Certarus Safety, Operations & RegulatoryCompliance

# RNG Virtual Pipeline Services November 26, 2024





# **Table of Contents**

Executive Summary	3
Experience	
· Emergency Outages & Utility Support	
Safety	
Certification / Compliance	9
Licenses and Registration Requirements	11
nsurance Requirements	13
Permits for Hazardous Materials and Special Operations	13
RNG Partners and Testimonies	15



# **Executive Summary**

Certarus has been leading the transition to clean energy fuel since 2012.

We deliver low carbon energy solutions that help customers improve environmental performance and lower operating costs.

Through our integrated and sustainable Energy-as-a-Service platform, we leverage the latest technology to safely deliver compressed natural gas (CNG) and hydrogen to industrial and commercial customers and offer last mile logistics support for renewable natural gas (RNG) developers. With the largest fleet of advanced carbon fiber trailers in the world, our compression and transportation network provide a mobile energy distribution solution that ensures a safe and reliable flow of energy without the need for pipeline infrastructure. As customers and communities look for environmentally responsible energy solutions our rapidly growing platform plays a critical role in building the energy supply chain across North America by connecting natural gas, RNG, and hydrogen to new markets.

By enabling customers to reduce consumption of higher emission fuels like diesel, propane, and waste fuel oil – we help bulk fuel users lower their carbon emissions and cost-effectively achieve their Environmental, Social & Governance (ESG) goals.

Certarus has the largest CNG, RNG, and Hydrogen platform with over \$715M invested by EOY 2024.

- Largest trailer fleet in the world most experience with 80,000+ MCF of gas moved per day and flexible redundancy with trailers in case of issues.
  - o 869+ Trailers by EOY 2024
  - o Annual standing order of an estimated 120 trailers
  - o Largest order of trailers with Hexagon Agility, \$54M USD
  - o Trailer capacity 375 475 MMBtu per trailer
- 374 Pressure Reduction Systems decanting equipment utilized to drop pressure and increase temperature for injection.
- 50+ Compressors loading compressors utilized to load RNG into trailers at 4,000 psi.
- 24/7 Logistics Our logistics team directs activity out of our centralized control center, where they monitor trailer volumes and coordinate dispatching to customer sites to ensure an uninterrupted flow of clean-burning fuel without any intervention or effort required by our customers.
- Experienced engineering support Certarus has 25+ full-time engineers with vast experience around compression, decompression, and the design / buildout of hubs.
- Health, Safety & Environment (HSE) support The goal of our Health, Safety & Environment (HSE) policy is to
  create an incident-free workplace. We take this goal seriously, and we expect each of our employees and
  contractors to take responsibility for maintaining and improving our safety performance. This applies equally
  across the company, from the boardroom to the maintenance shop. We are all accountable for our overall HSE
  initiatives.

Sincerely,

#### **Mel Lara**

RNG Strategic Account Manager T: 1-281-507-8898 mlara@certarus.com



# **Experience**

#### The Largest Integrated CNG, RNG & Hydrogen Platform in North America



**327,000+** Deliveries Completed

**92 Bcf** CNG Safely Delivered 1,226,000 Metric Tons CO<sub>2</sub> Displaced

# **Emergency Outages & Utility Support**

Certarus has extensive experience supporting utility companies and pipeline operators. From peak shaving and pipeline pigging, to planned and emergency outages – we provide rapid response to continue critical services for homes and businesses. We also provide incremental gas to pipeline-connected clients while working with utilities during maintenance and emergency outages. Some of our Utility customers include:



#### **FortisBC**

#### **Enbridge T-South pipeline**

When the Enbridge T-South pipeline near Prince George ruptured in October 2018, FortisBC customers were faced with the possibility of limited supply throughout the winter. Certarus was able to support FortisBC and supply up to 8,000 MMBTU/day, every day, for three straight months while Enbridge made repairs.





#### **Atmos Energy**

#### **West Texas**

During winter storm Uri, much of the natural gas infrastructure in Texas was pushed beyond its limits. Certarus was able to mobilize and provide emergency CNG of up to 1,000/MMBTU day for the duration of the storm keeping critical services online.



#### **National Grid**

#### **New York**

Peak shaving solutions are extremely critical to the broader Northeast gas distribution market. Certarus was able to safely provide up to 17,600 MMBTU/day of CNG to ensure existing service standards are met and that the needs of the end clients were satisfied.



#### **ATCO Gas**

#### Jasper, Alberta

The town of Jasper, Alberta required an emergency supply of natural gas due to rising flood waters impacting pipeline infrastructure. Certarus mobilized two pressure reduction units and delivered up to 1,000 MMBTU/day for a 5-week period in the spring of 2019.

## Safety

Certarus is committed to providing all employees, contractors, and customers with a safe work environment. Certarus will strive to meet or exceed all applicable federal, state, provincial, and municipal legislation and regulations regarding health, safety, and environment. No job is worth doing if it cannot be done safely.

Since 2012, Certarus has built a reputation for safely delivering compressed natural gas (CNG), renewable natural gas, and hydrogen across North America. The Certarus HSE & Transportation Compliance (TC) and Operations teams have developed policies and procedures to mitigate operational risks and effectively respond to all emergencies promptly. Certarus retains a full staff of 29 employees dedicated to HSE & TC activities. Members of this team are located across the Certarus operational network.

Certarus' company-wide Joint Health & Safety Committee meets regularly. The committee consists of regional managers, field-level employees, senior management, engineering, operations, and HSE personnel. The primary focus of this committee is reviewing incidents, hazards, and corrective actions, as well as HSE & TC initiatives and key performance indicators. These performance indicators provide an avenue for trending and tracking employee participation and findings by measuring overall employee participation in HSE & TC programs, including hazard identification and control, driver inspections, facility inspections, client site inspections, and safety meetings. Certarus operations managers and supervisors regularly visit client sites to ensure all Certarus and client safety expectations are upheld.



3-YEAR HSE PERFORMANCE STATS - CERTARUS (US&CAN)							
Overall Company Safety Criteria:	2024 (YTD)	2023	2022	2021			
Hours Worked (Payroll Hours)	1,499,866	1,439,133	1,163,491	851,121			
Average Number of Employees	692	611	531	442			
Medical Treatment Incidents	2	1	4	2			
Modified/Restricted Duty Incidents	3	1	1	1			
Lost Time Injury (LTI) Incidents	3	8	1	6			
Total Recordable Incident Rate (TRIR)	1.07	1.39	1.03	2.11			
Fatalities	0	0	0	0			
Miles Driven	15,960,852	14,233,767	11,843,690	9,129,715			
DOT Recordable Incident Count	5	4	10	7			
Experience Modification Rating (EMR)	0.86	1.11	1.55	1.65			
Days Away, Restricted, or Transferred (DART)	0.80	1.25	0.34	1.64			

Certarus has implemented the following safety measures and initiatives across the company 2020-2024 YTD:

