



# **INTERIM RECLAMATION PLAN**

Dorado 36

# Contents

1. Site Description:.....	1
1.1. Project Schedule .....	1
1.2. Surface Disturbance Totals .....	1
1.3. Well Pad Location .....	1
1.4. Access Road.....	1
1.5. Interim Reclamation .....	1
2. Soils Description:.....	2
3. Oil and Gas Location Pre-Disturbance Vegetation Composition: .....	3
4. Identification of Reference Area and Vegetation Composition (Non-Crop Land):.....	3
5. Known Weed Infestations:.....	4
6. Gathering Lines: .....	4
7. Access Road: .....	4
8. Removal of Drilling, Re-entry, Completion Equipment and all Associated Debris and Waste Materials (1003.a.):.....	4
9. Identification of Interim Reclamation Areas no Longer in Use (1003.b.): .....	4
10. Compaction Alleviation (1003.c.):.....	5
11. Recontouring:.....	5
12. Re-establish and Stabilize Drainage Features:.....	5
13. Establish Desired Self-Perpetuating Plant Community (1003.e.): .....	6
14. Seedbed Preparation and Seeding (1003.e.): .....	6
15. Fencing:.....	6
16. Management of Invasive Plants (1003.f.):.....	6
17. Proposed Interim Reclamation Drawing:.....	6
18. Reclamation Monitoring, Inspection, Maintenance, and Reporting: .....	7
19. Interim Reclamation Completion Notice, Form 4 (1003.e.[3]): .....	8
20. Site-Specific Interim Reclamation BMPs:.....	9

# Appendices

- Appendix A** Stormwater Management Plan Maps
- Initial Construction SWMP Overview Map
  - Construction Phase Layout Drawing
  - Production Phase Layout Drawing (Interim Reclamation Drawing)
  - Soils/Erosion Maps
  - Pre-Disturbance Land Use Map
  - Pre-Disturbance Vegetation Identification/Analysis and Photo Series
- Appendix B** Seed Mix
- Appendix C** Wetland Survey Site Map

## **1. Site Description:**

*Provide a brief description of the oil and gas location, including whether on fee or Pad surface; total acres of disturbance, working pad surface, and post-drilling and completion area (production pad); site elevation; proposed timeframes and duration of all oil and gas operations; and timeframe for interim reclamation (first favorable season).*

Bison is proposing the construction, development, and operation of the Dorado 36 (Dorado) Oil and Gas Development Plan (OGDP). The project consists of the development of the Dorado well pad and associated infrastructure to support the drilling and production of 10 new oil and gas wells.

### **1.1. Project Schedule**

The anticipated project schedule can be found in the associated Cumulative Impacts Plan.

### **1.2. Surface Disturbance Totals**

The Dorado will have a permitted disturbance area of 16.6 acres during the construction phase. During interim reclamation, a total of 11.3 acres will be seeded/mulched and reclaimed which includes the topsoil stockpile (2.5 acres), the detention pond (1.1 acres), and additional areas around the sides/slopes/perimeter (7.7 acres), leaving an unreclaimed area of 5.3 acres.

The access road accounts for 3.5 acres – 528 feet (0.4 acres) of new/proposed access road and 3,696 feet (3.1 acres) of existing access road.

### **1.3. Well Pad Location**

The Dorado well pad would support 10 wells to be drilled on-location and their supporting production equipment. Pad construction will involve clearing vegetation, stripping, and stockpiling topsoil, and leveling. Construction equipment generally involves the use of heavy equipment, such as a dozer, flat blade, dump truck, and crane; however, equipment needs may vary depending on the site-specific conditions of the individual well pad.

A stockpile for topsoil will be established within the permitted location boundaries and will be maintained for future backfilling and rehabilitation of the disturbed areas of the well pad for interim reclamation and final abandonment after the life of the wells.

### **1.4. Access Road**

Bison will construct 528 feet of new access road, branching off from an existing oil and gas access road, to provide access to the Dorado pad from County Road 74. The length of existing access road from County Road 74 is 3,696 feet.

### **1.5. Interim Reclamation**

In accordance with ECOM Rule 1003, interim reclamation for the project will commence as soon as practicable and, at minimum, within 6 months (since the land use here is rangeland/grassland) following drilling and subsequent operations. Debris, waste material, and equipment associated with drilling, re-entry, and completion operations will be removed from the facility. All disturbed, non-working areas

affected by drilling or subsequent operations, except those areas needed for production operations or for subsequent drilling operations to be commenced within 12 months, shall be reclaimed as nearly as practical to their original condition or their designated final land use. The reclaimed areas will be seeded/mulched in the first favorable season following rig demobilization. Areas needed for production operations or for subsequent drilling operations to be commenced within 12 months will be stabilized and maintained to minimize dust and erosion to the extent possible.

## **2. Soils Description:**

*Briefly describe the identified soil types and boundaries of the mapped units on the location and pertinent soil properties (drainage class, available water capacity, depth to restrictive feature [bedrock or confining layer]).*

A desktop review of the proposed project area indicates the presence of three soil map units across the well pad and access road. The breakdown of soil disturbance by well pad and access road is summarized in the table below.

**Dorado 36 OGD Soil Disturbance**

<b>Project Feature</b>	<b>Soil Type</b>	<b>Acreage Disturbed</b>
Well Pad	63 - Tassel loamy fine sand, 5 to 20 percent slopes	1.1
Well Pad	72 - Vona loamy sand, 3 to 9 percent slopes	4.6
Well Pad	74 - Vona sandy loam, 3 to 9 percent slopes	10.9
Access Road	63 - Tassel loamy fine sand, 5 to 20 percent slopes	1.0
Access Road	72 - Vona loamy sand, 3 to 9 percent slopes	0.1
Access Road	74 - Vona sandy loam, 3 to 9 percent slopes	2.4
<b>Total OGD Soil Disturbance</b>		<b>20.1</b>

The Vona sandy loam (3 to 9 percent slopes) soil map unit typical profile shows an anticipated H1 depth of 0 to 6 inches consisting of sandy loam, where it transitions to an H2 (6 to 15 inches) consisting of fine sandy loam. The depth to a restrictive feature is more than 80 inches. The drainage class is well drained, and the available water capacity is moderate (about 6.4 inches). This soil type has a hydrologic soil group classification of Group A - soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sand and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.

The Vona loamy sand (3 to 9 percent slopes) soil map unit typical profile shows an anticipated A horizon depth of 0 to 7 inches consisting of loamy sand, where it transitions to an Bt1 horizon (7 to 14 inches) consisting of sandy loam. The depth to a restrictive feature is more than 80 inches. The drainage class is well drained, and the available water capacity is moderate (about 6.4 inches). This soil type has a hydrologic soil group classification of Group A - soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sand and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.

The Tassel loamy fine sand (5 to 20 percent slopes) soil map unit typical profile shows an anticipated H1 depth of 0 to 7 inches consisting of loamy fine sand, where it transitions to an H2 (7 to 19 inches) consisting

of fine sandy loam. The depth to a restrictive feature is 10 to 20 inches to paralithic bedrock. The drainage class is well drained, and the available water capacity is very low (about 2.1 inches). This soil type has a hydrologic soil group classification of Group D - soils having very slow infiltration rates when thoroughly wetted, consisting chiefly of (1) clayey soils with high swelling capacity or potential, (2) soils with a high permanent water table, (3) soils with claypan or clay layer at or near the surface, and (4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission.

Slopes in the project area range from 0-20%. The risk of susceptibility to erosion/runoff is low to moderate based on K factor values; the overall erosion hazard is slight.

Soils/erosion maps can be found in Appendix A. The NRCS soils reports can be found as an attachment to the form 2A.

### **3. Oil and Gas Location Pre-Disturbance Vegetation Composition:**

*Describe the predominant plant species based on both soil types and onsite survey, as well as the percent of vegetative cover.*

The pre-disturbance land use at the subject location is disturbed grassland/rangeland which has been rented out for livestock grazing.

The pre-disturbance vegetation at the project location consists of both perennial and annual species with blue grama most commonly observed. Buffalo grass, kochia, western wheatgrass, purple three-awn, plains prickly pear, and sand dropseed were also common species. Rare species included small soapweed, western spiderwort, crested wheatgrass, and Idaho fescue.

Vegetation Coverage: ten semi-random quadrat samples were analyzed in the future project area in order to determine pre-disturbance vegetation coverage. All perennial plants, excluding noxious weeds, were included in the coverage estimates. Pre-disturbance plant coverage ranged from 30% to 90%, averaging 66% over the ten semi-random samples. The pre-disturbance desirable coverage metric can be used to help determine ECMC interim reclamation completion and final reclamation in the future, as well as CDPHE final stabilization.

Land use maps and pre-existing conditions/vegetation photo series and maps can be found in Appendix A.

### **4. Identification of Reference Area and Vegetation Composition (Non-Crop Land):**

*Describe how and where the Reference Area was determined and describe the predominant plant species based on both soil types and onsite survey, as well as the percent of vegetative cover.*

The reference area chosen for the subject location is ~700 feet northeast of the proposed pad (coordinates: 40.53374, -104.38246). This area is similar to the subject location in terms of soils map units (Vona sandy loam), and shows the same vegetation species and coverage as the project area.

## **5. Known Weed Infestations:**

*Identify any Colorado list A or B weed infestations at this location.*

No List A or B noxious weeds were found in the project area.

## **6. Gathering Lines:**

*Identify the pipeline and utility corridors that will be reclaimed (if applicable).*

Flowlines or utility corridors within the reclamation areas on the facility map (Appendix A) will be reclaimed during the interim reclamation phase or stabilized for ongoing operations if located on the interim working pad. All Dorado wells will be located on the same working surface as the tank battery.

Any midstream tie-in work (gas/oil/water sales/pipelines) will be unassociated to the subject project and off-pad reclamation will be managed by the 3rd party responsible for the construction. On-pad reclamation will likely include reapplying road base to armor the on-pad disturbed pipeline corridor, and rebuilding perimeter BMPs (ditch/berm) after tie-in.

