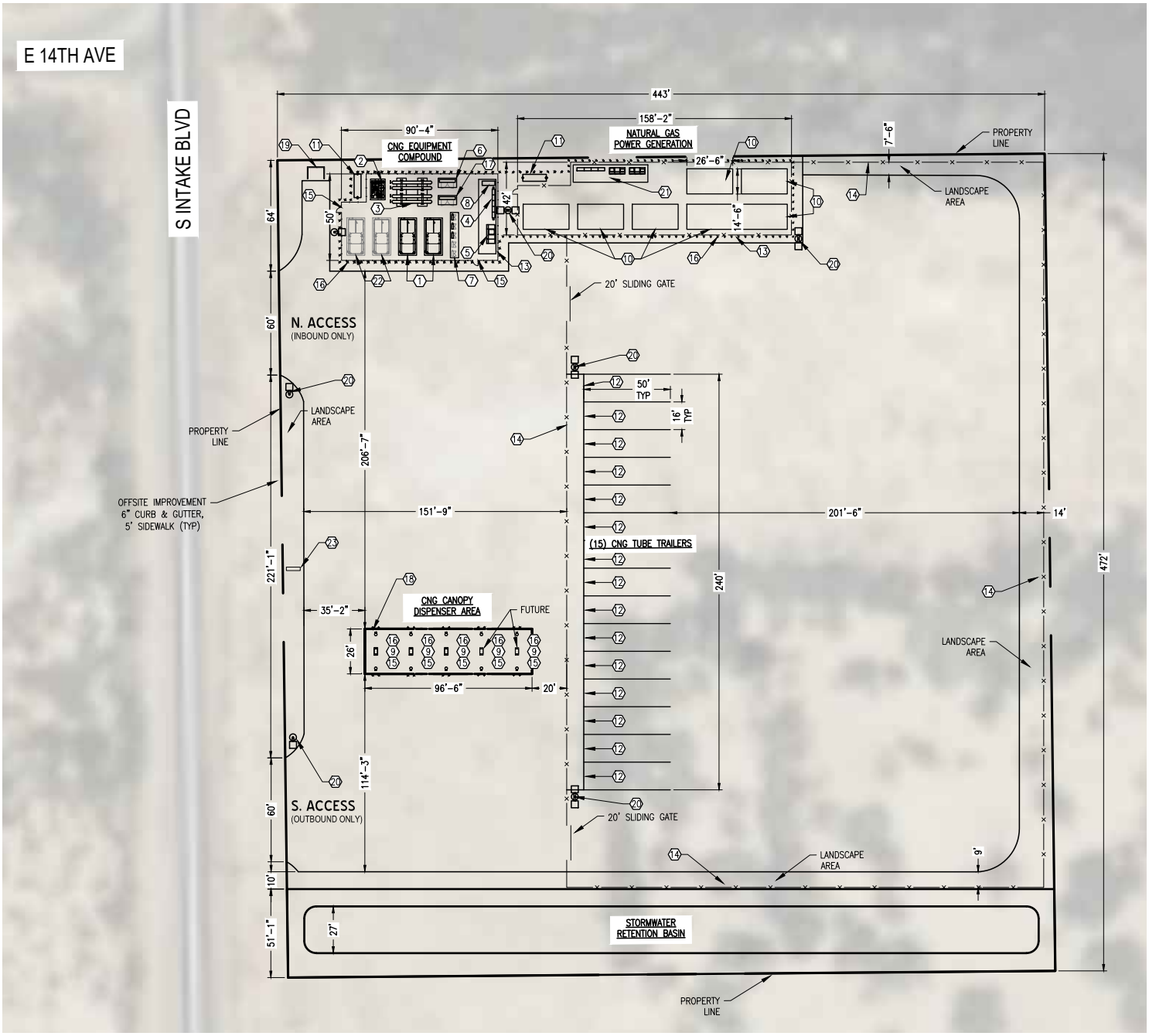
For the purposes of this traffic study, potential impacts to traffic and circulation have been evaluated for each of the following conditions:

- Existing (2025) Conditions
- Cumulative 5 Year (2030) without Project Conditions
- Cumulative 5 Year (2030) with Project Conditions
- General Plan (2045) without Project Conditions
- General Plan (2045) with Project Conditions

1.2.1 EXISTING (2025) CONDITIONS

Existing physical conditions have been disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

EXHIBIT 1-1: PRELIMINARY SITE PLAN



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Peak period traffic counts were collected in January 2025 during the following timeframes: 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM.

1.2.2 CUMULATIVE 5 YEAR (2030) CONDITIONS

A comparison of the Cumulative 5 Year (2030) Without Project and With Project traffic conditions analyses determine the potential near-term cumulative circulation system deficiencies.

To account for background traffic growth, the existing (2025) volumes have been adjusted by adding 5 years of background (ambient) growth (2% per year, total of 10.408% compounded over a 5-year period). Conservatively, this TS estimates the area ambient traffic growth for 2030 conditions and then adds traffic generated by other known or probable related projects in conjunction with Project traffic.

1.2.3 GENERAL PLAN (2045) CONDITIONS

A comparison of the General Plan (2045) Without Project and With Project traffic conditions analyses determine the potential long range cumulative circulation system deficiencies.

1.3 STUDY AREA

To ensure that this TS satisfies the needs of the City of Blythe, Urban Crossroads, Inc. prepared a Project specific traffic study scoping agreement for review by City staff prior to the preparation of this TS. The agreement provides an outline of the study area, trip generation, trip distribution, and analysis methodology (see Appendix 1.1).

1.4 ANALYSIS FINDINGS

This section provides a summary of the analysis results for Existing (2025), Cumulative 5 Year (2030) Without Project and With Project, General Plan (2045) Without Project and With Project traffic conditions.

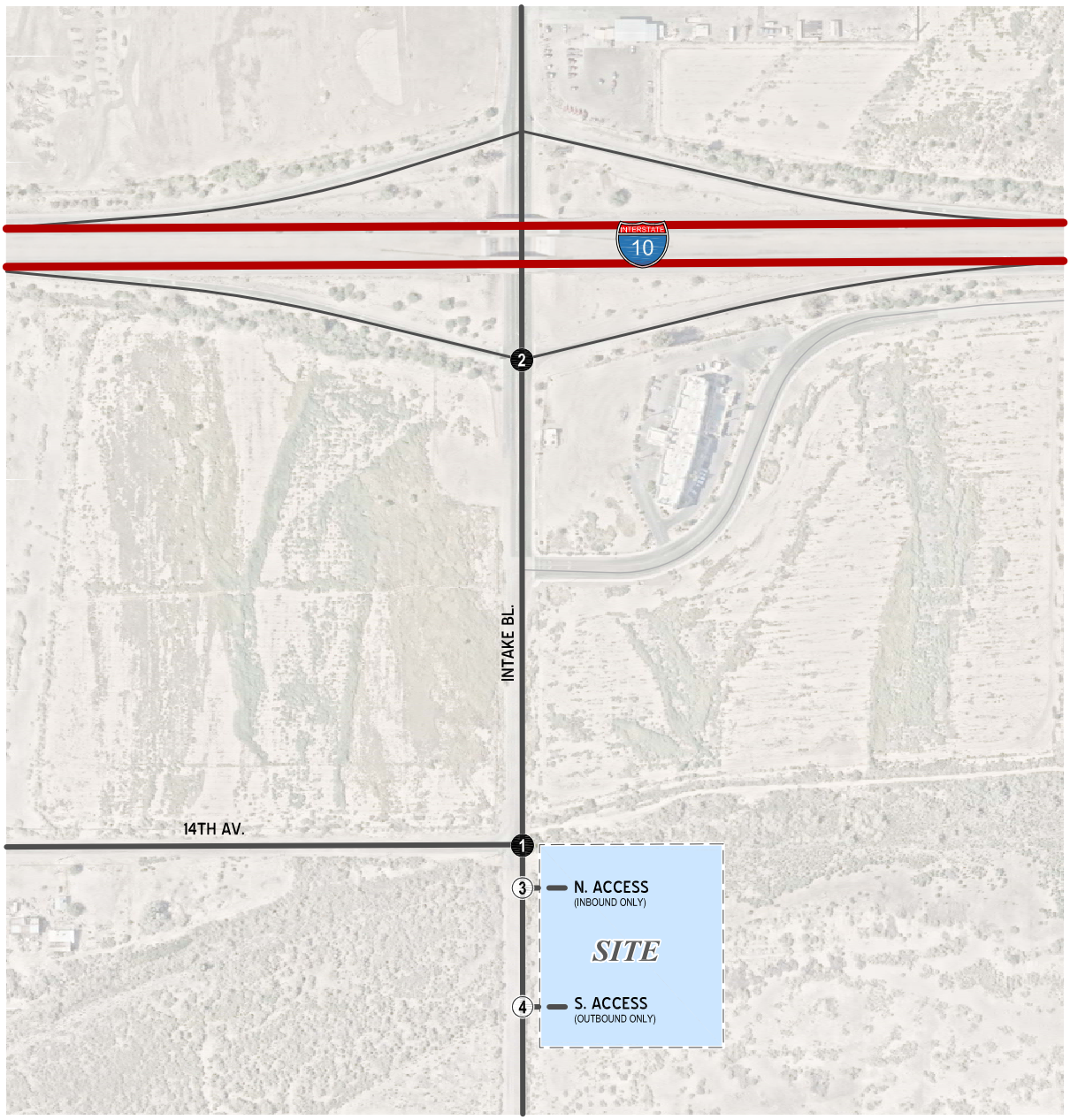
Existing (2025) and Cumulative 5 Year (2030) Conditions

For Existing (2025), Cumulative 5 Year (2030) Without Project and With Project traffic conditions, the study area intersections were found to operate at an acceptable LOS (i.e., LOS D or better) during the peak hours.

General Plan (2045) Conditions

For General Plan (2045) Without Project traffic conditions, the study area intersections of Intake Boulevard/14th Avenue (#1) and Intake Boulevard/I-10 EB Ramps (#2) were found to operate at an unacceptable LOS (i.e., LOS E or worse) during the peak hours with existing geometry. These long-term future LOS deficiencies will ultimately be addressed with the installation of a traffic signal at each of these two locations.

EXHIBIT 1-2: STUDY AREA



LEGEND:

- ❷ = EXISTING ANALYSIS LOCATION
- ② = FUTURE ANALYSIS LOCATION
- = FUTURE PROJECT ACCESS

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Traffic signal warrant analysis results indicate that the intersections of (#1) – Intake Boulevard/14th Avenue and (#2) – Intake Boulevard/I-10 EB Ramps are anticipated to meet warrants for General Plan (2045) Without Project conditions.

For General Plan (2045) With Project traffic conditions, the intersection analysis results indicate that the addition of Project traffic is not anticipated to result in a new LOS deficiency, in addition to the two intersections identified to meet traffic signal warrants under General Plan (2045) Without Project conditions.

1.5 RECOMMENDED IMPROVEMENTS

The intersections of Intake Boulevard/14th Avenue (#1) and Intake Boulevard/I-10 EB Ramps (#2) are anticipated to operate at acceptable level of service with the installation of traffic signals and turn lane improvements for General Plan (2045) conditions. Project participation in the provision of improvements to provide traffic signals (when needed) is recommended on a fair share basis, as indicated in Section 1.6.2.

1.5.1 SITE ACCESS IMPROVEMENTS

Roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed in conjunction with adjacent Project development activity or as needed for Project access purposes, consistent with the recommended roadway classifications and respective cross-sections in the City of Blythe General Plan Circulation Element, as indicated on Exhibit 5-3.

Intake Boulevard – Intake Boulevard is a north-south oriented roadway located along the Project's western boundary. Construct Intake Boulevard from the Project's southern boundary to 14th Avenue at its ultimate half-section width as a Collector (74-foot right-of-way) in compliance with the applicable City of Blythe standards.

Intake Boulevard / Project N. Driveway – Restrict access to inbound traffic only as illustrated on Exhibit 5-3 (see Section 5).

Intake Boulevard / Project S. Driveway – Install cross-street stop control on the westbound approach and restrict access to outbound traffic only as illustrated on Exhibit 5-3 (see Section 5).

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Sight distance at the primary access points should be reviewed with respect to standard Caltrans and City of Blythe sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

1.6 DEVELOPMENT IMPACT FEE (DIF) PROGRAM AND PROJECT FAIR SHARE

1.6.1 CITY OF BLYTHE DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Blythe has created a local Development Impact Fee (DIF) program to impose and collect fees from new residential, commercial, and industrial development for the purposes of funding roadways and intersections necessary to accommodate City growth as identified in the City's Municipal Code.

Periodic review and adjustment of the City's DIFs in future years will be appropriate and warranted in order to continue to ensure that the City collects sufficient funds to construct the additional infrastructure needed to serve new residents and businesses developing in town. The Project Applicant will be subject to the City's DIF program, and will pay the requisite City DIF fees at the rates then in effect pursuant to the City's ordinance.

1.6.2 FAIR SHARE CONTRIBUTION

Project mitigation may include a combination of fee payments to the established DIF program, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City of Blythe's discretion).

Detailed fair share calculations, for each peak hour, have been provided on Table 1-1. As shown in Table 1-1, the project contributes approximately 16.9% of the new traffic at the intersection of Intake Boulevard / 14th Avenue (#1) and 12.1% of the new traffic at the intersection of Intake Boulevard / I-10 EB Ramps (#2). Improvements included in a defined program and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

TABLE 1-1: PROJECT FAIR SHARE CALCULATIONS FOR INTERSECTIONS

#	Intersection	Existing (2025) Traffic	GP 2045 w/ Project Traffic[3]	Project Only Traffic	Total New Traffic[1]	Project Fair Share (%)[2]
1	Intake Bl. / 14th Av.					
	• AM Peak Hour	108	487	64	379	**16.9%**
	• PM Peak Hour	111	1,075	38	964	3.9%
2	Intake Bl. / I-10 EB Ramps					
	• AM Peak Hour	232	762	64	530	**12.1%**
	• PM Peak Hour	256	1,306	40	1,050	3.8%

[1] Total New Traffic = (2045 With Project - Existing Traffic)

[2] Project Fair Share % = (Project Only Traffic / Total New Traffic)

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2.0 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 7th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (3)

The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Blythe requires signalized intersection operations analysis based on the methodology described in the HCM. (3) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

The traffic modeling and signal timing optimization software package Synchro (Version 12) is utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection Capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and Capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

A saturation flow rate of 1900 is utilized for signalized intersections. The peak hour traffic volumes are adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow.

However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (3)

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Blythe requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (3) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection.

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0[1]
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (4)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (4) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections.

For the purposes of this study, the speed limit was the basis for determining whether "Urban" or "Rural" warrants were used for a given intersection. Urban warrants have been used as posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or below and rural warrants have been used on roadways with speeds greater than 40 miles per hour.

Future intersections that do not currently exist have also been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants.

Traffic signal warrant analyses were performed for the two existing unsignalized study area intersections (Intake Boulevard/14th Avenue - #1 and Intake Boulevard/I-10 EB Ramps - #2)

The Existing conditions traffic signal warrant analysis results are presented in the subsequent section, Section 3 *Existing Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *Cumulative 5 Year (2030) Traffic Conditions* and Section 6 *General Plan Buildout (2045) Traffic Conditions* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 MINIMUM LEVEL OF SERVICE (LOS)

The City of Blythe has established LOS D and/or a maximum volume to capacity ratio of 0.90 is as the provisionally acceptable LOS for its intersections. Therefore, any intersection operating at LOS E or F and/or with a volume to capacity ratio greater than 0.90 will be considered deficient for the purposes of this analysis.

2.5 FAIR SHARE

In cases where this TS identifies that the Project would contribute additional traffic volumes to cumulative traffic deficiencies, Project fair share costs of improvements necessary to address deficiencies have been identified. The Project's fair share cost of improvements is determined based on the following equation, which is the ratio of Project traffic to total future traffic:

Project Fair Share % = Project Traffic / (General Plan 2045 Total Traffic – Existing Traffic)

The Project fair share contribution calculations are presented previously in Table 1-1.

3.0 EXISTING CONDITIONS

This section provides a summary of the existing circulation network, the City of Blythe General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

3.1 EXISTING CIRCULATION NETWORK

The study area includes a total of 4 existing and future intersections as shown on Exhibit 1-2. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF BLYTHE GENERAL PLAN CIRCULATION ELEMENT

Exhibit 3-2 shows the adopted City of Blythe General Plan Circulation Element, and Exhibit 3-3 illustrates the adopted City of Blythe General Plan roadway cross-sections.

3.3 TRUCK ROUTES

Exhibit 3-4 shows the City of Blythe truck routes, as identified in the City's General Plan. As shown in Exhibit 3-4, Intake Boulevard is a designated truck routes within the study area.

3.4 TRANSIT SERVICE

The City of Blythe is currently served by the Palo Verde Valley Transit Agency (PVVTA). As shown on Exhibit 3-5, the PVVTA Line 1 (Blue Route) serves Intake Boulevard and 14th Avenue in the study area. Transit service is reviewed and updated periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.5 PEDESTRIAN AND BICYCLE FACILITIES

Exhibit 3-6 illustrates the City of Blythe bikeway system. Class II bike lanes are proposed along Intake Boulevard (north of 14th Avenue) and 14th Avenue (west of Intake Boulevard). Aerial observations indicate nominal pedestrian and bicycle activity within the study area. Intermittent sidewalks exist for sections of the roadway system (mostly south of Intake Boulevard/I-10 EB Ramps), but are not contiguous.

3.6 EXISTING TRAFFIC VOLUMES

New traffic counts were collected in January 2025 during the following timeframes:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

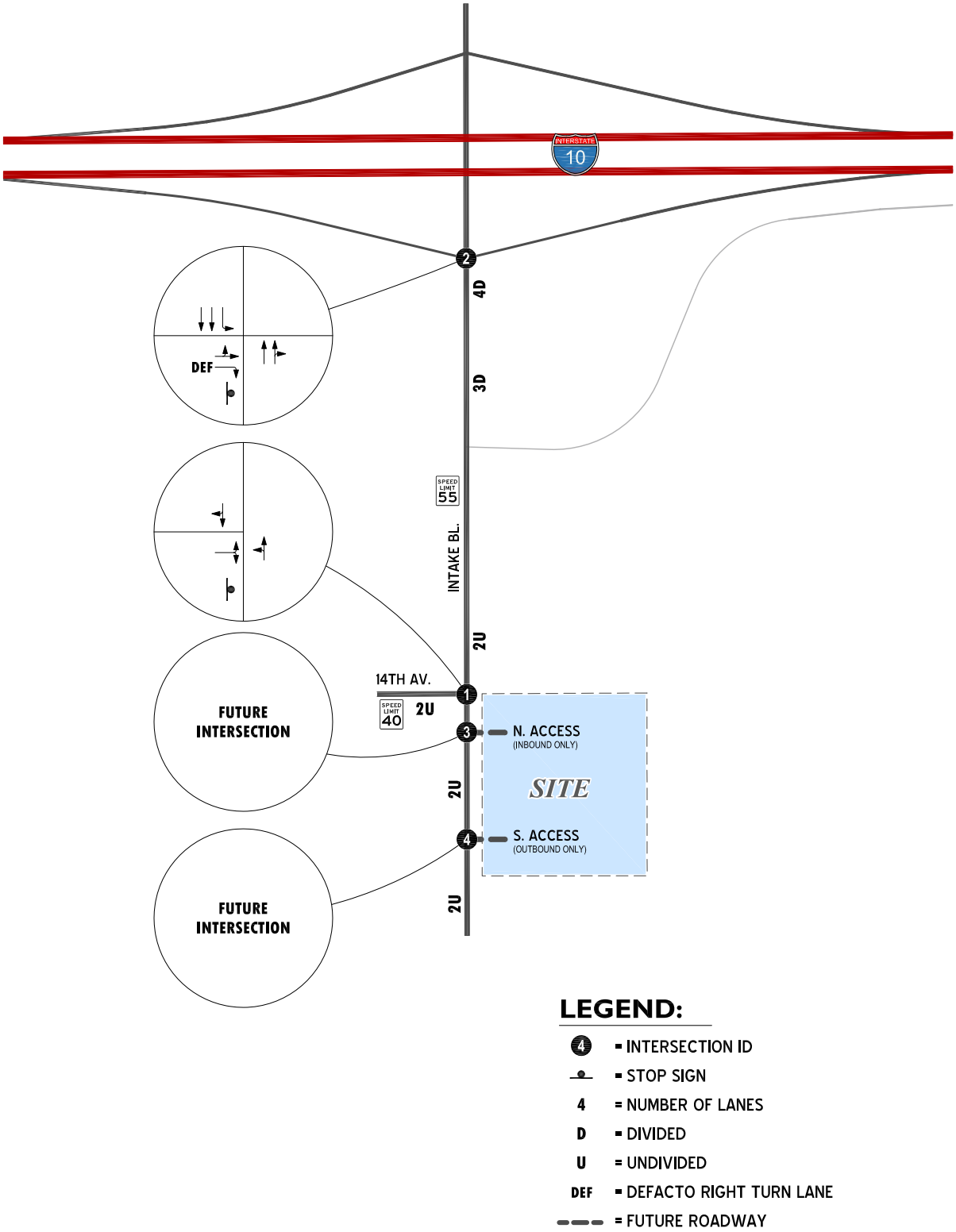

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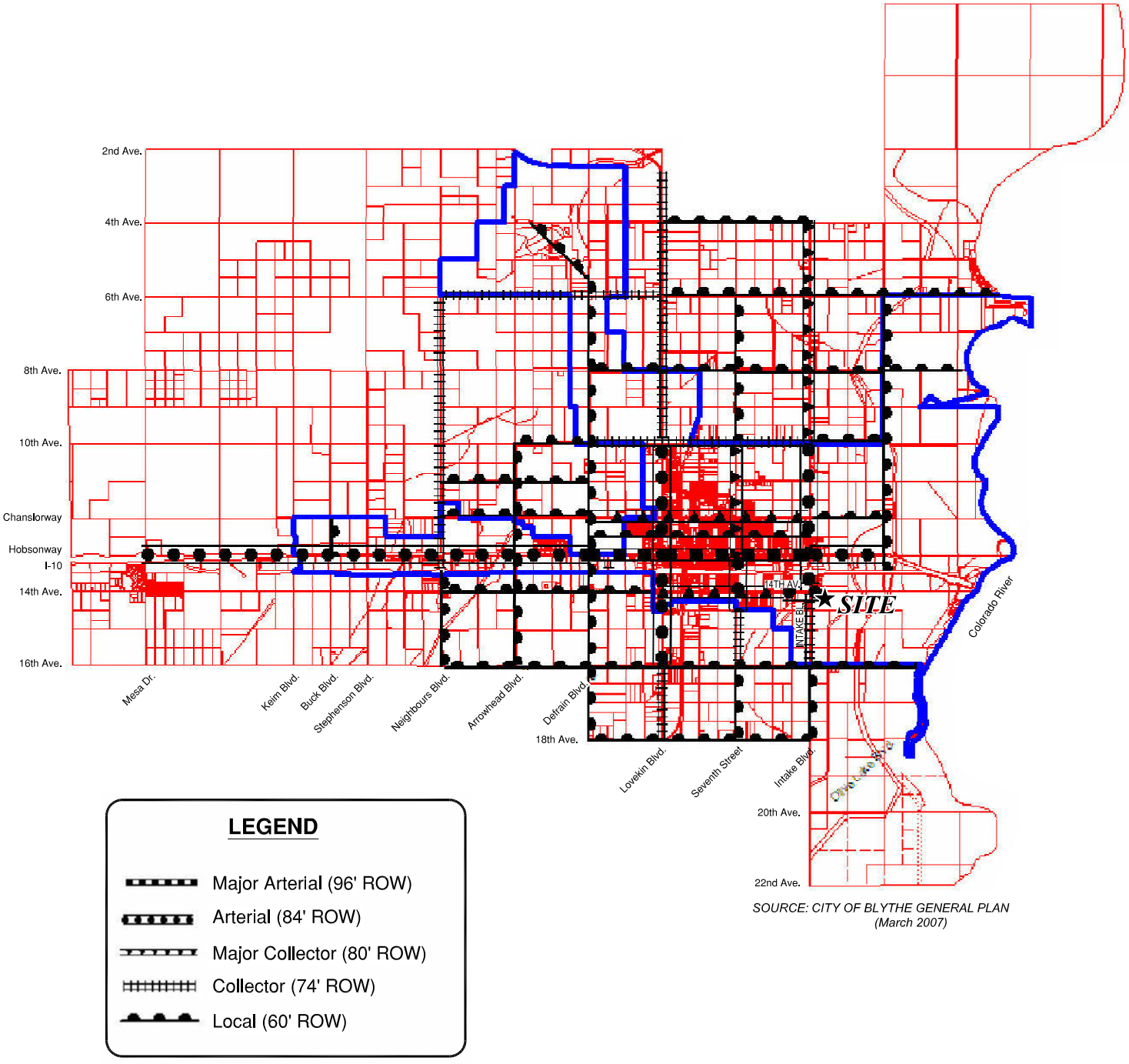
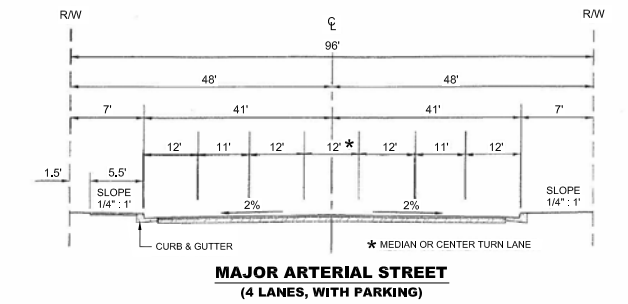
EXHIBIT 3-2: CITY OF BLYTHE GENERAL PLAN CIRCULATION ELEMENT