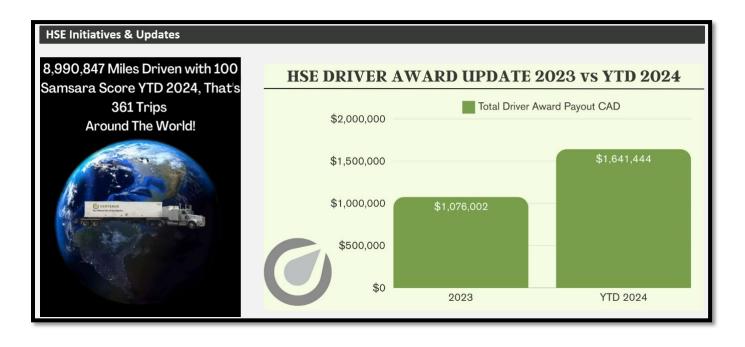
- Injury Mitigation
  - Developed an injury prevention program, standard, and training that focuses on body mechanics, ergonomics, and hand safety.
  - Warm to Perform coaching conducted during employee onboarding and actively encouraged at Certarus facilities.
  - Slips/Trips/Falls blitz conducted during Q3 2021 & 2022.
- Operations & HSE Leadership
  - Developed a safety leadership program that includes three tiers: Introduction to HSE, Developing the HSE Leader, and HSE for Managers & Supervisors.
  - o Bi-weekly regional health and safety meetings are led by management.
  - Operational leadership hosted regional safety summits in 2022, 2023, and 2024 to discuss safety accomplishments, improvements, incident trends, and communicate future goals.
  - Risk Manager hired to assess organizational risks that could impede reputation, safety, security, and financial success.

#### HSE Initiatives

- Introduced Human and Organizational Performance training to management and engineering which builds an understanding of how humans perform and how we can build systems that are more error tolerant. Currently providing training to all managers and supervisors in "Doing Safety Differently", focusing on learning teams and HSE declutter.
- Launched HSE Spot Awards Program which recognizes employees for their contributions to HSE excellence and driver performance.
  - SPOT AWARDS
    - October-December 2022 \$12,704 CAD
    - 2023 \$144,835 CAD
    - YTD 2024 \$ 191,909 CAD (November SPOTs are not included in this total)
    - Overall Total: \$349,448 CAD
- Launched a Driver Rewards Program that awards drivers for maintaining a Samsara score of 100 over a specified threshold of mileage.
  - DRIVING AWARDS
    - 2023 \$1,076,003 CAD
    - 2024 YTD \$1,641,444 CAD



- OVERALL TOTAL: \$2,717,447 CAD
- o Implementation of Ready, Safe, Start to promote a proactive approach to safety before starting any work.





#### **CERTARUS ROLLOVER INCIDENT HISTORY**

INCIDENT	DATE	REGION	INVOLVED	DESCRIPTION
2022 0307	1/18/2021	NUSA-OH	INTERNAL	On the morning of January 18, 2022, a Certarus driver encountered hazardous conditions during their first trip on a snow-covered road. Operating under Ascent's protocol, which granted them right of way, the driver properly utilized CV channel 27 to announce their fuel cell transport from Fox's Bottom Road to Springdale Road. After making a left turn onto Springdale Road and announcing their position, they encountered an unloaded sand truck operated by an unidentified Reliant contractor working for Halliburton. At a narrow 17.5-foot-wide curve, both vehicles entered simultaneously, with the sand truck encroaching significantly into the Certarus driver's lane. While successfully avoiding a collision through evasive action, the Certarus driver steered into a ditch. During attempted recovery, the driver turned sharply left, but the momentum caused the tractor and trailer to roll onto its right side. Emergency services and Certarus were immediately notified, though Samsara was unable to generate a crash report due to poor cellular coverage. Both Certarus and Ascent management arrived on scene with two witnesses, while the Reliant/Halliburton driver departed without stopping and remains unidentified.
2022 0391	5/8/2022	SUSA-OK	INTERNAL	On May 5, 2022, at 10:03 PM, a Samsara crash notification was received regarding Unit 3-4-0009. Dashcam footage review confirmed a Certarus employee operating a tractor-trailer had dropped the passenger-side front wheel off the pavement. The driver attempted to return to the roadway but overcorrected, causing the vehicle to roll onto its driver's side and slide to a stop in the road's center. During the rollover, the driver sustained a head impact with the cab's roof, appearing momentarily unresponsive before shutting off the ignition. After management notification, emergency responders established a one-mile security perimeter. The driver was evaluated on scene, transported to a local hospital, treated, and released. The incident involved a full Quantum trailer (210307) leaking natural gas. Despite overnight efforts by Certarus personnel to control and transfer the CNG, the release exceeded the 10,000-pound regulatory reporting threshold. Following complete gas release, a wrecker service transported both tractor and trailer to the Certarus hub in Calumet, OK, where additional documentation and measurements were conducted.
2022 0551	12/4/2022	WTX-OR	INTERNAL	At 4:30 AM, while operating Certarus tractor 3-4-0082 with trailer 220332 en route to the Devon FTS 1 Fleet 1 location from the Orla Hub, an incident occurred. As the Certarus driver attempted to pass an unidentified sand hauler on the left side of the lease road, the ground beneath the vehicle gave way, causing the trailer to track into a ditch. The driver's attempt to continue forward resulted in both the tractor and trailer rolling onto their driver's side.
2023 0591	1/9/2023	NUSA-PA	INTERNAL	A Certarus driver was traveling west on Route 87 when they became distracted, looking at a drilling rig through their driver's side window for too long. The passenger-side tires briefly left the road. As the driver steered left to correct their path, the rig rolled over onto its passenger side.



#### **CORRECTIVE ACTIONS**

- Samsara In-Vehicle Monitoring System was installed in all fleet vehicles. This platform includes forward and rearfacing dash cameras, real-time driver coaching, harsh and distracted event detection, and live GPS tracking, to provide opportunity for alerts and coaching on improved driving behaviors. Certarus is currently collaborating with Samsara in the development of lane departure warnings, fatigue alerts (in cab and real time notifications to HSE/TC) and custom app-based safety training for employees.
- Mobileye has been deployed across our heavy vehicle fleet. Mobileye aids in lane deviation, notifies drivers when following too closely, and warns drivers of upcoming hazards.
- Rollover stability protection installed on all CNG trailer chassis. The system uses sensors to monitor the speed of
  the trailer, steering angle, and yaw rate. If the system detects that the vehicle is deviating too far from pre-set
  center of gravity thresholds, it automatically applies the brakes to individual wheels and may reduce engine power
  to help the driver maintain control.
- Certarus continues to focus on distracted driving and fatigue management in order to prevent rollover accidents
  across the organization, with an annual corporate goal targeting 1 distracted driving event per 50,000 miles
  driven.
- Additional HSE & Transportation Specialists hired to focus on safe driving, provide advanced skill maneuver training, and event coaching, including Smith 5 Keys training to all drivers. Regional Driver Trainers provide in-cab coaching to new and existing employees.
- Two driving simulators were purchased and are currently being utilized to provide Advanced Skill Maneuvers
  training in a controlled environment. The simulator allows Certarus to train drivers to adapt to hazardous
  conditions in a safe manner without loss of asset or life.
- Drivers use Wellsite Navigator to follow routes that have been previously vetted for safety.
- Third party drivers were integrated into Certarus HazID & BBO program. Third party drivers also receive robust safety training during onboarding as well as simulator training.
- Additional integration of UpKeep (maintenance management system) with Samsara to enhance maintenance and vehicle defect reporting.
- The Certarus Third Party Management team prioritizes use of Carriers who have in-vehicle monitoring systems (e.g., Samsara or equivalent).

