

**INTERIM RECLAMATION PLAN**



Date: January 11, 2022

Location: WR OGDP 3 / Wells Ranch CDP / A02-07 Pad

Legal Description: SWNE Section 2, Township 6 North, Range 64 West, Weld County, Colorado

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**Article I. Introduction**

*Location Information*

This document provides site-specific information for the A02-07 Pad within the WR OGD 3 of the Wells Ranch CDP. The information in this document relates specifically to the time during the construction, drilling, completion, and production of the eight (8) proposed horizontal wells on this location.

The proposed location is irrigated cropland southwest of the intersection of WCR 59 and WCR 74. The Pad will be in the SWNE Section 2, Township 6 North, Range 64 West, zoned agricultural within the Weld County Near-Urban Planning Area. A 1041 WOGLA was filed for the CDP as 1041WOGLA19-0042 on 12/10/2019 and recorded at reception #4556398 on 1/8/2020. Site-specific supplemental information will be filed with Weld County prior to commencement of operations.

The proposed A02-07 Pad oil and gas location disturbance will be 10.2 acres, reduced to 2.8 after interim reclamation. The proposed working pad surface will be 6.8 acres. The Pad is on Parcel 080102000040 owned by Brandon L. Coalson & Juliana L. Coalson. The location is currently used for farming.

The A02-07 Pad will produce to the proposed AB35-10 Facility. Equipment at the A07-04 Pad will include wells and meter/sales buildings.

Phase	Duration (days)	Estimated Start Date
Construction	60 days	2nd Quarter, 2024
Drilling	40 days	3rd Quarter, 2024
Completion	40 days	1st Quarter, 2025
Flowback	N/A	Flowing back to production facility
Production	25 years	2nd Quarter, 2025
Interim Reclamation	60 days	1st Quarter, 2026

**Article II. Site Specific Details**

*Vegetation*

Location is in cropland.

*Soils*

Total area of soil disturbance in acres including accesses, pipeline, and utility corridors: approximately 24.7 acres.

Soil details are included in attached soil report.

Pad Soil type(s): 51 - Otero sandy loam, 1 to 3 percent slopes; 58 - Shingle loam, 1 to 3 percent slopes

Access Soil type(s)\*: 47 – Olney fine sandy loam, 1 to 3 percent slopes; 51 – Otero sandy loam, 1 to 3 percent slopes; 53 – Otero sandy loam, 5 to 9 percent slopes; 58 – Shingle loam, 1 to 3 percent slopes; 74 – Vona loamy sand, 5 to 9 percent slopes; 76 – Vona sandy loam, 1 to 3 percent slopes.

Pipeline Corridor Soil type(s)\*: 37 – Nelson fine sandy loam, 0 to 3 percent slopes; 47 – Olney fine sandy loam, 1 to 3 percent slopes; 51 – Otero sandy loam, 1 to 3 percent slopes; 52 – Otero sandy loam, 3 to 5 percent slopes; 58 – Shingle loam, 1 to 3 percent slopes; 64 – Thedalund loam, 1 to 3 percent slopes; 76 – Vona sandy loam, 1 to 3 percent slopes

*\*NRCS data is not accurate at scale for access roads and pipeline corridor.*

#### *Security*

A meeting with the surface owner will occur after completions but before interim reclamation to determine a fencing plan if needed. The location will be adequately secured per 603.h to restrict access by unauthorized persons in accordance with the surface owner's requests.

#### *Access/Pipeline/Flowline/Utility*

No portions of the access road will be reclaimed. Buried intra-facility flowline corridors will be totally reclaimed. 3<sup>rd</sup> party utility and gathering pipelines are not being permitted as part of this OGD.

### **Article III. Mitigation Measures and Best Management Practices**

#### *1002.a. Fencing*

Noble will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any relevant Local Government requirements.

#### *1002.f. Stormwater Management*

Temporary seeding, hydro mulching, and/or surface roughening will be placed along the north, east, and west sides of the pad during initial pad construction and maintained until interim reclamation, where additional seeding, hydro mulching, and/or surface roughening will also occur at the areas being reclaimed.

Two proposed offsite channels which drain towards a detention pond in the northeast corner of the pad will be constructed during pad construction and reclaimed during interim reclamation.

#### *1003.a. General*

When wells are completed for production, all disturbed areas no longer needed will be restored and revegetated as soon as practicable.

All well sites and surface production facilities shall be maintained in accordance with Rule 603.

Equipment, Weeds, Waste, and Trash: Debris and waste materials other than de minimis amounts, including, but not limited to, concrete, sack bentonite and other drilling mud additives, sand plastic, pipe

and cable, as well as equipment associated with the drilling, re-entry, or completion operations will be removed.

All E&P waste shall be handled according to the 900 Series rules.

All guy line anchors shall be brightly marked pursuant to Rule 603.j

*1003.b. Areas no Longer in Use*

All disturbed areas affected by drilling or subsequent operations, except areas reasonably needed for production operations or for subsequent drilling operations to be commenced within twelve (12) months, will be reclaimed as early and as nearly as practicable to their original condition or their final land use as designated by the surface owner and will be maintained to control dust and minimize erosion. If subsidence occurs in such areas, additional topsoil will be added to the depression and the land will be re-leveled as close to its original contour as practicable.