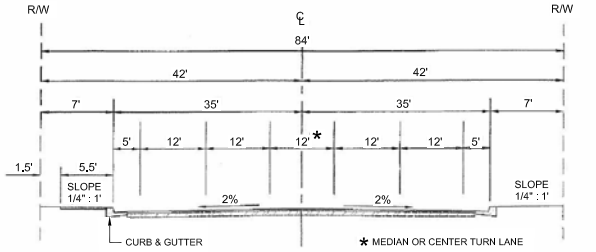


SOURCE: CITY OF BLYTHE GENERAL PLAN (March 2007)

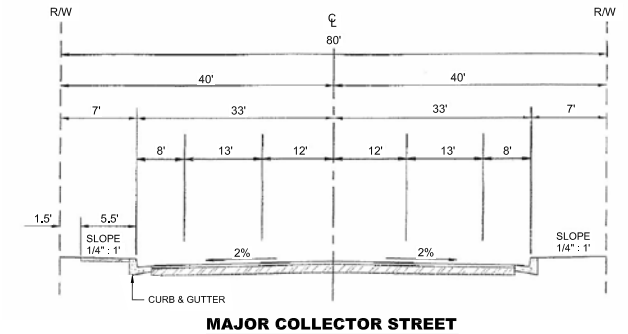
EXHIBIT 3-3: CITY OF BLYTHE GENERAL PLAN ROADWAY CROSS-SECTIONS



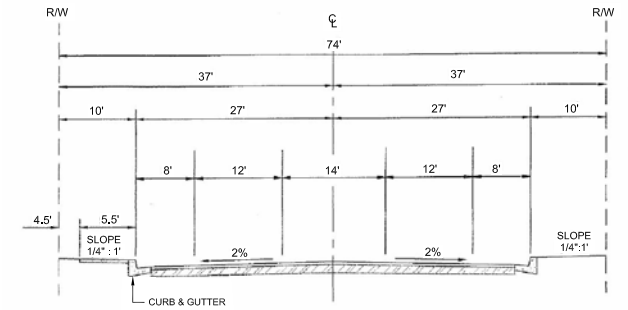
MAJOR ARTERIAL STREET
(4 LANES, WITH PARKING)



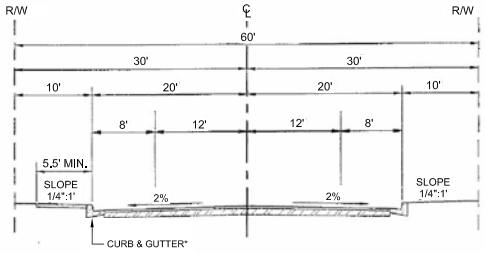
ARTERIAL STREET
(4 LANES, DIVIDED OR TURN LANE, NO PARKING)



MAJOR COLLECTOR STREET
(4 LANES WITH PARKING)



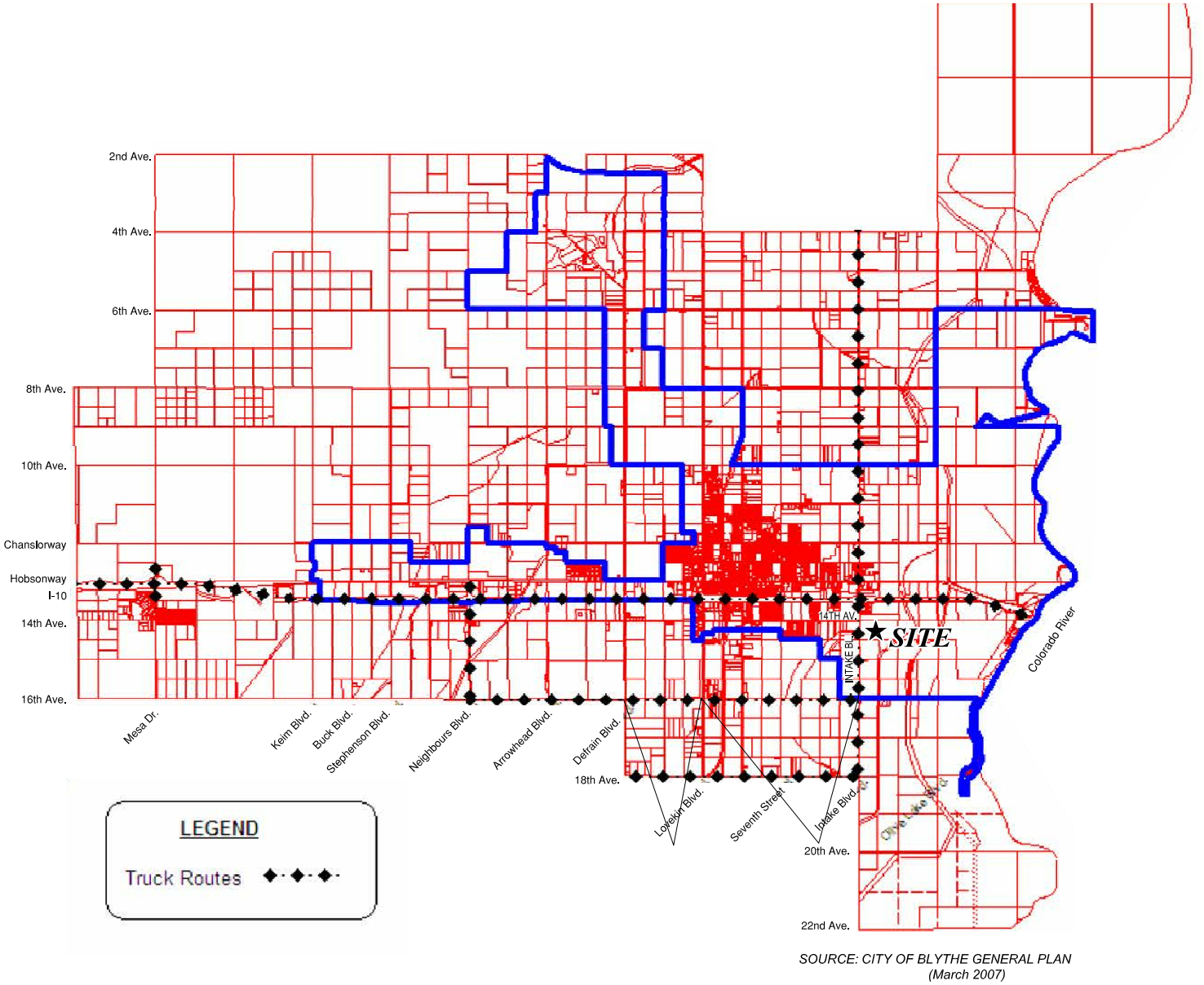
COLLECTOR STREET
(2 LANES WITH PARKING)



LOCAL STREET
(WITH PARKING)

SOURCE: CITY OF BLYTHE

EXHIBIT 3-4: CITY OF BLYTHE TRUCK ROUTES



SOURCE: CITY OF BLYTHE GENERAL PLAN (March 2007)

EXHIBIT 3-5: EXISTING TRANSIT ROUTE
(PVVT LINE 1 - BLUE ROUTE)

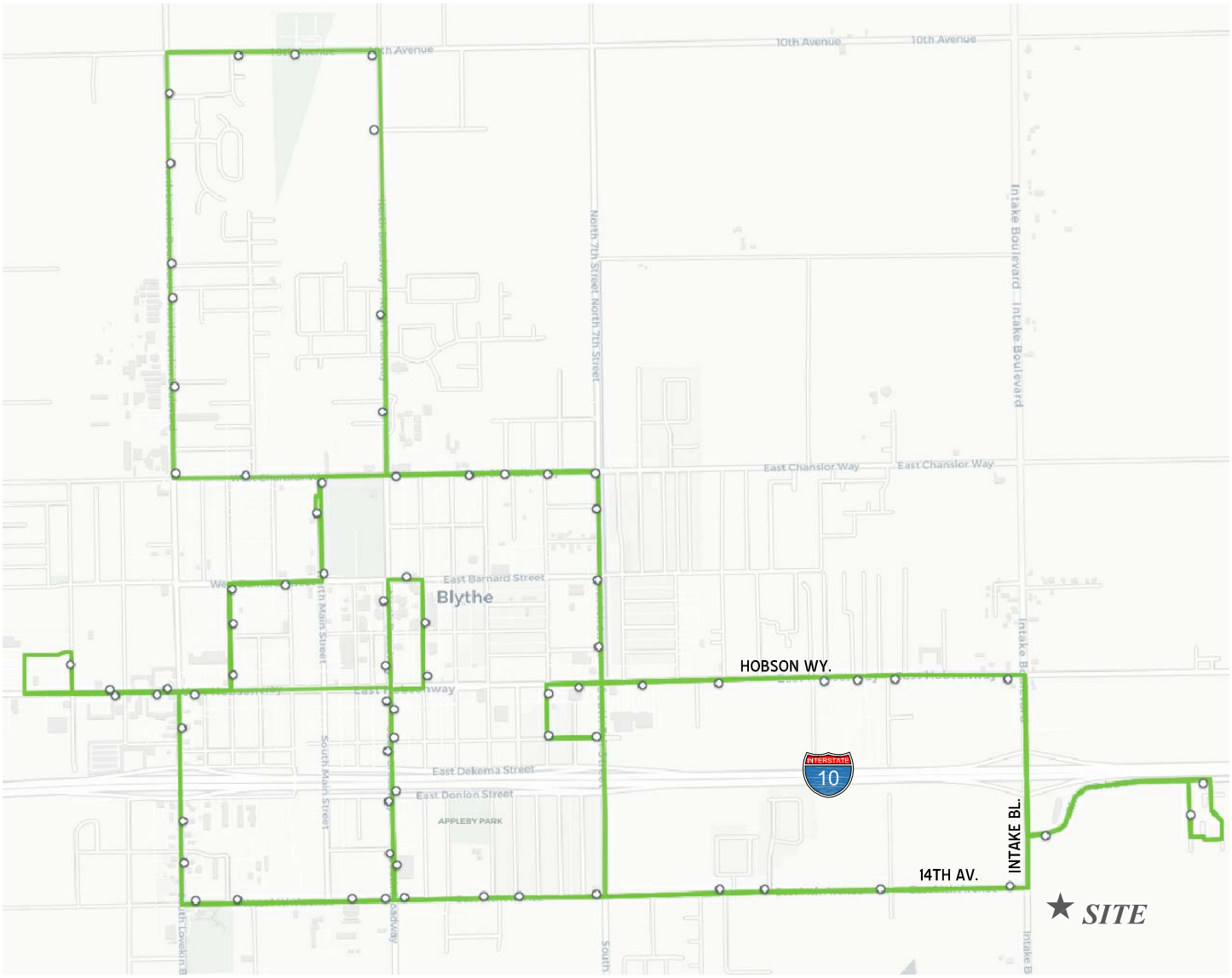


EXHIBIT 3-6: CITY OF BLYTHE GENERAL PLAN BICYCLE SYSTEM

SOURCE: CITY OF BLYTHE GENERAL PLAN (March 2007)

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The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

Existing weekday AM and PM peak hour intersection volumes are shown on Exhibit 3-7. Exhibit 3-7 also shows existing weekday average daily traffic (ADT) volumes on arterial highways throughout the study area. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 14.925 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 6.70 percent. As such, the above equation utilizing a factor of 14.925 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 6.70 percent (i.e., 1/0.0670 = 14.925) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses.

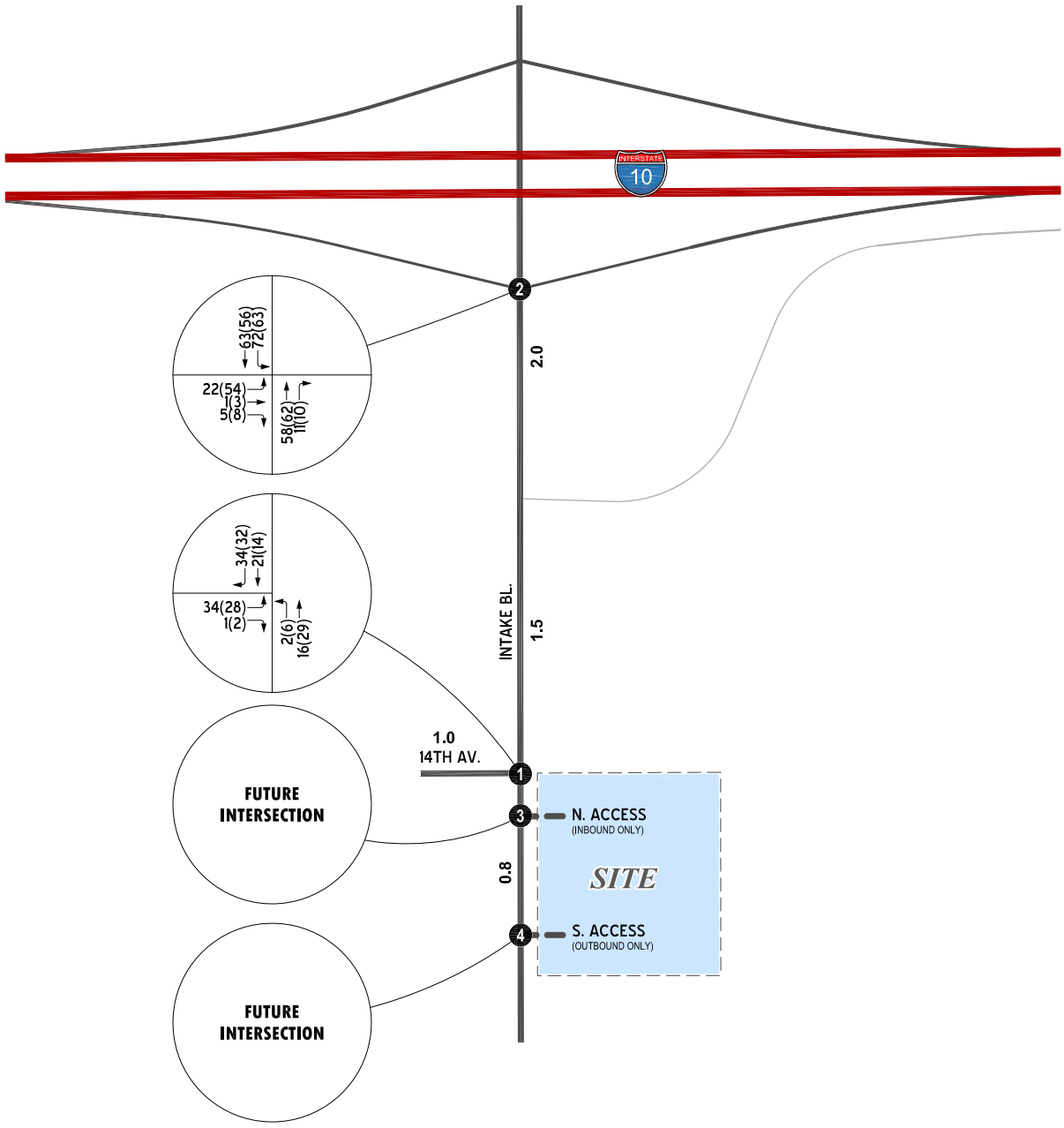
3.7 EXISTING CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that the existing study area intersections are currently operating at an acceptable LOS during the AM and PM peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TS.

3.8 EXISTING CONDITIONS TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. For Existing traffic conditions, the unsignalized study area intersections are not anticipated to meet traffic signal warrants (see Appendix 3.3).

EXHIBIT 3-7: EXISTING (2025) TRAFFIC VOLUMES



LEGEND:

4 = INTERSECTION ID
10(10) = AM(PM) PEAK HOUR VOLUMES
10.0 = VEHICLES PER DAY (1000'S)

N

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2025) CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[3] (secs.) AM	PM	Level of Service AM	PM
1	Intake Bl. / 14th Av.	CSS	0	1	0	0	1	0	0	1!	0	0	0	0	9.1	9.2	A	A
2	Intake Bl. / I-10 EB Ramps	CSS	0	2	0	1	2	0	0.5	0.5	d	0	0	0	10.9	11.2	B	B
3	Intake Bl. / N. Access		Future Intersection															
4	Intake Bl. / S. Access		Future Intersection															

[1] TS = Traffic Signal; CSS = Cross-Street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane;

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

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4.0 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project is proposed to consist of 5 CNG canopy dispensers, 15 CNG tube trailer spaces, and additional equipment.

For the purposes of this traffic impact analysis, it is assumed that the Project will be constructed and at full occupancy by Year 2030. Access to the Project will be provided directly to S. Intake Boulevard via one inbound driveway located just south of 14th Avenue and one outbound driveway located south of the inbound driveway.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used to estimate Project traffic are shown in Table 4-1, and a summary of the Project's trip generation is also shown in Table 4-1. The trip generation rates are based upon statistics for a similar project located at 1601 E. First Street, Santa Ana. As shown on Table 4-1, the Project is anticipated to generate a net total of 501 two-way vehicle trip-ends per day with 43 AM peak hour trips and 25 PM peak hour trips (actual vehicles).

Passenger car equivalent (PCE) factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the County's Guidelines.

Table 4-2 presents the passenger-car-equivalent (PCE) trip generation rates for the Proposed Project with the resulting PCE daily and peak hour trip generation estimates. As shown on Table 4-2, Proposed Project is anticipated to generate a total of 774 PCE trip-ends per day with 64 AM peak hour PCE trips and 38 PM peak hour PCE trips.

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land use and surrounding regional access routes is considered, to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site, as illustrated on Exhibit 4-1.

TABLE 4-1: PROJECT TRIP GENERATION SUMMARY - ACTUAL VEHICLES

Trip Generation Rates[1]

Land Use	Quantity	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
CNG Canopy Dispenser	5 Fueling Positions	3.98	3.52	7.50	2.25	1.50	3.75	76.00
	Passenger Cars	*1.74*	*1.26*	*3.00*	*1.25*	*1.00*	*2.25*	*42.75*
	2-Axle Trucks	*2.24*	*2.26*	*4.50*	*1.00*	*0.50*	*1.50*	*30.02*
	3-Axle Trucks	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*2.74*
	4-Axle (or more) Trucks	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.50*
CNG Tube Trailer Parking Dispensary	15 Parking Spaces	0.25	0.15	0.40	0.15	0.25	0.40	8.00
	3-Axle Trucks	*0.25*	*0.15*	*0.40*	*0.15*	*0.25*	*0.40*	*8.00*
	4-Axle (or more) Trucks	*0.25*	*0.15*	*0.40*	*0.15*	*0.25*	*0.40*	*8.00*

Trip Generation Results

Land Use	Quantity	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
CNG Canopy Dispenser	5 Fueling Positions							
- Passenger Cars :		9	6	15	6	5	11	214
- Truck Trips :	*2-Axle Trucks*	*11*	*11*	*22*	*5*	*3*	*8*	*150*
	3-Axle Trucks	*0*	*0*	*0*	*0*	*0*	*0*	*14*
	4-Axle (or more) Trucks	*0*	*0*	*0*	*0*	*0*	*0*	*3*
- Net Truck Trips (Actual Vehicles) :		11	11	22	5	3	8	167
CNG Canopy Dispenser Total Trips		20	17	37	11	8	19	381
CNG Tube Trailer Parking Dispensary	15 Parking Spaces							
	3-Axle Trucks	*2*	*1*	*3*	*1*	*2*	*3*	*60*
	4-Axle (or more) Trucks	*2*	*1*	*3*	*1*	*2*	*3*	*60*
CNG Tube Trailer Parking Dispensary Total		4	2	6	2	4	6	120
Passenger Cars Total Trips		*9*	*6*	*15*	*6*	*5*	*11*	*214*
Truck Total Trips (Actual Vehicles)		*15*	*13*	*28*	*7*	*7*	*14*	*287*
PROJECT TOTAL TRIPS (ACTUAL VEHICLES)[2]		**24**	**19**	**43**	**13**	**12**	**25**	**501**

[1] Source: Chevron Compressed Natural Gas (CNG) Fueling Facility Traffic Impact Analysis. Prepared by K2 Traffic Engineering, Inc., March 2022

[2] Actual Vehicles = Passenger Cars + Truck Trips (Actual Trucks).

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TABLE 4-2: PROJECT TRIP GENERATION SUMMARY - PASSENGER CAR EQUIVALENTS (PCE)

Trip Generation Rates[1]

Land Use	Quantity	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
CNG Canopy Dispenser	5 Fueling Positions	5.10	4.65	9.75	2.75	1.75	4.50	94.75
	Passenger Cars	*1.74*	*1.26*	*3.00*	*1.25*	*1.00*	*2.25*	*42.75*
	2-Axle Trucks (PCE = 1.5)	*3.36*	*3.40*	*6.76*	*1.50*	*0.75*	*2.25*	*45.03*
	3-Axle Trucks (PCE = 2.0)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*5.47*
	4-Axle Trucks (PCE = 3.0)	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*1.50*
CNG Tube Trailer Parking Dispensary	15 Parking Spaces	0.63	0.38	1.00	0.38	0.63	1.00	20.00
	3-Axle Trucks (PCE = 2.0)	*0.25*	*0.15*	*0.40*	*0.15*	*0.25*	*0.40*	*8.00*
	4-Axle Trucks (PCE = 3.0)	*0.38*	*0.23*	*0.60*	*0.23*	*0.38*	*0.60*	*12.00*

Trip Generation Results

Land Use	Quantity	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
CNG Canopy Dispenser	5 Fueling Positions							
- Passenger Cars :		9	6	15	6	5	11	214
- Truck Trips :	*2-Axle Trucks (PCE = 1.5)*	*17*	*17*	*34*	*8*	*4*	*12*	*225*
	3-Axle Trucks (PCE = 2.0)	*0*	*0*	*0*	*0*	*0*	*0*	*27*
	4-Axle Trucks (PCE = 3.0)	*0*	*0*	*0*	*0*	*0*	*0*	*8*
- Net Truck Trips (PCE) :		17	17	34	8	4	12	260
CNG Canopy Dispenser Total Trips		26	23	49	14	9	23	474
CNG Tube Trailer Parking Dispensary	15 Parking Spaces							
	3-Axle Trucks (PCE = 2.0)	*4*	*2*	*6*	*2*	*4*	*6*	*120*
	4-Axle Trucks (PCE = 3.0)	*6*	*3*	*9*	*3*	*6*	*9*	*180*
CNG Tube Trailer Parking Dispensary Total		10	5	15	5	10	15	300
Passenger Cars Total Trips		*9*	*6*	*15*	*6*	*5*	*11*	*214*
Truck Total Trips (PCE)		*27*	*22*	*49*	*13*	*14*	*27*	*560*
PROJECT TOTAL TRIPS (PCE)[2]		**36**	**28**	**64**	**19**	**19**	**38**	**774**

[1] Source: Chevron Compressed Natural Gas (CNG) Fueling Facility Traffic Impact Analysis. Prepared by K2 Traffic Engineering, Inc., March 2022

[2] PCE = Passenger Car Equivalent

The County of Riverside TIA & VMT Guidelines (December 2020) provide the following PCE factors: 2-axle = 1.5; 3-axle = 2.0; 4+ axle = 3.0.