# **Certification / Compliance**

#### **Driver Qualifications**

Certarus is responsible for ensuring all drivers authorized to work for Certarus are competent and fit for duty. Minimum competencies shall include, but are not limited to:

- Valid CDL holders with H or X (Hazmat & Tank) license endorsements
- Drivers compliance with all USDOT and FMCSA qualification and screening requirements
- Certarus HSE Orientation
- Certarus CNG Trailer Safe Work Procedure training
- Smith System defensive driving
- Certarus rollover prevention and advanced skill maneuver training
- CPR, First Aid, and Fire extinguisher training
- Additional training as required by National Grid

#### **Equipment Preventive Maintenance Highlights**

- 1. Compressors & Station
  - a. Standard Ariel PM, e.g., oil changes, frame overhauls, etc.
  - b. Quarterly functionality test of safety systems



- c. Weekly/Monthly/Quarterly/Annual package inspections, e.g.
  - i. Monthly visual inspection of PSV's
  - ii. 3-year PSV Recertification
  - iii. 5-year random UT tube/pipe thickness checks
- d. 24/7 high-level monitoring by Dispatch through Samsara cloud-based portal

#### 2. CNG Trailers

- a. Quarterly chassis inspections and preventative maintenance
- b. Quarterly CNG component inspections and preventative maintenance
- c. Annual DOT chassis inspections
- d. 5-Year major chassis inspection
- e. 5-Year cylinder integrity tests & recertification per PHMSA / DOT (Modal Acoustic Emissions)

#### Miscellaneous

- · Visual hose inspections during each trailer delivery
- Annual serialized hose pressure testing

#### **DRIVER BINDER DOCUMENTATION**

DOT Inspection Annual
Truck-Specific Cab Card
Overweight Permit (If required)
Driver On-Site Checklist
Samsara Logbook Instructions
Schedule 1 - NSC Standard

#### **LICENSES**

IFTA License

#### **REGISTRATION**

PHMSA Registration United Carrier Registration

#### **CERTIFICATE**

Safety Fitness Certificate

#### **INSURANCE**

Insurance Cab Card
The Travelers Indemnity Co of CT
24-25 Renewal PA Auto ID Cards
FORM MCS-90

#### **PERMIT**

Hazmat Safety Permit DOT-SP 20391 DOT-SP 20396 DOT-SP 15322 DOT-SP 14951 - Titan



DOT-SP 16524 - Quantum Spotted Lanternfly Permit TC-SU 6077 (Ren 5) TC-SU 9806 (Ren 5) - Titan TC-SU 9686 - Type 3 TC-SH 11921 - Quantum TC-SU 13548 - Hexagon

#### Standard Work Procedure (SWP)

CHSEMS-12-01 Compressed Gas Trailer SWP
CHSEMS-12-03 Disconnect Compressed Gas Trailer from Fill Post SWP
CHSEMS-12-04 Multiple Compressed Gas Trailer Swap SWP
CHSEMS-12-05 Single Compressed Gas Trailer Swap SWP
CHSEMS-12-06 PRS Trailer Rig-In SWP
CHSEMS-12-07 PRS Trailer Rig-Out SWP

#### Safety Data Sheet (SDS)

MSDS - Natural Gas, Compressed

#### **EMERGENCY RESPONSE**

CHSEMS-11-P01-A03 Emergency Response Assistance Plan

#### **Emergency Contacts**

ERP USA ERP Canada

# **Licenses and Registration Requirements**

- 1. IFTA License (International Fuel Tax Agreement)
  - Description: This license is required for motor carriers operating in multiple jurisdictions (states or provinces) to report and pay fuel taxes. The IFTA license simplifies fuel tax reporting for interstate travel and is used by commercial vehicles to report fuel usage and pay fuel taxes based on the miles driven in each state or province.
  - Requirements: Carriers must maintain accurate records of fuel purchases, miles driven, and jurisdictions entered. Quarterly fuel tax returns must be filed to the respective authorities.
- 2. PHMSA (Pipeline and Hazardous Materials Safety Administration) Regulations for Hazardous Materials Transportation
  - Description: PHMSA enforces regulations regarding the safe transport of hazardous materials. Carriers transporting hazardous materials must comply with DOT regulations and PHMSA guidelines to ensure the safety of the public, the environment, and employees.
  - Requirements: Carriers must have proper training, secure transport containers, and follow specific routes based on the type of hazardous materials.
- 3. Safety Fitness Certificate



- Description: A certificate issued to commercial vehicle operators certifying that they meet the necessary standards for safety in transportation operations. It verifies that the carrier has passed safety inspections and complies with regulations.
- Requirements: Required for certain jurisdictions that regulate safety fitness, including inspections, maintenance, and compliance with FMCSA safety standards.
- 4. FMCSA (Federal Motor Carrier Safety Administration) MCS-150B Form
  - Description: The MCS-150B form is a motor carrier identification report that includes safety information and motor carrier identification. This form is a required submission for motor carriers operating in interstate commerce.
  - Requirements: The form must be updated every 24 months, and includes information about the carrier's safety practices, type of operations, and vehicle fleet.
- 5. Public Service Commission of West Virginia
  - o Description: Issuance of a business license for transportation and utility operations within West Virginia.
  - Requirements: Carriers must meet state regulations for safety, insurance, and environmental compliance to operate in West Virginia.
- 6. UCR (Unified Carrier Registration) Registration
  - Description: UCR is a national registration program for motor carriers, brokers, and freight forwarders operating in interstate commerce. It simplifies the registration process and ensures compliance with federal motor carrier regulations.
  - o Requirements: Annual registration and payment of fees based on the number of vehicles in the fleet.
- 7. AMVIR (Access to Motor Vehicle Information Regulation)
  - Description: AMVIR allows authorized parties to access motor vehicle records for regulatory purposes. It ensures carriers and drivers comply with relevant laws, including those regarding vehicle registration, insurance, and safety.
  - Requirements: Carriers must apply for access if they need motor vehicle data for regulatory or operational reasons.
- 8. Office of the Secretary of State Certificate of Operation Authority (Oklahoma & Texas)
  - Description: This certificate is required for carriers to operate in Oklahoma and Texas. It grants legal authority for business operations and transportation within the state.
  - Requirements: Business registration, compliance with state laws, and payment of fees are necessary for obtaining the certificate.
- Railroad Commission of Texas Licensing for Trailers Transporting Compressed Natural Gas (CNG) and Drivers Delivering CNG in Texas
  - Description: Carriers transporting CNG or natural gas in Texas must obtain a specific license from the Texas Railroad Commission (RRC). This ensures that the vehicles, drivers, and transport processes meet safety and regulatory standards.
  - Requirements: Vehicles must be inspected, drivers must receive training, and the carrier must demonstrate compliance with specific safety protocols for CNG transport.