## **7. Access Road:**

*Identify if portions of the access road system can be reclaimed (if applicable).*

No portions of the access road will be reclaimed during interim reclamation.

## **8. Removal of Drilling, Re-entry, Completion Equipment and all Associated Debris and Waste Materials (1003.a.):**

*Debris and non-exploration and production (E&P) waste materials (concrete, sack bentonite and other drilling mud additives, sand, plastic, pipe and cable) should be removed and cellars, rat holes, and other boreholes unnecessary for further lease operations should be backfilled.*

All E&P waste will be removed as outlined in the associated Waste Management Plan, and all cellars, rat holes, boreholes, etc. will be backfilled following drilling and completions.

## **9. Identification of Interim Reclamation Areas no Longer in Use (1003.b.):**

*Identify the areas (and acreage) immediately around wellhead equipment, production tanks, separation equipment, air pollution control and treatment equipment, meter stations, and LACT units on location that will not be interim reclaimed.*

Areas that are to be reclaimed during interim reclamation are shown in the SWMP interim reclamation layout drawing in Appendix A. The Dorado will have a permitted disturbance area of 16.6 acres during the construction phase. During interim reclamation, a total of 11.3 acres will be seeded/mulched and reclaimed which includes the topsoil stockpile (2.5 acres), the detention pond (1.1 acres), and additional areas around the sides/slopes/perimeter (7.7 acres), leaving an unreclaimed area of 5.3 acres.

A large area northwest of the wellheads (between the wellheads and detention pond) will be reclaimed, along with the southern corner and the perimeter/edges of the pad. The area around the production equipment, wells, and the area between the wells and production equipment will not be reclaimed.

The areas not being reclaimed are needed for ongoing operations and will be armored and stabilized for the long-term life of the facility. The permeant working surface can be seen on the SWMP interim reclamation layout drawing in Appendix A.

#### **10. Compaction Alleviation (1003.c.):**

*Describe the proposed mechanical methods to be used and depths to un-compact the areas planned for interim reclamation in order to promote vegetation growth.*

Compacted soils and areas of the location impacted by construction to 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.

#### **11. Recontouring:**

*Describe site-specific recontouring or land forming design; including how the reclaimed areas will blend with surrounding contours, historic hydrology patterns, erosion control measures, and topsoil spreading.*

Bison will complete interim reclamation by reestablishing all topography and contours on the reclaimed area to their pre-disturbance conditions.

Bison has documented the existing topography, natural drainages, and contours at the site prior to disturbance, and will return the reclaimed areas to preexisting conditions during interim reclamation. The outer limits of the location will be blended back to native topography by matching the surrounding area of the location. Recontouring will take place in such a way that the depth of the topsoil is accounted for with the initial regrading of the site, this will ensure that an even and adequate amount of topsoil is spread over the entire site in a way that will not inhibit any natural drainages.

#### **12. Re-establish and Stabilize Drainage Features:**

*Briefly describe the proposed stormwater management on this location to stabilize soils, prevent excessive erosion, soil instability, subsidence, and/or slumping. Details of stormwater and erosion control measures will be provided in the Stormwater Management Plan.*

During the active construction phase, a ditch/berm will be installed around the perimeter of the location to prevent run-on and off-site discharges. Stormwater on the pad will flow to the detention pond in the northwest corner of the pad which will discharge clean water offsite. The detention pond will remain onsite following interim reclamation.

**13. Establish Desired Self-Perpetuating Plant Community (1003.e.):**

*Describe the seed mix selected (BLM, CPW, surface owner, local soil conservation district), seed weight in pounds per acre, and the proposed seed application rate.*

The seed mix to be used resulted from a consultation with the NRCS, and can be found in Appendix B.

**14. Seedbed Preparation and Seeding (1003.e.):**

*Describe the mechanical processes of seedbed prep, proposed amendments, moisture retention and soil stabilization methods, and timing and process of seeding.*

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. Straw mulch will be applied and crimped to topsoil adding further stabilization and increasing moisture retention. Seedbed will be void of earthen clods and firm enough to keep seed from being applied too deeply. Soil samples can be collected as needed 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.

Seed application will be performed using a disc seed drill equipped with depth bands, capable of direct seed placement no deeper than ¼ to ¾ inches, and functioning packer wheels with row spacing not exceeding 8 inches to adequately cover and stabilize the seed. Seeding 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.

**15. Fencing:**

*Identify the type (wildlife friendly, livestock, barbed-wire) and area to be fenced, if needed, to ensure that the interim reclaim does not get overgrazed.*

To exclude livestock, upon the State Land Board’s request, Bison will fence the perimeter of the location with a wildlife friendly four strand wire fence secured by posts at appropriate intervals.

**16. Management of Invasive Plants (1003.f.):**

*Describe how noxious and invasive weeds will be identified, inventoried and treated to control and reduce the spread of weed species.*

In accordance with the ECMC Rule 1003.f and the Colorado Noxious Weed Act, invasive plants will be monitored throughout all phases of construction during routine stormwater inspections, and the local weed division will be consulted when necessary. Bison maintains a weed mitigation maintenance schedule to prevent weed establishment on the topsoil pile and other areas of potential concern. Management will be performed by either mowing or spraying and on some occasions both methods may be necessary.

**17. Proposed Interim Reclamation Drawing:**

*This type of drawing is being required per guidance (forthcoming) for all locations regardless of site grade. All structural and non-structural BMPs should be shown on the plan drawing and labelled or put in a*

*legend. Use arrows to show planned flow direction. Controls for stormwater flow entering pad should be identified. Cross sections should be included to show reclaimed location and grading. The operator can use the drawing provided in the Stormwater Management Plan.*

The SWMP interim reclamation drawing is included in Appendix A.

## **18. Reclamation Monitoring, Inspection, Maintenance, and Reporting:**

*Describe the frequency of routine site visits and active management over reclamation activities, along with annual reclamation reporting requirements. Operator will focus to further stabilize soils, preventing erosion and site degradation, and to monitor for and treat invasive species. Locations will remain in the interim reclamation phase until the well is plugged and abandoned, at which time final reclamation will take place.*

### ***Frequency***

Active Construction Inspections: site inspections shall start within 7 calendar days of the commencement of construction activities at a new site. Inspections will then be conducted either, at least every 7 calendar days, or, at least every 14 calendar days and after precipitation and melting-events that cause surface erosion.

Non-Cropland Sites – Inactive/30-Day Inspections: at sites that are not located in cropland, or, if seed/mulch was used in final stabilization, once all ground disturbing activities have been completed and the location has been pulled-back and has been seeded/mulched (or is awaiting seeding/mulch), and all final stabilization measures have been implemented, the inspection frequency will be reduced to the 30-day/inactive frequency. Inspections will proceed until the site has met CDPHE final stabilization criteria, at which point it will move into the ECMC post-construction stormwater program.

Post-Construction Locations: when the location moves into the ECMC post-construction stormwater program, the location will be inspected at least annually. The inspection frequency may increase if any stormwater issues are found or additional risk factors are identified during future stormwater inspections.

### ***Inspection Scope***

At a minimum, the following will be inspected for adequate protection of stormwater and compliance:

- Construction site perimeter
- All disturbed areas
- Designated haul routes
- Material and waste storage areas
- Discharge or potential discharge locations
- Vehicle access locations
- All BMPs

Inspection requirements:

- Visually verify whether all implemented control measures are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges.
- Determine if there are new potential sources of pollutants.

- Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges.
- Identify all areas of non-compliance with the permit requirements and, if necessary, implement corrective action(s) in accordance with the general permit (Part I.B.1.c.).

At a minimum, the following information is recorded with each inspection:

- Inspection date
- Names and titles of personnel conducting the inspection
  - Inspector needs to be a Qualified Stormwater Manager (see Section 6.5)
- Weather
- Phase of construction
- Estimate acreage of disturbance
- Location(s) and identification of control measures requiring routine maintenance
- Location(s) and identification of discharges of sediment or other pollutants from the site
- Location(s) and identification of inadequate control measures
- Location(s) and identification of additional control measures needed that were not in place at the time of inspection
- Description of corrective action(s) for previous three items above, dates corrective action(s) were completed, including requisite changes to the SWMP, as necessary
- Description of minimum inspection frequency
- Deviations from inspection schedule
- After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the report shall contain the following statement, to be signed by the Qualified Stormwater Manager (QSM):

*I verify that, to the best of my knowledge and belief, that if any corrective action items were identified during the inspection, those corrective action are complete, and the site is currently in compliance with the permit.*

### ***Maintenance Procedures for BMPs***

The operator is responsible for implementing control measures (inclusive of seeding/mulching and weed mitigation) and performing routine maintenance, as needed, to ensure BMPs are in effective operating condition. BMPs requiring maintenance are identified in inspection reports and are addressed in the field as soon as practicable.

### **19. Interim Reclamation Completion Notice, Form 4 (1003.e.[3]):**

*Operators will submit a Form 4 Sundry Notice to 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.*

Interim reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized in such a way as to minimize erosion to the extent practicable, or a uniform vegetative cover has been established that reflects pre-disturbance or

reference area forbs, shrubs, and grasses with total percent plant cover of at least eighty percent (80%) of pre-disturbance levels or reference areas, excluding noxious weeds.

Once interim reclamation is achieved, a vegetation coverage assessment is conducted to confirm and document successful reclamation. When a vegetation coverage assessment confirms that the requirements have been met, photos are collected to document interim reclamation completion. Four photos are taken from the pad reclamation during the growing season facing each cardinal direction, and one photo is taken to document the vegetation in an undisturbed/reference area adjacent to the pad or in the surrounding field. Each photograph is identified by date taken, well name or location number, GPS coordinates, and direction of view. An ECMC Form 4 Sundry Notice is then submitted to document interim reclamation completion, accompanied by the requisite photos documenting the reclamation and vegetation analysis. The Form 4 submission will also outline a description of the 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.

