



October 24, 2022

**SENT VIA EMAIL**

Mr. Adam Renfandt  
Public Utility Analyst  
North Dakota Public Service Commission  
600 E Blvd Ave Dept 408  
Bismarck, ND 58505-0480

**RE: OE2 North LLC  
Case No. PU-20-247  
B. Sanderson Residue Gas  
and NGL Pipelines Project**

Dear Mr. Renfandt:

OE2 North LLC ("Outrigger") has received the and reviewed the 3<sup>rd</sup> party reclamation inspection report, dated September 2022. In response to the report, Outrigger has and will continue to complete the following activities:

- Regular inspection by Outrigger staff to ensure no evidence of erosion along the pipeline route, per the project SWPPP (enclosed for reference)
- Regular inspection by Outrigger staff of vegetation cover in order to continue to monitor and promote the growth of hay, crop, or NRCS recommended grasses
- Inspection and control of annual and noxious weeds, through either herbicide application or mechanical control (ie mowing), as approved by the landowner and in accordance with county regulation, state regulation, and the project Weed Management Plan (enclosed for reference)

Outrigger staff was present for the 3<sup>rd</sup> party reclamation inspection and agrees with the potential issues and recommendations listed in Section 4 of the inspection report. If there are any questions or concerns, feel free to contact me via email or telephone to discuss.

Sincerely,

*Andrew Perdue*

Andrew Perdue

*Enclosures:*

OE2 North SWPPP  
OE2 North Weed Management Plan  
PU-20-247\_OE2 North Pipelines\_Reclamation Inspection Report\_Barr-Meadowlark\_Sept2022\_Final

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Letter enclosing SWPPP Report, Weed Management Plan, and Final Reclamation Inspection Report  
OE2 North LLC  
Andrew Perdue



**OE2 NORTH, LLC  
STORMWATER POLLUTION PREVENTION PLAN  
FOR THE BILL SANDERSON RESIDUE AND NGL  
PIPELINES PROJECT**

**PERMIT NDR11-0000  
WILLIAMS COUNTY, NORTH DAKOTA**

**MAY 2020**

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**ONLY THE CLIENT OR ITS DESIGNATED REPRESENTATIVES MAY USE THIS DOCUMENT AND ONLY FOR THE SPECIFIC  
PROJECT FOR WHICH THIS REPORT WAS PREPARED.**

A Report Prepared for:

OE2 North LLC  
1200 17<sup>th</sup> Street, Suite 900  
Denver, CO 80202

**OE2 NORTH LLC  
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)  
FOR THE  
BILL SANDERSON RESIDUE AND NGL PIPELINES PROJECT**

**PERMIT NDR11-0000  
WILLIAMS COUNTY, NORTH DAKOTA**

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**Table 1. Amendments to Stormwater Pollution Prevention Plan**

<i>SWPPP Modification Log</i>		
Name of Construction Site		Location of Construction Site
Type of Modification		Description of Modification
<input type="checkbox"/> Major <input type="checkbox"/> Minor		
Start Date:		
Completion Date:		
Reason for Modifications:		Approved/Implemented By:
Type of Modification		Description of Modification
<input type="checkbox"/> Major <input type="checkbox"/> Minor		
Start Date:		
Completion Date:		
Reason for Modifications:		Approved/Implemented By:
Type of Modification		Description of Modification
<input type="checkbox"/> Major <input type="checkbox"/> Minor		
Start Date:		
Completion Date:		
Reason for Modifications:		Approved/Implemented By:

**CERTIFICATION**

"I \_\_\_\_\_, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed Name of Applicant	Title
Signature of Applicant	Date

## 1 PROJECT INFORMATION

This Stormwater Pollution Prevention Plan (SWPPP) was written to comply with the North Dakota Department of Environmental Quality (NDDEQ) General Permit NDR11-0000 (the “Permit”), which provides authorization to discharge stormwater associated with new and large construction activities. This SWPPP was prepared with the objective to inventory pollutants that have potential to leave the construction site in stormwater runoff, identify best management practices (BMPs) to eliminate or minimize pollutants in runoff, meet the conditions of the Permit, and not cause contamination or degradation to waters of the state.

OE2 North, LLC (OE2) is seeking to obtain coverage under the General Stormwater Permit (NDR11-0000, **Appendix A**) for the construction of their Bill Sanderson Residue and NGL Pipelines Project (Project). This SWPPP addresses construction activities associated with the Project’s two proposed pipelines, approximately 4.67 miles of new 20-inch residue gas pipeline and approximately 1.28 miles of new 8-inch Natural Gas Liquids (NGL) pipeline in Williams County, North Dakota. **Appendix B** provides an Overview Map of the Project, and **Appendix C** provides the specific site maps that show the BMPs to be utilized during construction; these figures will be periodically added to and updated as site conditions change and as OE2 proceeds through construction to restoration.

This SWPPP was prepared in accordance with good engineering, hydrologic, and pollution control practices. This SWPPP is a dynamic document that will be updated, as needed, to address planned development, new disturbances, and other changes needed to manage stormwater and protect surface water quality. The SWPPP will be modified whenever there is a change in design, construction, operation, or maintenance that changes the potential for the discharge of pollutants to the waters of the state. The SWPPP will also be modified if elements prove ineffective in eliminating or minimizing pollutants present in stormwater. Table 1 on page v lists all modifications to this SWPPP.

The most current SWPPP is to be retained on site or may be located off-site when the Project is shut down for the season or when completion of construction occurs. The complete SWPPP will be maintained at OE2’s Denver, Colorado, offices and in the construction trailer at the site. A copy will also be kept with the SWPPP administrator when practical.

### 1.1 Stormwater Administrator

Stormwater management involves OE2 as well as an outside consultant. This SWPPP was prepared on behalf of OE2 by Kleinfelder, Inc.; however, the implementation and execution of the plan will be conducted by OE2 or their construction contractor. The authorized officer for this SWPPP is listed below:

## **SWPPP Administrator and Legally Responsible Person:**

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OE2 North LLC  
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### **1.2 Site Description**

OE2 is proposing to construct and operate the Bill Sanderson Residue and NGL Pipelines Project (Project) which consists of construction of a new 20-inch residue gas pipeline and a new 8-inch NGL pipeline, both beginning at the proposed Bill Sanderson Gas Processing Plant and terminating at tie-ins with Northern Border Interconnect and Oneok Interconnect respectively. The pipelines are located in Williams County, North Dakota. The proposed pipelines will be collocated for 1.28 miles and will have a 125-foot permanent right-of-way (ROW) with an additional 25 feet of temporary ROW (centered on the proposed pipelines where feasible) for a total of 150 feet of temporary construction ROW. The residue gas pipeline will continue for an additional 3.39 miles and will have a 50-foot permanent ROW with an additional 25-feet of temporary ROW, for a total of 75-feet of temporary construction ROW. The Project location is depicted in the Project Overview Map included in **Appendix B**.

The Project is located entirely on private lands. The observed land use along the alignment is primarily rangeland and agricultural plots, as well as some existing oil and gas facilities. The site-specific stormwater diagrams and suggested stormwater BMPs for each project component can be found on the Site Maps in **Appendix C**. Disturbance for the pipelines' construction ROW and interconnect site footprints are estimated to be 51.7 acres.

### **1.3 Proposed Sequence of Construction Activities**

The Project includes construction and installation of approximately 1.28 miles of collocated 20-inch residue gas pipeline and 8-inch NGL pipeline within a 150-foot construction ROW. The residue pipeline will continue southwest for 3.39 miles within a 75-foot construction ROW. Additionally, aboveground facilities will include a proposed 100x100-foot interconnect site at the terminus of the 8-inch NGL pipeline, a 250x250-foot interconnect site at the terminus of the 20-inch residue gas pipeline, as well as pipeline markers and cathodic test stations along the Route.

Construction and development is anticipated to begin in July 2020 and will continue for approximately 12 weeks. Reclamation will begin immediately after construction is complete and the final restoration including adequate vegetative cover will be dependent on weather conditions.

All BMPs will be installed in a phased approach by activity (for example, Construction and Development followed by Operation and Reclamation) as outlined in accordance with **Table 2**.