All holes unnecessary for further lease operations will be backfilled as soon as possible after the drilling rig is released to conform with surrounding terrain.

*1003.c. Compaction Alleviation.*

All areas compacted by drilling and subsequent oil and gas operations which are no longer needed following completion of such operations will be cross-ripped. Compaction alleviation operations will be undertaken when the soil moisture at the time of ripping is below thirty-five percent (35%) of field capacity. Ripping will be undertaken to a depth of eighteen (18) inches unless bed rock is encountered at a shallower depth.

*1003.d. Drilling pit closure*

Location is closed loop. No pits on location, so no pit closure will be needed.

*1003.e. Restoration and revegetation*

All segregated soil horizons removed from non-crop lands shall be replaced to their original relative positions and contour as near as practicable to achieve erosion control and long-term stability and shall be tilled adequately in order to establish a proper seedbed. The disturbed area then shall be returned to farmland in the first favorable season following rig demobilization.

Noble Energy will be responsible for segregating the topsoil, backfilling, re-compacting any backfill, reseeding, and re-contouring the surface of any disturbed area so as not to interfere with Owner's operations and will reclaim such area to be returned to preexisting conditions as best as possible with control of all weeds.

*1003.f. Weed control*

During drilling, completion, production, and reclamation operations, all disturbed areas shall be kept as free of all undesirable plant species. Noble Energy or contractor will conduct daily visual inspections for

weeds. Noble Energy will check for weed seeds and when found will clean gear, equipment, and clothing prior to entering or leaving the site.

#### *Reclamation Monitoring, Inspection, Maintenance, and Reporting*

Regular monitoring of reclaimed areas will be conducted by a qualified consultant to assess the success of reclamation activities and identify any corrective actions required to achieve success. Any corrective actions recommended by the consultant will be communicated with the appropriate Noble Energy personnel who will implement the corrective actions and track the status of completion of such actions. Corrective actions may include, but not be limited to, control of weeds and other undesired vegetation, recommendations for soil amendments or additional seeding, and erosion control. The regular monitoring will include qualitative assessments of revegetation success until such time the consultant believes that revegetation has met the appropriate State and/or Federal standards. At that time, the consultant will utilize an appropriate quantitative method for determining revegetation success.

#### *Interim Reclamation Completion Notice*

Noble Energy will submit a Form 4 Sundry Notice describe reclamation procedures, associated mitigation measures, changes to final land use, and the total cover of live perennial vegetation to evaluate the success of interim reclamation.

#### *Site-Specific BMPs*

The following is a list of site-specific BMPs related to Noble Energy's interim reclamation approach at the A02-07 Pad location, for areas that will be reclaimed and not used for continuing oil and gas operations:

- Compaction alleviation – compacted soils and areas of the location impacted by construction will be ripped to a minimum depth of 18 inches prior to topsoil replacement. Decompaction will be performed by a parabolic Ag style ripper capable of fracturing the soil ensuring soil layers are not mixed. Proper decompaction will allow for greater water infiltration and promote vegetation growth.
- Culvert – culverts are a means of subsurface storm water conveyance where surface transport is not feasible. Culverts are most often used to convey water under a roadway without impeding use of the road.
- Culvert protection - culvert protection may be required at the inlet (upstream side) of the culvert and/or the outlet (downstream side) of the culvert. Protection helps to reduce erosion from culverts with concentrated, high velocity flows.
- Erosion control – seed/mulch application functions as erosion control during initial reclamation efforts until adequate vegetation establishment on areas not returned to farming, at which point the reclamation will be deemed final stabilized. The interim working pad will be stabilized against potential erosion for the long-term with surface armoring.
- Fencing – Noble Energy may fence reclaimed areas until interim reclamation has been achieved in order to ensure vegetation growth is not overgrazed if such fencing does not interfere with the landowner's farming operations. Fence types are to be determined by Noble Energy and the landowner to adequately prevent livestock from entering reclaimed areas. Fencing to be installed after seed/mulch application.