## **20. Site-Specific Interim Reclamation BMPs:**

*Operators will submit, as part of this plan, a detailed list or narrative description of site-specific Best Management Practices (BMPs) for conducting interim reclamation on all areas of an Oil, and Gas Location that is not being used for production or processing of E&P materials, but has been disturbed, should be conducted through recontouring, topsoil replacement, and revegetation. BMPs shall include, but not limited to placement of soil (subsoil first, followed by top soil), packing of soil layers (pack each soil layer separately), erosion control, weed control, seed mix description, seeding methods, fencing (if needed), timing of reclamation, and landscape description (drainage pattern [streams, creeks, aquifers, contours, etc.], grade or slope).*

The following is a list of site-specific BMPs related to the interim reclamation approach at the subject location, for areas that will be reclaimed (the reclamation), and not used for continuing oil and gas operations (the working interim pad).

- 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.
- Erosion control – seed/mulch application will be installed on any areas not needed for ongoing operations. The interim working pad will be stabilized against potential erosion for the long-term with surface armoring.
- Grading – grading will be employed on all areas not needed for ongoing operations by reshaping the ground surface to planned grades.
- Mulching – mulching will be employed in conjunction with seed application to stabilize and promote vegetation growth for previous disturbance areas not needed for ongoing operations.

- Placement of soil – any subsoil used during interim reclamation will be 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 – individual soil layers will be applied and packed separately and sequentially during interim reclamation.
- Recontouring – areas not needed for ongoing operations will be brought back to their pre-disturbance conditions by recontouring areas where reclamation will occur.
- Routine inspections – the operator, and/or third-party contractors will conduct routine and regularly scheduled inspections during which the reclamation and general site conditions are inspected and monitored.
- Seedbed preparation – following interim reclamation 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.
- Seeding – seed will be used to reclaim areas not needed for ongoing operation during interim reclamation. Seed application at the subject location will be performed using a disc seed drill equipped with depth bands, capable of direct seed placement no deeper than ¼ to ¾ inches, and functioning packer wheels with row spacing not exceeding 8 inches to adequately cover and stabilize the seed.
- Seed mix – see Appendix B for seed mix and application rate.
- Stockpile management – topsoil will be stockpiled onsite in the northern corner of the pad for later use in the reclamation process. A topsoil pile will remain in the northern corner following interim reclamation. The stockpiles will be cat-tracked/surface roughened initially and seeded/mulched later for permanent stabilization.
- Surface armor – surface armor will be used on all areas needed for ongoing operations at the subject location.
- Timing of reclamation – seeding 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.
- Topsoil salvage – topsoil will be salvaged prior to construction of the pad. In order to maintain microbial activity of the topsoil, compaction will be limited, slopes will be 3:1 and the topsoil stockpile will be seeded/mulched to promote vegetation growth.
- Training – employee training on spill prevention, stormwater, and associated practices and procedures will be conducted routinely throughout the life of the pad.
- Weed control – in accordance with the ECMC Rule 1003.f and the Colorado Noxious Weed Act, invasive plants will be monitored throughout all phases of construction during routine stormwater

inspections, and the local weed division will be consulted when necessary. Bison maintains a weed mitigation maintenance schedule to prevent weed establishment on the topsoil pile and other areas of potential concern. Management will be performed by either mowing or spraying and on some occasions both methods may be necessary.

## Appendix A

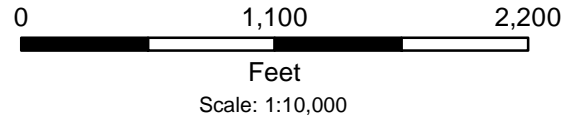
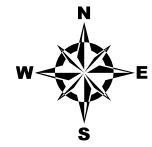
### **Stormwater Management Plan Maps**

- Initial Construction SWMP Overview Map
- Construction Phase Layout Drawing
- Production Phase Layout Drawing (Interim Reclamation Drawing)
- Soils/Erosion Maps
- Pre-Disturbance Land Use Map
- Pre-Disturbance Vegetation Identification/Analysis and Photo Series



# Stormwater Management Plan Overview Map

## Dorado Pad



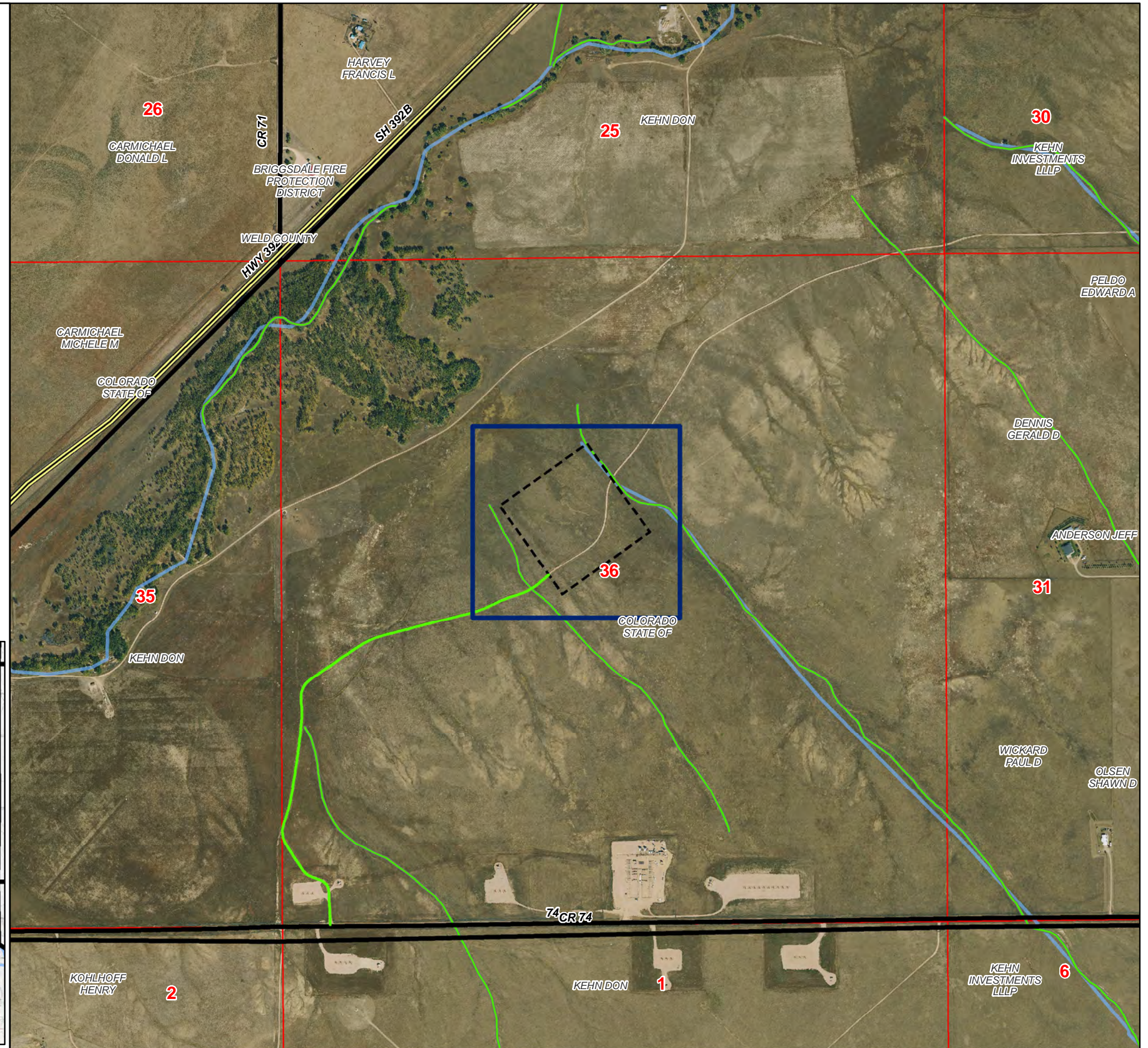
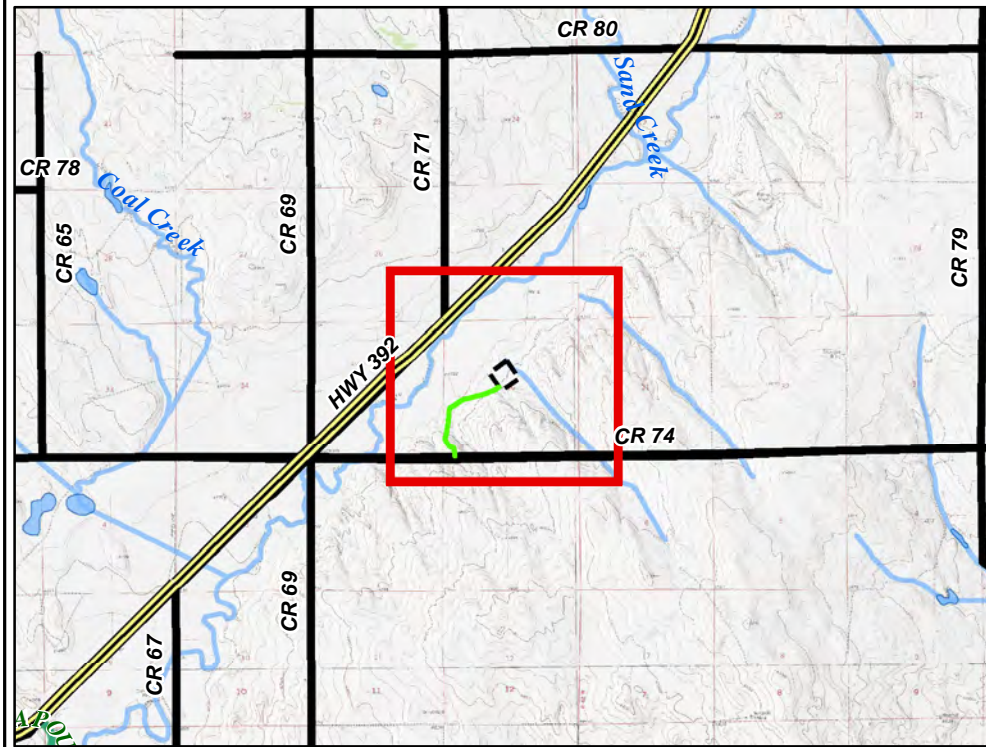
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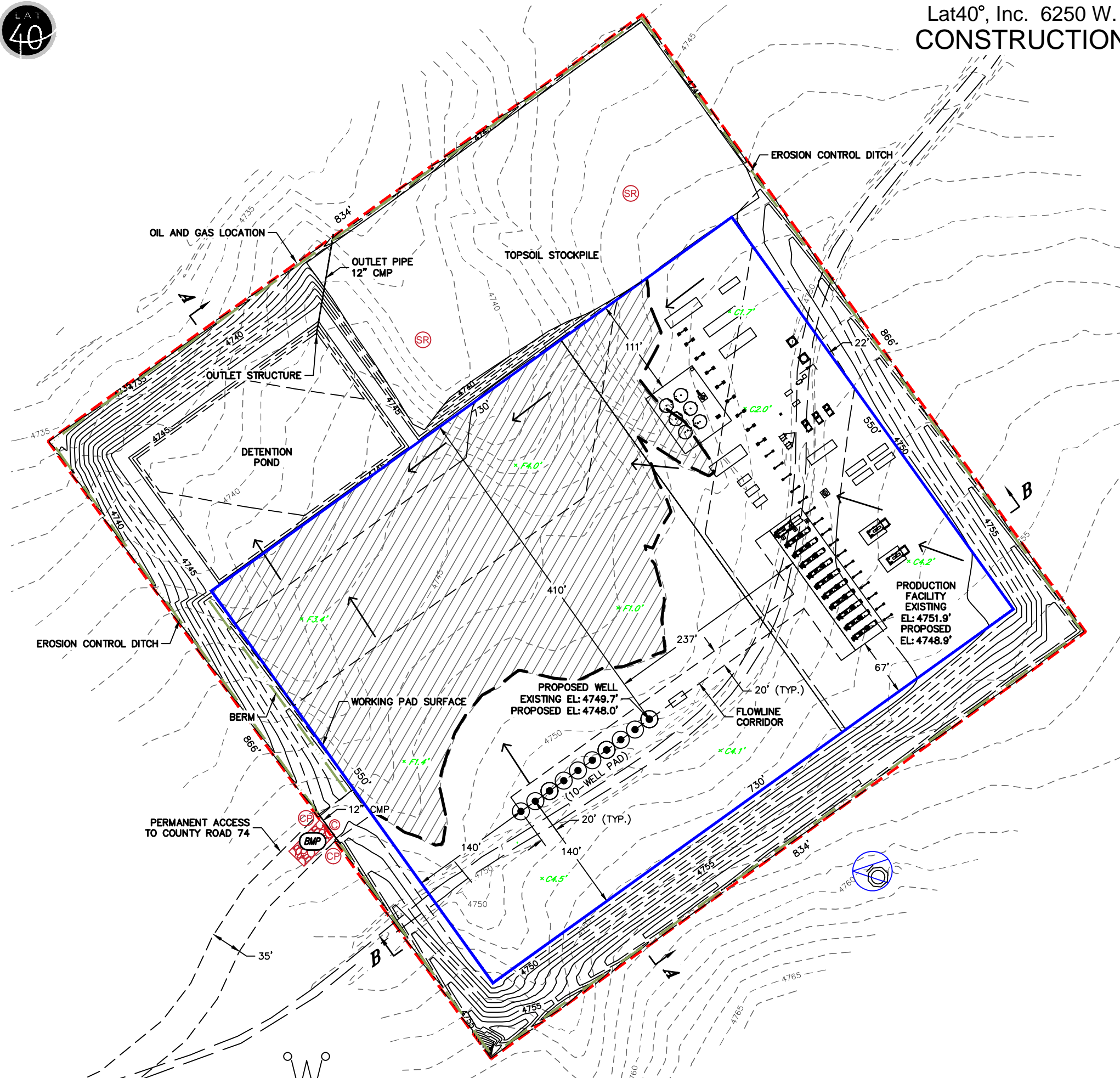
Editor: nwilson