**Table 2. BMPs Recommended During Each Project Phase**

<b>Construction and Development</b>	<b>Operation</b>	<b>Reclamation</b>
<b>Erosion and Sediment Control (Structural)</b>		
Dust Control	Dust Control	Dust Control
Silt Fence	Silt Fence	Silt Fence
Timber Mats		
Trench Plug		
Water Bar		
<b>Erosion and Sediment Control (Non-structural)</b>		
Phased Construction	Phased Construction	Phased Construction
Protect/Preserve Vegetation	Protect/Preserve Vegetation	Protect/Preserve Vegetation
Re-vegetation	Re-vegetation	Re-vegetation
Mulching	Mulching	Mulching
Surface Roughening	Surface Roughening	Surface Roughening
Proper Track Walking During Land Grading	Proper Track Walking During Land Grading	Proper Track Walking During Land Grading
Slope Stabilization	Slope Stabilization	Slope Stabilization
<b>Operational Controls</b>		
Good Housekeeping	Good Housekeeping	Good Housekeeping
Employee Training	Employee Training	Employee Training
Bulk Storage of Petroleum	Bulk Storage of Petroleum	
Concrete Washout		
Maintenance of Equipment	Maintenance of Equipment	
<b>Dewatering BMPs</b>		
Settling/Filtration		
Velocity Dissipation		

### 1.3.1 Construction and Development

Construction of pipelines and appurtenances is subject to safety regulations specified in U.S. Department of Transportation (USDOT) CFR, Title 49, Part 192 (49 CFR § 192), Transportation of Natural and Other Gas by Pipeline Minimum Federal Safety Standards, and other applicable regulations.

#### Aboveground Facilities

The two new interconnect sites will be constructed in compliance with federal regulations, guidelines, and approvals. The first key activity to take place at the site is to clear the existing vegetation and grade it as necessary to create level surfaces to establish access for the movement of construction vehicles, and to prepare the area for construction activities. Clearing will only be performed on those areas necessary for installation of structures and pipeline,

including sufficient workspaces. Installation of erosion and sedimentation controls (e.g. silt fences and/or hay bales) will begin during the initial clearing of the site in accordance with this SWPPP.

Site Maps showing the limits of disturbance as well as the specific BMPs to be used during the improvements to the access road and construction of the new gas plant are included in **Appendix C**.

### Pipelines

The first phase of construction would involve staking the pipeline centerline and the construction ROW. Clearing of trees and brush would be performed after staking is completed. Vegetative debris would be managed in accordance with applicable regulations; the resulting materials would be beneficially used where possible (that is, timber, mulch, firewood), or hauled away for off-site management or disposal in accordance with applicable local and state requirements and/or restrictions. Topsoil segregation would be performed ahead of trenching and subsoil would be stockpiled separately from topsoil.

Stormwater inspections would begin once the soil or vegetation is disturbed. Temporary or permanent on-site perimeter erosion and sediment control BMPs will be installed as appropriate (that is, before, during, and after all grading activities and development).

Individual sections of pipe would be strung along the ROW, which can be done either before or after trenching. Trenching would be accomplished by backhoe or trenching machine, keeping trench soil separate from topsoil. Generally, the trench would be excavated 12 inches wider than the diameter of the pipe. Trench width is dependent on pipe size and trenching method.

Pipe would be bent where necessary, aligned, and welded. All welds would be visually and radiographically inspected. The pipe assembly would be lowered into the trench and backfilled with the previously excavated soil. The depth of soil cover over the top of pipe would be at least 36 inches. After backfilling, the pipe would be hydrostatically tested in accordance with USDOT regulations specified in 49 CFR 192.

Sequencing of construction activities will progress as rapidly as practicable to minimize the amount of time that portions of the site are disturbed. Inactive areas will be temporarily stabilized to reduce erosion potential, slow runoff velocity, and promote infiltration and will be temporarily seeded where applicable.

The Site Maps showing the limits of disturbance are as well as the specific BMPs to be used during construction of the pipelines are included in **Appendix C**.

### 1.3.2 Operation

All proposed facilities covered under this SWPPP will be operated and maintained in compliance with USDOT regulations (49 CFR 192), and in a manner consistent with industry standards. Procedures will include periodic inspection and maintenance of pipelines and appurtenances.

OE2 operations personnel would perform operation and maintenance of the new equipment at the new interconnect sites, but they would not be manned daily. Site personnel would perform routine checks of the facilities, including calibration of equipment and instrumentation, inspection of critical components, and scheduled and preventative maintenance of equipment as required.

During the Operation Phase, appropriate BMPs will be maintained and remain in place until final stabilization is achieved.

Operational activity on the pipelines will be limited primarily to maintenance of the ROW and inspection, repair, and cleaning of the pipelines. Periodic ground inspections by pipeline personnel would identify:

- Soil erosion that may expose the pipe
- Dead vegetation that may indicate a leak in the line
- Conditions of the vegetation cover and erosion control measures
- Unauthorized encroachment on the ROW, such as buildings and other substantial structures
- Other conditions that could present a safety hazard or require preventive maintenance or repairs

The pipeline cathodic protection system would also be monitored and inspected periodically to ensure proper and adequate corrosion protection. During the Operation Phase, appropriate BMPs will be maintained and remain in place until final stabilization is achieved.

### 1.3.3 Reclamation

After construction and operation activities are complete, the grades of the slopes will be reduced and returned to approximately the original topography. All reclaimed areas will be permanently seeded and mulched according to the standard details included in **Appendix D**. Final seeding of the reclaimed area will be done depending on the completion time of the reclamation and weather conditions.

Following completion of final revegetation, a qualified representative will inspect areas that have been seeded to ensure that the revegetation has been successful. If revegetation is not successful, spot revegetation or other remedial actions will be implemented to assure compliance with the Permit. An Inactivation Notice will be filed for the project once all of the construction activities have been completed and all areas have reached final stabilization or 70 percent of pre-disturbed vegetative conditions.

## 1.4 Potential Pollution Sources

Potential pollution sources associated with construction and operation activities includes:

- Sediment resulting from erosion of soil stockpiles and other areas cleared of vegetation
- Fugitive dust
- Off-site vehicle tracking
- Leakage of fuels and lubricants from equipment and spills from fueling or equipment failures during earth moving activities
- Solid waste and debris from clearing activities, construction materials, and workers

- Construction material storage areas
- Chemicals associated with temporary portable toilet services for construction workers

The most common source of pollution anticipated during construction and development is sediment which may potentially impact the water quality of receiving waterbodies via clearing, grading, and altering previously undisturbed lands. Fugitive dust associated with construction activities may transport sediment during heavy traffic periods, grading, clearing, or grubbing activities. Off-site vehicle tracking will need to be minimized or eliminated through the use of vehicle tracking control BMPs when necessary.

Petroleum products utilized on-site can be potential stormwater pollutants. These products are used in project construction to power or lubricate equipment and include the following: fuel, gear and hydraulic oils, brake fluids, and grease. Leakage from fueling or other site operations will be handled in accordance with BMPs included in **Appendices C and D** and as described in Section 2.2 – Operational Controls. Designated areas for storing petroleum products will need to be updated on site-specific maps if locations change.

Debris from construction, residue from equipment cleaning and maintenance, and solid waste generated from land clearing operations and human activities present other potential pollution sources within the construction site(s). Please refer to the BMPs and site-specific maps that address these non-stormwater issues.

Construction material storage areas may be potential pollution sources if materials are improperly stored or exposed to precipitation. Construction material storage areas may include petroleum products, fertilizers, chemicals, or paints associated with proposed activities on site. Secondary containment BMPs should be updated on the site-specific maps and in stormwater BMPs located in **Appendices C and D**. Additional chemicals associated with toilets for construction workers will need to be sited in areas that will not impact waterways or storm drains.

Potential pollutant sources will be inspected on a regular basis and include:

1) Disturbed and stored soils

There is a potential for disturbed and stored soils to contribute pollutants to stormwater discharges; however, as part of the regular stormwater inspections, all disturbed and stored soils will be monitored to ensure sediment transport is not occurring. BMPs will be installed and maintained along these areas.