- 10. Wyoming Department of Transportation Certificate of Operation Authority
  - Description: This certificate allows motor carriers to operate in Wyoming and demonstrates the carrier's compliance with state regulations.
  - Requirements: Businesses must provide operational details, vehicle fleet information, and proof of insurance to receive approval.

## **Insurance Requirements**

- 1. MCCS Insurance Cab Card for TXDMV
  - Description: The Insurance Cab Card verifies that a motor carrier has valid insurance coverage as required by Texas DMV. It is a critical proof of insurance for vehicles operating in Texas.
  - Requirements: Carriers must submit their insurance policy details and obtain a cab card before registering vehicles in Texas.
  - o Travelers Indemnity Co (Canada Pink Card)
    - Description: The Canada Pink Card issued by Travelers Indemnity Co is proof of liability insurance for vehicles crossing the U.S.-Canada border. It ensures that the vehicle is covered for accidents, damages, and claims while operating in Canada.
  - Requirements: Carriers must have valid insurance for vehicles entering Canada and carry this card for cross-border operations.

#### 2. 24-25 Renewal PA Auto ID Cards

- Description: Auto ID Cards are issued for commercial vehicles registered in Pennsylvania, confirming that the vehicle has met the required auto liability insurance standards for the state.
- o Requirements: Carriers must renew their insurance coverage annually in Pennsylvania and display the card when operating within the state.
- 3. FORM MCS-90 (Hazardous Materials)
  - Description: This insurance form is required for carriers transporting hazardous materials. It is a filing that provides proof of financial responsibility to cover potential damages from hazardous materials accidents.
  - Requirements: The MCS-90 is often filed with the FMCSA and is required for certain transportation operations involving hazardous materials.
- 4. Liability Insurance Cards for TX, OK, OH, ND, MD, & CO
  - The liability insurance card verifies that the motor carrier has the required minimum levels of insurance coverage for vehicles registered with the Texas DMV. This coverage applies to all motor carriers operating within the state, including intrastate and interstate transport.

# **Permits for Hazardous Materials and Special Operations**

- 1. Hazmat Safety Permit
  - Description: The Hazmat Safety Permit is required for carriers transporting specific hazardous materials.
     This permit ensures that carriers comply with all safety and regulatory standards set by DOT, PHMSA, and FMCSA.
  - o Requirements: Carriers must obtain this permit before transporting certain types of hazardous materials.



#### 2. DOT Special Permits (DOT-SP)

- DOT-SP 20391, DOT-SP 20396, DOT-SP 15322, DOT-SP 14951 (Titan), DOT-SP 16524 (Quantum), DOT-SP 13173 (Outrider Trailers)
  - These special permits are issued to carriers who transport specific hazardous materials or operate under unique conditions (e.g., for Outrider trailers or specific Titan and Quantum materials).
  - Requirements: Carriers must apply for each permit based on the type of materials being transported and meet all safety, regulatory, and equipment standards.

#### 3. Spotted Lanternfly Permit

- Description: Required for carriers operating in states where the spotted lanternfly is a recognized pest,
   this permit ensures that vehicles are not carrying this invasive species.
- Requirements: Carriers must follow specific inspection and cleaning protocols to prevent the spread of the pest.
- 4. State-Specific Permits (California, Pennsylvania, Ohio, New York, New Mexico, etc.)
  - State of California Hazmat Transportation
    - Carriers transporting hazardous materials in California must have a California Hazmat Permit.
  - PA Posted Highway Permit #56-000683, #56-000685
    - Special permits required for operating on certain posted highways in Pennsylvania.
  - H24s Permitted for Ohio, New York HUT, New Mexico Weight Permits
    - These state-specific permits are required for heavy and hazardous materials transport, including weight-related permits and highway use tax for commercial vehicles.
- 5. Overweight Permit for Texas (Tractor Over 80,000 lbs)
  - Description: An overweight permit is required for any vehicle (typically a tractor) exceeding the 80,000 lb weight limit in Texas.
  - Requirements: Carriers must apply for the permit before transporting heavy loads that exceed state weight restrictions.
- 6. Weld County OS/OW Annual Permit
  - Description: An Over-Size/Over-Weight (OS/OW) Annual Permit issued by Weld County in Colorado for commercial vehicles operating on local roads with oversized or overweight loads.
  - Requirements: Carriers must have this permit for each vehicle exceeding legal size or weight limits within the county.
- 7. Colorado Department of Transportation Annual HazMat Permit
  - Description: Required for carriers transporting hazardous materials through Colorado, this permit ensures compliance with state and federal safety standards.
  - Requirements: Carriers must apply for this permit annually, meet vehicle and driver requirements, and follow approved routes.



This detailed breakdown provides a comprehensive list of licenses, certificates, insurance, and permits necessary for transporting hazardous materials and operating motor carriers across various states and jurisdictions. Each of these requirements ensures compliance with safety standards, environmental protection, and regulatory frameworks that govern the safe transport of hazardous goods across the United States and Canada.

#### **RNG Partners and Testimonies**

"Certarus reacted to our unexpected pipeline outage with urgency and purpose, bringing three spare trailers in from remote terminals across the country on a holiday weekend without any logistical issues. During the pipeline outage, Certarus' Renewables Dispatch and CNG Drivers through communications and diligence were instrumental in ensuring we were able to process and sell all available digester gas produced during this event. Once the pipeline opened back up for business, Certarus created and implemented schedules that allowed us to keep up with current production and decant the stored gas, all without issues, and I assure you this was no small task. I would recommend Certarus' services and expertise. If you are in a tough spot with transportation or CNG storage issues, they should be your first call."

- Jason Johnson, Chief Operating Officer at Outagamie Clean Energy Partners, LLC

"Certarus proved to be an excellent partner this last year with a great safety track record along with expertise in transporting and decompressing natural gas, making them the perfect partner for our projects."

- Chris Roach, President of Roeslein Alternative Energy

"Certarus' safety track record, as well as years of expertise in compressing, transporting, and decompressing natural gas, made them the perfect partner for this project."