Date: 6/6/2024

File: BOG\_PreConstr\_Overview\_V1

- Construction Boundary
- Road - Proposed
- County/Local Road
- Highway
- Waterbody
- Waterway
- Wetland
- Sections





*CUT VOLUME: 19,228 CY*  
*FILL VOLUME: 19,228 CY*  
*EXPORT VOLUME: 0 CY*  
*TOPSOIL (6") VOLUME: 13,375 CY*  
*GRAVEL (6") IMPORT: 7,435 CY*

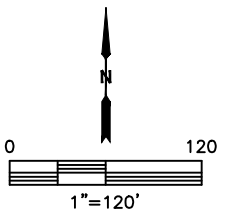
*SEE PROPOSED GRADING PLAN FOR ADDITIONAL INFORMATION AS PREPARED BY OTHERS*

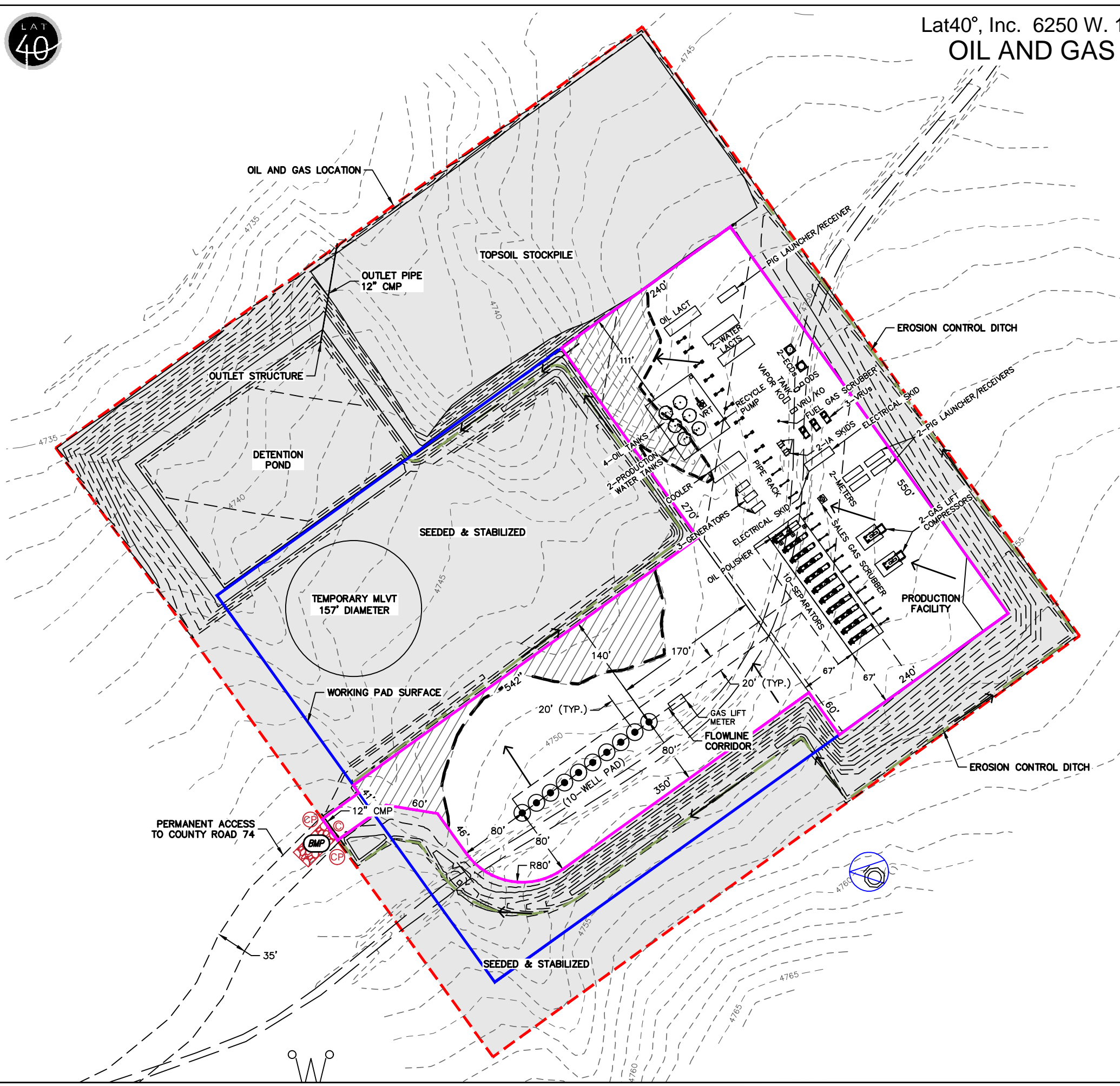
*OIL AND GAS LOCATION: ±16.6 ACRES*  
*WORKING PAD SURFACE: ±9.2 ACRES*  
*PERMANENT ACCESS ROAD: ±3.5 ACRES*

LEGEND

- WORKING PAD SURFACE
- OIL AND GAS LOCATION
- FILL
- INSTALL SEDIMENT BASIN
- DITCH/BERM
- EXISTING CONTOUR - 1' INTERVAL
- PROPOSED CONTOUR - 1' INTERVAL
- CUT/FILL LINE
- SURFACE ROUGHENING
- INSTALL CULVERT PROTECTION/RIP RAP
- INSTALL CULVERT
- FLOW ARROW
- INSTALL EROSION CONTROL BLANKET
- PROPOSED CUT/FILL DEPTH
- VEHICLE TRACKING BMP

NOTE:  
 1. Ground elevations are based on an observed GPS elevation (NAVD 1988 DATUM).  
 2. No offsite flowlines proposed.  
 3. Third party custody transfer occurs at LACT for oil.  
 4. Third Party custody transfer occurs at meter for gas.