2) Vehicle tracking of sediments

There is a low potential for vehicle tracking of sediments to contribute pollutants to stormwater discharges given that the roads in the area are not paved.

3) Management of contaminated soils

There is a low potential for contaminated soils to contribute pollutants to stormwater discharges. Areas of contaminated soils will be disposed of in an appropriate facility and soil sampling will be conducted to ensure contaminated soils have been removed.

4) Loading and unloading operations

There is a low potential for loading and unloading operations to contribute pollutants to stormwater discharges, because BMPs will be installed before items necessary for pipelines, and gas treatment are put in place.

5) Outdoor storage activities (building materials, fertilizers, and chemicals)

There is a low potential for outdoor storage activities to contribute pollutants to stormwater discharges. No fertilizers or building materials will be kept on-site and chemicals used for plant operations will be stored within a weatherproof structure or will be kept off the ground and covered to ensure precipitation does not come in contact with the materials.

6) Vehicle and equipment maintenance and fueling

There is a low potential for vehicle and equipment maintenance and fueling to contribute pollutants to stormwater discharges. No vehicle and equipment maintenance and fueling will take place at the Project facilities. On-site maintenance and fueling will be done in designated areas cleared of vegetation and located away from any drainage areas.

7) Significant dust or particulate generating processes

There is a moderate potential for dust or particulate-generating processes to contribute pollutants to stormwater discharges. During summer months, winds carry dust and sediment from construction activity or moving vehicles and deposit it along waterways. However, areas of disturbed soils will be stabilized, and areas needed for post-construction operations will be hard surfaced after construction operations are completed.

8) Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils

Oils and antifreeze will be used for plant maintenance.

9) On-site waste management practices (waste piles, liquid wastes)

There is a low potential for on-site waste management practices to contribute pollutants to stormwater discharges. Waste piles will be contained using BMPs to minimize sediment transport. During construction operations, dumpsters may be retained on-site for worker trash and will be emptied as necessary.

10) Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment

There is a very low potential for concrete truck/equipment washing to contribute pollutants to stormwater discharge. There will be a designated washout area and concrete will be disposed of properly.

11) Dedicated asphalt and concrete batch plants

There is no potential for dedicated asphalt and concrete batch plants to contribute pollutants to stormwater discharges as there are no asphalt or concrete batch plants associated with the project.

12) Non-industrial waste sources such as worker trash and portable toilets

There is a low potential for non-industrial waste sources to contribute pollutants to stormwater discharges. Dumpsters for worker trash will be kept on-site and portable toilets will be staked down and will be located in a safe area where accidental tipping will not occur. Dumpsters and portable toilets will only be on-site during construction operations.

13) Other areas or procedures where potential spills can occur

Spills may occur from vehicles accessing each location during construction and daily activities. Observations for soil staining will be conducted during routine inspections.

Non-stormwater discharges are not expected from the Project. There are no municipal discharge outfalls within the Project Area. Storm culverts and diversion ditches in close proximity to construction activities associated with this Project are depicted on the site-specific maps.

### 1.5 Existing Topography, Vegetation, and Soils

Other relevant characteristics include runoff characteristics, site elevations, and soil units. Runoff characteristics are based on site topography, soil type, and soil/vegetative cover. The facilities are mainly located on flat tracks of land where the potential for soil loss due to topography is considered minimal. The elevation in the Project Area generally ranges from 2,200 to 2,300 feet.

Vegetative communities primarily consist of herbaceous upland (grasses and forbs) and cropland (small grains). Vegetative cover ranges from 90-percent to 100-percent. Vegetation maps can be found in **Appendix E**.

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web based soil survey was used to determine soil types within the Project corridor. The web-based soil maps, including a name and designation index, are included in **Appendix E**. Soils crossed by the proposed ROW are listed below:

- Amor-Williams-Zahl loams, 3 to 9 percent slopes
- Amor-Zahl-Cabba loams, 9 to 25 percent slopes
- Appam sandy loam, 0 to 6 percent slopes
- Arnegard loam, 0 to 2 percent slopes
- Bowdle loam, 0 to 2 percent slopes
- Daglum-Rhoades complex, 0 to 6 percent slopes
- Farland silt loam, 0 to 6 percent slopes
- Korchea-Divide loams, channeled 0 to 2 percent slopes
- Shambo loam, 0 to 2 percent slopes
- Vida-Zahill loams, 2 to 8 percent slopes
- Vebar-Flasher-Zahl complex, 9 to 25 percent slopes
- Williams-Bowbells loams, 3 to 6 percent slopes
- Zahl loam, 15 to 60 percent slopes
- Zahill-Vida loams, 4 to 15 percent slopes

## 1.6 Receiving Waters

The Project Area is located within two hydrologic units:

- Horse Tied Creek (HUC 100600050703)
- Lower Little Muddy Creek (HUC 100600050704)

From the Project Area, storm water runoff would flow into other intermittent drainages located near and within the Project Area. Outfalls potentially consist of overland flows from the locations described in this plan to the above-mentioned drainages which subsequently drain into Horse Tied Creek and ultimately into Little Muddy Creek. Hydrology Maps, including features delineated during field surveys, are included in **Appendix E**.

### 1.6.1 Impaired Waters

There are no receiving water(s) that are listed on the state's most recent 303(d) report as impaired within 2,000 feet of the Project Area. There are no receiving water(s) that are listed on the state's most recent 303(d) that have an approved Total Maximum Daily Load (TMDL) for sediment, suspended solids or turbidity within 2,000 feet of the construction site and that may receive runoff from the construction site or will receive construction site stormwater discharge that enter a storm sewer system.

## 2 BEST MANAGEMENT PRACTICES (BMPS) FOR STORMWATER POLLUTION PREVENTION

The selection of erosion and sediment control BMPs is contingent upon site-specific conditions during construction. The objective of the selected erosion and sediment controls is to minimize erosion and sedimentation via the utilization of a combination of structural and nonstructural controls. The types and locations of structural BMPs for construction of the proposed pipelines are depicted on the Site Maps in **Appendix C**.

### 2.1 Erosion and Sediment Controls

Erosion prevention BMPs prevent soil or sediment movement by wind or water and retain soil in its original location within the construction site. Temporary erosion protection may be needed for some activities, in particular where further work is not anticipated for 28 calendar days or more. Ditches, berms, and soil stockpiles may require temporary erosion protection. Sedimentation controls prevent soil from eroding and being transported from the original location on-site and from entering waters of the state. Appropriate control measures for erosion and sediment control of the Project Area are described as follows:

#### 1) Structural Practices for Erosion and Sediment Control

There are a number of structural practices which may be used on the project including: various dust control methods, waterbars, trench plugs, silt fence with outlets, and sediment

traps, re-establishing/replacing vegetation, mulching, and rolled erosion control products. The locations of structural BMP practices are depicted on the Site Maps in **Appendix C**.

## 2) Non-Structural Practices for Erosion and Sediment Control

Non-structural erosion and sediment control BMPs include phasing construction, minimizing disturbances to existing vegetation, and preservation of natural vegetation, surface roughening, and proper track walking during land grading activities. The location of non-structural BMPs practices are depicted on the Site Maps in **Appendix C**.

## 3) Phased BMP Implementation

BMPs for these sites will be implemented in three phases – construction, operation, and reclamation. **Table 2** lists the BMPs that may be used during each of the aforementioned phases of the project.

### 2.1.1 Construction and Development

The Construction Phase will begin with the clearing and grubbing of all necessary areas to construct the proposed 20-inch residue gas pipeline and 8-inch NGL pipeline. A portion of the temporary construction ROW will be cleared of trees and obstructions and graded to a relatively flat surface to accommodate construction equipment. Stormwater inspections begin once the soil or vegetation is disturbed. The facilities and associated private access road will be constructed utilizing standard cut and fill techniques.

Structural sediment control BMPs will be installed below the limits of disturbance to prevent sediment from leaving the construction site. These BMPs will be installed prior to starting any earthwork activities. If site berms are installed, they will encompass the facility surface and will be constructed at the top of the fill slopes to act as run on control. BMPs will be maintained during construction to the standards outlined in the BMP details located in **Appendix D**.