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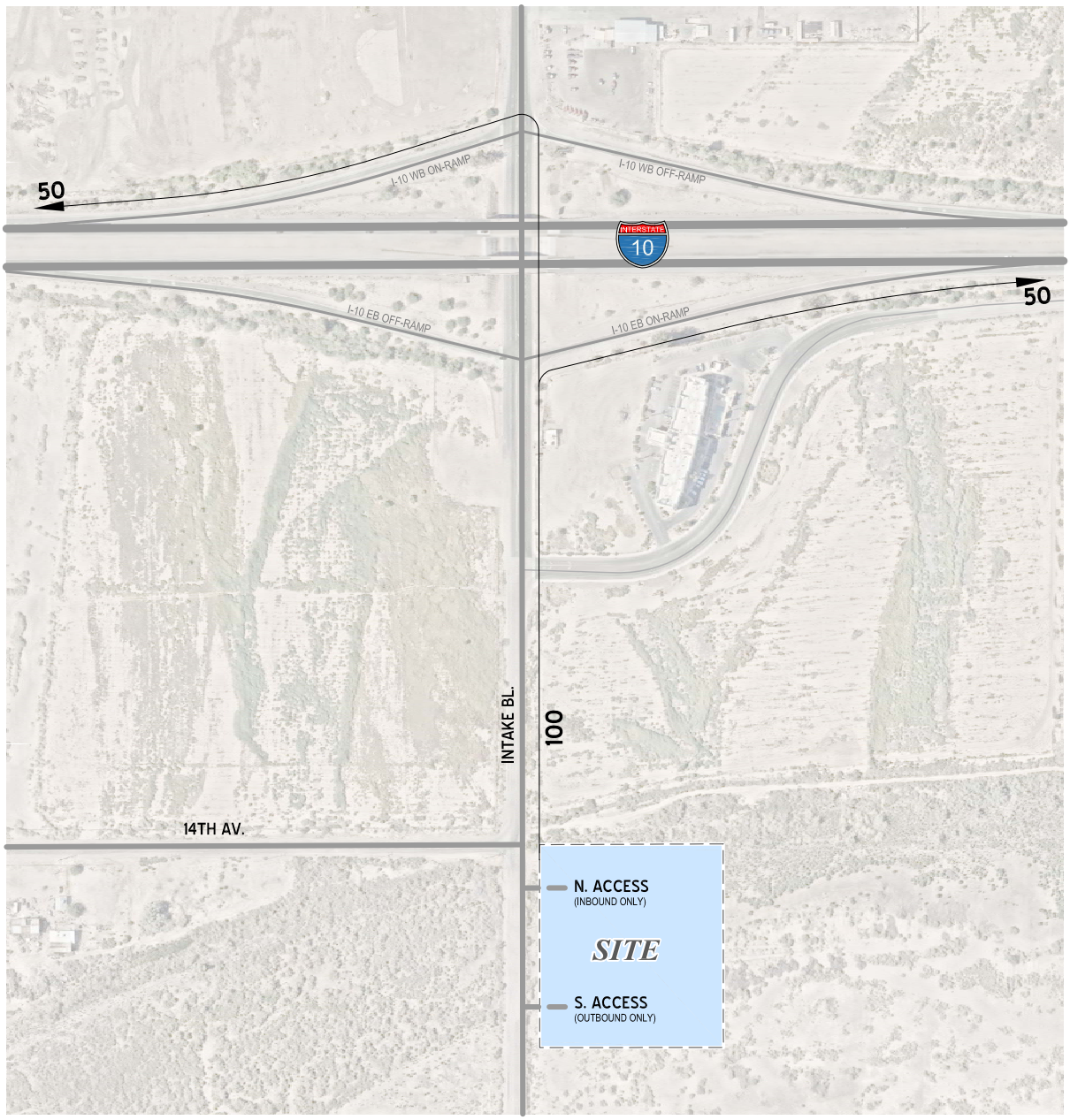
EXHIBIT 4-1: PROJECT TRIP DISTRIBUTION



LEGEND:

10 = PERCENT FROM/TO PROJECT

= FUTURE PROJECT DRIVEWAY

N

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4.3 MODAL SPLIT

Although the use of public transit, walking, and/or bicycling have the potential to reduce Project-related traffic, such reductions have not been taken into consideration in this traffic study in order to provide a conservative analysis of the Project's potential to contribute to circulation system deficiencies.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-2.

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon a background (ambient) growth factor of 2% per year, compounded annually. The ambient growth factor is intended to approximate traffic growth. The total ambient growth is 10.408% for Cumulative 5 Year (2030) traffic conditions (compounded growth of 2 percent per year over 5 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways.

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

Other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area are included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Blythe.

Exhibit 4-3 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on Table 4-3. If applicable, the traffic generated by individual cumulative projects was manually added to the Cumulative 5 Year (2030) forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-3 are reflected as part of the background traffic.

TABLE 4-3: CUMULATIVE DEVELOPMENT LAND USE SUMMARY

ID	Project Name	Land Use	Quantity	Units
1	WattEV Electric Vehicle Charging Station (SEC Intake Bl./Donlon St.)	Passenger EV Charging Center	46	Parking Stalls
		Truck EV Charging Center	72	Parking Stalls
2	Bossa Nova (APN 857-160-024-9)	Truck EV Charging Center	48	Parking Stalls

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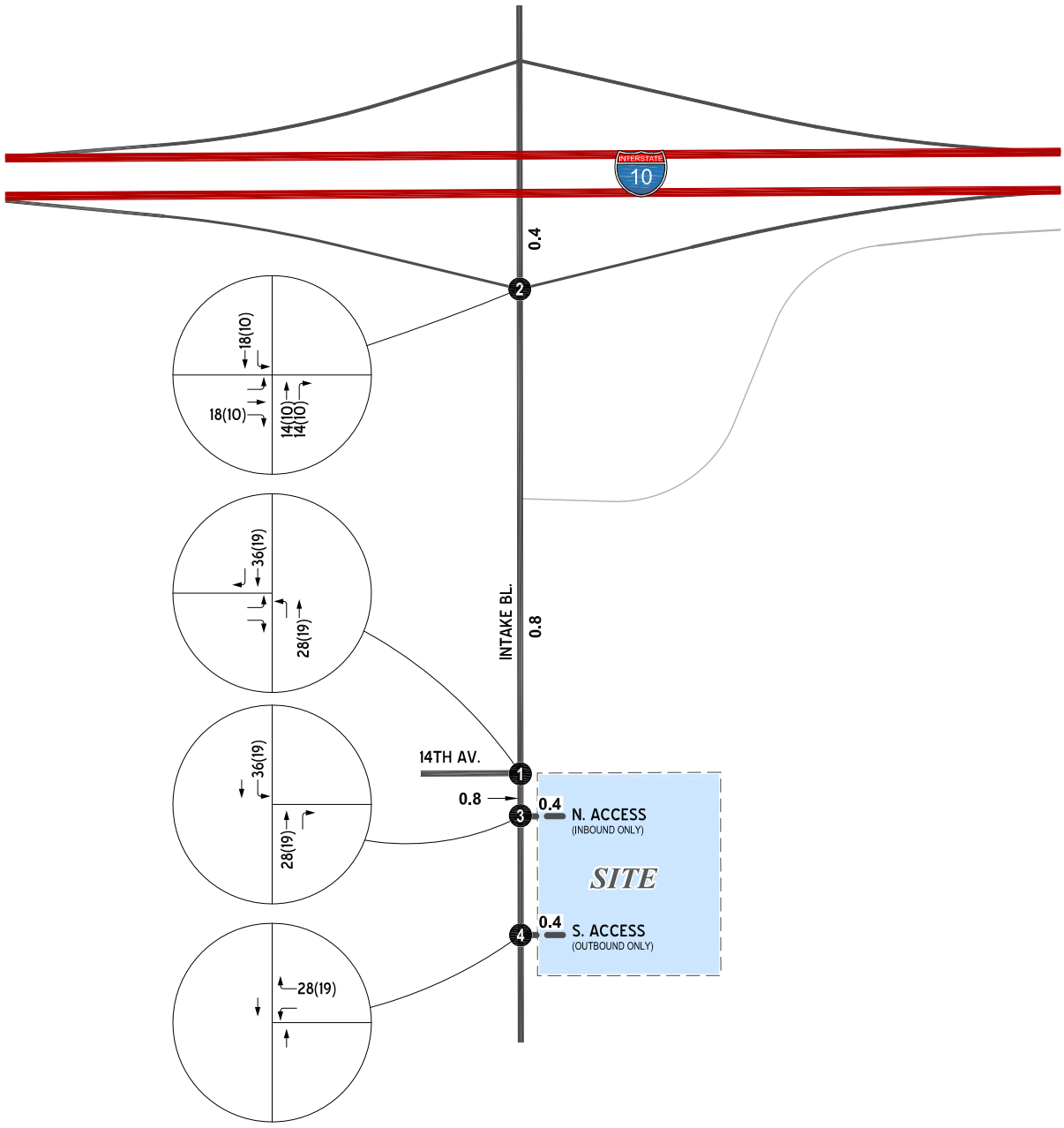
EXHIBIT 4-2: PROJECT ONLY TRAFFIC VOLUMES

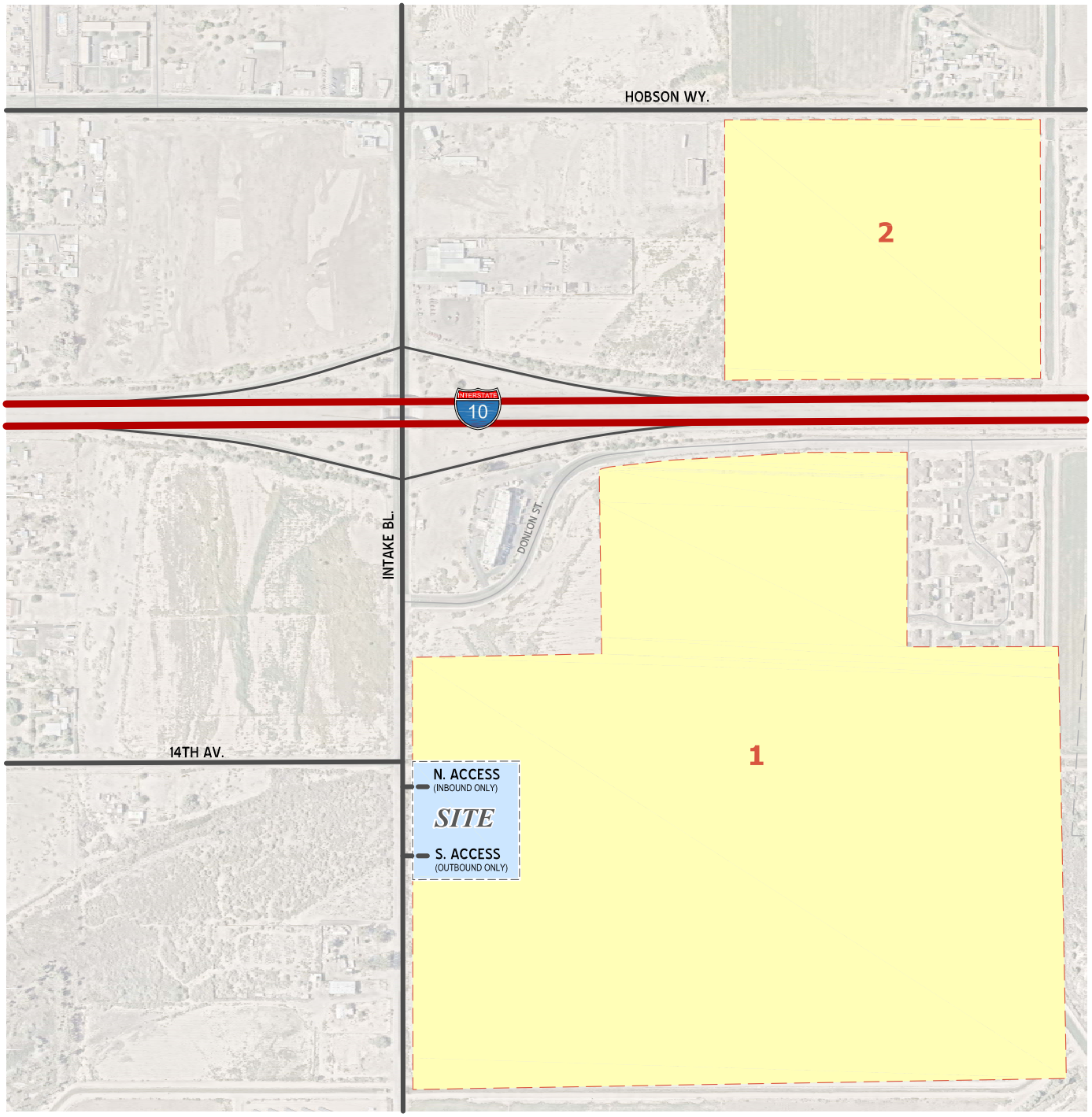


LEGEND:

4	= INTERSECTION ID
10(10)	= AM(PM) PEAK HOUR VOLUMES
10.0	= VEHICLES PER DAY (1000'S)

N

EXHIBIT 4-3: CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

= CUMULATIVE DEVELOPMENT ID

N

4.7 TRAFFIC FORECASTS

To provide a comprehensive assessment of potential transportation network deficiencies, "buildup" analysis was performed in support of this work effort. The "buildup" method was used to approximate Cumulative 5 Year (2030) Without Project and With Project traffic conditions, and is intended to identify the near-term deficiencies on both the existing and planned near-term circulation system.

Project traffic is added to assess Cumulative 5 Year (2030) With Project traffic conditions. The 2030 roadway network is similar to the existing conditions roadway network with the exception of future roadways and intersections proposed to be developed by the Project.

The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Cumulative 5 Year (2030) Without Project
    - Existing 2025 volumes
    - Ambient growth traffic (10.408%)
    - Cumulative Development Project traffic
- Cumulative 5 Year (2030) With Project
    - Existing 2025 volumes
    - Ambient growth traffic (10.408%)
    - Cumulative Development Project traffic
    - Project traffic

5.0 CUMULATIVE 5 YEAR (2030) CONDITIONS

This section discusses the traffic forecasts for Cumulative 5 Year (2030) Without Project and With Project conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Cumulative 5 Year (2030) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of Project driveways and those facilities assumed to be constructed by the Project to provide site access. Intersection and roadway improvements at the frontage and driveways of the cumulative projects are also assumed in place.

5.2 CUMULATIVE 5 YEAR (2030) WITHOUT PROJECT CONDITIONS

The Cumulative 5 Year (2030) Without Project scenario includes existing traffic volumes, ambient growth, and known cumulative projects. Exhibit 5-1 shows the ADT volumes which can be expected for Cumulative 5 Year (2030) Without Project conditions. Cumulative 5 Year (2030) Without Project weekday AM and weekday PM peak hour intersection turning movement volumes are also shown on Exhibit 5-1.

5.2.1 CUMULATIVE 5 YEAR (2030) WITHOUT PROJECT INTERSECTION OPERATIONS ANALYSIS

Cumulative 5 Year (2030) Without Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TS. Table 5-1 summarizes the Cumulative 5 Year (2030) Without Project intersection analysis results.

The intersection analysis results indicate that the study area intersections are anticipated to continue to operate at an acceptable LOS (LOS "D" or better) during the peak hours. The intersection operations analysis worksheets are included in Appendix 5.1 of this TS for Cumulative 5 Year (2030) Without Project traffic conditions.

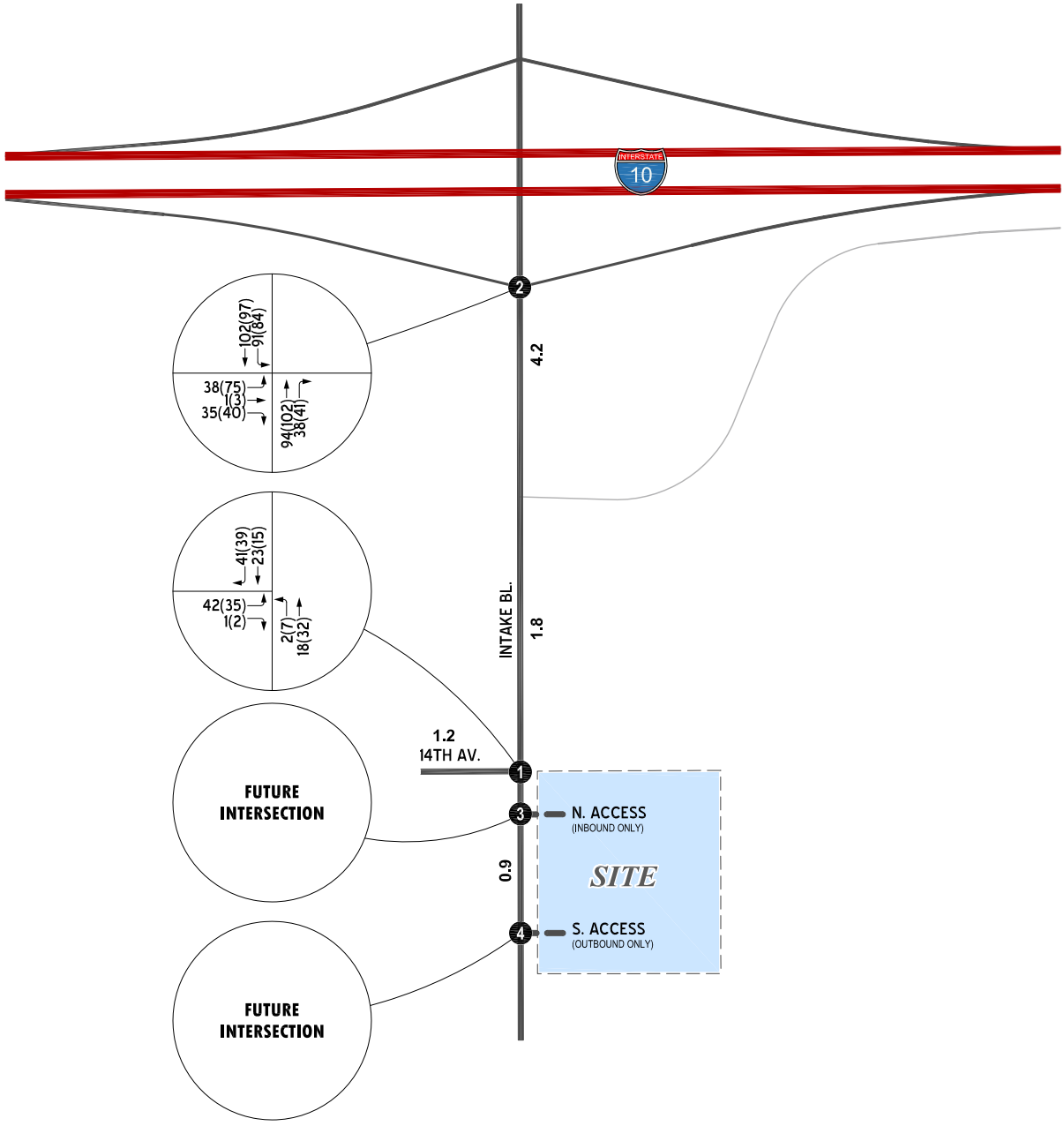
5.2.2 CUMULATIVE 5 YEAR (2030) WITHOUT PROJECT TRAFFIC SIGNAL WARRANTS ANALYSIS

For Cumulative 5 Year (2030) Without Project traffic conditions, the unsignalized study area intersections are not anticipated to warrant a traffic signal (see Appendix 3.3).

5.3 CUMULATIVE 5 YEAR (2030) WITH PROJECT CONDITIONS

For Cumulative 5 Year (2030) With Project scenario, Project traffic has been added to Cumulative 5-Year (2030) Without Project traffic conditions. Exhibit 5-2 shows the ADT volumes which can be expected for Cumulative 5 Year (2030) With Project conditions. Cumulative 5 Year (2030) With Project weekday AM and weekday PM peak hour intersection turning movement volumes are also shown on Exhibit 5-2.

EXHIBIT 5-1: CUMULATIVE 5 YEAR (2030) WITHOUT PROJECT TRAFFIC VOLUMES



LEGEND:

4	= INTERSECTION ID
10(10)	= AM(PM) PEAK HOUR VOLUMES
10.0	= VEHICLES PER DAY (1000'S)

N

TABLE 5-1: INTERSECTION ANALYSIS FOR CUMULATIVE 5 YEAR (2030) WITHOUT PROJECT CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2]												Delay[3] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Intake Bl. / 14th Av.	CSS	0	1	0	0	1	0	0	1!	0	0	0	0	9.2	9.3	A	A
2	Intake Bl. / I-10 EB Ramps	CSS	0	2	0	1	2	0	0.5	0.5	d	0	0	0	12.3	13.1	B	B
3	Intake Bl. / N. Access		Future Intersection															
4	Intake Bl. / S. Access		Future Intersection															

[1] TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; **1** = Improvement

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

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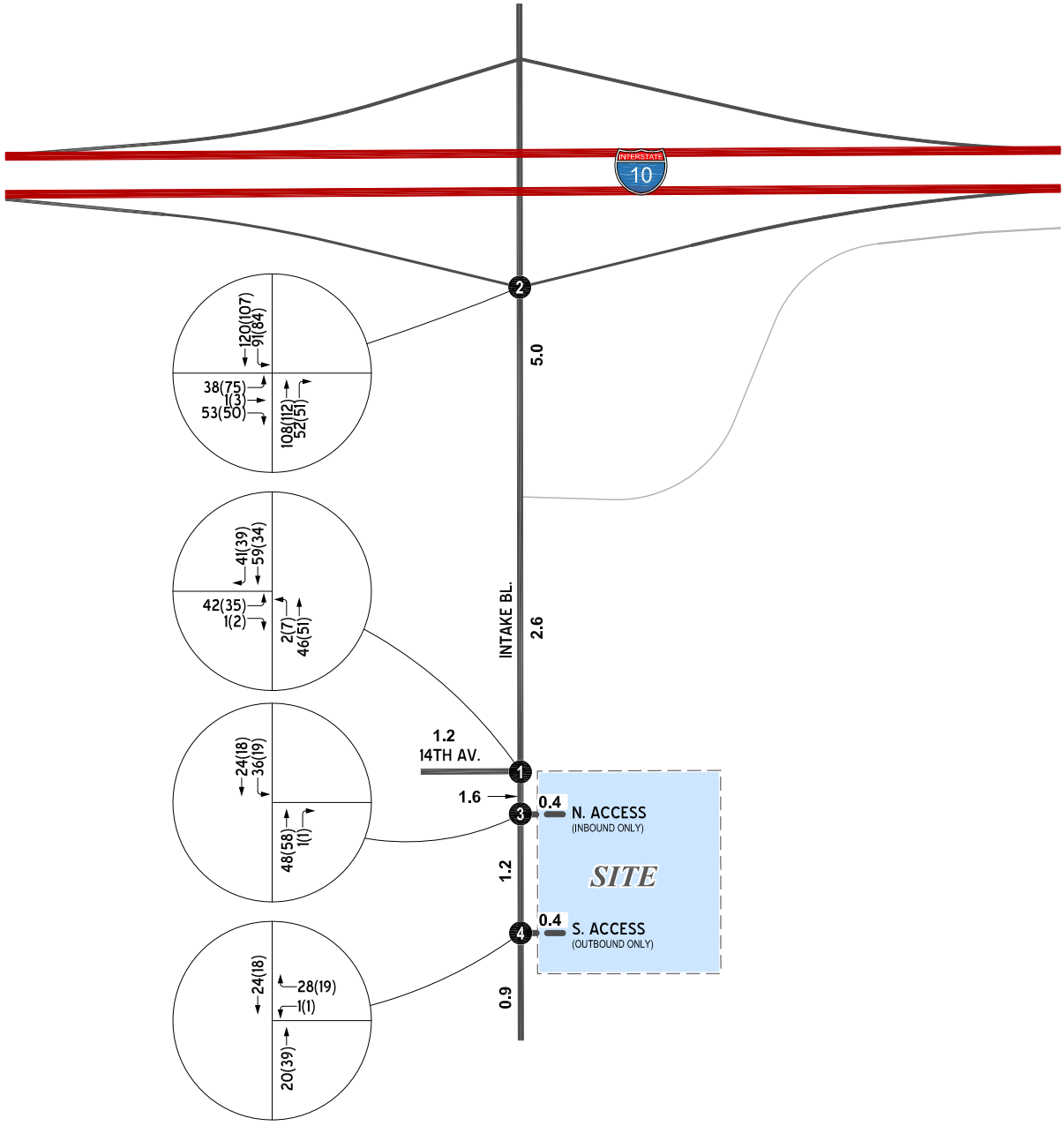
EXHIBIT 5-2: CUMULATIVE 5 YEAR (2030) WITH PROJECT TRAFFIC VOLUMES



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5.3.1 CUMULATIVE 5 YEAR (2030) WITH PROJECT INTERSECTION OPERATIONS ANALYSIS

Cumulative 5 Year (2030) With Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TS. Table 5-2 summarizes the Cumulative 5 Year (2030) With Project intersection analysis results.

The intersection analysis results indicate that the addition of Project traffic is not anticipated to result in LOS deficiencies during the peak hours. The intersection operations analysis worksheets are included in Appendix 5.2 of this TS for Cumulative 5 Year (2030) With Project traffic conditions.

5.3.2 CUMULATIVE 5 YEAR (2030) WITH PROJECT TRAFFIC SIGNAL WARRANTS ANALYSIS

For Cumulative 5 Year (2030) With Project traffic conditions, the unsignalized study area intersections are not anticipated to warrant a traffic signal (see Appendix 3.3).

5.4 SITE ACCESS IMPROVEMENTS

For the purpose of this report, the following site access improvements and project driveway configurations are anticipated to be in place for with Project conditions. Recommended access improvements are presented on Exhibit 5-3:

Intake Boulevard – Intake Boulevard is a north-south oriented roadway located along the Project's western boundary. Construct the ultimate half-section width as a Collector (74-foot right-of-way) for Intake Boulevard from the Project's southern boundary to 14th Avenue in compliance with the applicable City of Blythe standards.

Intake Boulevard / Project N. Driveway – Restrict access to inbound traffic only as illustrated on Exhibit 5-3.