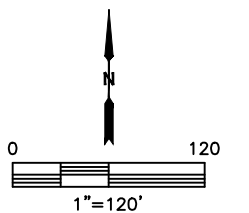


*SEE PROPOSED GRADING PLAN FOR ADDITIONAL INFORMATION AS PREPARED BY OTHERS*

**OIL AND GAS LOCATION: ±16.6 ACRES**  
**RECLAIMED AREA: ±11.3 ACRES**  
**TOPSOIL STOCKPILE: ±2.5 ACRES**  
**DETENTION POND: ±1.1 ACRES**  
**ADDITIONAL AREA/SLOPES: ±7.7 ACRES**  
**UNRECLAIMED AREA: ±5.3 ACRES**

- LEGEND**
- INTERIM WORKING PAD SURFACE
  - WORKING PAD SURFACE
  - OIL AND GAS LOCATION
  - FILL
  - RECLAIMED AREA - SEEDED & STABILIZED
  - DITCH/BERM
  - EXISTING CONTOUR - 1' INTERVAL
  - PROPOSED CONTOUR - 1' INTERVAL
  - CUT/FILL LINE
  - CP CULVERT PROTECTION/RIP RAP
  - C CULVERT
  - FLOW ARROW
  - BMP VEHICLE TRACKING BMP

**NOTE:**  
 1. Ground elevations are based on an observed GPS elevation (NAVD 1988 DATUM).  
 2. All equipment is PROPOSED unless otherwise noted.





**Stormwater Management Plan  
Soils Map  
Dorado Pad**



Date: 6/6/2024  
0 0.15 0.3  
Miles  
1:9,890



NHD Flowline

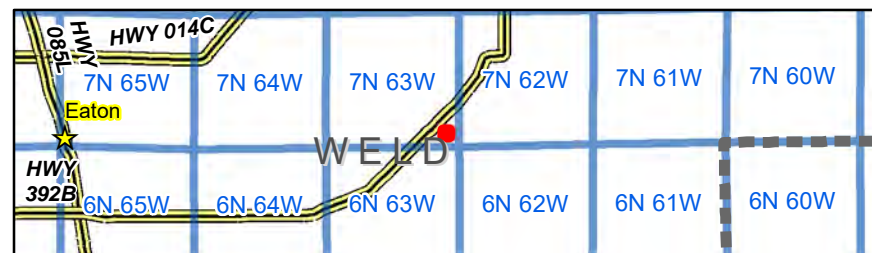
Wetland

**Map Unit Name:**

- Haverson loam, 0 to 3 percent slopes | 95120
- Nunn clay loam, 0 to 6 percent slopes | 95134
- Tassel loamy fine sand, 5 to 20 percent slopes | 95158
- Vona loamy sand, 3 to 9 percent slopes | 95168
- Vona sandy loam, 3 to 9 percent slopes | 95170

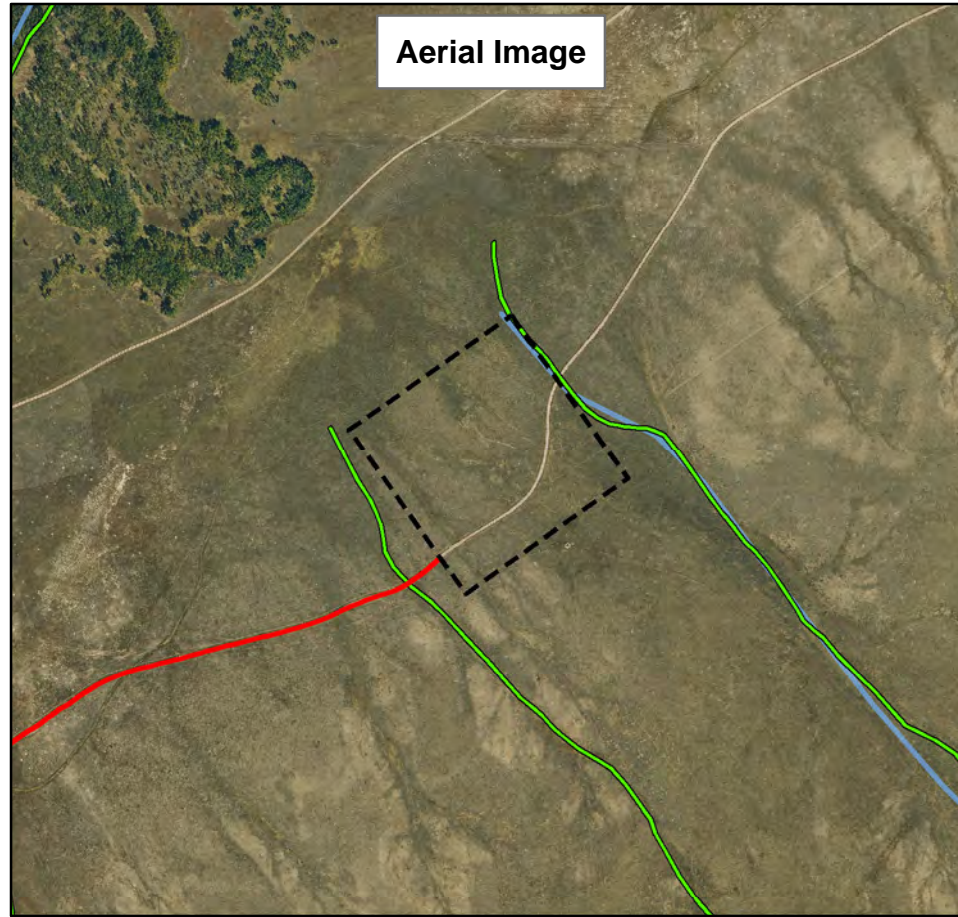
**K Factor Value Groupings (Approximate):**

- Low susceptibility to erosion/runoff:  $\leq 0.2$
- Moderate susceptibility to erosion/runoff:  $> 0.2 - 0.4$
- High susceptibility to erosion/runoff:  $> 0.4$