In areas disturbed by construction, topsoil will be stripped and stockpiled on-site. Soil materials will be managed so erosion and sediment transport are minimized. Nearby drainages will be protected by appropriate BMPs. Any stockpiled excess cut-material or topsoil will be segregated during construction and appropriate erosion and sediment control BMPs will be utilized to minimize sediment transport during temporary storage.

The pipeline trenches will be excavated to provide a depth of cover required by the USDOT, Williams County, or OE2 Standards. At roadways the pipelines will be bored using standard construction techniques. Temporary BMPs will be implemented to prevent sediment transport from stockpiles where applicable.

Pipe segments will be strung along the ROW parallel to the trench, and will be bent (where required), welded, and lowered into the trench. Once the pipelines are placed in the trench, a bulldozer or other appropriate equipment will backfill the trench with fill or native subsoil. Topsoil that was segregated during grading operations will be placed over the subsoil. The ROW will be re-graded to its preconstruction contour, decompacted and seeded to encourage revegetation. Any excavated materials not used as backfill will be disposed of properly. After installation, the pipelines will undergo hydrostatic testing to ensure its integrity.

Sequencing of construction activities will progress as rapidly as practicable to minimize the amount of time portions of the site are disturbed. Inactive areas, where ground disturbing activity has ceased for more than 14 calendar days, will be stabilized to reduce erosion potential, slow runoff velocity, and promote infiltration and will be temporarily seeded where applicable.

The construction phase will last approximately 12 weeks. All ground disturbing activities will be conducted on the working surface of the construction site during the development phase.

During construction and development, all structural BMPs used for sediment control during the construction phase will be maintained or be replaced, and any necessary additional BMPs will be installed. Possible BMPs include sit fencing, vehicle traction control, timber matting, trench plugs and water bars, and erosion control blankets.

Depending on site conditions, a variety of erosion control practices may be necessary to stabilize areas of disturbed soil that do not have gravel or that have not been surface hardened. Seed and mulch or erosion control blankets should be applied to disturbed areas such as topsoil stockpiles and cut and fill slopes. Slopes may also be track walked to provide soil roughening.

### 2.1.2 Operation

Once constructed, the pipelines will operate 24 hours a day, 365 days a year. Once operating, there is no intention of removing or terminating use of the pipelines. Should any portion of the facilities require decommissioning, the pipelines would be isolated, cleaned, and abandoned in place per State of North Dakota and local regulations and per the landowner agreement.

The pipelines will be un-manned during operation. The ROW may be periodically driven by one or two employees for regular inspection and/or maintenance. All non-emergency work will take place between 6:00 AM and 5:00 PM, Monday through Friday. Daily visits to the pipeline ROW are not anticipated. During the Operation Phase, appropriate BMPs will be maintained and remain in place until final stabilization is achieved.

### 2.1.3 Reclamation

Interim or final stabilization activities will begin once all construction and development activities have been completed or will cease for more than 14 days. The slopes and disturbed soils will be re-contoured during the final reclamation stage to match preexisting conditions, stockpiled topsoil should be applied to the slopes and then track walked, disked, seeded, and mulched.

After final stabilization, the site will continue to be monitored on a monthly basis while the vegetation cover is established to ensure that the proposed activities to achieve final stabilization are adequate. Once uniform vegetative cover has been established with a plant density of at least 70 percent of pre-existing conditions on all reclaimed areas, the site will be considered stabilized and inspections may cease. Structural BMPs, if present, may be removed after these conditions have been met.

Seeding can be conducted at any time of the year; however, the middle of winter and the middle of summer can be problematic. If applied in the winter, seed will lie dormant and will be in place to grow as soon as spring arrives accompanied by warmer temperatures and moisture from precipitation or snowmelt. However, seed cannot be applied when there is more than an inch of

snow on the ground. If seed is applied in the middle of summer, extreme heat and limited moisture will reduce effectiveness. Therefore, the recommended times for seeding are spring (after snowmelt begins but generally mid-March to mid-June) and fall (generally from late August until the first heavy snow).

Final stabilization practices for obtaining a minimal 70 percent pre-disturbance vegetative cover will include selecting a seed mix and application methods, soil preparation and amendments when necessary, implementing soil stabilization practices, and utilizing appropriate sediment control BMPs, as needed, until final stabilization is achieved. The temporary ROW will be re-graded to reduce cut and fill slopes and be re-seeded. The seeding and stabilization practices may include drill- or broadcast-seeding, mulching and crimping, erosion control matting, or hydro-seeding. The BMPs implemented may be modified as needed to ensure site reclamation and stabilization leading to 70 percent of pre-disturbance vegetative cover.

#### 2.1.4 Construction Site Dewatering

If groundwater is encountered during proposed activities, a separate groundwater permit may be acquired by OE2 from NDDEQ and monitoring will need to be conducted in accordance with the groundwater permit requirements. Other dewatering activities should include BMPs that remove sediments suspended in the water as well as velocity dissipation devices (for example, rock riprap, sandbags, plastic sheeting, or equivalent) to control erosion during the discharge process.

## 2.2 Operational Controls

### 2.2.1 Spill Response

Spills at the site can be largely prevented through proper training and the conscientious efforts of personnel during the performance of routine activities. Efforts should be made to refuel equipment away from drainages and waterways. If possible, attempts should be made to use the same location for refueling activities, such as a designated equipment refueling/staging area. If a release of a hazardous substance does occur during construction activities, construction personnel will take appropriate action to minimize the impact of the spill through the use of absorbent material stored at the construction site. Absorbent material may consist of clay, sawdust, straw, kitty litter, booms, absorbent pads, or other suitable materials.

In the event of a release of fuel, lubricant, or coolant from equipment, efforts will be made to stop the release. Spilled fluids will be cleaned up as soon as possible. All contaminated soils and spent/used clean up materials shall be containerized (drums or dumpsters) and stored on site, until appropriate disposal methods have been identified. **Wade Janecek (OE2) is to be contacted at 970.270.5584, to report any spills over five gallons.** The necessary repairs will be made to the equipment to prevent a continued release of potential pollutants. OE2 will report any spill that may seriously endanger health or the environment as soon as possible, but no later than 24 hours from the time OE2 became aware of the spill.

**If this is an emergency, an imminent threat to public health and safety, or for additional assistance, please call the Oil and Gas Division or the Department of Environmental Quality at the numbers below:**

- North Dakota Oil and Gas Division: 1-701-328-8020
- North Dakota Department of Environmental Quality, Environmental Health Section: 701-328-5210
- North Dakota Department of Emergency Services: 1-800-472-2121 (24-Hour Hotline)

Complete additional Incident Report Forms at: <https://www.dmr.nd.gov/oilgas/mvc/wincident/>

### 2.2.2 Good Housekeeping

A list of all potentially toxic or hazardous chemicals used during the Project will be maintained and kept on-site. Warning labels must be attached to all potentially toxic or hazardous chemicals. Safety Data Sheets (SDS) and other safety information will be on file and accessible during all periods in which the chemicals are used or stored. Construction site personnel must follow spill prevention and control practices as outlined in the SPCC plan developed for the existing gas plant.

In addition to maintaining an inventory of potentially toxic, hazardous materials and associated safety information, the following materials management practices will be followed:

- Materials will be handled in accordance with Occupational Safety and Health Administration (OSHA) requirements and manufacturers' instructions.
- Chemicals regulated under the Resource Conservation and Recovery Act (RCRA) will be reported and handled in accordance with relevant regulations.
- Materials stored at the construction site will be covered or otherwise protected from the elements.
- The quantity of fuel and lubricants stored on the construction site will be limited to the amount that is reasonable to support the specific construction or maintenance activity.
- Bulk storage areas for materials not consumed daily will be enclosed and protected from the elements and contained in a manner to prevent release to the environment.
- Petroleum products and fertilizers will be stored at separate facilities or isolated by impermeable barriers.
- General construction site debris will be stored in trash containers and removed from the job site on a regular basis to prevent overflowing.