Intake Boulevard / Project S. Driveway – Install a stop control on the westbound approach and restrict access to outbound traffic only as illustrated on Exhibit 5-3.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Sight distance at the primary access points should be reviewed with respect to standard Caltrans and City of Blythe sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

TABLE 5-2: INTERSECTION ANALYSIS FOR CUMULATIVE 5 YEAR (2030) WITH PROJECT CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[3] (secs.) AM	PM	Level of Service AM	PM
1	Intake Bl. / 14th Av.	CSS	0	1	0	0	1	0	0	1!	0	0	0	0	9.6	9.6	A	A
2	Intake Bl. / I-10 EB Ramps	CSS	0	2	0	1	2	0	0.5	0.5	d	0	0	0	12.7	13.4	B	B
3	Intake Bl. / N. Access	UNC	0	1	0	0.5	0.5	0	0	0	0	0	0	0	7.6	7.6	A	A
4	Intake Bl. / S. Access	**CSS**	0	1	0	0	1	0	0	0	0	0	**1!**	0	8.5	8.6	A	A

[1] TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; **1** = Improvement

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

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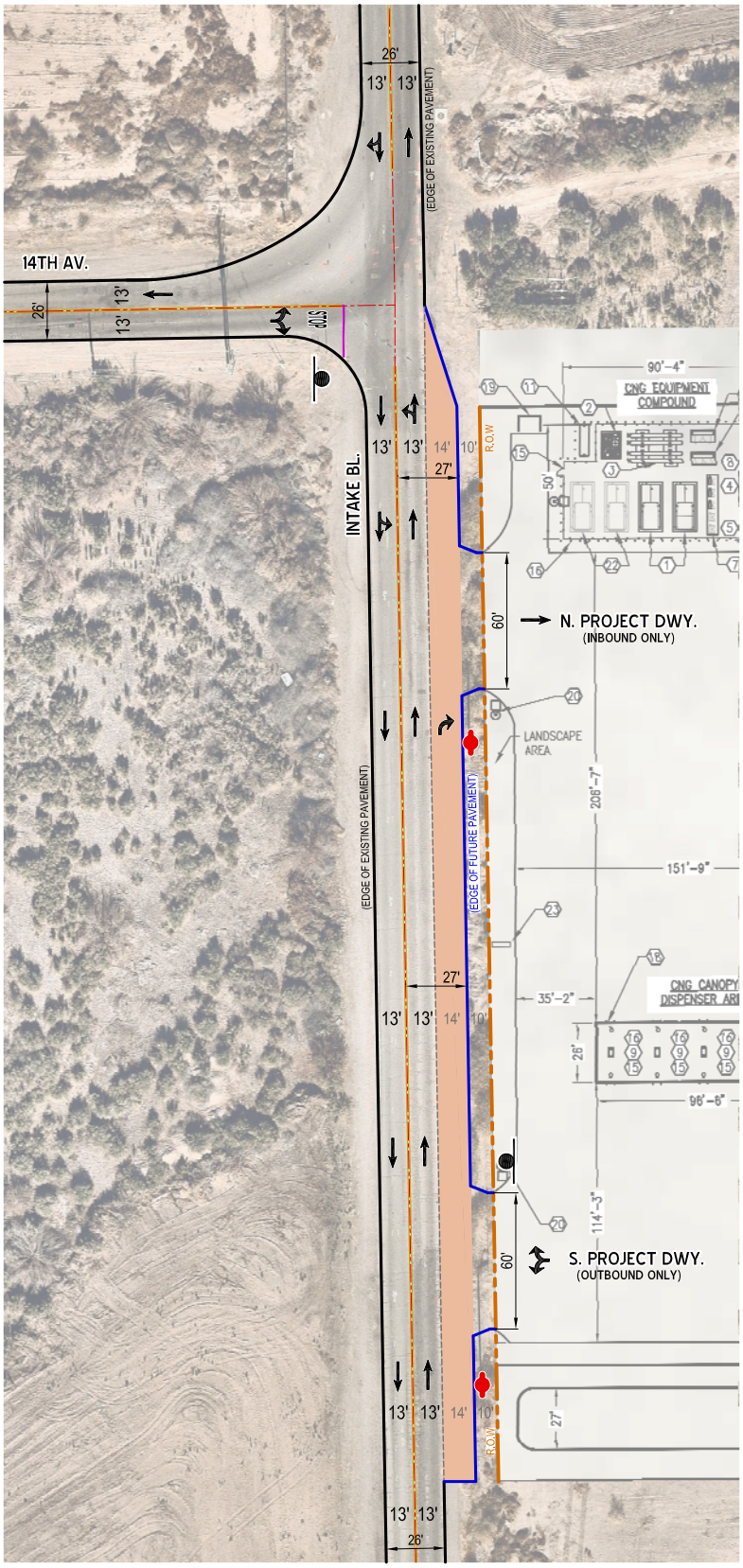
EXHIBIT 5-3: SITE ACCESS AND SITE ADJACENT ROADWAY RECOMMENDATIONS

ON-SITE TRAFFIC SIGNING AND STRIPING SHOULD BE IMPLEMENTED IN CONJUNCTION WITH DETAILED CONSTRUCTION PLANS FOR THE PROJECT SITE.

SIGHT DISTANCE AT THE PROJECT ACCESS POINTS SHOULD BE REVIEWED WITH RESPECT TO STANDARD CALTRANS AND CITY OF BLYTHE SIGHT DISTANCE STANDARDS AT THE TIME OF PREPARATION OF FINAL GRADING, LANDSCAPE AND STREET IMPROVEMENT PLANS.



LEGEND:

= STOP SIGN CONTROL
= EXISTING UTILITY POLE
= ULTIMATE PAVED SECTION

80' 40' 0 80'
SCALE: 1" = 80'

N

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6.0 GENERAL PLAN (2045) CONDITIONS

This section discusses the methods used to develop General Plan Buildout (2045) traffic forecasts, and the resulting intersection operations and roadway segment operations analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for General Plan (2045) traffic conditions are consistent with those shown on Exhibit 3-1, in conjunction with other long-range City roadway facilities that would be likely be in place by General Plan Buildout (2045) traffic conditions.

6.2 GENERAL PLAN (2045) WITHOUT PROJECT CONDITIONS

Future General Plan Buildout 2045 traffic projections were derived from the Riverside County Transportation Analysis Model (RivTAM). Adjustments have been made to the long-range traffic forecasts where raw model volumes are lower than the current (2030) baseline condition. In addition, post processing of the 2045 volume projections also includes the potential buildout of 34 acres of general commercial land uses located at the northwest corner of Intake Boulevard/14th Avenue.

Exhibit 6-1 shows the ADT volumes which can be expected for General Plan (2045) Without Project conditions. General Plan (2045) Without Project weekday AM and weekday PM peak hour intersection turning movement volumes are also shown on Exhibit 6-1.

6.2.1 GENERAL PLAN (2045) WITHOUT PROJECT INTERSECTION OPERATIONS ANALYSIS

General Plan (2045) Without Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TS. Table 6-1 summarizes the General Plan (2045) Without Project intersection analysis results.

The intersection analysis results indicate that two study area intersections are anticipated to operate at an unacceptable LOS (LOS "E" or better) with existing geometry:

- #1 – Intake Boulevard / 14th Avenue
- #2 – Intake Boulevard / I-10 EB Ramps

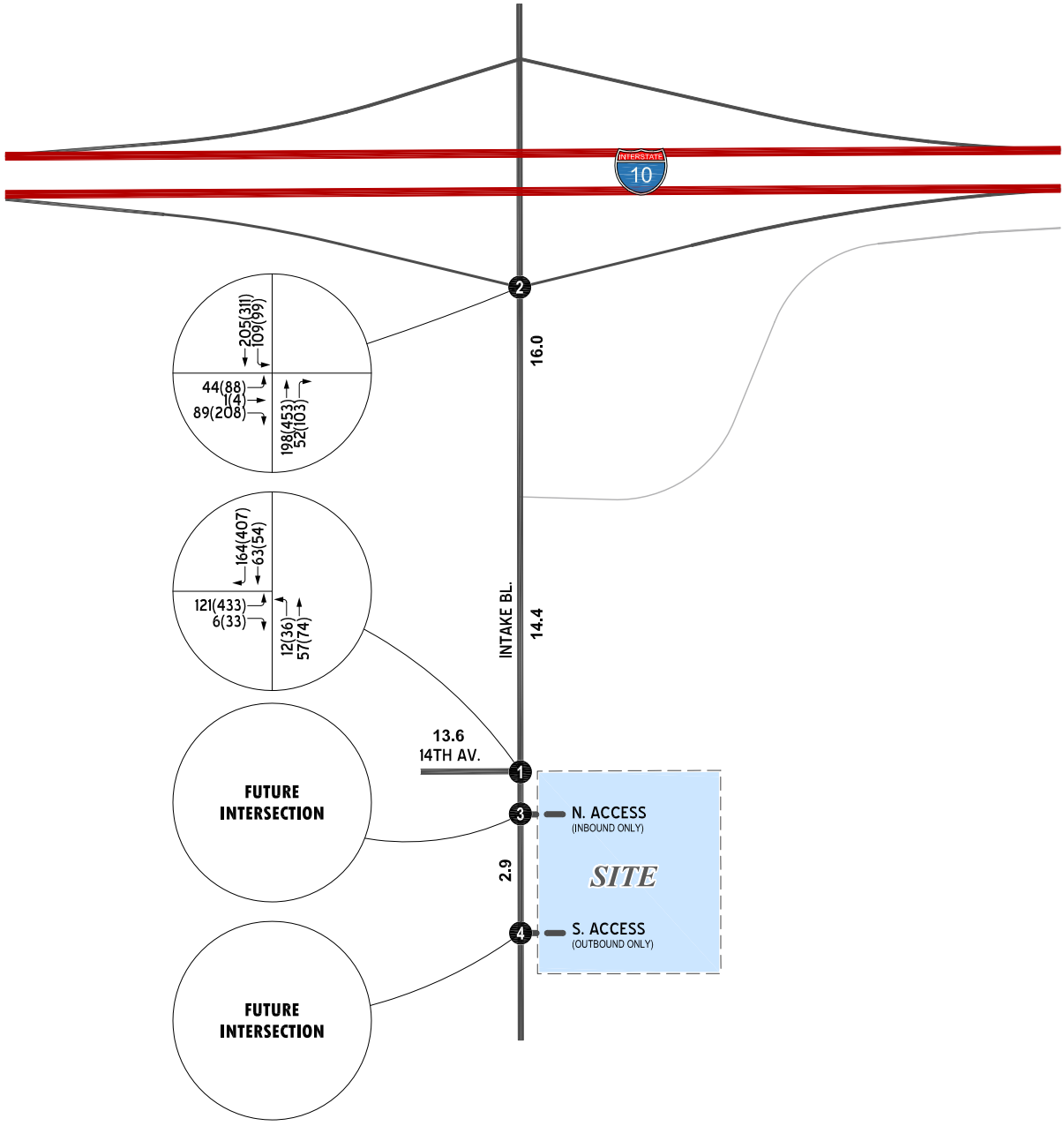
As shown in Table 6-1 the two deficient intersections are anticipated to operate at an acceptable LOS (LOS "D or better) with the installation of traffic signals and turn lane improvements.

The intersection operations analysis worksheets are included in Appendix 6.1 of this TS for General Plan (2045) Without Project traffic conditions.

6.2.2 GENERAL PLAN (2045) WITHOUT PROJECT TRAFFIC SIGNAL WARRANTS ANALYSIS

For General Plan (2045) Without Project traffic conditions, the two deficient unsignalized study area intersections (#1 – Intake Boulevard / 14th Avenue and #2 – Intake Boulevard / I-10 EB Ramps) are anticipated to warrant a traffic signal at each location (see Appendix 3.3).

EXHIBIT 6-1: GENERAL PLAN (2045) WITHOUT PROJECT TRAFFIC VOLUMES



LEGEND:

4 = INTERSECTION ID
10(10) = AM(PM) PEAK HOUR VOLUMES
10.0 = VEHICLES PER DAY (1000'S)

N

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TABLE 6-1: INTERSECTION ANALYSIS FOR GENERAL PLAN BUILDOUT (2045) WITHOUT PROJECT CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[3] (secs.) AM	PM	Level of Service AM	PM
1	Intake Bl. / 14th Av.	CSS	0	1	0	0	1	0	0	1!	0	0	0	0	11.3	**75.2**	B	**F**
	- With Improvements	**TS**	0	1	0	0	1	**1**	**1**	0	1	0	0	0	11.2	18.5	B	B
2	Intake Bl. / I-10 EB Ramps	CSS	0	2	0	1	2	0	0.5	0.5	d	0	0	0	15.9	35.2	C	**E**
	- With Improvements	**TS**	0	2	0	1	2	0	0.5	0.5	d	0	0	0	14.7	16.7	B	B
3	Intake Bl. / N. Access		Future Intersection															
4	Intake Bl. / S. Access		Future Intersection															

[1] TS = Traffic Signal; CSS = Cross-Street Stop

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane;
* = Turn lane accommodated within two-way left-turn lane (TWLTL) striped median; **1** = Improvement

[3] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

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6.3 GENERAL PLAN (2045) WITH PROJECT CONDITIONS

In order to provide a conservative analysis, the proposed Project has been added to the General Plan Buildout 2045 Without Project conditions. The ADT and AM and PM peak hour traffic volumes which can be expected for General Plan (2045) With Project traffic conditions are shown on Exhibit 6-2.

6.3.1 GENERAL PLAN (2045) WITH PROJECT INTERSECTION OPERATIONS ANALYSIS

General Plan (2045) With Project peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TS. Table 6-2 summarizes the General Plan (2045) With Project intersection analysis results.

The intersection analysis results indicate that the addition of Project traffic is not anticipated to result in new LOS deficiencies during the peak hours, in addition to the two traffic signal installations previously identified under General Plan (2045) Without Project conditions. The intersection operations analysis worksheets are included in Appendix 5.2 of this TS for General Plan (2045) With Project traffic conditions.

6.4 RECOMMENDED IMPROVEMENTS

As shown previously on Tables 6-1 and 6-2, the intersections of Intake Boulevard / 14th Avenue (#1) and Intake Boulevard / I-10 EB Ramps (#2) are anticipated to operate at an unacceptable LOS (LOS E or worse) during the peak hours for General Plan (2045) Without Project and With Project conditions. Both of the deficient intersections are projected to meet traffic signal warrants for General Plan (2045) Without Project conditions. The following recommendations for General Plan (2045) Without and With Project conditions are anticipated to improve the deficient intersections to operate at an acceptable LOS (LOS "D" or better):

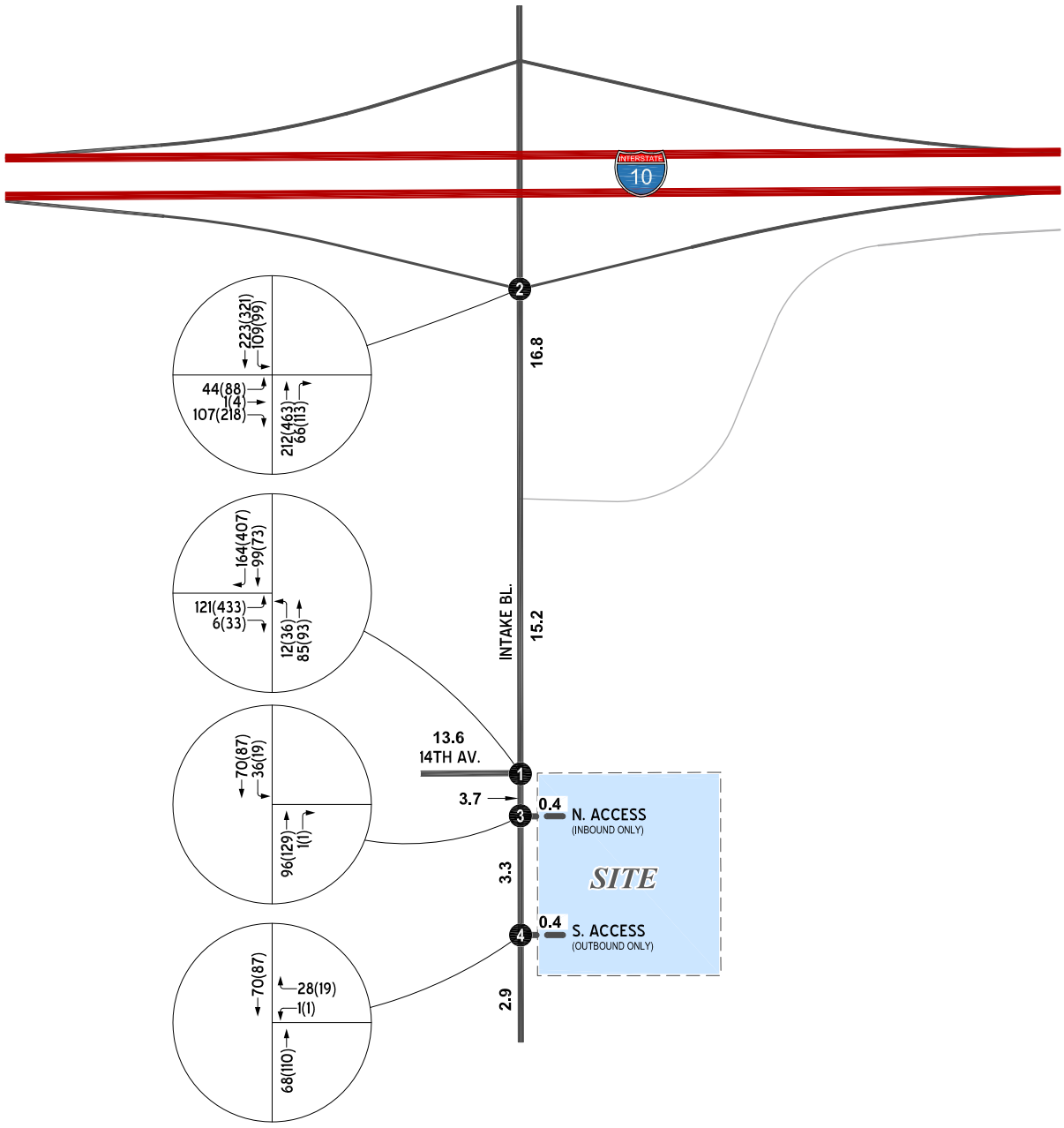
Intake Boulevard / 14th Avenue (#1) – The Project should contribute on a fair share basis to the following off-site improvements:

- Install a traffic signal
- Project to contribute to the addition of one southbound right turn lane (improvement adjacent to future 34-acre commercial site).
- Project to contribute to the addition of one eastbound left turn lane (improvement adjacent to future 34-acre commercial site).

Intake Boulevard / I-10 EB ramps (#2) – The Project should contribute on a fair share basis to the following off-site improvements:

- Install a traffic signal

EXHIBIT 6-2: GENERAL PLAN (2045) WITH PROJECT TRAFFIC VOLUMES



LEGEND:

4	= INTERSECTION ID
10(10)	= AM(PM) PEAK HOUR VOLUMES
10.0	= VEHICLES PER DAY (1000'S)

N

TABLE 6-2: INTERSECTION ANALYSIS FOR GENERAL PLAN (2045) WITH PROJECT CONDITIONS

#	Intersection	Traffic Control[1]	Intersection Approach Lanes[2] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[3] (secs.) AM	PM	Level of Service AM	PM
1	Intake Bl. / 14th Av.	CSS	0	1	0	0	1	0	0	1!	0	0	0	0	12.0	**>80**	B	**F**
	- With Improvements	**TS**	0	1	0	0	1	**1**	**1**	0	1	0	0	0	11.5	18.2	B	B
2	Intake Bl. / I-10 EB Ramps	CSS	0	2	0	1	2	0	0.5	0.5	d	0	0	0	16.4	36.9	C	**E**
	- With Improvements	**TS**	0	2	0	1	2	0	0.5	0.5	d	0	0	0	14.6	17.2	B	B
3	Intake Bl. / N. Access	UNC	0	1	0	0.5	0.5	0	0	0	0	0	0	0	7.7	7.8	A	A
4	Intake Bl. / S. Access	**CSS**	0	1	0	0	1	0	0	0	0	0	**1!**	0	8.8	9.0	A	A

[1] TS = Traffic Signal; CSS = Cross-Street Stop; UNC = Uncontrolled

[2] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d = Defacto Right Turn Lane; 0.5 = Shared Lane; 1! = Shared Left/Through/Right lane; **1** = Improvement

[3] Per the Highway Capacity Manual (7th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

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7.0 REFERENCES

1. **Riverside County Transportation Department.** *Transportation Analysis Guidelines for Level of Service & Vehicle Miles Traveled.* County of Riverside : s.n., December 2020.
2. **K2 Traffic Engineering, Inc.** *Chevron Compressed Natural Gas (CNG) Fueling Facility Traffic Impact Analysis.* 2022.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM), 7th Edition.* s.l. : National Academy of Sciences, 2022.
4. **California Department of Transportation.** *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014, Updated March 30, 2021 (Revision 6).

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Appendix B:

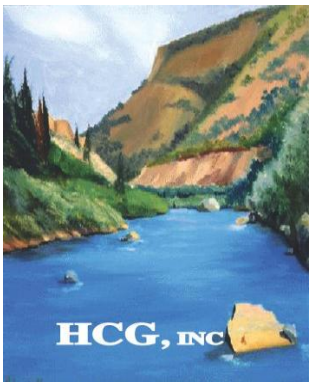
Air Quality and Greenhouse Gas Emissions Technical Report

The RCH Group, March 2025

Air Quality and Greenhouse Gas Emissions Technical Report
Blythe Ocean Pacific

Blythe, California

Prepared For:



Prepared By:

RCH GROUP
planning & environmental consulting

March 2025

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Blythe Ocean Pacific
Air Quality and Greenhouse Gas Emissions Technical Report

1.0 INTRODUCTION

This document presents a technical report for the air quality and greenhouse gas (GHG) emissions analysis associated with the Pacific Ocean Project (the "project") in the City of Blythe, California. This document provides an overview of the existing conditions at the project site, the regulatory framework, and an analysis of air quality and GHG emissions impacts in accordance with the State CEQA Guidelines Appendix G Checklist. Supporting information are provided in **Attachment A: CalEEMod Files and Natural Gas Generators Information**.

2.0 PROJECT OVERVIEW

The project would construct a compressed natural gas (CNG) fueling station[1] and operate six natural gas microturbines on approximately 4.80 acres within a property of 78.48 acres. Construction is expected to occur from May 1, 2025 through February 15, 2026.

The proposed project would receive natural gas from SoCal Gas's High Pressure Main. There are existing gas pipelines north of the project site on the northern side of the Goodman Slough on the adjacent WattEV property and includes a connection to that source to supply natural gas.

The generation station would include six 65 kilowatts (kW) natural gas microturbines with a 500 kilowatts-hour (kWh) battery. The natural gas microturbines would operate for four hours per day and 365 days per year, consuming 17 million British thermal units (MMBTU) per day and 6,264 MMBTU per year. The CNG fueling station would dispense 632 MMBTU per day and 230,552 MMBTU per year.

The CNG fueling station is anticipated to generate a net total of 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 morning peak hour trips and 25 afternoon peak hour trips. The microturbines would produce annual electricity of approximately 1,709,170 kilowatts-hour (kWh) to be used for project operations.

The project requires site plan approval from the City of Blythe and is subject to environmental review under the California Environmental Quality Act (CEQA).

3.0 ANALYSIS METHODOLOGY

Intermittent construction emissions that occur from activities, such as site-grading, microturbine installation, and CNG fueling station construction were evaluated. Long-term operational emissions would also occur from mobile vehicles and natural gas generators. This air quality analysis focuses on daily and annual emissions from these construction and operational activities.

[1] Including utilize low carbon renewable natural gas (RNG)

The air quality analysis is consistent with the methods described in the Mojave Desert Air Quality Management District (MDAQMD) *CEQA and Federal Conformity Guidelines*.[2]

The air quality analysis includes a review of criteria pollutant[3] emissions such as carbon monoxide (CO)[4], nitrogen oxides (NO_x), sulfur dioxide (SO_2), volatile organic compounds (VOC) as reactive organic gases (ROG)[5], particulate matter less than 10 micrometers (coarse or PM_{10}), and particulate matter less than 2.5 micrometers (fine or $PM_{2.5}$).[6] GHG emissions include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).

Regulatory models used to estimate air quality impacts include:

- California Air Pollution Officers Association (CAPCOA) CalEEMod (California Emissions Estimator Model Version 2022.1)[7] is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutants and GHG emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including 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.
- California Air Resources Board (CARB) EMFAC[8] emissions inventory model. EMFAC is the latest emission inventory model that calculates emission inventories and emission rates for motor vehicles operating on roads in California. This model reflects CARB's current understanding of how vehicles travel and how much they emit. EMFAC can be

[2] Mojave Desert Air Quality Management District. *CEQA and Federal Conformity Guidelines*, February 2020, https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000

[3] Criteria air pollutants refer to those air pollutants for which the United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) has established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) under the Federal Clean Air Act (CAA).

[4] CO is a non–reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood–burning stoves and fireplaces.

[5] VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROGs are any reactive compounds of carbon, excluding methane, CO, CO_2 carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.

[6] PM10 and PM2.5 consists of airborne particles that measure 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

[7] California Air Pollution Officers Association, *California Emissions Estimator Model User Guide Version 2022.1*, April 2022, http://www.caleemod.com/

[8] California Air Resources Board, Mobile Source Emissions Inventory – Modeling Tools, https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-modeling-tools

used to show how California motor vehicle emissions have changed over time and are projected to change in the future.

CalEEMod does not include the CNG emission factors for motor vehicles. However, EMFAC does have CNG emission factors. The EMFAC emission factors for CNG were input into CalEEMod to determine the daily and annual emissions for motor vehicles (i.e., passenger vehicles and trucks). This activity would be pass-by vehicle trips.[9] Natural gas microturbine emissions were determined using CalEEMod and default emission factors except for CO_2 emissions which were based on manufacturer specifications.

4.0 EXISTING CONDITIONS

The project site is in the City of Blythe (Riverside County) within the Mojave Desert Air Basin (MDAB or Air Basin). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada in the north by the Tehachapi Pass (3,800 feet elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet). The Mojave Desert is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley). The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley) whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

Regional Meteorology

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Atmospheric conditions, including wind speed, wind direction, stability, and air temperature, in combination

[9] Pass-by trips are a subset of trip generation and only apply to commercial/retail developments. Pass-by trips are vehicles already on the road and utilize the business as they are driving by.