- Scott Gramm, Manager of Renewable Natural Gas supply with FortisBC
  - Archaea Energy
  - bp
  - Berg RNG
  - Clean Energy
  - Dynamic Renewables
  - FortisBC
  - Landfill Group
  - Roeslein Alternative Energy
  - SSAB
  - Sevana Bioenergy
  - UGI Energy Services
  - Avolta
  - Nacelle Solutions
  - Terreva Renewables
  - Verbio
  - Outagamie Clean Energy Partners (OCEP)

# November 27, 2024

# TRAFFIC ASSESSMENT FOR THE PROPOSED CLEAN EAGLE INTERCONNECT PROCESSING RNG FACILITY

4212 Roy Parks Road Gainesville, Hall County, Georgia 30507

Prepared for:

Archea Energy Operating, LLC

#### Prepared by:

Civil & Environmental Consultants, Inc. Mr. Chris A. Droznek II, P.E., PTP 700 Cherrington Parkway Moon Township, Pennsylvania 15108 (412) 429-2324 cdroznek@cecinc.com



#### TABLE OF CONTENTS

PROJECT DESCRIPTION	1
EXISTING CONDITIONS	1
ROADWAY SEGMENTS - DAILY TRAFFIC VOLUMES	2
ROADWAY SEGMENTS - PEAK HOUR TRAFFIC VOLUMES	4
SITE GENERATED TRAFFIC	5
PROJECTED BUILD CONDITION TRAFFIC VOLUMES	6
CONCLUSIONS/RECOMMENDATIONS	8

#### LIST OF TABLES

- TABLE 1 HISTORICAL TRAFFIC VOLUME SUMMARY
- TABLE 2 ESTIMATED NEW TRIP GENERATION D
- TABLE 3 PROJECTED TRAFFIC VOLUME SUMMARY

#### LIST OF FIGURES

FIGURE 1 – SITE LOCATION

FIGURE 2 - SITE PLAN

# TRAFFIC EVALUATION FOR THE PROPOSED CLEAN EAGLE INTERCONNECT PROPOSED RNG FACILITY

Gainesville, Hall County, Georgia

Civil & Environmental Consultants, Inc. (CEC) has completed this Traffic Evaluation for the proposed Clean Eagle Interconnect Proposed RNG Facility to be located on the north side of Roy Parks Road just east of Candler Road (SR 60) in Hall County, Gainesville, Georgia. The property address is 4212 Roy Parks Road, Gainesville, Georgia 30507.

#### PROJECT DESCRIPTION

It is CECs understanding that Clean Eagle RNG, LLC plans to build a renewable natural gas (RNG) facility on-site at the Eagle Point Landfill in Forsyth County. The landfill will collect landfill gas through a series of wells and pipes to be transported to their RNG facility. Due to the lack of pipelines, Certarus plans to build a compressed natural gas (CNG) plant on the Eagle Point Landfill to compress RNG and truck it to the interconnect site. Clean Eagle will contract with Certarus to build the proposed CNG decant and interconnect facility on Roy Parks Road within Hall County, Gainesville, Georgia. Trucks will deliver CNG from Eagle Point Landfill to the site where gas will be injected into the Liberty pipeline system.

The proposed interconnect facility location along Roy Parks Road is presented in Figure 1. Access to the interconnect site will be provided via two (2) approximately 24 ft wide one-way site access driveways. The western driveway is to be located at the same location of an existing site driveway for the former land use. The eastern driveway will be located approximately 220 feet east of this location. The easternmost driveway will serve as the site entrance while the westernmost driveway will serve as the site exit. Access to the site will be restricted with gates. A copy of the proposed site plan is shown in Figure 2.

Certarus will limit truck traffic Monday through Friday from 6:45 - 7:45am and 2:25 - 4pm to align with school zone time frames and avoid high traffic times. Certarus will use this time for shift change, safety meetings, team updates and trainings, etc.

#### **EXISTING CONDITIONS**

A desktop reconnaissance of the immediate study area was conducted by CEC. A description of the study roadway segments are as follows:

**Roy Parks Road** – Roy Parks Road is an east/west roadway which connects Candler Road (SR 60) from the west to Athens Highway (SR 11) to the east. Roy Parks Road is classified as a functional class 6U – Minor Urban Collector roadway according to the GDOT Traffic Analysis & Data Application (TADA) mapping.

Roy Parks Road is a two-lane undivided roadway. Within the vicinity of Candler Road, Roy Parks Road has an asphalt paved cartway that is approximately 21 feet wide with earth shoulders. At Candler Road, Roy Parks Road is signed with a "No Thru Trucks 10 Wheels or More" sign. There is also a railroad crossing on Roy Parks Road at its intersection with Candler Road. This crossing includes active traffic control devices including flashing warning light signals and gate arms.

<u>Candler Road (SR 60)</u> – Candler Road is a north/south roadway which provides regional connections. To the south, SR 60 crosses over I-85 To the north, SR 60 connects to the I-985 interchange and continues north. Candler Road is classified as a functional class 5U – Major Urban Collector roadway south of the site. North of the site, Candler Road is classified as a functional class 4U – Minor Urban Arterial roadway. Functional classifications were obtained from the GDOT Traffic Analysis & Data Application (TADA) mapping.

Within the vicinity of Roy Parks Road, Candler Road is a two-lane undivided roadway with turn lanes provided at major intersections.

Intersection of Candler Road (SR 60) with Roy Parks Road — The intersection of Candler Road with Roy Parks Road is unsignalized with stop control provided on the minor street Roy Parks Road westbound approach and the eastbound Dollar General site driveway approach. Candler Road provides a single lane (shared left/through/right turn) approach for northbound traffic and a two-lane (exclusive left turn lane/shared through/right turn) approach for southbound traffic. This southbound left turn lane provides approximately 175 feet of vehicular storage exclusive of taper. The westbound Roy Parks Road approach provides a single lane (shared left/through/right turn) approach for traffic. As previously mentioned, a rail line runs north/south parallel to Candler Road and crosses Roy Parks Road at the intersection. This rail crossing includes active traffic control devices including flashing warning light signals and gate arms. The stop bar/sign for the westbound approach is located on the eastern side of the rail.

#### ROADWAY SEGMENTS – DAILY TRAFFIC VOLUMES

Roadway Average Annual Daily Traffic (AADT) volumes within the study area were obtained from the Georgia Department of Transportation (GDOT) Traffic Analysis & Data Application (TADA). The proposed development is expected to have traffic traveling between the Eagle Point

Landfill and the interconnect site. Therefore, the expected travel route from the landfill is along SR 369 to US 19 to SR 53 to I-985 to SR 60 and finally to the interconnect site on Roy Parks Road. As a result, within the vicinity of Roy Parks Road, all traffic will head to or originate from the north on SR 60. New traffic at the intersection of Candler Road (SR 60) with Roy Parks Road is assumed to consist of southbound left turns onto Roy Parks Road and westbound right turns from Roy Parks Road onto Candler Road.

The most recent reported year 2023 AADT volumes were searched along this travel route within the vicinity of the proposed interconnect site on Roy Parks Road. In order to project the traffic for current year 2024 AADT data, a background traffic growth rate of 2.0% per year linear was assumed.