### 2.3 Bulk Storage of Petroleum Products

Lubricant, hydraulic, and miscellaneous oils and solvents will be stored in 55-gallon or smaller containers. Pollutants from petroleum products used during construction activities adhere easily to soil particles and other surfaces. In case of a spill or leak, soils contaminated with petroleum products will be contained and removed to a proper disposal site. Proposed soil erosion and

sediment control practices will aid in retention of spills or leaks. Use of secondary containment and drip pans will reduce the likelihood of spills or leaks contacting the ground. Proposed maintenance and safe storage practices will reduce the chance of petroleum products contaminating on-site soils and drainages. Oily wastes such as cans, rags, and paper containing oils will be placed in proper receptacles and disposed of or recycled. Additional sources of petroleum contamination are leaks from equipment and vehicles. Routine daily inspections will be conducted to identify leaks and initiate corrective actions, if needed.

The following guidelines for storing petroleum products will be used:

- All product containers will be clearly labeled.
- Drums will be kept off the ground within secondary containment and stored under cover, if needed.
- Emergency spill response procedures will be available on-site. Persons trained in handling spills will be on call at all times.
- Spill cleanup and containment materials (absorbent, shovels, etc.) will be easily accessible. Spills will be cleaned in a timely manner and reported as required in accordance with applicable regulations.
- Contaminated materials will be properly stored on-site until they can be disposed of in accordance with applicable regulations.

Storage areas and containers will be regularly monitored for leaks and repaired or replaced as necessary. Workers will be reminded about proper storage and handling of materials during safety meetings.

Each of these wastes will be managed so as to not contribute to stormwater pollution.

1) Dedicated Concrete or Asphalt Batch Plants

No concrete or asphalt batch plants are included as part of this project.

2) Vehicle Tracking Controls

Vehicle tracking controls (VTCs) are used to reduce the potential for sediment to leave a construction area. If tracking does become an issue, VTC will be implemented.

3) Concrete Washout

During plant construction, the concrete washout will be addressed by properly containing all waste within a lined pit or manufactured tank facility to prevent concrete wash waters from entering surface waters of the state.

4) Waste Management and Disposal

Construction will generate various other wastes, possibly including the following:

- Vegetation from clearing operations
- Trash and debris from construction materials and workers
- Sanitary sewage

Vegetation may be piled along the toe of fill slopes to provide additional sediment control or be hauled off-site. Construction trash and debris will be collected in containers and hauled off-site for disposal in suitable landfills. Temporary portable toilets will be staked to prevent accidental spillage.

## **2.4 Employee Training**

Scheduled “tail gate” trainings will be provided for on-site personnel. These trainings will review important components of the SWPPP with a focus on general BMP awareness and site controls and maintenance responsibilities.

## **3 MAINTENANCE**

All erosion and sediment control practices and other protective measures included in the SWPPP will be maintained in effective operating condition. Proper selection and installation of BMPs and development of comprehensive inspection and maintenance procedures are planned to meet this condition.

Should inspections reveal that BMPs are not operating in accordance with good engineering, hydrologic, and pollution control practices then maintenance will be initiated. Maintenance activities may include removal of collected sediment outside the acceptable tolerances of the BMPs and other activities for preparation for post-construction stormwater control. BMP maintenance is intended to be proactive, not reactive. Equipment used on-site is to be maintained in accordance with applicable manufacturer and/or industry standards.

Temporary and permanent sedimentation ponds or basins, if used, must be drained and sediment removed when the depth of sediment collected in the basin reaches  $\frac{1}{2}$  the sediment storage volume. Drainage and removal must be completed for active construction site within 72 hours and on inactive construction sites within 14 days of discovery, or as soon as field conditions allow access.

Construction site egress locations must be inspected for evidence of sediment being tracked off-site by vehicles or equipment onto paved surfaces. Accumulation of tracked and deposited sediment must be removed from paved surfaces within 24 hours of discovery.

Observations resulting in BMP maintenance activities can be made during a site inspection or during general observations of site conditions. The BMP maintenance standards are outlined in the BMP details located in **Appendix D**.

Adequate site assessment will be performed as part of a comprehensive inspection and maintenance procedures. Site assessment evaluates the adequacy of BMPs at the site and the necessity of changes to those BMPs to assure continued effective performance. Where BMPs have failed, resulting in non-compliance with the Permit, they must be addressed as soon as possible, (that is, immediately in most cases), to minimize the discharge of pollutants. When new BMPs are installed or replaced with different BMPs, the SWPPP must be updated.

## 4 INSPECTION

To meet requirements of the Permit, inspection and maintenance of erosion and sediment controls must occur during the project construction or until a Notice of Termination is submitted to NDDEQ. Continued inspection and maintenance are required for specific structures after construction is completed. The inspection program will include the following:

- 1) A qualified person familiar with the SWPPP and control measures will conduct the inspections.
- 2) Inspections will cover these areas of the construction site:
  - Disturbed areas
  - Material storage areas
  - BMPs
  - Surface water diversions
  - Up-gradient and down gradient areas (run-on and run-off)
- 3) A log of inspections will be kept at the site when practical, a copy of all inspection reports will be filed in **Appendix F** of the SWPPP.
- 4) Sediment control BMPs will be inspected for evidence of deterioration, under-cutting, and buildup of sediment.
- 5) Following each inspection, the SWPPP will be updated as necessary to include additional controls designed to correct problems. Revisions to the SWPPP will be made after the changes to BMP installations or implementations occur to the site within 30 days following the inspection.
- 6) A signed inspection report summarizing the scope of the inspection, the name of the person conducting the inspection, date of inspection, and observations will be prepared and placed into the SWPPP. Inspection reports will be retained by the Impact SWPPP Administrator for at least 3 years from the date that the site is finally stabilized.
- 7) Actions taken to modify any stormwater control measure will be recorded and maintained with the SWPPP. Once adequate corrective action(s) have been taken, or where an inspection report does not indicate incidents requiring corrective action, the report shall be signed by a qualified person indicating the site is in compliance. An updated site map will accompany each inspection report.

### 4.1 Minimum Inspection Schedule

The stormwater inspections will be conducted in accordance with the following inspection schedule to meet the requirements of the Permit. The minimum inspection schedules are allowed:

- 1) Active Construction Sites/Areas

During active construction, qualified personnel shall inspect disturbed areas, control measures, and locations where vehicles enter or exit the site at least once every 14 calendar days and within 24 hours of any precipitation and/or snow melt event which exceeds 0.5 inches. The permittee must either maintain a rain gauge at the site or use the nearest National Weather Service precipitation gauge station. Any rain measurement shall be taken from an area within 10 miles of the construction project, or at least once every 7 days.

## 2) Inspections at Completed Sites/Areas

For sites, or portions of sites, that meet the following criteria but where final stabilization has not yet been achieved due to a vegetative cover that has not become established, an inspection will be conducted at least once every month and post-storm event inspections are not required. This reduced inspection schedule is allowed *only* if:

- All construction activities that will result in surface ground disturbance are completed.
- All activities required for final stabilization, in accordance with the SWPPP, have been completed, with the exception of the application of seed that has not occurred due to seasonal conditions or the necessity for additional seed application to augment previous efforts.
- The SWPPP must be amended to indicate those areas that will be inspected in accordance with the reduced schedule allowed for in this subsection.

## 3) Inactive Construction Sites/Areas

During seasonal shutdowns and periods following completion of construction, but before the site has achieved “final stabilization” conditions and termination of coverage under the General Permit, qualified personnel is required to inspect the site at least once each month.

## 4) Weather-Related Delays

Operators of projects in remote, rural sites that do not have “all season” road access may delay inspections until site conditions are appropriate for access. The reason for such a delay must be documented in the SWPPP. Inspections must occur as soon as access is feasible.

## 5) Alternative Inspection Plans and Schedules

A permittee may submit an alternative inspection plan for long, narrow, linear construction projects such as pipelines or utility line installation, and other projects in remote areas where vehicle traffic is restricted or could compromise native vegetation or stabilization measures. A copy of the SWPPP and alternative inspection plan must be submitted to the Department at least 30 days prior to implementing the plan. An alternative plan must provide for the timely recognition and repair of erosion or sedimentation. For an alternative inspection plan to be valid, it must be approved in writing by NDDEQ.