- Grading – Grading involves reshaping the ground surface to planned grades. Grading provides more suitable topography for well pads and pipelines and helps to control runoff, soil erosion, and sediment during and after construction in these areas.
- Mulching – mulching is a temporary erosion control used to stabilize exposed soils while waiting for vegetation to establish. Mulch protects soils from rain impacts and wind erosion, increases infiltration, and helps regulate soil temperatures. Typically, agricultural straw or hay is mechanically applied and crimped in or wood splinters/fibers are surface applied by hand or machinery. Tackifiers may be sprayed over the applied mulch to enhance stabilization.
- Placement of soil – any subsoil used during interim reclamation is applied first, followed by top soil, in order to ensure that topsoil is not contaminated or adulterated and to ensure optimum germination efforts.
- Packing of soil layers – if multiple soil layers are applied during interim reclamation, each soil layer is packed separately and sequentially.
- Recontouring – documenting the existing topography and natural drainages and the site prior to disturbance, and reestablishing the topography and contours on the reclamation to pre-disturbance conditions.
- Routine inspections – Noble Energy, and/or third-party contractors, conduct a number of routine and regularly scheduled inspections during which the reclamation and general site conditions are inspected and monitored.
- Seedbed preparation – after decompaction, recontouring, and topsoil application, the top 3- 4 inches of soil will be prepared for seed application using a high-speed disk and/or a mulcher as needed. Seedbed will be void of earthen clods and firm enough to keep seed from being applied too deeply. Soil samples will be collected and analyzed prior to seed application to identify any amendments needed. Compost and fertilizer will be applied based on current site conditions and on an as needed basis. Portions of the location that will be returned to farming operations will be prepared in accordance with the landowner's direction.
- Seeding – seeding, to establish perennial vegetative cover following construction, is the best long term stabilization control for areas not stabilized with other permanent controls (pavement, concrete, road base, etc.). Establishing perennial vegetation stabilizes the soil, reduces wind and water erosion, minimizes sheet flow, increases infiltration, and reduces overall runoff volumes. Seeding can be used to establish temporary stabilization when dirt moving activities have ceased and will not resume for an extended period of time, or as a final stabilization technique as part of the reclamation plan for a site. Seeding of portions of the location that will be returned to farming operations will be seeded by the landowner at the appropriate time.
- Seed mix – the seed mix for reclaimed areas that will not be returned to farming operations will be selected in coordination with the landowner and/or the NRCS.
- Stockpile management – stockpile management is the protection of stockpiled erodible materials through structural and nonstructural practices.
- Surface armor – surface armor is a combination of various materials (e.g., clay, concrete, dirt, rock, etc.) used to stabilize a surface on location where erosion could occur. The armor reduces erosion caused by runoff and/or raindrop impact and provides a stable working surface for various construction related activities. Surface armor is often utilized throughout the life of a location and can be incorporated on access roads, tank battery locations, and well head locations.
- Timing of reclamation – seeding of areas not returned to farming will occur during interim reclamation – after compaction alleviation, topsoil application, recontouring, and seedbed preparation, and will be conducted during a spring or fall planting window to achieve maximum

germination rates. Timing of seeding of areas to be returned to farming will be determined by the landowner.

- Topsoil salvage – the salvage and proper handling of topsoil is one of the keys to reclamation success. Topsoil is vital for the revegetation of disturbed areas following final grading.
- Training – employee training on spill prevention, stormwater, and associated practices and procedures is essential to ensuring that everyone has the knowledge needed to follow appropriate steps and be able to minimize potential impacts resulting from stormwater related incidents.
- Weed control – invasive plants will be managed by performing a site assessment during the spring and upon completion of the first growing season after interim reclamation. This assessment will identify and inventory any/all invasive plants on the location. The assessment will include GPS coordinates and maps detailing the location of the invasive plants. Management will be performed by either mowing or spraying and in some rare occasions both methods may be necessary. Any spraying conducted will be coordinated with the landowner to not impact crops. Routine inspections throughout the life of the pad will also aid in identifying when weed mitigation is needed.

**Article IV.      Exhibits/References/Appendices**

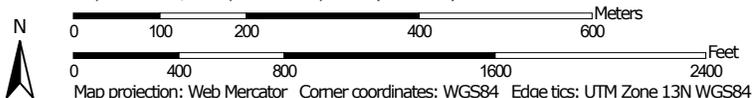
NRCS Soil Details  
Layout Drawings

Soil Map—Weld County, Colorado, Southern Part



Soil Map may not be valid at this scale.

Map Scale: 1:8,700 if printed on A portrait (8.5" x 11") sheet.



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part  
 Survey Area Data: Version 19, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 19, 2018—Aug 10, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
37	Nelson fine sandy loam, 0 to 3 percent slopes	0.6	2.7%
47	Olney fine sandy loam, 1 to 3 percent slopes	1.8	8.4%
51	Otero sandy loam, 1 to 3 percent slopes	12.2	57.9%
53	Otero sandy loam, 5 to 9 percent slopes	0.0	0.1%
58	Shingle loam, 1 to 3 percent slopes	6.1	29.0%
74	Vona loamy sand, 5 to 9 percent slopes	0.2	0.8%
76	Vona sandy loam, 1 to 3 percent slopes	0.2	1.1%
<b>Totals for Area of Interest</b>		<b>21.1</b>	<b>100.0%</b>

## Weld County, Colorado, Southern Part

### 37—Nelson fine sandy loam, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 362h

*Elevation:* 4,800 to 5,050 feet

*Mean annual precipitation:* 13 to 15 inches

*Mean annual air temperature:* 48 to 57 degrees F

*Frost-free period:* 145 to 190 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Nelson and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Nelson

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Residuum weathered from sandstone