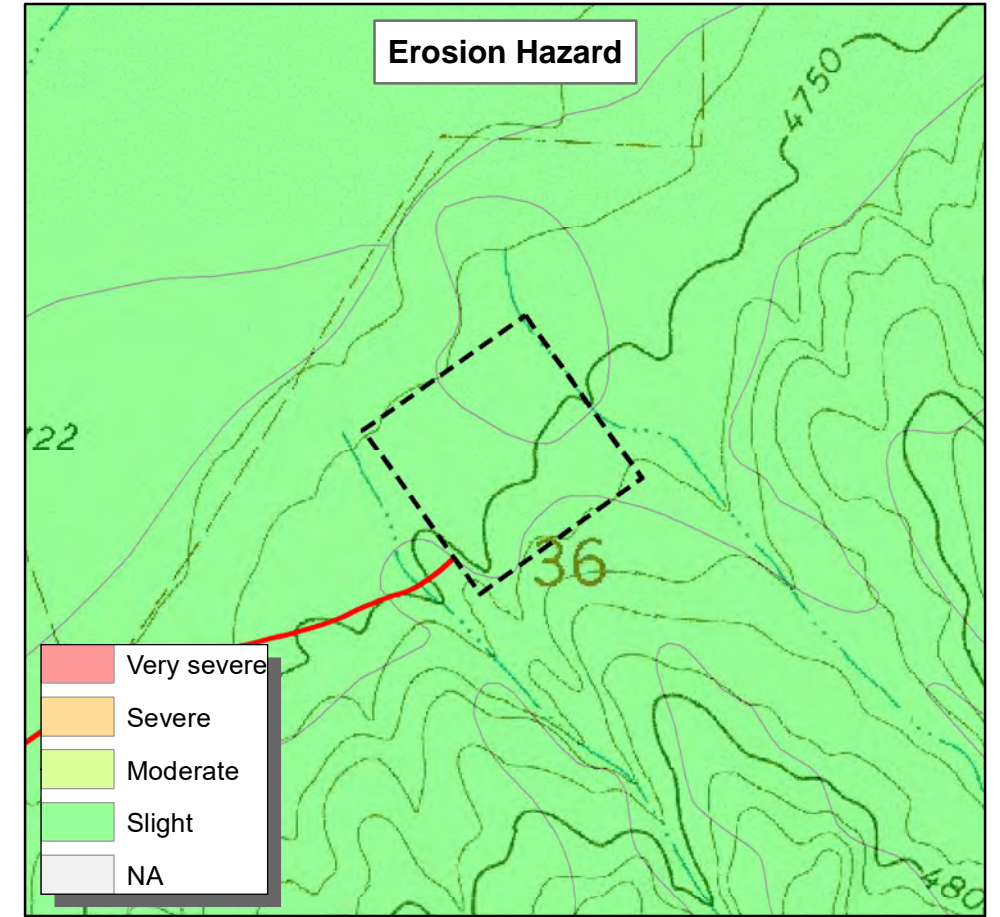
Document Name: BOG\_Soils\_V2

User Name: nwilson



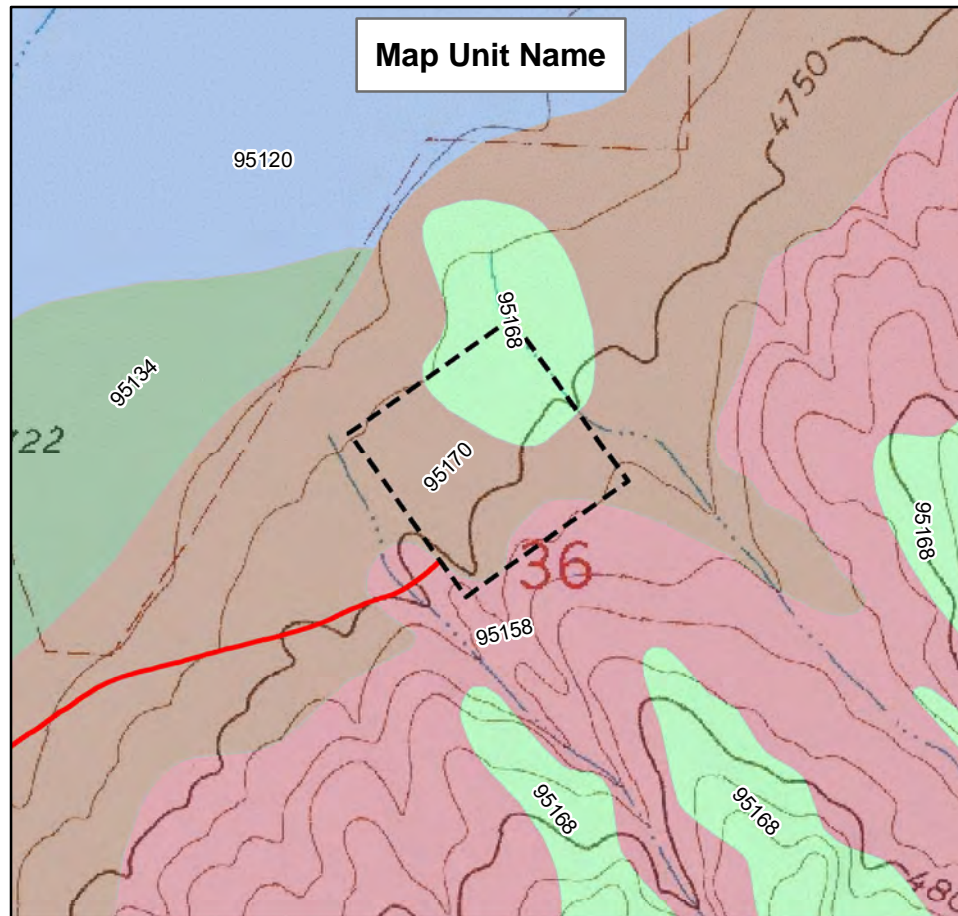
Aerial Image

All data is from the NRCS soil surveys and is useful for overview purposes only. Onsite verifications are required to confirm accuracy when used for planning.

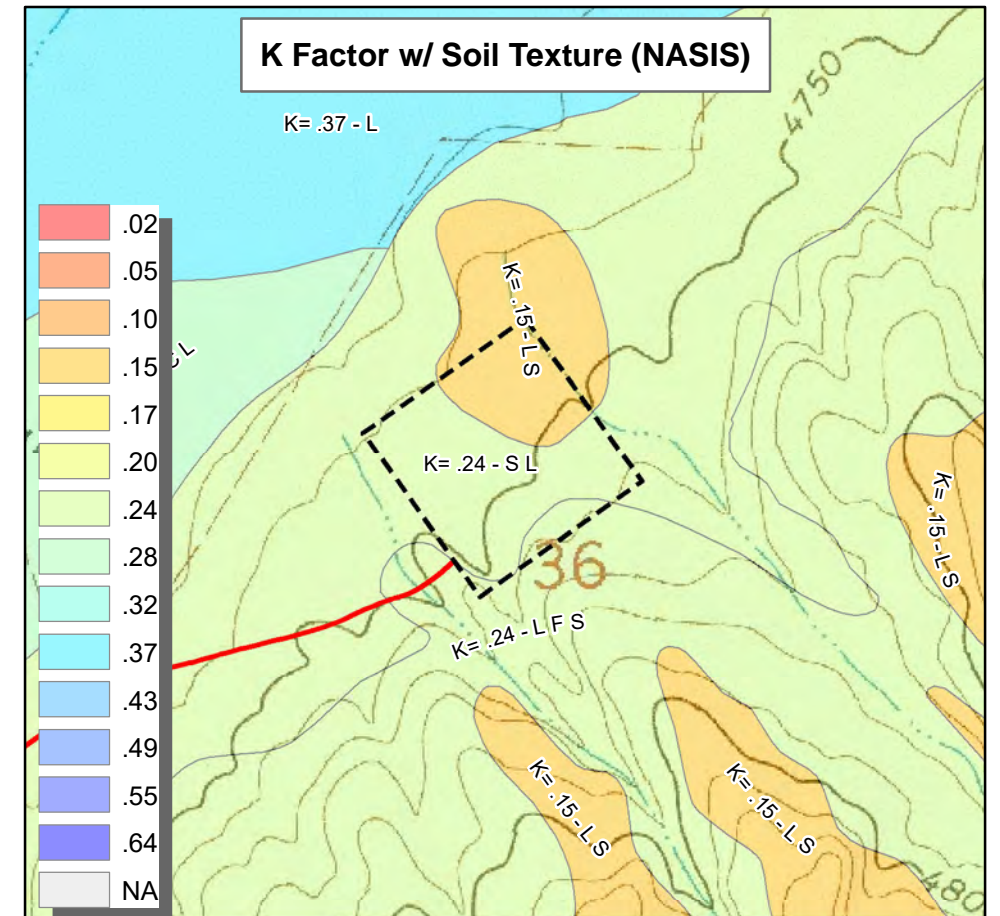


Erosion Hazard

- Very severe
- Severe
- Moderate
- Slight
- NA



Map Unit Name



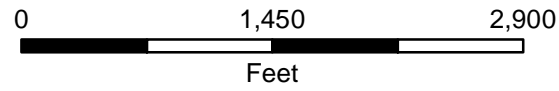
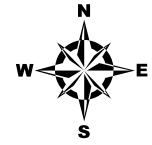
K Factor w/ Soil Texture (NASIS)

- .02
- .05
- .10
- .15
- .17
- .20
- .24
- .28
- .32
- .37
- .43
- .49
- .55
- .64
- NA



# Stormwater Management Plan Land Use Map

Dorado Pad



Scale: 1:13,320

Prepared by:



Editor: nwilson

Date: 6/6/2024

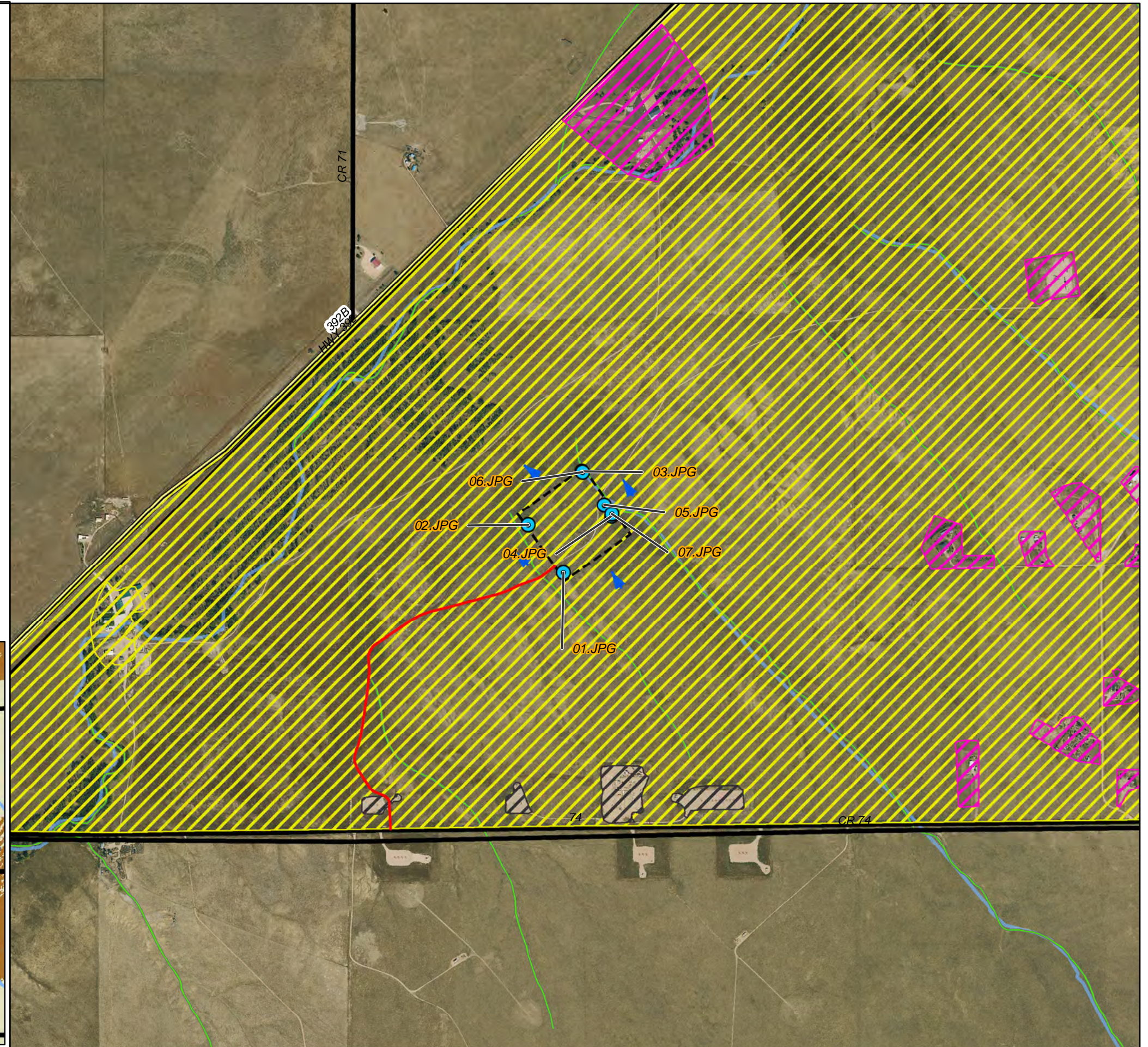
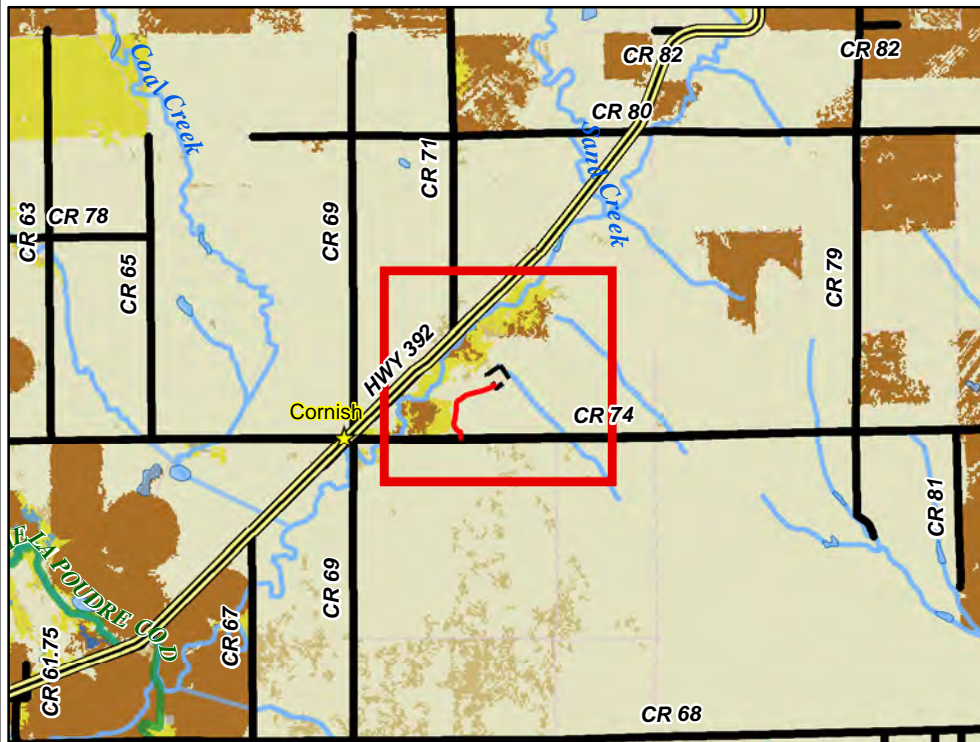
File: BOG\_Land\_Use\_V1