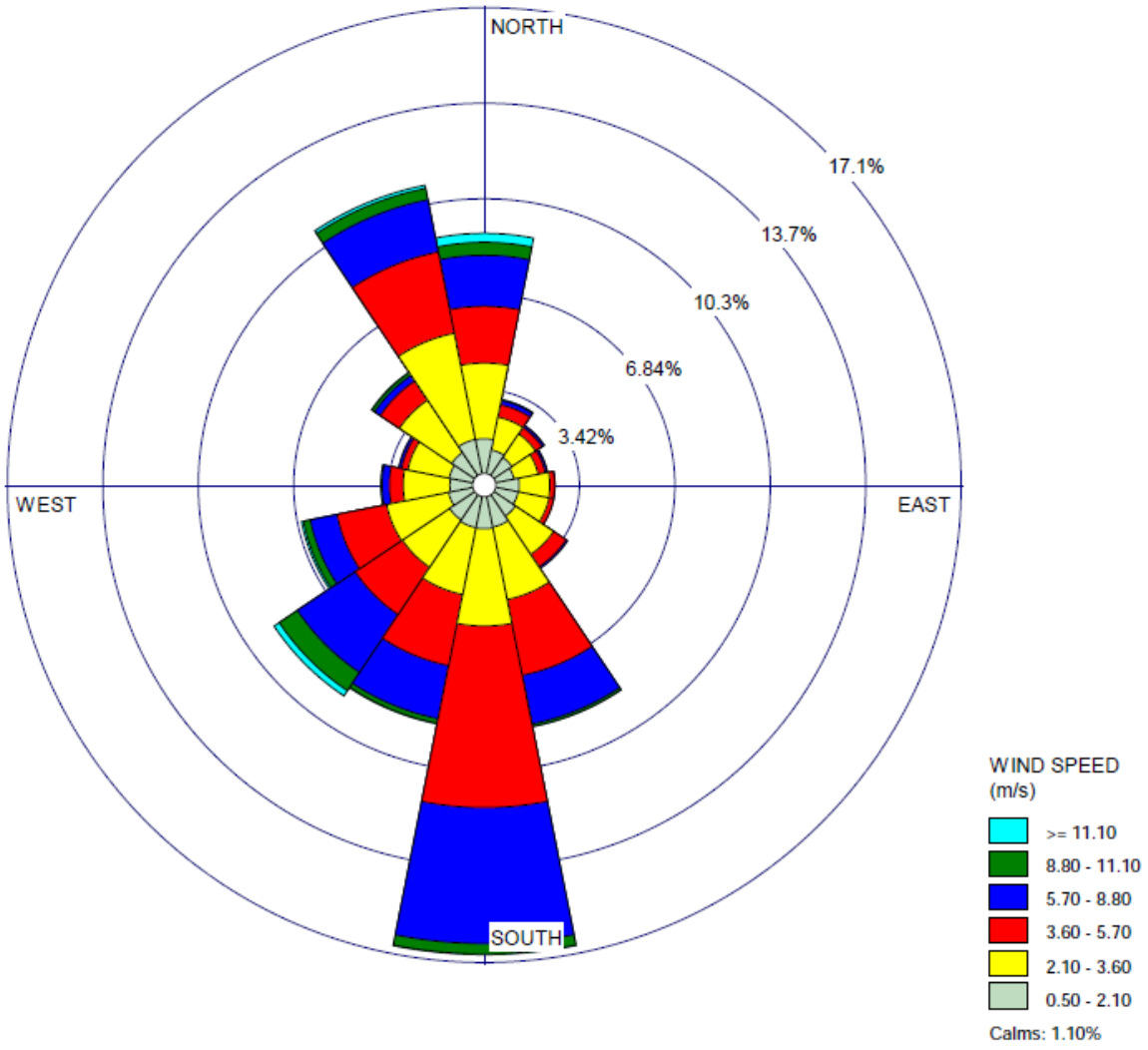
with local surface topography (i.e., geographic features such as mountains, valleys, and Pacific Ocean), determine the effect of air pollutant emissions on local air quality.

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time the reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperatures over 100°F. The region is characterized by extreme fluctuations of daily temperatures, strong seasonal winds, and clear skies. January is the coldest month, with a mean low temperature of 37°F. July is the hottest month, with a mean high temperature of 108°F.

Hourly meteorological data from Blythe Airport from 2015, 2016, 2017, 2019 and 2020 is available.[10] As shown in **Figure 1**, wind directions are predominately from the south and north with a low frequency of calm wind speed conditions (approximately 1.1 percent). The average annual wind speed is 8.7 miles per hour (3.9 meters per second). In this region, wind speeds tend to be higher during the summer months and during the daytime.

[10] California Air Resources Board, Air Dispersion Modeling and Risk Tool Meteorological Files, https://www.arb.ca.gov/toxics/harp/metfiles2.htm

Figure 1: Windrose for Blythe Airport



SOURCE: California Air Resource Board, *Meteorological Files*, 2022

Criteria Air Pollutants

The United States Environmental Protection Agency (USEPA) has established the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for six common air pollutants known as "criteria pollutants".[11] These air pollutants consist of CO, nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), SO_2, and lead (Pb). An ambient air quality standard establishes the concentration above which the pollutant is known to cause adverse health effects to sensitive groups within the population such as children and the elderly. The goal is for localized project effects not to cause or contribute to an exceedance of the standards. Ambient air quality standards are classified as either "primary" or "secondary" standards. Primary standards define levels of air quality, including an adequate margin of safety, necessary to protect the public health. Secondary ambient air quality standards define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

The CARB manages air quality, regulates mobile emissions sources, and oversees the activities of county and regional Air Pollution Control Districts and Air Quality Management Districts. CARB regulates local air quality indirectly by establishing State ambient air quality standards and vehicle emissions and fuel standards; and by conducting research, planning and coordinating activities. California has adopted ambient standards (known as California Ambient Air Quality Standards or CAAQS) that are more stringent than the federal standards for some criteria air pollutants. These ambient air standards are shown in **Table 1.**

Local Air Quality

The MDAQMD maintains a network of monitoring stations within Riverside County that monitor air quality and compliance with applicable ambient standards. O_3 data from the Blythe (445 West Murphy Street) air monitoring station were evaluated. This monitoring data for 2022 through 2024 is summarized in **Table 2**. As shown, the nearby monitoring station measured no exceedances of the applicable ambient standards. The nearest monitoring station that measures $PM_{2.5}$ is in Victorville; which are not likely to be representative of conditions in the project area. The nearest monitoring station that measures CO, NO_2, and PM_{10} is in Barstow, which may also be substantially different from ambient conditions in Blythe.

[11] U.S. Environmental Protection Agency, *Six Common Air Pollutants*, https://www.epa.gov/criteria-air-pollutants

Table 1: State and National Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.07 ppm	– 0.070 ppm	High concentrations can directly affect lungs, causing irritation. Long–term exposure may cause damage to lung tissue.	Formed when reactive organic gases and nitrogen oxides react in the presence of sunlight. Major sources include on–road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide (CO)	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9.0 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline–powered motor vehicles.
Nitrogen Dioxide (NO_2)	1 Hour Annual	0.18 ppm 0.03 ppm	0.10 ppm 0.053 ppm	Irritating eyes and respiratory tract. Colors atmosphere reddish–brown.	Motor vehicles, petroleum–refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide (SO_2)	1 Hour 3 Hour 24 Hour Annual	0.25 ppm – 0.04 ppm –	0.075 ppm 0.5 ppm 0.14 ppm 0.030 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM10)	24 Hour Annual	50 µg/m^3 20 µg/m^3	150 µg/m^3 –	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume–producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind–raised dust and ocean sprays).
Fine Particulate Matter (PM2.5)	24 Hour Annual	– 12 µg/m^3	35.0 µg/m^3 9.0 µg/m^3	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including nitrogen oxides, sulfur oxides, and organics.
Lead (Pb)	Month Rolling 3 Month	1.5 µg/m^3 –	– 0.15 µg/m^3	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present sources: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.

SOURCE: California Air Resource Board, *Ambient Air Quality Standards*, https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf, July 16, 2024. NOTE: (ppm = parts per million; µg/m3 = micrograms per cubic meter)

Notably, the Riverside County portion of the MDAQMD is currently designated "nonattainment" for state (1-hour and 8-hour) ozone standards and for the state PM_{10} standards (annual average and 24-hour). The Riverside County portion of the MDAQMD is designated "attainment" or "unclassifiable" with respect to the other ambient air quality standards.

Table 2: Air Quality Data Summary (2022 - 2024)

Pollutant	Monitoring Data by Year			
	Standard[a]	2022	2023	2024
Ozone				
Highest 1 Hour Average (ppm)[b]	0.090	0.066	0.071	0.063
Days over State Standard		0	0	0
Highest 8 Hour Average (ppm)[b]	0.070	0.063	0.065	0.060
Days over National Standard		0	0	0
Highest 8 Hour Average (ppm)[b]	0.070	0.063	0.065	0.060
Days over State Standard		0	0	0

NOTES: Values in **bold** are in excess of at least one applicable standard.

a. Generally, state standards and national standards are not to be exceeded more than once per year.

b. ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.

SOURCE: United States Environmental Protection Agency, AirData, *https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors*

California Air Resources Board

The CARB has oversight over air quality in the state of California and has established the California Clean Air Act (CCAA). The CCAA was signed into law in 1988 and, for the first time, clearly spelled out in statute California's air quality goals, planning mechanisms, regulatory strategies, and standards of progress. The CCAA provides the State with a comprehensive framework for air quality planning regulation. Prior to passage of the CCAA, federal law contained the only comprehensive planning framework.

The CARB is responsible for the development of the State Implementation Plan (SIP), which provides a framework for attaining and maintaining the NAAQS within the state of California. In turn, development of individual inputs to the SIP is the responsibility of local air pollution control agencies. Regulation of individual stationary sources has been delegated to local air pollution control agencies.

The CARB is responsible for developing programs designed to reduce emissions from non-stationary sources, including motor vehicles and off-road equipment. The CARB and the California Office of Environmental Health Hazard Assessment (OEHHA) are also responsible for developing regulations governing toxic air contaminants (TAC). TAC include air pollutants that can cause serious illnesses or increased mortality, even in low concentrations. The CARB and

OEHHA identify specific air pollutants as TAC, develop health thresholds for exposure to TAC, and develop guidelines for conducting health risk assessments for sources of TAC emissions.

Mojave Desert Air Quality Management District

The MDAQMD is responsible for regulating stationary sources of air emissions. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by the MDAQMD.[12] The following MDAQMD rules are applicable to the project.

Rule 401 – Visible Emissions

Rule 401 states that a person shall not discharge into the atmosphere, from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

> (a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines, or
>
> (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A [of the Rules].

Rule 402 – Nuisance

Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Rule 403 – Fugitive Dust

Rule 403 requires control of fugitive dust emissions during activities such as construction that have the potential to generate dust. The provisions of Rule 403 include the following:

> (a) Any person shall not cause or allow the emissions of Fugitive Dust from any transport, handling, construction or storage activity so that the Visible Fugitive Dust remains visible in the atmosphere beyond the property line of the emission source, except during High Winds.
>
> (b) A person shall take every reasonable precaution to minimize fugitive dust emissions from wrecking, excavation, grading, clearing of land and solid waste disposal operations.

[12] Mojave Desert Air Quality Management District, *Rule Book*, http://mdaqmd.ca.gov/rules/rule-book

(c) A person shall not cause or allow PM_{10} to exceed 100 micrograms per cubic meter when determined as the difference between upwind and downwind samples collected on federal reference method samplers at the property line for a minimum of five hours, except during high winds.

(d) A person shall take every reasonable precaution to prevent visible particulate matter from being deposited upon public roadways as a direct result of their operations. Reasonable precautions shall include, but are not limited to, the removal of particulate matter from equipment prior to movement on paved streets or the prompt removal of any material from paved streets onto which such material has been deposited.

(e) Subsections (a) and (c) shall not be applicable when the wind speed instantaneously exceeds 40 kilometers (25 miles) per hour, or when the average wind speed is greater than 24 kilometers (15 miles) per hour. The average wind speed determination shall be on a 15-minute average at the nearest official air-monitoring station or by wind instrument located at the site being checked.

(f) The provisions of this rule shall not apply to agricultural operations.

Rule 404 – Particulate Matter Concentration

Rule 404 restricts emissions of particulate matter from any source based on the concentrations specified in Table 404(a).

Rule 405 – Solid Particulate Matter Weight

Rule 405 restricts emissions of particulate matter from any source based on the concentrations specified in Table 405(a).

Rule 406 – Specific Contaminants

Rule 406 restricts emissions of sulfur compounds to 500 ppm or less, and restricts emissions of halogens, which are not generally emitted from construction projects.

Rule 407 – Liquid and Gaseous Air Contaminants

Rule 407 restricts emissions of carbon monoxide to 2,000 ppm or less.

Rule 408 – Circumvention

Rule 408 restricts the building, erection, installation, or use of any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the Health and Safety Code or of the MDAQMD Rules.

Rule 409 – Combustion Contaminants

Rule 409 restricts discharge into the atmosphere from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of CO2 at standard conditions averaged over a minimum of 25 consecutive minutes.

Rule 431 – Sulfur Content of Fuels

Rule 431 restricts the use of any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight.

Rule 442 – Usage of Solvents

Rule 442 restricts the emission of VOC from any solvent material to 1,190 pounds per month and requires proper storage and handling of VOC-containing solvents.

Rule 1159 – Stationary Gas Turbines

Rule 1159 applies to any new or existing non-utility, commercial, industrial or institutional Stationary Gas Turbine of 0.3 MW and larger, unless exempt. The purpose of the rule is to limit the emission of NOx from commercial, industrial and institutional Stationary Gas Turbines.

Regulation IX – Standards for Performance for New Stationary Sources

Regulation IX includes by reference the New Source Performance Standards (NSPS) for New Stationary Combustion Turbines (40 CFR 60 Subpart KKKK), NSPS for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart mi), and NSPS for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subpart Db). Permit conditions for the project will establish limits which are in compliance with the turbine, auxiliary boiler, and compression ignition engine NSPS referenced in Regulation IX.

Regulation XII – Standards for Performance for New Stationary Sources

Rule 1300 sets forth the requirements for the preconstruction review of all new or modified facilities. Rule 1300 ensures that construction or modification of facilities subject to the regulation does not interfere with the attainment and maintenance of Ambient Air Quality Standards. Rule 1300 also ensures that the construction or modification of facilities subject to the regulation complies with preconstruction review requirements for TAC set forth in Rule 1320 and requirements for prevention of significant deterioration set forth in Rule 1600.

Rule 1302 requires certification of compliance with the Federal Clean Air Act, applicable implementation plans, and all applicable District rules and regulations.

Rule 1303 requires BACT and offsets for selected large new sources. If applicable, permit conditions limit the emissions from a project to a level which has been defined as BACT for the

project, bringing the project into compliance with Rule 1302(A). If required to obtain offsets, a project applicant shall have obtained sufficient offsets to comply with Rule 1303(B)(1) prior to construction of a project.

City of Blythe General Plan 2025

The City of Blythe General Plan 2025 Air Quality Element includes guiding and implementing policies that seek continued maintenance of the high quality of air enjoyed by residents.[13] The Air Quality Element discusses the following applicable policies regarding air quality within the City of Blythe:

Implementation – Require applicants whose development would result in construction-related fugitive dust emissions to control such emissions as follows:

- During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by regular watering, paving of construction roads or other dust-preventive measures.
- All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day.
- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 15 mph averaged over a 1-hour period.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by demolition, clearing, grading, earth moving, or excavation operations shall be minimized at all times.
- Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until a vegetative cover is grown.
- All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

Implementation – Require applicants whose development would result in construction-related exhaust emissions to minimize such emissions by maintaining equipment engines in good conditions and in proper tune according to manufacturer's specifications and during

[13] City of Blythe, *General Plan 2025 Air Quality Element*, March, 2007 https://www.cityofblythe.ca.gov/DocumentCenter/View/302

smog season (May through October) by not allowing construction equipment to be left idling for long periods.

Implementation – Require applicants whose development would result in potential CO "hot spot" impacts to consult with the City of Blythe to ensure that schools, hospitals, or day care facilities are not located near such "hot spots".

Implementation – All new construction shall comply with energy efficiencies mandated by Title 24 construction requirements. New facilities will be substantially more energy efficiency than the facilities they replace or existing units, even at higher densities.

5.0 IMPACT ANALYSIS

The air quality analysis includes a review of pollutant emissions such as CO, NO_x, SO_2, ROG, PM_{10}, and $PM_{2.5}$.

Threshold of Significance

According to the MDAQMD, any project is significant if it triggers or exceeds the following evaluation criteria:

- Generates total emissions (direct and indirect) in excess of the thresholds in **Table 3**;

Table 3: MDAQMD Air Quality Significance Thresholds

Pollutants	Annual (tons)	Daily (pounds)
Greenhouse Gases	100,000	548,000
Carbon Monoxide (CO)	100	548
Nitrogen Oxides (NOx)	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxides (SOx)	25	137
Coarse Particulate Matter (PM_{10})	15	82
Fine Particulate Matter ($PM_{2.5}$)	12	65
Hydrogen Sulfides (H_2S)	10	54
Lead (Pb)	0.6	3

SOURCE: Mojave Desert Air Quality Management District, *CEQA and Federal Conformity Guidelines*, February 2020, https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/638126583450270000

- Generates a violation of any ambient air quality standard when added to the local background;
- Does not conform to the applicable attainment or maintenance plan(s). Project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase

vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold.

- Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1. Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated through a health risk assessment:
  - Any industrial project within 1,000 feet;
  - A distribution center (40 or more trucks per day) within 1,000 feet;
  - A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
  - A dry cleaner using perchloroethylene within 500 feet; and/or
  - A gasoline dispensing facility within 300 feet.

A significant project must incorporate mitigation sufficiently to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation measures.

Consistency with Clean Air Plan

The applicable air quality plan for the project is the 2004 Ozone Attainment Plan.[14] The purpose of the Clean Air Plan is to address the attainment and maintenance of State and federal ambient air quality standards. The MDAQMD has adopted the control measures recommended in the plan in its Rules and Regulations. The MDAQMD has also adopted fugitive dust control requirements in its Rule 403. Because the project would comply with the MDAQMD's Rules and Regulations, including those adopted from the SIP, the project would not conflict with the applicable Air Quality Plan. Therefore, the project would have a less-than-significant impact.

Construction Impact Analysis

CalEEMod was used to estimate emissions that would be associated with construction. Construction activities would occur from May of 2025 through February of 2026. **Table 4** displays the estimated construction schedule. Typically, construction activities would take place between 8 a.m. and 5 p.m. (nine hours per day), on Monday through Friday.

[14] Mojave Desert Air Quality Management District, *2004 Ozone Attainment Plan (State and Federal)*, April 26, 2004, http://mdaqmd.ca.gov/home/showdocument?id=174

Table 4: Estimated Project Construction Schedule

Description	Start	End	Working Days
Site Demolition & Grading	5/01/2025	6/01/2025	22
OverEx/Recompact	5/25/2025	6/01/2025	5
Concrete Installation for Equipment Foundations	6/01/2025	6/21/2025	15
Excavate Compound Trenching	6/21/2025	7/15/2025	17
Installation of Electrical Conduits	7/10/2025	8/10/2025	22
Bio Retention Area	7/1/2025	8/1/2025	24
Set & Install CNG Equipment	1/03/2026	1/14/2026	8
Installation of Canopy	10/2/2025	10/30/2025	21
Installation of Gas Utility MSA	1/31/2026	2/16/2026	11
Electrical Installation	10/30/2025	12/16/2025	34
High Pressure Gas Tubing Installation	10/16/2025	11/30/2025	32
Gas Release and Pressure Test Inspection for Service Gas Line	10/16/2025	10/17/2025	2
High Pressure Testing of Tubing	1/14/2026	1/21/2026	6
Installation of Concrete Pavement	11/7/2025	11/21/2025	11

SOURCE: Applicant Data Response (February 28, 2025).

Construction activities would require the use of diesel construction equipment such as excavators, loaders, dozers, graders, forklifts, and rollers. The estimated construction equipment associated with the project along with the number of pieces of equipment, daily hours of operation, horsepower (hp), and load factor (i.e., percent of full throttle) are shown in **Table-5**.

Project construction would generate short-term emissions of air pollutants, including fugitive dust (such as wind-blown dust) and equipment exhaust (via tailpipe or stack) emissions. Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. In the absence of best management practices, construction activities may result in significant quantities of dust, and as a result, local visibility and PM_{10} concentrations may be adversely affected on a temporary and intermittent basis during construction. In addition, the fugitive dust generated by construction would include not only PM_{10}, but also larger particles, which would fall out of the atmosphere within several hundred feet of the site and could result in nuisance-type impacts.

Table 5: Estimated Project Construction Equipment Usage

Phase	Equipment	Amount	Daily Hours	HP	LF
Site Demolition and Grading	Graders	1	8	148	0.41
Site Demolition and Grading	Excavators	1	8	36	0.38
Electrical Conduit Installation	Tractors/Loaders/Backhoes	1	8	84	0.37
OverEx/Reconnect	Tractors/Loaders/Backhoes	1	8	84	0.37
Concrete Installation for Equipment Foundations	Pumps	1	3	11	0.74
Excavate Compound Trenching	Tractors/Loaders/Backhoes	1	8	84	0.37
Excavate Compound Trenching	Trenchers	1	8	40	0.50
Bio Retention Area	Excavators	1	8	36	0.38
Set & Install CNG Equipment	Cranes	1	5	367	0.29
Set & Install CNG Equipment	Forklifts	1	8	82	0.20
Set & Install CNG Equipment	Generator Sets	1	8	14	0.74
Set & Install CNG Equipment	Welders	1	8	46	0.45
Installation of Canopy	Forklifts	2	8	82	0.20
Installation of Canopy	Generator Sets	1	8	14	0.74
Installation of Gas Utility MSA	Tractors/Loaders/Backhoes	1	8	84	0.37
Installation of Concrete Pavement	Paving Equipment	1	6	89	0.36
Installation of Concrete Pavement	Rollers	1	6	36	0.38
Installation of Concrete Pavement	Tractors/Loaders/Backhoes	1	8	84	0.37

SOURCE: Applicant Data Response (February 28, 2025) and CARB CalEEMod Version 2022.1.

The project would be required to comply with MDAQMD Rule 403 (Fugitive Dust) and all other applicable MDAQMD rules. The City of Blythe General Plan 2025 Air Quality Element requires the following best management practices (BMPs).

BMP AQ-1: The Applicant shall control fugitive dust emissions during construction as follows:

- During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by regular watering, paving of construction roads or other dust-preventive measures.
- All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day.
- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 15 mph averaged over a 1-hour period.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by demolition, clearing, grading, earth moving, or excavation operations shall be minimized at all times.

- Portions of the construction site to remain inactive longer than a period of three months shall be seeded and watered until a vegetative cover is grown.
- All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

BMP AQ-2: The Applicant shall control exhaust emissions during construction by maintaining equipment engines in good condition and in proper tune according to manufacturer's specifications and during smog season (May through October) by not allowing construction equipment to be left idling for long periods.

Tables 6 and 7 provide the estimated short-term (maximum daily) and annual construction emissions that would be associated with the project and compares those emissions to the MDAQMD's significance thresholds for construction exhaust emissions. Supporting information are included in **Attachment A: CalEEMod Files and Natural Gas Generators Information.** As indicated in **Tables 6 and 7**, the estimated maximum daily and annual construction emissions for the project would be below the MDAQMD's significance thresholds. Therefore, the project would have a less-than-significant impact related to construction.

Table 6: Estimated Maximum Daily Construction Emissions (pounds)

Condition	ROG	NOx	PM_{10}	$PM_{2.5}$	CO	SO_2
2025 Summer	0.66	5.29	0.91	0.32	7.73	0.01
2025 Winter	0.36	2.87	0.28	0.14	4.90	0.01
2026 Winter	0.62	5.14	0.34	0.21	5.69	0.01
Significance Threshold	137	137	82	65	548	137
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2022.1.1.29
NOTE: Values reflect rounding.

Table 7: Estimated Annual Construction Emissions (tons)

Condition	ROG	NOx	PM_{10}	$PM_{2.5}$	CO	SO_2
2025	0.02	0.13	0.02	0.01	0.20	<0.01
2026	<0.01	0.03	<0.01	<0.01	0.03	<0.01
Significance Threshold	25	25	15	12	100	25
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2022.1.1.29
NOTE: Values reflect rounding.

Operational Impact Analysis

CalEEMod was used to estimate emissions that would be associated with operations (e.g., motor vehicle use and natural gas generator usage) expected to occur after construction is complete and the project is operational.

The CNG fueling station is anticipated to generate a net total of 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 morning peak hour trips and 25 afternoon peak hour trips. This activity would be pass-by vehicle trips.

The CNG generation station would include six 65 kW natural gas microturbines with a 500-kWh battery. The natural gas microturbines would operate for four hours per day and 365 days per year, consuming 17 MMBTU per day and 6,264 MMBTU per year. The CNG fueling station would dispense 632 MMBTU per day and 230,552 MMBTU per year. Supporting information are included in **Attachment A: CalEEMod Files and Natural Gas Generators Information.**

Estimated daily and annual operational emissions that would be associated with the project are presented in **Tables 8 and 9** and the estimates are compared to MDAQMD's thresholds of significance. The project operational emission would be below MDAQMD significance thresholds. Therefore, the project would have a less-than-significant impact related to operations.

