

# CARBON STORAGE SOLUTIONS FRONT RANGE #1 WELL SITE PROJECT

## TRANSPORTATION PLAN

SECTION 26, TOWNSHIP 6 NORTH, RANGE 67 WEST, 6TH P.M.  
WELD COUNTY, COLORADO

Prepared For:  
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## I. INTRODUCTION

This transportation plan is being prepared for the Carbon Storage Solutions' Front Range #1 Well Site project. The project consists of the development of infrastructure to support the drilling and testing of 1 stratigraphic well located in Weld County. The purpose of this report is to provide an overview of the traffic generated as a result of the construction and well development/testing of the Front Range #1 well site project located in Weld County, CO.

## II. LOCATION AND EXISTING CONDITIONS

The proposed Front Range #1 well site is located on the west side of Great Western Dr. approximately 0.7 mile south of the intersection with Eastman Park Dr. The Front Range #1 well site is planned to be located in the Northwest 1/4 of the Southeast 1/4 of Section 26, Township 6 North, Range 67 West, 6th P.M. The Front Range 1 well site is planned to drill stratigraphic test 1 well from the site. The existing land-use is Heavy Industry.

## III. SITE DEVELOPMENT SCHEDULE

The proposed project will include approximately three phases of development. They are detailed as follows:

1. Construction Phase – Earthwork of site and access road
2. Drilling Phase – Rig occupation and well drilled
3. Testing Phase – Stratigraphic well testing

The following schedule details the planned development of the site and an approximate planned drilling schedule (please note that the drilling schedule is subject to change).

*Table 1 – Site Development Schedule.*

Year	Phases of Development
2022	Construction Phase – 1 Well Drilling Phase – 1 Well Testing Phase – 1 Well

## IV. HAUL ROUTE

All trips, including equipment, water, materials, and waste, are planned to arrive and depart using the intersection of Highway 392 and County Rd 23. When departing from the well site, all trucks will use Great Western Dr., then north along County Rd 23, to Highway 392. Highway 392 is two-lane road, with a posted speed limit of 65 mph.

- Great Western Dr. is an internal private roadway.
- County Rd 23 is a County Road.
- Highway 392 is a State Highway maintained by CDOT.

Please refer to Appendix A for a vicinity map and a truck haul route.

## V. TRIP GENERATION

The planned well development of the Front Range #1 Well site will consist of three phases of development. These include the site construction, drilling, and testing. The site construction, drilling, and testing phases are temporary phases of development and would be completed within 2-3 months of occupying the site over a 4-month drilling plan. Table 1, in the Appendix B, shows the estimated daily trip generation by vehicle type for a maximum rig occupation of 1 well, based on information provided by the applicant. The following details the estimated trips generated by the site for the three phases of the project:

*Table 2 - Site Generated Traffic Volumes*

Development Phase	Daily Trips
Construction Phase	60 trips per day
Drilling Phase	72 trips per day
Testing Phase	10 trips per day

## VI. CONCLUSION

1. The proposed access will include a 30-foot wide graveled access road off of Great Western Dr.
2. The short-term impact to the roadway will be highest at about 72 trips per day during the Drilling Phase.
3. The total long-term impact will be about 6 vehicles per day (4 veh/day Passenger Vehicles and 2 veh/day Heavy Trucks) during the Production phase of the wells.
4. The short-term phase impacts exceeding the SHAC thresholds for auxiliary lanes will be managed through the use of a traffic control plan per CDOT's standard practice for Temporary Construction Traffic.

## VII. APPENDIX

## APPENDIX A – HAUL ROUTE MAP



## APPENDIX B – TRIP GENERATION STUDY



Table 1					
Carbon Storage Solutions - Front Range 1 Pad					
Trip Generation Estimate (1 Well Drilled)					
Phase of Development	Gross Vehicle Weight <sup>(1)</sup>		Number of Vehicles Estimated per Day <sup>(1)</sup>		Average Daily Trips
Construction Phase (7 days +/-) - Earthwork of pad site and access road					
Passenger Vehicles <sup>(1)</sup>	4,500	to 8,500 lbs	10	Vehicles	20
Trucks <sup>(1)</sup>	50,000	to 70,000 lbs	20	Vehicles	40
Typical Vehicle Trips per Day =					60
Typical Passenger Car Equivalent Trips per Day <sup>(2)</sup> =					140
Drilling Phase (14 days +/-)					
Passenger Vehicles <sup>(1)</sup>	4,500	to 8,500 lbs	24	Vehicles	48
Trucks <sup>(1)</sup>	50,000	to 70,000 lbs	12	Vehicles	24
Typical Vehicle Trips per Day =					72
Typical Passenger Car Equivalent Trips per Day <sup>(2)</sup> =					120
Pad Testing (90 days +/-)					
Passenger Vehicles <sup>(1)</sup>	4,500	to 8,500 lbs	3	Vehicles	6
Trucks <sup>(1)</sup>	50,000	to 70,000 lbs	2	Vehicles	4
Typical Vehicle Trips per Day =					10
Typical Passenger Car Equivalent Trips per Day <sup>(2)</sup> =					18
Notes:					
(1) Source: Based on input provided by Carbon Storage Solutions					
(2) CDOT State Highway Access Code (SHAC) assumes: passenger vehicle < 20', single unit truck from 20' to 40', multiple unit truck > 40'					
(3) CDOT SHAC assumes single unit trucks = 2 passenger car equivalents and multiple unit trucks = 3 passenger car equivalents					
Source: Uintah Engineering and Land Surveying based on input from Carbon Storage Solutions					