##### Typical profile

*H1 - 0 to 9 inches:* fine sandy loam

*H2 - 9 to 30 inches:* fine sandy loam

*H3 - 30 to 34 inches:* weathered bedrock

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately low to high (0.06 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water capacity:* Low (about 3.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* R067BY024CO - Sandy Plains

*Hydric soil rating:* No

### **Minor Components**

#### **Thedalund**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

#### **Olney**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 19, Jun 5, 2020

## Weld County, Colorado, Southern Part

### 47—Olney fine sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 362v

*Elevation:* 4,600 to 5,200 feet

*Mean annual precipitation:* 11 to 15 inches

*Mean annual air temperature:* 46 to 54 degrees F

*Frost-free period:* 125 to 175 days

*Farmland classification:* Prime farmland if irrigated and the product of  
I (soil erodibility) x C (climate factor) does not exceed 60

#### Map Unit Composition

*Olney and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of  
the mapunit.*

#### Description of Olney

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Mixed deposit outwash

##### Typical profile

*H1 - 0 to 10 inches:* fine sandy loam

*H2 - 10 to 20 inches:* sandy clay loam

*H3 - 20 to 25 inches:* sandy clay loam

*H4 - 25 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to high (0.57 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0  
mmhos/cm)

*Available water capacity:* Moderate (about 7.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4c

*Hydrologic Soil Group:* B

*Ecological site:* R067BY024CO - Sandy Plains  
*Hydric soil rating:* No

**Minor Components**

**Zigweid**

*Percent of map unit:* 10 percent  
*Hydric soil rating:* No

**Vona**

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part  
Survey Area Data: Version 19, Jun 5, 2020

## Weld County, Colorado, Southern Part

### 51—Otero sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3630

*Elevation:* 4,700 to 5,250 feet

*Mean annual precipitation:* 12 to 15 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 130 to 180 days

*Farmland classification:* Prime farmland if irrigated and the product of  
I (soil erodibility) x C (climate factor) does not exceed 60

#### Map Unit Composition

*Otero and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of  
the mapunit.*

#### Description of Otero

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Eolian deposits and/or mixed outwash

##### Typical profile

*H1 - 0 to 12 inches:* sandy loam

*H2 - 12 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0  
mmhos/cm)

*Available water capacity:* Moderate (about 7.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* R067BY024CO - Sandy Plains

*Hydric soil rating:* No

### **Minor Components**

#### **Kim**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

#### **Vona**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 19, Jun 5, 2020

## Weld County, Colorado, Southern Part

### 53—Otero sandy loam, 5 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3632

*Elevation:* 4,700 to 5,250 feet

*Mean annual precipitation:* 12 to 15 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 130 to 180 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Otero and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Otero

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Eolian deposits and/or mixed outwash

##### Typical profile

*H1 - 0 to 12 inches:* sandy loam

*H2 - 12 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 5 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 10 percent

*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Available water capacity:* Moderate (about 7.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* A

*Ecological site:* R067BY024CO - Sandy Plains

*Hydric soil rating:* No

### **Minor Components**

#### **Kim**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

#### **Cushman**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 19, Jun 5, 2020

## Weld County, Colorado, Southern Part

### 58—Shingle loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3637

*Elevation:* 4,850 to 5,200 feet

*Mean annual precipitation:* 10 to 13 inches

*Mean annual air temperature:* 46 to 48 degrees F

*Frost-free period:* 110 to 140 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Shingle and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Shingle

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Residuum weathered from shale

##### Typical profile

*H1 - 0 to 6 inches:* loam

*H2 - 6 to 18 inches:* clay loam

*H3 - 18 to 22 inches:* unweathered bedrock

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):*

Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 3.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 6s

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* D

*Ecological site:* Shaly Plains (R067BY045CO)

*Hydric soil rating:* No

### **Minor Components**

#### **Renohill**

*Percent of map unit:* 6 percent

*Hydric soil rating:* No

#### **Terry**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### **Ulm**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 17, Sep 10, 2018

## Weld County, Colorado, Southern Part

### 74—Vona loamy sand, 5 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2x0j9

*Elevation:* 4,100 to 5,200 feet

*Mean annual precipitation:* 12 to 17 inches

*Mean annual air temperature:* 46 to 52 degrees F

*Frost-free period:* 130 to 155 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Vona and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Vona

##### Setting

*Landform:* Hills, hillslopes

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear, convex

*Parent material:* Eolian sands

##### Typical profile

*A - 0 to 7 inches:* loamy sand

*Bt1 - 7 to 14 inches:* sandy loam

*Bt2 - 14 to 20 inches:* sandy loam

*Bk - 20 to 45 inches:* sandy loam

*C - 45 to 80 inches:* loamy sand

##### Properties and qualities

*Slope:* 5 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High  
(2.00 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline (0.1 to 1.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 6e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* A  
*Ecological site:* Deep Sand (R067BY015CO)  
*Hydric soil rating:* No

### **Minor Components**

#### **Ascalon**

*Percent of map unit:* 5 percent  
*Landform:* Interfluves  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### **Manter**