## Main Map (H2E Gathered Data)

- Photo Point
- Flow
- Road - Proposed
- Construction Boundary
- Residential/Commercial
- Disturbed Grassland
- Industrial
- County/Local Road
- Major Roads
- Highway
- Waterway
- Wetland

## Inset Map (National Land Cover Data)

- Barren Land
- Cultivated Crops
- Deciduous Forest
- Developed, High Intensity
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, Open Space
- Emergent Herbaceous Wetlands
- Evergreen Forest
- Hay/Pasture
- Herbaceous
- Mixed Forest
- Open Water
- Perennial Snow/Ice
- Shrub/Scrub
- Woody Wetlands





**Stormwater Management Plan Map**

01.JPG Dorado Pad

D\_WGS\_1984: 40.530300 -104.386000






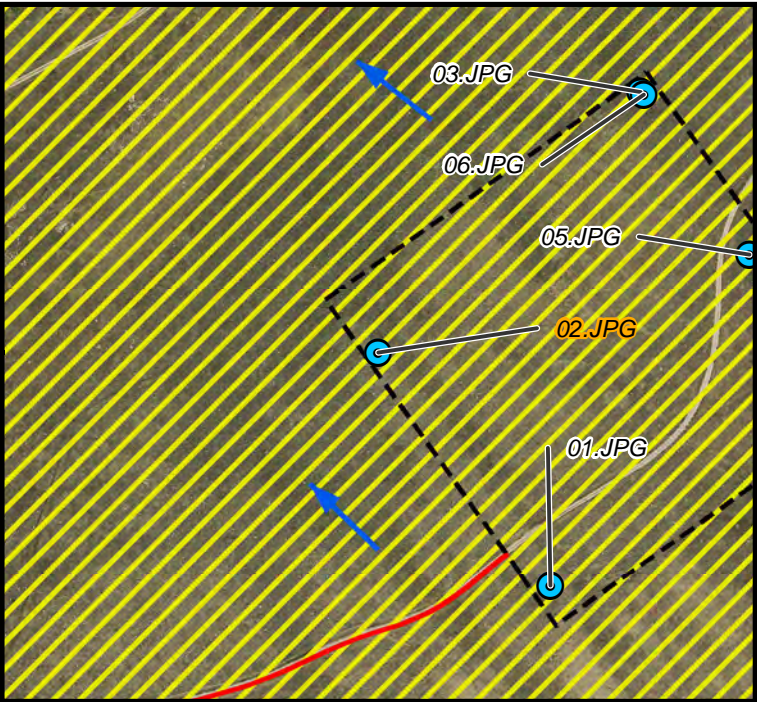
-  Photo Point
-  Flow
-  Road - Proposed
-  Construction Boundary
-  Disturbed Grassland

Photo taken facing N at the S corner of the proposed facility across a portion of disturbed grassland where the construction will occur. Vegetation identified on site during the pre-construction inspection includes blue gramma, prickly pear cactus, crested wheatgrass, buffalo grass, California oatgrass, purple three-awn, western wheatgrass, Idaho fescue, small soapweed, western spiderwort and sand dropseed.



05.02.2024



**Stormwater Management Plan Map**

02.JPG Dorado Pad

D\_WGS\_1984: 40.531690 -104.387300






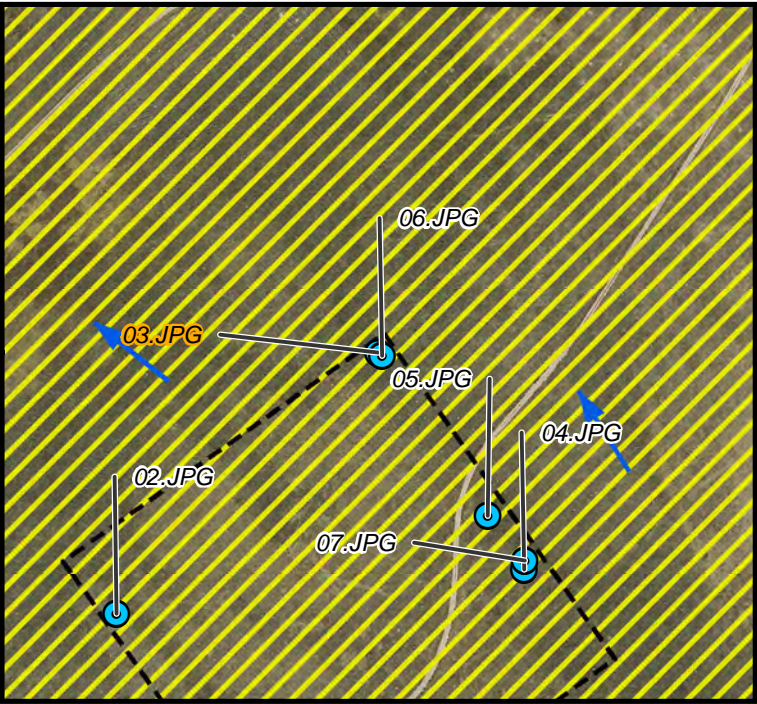
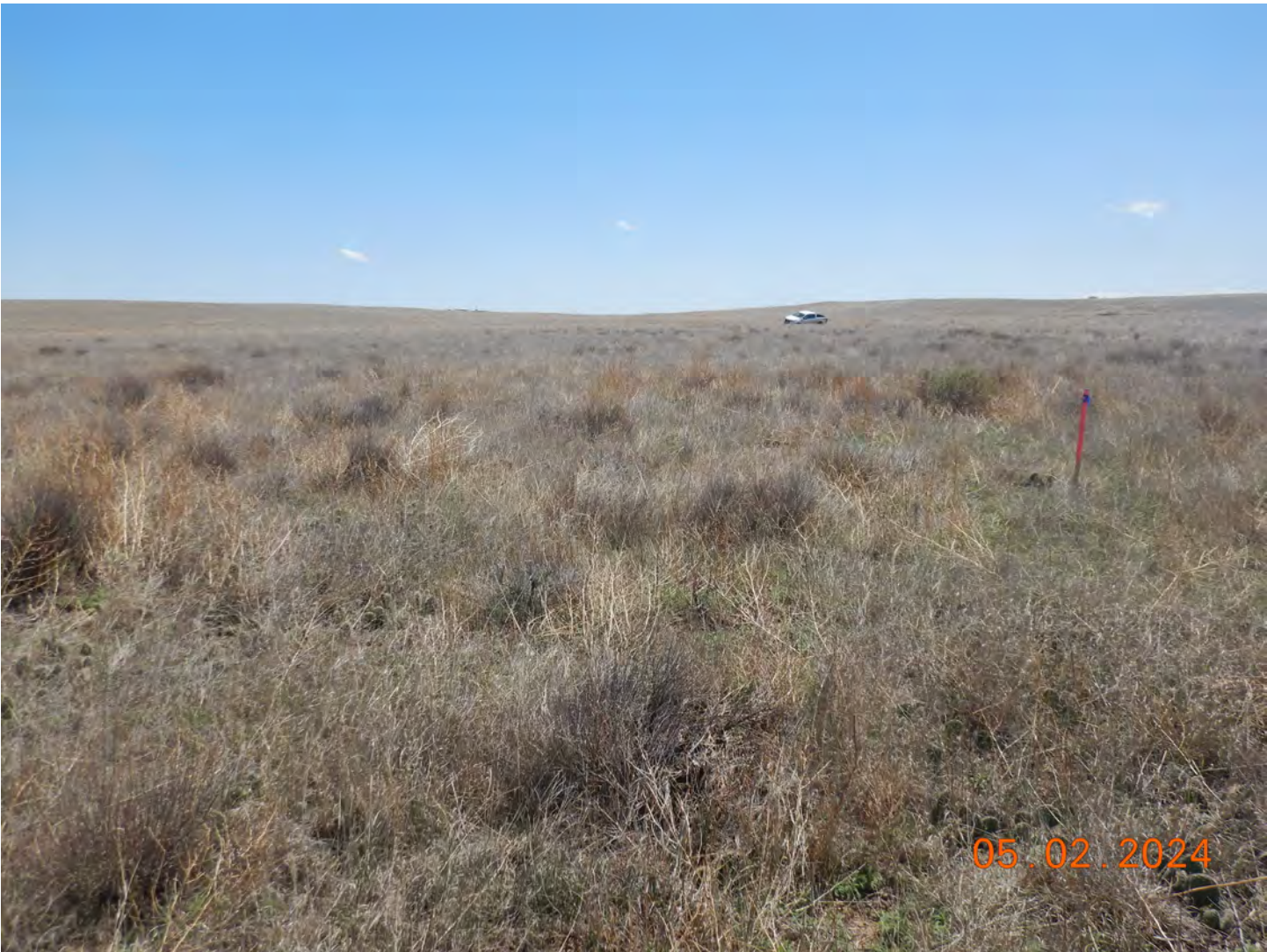
-  Photo Point
-  Flow
-  Road - Proposed
-  Construction Boundary
-  Disturbed Grassland