The following roadway segments were selected for traffic volume comparison:

- Roy Parks Road (east of Candler Road);
- Candler Road (north of Roy Parks Road and south of Lee Land Road);
- Mundy Mill Road (SR 53) (south of Old Oakwood Road);
- McEver Road (north of Whiting Road);
- Dawsonville Highway (SR 53) (east of Venture Drive);
- Dawsonville Highway (SR 53) (north of Sundown Way);
- Highway 400 S (US 19) (south of Beartooth Parkway);
- Browns Bridge Road (SR 369) (west of US 19); and
- Matt Highway (SR 369) (east of McBrayer Road).

Based on the data available and as summarized in Table 1, the year 2024 AADT for each of the study roadway segments were identified to be as follows:

- Roy Parks Road
  - 5.641 vehicles
- Candler Road
  - 14,178 vehicles
- Mundy Mill Road
  - 35,802 vehicles
- McEver Road
  - **31,620** vehicles
- Dawsonville Highway (SR 53) (east of Venture Drive)
  - **29,988** vehicles
- Dawsonville Highway (SR 53) (North of Sundown Way)
  - 16,932 vehicles

- Highway 400 S (US 19)
  - **38,760** vehicles
- Browns Bridge Road
  - 19,686 vehicles
- Matt Highway (SR 369)
  - 9,517 vehicles

#### **ROADWAY SEGMENTS - PEAK HOUR TRAFFIC VOLUMES**

For traffic analysis purposes, the peak hour of activity were conservatively assumed to overlap with traditional AM and PM peak hours of traffic. For analysis purposes, the following peak hours of traffic were utilized:

- Weekday A.M. Peak Hour 8:00 A.M. 9:00 A.M.
- Weekday P.M. Peak Hour 5:00 P.M. 6:00 P.M.

As shown in Table 1, hourly count volumes were obtained from data collected between years 2021 and 2024. In order to project the traffic for current year 2024 AADT data, a background traffic growth rate of 2.0% per year linear was assumed. As summarized in Table 1, the AM and PM peak hour traffic volumes for each of the study roadway segments were identified to be as follows:

- Roy Parks Road
  - 237 vehicles AM Peak
  - 385 vehicles PM Peak
- Candler Road
  - 846 vehicles AM Peak
  - 1,411 vehicles PM Peak
- Mundy Mill Road
  - 2,303 vehicles AM Peak
  - 3,367 vehicles PM Peak
- McEver Road
  - 2,155 vehicles AM Peak
  - 3,092 vehicles PM Peak
- Dawsonville Highway (SR 53) (East of Venture Drive)
  - 1.973 vehicles AM Peak
  - 2,778 vehicles PM Peak
- Dawsonville Highway (SR 53) (North of Sundown Way)
  - 1,037 vehicles AM Peak
  - 1,651 vehicles PM Peak

- Highway 400 S (US 19)
  - 2,463 vehicles AM Peak
  - 3,654 vehicles PM Peak
- Browns Bridge Road
  - 1,770 vehicles AM Peak
  - 2,155 vehicles PM Peak
- Matt Highway (SR 369)
  - 878 vehicles AM Peak
  - 972 vehicles PM Peak

#### SITE GENERATED TRAFFIC

Trip generation information for an interconnect processing RNG facility is not included in the Institute of Transportation Engineers (ITE) publication <u>Trip Generation</u>. Therefore, data obtained from Archea Energy Operating, LLC (Archea) and Certarus was used to estimate the site generated trips.

Certarus will limit truck traffic Monday through Friday from 6:45 - 7:45am and 2:25 - 4pm to align with school zone time frames and avoid high traffic times. Certarus will use this time for shift change, safety meetings, team updates and trainings, etc.

For traffic analysis purposes, the peak hour of activity were conservatively assumed to overlap with traditional AM and PM peak hours of traffic outside of the aforementioned restrictions for school activity. The peak hour of traffic was therefore assumed to be 8-9 AM and 5-6 PM. According to data provided by Archea, up to 13 trucks per day are projected for the interconnect site at maximum capacity. According to data provided by Certarus, up to 35 trucks per day are anticipated for the site at maximum capacity. Therefore, a combined total of 48 trucks per day are anticipated. It is estimated that up to 10% of truck traffic would occur during the weekday commuter AM and PM peak hours of adjacent street traffic (8:00 AM and 5:00 PM).

In addition, up to four (4) employees are expected to work on site during the daylight hours, while the facility will be automated during non-peak hours. Therefore, as presented in Table 2, the estimated peak hour traffic volumes are as follows:

- Total Daily:
  - o 48 Trucks Entering / 48 Trucks Exiting / 96 Total
  - o 4 Passenger Vehicles Entering / 4 Passenger Vehicles Exiting / 8 Total Trips
  - o 52 Trips Entering / 52 Trips Exiting / 104 Total
- AM Peak Hour

- o 5 Trucks Entering / 5 Trucks Exiting / 10 Total
- o 4 Passenger Vehicles Entering / 0 Passenger Vehicles Exiting / 4 Total Trips
- o 9 Trips Entering / 5 Trips Existing / 14 Total Trips
- PM Peak Hour
  - o 5 Trucks Entering / 5 Trucks Exiting / 10 Total
  - o 0 Passenger Vehicles Entering / 4 Passenger Vehicles Exiting / 4 Total Trips
  - o 5 Trips Entering / 9 Trips Existing / 14 Total Trips

#### PROJECTED BUILD CONDITION TRAFFIC VOLUMES

The resultant projected build conditions traffic volumes were determined by combining the available traffic volume data presented in Table 1 with the estimated traffic volumes presented in Table 2. The resultant traffic volumes for the study roadway segments are presented in Table 3 and are as follows:

- Roy Parks Road
  - 5,745 vehicles AADT
  - 251 vehicles AM Peak
  - 399 vehicles PM Peak
- Candler Road
  - 14,282 vehicles AADT
  - 860 vehicles AM Peak
  - 1,425 vehicles PM Peak
- Mundy Mill Road
  - 35,906 vehicles AADT
  - 2,317 vehicles AM Peak
  - 3,381 vehicles PM Peak
- McEver Road
  - 31,724 vehicles AADT
  - 2.169 vehicles AM Peak
  - 3.106 vehicles PM Peak
- Dawsonville Highway (SR 53) (east of Venture Drive)
  - 30,092 vehicles AADT
  - 1,987 vehicles AM Peak
  - 2,792 vehicles PM Peak
- Dawsonville Highway (SR 53) (north of Sundown Way)

- 17,036 vehicles AADT
- 1,051 vehicles AM Peak
- 1,665 vehicles PM Peak
- Highway 400 S (US 19)
  - 38,864 vehicles AADT
  - 2,477 vehicles AM Peak
  - 3,668 vehicles PM Peak
- Browns Bridge Road
  - 19,790 vehicles AADT
  - 1,784 vehicles AM Peak
  - 2,169 vehicles PM Peak
- Matt Highway (SR 369)
  - 9,621 vehicles AADT
  - 892 vehicles AM Peak
  - 986 vehicles PM Peak

The percentage of site traffic for the roadway segments as presented in Table 3 is as follows:

- Roy Parks Road
  - 1.8% of traffic AADT
  - 5.6% of traffic during AM Peak
  - 3.5% of traffic during PM Peak
- Candler Road
  - 0.7% of traffic AADT
  - 1.6% of traffic during AM Peak
  - 1.0% of traffic during PM Peak
- Mundy Mill Road
  - 0.3% of traffic AADT
  - 0.6% of traffic during AM Peak
  - 0.4% of traffic during PM Peak
- McEver Road
  - 0.3% of traffic AADT
  - 0.6% of traffic during AM Peak
  - 0.5% of traffic during PM Peak
- Dawsonville Highway (SR 53) (east of Venture Drive)
  - 0.3% of traffic AADT
  - 0.7% of traffic during AM Peak
  - 0.5% of traffic during PM Peak
- Dawsonville Highway (SR 53) (north of Sundown Way)

- 0.6% of traffic AADT
- 1.3% of traffic during AM Peak
- 0.8% of traffic during PM Peak
- Highway 400 S (US 19)
  - 0.3% of traffic AADT
  - 0.6% of traffic during AM Peak
  - 0.4% of traffic during PM Peak
- Browns Bridge Road
  - 0.5% of traffic AADT
  - 0.8% of traffic during AM Peak
  - 0.6% of traffic during PM Peak
- Matt Highway (SR 369)
  - 1.1% of traffic AADT
  - 1.6% of traffic during AM Peak
  - 1.4% of traffic during PM Peak

#### CONCLUSIONS/RECOMMENDATIONS

This study has concluded that the construction of the proposed Clean Eagle Interconnect Processing RNG Facility will have no significant impact on the operations of the adjacent study intersections and roadways. The traffic evaluation found the following:

- As reported, the projected site traffic volumes during operations are not significant and are expected to be accommodated within the existing roadway capacities.
- Projected site traffic is expected to make up less than 1% of AADT traffic volumes on the study roadways with the exception of Roy Parks Road which is less than 2%.
- Projected site traffic is expected to make up less than 2% of peak hour traffic volumes on the study roadways with the exception of Roy Parks Road which is approximately 5% or less.
- No intersection improvements within the vicinity of the proposed interconnect site are anticipated to require traffic control mitigations due to the increase of approximately 14 peak hour trips.
- No intersection capacity degradation are anticipated due to the increase of 14 peak hour trips (two direction) during the peak hours.

- At the intersection of Candler Road with Roy Parks Road, the existing southbound left turn lane, which provides 175 feet of vehicular storage, is expected to be sufficient to accommodate the projected traffic volumes including truck traffic.
- No new turn lanes on Roy Parks Road at the proposed stie entrance driveway are anticipated with the AM peak hour entering volume of up to nine (9) vehicles entering.
- The proposed site exit driveway should be controlled with stop control on the driveway approach to Roy Parks Road.
- The proposed site driveways should provide sight triangles that are free of sight line obstructions such as trees, bushes, vegetation, etc. to maintain a clear line of sight for turning maneuvers. Any new vegetation within the sight lines of the driveway should be maintained at a height of 2 feet or less to provide unobstructed views.
- Site access driveways should be designed to accommodate the largest expected design vehicle entering/existing the driveway.
- Certarus will limit truck traffic Monday through Friday from 6:45 7:45am and 2:25 4pm to align with school zone time frames and avoid high traffic times. Certarus will use this time for shift change, safety meetings, team updates and trainings, etc.

# **TABLES**

TABLE 1
HISTORICAL VOLUME SUMMARY <sup>(1)</sup>
Proposed Clean Eagle Interconnect Processing RNG Facility
Gainesville, Hall County, Georgia

	Roadway S	Segment		Traffic Volume Data <sup>(1)(2)</sup>									
					AADT		AM Peak	Hour Traffi AM)	c Volume (7:00		Hour Traffic area Peak 5:0	Volume (Study 00 PM)	
Name	Site ID	Location	Most Recent Count Date	Year	AADT	Projected	7	Two-Way Vo	olume		Two-Way Vo	olume	
				Year	AADI	2024	Year	Volume	Projected 2024	Year	Volume	Projected 2024	
Roy Parks Road	139-8109	East of Candler Road	Tuesday, March 23, 2021	2023	5,530	5,641	2021	311	330	2021	363	385	
Candler Road (SR 60)	139-0303	South of Lee Land Road (north of site)	Wednesday, July 14, 2021	2023	13,900	14,178	2021	1,094	1,160	2021	1,331	1,411	
Candler Road (SR 60)	139-0307	north of I-985 interchange	Wednesday, October 25, 2023	2023	29,000	29,580	2023	2,430	2,479	2023	2,491	2,541	
Dawsonville Highway (SR 53)	139-0258	south of McEver Road	Wednesday, March 20, 2024	2023	31,000	31,620	2024	2,210	2,210	2024	2,920	2,920	
Dawsonville Highway (SR 53)	139-0267	east of Sardis Road	Wednesday, July 27, 2022	2023	29,400	29,988	2022	1,989	2,069	2022	2,671	2,778	
Keith Bridge Road (SR 306)	117-0055	south of Leland Drive	Tuesday, September 12, 2023	2023	14,000	14,280	2023	1,038	1,059	2023	1,311	1,337	
Browns Bridge Road (SR 369)	1174-0069	west of US 19	Tuesday, October 24, 2023	2023	19,300	19,686	2023	1,646	1,679	2023	2,113	2,155	
Matt Highway (SR 369)	117-0063	east of McBrayer Road	Wednesday, April 3, 2024	2023	9,330	9,517	2024	820	820	2024	972	972	

<sup>(1)</sup> Traffic count data obtained form the GDOT Traffic Analysis & Data Application (TADA).

<sup>(2)</sup> Projected year 2024 volumes was estimated assuming a liner 2.0% per year growth rate.

TABLE 2
ESTIMATED TRIP GENERATION (1)
Proposed Clean Eagle Interconnect Processing RNG Facility
Gainesville, Hall County, Georgia

Trip Type	Daily Projected Maximum Capacity (24-hour operation)	AM Peal (estimate 10	AM Peak Hour (assumed 7:00 AM) (estimate 10% of daily total truck traffic)	00 AM) ick traffic)	PM Pea (esti	PM Peak Hour (assumed 5:00 PM) (estimate 10% of daily total)	00 PM) stal)
		Enter	Exit	Total	Enter	Exit	Total
Archea Energy RNG Trucks	13 trucks	1	1	2	1	1	2
Certarus Trucks	35 trucks	4	4	8	4	4	8
On-Site Workers (passenger vehicle)	4	4	0	4	0	4	4
Total Trips	104	6	5	14	5	6	14

(1) Data provided by Client.