*Percent of map unit:* 5 percent  
*Landform:* Interfluves, hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Interfluve, side slope  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### **Olnest**

*Percent of map unit:* 3 percent  
*Landform:* Interfluves, hills  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Interfluve, base slope  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### **Valent**

*Percent of map unit:* 2 percent  
*Landform:* Dunes  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Crest, side slope, nose  
slope  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* Deep Sand (R067BY015CO)  
*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part  
Survey Area Data: Version 17, Sep 10, 2018

## Weld County, Colorado, Southern Part

### 76—Vona sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 363w

*Elevation:* 4,600 to 5,200 feet

*Mean annual precipitation:* 13 to 15 inches

*Mean annual air temperature:* 48 to 55 degrees F

*Frost-free period:* 130 to 160 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Vona and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Vona

##### Setting

*Landform:* Plains, terraces

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium and/or eolian deposits

##### Typical profile

*H1 - 0 to 6 inches:* sandy loam

*H2 - 6 to 28 inches:* fine sandy loam

*H3 - 28 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* Sandy plains (R067BY024CO)

### **Minor Components**

#### **Remmit**

*Percent of map unit:* 9 percent

#### **Olney**

*Percent of map unit:* 3 percent

#### **Julesburg**

*Percent of map unit:* 3 percent

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 13, Sep 23, 2014

# A02-07 PAD GRADING PLAN



ASCENT GEOMATICS SOLUTIONS  
8620 WOLFF COURT  
WESTMINSTER, CO 80031  
(303) 928-7128

PREPARED FOR:  
**noble energy**

NOBLE ENERGY, INC.  
1625 BROADWAY, SUITE 2200  
DENVER, CO 80202  
(303) 228-4000

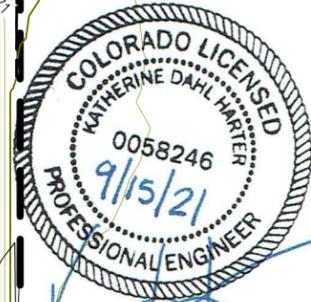
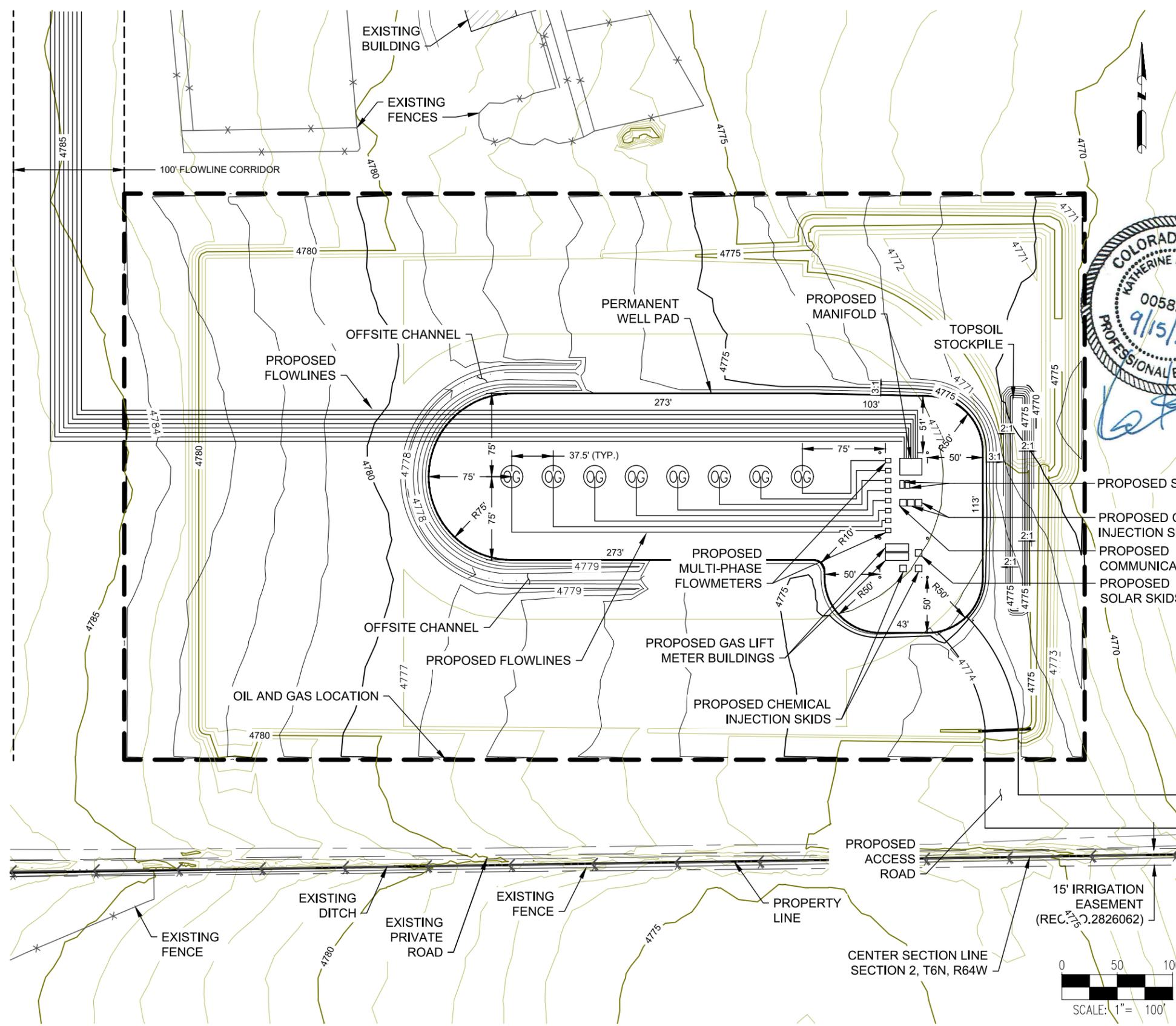
SHEET NAME:  
**INTERIM-RECLAMATION LAYOUT**  
SURFACE LOCATION  
A02-07 PAD  
SW 1/4 NE 1/4 SECTION 2,  
T6N, R64W, 6TH P.M.,  
WELD COUNTY, COLORADO