Photo taken facing E near the S corner of the proposed facility across a portion of disturbed grassland where the construction will occur. Vegetation identified on site during the pre-construction inspection includes blue gramma, prickly pear cactus, crested wheatgrass, buffalo grass, California oatgrass, purple three-awn, western wheatgrass, Idaho fescue, small soapweed, western spiderwort and sand dropseed.



**Stormwater Management Plan Map**

03.JPG Dorado Pad

**D\_WGS\_1984:** 40.533230 -104.385300





-  Photo Point
-  Flow
-  Construction Boundary
-  Disturbed Grassland

Photo taken facing S at the N corner of the proposed facility across a portion of disturbed grassland where the construction will occur. Vegetation identified on site during the pre-construction inspection includes blue gramma, prickly pear cactus, crested wheatgrass, buffalo grass, California oatgrass, purple three-awn, western wheatgrass, Idaho fescue, small soapweed, western spiderwort and sand dropseed.



05.02.2024



**Stormwater Management Plan Map**

04.JPG Dorado Pad

D\_WGS\_1984: 40.531940 -104.384100






-  Photo Point
-  Flow
-  Road - Proposed
-  Construction Boundary
-  Disturbed Grassland

Photo taken facing W near the E corner of the proposed facility across a portion of disturbed grassland where the construction will occur. Vegetation identified on site during the pre-construction inspection includes blue gramma, prickly pear cactus, crested wheatgrass, buffalo grass, California oatgrass, purple three-awn, western wheatgrass, Idaho fescue, small soapweed, western spiderwort and sand dropseed.



05.02.2024



## Stormwater Management Plan Map

05.JPG Dorado Pad

D\_WGS\_1984: 40.532260 -104.384400






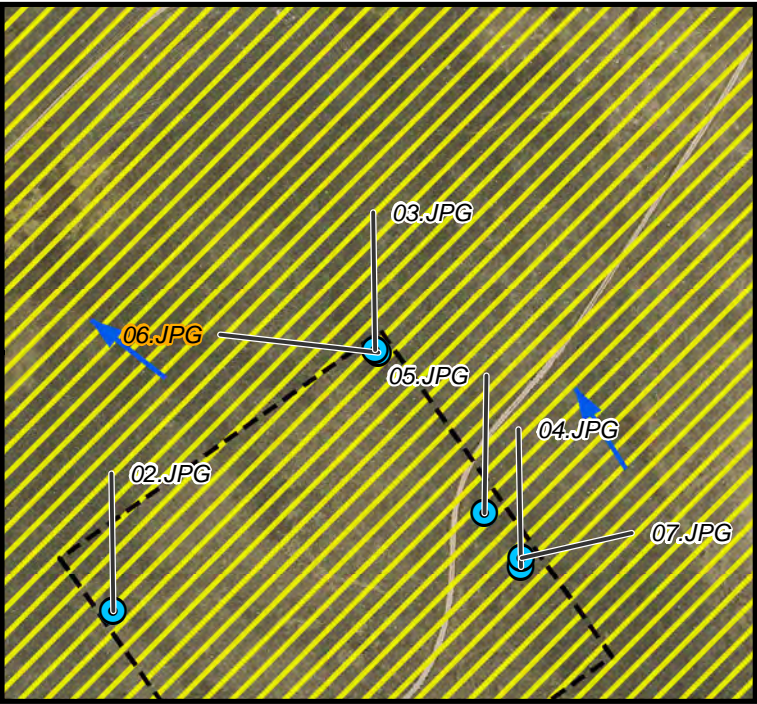
-  Photo Point
-  Flow
-  Road - Proposed
-  Construction Boundary
-  Disturbed Grassland

Photo taken facing E near the E edge of the proposed facility giving an overview of the area prior to construction activities. Vegetation identified on site during the pre-construction inspection includes blue gramma, prickly pear cactus, created wheatgrass, buffalo grass, California oatgrass, purple three-awn, western wheatgrass, Idaho fescue, small soapweed, western spiderwort and sand dropseed.



### Stormwater Management Plan Map

06.JPG Dorado Pad

D\_WGS\_1984: 40.533220 -104.385200





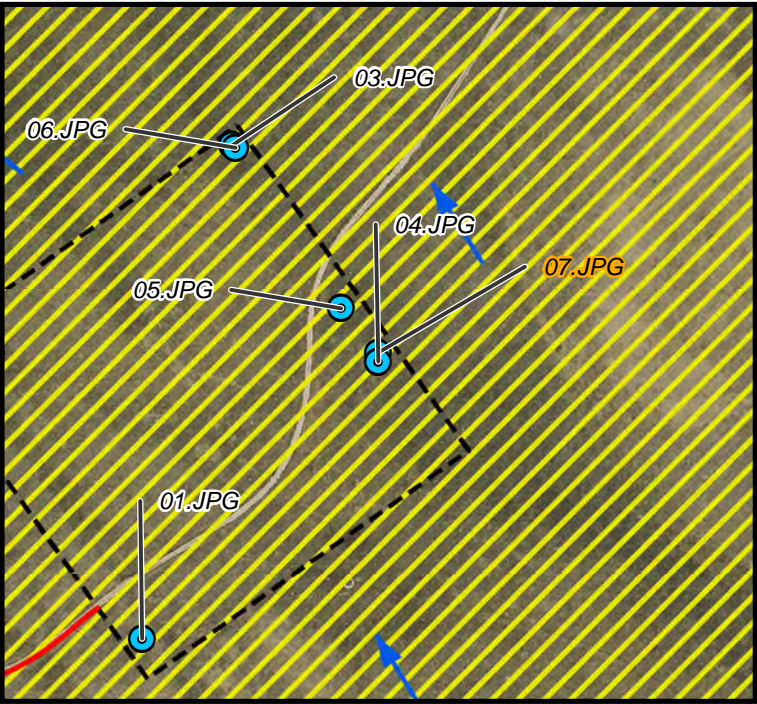
-  Photo Point
-  Flow
-  Construction Boundary
-  Disturbed Grassland

Photo taken facing N at the N corner of the proposed facility across an adjacent area of disturbed grassland that can be used as reference for future reclamation activities.



### Stormwater Management Plan Map

07.JPG Dorado Pad

D\_WGS\_1984: 40.531990 -104.384100

- Photo Point
- Flow
- Road - Proposed
- - - Construction Boundary
- ▨ Disturbed Grassland

Photo taken facing S near the E edge of the proposed facility towards the project's high point.

## Appendix B

### **Seed Mix**

## Native Grass Seed Mix

### Weld County (Greeley NRCS Field Office)

Mix based on Critical Area Planting (342) specifications  
for soil textures other than Sand or Loamy Sand

VARIETY	SPECIES	PLS/ACRE @ 100%	% of Mixture	PLS RATE PER ACRE
El Reno	Sideoats Grama *	9.0	30	2.70
Arriba	Western Wheatgrass *	16.0	25	4.00
Lodorm	Green Needlegrass *	10.0	20	2.00
Hachita	Blue Grama *	3.0	15	0.45
Blackwell	Switchgrass	4.0	10	0.40
<b>Total</b>			100	<b>9.55</b>

**Seeding Dates: November 1 to May 15**

\* required grasses in mix

\*\*\*Mix must be seeded with a Native Grass Drill

**Options for Variety if the specified variety is in short supply, etc.**

<i>Niner</i>	Sideoats Grama
<i>Barton</i>	Western Wheatgrass
<i>Lovington</i>	Blue Grama
<i>Nebraska 28</i>	Switchgrass

**Recommend addition or substitution (up to 10%) of one of the following Forb or Legume Species:**

Variety	Species	PLS RATE PER ACRE
<i>Ladak or Ranger</i>	Alfalfa	Up to 0.5
<i>Native</i>	Winterfat	"
<i>Native</i>	Fourwing Saltbush	"
<i>Native</i>	Purple Prairieclover	"
<i>Native</i>	American Vetch	"

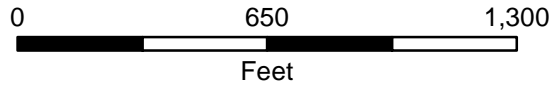
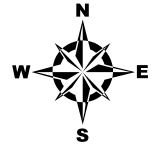
## Appendix C

### **Wetland Survey Site Map**










# Wetland Delineation Site Map

**Dorado Pad**  
**SECTION 36, TOWNSHIP 7N, RANGE 63W,**  
**WELD COUNTY, CO**



Editor: nwilson  
File: BOG\_PreConstruction\_Wetland\_V1

Prepared by:  
Scale: 1:6,000  
Date: 5/21/2024

-  Wetland Data Point
-  Information
-  Construction Boundary
-  Buffer
-  Distance
-  NWI Mapped Riverine
-  NHD Flowline