Table 8: Estimated Maximum Daily Operational Emissions (pounds)

Condition	ROG	NOx	PM_{10}	$PM_{2.5}$	CO	SO_2
Mobile	0.54	9.29	0.05	0.02	7.63	0.01
Area	0.44	<0.01	<0.01	<0.01	0.59	<0.01
Natural Gas Generators	18.4	4.78	0.10	0.10	47.8	0.01
Total	**19.4**	**14.1**	**0.15**	**0.12**	**56.1**	**0.02**
Significance Threshold	137	137	82	65	548	137
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2022.1.1.29
NOTE: Values reflect rounding.

Table 9: Estimated Annual Operational Emissions (tons)

Condition	ROG	NOx	PM_{10}	$PM_{2.5}$	CO	SO_2
Mobile	0.03	0.79	0.01	<0.01	4.68	<0.01
Area	0.07	<0.01	<0.01	<0.01	0.05	<0.01
Natural Gas Generators	3.35	0.87	0.02	0.02	8.73	<0.01
Total	**3.45**	**1.66**	**0.03**	**0.02**	**13.5**	**<0.01**
Significance Threshold	25	25	15	12	100	25
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2022.1.1.29
NOTE: Values reflect rounding.

Health Impacts

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. The CARB has identified the following people as most likely to be affected by air pollution: children

less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive population groups.

Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions and because the presence of pollution detracts from recreational experience. The nearest sensitive receptors to the project are the Casa Encinas at River Heights Apartment Complex located approximately 50 feet east of the property line of the northern parcel.

The project would not expose sensitive receptors to substantial pollutant concentrations, including TAC. Health effects are generally evaluated based on a long-term (30 years) of exposure. According to the MDAQMD, the project type is not one that would require a health risk assessment for CEQA purposes. The project would generate TAC emissions during short-term construction activities and the operation of the natural gas generators. Natural gas generators are a stationary source under the jurisdiction of the MDAQMD and would be subject to air quality permitting and would be required to meet the Rules and Regulations adopted by the MDAQMD. Thus, impacts during construction and operation would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the project would have a less-than-significant health impact.

Odor Impacts

Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact. As a general matter, the types of development that pose potential odor problems include agriculture, food processing, dairies, rendering, refineries, chemical plants, wastewater treatment plants, landfills, composting facilities, and transfer stations. The project does not include any of these types of development. Therefore, the project would have a less-than-significant odor impact.

Cumulative Impacts

In analyzing cumulative impacts from a project, the analysis must specifically evaluate a project's contribution to the cumulative increase in pollutants for which the project area is listed as "non-attainment" for the federal or state AAQS. In the event direct impacts from a project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions from the project, in combination with the emissions from other proposed, or reasonably foreseeable future projects are in excess of screening levels identified above, and the project's contribution accounts for more than an insignificant proportion of the cumulative total emissions.

The project area is considered an unclassified/attainment area for all of the NAAQS. The project area is considered a moderate nonattainment area for the CAAQS for ozone and a nonattainment area for the CAAQS for PM_{10}. The area is considered unclassified/attainment for all CAAQS for the other criteria pollutants.

While the region is nonattainment for the CAAQS for ozone and PM_{10}, not all projects would result in a significant impact to air quality. Permitting agencies and lead agencies with jurisdiction over nonattainment areas, such as the USEPA and the MDAQMD, typically establish thresholds below which a project would have neither direct, nor cumulative impacts. The project's potential for air quality impacts are mainly attributable to construction activities.

Each air district in a nonattainment area is responsible for developing emissions inventory data as part of the planning process to develop its attainment plan. The emissions budget for the MDAQMD includes emissions associated with construction activity, including construction equipment, fugitive dust, and vehicles. The MDAQMD construction emissions budget for off-road construction equipment and vehicles includes 1.63 tons per day of ROG, 4.67 tons per day of NOx and 0.28 tons per day of PM_{10}. The MDAQMD fugitive dust emissions budget attributable to construction activities also includes 8.77 tons per day of PM_{10}. During construction, the project's estimated ROG, NOx, and PM_{10} emissions are less than one percent of the total emissions budget. Project operational emissions of nonattainment pollutants are negligible in comparison to the overall emissions budget for the MDAQMD.

Construction emissions would be temporary, and even if project construction occurs during construction of other projects in the City or MDAQMD boundary, cumulative impacts would be less than significant because emissions of ozone precursors and PM_{10} are far below significance thresholds, and the project would be required to comply with MDAQMD rules and regulations and implement the required BMPs. Operational emissions from the project are negligible and the project supports the reduction of emissions in the region through generating renewable energy. Therefore, cumulative impacts would be less-than-significant.

6.0 GREENHOUSE GAS EMISSIONS

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal, with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years.

Gases that trap heat in the atmosphere are referred to as GHG because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHG are CO_2, CH_4, and N_2O, ozone, and water vapor.

While the presence of the primary GHG in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices, coal mines, and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same amount of CO2. CH4 and N2O are substantially more potent GHG than CO2, with GWP of 28 and 265 times that of CO2, respectively.[17]

[15] International Panel on Climate Change, *2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf

[16] International Panel on Climate Change, *2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons (MT) of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

California Environmental Quality Act and Climate Change

Under CEQA, lead agencies are required to disclose the reasonably foreseeable adverse environmental effects of projects they are considering for approval. GHG emissions have the potential to affect the environment because they contribute to global climate change. In turn, global climate change has the potential to cause sea levels to rise, alter rainfall and snowfall patterns, and affect habitat.

California Code of Regulations Title 24

Although not originally intended to reduce greenhouse gas emissions, Title 24 of the California Code of Regulations, Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow for the consideration and possible incorporation of new energy efficiency technologies and methods. Energy efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in GHG emissions. Therefore, increased energy efficiency results in decreased GHG emissions.

Accordingly, Title 24 in the CALGreen Building Code is now a part of the statewide strategy for reducing GHG emissions and is the only statewide plan for reduction of GHG emissions that every local agency must adopt in a public hearing by adopting the state building code. Consistent with CALGreen, the state recognized that GHG reductions would be achieved through buildings that exceed minimum energy-efficiency standards, decrease consumption of potable water, reduce sold waste during construction and operation, and incorporate sustainable materials. Compliance with Title 24 of the CALGreen Building Code is thus a vehicle to achieve statewide electricity and natural gas efficiency targets, and lower GHG emissions from waste and water transport sectors.

[17] International Panel on Climate Change, *2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf

Executive Order S-3-05

Governor Schwarzenegger established Executive Order S-3-05 in 2005, in recognition of California's vulnerability to the effects of climate change. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team, made up of members from various state agencies and commissions. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide cap on GHG emissions that were to be phased in starting in 2012. To effectively implement the cap, AB 32 directed California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specified that regulations adopted in response to AB 1493 were used to address GHG emissions from vehicles. However, AB 32 also included language stating that if the AB 1493 regulations cannot be implemented, then CARB was to develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 required CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Pursuant to AB 32, CARB identified 427 million metric tons of CO_2e as the total Statewide aggregated 1990 GHG emissions level, which serves as the 2020 emissions limit. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 represented an approximate 25 to 30 percent reduction in current emissions levels. However, CARB also had discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not expected to significantly increase emissions. The goals of AB 32 were achieved within the 2002 timeline.

Climate Change Scoping Plans

AB 32 also required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

The 2013 Scoping Plan Update builds upon the initial Scoping Plan with new strategies and recommendations. The 2013 Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2013 Update defines CARB climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. The 2013 Update highlights California progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. In the 2013 Update, nine key focus areas were identified (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the cap-and-trade program.

On May 22, 2014, the First Update to the Climate Change Scoping Plan was approved by the Board, along with the finalized environmental documents. The First Update to the Climate Change Scoping Plan identified the 2020 emissions limit as 431 million metric tons of CO_2e and the 2020 business-as-usual forecast as 509 million metric tons of CO_2e. Finally, the Updated Scoping Plan provided recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05. The recommendations covered energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors.

In 2017, CARB approved the Second Update to the Climate Change Scoping Plan (2017 Scoping Plan). The 2017 Scoping Plan identified progress made to meet the near-term (2020) objectives of AB 32 and defined California's climate change priorities and activities for the next several years. The 2017 Scoping Plan identified the 2020 emissions limit as 431 million metric tons of CO_2e and the 2020 business-as-usual forecast as 509 million metric tons of CO_2e. The 2017 Scoping Plan provided strategies for meeting the mid-term 2030 greenhouse gas reduction target set by Senate Bill (SB) 32. The 2017 Scoping Plan also identified how the State can substantially advance toward the 2050 greenhouse gas reduction target of Executive Order S-3-05, which consists of reducing greenhouse gas emissions to 80 percent below 1990 levels. The recommendations covered the key sectors, including energy and industry; transportation; natural and working lands; waste management; and water.

In 2022, CARB approved the Third Update to the Climate Change Scoping Plan (2022 Scoping Plan), which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279.[18] The 2022 Scoping Plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.

[18] California Air Resources Board, *Final 2022 Scoping Plan Update*, November 16, 2022, https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan#:~:text=The%20Draft%202022%20Scoping%20Plan,neutrality%20no%20later%20than%202045

- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the state's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

The recommended measures in the 2022 Scoping Plan and previous Scoping Plans are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects.

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders "All State agencies with jurisdiction over sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets." The Executive Order also states that "CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent." The CARB is currently moving forward with a second update to the Climate Change Scoping Plan to reflect the 2030 reduction target. The updated Scoping Plan will provide a framework for achieving the 2030 target. In September of 2016, AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Executive Order No. B-55-18/Assembly Bill 1279

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality by 2045 and maintain net

negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Executive Order B-55-18 establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

Pavley Standards

California AB 1493 (Pavley) enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHG emitted by passenger vehicles and light duty trucks for model years 2009–2016, which are often times referred to as the "Pavley I" standards. The CARB obtained a waiver from USEPA that allows for implementation of these regulations notwithstanding possible federal preemption concerns.

Federal Vehicle Standards

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the applicable vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the USEPA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program. On September 27, 2019, the USEPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg.

51,310 (Sept. 27, 2019.) The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the USEPA finalized rulemaking for SAFE Part Two, which sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light duty trucks, covering model years 2021 through 2026.

California Renewables Portfolio Standard Program

In 2002, a California State law established the basic policy framework for the increased use of renewable energy resources in California, known as the Renewables Portfolio Standard (RPS). RPS requires renewable energy resources to serve a certain percentage of electricity sales by all electricity utilities in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. Major eligible renewable energy resources, as defined by the California Energy Commission (CEC), include biomass, geothermal, solar, wind, and small hydroelectric facilities. CEC and the California Public Utilities Commission (CPUC) work collaboratively to implement RPS.[19]

Electric utilities in California must procure a minimum quantity of sales from eligible renewable energy resources as specified by RPS requirements. To integrate renewable generators on the grid, optimize the delivery of growing amounts of renewable energy production, and facilitate achieving the targeted GHG reductions, the California legislature has also authorized energy agencies to establish energy storage procurement targets.

The Clean Energy and Pollution Reduction Act of 2015 [Senate Bill 350 (SB 350)] established California's state policy objectives on long-term energy planning and procurement as signed into law on October 7, 2015. The 100 Percent Clean Energy Act of 2018 [Senate Bill 100 (SB 100)] revised the RPS targets to establish the policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

With SB 350 and SB 100, California's objectives include:

- To set the RPS for the procurement of California's electricity from renewable sources at 33 percent by 2020, 50 percent by 2026, and 60 percent by 2030;
- To plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045; and

[19] California Air Resources Board, Enforcement of the Renewables Portfolio Standard, https://ww2.arb.ca.gov/enforcement-renewables-portfolio-standard

- To double the energy efficiency savings on electricity and natural gas end uses by retail customers by 2030.

California State legislation have steadily increased the renewable energy target, most recently from SB 100 (September 2018) which increased the RPS targets to 60 percent of California's electricity by 2030 and 100 percent of all retail electricity sold in California by 2045.

Greenhouse Gas Regional Emission Estimates

In 2022, the United States emitted about 6,343 million metric tons of CO_2e or 5,489 million metric tons of CO_2e after accounting for sequestration from the land sector. Emissions increased in 2022 by 1 percent. The increase in total GHG emissions was driven largely by an increase in CO_2 emissions from fossil fuel combustion. In 2022, CO_2 emissions from fossil fuel combustion increased by 1 percent compared to the previous year. This increase in fossil fuel consumption emissions was due in part to the continued rebound in economic activity after the height of the COVID-19 pandemic.[20]

According to USEPA, net emissions were 17 percent below 2005 levels. The recent decline is mostly due to a shift to less CO_2-intensive natural gas for generating electricity and a rapid increase in the use of renewable energy in the electric power sector. Transportation activities accounted for 28 percent of total GHGs emissions in 2022. Emissions from electric power accounted for the second largest portion (25 percent), while emissions from industry accounted for the third largest portion (23 percent) of total GHG in 2022. [21]

In 2022, California emitted approximately 371 million metric tons of CO_2e, 9.3 million metric tons of CO_2e lower than 2021 levels and 60 million metric tons of CO_2e below the 2020 GHG limit of 431 million metric tons of CO_2e). The transportation sector represents 39 percent of the total GHG emissions. The industrial sector represents 23 percent of the total GHG emissions, followed by electricity (11 percent), and residential, agricultural, and commercial (8, 8, and 6 percent, respectively).[22]

[20] United States Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990 - 2022*, April 2024, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

[21] United States Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990 - 2022*, April 2024, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

[22] California Air Resources Board, *Emissions Trends Report 2000-2022 (2024 Edition)*, September 2024, https://ww2.arb.ca.gov/ghg-inventory-data

Greenhouse Gas Emissions

CalEEMod was used to estimate GHG emissions from construction and operations (e.g., motor vehicle use, natural gas generators, and solid waste land filling). Supporting Information are included in **Attachment A: CalEEMod Files and Natural Gas Generators Information.**

The project's estimated construction GHG emissions are presented in **Table 10**. As shown, the construction emissions are below the MDAQMD significance thresholds of 548,000 pounds of CO_2e per day and 100,000 tons of CO_2e per year. Thus, the project would have a less-than-significant impact related to construction GHG emissions.

Table 10: Estimated Construction GHG Emissions

Condition	Daily CO_2e (pounds)	Annual CO_2e (tons)
2025	1,197	33.9
2026	1,353	7.63
Significance Threshold	548,000	100,000
Significant (Yes or No)?	No	No

SOURCE: CalEEMod Version 2022.1.1.29
NOTE: Values reflect rounding.

The estimated operational GHG emissions are presented in **Table 11**. The project's estimated operational GHG emissions are below the MDAQMD significance threshold of 548,000 pounds of CO_2e per day and 100,000 tons of CO_2e per year. Thus, the estimated operational GHG emissions attributed to mobile source and the natural gas generators would be a less-than-significant impact related to operational GHG emissions.

Table 11: Estimated Operational GHG Emissions

Condition	Daily CO_2e (pounds)	Annual CO_2e (tons)
Mobile	1,371	722
Area	2.42	0.22
Natural Gas Generators	5.08	0.93
Solid Waste	1,688	308
Total	**3,067**	**1,031**
Significance Threshold	548,000	100,000
Significant (Yes or No)?	No	No

SOURCE: CalEEMod Version 2022.1.1.29
NOTE: Values reflect rounding.

Consistency with GHG Plans, Policies and Regulations

The City of Blythe does not have an adopted Climate Action Plan. The principal State plan and policy adopted for the purpose of reducing GHG emissions is SB 32. SB 32 requires that by 2030

statewide emissions be reduced by 40 percent beyond the 2020 reduction target set by AB 32. The State has taken these measures, because no project individually could have a major impact (either positively or negatively) on the global concentration of GHG. Therefore, the project would result in a significant impact if it would be in conflict with state regulations for reducing GHG emissions such as SB 32.

Projects that demonstrate consistency with the strategies, actions, and emission reduction targets contained in the 2022 Scoping Plan[23] would have a less than significant impact on climate change. The project will generate little GHG emissions as shown in **Table 11**. Therefore, consistency with the 2022 Scoping Plan would result in a less than significant impact with respect to GHG emissions

The major source of emission typically associated with most projects are mobile sources. Because the fuel origin for this project is CNG as well as utilize low carbon RNG and thus reduce dependency on diesel and gasoline and lower GHG emissions[24]. The project, as shown in **Table 11**, will account for a very low amount of area source, water, or waste GHG emissions. By providing a fuel source for CNG based vehicles the project would have a less-than-significant cumulative impact.

7.0 CONCLUSIONS

Construction of the project would be below all MDAQMD significance thresholds and would adhere to the required BMPs, ensuring a less than significant impact. The operation of the project would be below all MDAQMD significance thresholds and would not significantly contribute to air pollution or deteriorate local air quality conditions. Furthermore, the project aligns with federal, state, and local plans, policies, and regulations. All air quality and GHG emissions impacts would be less-than-significant for CEQA purposes.

[23] Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.

[24] The emission coefficient by fuel are 167.8 pounds of CO_2 per million BTU for gasoline, 163 pounds of CO_2 per million BTU for diesel , and 116.7 pounds of CO_2 per million BTU for natura gas, https://www.eia.gov/environment/emissions/co2_vol_mass.php

ATTACHMENT A

CalEEMod Input Data
Construction and Operational CalEEMod Output Files
Natural Gas Generators Information
EMFAC Output

Blythe Ocean Pacific Fueling Station

CalEEMod Version 2022.1.1.29 Inputs

Project Characteristics

Start of Construction: May 1, 2025

End of Construction: February 15, 2026

Operational Year: 2026

Location: Blythe, Riverside County

Air District: Mojave Desert Air Quality Management District

Project Specifics

No existing buildings would be demolished, and no asphalt/concrete would be removed. No trees would be removed. The proposed project site is 4.80 acres within a property of 78.48 acres. There will be no import/export of soil materials with a balanced grading site.

The proposed project would receive natural gas from SoCal Gas's HP Main. There are existing gas pipelines north of the project site on the northern side of the Goodman Slough on the adjacent WattEV property and includes a connection to that source to supply the CNG equipment in the northwest corner of the fueling station site.

The CNG fueling station is anticipated to generate a net total of 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 AM peak hour trips and 25 PM peak hour trips (actual vehicles). The CNG station will be unattended/remote monitored. One technician visit per week. One janitorial visit two times per month.

The proposed project would not contain a permanent, occupied building onsite. There would be a fueling canopy (2,500 square feet). In addition to the canopy, the above ground equipment for the CNG compression station and power generation equipment would take up approximately 11,000 square feet. The project site would require approximately 140,000 square feet of concrete.

The proposed project would consume an annual electricity for the site of approximately 1,709,170 kWh and the annual electricity produced on the site would be approximately 1,709,170 kWh.

The CNG generation station would include six 65 kW natural gas microturbines with 500 kWh battery. The natural gas microturbines would operate for four hours per day and 365 days per year, consuming 17 MMBTU per day and 6,264 MMBTU per year. The CNG fueling station would dispense 632 MMBTU per day and 230,552 MMBTU per year.

Typically, construction activities would take place between 8 a.m. and 5 p.m. (nine hours per day), on Monday through Friday.

Estimated Construction Schedule – Phase 1

Description	Start	End	Hours per Day	Working Days
Site Demolition & Grading	5/01/2025	6/01/2025	5	22
OverEx/Recompact	5/25/2025	6/01/2025	5	5
Concrete Installation for Compound Equipment Foundations	6/01/2025	6/21/2025	5	15
Excavate Compound Trenching	6/21/2025	7/15/2025	5	17
Installation of Electrical Conduits	7/10/2025	8/10/2025	5	22
Bio Retention Area	7/1/2025	8/1/2025	5	24
Set & Install CNG Equipment	1/03/2026	1/14/2026	5	8
Installation of Canopy	10/2/2025	10/30/2025	5	21
Installation of Gas Utility MSA	1/31/2026	2/16/2026	5	11
Electrical Installation	10/30/2025	12/16/2025	5	34
High Pressure Gas Tubing Installation	10/16/2025	11/30/2025	5	32
Gas Release and Pressure Test Inspection for Service Gas Line	10/16/2025	10/17/2025	5	2
High Pressure Testing of Tubing	1/14/2026	1/21/2026	5	6
Installation of Concrete Pavement	11/7/2025	11/21/2025	5	11

SOURCE: Applicant Data Response (February 28, 2025).

Estimated Construction Equipment Usage

Phase	Equipment	Amount	Daily Hours	HP	LF
Site Demolition and Grading	Graders	1	8	148	0.41
Site Demolition and Grading	Excavators	1	8	36	0.38
Electrical Conduit Installation	Tractors/Loaders/Backhoes	1	8	84	0.37
OverEx/Reconnect	Tractors/Loaders/Backhoes	1	8	84	0.37
Concrete Installation for Equipment Foundations	Pumps	1	3	11	0.74
Excavate Compound Trenching	Tractors/Loaders/Backhoes	1	8	84	0.37
Excavate Compound Trenching	Trenchers	1	8	40	0.50
Bio Retention Area	Excavators	1	8	36	0.38
Set & Install CNG Equipment	Cranes	1	5	367	0.29
Set & Install CNG Equipment	Forklifts	1	8	82	0.20
Set & Install CNG Equipment	Generator Sets	1	8	14	0.74
Set & Install CNG Equipment	Welders	1	8	46	0.45
Installation of Canopy	Forklifts	2	8	82	0.20
Installation of Canopy	Generator Sets	1	8	14	0.74
Installation of Gas Utility MSA	Tractors/Loaders/Backhoes	1	8	84	0.37
Installation of Concrete Pavement	Paving Equipment	1	6	89	0.36
Installation of Concrete Pavement	Rollers	1	6	36	0.38
Installation of Concrete Pavement	Tractors/Loaders/Backhoes	1	8	84	0.37

SOURCE: Applicant Data Response (February 28, 2025) and CARB CalEEMod Version 2022.1.

Blythe Ocean Pacific Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Blythe Ocean Pacific
Construction Start Date	5/1/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	8.40
Location	Goodman Slough, East Blythe, CA 92225, USA
County	Riverside-Mojave Desert MDAQMD
City	Unincorporated
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5669
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Gasoline/Service Station	5.00	Pump	0.31	13,500	0.00	0.00	—	—

Other Non-Asphalt Surfaces	14.0	1000sqft	3.21	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.79	0.66	5.29	7.73	0.01	0.25	0.66	0.91	0.23	0.09	0.32	—	1,189	1,189	0.05	0.02	0.83	1,197
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	0.62	5.14	5.69	0.01	0.19	0.17	0.34	0.17	0.04	0.21	—	1,342	1,342	0.05	0.03	0.02	1,353
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.74	1.08	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	184	184	0.01	< 0.005	0.06	186
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.13	0.20	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	30.5	30.5	< 0.005	< 0.005	0.01	30.8

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.79	0.66	5.29	7.73	0.01	0.25	0.66	0.91	0.23	0.09	0.32	—	1,189	1,189	0.05	0.02	0.83	1,197
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.43	0.36	2.87	4.90	0.01	0.11	0.17	0.28	0.10	0.04	0.14	—	858	858	0.03	0.03	0.02	865
2026	0.74	0.62	5.14	5.69	0.01	0.19	0.15	0.34	0.17	0.04	0.21	—	1,342	1,342	0.05	0.03	0.02	1,353
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.11	0.09	0.74	1.08	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	184	184	0.01	< 0.005	0.06	186
2026	0.02	0.02	0.15	0.19	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	0.01	—	41.4	41.4	< 0.005	< 0.005	0.01	41.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.02	0.02	0.13	0.20	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	30.5	30.5	< 0.005	< 0.005	0.01	30.8
2026	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.86	6.86	< 0.005	< 0.005	< 0.005	6.92

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.90	19.4	13.4	55.8	0.02	0.11	0.04	0.15	0.11	0.01	0.12	1.45	2,904	2,906	2.63	0.20	0.32	3,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.72	19.2	14.1	55.5	0.02	0.11	0.04	0.15	0.11	0.01	0.12	1.45	2,935	2,937	2.63	0.21	0.01	3,064
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.2	18.9	9.10	73.8	0.01	0.11	0.05	0.16	0.11	0.01	0.13	1.45	5,082	5,084	14.3	0.70	0.00	5,651

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.95	3.46	1.66	13.5	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	0.24	841	842	2.36	0.12	0.00	936

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.62	0.54	8.58	7.40	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	1,275	1,275	0.03	0.20	0.32	1,336
Area	0.46	0.45	< 0.005	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.41	2.41	< 0.005	< 0.005	—	2.42
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Stationary	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Total	4.90	19.4	13.4	55.8	0.02	0.11	0.04	0.15	0.11	0.01	0.12	1.45	2,904	2,906	2.63	0.20	0.32	3,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.54	0.47	9.29	7.63	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	1,309	1,309	0.03	0.21	0.01	1,371
Area	0.36	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Stationary	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Total	4.72	19.2	14.1	55.5	0.02	0.11	0.04	0.15	0.11	0.01	0.12	1.45	2,935	2,937	2.63	0.21	0.01	3,064
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	11.9	0.17	4.32	25.6	0.00	0.01	0.05	0.06	0.01	0.01	0.03	—	3,454	3,454	11.7	0.70	0.00	3,956
Area	0.41	0.40	< 0.005	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.19	1.19	< 0.005	< 0.005	—	1.19
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Stationary	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Total	16.2	18.9	9.10	73.8	0.01	0.11	0.05	0.16	0.11	0.01	0.13	1.45	5,082	5,084	14.3	0.70	0.00	5,651
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.18	0.03	0.79	4.68	0.00	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	572	572	1.93	0.12	0.00	655
Area	0.07	0.07	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.20	0.20	< 0.005	< 0.005	—	0.20
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.24	0.00	0.24	0.02	0.00	—	0.84
Stationary	0.70	3.35	0.87	8.73	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	269	269	0.41	0.00	0.00	280
Total	2.95	3.46	1.66	13.5	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	0.24	841	842	2.36	0.12	0.00	936