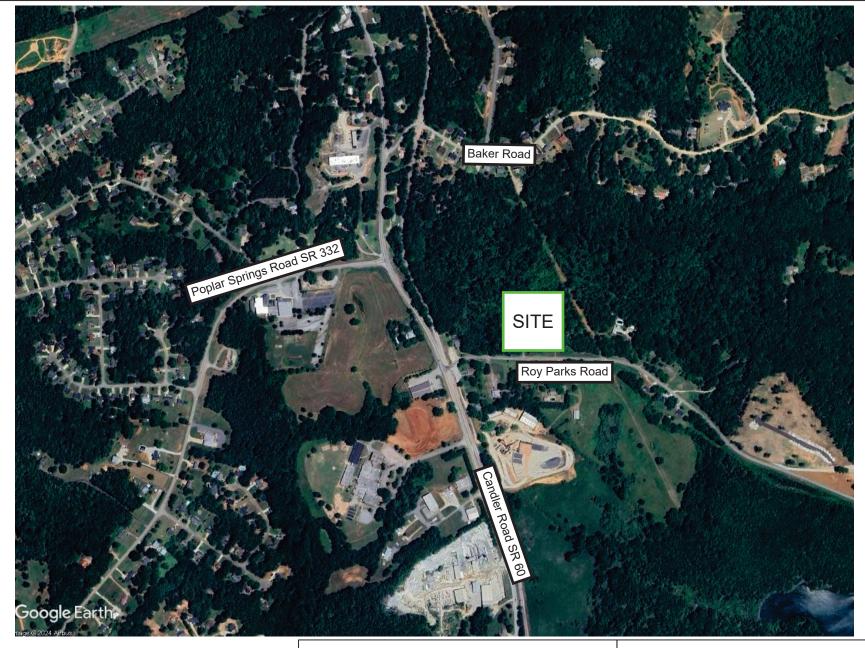
TABLE 3
PROJECTED TRAFFIC VOLUME SUMMARY <sup>(1)</sup>
Proposed Clean Eagle Interconnect Processing RNG Facility
Gainesville, Hall County, Georgia

	Roadway S	Segment						T	raffic Volumes <sup>(1)</sup>					
			2024	Projected	Total AADT	Percentage			Traffic Volume (7	2:00 AM)	PM Peak I		Volume (Study APM)	Area Peak 5:00
Name	Site ID	Location	Existing	Daily Site	(existing +	of future		Two	Two-Way Volume			Two-	Way Volume	
			AADT	Trips	site)	Traffic	2024 Existing Peak Hour	Site Trips	Total Peak Hour Volume	Percentage of future Traffic	2024 Existing Peak Hour	Site Trips	Total Peak Hour Volume	Percentage of future Traffic
Roy Parks Road	139-8109	East of Candler Road	5,641	104	5,745	1.8%	330	14	344	4.1%	385	14	399	3.5%
Candler Road (SR 60)	139-0303	South of Lee Land Road (north of site)	14,178	104	14,282	0.7%	1,160	14	1,174	1.2%	1,411	14	1,425	1.0%
Candler Road (SR 60)	139-0307	north of I-985 interchange	29,580	104	29,684	0.4%	2,479	14	2,493	0.6%	2,541	14	2,555	0.5%
Dawsonville Highway (SR 53)	139-0258	south of McEver Road	31,620	104	31,724	0.3%	2,210	14	2,224	0.6%	2,920	14	2,934	0.5%
Dawsonville Highway (SR 53)	139-0267	east of Sardis Road	29,988	104	30,092	0.3%	2,069	14	2,083	0.7%	2,778	14	2,792	0.5%
Keith Bridge Road (SR 306)	117-0055	south of Leland Drive	14,280	104	14,384	0.7%	1,059	14	1,073	1.3%	1,337	14	1,351	1.0%
Browns Bridge Road (SR 369)	1174-0069	west of US 19	19,686	104	19,790	0.5%	1,679	14	1,693	0.8%	2,155	14	2,169	0.6%
Matt Highway (SR 369)	117-0063	east of McBrayer Road	9,517	104	9,621	1.1%	820	14	834	1.7%	972	14	986	1.4%

<sup>(1)</sup> From Table 1 and Table 2.

# **FIGURES**





Civil & Environmental

Civil & Environmenta Consultants, Inc. 700 Cherrington Parkway Moon Township, PA 15108

Ph: 412.429.2324 · 800.365.2324

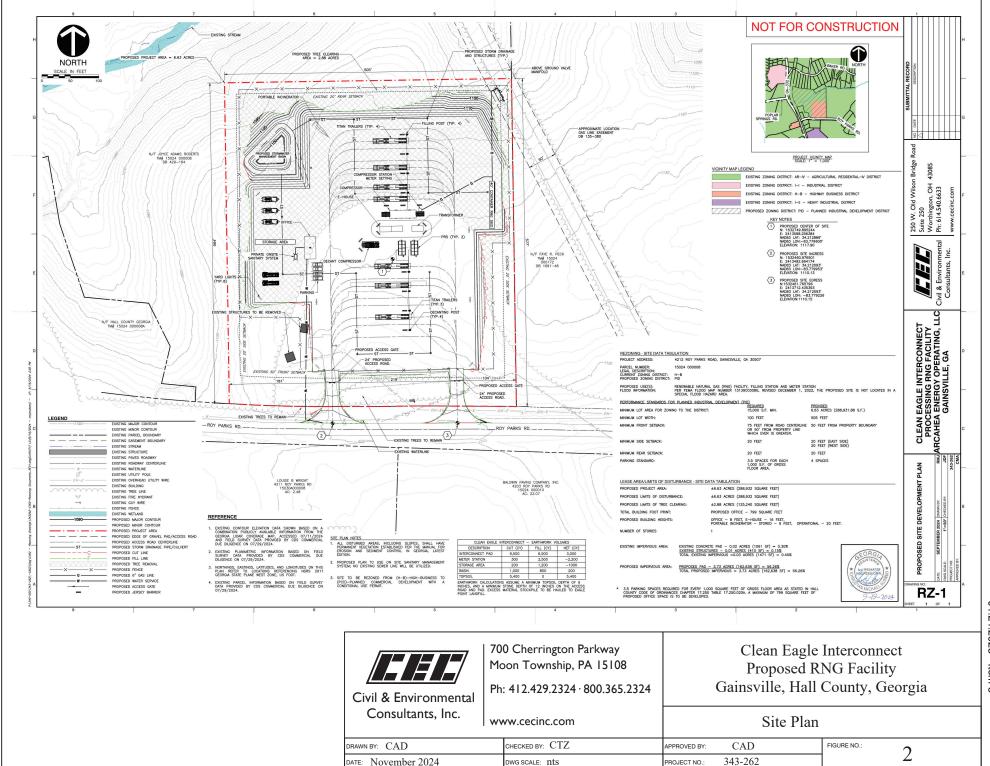
www.cecinc.com

Clean Eagle Interconnect Proposed RNG Facility Gainsville, Hall County, Georgia

Location

DRAWN BY: CAD	CHECKED BY: CTZ	APPROVED BY:	CAD	FIGURE NO.:
DATE: November 2024	DWG SCALE: nts	PROJECT NO.:	343-262	1

01.21.2025 - Item 3



01.21.2025 - Item 3