REV.	DATE	DESCRIPTION	INT.	AMS
0	09/15/21	ISSUED FOR CONSTRUCTION	-	-

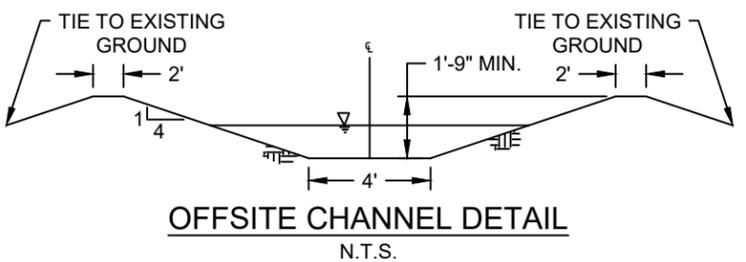
FIELD DATE:  
04-16-2019  
DRAWING DATE:  
07-27-2021  
DRAFTED BY:  
KTL  
SHEET NO.  
08 OF 16

### SITE QUANTITIES

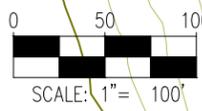
TOTAL CUT FOR SITE (BANK)	12,657 CY
TOTAL FILL FOR SITE	12,657 CY
NET EXCESS MATERIAL	0 CY
RECLAIMED AREA	7.4 ACRES
PERMANENT DISTURBANCE AREA	2.8 ACRES
OIL & GAS LOCATION AREA	10.2 ACRES



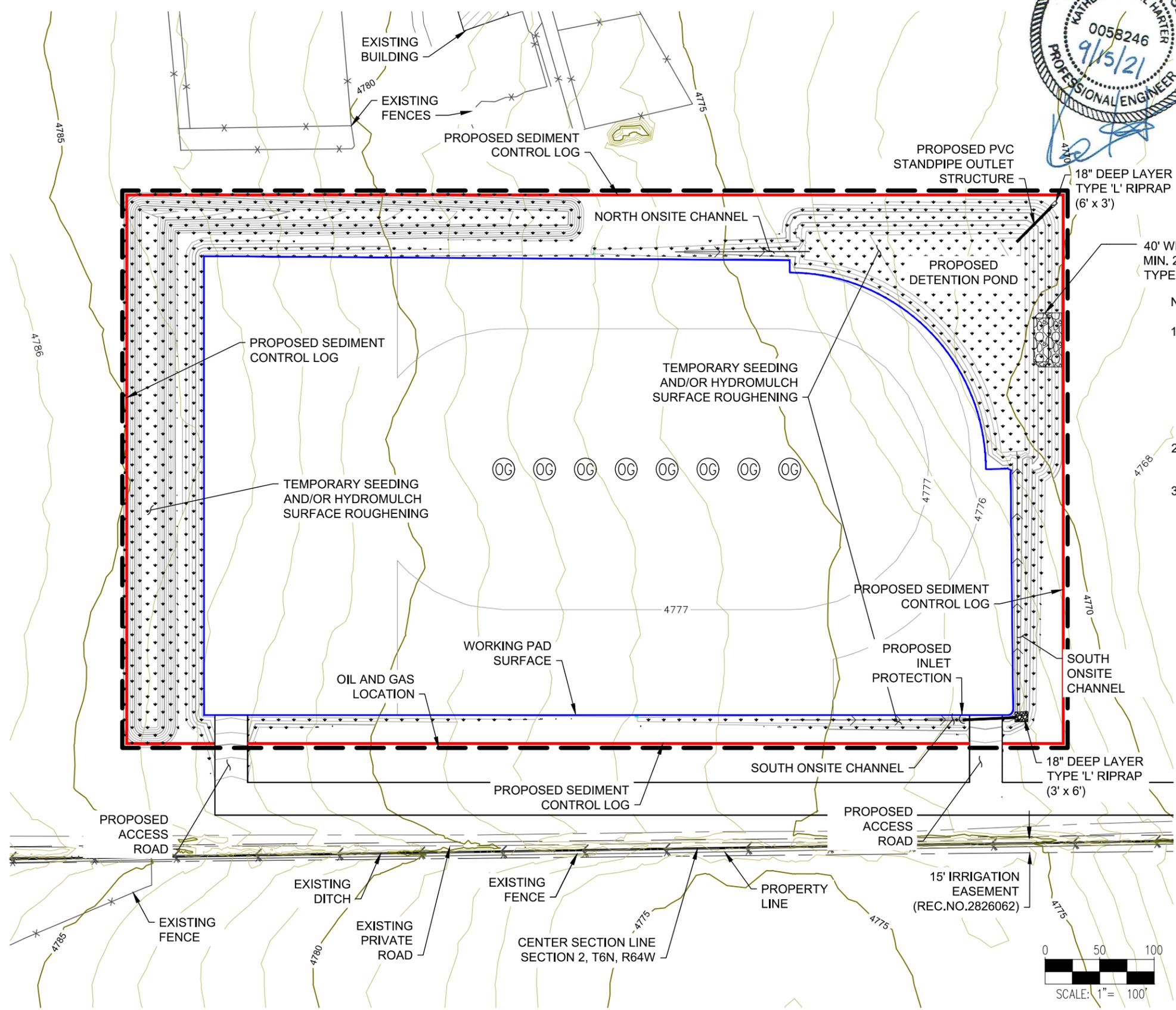
- NOTES:
- ASCENT GEOMATICS SOLUTIONS WAS NOT PROVIDED A TITLE REPORT FOR THIS SITE. ALL RECORDED DOCUMENTS REFERENCED ON THESE PLANS WERE DOWNLOADED FROM RESEARCH VIA THE WELD COUNTY CLERK AND RECORDER. ASCENT GEOMATICS SOLUTIONS MAKES NO GUARANTY OR WARRANTY, EITHER EXPRESSED OR IMPLIED, TO THE COMPLETENESS OF ENCUMBRANCES TO THE SUBJECT PROPERTY.
  - CULVERTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.