3. Construction Emissions Details

3.1. OverEx/Reconnect (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	290	290	0.01	< 0.005	—	291

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.98	3.98	< 0.005	< 0.005	—	3.99
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.66	0.66	< 0.005	< 0.005	—	0.66
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	39.4	39.4	< 0.005	< 0.005	0.13	39.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.49	0.49	< 0.005	< 0.005	< 0.005	0.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Bio Retention (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.83	1.02	< 0.005	0.03	—	0.03	0.02	—	0.02	—	142	142	0.01	< 0.005	—	142
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.31	9.31	< 0.005	< 0.005	—	9.35
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.54	1.54	< 0.005	< 0.005	—	1.55
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	39.4	39.4	< 0.005	< 0.005	0.13	39.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.35	2.35	< 0.005	< 0.005	< 0.005	2.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Concrete Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.23	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.6	30.6	< 0.005	< 0.005	—	30.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.26	1.26	< 0.005	< 0.005	—	1.26
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.21	0.21	< 0.005	< 0.005	—	0.21
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	39.4	39.4	< 0.005	< 0.005	0.13	39.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Site Demolition and Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	3.89	4.68	0.01	0.20	—	0.20	0.18	—	0.18	—	710	710	0.03	0.01	—	713
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	42.8	42.8	< 0.005	< 0.005	—	43.0
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.09	7.09	< 0.005	< 0.005	—	7.11
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.49	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	78.7	78.7	< 0.005	< 0.005	0.27	79.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.31	4.31	< 0.005	< 0.005	0.01	4.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. High Pressure Testing (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	59.3	59.3	< 0.005	< 0.005	0.01	60.0
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.4	70.4	< 0.005	0.01	< 0.005	73.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.99	0.99	< 0.005	< 0.005	< 0.005	1.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.20

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.16	0.16	< 0.005	< 0.005	< 0.005	0.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Electrical Conduit Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.10	1.91	< 0.005	0.04	—	0.04	0.04	—	0.04	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.5	17.5	< 0.005	< 0.005	—	17.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.90	2.90	< 0.005	< 0.005	—	2.91
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.43	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	68.0	68.0	< 0.005	< 0.005	0.23	68.9
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.7	71.7	< 0.005	0.01	0.19	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.72	3.72	< 0.005	< 0.005	0.01	3.77
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.32	4.32	< 0.005	< 0.005	0.01	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.62
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.72	0.72	< 0.005	< 0.005	< 0.005	0.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Install CNG Equipment (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.57	4.93	5.12	0.01	0.19	—	0.19	0.17	—	0.17	—	1,083	1,083	0.04	0.01	—	1,086
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.7	23.7	< 0.005	< 0.005	—	23.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.93	3.93	< 0.005	< 0.005	—	3.94
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	59.3	59.3	< 0.005	< 0.005	0.01	60.0
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.4	70.4	< 0.005	0.01	< 0.005	73.2

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.22	0.22	< 0.005	< 0.005	< 0.005	0.22
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Install Canopy (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.25	2.27	2.61	< 0.005	0.11	—	0.11	0.10	—	0.10	—	409	409	0.02	< 0.005	—	410
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	23.5	23.5	< 0.005	< 0.005	—	23.6

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	60.6	60.6	< 0.005	< 0.005	0.01	61.3
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.8	71.8	< 0.005	0.01	< 0.005	74.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.56	3.56	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.13	4.13	< 0.005	< 0.005	< 0.005	4.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Install Gas Utility (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.03	1.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	290	290	0.01	< 0.005	—	291
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.75	8.75	< 0.005	< 0.005	—	8.78
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	59.3	59.3	< 0.005	< 0.005	0.01	60.0

Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70.4	70.4	< 0.005	0.01	< 0.005	73.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.85
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.12	2.12	< 0.005	< 0.005	< 0.005	2.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.30	0.30	< 0.005	< 0.005	< 0.005	0.31
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Electrical Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	60.6	60.6	< 0.005	< 0.005	0.01	61.3
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.8	71.8	< 0.005	0.01	< 0.005	74.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.76	5.76	< 0.005	< 0.005	0.01	5.83
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.68	6.68	< 0.005	< 0.005	0.01	6.96
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	0.97
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Gas Release Test (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	60.6	60.6	< 0.005	< 0.005	0.01	61.3
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	71.8	71.8	< 0.005	0.01	< 0.005	74.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.41
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Installation Concrete (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.30	2.71	4.10	0.01	0.11	—	0.11	0.10	—	0.10	—	620	620	0.03	0.01	—	622
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.7	18.7	< 0.005	< 0.005	—	18.8
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.09	3.09	< 0.005	< 0.005	—	3.11
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.48	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.01	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.23	3.23	< 0.005	< 0.005	0.01	3.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Excavate Trenching (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.30	2.39	3.36	< 0.005	0.10	—	0.10	0.09	—	0.09	—	498	498	0.02	< 0.005	—	500
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.2	23.2	< 0.005	< 0.005	—	23.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.84	3.84	< 0.005	< 0.005	—	3.85
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.49	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	78.7	78.7	< 0.005	< 0.005	0.27	79.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.33	3.33	< 0.005	< 0.005	0.01	3.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Gas Tubing Installation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	0.62	0.54	8.58	7.40	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	1,275	1,275	0.03	0.20	0.32	1,336
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.62	0.54	8.58	7.40	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	1,275	1,275	0.03	0.20	0.32	1,336
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	0.54	0.47	9.29	7.63	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	1,309	1,309	0.03	0.21	0.01	1,371

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.54	0.47	9.29	7.63	0.01	0.01	0.04	0.05	0.01	0.01	0.02	—	1,309	1,309	0.03	0.21	0.01	1,371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	2.18	0.03	0.79	4.68	0.00	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	572	572	1.93	0.12	0.00	655
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.18	0.03	0.79	4.68	0.00	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	572	572	1.93	0.12	0.00	655

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Gasoline/Servic	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Gasoline/Servic	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.10	0.10	< 0.005	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.41	2.41	< 0.005	< 0.005	—	2.42
Total	0.46	0.45	< 0.005	0.59	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.41	2.41	< 0.005	< 0.005	—	2.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.06	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.36	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.20	0.20	< 0.005	< 0.005	—	0.20
Total	0.07	0.07	< 0.005	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.20	0.20	< 0.005	< 0.005	—	0.20

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.45	0.00	1.45	0.15	0.00	—	5.08
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.24	0.00	0.24	0.02	0.00	—	0.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.24	0.00	0.24	0.02	0.00	—	0.84

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Total	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Total	3.82	18.4	4.78	47.8	0.01	0.10	0.00	0.10	0.10	0.00	0.10	0.00	1,627	1,627	2.45	0.00	0.00	1,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.70	3.35	0.87	8.73	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	269	269	0.41	0.00	0.00	280
Total	0.70	3.35	0.87	8.73	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	269	269	0.41	0.00	0.00	280

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
OverEx/Reconnect	Site Preparation	5/25/2025	6/1/2025	5.00	5.00	2

Bio Retention	Site Preparation	7/1/2025	8/1/2025	5.00	24.0	6
Concrete Installation	Grading	6/01/2025	6/21/2025	5.00	15.0	3
Site Demolition and Grading	Grading	5/01/2025	6/1/2025	5.00	22.0	1
High Pressure Testing	Building Construction	1/14/2026	1/21/2026	5.00	6.00	13
Electrical Conduit Installation	Building Construction	7/10/2025	8/10/2025	5.00	22.0	5
Install CNG Equipment	Building Construction	1/03/2026	1/14/2026	5.00	8.00	7
Install Canopy	Building Construction	10/2/2025	10/30/2025	5.00	21.0	8
Install Gas Utility	Building Construction	1/31/2026	2/16/2026	5.00	11.0	9
Electrical Installation	Building Construction	10/30/2025	12/16/2025	5.00	34.0	10
Gas Release Test	Building Construction	10/16/2025	10/17/2025	5.00	2.00	12
Installation Concrete	Paving	11/7/2025	11/21/2025	5.00	11.0	14
Excavate Trenching	Trenching	6/21/2025	7/15/2025	5.00	17.0	4
Gas Tubing Installation	Trenching	10/16/2025	11/30/2025	5.00	32.0	11

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
OverEx/Reconnect	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Bio Retention	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Concrete Installation	Pumps	Diesel	Average	1.00	3.00	11.0	0.74
Site Demolition and Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Demolition and Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Electrical Conduit Installation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Install CNG Equipment	Cranes	Diesel	Average	1.00	5.00	367	0.29
Install CNG Equipment	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Install CNG Equipment	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Install CNG Equipment	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Install Canopy	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Install Canopy	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Install Gas Utility	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Installation Concrete	Paving Equipment	Diesel	Average	1.00	6.00	89.0	0.36
Installation Concrete	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Installation Concrete	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Excavate Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Excavate Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Demolition and Grading	—	—	—	—
Site Demolition and Grading	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Demolition and Grading	Vendor	0.00	10.2	HHDT,MHDT
Site Demolition and Grading	Hauling	0.00	20.0	HHDT
Site Demolition and Grading	Onsite truck	0.00	0.00	HHDT
OverEx/Reconnect	—	—	—	—
OverEx/Reconnect	Worker	2.50	18.5	LDA,LDT1,LDT2

OverEx/Reconnect	Vendor	0.00	10.2	HHDT,MHDT
OverEx/Reconnect	Hauling	0.00	20.0	HHDT
OverEx/Reconnect	Onsite truck	0.00	0.00	HHDT
Concrete Installation	—	—	—	—
Concrete Installation	Worker	2.50	18.5	LDA,LDT1,LDT2
Concrete Installation	Vendor	0.00	10.2	HHDT,MHDT
Concrete Installation	Hauling	0.00	20.0	HHDT
Concrete Installation	Onsite truck	0.00	0.00	HHDT
Excavate Trenching	—	—	—	—
Excavate Trenching	Worker	5.00	18.5	LDA,LDT1,LDT2
Excavate Trenching	Vendor	0.00	10.2	HHDT,MHDT
Excavate Trenching	Hauling	0.00	20.0	HHDT
Excavate Trenching	Onsite truck	0.00	0.00	HHDT
Bio Retention	—	—	—	—
Bio Retention	Worker	2.50	18.5	LDA,LDT1,LDT2
Bio Retention	Vendor	0.00	10.2	HHDT,MHDT
Bio Retention	Hauling	0.00	20.0	HHDT
Bio Retention	Onsite truck	0.00	0.00	HHDT
Electrical Conduit Installation	—	—	—	—
Electrical Conduit Installation	Worker	4.32	18.5	LDA,LDT1,LDT2
Electrical Conduit Installation	Vendor	2.21	10.2	HHDT,MHDT
Electrical Conduit Installation	Hauling	0.00	20.0	HHDT
Electrical Conduit Installation	Onsite truck	0.00	0.00	HHDT
Install CNG Equipment	—	—	—	—
Install CNG Equipment	Worker	4.32	18.5	LDA,LDT1,LDT2
Install CNG Equipment	Vendor	2.21	10.2	HHDT,MHDT
Install CNG Equipment	Hauling	0.00	20.0	HHDT
Install CNG Equipment	Onsite truck	0.00	0.00	HHDT

Install Canopy	—	—	—	—
Install Canopy	Worker	4.32	18.5	LDA,LDT1,LDT2
Install Canopy	Vendor	2.21	10.2	HHDT,MHDT
Install Canopy	Hauling	0.00	20.0	HHDT
Install Canopy	Onsite truck	0.00	0.00	HHDT
Install Gas Utility	—	—	—	—
Install Gas Utility	Worker	4.32	18.5	LDA,LDT1,LDT2
Install Gas Utility	Vendor	2.21	10.2	HHDT,MHDT
Install Gas Utility	Hauling	0.00	20.0	HHDT
Install Gas Utility	Onsite truck	0.00	0.00	HHDT
Electrical Installation	—	—	—	—
Electrical Installation	Worker	4.32	18.5	LDA,LDT1,LDT2
Electrical Installation	Vendor	2.21	10.2	HHDT,MHDT
Electrical Installation	Hauling	0.00	20.0	HHDT
Electrical Installation	Onsite truck	0.00	0.00	HHDT
Gas Tubing Installation	—	—	—	—
Gas Tubing Installation	Worker	0.00	18.5	LDA,LDT1,LDT2
Gas Tubing Installation	Vendor	0.00	10.2	HHDT,MHDT
Gas Tubing Installation	Hauling	0.00	20.0	HHDT
Gas Tubing Installation	Onsite truck	0.00	0.00	HHDT
High Pressure Testing	—	—	—	—
High Pressure Testing	Worker	4.32	18.5	LDA,LDT1,LDT2
High Pressure Testing	Vendor	2.21	10.2	HHDT,MHDT
High Pressure Testing	Hauling	0.00	20.0	HHDT
High Pressure Testing	Onsite truck	0.00	0.00	HHDT
Gas Release Test	—	—	—	—
Gas Release Test	Worker	4.32	18.5	LDA,LDT1,LDT2
Gas Release Test	Vendor	2.21	10.2	HHDT,MHDT

Gas Release Test	Hauling	0.00	20.0	HHDT
Gas Release Test	Onsite truck	0.00	0.00	HHDT
Installation Concrete	—	—	—	—
Installation Concrete	Worker	7.50	18.5	LDA,LDT1,LDT2
Installation Concrete	Vendor	0.00	10.2	HHDT,MHDT
Installation Concrete	Hauling	0.00	20.0	HHDT
Installation Concrete	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
OverEx/Reconnect	0.00	0.00	0.80	0.00	—
Bio Retention	0.00	0.00	1.20	0.00	—
Concrete Installation	0.00	0.00	1.20	0.00	—
Site Demolition and Grading	0.00	0.00	1.20	0.00	—

Installation Concrete	0.00	0.00	0.00	0.00	3.21

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	3.21	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Gasoline/Service Station	500	500	500	182,500	50.0	50.0	50.0	18,250
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	10,530	3,510	36,590

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Gasoline/Service Station	0.00	532	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Gasoline/Service Station	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Gasoline/Service Station	2.69	—
Other Non-Asphalt Surfaces	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	CNG	6.00	4.00	1,460	87.0	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	30.7	annual days of extreme heat
Extreme Precipitation	0.75	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth

Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	46.8
AQ-DPM	53.6
Drinking Water	68.1
Lead Risk Housing	83.4
Pesticides	83.1
Toxic Releases	9.23
Traffic	13.2
Effect Indicators	—
CleanUp Sites	76.7
Groundwater	87.9

Haz Waste Facilities/Generators	74.7
Impaired Water Bodies	0.00
Solid Waste	95.4
Sensitive Population	—
Asthma	82.5
Cardio-vascular	98.2
Low Birth Weights	35.4
Socioeconomic Factor Indicators	—
Education	80.3
Housing	65.6
Linguistic	90.9
Poverty	97.7
Unemployment	98.5

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	10.77890414
Employed	19.97946875
Median HI	8.032849994
Education	—
Bachelor's or higher	22.76401899
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	40.90850764
Active commuting	22.2764019

Social	—
2-parent households	4.273065572
Voting	21.89144104
Neighborhood	—
Alcohol availability	69.72924419
Park access	30.64288464
Retail density	22.4560503
Supermarket access	63.64686257
Tree canopy	3.47747979
Housing	—
Homeownership	28.66675221
Housing habitability	50.49403311
Low-inc homeowner severe housing cost burden	85.87193635
Low-inc renter severe housing cost burden	45.78467856
Uncrowded housing	30.12960349
Health Outcomes	—
Insured adults	15.69357115
Arthritis	0.0
Asthma ER Admissions	10.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	9.9
Cognitively Disabled	10.7
Physically Disabled	52.4

Heart Attack ER Admissions	2.1
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	68.5
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	62.5
Elderly	84.9
English Speaking	14.0
Foreign-born	42.6
Outdoor Workers	17.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	69.3
Traffic Density	9.8
Traffic Access	23.0
Other Indices	—
Hardship	89.1
Other Decision Support	—
2016 Voting	21.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	92.0
Healthy Places Index Score for Project Location (b)	18.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Applicant Data Response, February 28, 2025
Construction: Construction Phases	Applicant Data Response, February 28, 2025
Construction: Off-Road Equipment	Applicant Data Response, February 28, 2025
Construction: Architectural Coatings	Phase 2 has no buildings.
Construction: Paving	Applicant Data Response, February 28, 2025
Operations: Vehicle Data	Applicant Data Response, February 28, 2025 and Urban Crossroads Traffic Report
Operations: Energy Use	Applicant Data Response, February 28, 2025 (electrical usage generated by project generators)
Operations: Architectural Coatings	Applicant Data Response, February 28, 2025

Operations: Emergency Generators and Fire Pumps	Applicant Data Response, February 28, 2025
Construction: Dust From Material Movement	Applicant Data Response, February 28, 2025
Operations: Water and Waste Water	Applicant Data Response, February 28, 2025
Operations: Generators + Pumps EF	Applicant Data Response, February 28, 2025 and natural gas generator specifications
Operations: Fleet Mix	Applicant Data Response, February 25, 2025
Operations: Vehicle EF	Applicant Data Response, February 25, 2025 and EMFAC

VGF - H24SE-EPA

Power Generation

ENGINE SPEED (rpm):	1800	NOx SELECTION (g/bhp-hr):	EPA Mobile - Tier 2
DISPLACEMENT (in3):	1462	COOLING SYSTEM:	JW, IC + OC
COMPRESSION RATIO:	8.6:1	INTERCOOLER WATER INLET (°F):	130
IGNITION SYSTEM:	ESM	JACKET WATER OUTLET (°F):	200
EXHAUST MANIFOLD:	Water Cooled	JACKET WATER CAPACITY (gal):	20
COMBUSTION:	Rich Burn, Turbocharged	AUXILIARY WATER CAPACITY (gal):	6
ENGINE DRY WEIGHT (lbs):	8220	LUBE OIL CAPACITY (gal):	56
AIR/FUEL RATIO SETTING:	ESM	MAX. EXHAUST BACKPRESSURE (in. H2O):	15
ENGINE SOUND LEVEL (dBA)	100	MAX. AIR INLET RESTRICTION (in. H2O):	15
		EXHAUST SOUND LEVEL (dBA)	113
FREQUENCY (Hz):	60	PHASE:	3
GENERATOR TYPE:	Synchronous	PHASE ROTATION:	T1-T2-T3

SITE CONDITIONS:

FUEL:	Natural Gas	ALTITUDE (ft):	500
FUEL PRESSURE RANGE (psig):	1.5 - 5	MAXIMUM INLET AIR TEMPERATURE (°F):	100
FUEL HHV (BTU/ft3):	1,035.2	FUEL WKI:	91.8
FUEL LHV (BTU/ft3):	935.8		

SITE SPECIFIC TECHNICAL DATA

POWER RATING	UNITS	110% OVERLOAD SITE DATA (See note 18)	MAX RATING AT 100 °F AIR TEMP	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE OF 100 °F		
				100%	75%	50%
CONTINUOUS ENGINE POWER	BHP	585	530	530	398	266
OVERLOAD	% 2/24 hr	Note 18	10	10	-	-
ELECTRICAL EFFICIENCY (LHV)	%	31.4	31.1	31.1	29.6	26.2
GENERATOR OUTPUT	kWe	415	376	376	283	189
GENERATOR kVA	kVA	415	376	376	283	189
based on 95.2% generator efficiency at 1.0 PF, no auxiliary engine driven equipment						
FUEL CONSUMPTION						
FUEL CONSUMPTION (LHV)	BTU/kWe-hr	10869	10994	10995	11555	13015
FUEL CONSUMPTION (HHV)	BTU/kWe-hr	12023	12162	12163	12782	14397
FUEL FLOW *based on fuel analysis LHV*	SCFM	80	74	74	58	44
HEAT REJECTION						
JACKET WATER (JW)	BTU/hr x 1000	1294	1212	1212	1017	827
LUBE OIL (OC)	BTU/hr x 1000	207	205	205	200	194
INTERCOOLER (IC)	BTU/hr x 1000	164	132	132	71	34
EXHAUST	BTU/hr x 1000	1269	1145	1145	868	623
RADIATION	BTU/hr x 1000	174	171	171	162	151
EMISSIONS (CATALYST OUT):						
NOx (NO + NO2)	g/kWb-hr			EPA	Mobile	Tier 2
CO	g/kWb-hr			EPA	Mobile	Tier 2
THC	g/kWb-hr			EPA	Mobile	Tier 2
NMHC	g/kWb-hr			EPA	Mobile	Tier 2
NM,NEHC (VOC)	g/kWb-hr			EPA	Mobile	Tier 2
CO2	g/kWb-hr	640	648	648	682	768
AIR INTAKE / EXHAUST GAS						
INDUCTION AIR FLOW	SCFM	884	810	810	640	482
EXHAUST GAS MASS FLOW	lb/hr	3873	3551	3550	2805	2111
EXHAUST GAS FLOW *at exhaust temp, 14.5 psia*	ACFM	2764	2519	2518	1941	1406
EXHAUST TEMPERATURE	°F	1146	1136	1136	1097	1039

HEAT EXCHANGER SIZING[12]			
TOTAL JACKET WATER CIRCUIT (JW)	BTU/hr x 1000	1467	1374
TOTAL AUXILIARY WATER CIRCUIT (IC + OC)	BTU/hr x 1000	421	382

COOLING SYSTEM WITH ENGINE MOUNTED WATER PUMPS		
JACKET WATER PUMP MIN. DESIGN FLOW	GPM	130
JACKET WATER PUMP MAX. EXTERNAL RESTRICTION	psig	20
AUX WATER PUMP MIN. DESIGN FLOW	GPM	35
AUX WATER PUMP MAX. EXTERNAL RESTRICTION	psig	12

All data provided per the condtions listed in the notes section on page three.

Data Generated by EngCalc Program Version 5.0 INNIO Waukesha Gas Engines, Inc.

12/4/2024 4:04 PM

FUEL COMPOSITION

HYDROCARBONS:		Mole or Volume %
Methane	CH4	93
Ethane	C2H6	4
Propane	C3H8	1
Iso-Butane	I-C4H10	0
Normal Butane	N-C4H10	0
Iso-Pentane	I-C5H12	0
Normal Pentane	N-C5H12	0
Hexane	C6H14	0
Heptane	C7H16	0
Ethene	C2H4	0
Propene	C3H6	0
	SUM HYDROCARBONS	98
NON-HYDROCARBONS:		
Nitrogen	N2	0
Oxygen	O2	0
Helium	He	0
Carbon Dioxide	CO2	2
Carbon Monoxide	CO	0
Hydrogen	H2	0
Water Vapor	H2O	0
	TOTAL FUEL	100

FUEL:	Natural Gas
FUEL PRESSURE RANGE (psig):	1.5 - 5
FUEL WKI:	91.8
FUEL SLHV (BTU/ft3):	919.50
FUEL SLHV (MJ/Nm3):	36.16
FUEL LHV (BTU/ft3):	935.78
FUEL LHV (MJ/Nm3):	36.80
FUEL HHV (BTU/ft3):	1035.15
FUEL HHV (MJ/Nm3):	40.71
FUEL DENSITY (SG):	0.60

Standard Conditions per ASTM D3588-91 [60°F and 14.696psia] and ISO 6976:1996-02-01[25, V(0;101.325)].
Based on the fuel composition, supply pressure and temperature, liquid hydrocarbons may be present in the fuel. No liquid hydrocarbons are allowed in the fuel. The fuel must not contain any liquid water. Waukesha recommends both of the following:
1) Dew point of the fuel gas to be at least 20°F (11°C) below the measured temperature of the gas at the inlet of the engine fuel regulator.
2) A fuel filter separator to be used on all fuels except commercial quality natural gas.
Refer to the 'Fuel and Lubrication' section of 'Technical Data' or contact the Waukesha Application Engineering Department for additional information on fuels, or LHV and WKI* calculations.
* Trademark of INNIO Waukesha Gas Engines Inc.

FUEL CONTAMINANTS

Total Sulfur Compounds	0	% volume
Total Halogen as Chloride	0	% volume
Total Ammonia	0	% volume
Siloxanes		
Tetramethyl silane	0	% volume
Trimethyl silanol	0	% volume
Hexamethyldisiloxane (L2)	0	% volume
Hexamethylcyclotrisiloxane (D3)	0	% volume
Octamethyltrisiloxane (L3)	0	% volume
Octamethylcyclotetrasiloxane (D4)	0	% volume
Decamethyltetrasiloxane (L4)	0	% volume
Decamethylcyclopentasiloxane (D5)	0	% volume
Dodecamethylpentasiloxane (L5)	0	% volume
Dodecamethylcyclohexasiloxane (D6)	0	% volume
Others	0	% volume

Total Sulfur Compounds	0 µg/BTU
Total Halogen as Chlorid	0 µg/BTU
Total Ammonia	0 µg/BTU
Total Siloxanes (as Si)	0 µg/BTU

Calculated fuel contaminant analysis will depend on the entered fuel composition and selected engine model.

NOTES

1. All data is based on engines with standard configurations unless noted otherwise.

2. Power rating is adjusted for fuel, site altitude, and site air inlet temperature, in accordance with ISO 3046/1 with tolerance of ± 3%.

3. Fuel consumption is presented in accordance with ISO 3046/1 with a tolerance of -0 / +5% at maximum rating. Fuel flow calculation based on fuel LHV and fuel consumption with a tolerance of -0/+5 %. For sizing piping and fuel equipment, it is recommended to include the 5% tolerance.