#### 6) Winter Conditions Inspections Exclusion

Inspections will not be performed at sites where construction activities are temporarily halted, snow cover exists over the entire site for an extended period, and melting conditions posing a risk of surface erosion do not exist. This exception is applicable *only* during the period where melting conditions do not exist and applies to the routine 14-day and monthly inspections as well as post-storm event inspections. The following information will be documented in the inspection record for use of this exclusion:

- Dates when snow cover occurred
- Date when construction ceased
- Date melting conditions began

#### 7) Completed Construction

Where there are areas that have achieved final stabilization, the operator may document such in the facility SWPPP and omit those areas from further routine inspections. Examples of where this provision may apply include specific well pads or pipeline segments that have been stabilized that are part of a larger plan of development covered under a single stormwater permit. Or the earlier phases of a large, phased development which may be stabilized before the later phases are completed.

## 4.2 Inspection Requirement

### 1) Inspection Scope

The construction site perimeter, all disturbed areas, material or waste storage areas that are exposed to precipitation, discharge locations, and locations where vehicles access the site will be inspected for evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to waters of the state. All erosion and sediment control practices identified in the SWPPP will be evaluated to confirm that they are operating correctly.

The stormwater inspector will be trained and knowledgeable about implementing the practices and controls included in the SWPPP such as spill response, good housekeeping and sediment controls. Employee training will be provided at least annually, as new employees are hired, as site conditions change, or as necessary to ensure compliance with the SWPPP and General Permit.

### 2) Inspection Report/Records

A record will be kept of inspections. Measurable quantities of sediment or other pollutants that have been transported off site are to be included in inspection record. Inspection reports will identify any incidents of non-compliance with the terms and conditions of the Permit and a diagram will accompany each report. The measures taken to correct deficiencies are to be recorded.

Copies of the inspection reports shall be retained with the SWPPP (**Appendix F**) at OE2's Denver, Colorado, offices and at the construction trailer at the Site during construction,

interim and final reclamation operations and for a minimum of three years following the completion of the activities. The most current version of the SWPPP and inspection records shall be retained at the construction site during active construction unless infeasible. If keeping a copy of the SWPPP and inspection records on-site is infeasible (such as on a site where there is no construction trailer or other structure where the SWPPP can be kept), the permittee shall provide the location of an off-site SWPPP to the NDDEQ either by letter or e-mail. Such notice must include the facility stormwater permit authorization number, location of the SWPPP and the name, address and a contact telephone number for a person with access to the SWPPP. All reports will be provided to the Administrator upon request.

The inspection reports will include:

- The inspection date
- Names and title of the personnel making the inspection
- Location of discharges of sediment or other pollutants from the site
- Location of BMPs that need to be maintained
- Location of BMPs that failed to operate as designed or proved inadequate for a particular location
- Location where additional BMPs are needed that were not in place at the time of the inspection
- Deviations from the minimum inspection schedule
- Description of corrective action for above items, date corrective action taken, and measures taken to prevent future violations, including requisite changes to the SWPPP as necessary
- Dates and amount of all rainfall events greater than 0.5 inches in a 24-hour period for active construction projects that are inspected under the 14-day inspection schedule
- Documentation of any changes made to the SWPPP and SWPPP site map as a result of the inspection
- After corrective action has been taken, or where a report does not identify any incidents requiring corrective action, the report will contain a signed statement indicating that it is in compliance with the SWPPP and the General Permit to the best of the signatory's knowledge and belief

#### **4.3 Required Actions Following Site Inspections**

Where site inspections note the need for BMP maintenance activities, BMPs will be maintained in accordance with the SWPPP. Repair, replacement, or installation of new BMPs determined necessary during site inspections to address ineffective or inadequate BMPs will be conducted

as described below. Guidelines for specific BMP installation and maintenance are included in **Appendix D**.

Upon written request from the Administrator of the Water Quality Division of NDDEQ or his agent, stormwater effluent or ambient water quality data will be collected of the type and at the frequency specified. Monitoring records shall include the following information:

- The date, exact place, and time of sampling or measurements
- The initials or name(s) of the individual(s) who performed the sampling or measurements
- The date(s) analyses were performed
- The time(s) analyses were initiated
- The initials or name(s) of the individual(s) who performed the analyses
- References and written procedures for the analytical techniques or methods used
- The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results

Monitoring will be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the general NPDES permit NDR11-0000.

**APPENDIX A**  
**NDPDES STORMWATER GENERAL PERMIT NDR11-0000**

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Permit No: NDR11-0000  
Effective Date: April 1, 2020  
Expiration Date: March 31, 2025

AUTHORIZATION TO DISCHARGE UNDER THE  
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33.1-16-01 of the North Dakota Department of Environmental Quality rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Facilities both qualifying for and satisfying the requirements identified in Part I of the permit

are authorized to discharge stormwater associated with construction activity

to waters of the state

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,

March 31, 2025.

Signed this 30 day of March, 2020.



Karl H. Rockeman, P.E.  
Director  
Division of Water Quality

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## I. PERMIT COVERAGE AND LIMITATIONS

### A. Discharges Covered

1. This permit applies to all areas within the state of North Dakota, except for those areas defined as Indian Country. Construction activity located within Indian Country within the state of North Dakota must obtain a permit through the United States Environmental Protection Agency. If the construction activity is located with the jurisdiction of the state of North Dakota, and the United States Environmental Protection Agency, a permit must be obtained from both regulatory entities.
2. This permit applies to stormwater discharges associated with construction activity and small construction activity as defined in Title 40 of the Code of Federal Regulations (CFR), Parts 122.26(b)(14)(x) and (b)(15), respectively. The reference to construction activity in this permit includes both large construction activity and small construction activity as described below.
  - a. Large construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than five (5) acres and includes the disturbance of less than five (5) acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five (5) acres or more.
  - b. Small construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than one (1) acre, and includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater that one (1) and less than five (5) acres.
3. This permit applies to discharges of stormwater from construction activity identified in Part I(A)(1)-(2) associated with oil and gas exploration, production, processing or treatment operations, or transmission facilities resulting in the discharge of a reportable quantity for which notification is required pursuant to 40 CFR 110.6, 40 CFR 117.21, or 40 CFR 302.6 or contributes to a violation of a water quality standard.
4. Stormwater discharges from support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) may be covered by this permit as part of a related construction site. The support activities may only be in association with one project. If the support activity is associated with more than one project, a separate stormwater permit (Industrial or mining, extraction or paving material preparation) is required.
5. Certain non-stormwater discharges from facilities covered by this permit and meeting the requirements specified in Part II(A).
6. Stormwater discharges from construction activity covered by the previous permit, issued April 1, 2015, where a notice has been submitted to obtain coverage under this permit.
7. Projects which have obtained coverage under this permit shall amend and implement a Stormwater Pollution Prevention Plan (SWPPP) that meets the requirements of this permit within ninety (90) days of the effective date of this permit.
8. Discharges from dewatering activities related to construction activities (discharges of uncontaminated stormwater, uncontaminated groundwater, and uncontaminated surface water).
9. Local Authority. This permit does not preempt or supersede the authority of local agencies or operators of municipal separate storm sewer systems to prohibit, restrict, or control discharges of stormwater to storm sewer systems or other water courses within their jurisdiction.

## **B. Discharges Not Covered**

1. Stormwater discharges associated with industrial activity from any source other than construction activities described in Part I(A).
2. Post-construction discharges from industrial activity that originate from the site after construction activities have been completed at the site. Industrial and post-construction stormwater discharges may need to be covered by a separate stormwater permit.
3. The placement of fill into waters of the state requiring local, state, or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits).
4. This permit does not substitute for obligations under the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), Wild and Scenic Rivers Act, or National Historic Preservation Act (NHPA), it is the permittees responsibility to ensure the project and resulting discharges comply with the respective requirements.
5. Discharges to waters for which there is a total maximum daily load (TMDL) allocation are not covered unless you develop a Stormwater Pollution Prevention plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, the SWPPP must incorporate the conditions applicable to the discharge necessary for consistency with the assumptions, allocations and requirements of the TMDL. If a specific numeric wasteload allocation has been established that would apply to discharges from construction activity, the permittee must incorporate that allocation into the SWPPP and implement necessary steps to meet that allocation. Information about TMDL allocations may be found at the following website: [deq.nd.gov/WQ](http://deq.nd.gov/WQ).
6. Stormwater discharges that the department determines will cause or have the reasonable potential to cause or contribute to a violation of the standards for quality for waters of the state (North Dakota Administrative Code [NDAC] 33.1-16-02.1).
7. Discharges from hydrostatic testing, well points, water line disinfection, treatment of refined petroleum contaminated groundwater or surface water, treatment of crude oil contaminated groundwater or surface water, and oil and gas production water.
8. Discharges of wash water using detergents, wastewater, and sanitary waste.