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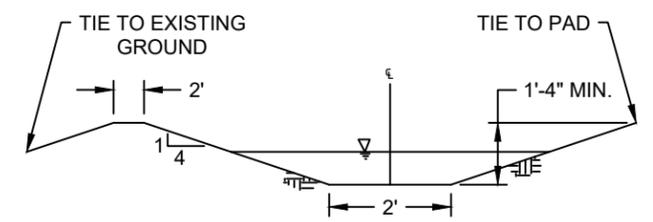


A02-07 PAD  
GRADING PLAN

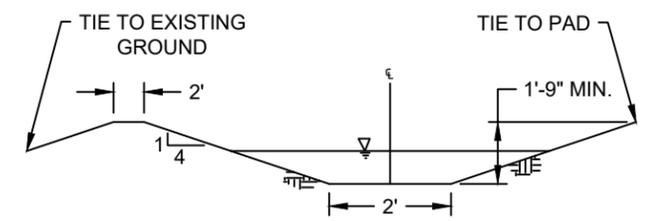


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2. CULVERTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
3. VEHICLE TRACKING CONTROL TO BE INSTALLED ON ACCESS ROAD WEST OF INTERSECTION WITH COUNTY ROAD 59.

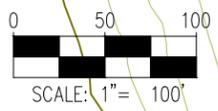


NORTH ONSITE CHANNEL DETAIL  
N.T.S.



SOUTH ONSITE CHANNEL DETAIL  
N.T.S.

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**ASCENT**  
GEOMATICS SOLUTIONS  
8620 WOLFF COURT  
WESTMINSTER, CO 80031  
(303) 928-7128

PREPARED FOR:  
**noble energy**

NOBLE ENERGY, INC.  
1625 BROADWAY, SUITE 2200  
DENVER, CO 80202  
(303) 228-4000

SHEET NAME:  
EROSION & SEDIMENT CONTROL PLAN - INTERIM  
SURFACE LOCATION  
A02-07 PAD  
SW 1/4 NE 1/4 SECTION 2,  
T6N, R64W, 6TH P.M.,  
WELD COUNTY, COLORADO