4. Heat rejection tolerances are ± 30% for radiation, and ± 8% for jacket water, lube oil, intercooler, and exhaust energy.

5. Emission levels for engines with Waukesha supplied 3-way catalyst are given at catalyst outlet flange. For all other engine models, emission levels are given at engine exhaust outlet flange prior to any after treatment. Values are based on a new engine operating at indicated site conditions, and adjusted to the specified timing and air/fuel ratio at rated load. Catalyst out emission levels represent emission levels the catalyst is sized to achieve. Manual adjustment may be necessary to achieve compliance as catalyst/engine age. Catalyst-out emission levels are valid for the duration of the engine warranty. Emissions are at an absolute humidity of 75 grains H2O/lb (10.71 g H2O/kg) of dry air. Emission levels may vary subject to instrumentation, measurement, ambient conditions, fuel quality, and engine variation. Engine may require adjustment on-site to meet emission values, which may affect engine performance and heat output. NOx, CO, THC, NMHC, CO2, and CO2e emission levels are listed as a not to exceed limit, all other emission levels are estimated. CO2 emissions based on EPA Federal Register/Vol. 74, No. 209/Friday, October 30, 2009 Rules and Regulations 56398, 56399 (3) Tier 3 Calculation Methodology, Equation C-5.

6. Air flow is based on undried air with a tolerance of ± 7%.

7. Exhaust temperature given at engine exhaust outlet flange with a tolerance of ± 50°F (28°C).

8. Exhaust gas mass flow value is based on a "wet basis" with a tolerance of ± 7%.

9. Inlet air restrictions based on full rated engine load. Exhaust backpressure based on 160 PSI BMEP and 1800 RPM. Refer to the engine specification section of Waukesha's standard technical data for more information.

10. Cooling circuit capacity, lube oil capacity, and engine dry weight values are typical.

11. Fuel must conform to Waukesha's "Gaseous Fuel Specification" S7884-7 or most current version. Fuel may require treatment to meet current fuel specification.

12. Heat exchanger sizing values given as the maximum heat rejection of the circuit, with applied tolerances and an additional 5% reserve factor.

13. Fuel volume flow calculation in english units is based on 100% relative humidity of the fuel gas at standard conditions of 60°F and 14.696 psia (29.92 inches of mercury; 101.325 kPa).

14. Fuel volume flow calculation in metric units is based on 100% relative humidity of the fuel gas at a combustion temperature of 25°C and metering conditions of 0°C and 101.325 kPa (14.696 psia; 29.92 inches of mercury). This is expressed as [25, V(0;101.325)].

15. Engine sound data taken with the microphone at 1 m (3.3 ft) from the side of the engine at the approximate front-to-back centerline. Microphone height was at intake manifold level. Engine sound pressure data may be different at front, back and opposite side locations. Exhaust sound data taken with microphone 1 meter (3.3 ft) away and 1 meter (3.3 ft) to the side of the exhaust outlet.

16. Due to variation between test conditions and final site conditions, such as exhaust configuration and background sound level, sound pressure levels under site conditions may be different than those tabulated above.

17. Cooling system design flow is based on minimum allowable cooling system flow. Cooling system maximum external restriction is defined as the allowable restriction at the minimum cooling system flow.

18. Continuous Power Rating: The highest load and speed that can be applied 24 hours per day, seven days per week, 365 days per year except for normal maintenance at indicated ambient reference conditions and fuel. It is permissible to operate the engine at the indicated overload power, for two hours in every 24 hour period.

19. emPact emission compliance available for entire range of operable fuels; however, fuel system and/or O2 set point may need to be adjusted in order to maintain compliance. VHP emPact particulate emissions measured as condensable PM2.5 per 40 CFR Part 1065 gravimetric reference method.

20. In cold ambient temperatures, heating of the engine jacket water, lube oil and combustion air may be required. See Waukesha Technical Data.

21. Available Turndown Speed Range refers to the constant torque speed range available. Reduced power may be available at speeds outside of this range. Contact application engineering.

SPECIAL REQUIREMENTS

Natural Gas Generators Emissions

Generation Capacity	390	kW
Daily Generation	1,560	kWh/day
Annual Generation	569,400	kWh/year
Annual Fuel Use	6,264	MMBtu/year
Average Hours/ Day	4	hrs
Daily Fuel Use	17	MMBtu/day
Hourly Fuel Use	4.3	MMBtu/hr

Source	Pollutant	lbs/MMBtu Emission Factor	(lbs/day) Daily Emissions	(tons/year) Annual Emissions	g/hp-hr Emission Factor	(lbs/day) Daily Emissions	(tons/year) Annual Emissions
USEPA	ROG	0.011	0.19	0.03	5.47	18.4	3.35
USEPA	NOx	0.32	5.49	1.00	1.42	4.78	0.87
USEPA	SO2	0.0034	0.06	0.01	1.87E-03	0.01	1.14E-03
USEPA	PM10	0.0019	0.03	0.01	0.03	0.10	0.02
USEPA	PM2.5	0.0019	0.03	0.01	0.03	0.10	0.02
USEPA	CO	0.082	1.41	0.26	14.2	47.8	8.73
Manufactur	CO2	42.34	1,627	297	484	1,627	269
USEPA	CH4	8.60E-03	0.33	0.06	0.73	2.45	0.41
USEPA	N2O	3.00E-03	0.12	0.02			

Source: USEPA AP-42 Chapter Three, Section 1, Stationary Gas Turbines

Source: CalEEMod, Version 2022.1.1.29

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: Air District

Region: Mojave Desert AQMD

Calendar Year: 2026

Season: Annual

Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Y	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	Trips	NOx_RUNE	NOx_IDLE	PM2.5_RUI	PM2.5_IDL	PM2.5_PM	PM2.5_PM	PM10_RUN	PM10_IDLI	PM10_PMT	PM10_PME	CO2_RUNI	CO2_IDLE	CH4_RUNI	CH4_IDLE	N2O_RUNI	N2O_IDLE	ROG_RUNI	ROG_IDLE	TOG_RUNI	TOG_IDLE	NH3_RUNI	CO_RUNEX	CO_IDLEX
Natural Gas										0.309747	3.891239	0.000482	0.010681	0.006728	0.035834	0.000513	0.011616	0.026911	0.102382	1650.838	2968.714	2.042959	10.39436	0.336534	0.605192	0.029336	0.148515	2.085149	10.60821	0.984223	24.68469	20.79981
Mojave De	2026	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	1.127618	48.0423	48.0423	5.78468	0.040581	7.666661	0.000862	0.029051	0.003	0.014599	0.000938	0.031596	0.012	0.04171	701.3175	6724.43	0.446537	17.63654	0.142968	1.370819	0.00638	0.251991	0.455723	17.99939	1.06	0.956815	57.98844
Mojave De	2026	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	3.45207	133.2354	133.2354	17.70912	0.060522	7.826235	0.000736	0.025245	0.003	0.014599	0.0008	0.027456	0.012	0.04171	740.1867	6877.472	0.417734	19.60675	0.150892	1.402018	0.005969	0.280142	0.426328	20.01013	1.06	1.237923	49.40653
Mojave De	2026	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	1.77975	74.81483	74.81483	9.130116	0.040461	7.666661	0.000859	0.029051	0.003	0.014596	0.000935	0.031596	0.012	0.041703	713.2331	6859.59	0.444392	17.63654	0.145397	1.398372	0.006349	0.251991	0.453535	17.99939	1.06	0.937714	57.98844
Mojave De	2026	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	5.167582	268.42	268.42	26.5097	0.045786	7.7202	0.000823	0.027774	0.003	0.014595	0.000896	0.030207	0.012	0.041701	715.4535	6852.876	0.435528	18.29758	0.14585	1.397004	0.006223	0.261436	0.444488	18.67402	1.06	1.014134	55.10907
Mojave De	2026	T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	1.439328	292.9077	292.9077	33.07576	0.248686	65.8867	0.001441	0.182777	0.009	0.024826	0.001567	0.198786	0.036	0.070932	1049.946	47183.49	0.830206	175.8776	0.214038	9.618663	0.011862	2.512944	0.847286	179.496	1.06	3.650532	349.9048
Mojave De	2026	T7 POLA Class 8	Aggregate	Aggregate	Natural Gas	2.735714	341.5429	341.5429	44.75628	0.146311	20.79375	0.00161	0.078794	0.009	0.024941	0.001752	0.085696	0.036	0.07126	1011.962	16284.25	0.846756	47.83436	0.206295	3.319651	0.012098	0.683459	0.864176	48.81847	1.06	2.151782	157.278
Mojave De	2026	T7 Public Class 8	Aggregate	Aggregate	Natural Gas	6.605954	318.0434	318.0434	33.88854	0.246419	7.603821	0.001403	0.021685	0.009	0.02649	0.001526	0.023585	0.036	0.075685	1088.885	5825.844	0.825932	20.08257	0.221976	1.187636	0.011801	0.28694	0.842924	20.49573	1.06	4.132385	41.69469
Mojave De	2026	T7 Single Concrete/Transit M	Aggregate	Aggregate	Natural Gas	1.250543	79.70129	79.70129	11.78012	0.266507	11.72035	0.001338	0.033645	0.009	0.024965	0.001455	0.036592	0.036	0.071328	1066.119	8775.797	0.821682	30.87509	0.217335	1.789004	0.01174	0.441144	0.838587	31.51029	1.06	4.882012	64.754
Mojave De	2026	T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	3.479615	178.4761	178.4761	32.77798	0.422017	12.13945	0.000978	0.023648	0.009	0.024842	0.001064	0.02572	0.036	0.070977	1172.39	8993.598	0.784959	36.04946	0.238999	1.833404	0.011216	0.515076	0.801108	36.79112	1.06	8.37824	42.21527
Mojave De	2026	T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	7.201768	386.3168	386.3168	67.84065	0.35874	12.00295	0.001124	0.026904	0.009	0.024796	0.001223	0.029261	0.036	0.070844	1137.887	8983.642	0.799488	34.36415	0.231966	1.831374	0.011423	0.490996	0.815936	35.07114	1.06	6.959816	49.55621
Mojave De	2026	T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	2.047026	132.5715	132.5715	9.416319	0.442827	3.767975	0.000442	0.000997	0.009	0.0735	0.00048	0.001084	0.036	0.21	974.4701	6808.057	1.252815	9.041628	0.198652	1.387867	0.0179	0.129187	1.278589	9.227645	0.58	7.831172	49.33752
Mojave De	2026	T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	16.76777	1174.503	1174.503	243.6357	0.32354	22.05108	0.001198	0.055152	0.009	0.024711	0.001303	0.059983	0.036	0.070602	1119.906	16705.23	0.80352	61.05085	0.2283	3.405469	0.011481	0.872296	0.820051	62.30687	1.06	6.161166	103.7477
Mojave De	2026	UBUS	Aggregate	Aggregate	Natural Gas	104.4971	13792.72	13792.72	417.9883	0.321466	0	0.00031	0	0.006391	0.038459	0.000324	0	0.025564	0.109884	1803.419	0	2.358912	0	0.367639	0	0.033887	0	2.407641	0	0.97	29.62309	0

Appendix C:

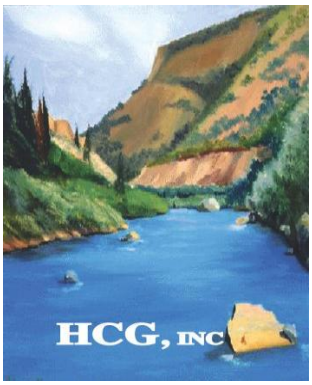
Energy Technical Report

The RCH Group, March 2025

Energy Technical Report
Blythe Ocean Pacific

Blythe, California

Prepared For:



Prepared By:

RCH GROUP
planning & environmental consulting

March 2025

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Blythe Ocean Pacific Energy Technical Report

1.0 INTRODUCTION

This document presents a technical report for the energy analysis associated with the Ocean Pacific Project (the "project") in the City of Blythe, California. This document provides an overview of the existing energy conditions at the project site, the energy regulatory framework, and an analysis of energy impacts in accordance with the State CEQA Guidelines Appendix G Checklist.

2.0 PROJECT OVERVIEW

The project would construct a compressed natural gas (CNG) fueling station and operate six natural gas microturbines on approximately 4.80 acres within a property of 78.48 acres. Construction is expected to occur from May 1, 2025 through February 15, 2026.

The proposed project would receive natural gas from SoCal Gas's High Pressure Main. There are existing gas pipelines north of the project site on the northern side of the Goodman Slough on the adjacent WattEV property and includes a connection to that source to supply natural gas.

The CNG generation station would include six 65 kilowatts (kW) natural gas microturbines with a 500 kilowatts-hour (kWh) battery. The natural gas microturbines would operate for four hours per day and 365 days per year, consuming 17 million British thermal units (MMBTU) per day and 6,264 MMBTU per year. The CNG fueling station would dispense 632 MMBTU per day and 230,552 MMBTU per year.

The CNG fueling station is anticipated to generate a net total of 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 morning peak hour trips and 25 afternoon peak hour trips. The microturbines would produce annual electricity of approximately 1,709,170 kilowatts-hour (kWh) to be used for project operations.

The project requires site plan approval from the City of Blythe and is subject to environmental review under the California Environmental Quality Act (CEQA).

3.0 ANALYSIS METHODOLOGY

The energy analysis quantifies project construction and operational energy usage based on project-specific details from project engineers regarding energy usage for the CNG fueling station and generators. The project would generate electricity and consume natural gas through the use of the generators.

The Energy Technical Report aligns with the CEQA Guidelines Appendix G checklist questions for Energy. The report provides current information on energy setting, encompassing the consumption of various energy resources such as electricity and petroleum fuels within the

project. Regulatory setting information at the federal, state, and local levels related to energy and energy conservation is included. This report segments energy use calculations into construction and operational activities, considering different energy consumption types such as petroleum fuels and electricity. A comparative analysis has been conducted to evaluate the project's energy use estimates against statewide, regional, and local energy use data. This assessment determines if the project leads to wasteful, inefficient, or unnecessary energy consumption. Furthermore, the project's energy use estimates are compared to relevant state and local plans for renewable energy and energy efficiency to ensure consistency.

4.0 EXISTING CONDITIONS

Electricity

Electrical service to the facility is provided by Southern California Edison. In 2023, statewide electricity generation was 215,625 gigawatt hours (GWh) of electric power.[1] The microturbines would produce annual electricity of approximately 1,709,170 kWh to be used for project operations.

Petroleum Based Fuels

The project would consume petroleum-based fuels during construction for onsite heavy equipment and vehicles (worker automobiles and haul trucks). In 2023, at fueling stations within the state, California gasoline sales were approximately 11,685 million gallons, diesel fuel sales were approximately 2,016 million gallons, and natural gas sales were approximately 85.65 million gallons.[2]

Natural Gas

Natural gas service to the site is provided by Southern California Edison. The project would require natural gas consumption (a total of 236,816 million cubic feet) for the operation of the six 65 kW natural gas generators and fuel station. In 2023, California statewide natural gas consumption was approximately 2,087,461 million cubic feet.[3]

[1] California Energy Commission, Electric Generation Capacity and Energy, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/electric-generation-capacity-and-energy

[2] California Energy Commission, California Retail Fuel Outlet Annual Reporting Results, https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

[3] U.S. Energy Information Administration, Natural Gas Consumption by End Use. Reporting Results, https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm

5.0 REGULATORY SETTING

Federal

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this Act, the National Highway Traffic and Safety Administration, part of the U.S. Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. EPA calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. The CAFE values are a weighted harmonic average of the EPA city and highway fuel economy test results. Based on information generated under the CAFE program, DOT is authorized to assess penalties for the Energy Independence and Security Act of 2007 (described below).

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. The EPAct includes several parts intended to build an inventory of alternative fuel vehicles in large, centrally-fueled fleets in metropolitan areas. The EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty alternative fuel vehicles. In addition, financial incentives are also included in The EPAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of alternative fuel vehicles. States are also required by The EPAct to consider a variety of incentive programs to help promote alternative fuel vehicles. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds on progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

State

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required the CEC to: "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (Public Resources Code Section 25301(a)). This work culminated in the Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every two years and an update every other year. The 2022 IEPR Update is the most recent IEPR publication, and the most recent version was adopted May 10, 2022. The 2021 IEPR and 2022 Update provide a summary of priority energy issues currently facing the State, outlining strategies and recommendations to further the State's goal of ensuring reliable, affordable, and environmentally-responsible energy sources. Electricity sector trends are analyzed, as well as building decarbonization and energy efficiency, zero-emission vehicles, energy equity, climate change adaptation, electricity reliability in Southern California, natural gas assessment, and electricity, natural gas, and transportation energy demand forecasts.[4]

Senate Bill 1078, 350 and 100: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002) establishes a renewable portfolio standard (RPS) for electricity supply. The RPS required that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 20 percent of their supply from renewable sources by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50 percent RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

Senate Bill X1-2: California Renewable Energy Resources Act

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice

[4] California Energy Commission (CEC). 2022. 2022 Integrated Energy Policy Report Update. March 2022.

aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The State's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 Energy Action Plan II, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues and research and development activities. CEC recently adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

Assembly Bill 1007: State Alternatives Fuel Plan

Assembly Bill (AB) 1007 (Chapter 371, Statues of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with the California Air Resources Board (CARB) and in consultation with other State, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce greenhouse gas (GHG) emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32, Senate Bill 32, and Climate Change Scoping Plan and Update

Reducing GHG emissions in California has been the focus of the state government for approximately two decades. GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to

40 percent below 1990 levels by 2030 (SB 32 of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050.

California's 2022 Climate Change Scoping Plan, prepared by CARB, outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and substantially advance toward the state's 2050 climate goals. It identifies the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). In 2020, electricity generation accounted for 18 percent of the State's GHG emissions.[5]

California plans to significantly reduce GHG emissions from the energy sector through the development of renewable electricity generation in the form of solar, wind, geothermal, hydraulic, and biomass generation. The State met the SB X1-2-33 percent renewable energy target by 2020 and will continue to increase statewide renewable energy to 60 percent by 2030, as directed by SB 100. Additionally, the State will further its climate goals through improving the energy efficiency of residential and non-residential buildings by continual updates (i.e., every three years) to the Energy Code, which contains mandatory and prescriptive energy efficiency standards for all new construction.

Low Carbon Fuel Standard

Under the Climate Change Scoping Plan, the CARB identified the low carbon fuel standard (LCFS) as one of the nine discrete early action measures to reduce California's GHG emissions. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits. In 2018, the CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes. The program is based on the principle that each fuel has "life cycle" GHG emissions and the life cycle assessment examines the GHG emissions associated with the production, transportation, and use of a given fuel. The life cycle assessment includes direct emissions associated with producing, transporting, and using the fuels, as well as significant indirect effects on GHG emissions, such as changes in land use for some biofuels. The carbon

[5] California Air Resources Board, December 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf

intensity scores assessed for each fuel are compared to a declining CI benchmark for each year. Low carbon fuels below the benchmark generate credits, while fuels above the CI benchmark generate deficits. Credits and deficits are denominated in metric tons of GHG emissions. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets the LCFS carbon intensity standards, or benchmarks, for each annual compliance period. A deficit generator meets its compliance obligation by ensuring that the amount of credits it earns or otherwise acquires from another party is equal to, or greater than, the deficits it has incurred.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 EV chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018 and requires that the California Energy Commission working with the State Air Resources Board prepare biannual assessments of the statewide EV charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero emission vehicles on California roads by 2030.

Executive Order N-79-20

The California Governor issued Executive Order N-79-20 on September 23, 2020 that requires all new passenger cars and trucks and commercial drayage trucks sold in California to be zero-emissions by the year 2035 and all medium- heavy-duty vehicles (commercial trucks) sold in the state to be zero-emission by 2045 for all operations where feasible. Executive Order N-79-20 also requires all off-road vehicles and equipment to transition to 100 percent zero-emission equipment, where feasible by 2035.

Senate Bill 1020

Senate Bill 1020 (SB 1020) was adopted September 16, 2022 and would speed up the timeline retail electricity is supplied by renewable energy sources over the prior adoption timelines provided in SB 100, SB 350, SB 1078, SB 107, and SB X1-2. SB 1020 requires that retail sales of electricity are from renewable energy resources and zero-carbon resources supply 90 percent by December 31, 2035, 95 percent by December 31, 2040, and 100 percent by December 31, 2045.

Local

City of Blythe General Plan 2025

The City of Blythe General Plan 2025 Energy Resources Element addresses the management and utilization of energy resources in alignment with the city's goals for sustainable development.[6] The Energy Resources Element outlines key policies and strategies aimed at promoting efficient and responsible energy use within the City of Blythe. This Energy Resources Element includes the following applicable policy:

26. Policy: Conserve scarce or nonrenewable energy resources.

6.0 IMPACT ANALYSIS

The project would consume energy in three primary forms:

- Petroleum-based fuels (gasoline and diesel) to power construction equipment, haul trucks, and worker vehicles during project construction;
- CNG for the fueling station for passenger vehicles and trucks; and
- Natural gas to power the natural gas generators to provide project electricity (i.e., consumed onsite and any additional would be sold to adjacent property).

Construction Energy Usage

Project construction would require two phases of construction consisting of activities such as site preparation, grading, fueling station construction, and concrete installation. The project site does not include unusual challenges that would require unusually high energy usage and grading of the project site would be balanced and would not require the import or export of soils using heavy trucks.

Based on California Air Pollution Officers Association (CAPCOA) CalEEMod (California Emissions Estimator Model Version 2022.1)[7] results for project construction and standard fuel consumption conversion factors, construction would require approximately 3,173 gallons of diesel[8] and 580 gallons of gasoline[9]. This includes all off-road construction equipment, hauling, vendor, and worker trips over the construction period. Some electricity may be used (e.g., for

[6] City of Blythe, *General Plan 2025 Energy Resources Element*, March, 2007 https://www.cityofblythe.ca.gov/DocumentCenter/View/302

[7] California Air Pollution Officers Association, *California Emissions Estimator Model User Guide Version 2022.1*, April 2022, http://www.caleemod.com/

[8] Fuel usage is estimated using the CalEEMod output for CO_2, and a 10.19 kg of CO2 per gallon conversion factor for diesel fuel, https://www.eia.gov/environment/emissions/co2_vol_mass.php

[9] Fuel usage is estimated using the CalEEMod output for CO_2, and a 9.46 kg of CO2 per gallon conversion factor for gasoline fuel, https://www.eia.gov/environment/emissions/co2_vol_mass.php

power tools and work lighting). While this electricity usage cannot be quantified at this time, it is anticipated to be relatively minor. Natural gas would not be used during construction. Because of all the operational energy benefits of the project, project energy consumption would not be considered wasteful, inefficient, or unnecessary. Therefore, the consumption of fuel and other energy during project construction would have a less-than-significant impact on energy resources.

Operational Energy Usage

The CNG generation station would include six 65 kW natural gas microturbines with a 500 kWh battery. The natural gas microturbines would operate for four hours per day and 365 days per year, consuming 17 million MMBTU per day and 6,264 MMBTU per year. The CNG fueling station would dispense 632 MMBTU per day and 230,552 MMBTU per year.

The CNG fueling station is anticipated to generate a net total of 501 two-way vehicle trips per day (214 passenger vehicles and 287 truck trips) with 43 morning peak hour trips and 25 afternoon peak hour trips. The microturbines would produce annual electricity of approximately 1,709,170 kWh to be used for project operations. Any excess electricity generated and not needed for project operations would be sold to the adjacent WattEV charging facility.

The project would decrease gasoline and diesel fuel consumption during project operations through the use of natural gas generators and a CNG fueling station for use by passenger vehicles and trucks. This would encourage the use of CNG and effectively reduce regional dependence on gasoline and diesel-powered vehicles, leading to a decrease in the consumption of petroleum-based fuels for transportation purposes.

Full buildout of the project would provide an energy benefit during long-term operations, reducing diesel and gasoline fuel usage by providing CNG infrastructure and would continue reducing regional fuel usage for the lifetime of the project. Thus, project energy consumption would not be considered wasteful, inefficient, or unnecessary as the project would have many energy benefits. Therefore, the consumption of fuel and other energy during project operations would have a less-than-significant impact on energy resources.

Impacts to State or Local Energy Plans

The Regulatory Setting of this Energy Technical Report describes the regulatory framework for energy usage and conservation at the federal, State, and local level. There are no applicable energy efficiency or renewable energy plans applicable to the project, however, the City of Blythe 2025 General Plan contains policies related to energy conservation. While the project would consume natural gas to create CNG and electricity, it would reduce diesel and gasoline fuel usage by providing CNG infrastructure and would not increase electricity use from the grid. Furthermore, the project would only consume natural gas as needed for CNG and electricity production,

therefore, it would not be wasteful, inefficient, or unnecessary and would not hinder renewable energy or energy efficiency efforts. Therefore, the project would not conflict with or obstruct the 2025 General Plan and impacts would be less than significant.

Impacts to Energy Production Facilities

The project includes the construction of new energy production facilities and infrastructure, which have been analyzed in this report and determined to be less than significant. Therefore, this impact would be less than significant.

7.0 CONCLUSIONS

The project would require the consumption of petroleum-based fuels during construction and electricity and natural gas during long-term operations (the project is expected to generate its required electricity). The project would reduce regional gasoline and diesel fuel consumption for the lifetime of the project. Project energy consumption would not be considered wasteful, inefficient, or unnecessary. The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. All energy impacts would be less than significant for CEQA purposes.