## **C. Obtaining Coverage and Authorization Effective Date**

1. To obtain authorization under this general permit for stormwater discharges you must submit a complete notice of intent (NOI) and develop a SWPPP in accordance with Part II(C) of this permit. A SWPPP must be in place as a condition of the permit and a copy of the SWPPP must be retained by the permittee.
2. Permit coverage will become effective seven (7) days after you submit a complete NOI unless otherwise notified by the department (based on the department receipt date).
3. Upon the effective date of permit coverage, permittees are authorized to discharge stormwater from eligible activities under the terms and conditions of this permit.

#### D. Notice of Intent Process

1. Applicants must use a NOI form or electronic NOI to complete the application. The NOI form or electronic NOI can be found at: [deg.nd.gov/WQ](http://deg.nd.gov/WQ). Submission of data contained within the NOI must be in compliance with the electronic reporting requirements found in 40 CFR 127.
2. NOI Content and Conditions.
  - a. The owner, or owner jointly with the operator (usually the general contractor), shall submit a completed NOI for this permit. The owner is responsible for compliance with all terms and conditions of this permit. The operator has day to day supervision of construction activities and is jointly responsible with the owner for compliance with the permit conditions as they pertain to the construction activities delegated to the operator.
  - b. The NOI shall contain, at a minimum, the following information:
    - 1) Owner name, mailing address, and phone number;
    - 2) Project contact name, phone number, and e-mail address;
    - 3) Project/site name;
    - 4) Project/site location (street address; section, township, range) and county;
    - 5) Project/site latitude and longitude;
    - 6) A brief description of the construction activity;
    - 7) The anticipated start date and the anticipated completion date for the project (if known);
    - 8) The estimated total area of the site and the total area of disturbance in acres;
    - 9) The name of receiving water(s), or the name of the municipal storm sewer system and receiving water; and
    - 10) The signature of the applicant(s), owner (and operator if co-applicants) signed in accordance with the Signatory Requirements in Part IV(A)(6) of this permit.
  - c. A SWPPP (Part II(C)) for the project must be prepared and available for review, upon request, by the department at the time of application. Permittees are not required to submit the SWPPP with the NOI unless otherwise notified by the department.
3. For residential construction activity occurring within a common plan of development (such as a subdivision) subject to the permit requirements, coverage may be obtained by the following:
  - a. The owner of the lot(s) shall submit one NOI for all of the owner's construction activity within the common plan of development, or
  - b. The operator, such as a homebuilder who may represent one or more lot owners, shall submit one NOI for all of the operator's construction activity within the common plan of development. Additional phases of the common plan of development may be included under the initial NOI and permit coverage.

In addition, a SWPPP must be developed and implemented for the permittee's activities within the common plan of development. Additional phases of the common plan of development may be included provided the SWPPP is amended to include the additional area or phases.

4. For construction activity associated with oil and gas exploration, production, processing, treatment operations, or transmission facilities, which discharge contaminated stormwater, an NOI may be submitted for individual project sites or for an area of operations such as well field or by county.

#### **E. Notice of Termination (NOT)**

1. Permittees wishing to terminate coverage under this permit must submit a Notice of Termination (NOT) signed in accordance with Part IV(A)(6) of this permit. Submission of data contained within the NOT must be in compliance with the electronic reporting requirements found in 40 CFR 127. Compliance with the conditions of this permit is required until a NOT is submitted to the department.
2. Permittees may only submit a NOT after one of the following conditions have been met:
  - a. Final stabilization (Part II(E)) has been achieved on all portions of the site for which the permittee is responsible.
  - b. Another owner/operator/permittee has assumed control in accordance with the transfer provisions (Part I(F)) over all areas of the site that have not achieved final stabilization.
  - c. For residential construction only, a NOT is not required for each lot that is sold, transferred, or has achieved final stabilization. The permittee must modify the SWPPP to indicate that permit coverage is no longer required for that lot. The SWPPP shall indicate the reason why coverage is no longer needed and the date the lot was sold, transferred, or achieved final stabilization. In order to terminate coverage, all lots under the control of the owner or operator must be sold, transferred, or achieved final stabilization (Part II(E)).

#### **F. Transfer of Ownership or Control**

1. When the owner or operator of a construction project changes, the new owner or operator must submit a written request for permit transfer/modification within fourteen (14) days of assuming control of the site or commencing work on-site, or of the legal transfer, sale or closing on the property; except as provided in Part I(F)(2). Late submittals will not be rejected; however the department reserves the right to take enforcement for any unpermitted discharges or permit noncompliance. For stormwater discharges from construction activities where the owner or operator changes, the new owner or operator can implement the original SWPPP created for the project or develop and implement their own SWPPP. Permittees shall ensure either directly or through coordination with other operators that their SWPPP meets all terms and conditions of this permit and that their activities do not interfere with another party's SWPPP.
2. A permit transfer/modification request is not required for the legal transfer, sale or closing on a property between permittees covered by this permit. Examples include the sale of a property parcel from a developer to a builder, or the transfer of an easement from a developer to a local government authority. If the new party is not covered by this permit at the time of transfer or sale, then the new owner/operator must submit a completed NOI within fourteen (14) days of assuming control of the site.

## II. STORMWATER DISCHARGE REQUIREMENTS

### A. Prohibition of Non-Stormwater Discharges

The discharge of wastewater is not authorized by this permit. The following sources of non-stormwater discharges are allowed if they are not a significant source of pollution and are identified in the SWPPP: fire-fighting activity, fire hydrant flushing, potable water line flushing, equipment wash down without detergents or hazardous cleaning products, uncontaminated foundation drains, springs, surface water, lawn watering, chemical treatment of stormwater, and air conditioning condensate. Impervious surface wash water may not be directed into any surface water or storm drain inlet unless appropriate pollution prevention measures have been implemented. Non-stormwater discharges may not come into contact with oil and grease deposits or any other toxic or hazardous materials (unless cleaned up using dry clean-up methods). The SWPPP must include a description of the pollution prevention measures to be implemented while non-stormwater discharges are occurring.

### B. Releases in Excess of Reportable Quantities

This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302, nor the reporting requirements found in NDAC 33.1-16-02.1. Any release which meets any reporting requirement shall be reported to the department in accordance with Part IV(A)(7).

### C. Stormwater Pollution Prevention Plans

All permittees shall implement a SWPPP for any construction activity requiring this permit until final stabilization is achieved. The SWPPP and revisions are subject to review by the department. The objectives of the SWPPP are to identify potential sources of sediment and other sources of pollution associated with construction activity, and to ensure practices are implemented and maintained to reduce the contribution of pollutants in stormwater discharges from the construction site to waters of the state and storm sewer systems. Stormwater management documents developed under other regulatory programs may be included or incorporated by reference in the SWPPP or used in whole as a SWPPP if it meets the requirements of this part. A partially complete SWPPP is acceptable when it clearly identifies the item(s) to be completed, the person(s) responsible for completing the item(s) and the deadline for completing the item(s). The SWPPP must be completed prior to the start of construction (or the applicable construction phase).

The SWPPP may identify more than one permittee and may specify the responsibilities of each permittee by task, area, and/or timing. Permittees may coordinate and prepare more than one SWPPP to accomplish this. However, in the event there is a requirement under the SWPPP for which responsibility is ambiguous or is not included in the SWPPP, each permittee shall be responsible for implementation of that requirement. Each permittee is responsible for assuring that their activities do not render another permittee's controls ineffective.

The SWPPP must incorporate the requirements provided in Appendix 1 and shall include the following information.