REV.	DATE	DESCRIPTION	INT.
0	09/15/21	ISSUED FOR CONSTRUCTION	

FIELD DATE:  
04-16-2019  
DRAWING DATE:  
07-27-2021  
DRAFTED BY:  
KTL  
SHEET NO.  
10 OF 16

A02-07 PAD  
GRADING PLAN

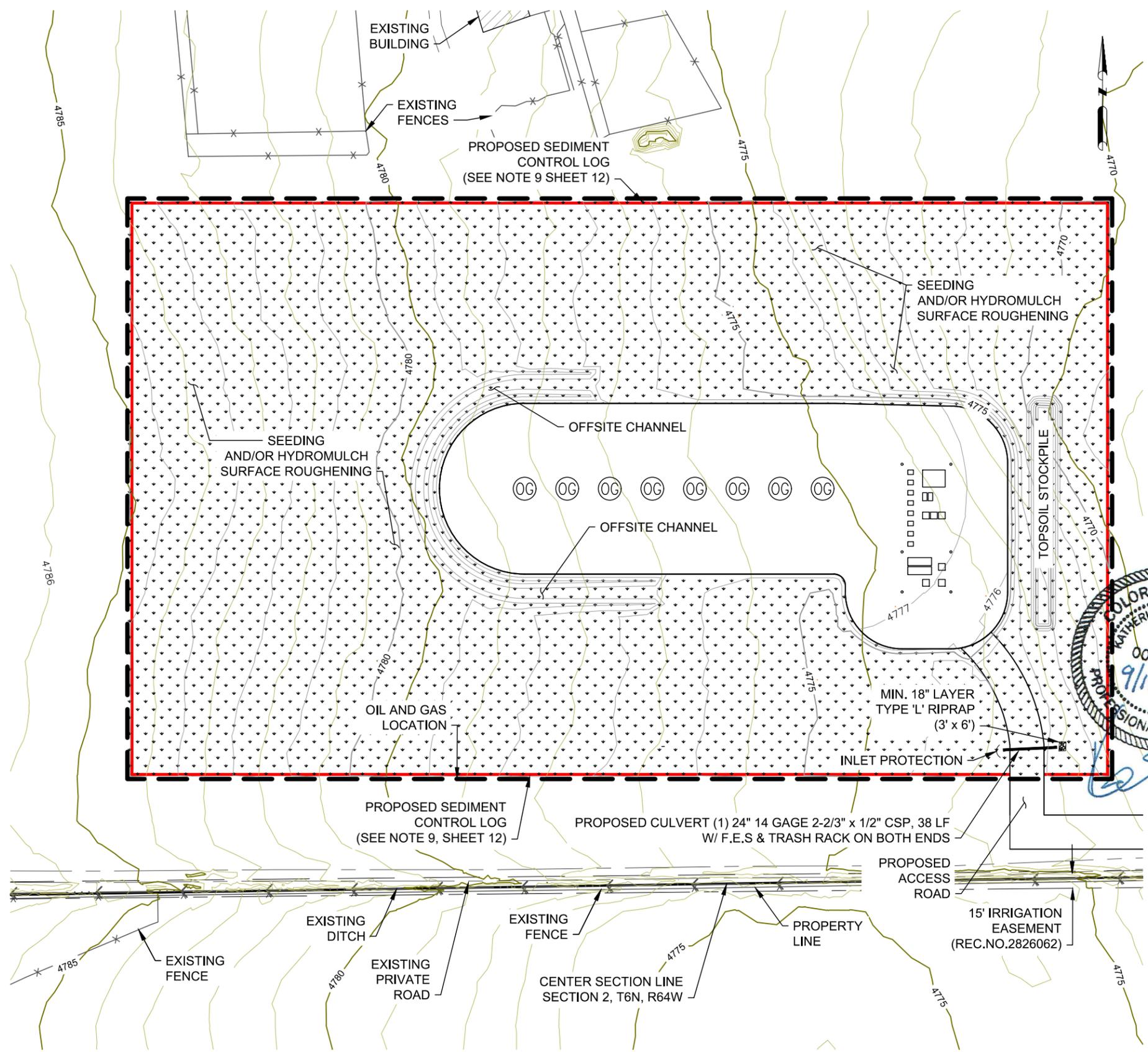


ASCENT GEOMATICS SOLUTIONS  
8620 WOLFF COURT  
WESTMINSTER, CO 80031  
(303) 928-7128

PREPARED FOR:  
**noble energy**

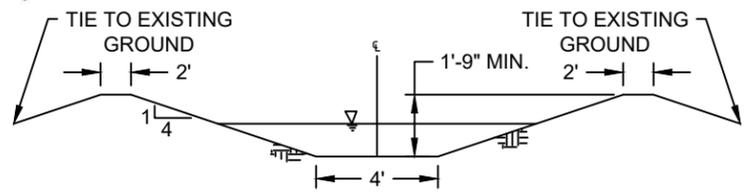
NOBLE ENERGY, INC.  
1625 BROADWAY, SUITE 2200  
DENVER, CO 80202  
(303) 228-4000

SHEET NAME:  
EROSION & SEDIMENT CONTROL PLAN - FINAL  
SURFACE LOCATION  
A02-07 PAD  
SW 1/4 NE 1/4 SECTION 2,  
T6N, R64W, 6TH P.M.,  
WELD COUNTY, COLORADO



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OFFSITE CHANNEL DETAIL  
N.T.S.

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REV.	DATE	REVISION DESCRIPTION	INT.
0	09/15/21	ISSUED FOR CONSTRUCTION	AM

FIELD DATE: 04-16-2019  
DRAWING DATE: 07-27-2021  
DRAFTED BY: KTL  
SHEET NO. 11 OF 16