1. **Site Description.** Each SWPPP shall provide a description of the construction activity and potential sources of pollution as indicated below:
  - a. A description of the overall project and the type of construction activity;
  - b. Estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, grubbing, or other activities during the life of the project;

- c. A proposed timetable/schedule, or chart, of activities that includes major phases/stages, BMP implementation, BMP removal, disturbances, and stabilization for major portions of the site;
- d. A description of the soil within the disturbed area(s);
- e. The name of the surface water(s) and municipal storm sewer system at or near the disturbed area that will receive stormwater runoff from the project site; and
- f. A site map which indicates the following items as applicable (more than one (1) map may be needed). If an item is not applicable, provide rationale describing why the item is not applicable to the construction activity:
  - 1) Location of project;
  - 2) Project boundaries;
  - 3) Areas of ground disturbance during each phase/stage of the project;
  - 4) Areas where disturbance will not occur, such as avoidance areas (e.g. wetlands, critical habitat, Threatened and Endangered Species, etc);
  - 5) Drainage patterns including flow direction (run-on and runoff);
  - 6) Discharge points and storm sewer system inlets which the site drains to or may be affected by the activity;
  - 7) Location of all temporary and permanent sediment and erosion controls during each particular phase;
  - 8) Location of any stormwater conveyances such as retention ponds, detention ponds, ditches, pipes, swales, stormwater diversions, culverts, and ditch blocks;
  - 9) Location of potential sources of pollution (e.g. portable toilets, trash receptacles, etc.) or areas where potential sources of pollution cannot be located;
  - 10) Location of soil stockpiles;
  - 11) Identify steep slopes;
  - 12) Surface waters, including an aerial extent of wetlands;
  - 13) Location of surface water crossings;
  - 14) Locations where stormwater is discharged to surface waters;
  - 15) Location of dewatering discharge points;
  - 16) Locations where chemical treatment of stormwater will be performed, including discharge points;
  - 17) Fueling locations and storage, vehicle and equipment maintenance areas, designated wash water collection site, lubricant and chemical storage, paint storage, material storage, staging areas, and debris collection area;
  - 18) Location of any impervious surfaces upon completion of construction; and
  - 19) Where included as part of the project, the site maps for off-site concrete/asphalt batch plants, equipment staging areas, borrow sites or excavated fill material disposal sites. Site maps must show items 1 through 18 of this section.
- g. Projects that discharge stormwater which flows to a water body listed as impaired under section 303(d) of the Federal Clean Water Act due to sediment, suspended solids or turbidity must identify the water body and impairment in the SWPPP. The department's 303(d) list may be found at the following website under Integrated Reports: [deq.nd.gov/WQ](http://deq.nd.gov/WQ)
- h. For water bodies which have a TMDL, the SWPPP must describe and conform to the Waste Load Allocations (WLA) of the water body. Information about TMDL allocations may be found at the following website: [deq.nd.gov/WQ](http://deq.nd.gov/WQ)

2. **Narrative.** The SWPPP must include a narrative description of the selected operational controls and sediment and erosion controls as outlined in Part II(C)(3), Part II(C)(4), and Appendix 1 of this permit. When applicable, a description of the requirements for any additional environmental regulations and local requirements related to the project, as it relates to waters of the state, must also be included or incorporated by reference (e.g. The Wild and Scenic Rivers Act, The National Historic Preservation Act, The Endangered Species Act, Fish and Wildlife Coordination Act, National Environmental Policy Act, Section 404 of the Clean Water Act, etc.).

The narrative shall describe at a minimum:

- a. The installation, removal (if applicable), and maintenance requirements of selected Best Management Practices (BMPs) for each phase/stage of construction activity;
  - b. The rationale for the selection of all BMPs (the design should be included where appropriate);
  - c. Whether selected BMPs are temporary or permanent;
  - d. Any descriptions of infeasibility or explanations as required in Part II of this permit.
3. **Operational Controls.** The SWPPP shall describe the BMPs used in day to day operations on the project site that reduce the contribution of pollutants in stormwater runoff.
- a. The SWPPP must identify a person knowledgeable and experienced in the application of erosion and sediment control BMPs who will oversee the implementation of the SWPPP, and the installation, inspection, and maintenance of the erosion and sediment control BMPs before and during construction until a NOT is filed or the permit is transferred. A knowledgeable and experienced person is someone who meets the requirements of Part II(C)(3)(e) of this permit.
  - b. The owner shall develop a chain of responsibility with all operators on the site to ensure that the SWPPP will be implemented and stay in effect until the construction project is complete, the entire site has undergone final stabilization, and a NOT has been submitted to the department.
  - c. The SWPPP must include a description of good housekeeping practices used to maintain a clean and orderly site. The SWPPP shall describe how litter, debris, chemicals and parts will be handled to minimize exposure to stormwater. The SWPPP also shall describe what measures will be used to reduce and remove sediment tracked off site by vehicles or equipment. In addition, the SWPPP shall describe methods which will be used to reduce the generation of dust that could be discharged in stormwater from the project.
  - d. The SWPPP shall describe spill prevention and response procedures where potential spills can occur. Specific handling procedures, storage requirements, spill containment, cleanup procedures, and disposal must be identified. Storage structures for petroleum products and other chemicals shall have adequate leak and spill protection to prevent any spilled materials from entering waters of the state or storm sewer systems.

The potential discharge of hazardous substances in stormwater discharges shall be minimized by including measures detailed in the SWPPP to prevent and respond to releases of hazardous substances. If a reportable quantity release occurs, the SWPPP shall be revised to prevent the reoccurrence of such a release.

- e. The SWPPP shall outline how employees and responsible parties shall be trained on the implementation of the SWPPP. Training must be provided at least annually, as new employees or responsible parties are hired, or as necessary to ensure compliance with the SWPPP and the general permit. Employees and responsible parties include individuals who are responsible for design, installation, maintenance, and repair of stormwater controls and conducting inspections.

- 1) On-site personnel must understand the requirements of this permit as it pertains to their role in implementing the SWPPP. On-site personnel must know:
    - a. The purpose of the SWPPP, requirements of the SWPPP, and how the SWPPP will be implemented;
    - b. The location of all BMPs identified in the SWPPP; and
    - c. Correct installation, function, maintenance, and removal (if applicable) of BMPs identified in the SWPPP.
  - 2) Personnel responsible for performing site inspections must understand when inspections must be conducted (Part III(A)), what must be inspected (Part II(C)(7)), how to record findings, and when to initiate and properly document corrective actions.
  - 3) Maintenance personnel must understand when maintenance must be performed on BMPs in order to maintain properly functioning BMPs and what needs to be recorded for corrective actions/maintenance records in accordance with Part III(A)(5) of this permit.
- f. The SWPPP must describe how concrete grindings and slurry will be managed. Wastewater from concrete washout, cleanout or washout from stucco, paint, joint compound, and other building materials shall not be discharged to waters of the state, storm sewer systems, or curb and gutter systems.
- 1) Wash water must be collected in leak-proof containers or leak-proof pits. Containers or pits must be designed and maintained so that overflows cannot occur due to inadequate sizing, precipitation events, or snowmelt.
- g. The SWPPP shall describe any dewatering activities planned at the site. Dewatering or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) related to the permitted activity must be managed with appropriate BMPs, such that the discharge does not adversely affect the receiving water. The following conditions apply to dewatering activities:
- 1) Dewatering is limited to uncontaminated stormwater, surface water, and groundwater that may collect on-site and those sources identified in Part II(A), if they are not a significant source of pollution. A separate permit must be obtained to discharge water from other sources such as hydrostatic testing of pipes, tanks, or other similar vessels; disinfection of potable water lines; pump testing of water wells; and the treatment of refined petroleum contaminated groundwater or surface water.
  - 2) The permittee(s) must operate the discharge to minimize the release of sediment and provide adequate BMPs where necessary to minimize erosion due to the discharge. Discharges must not lead to the deposition of sediment within stormwater conveyance systems or surface waters. Discharges must not cause or potentially cause a visible plume within a surface water body.
  - 3) When dewatering, utilize structures or BMPs which allow for draw down to occur from the surface of the water, unless infeasible. If infeasible, documentation must be provided in the SWPPP. In addition, you must describe what BMP(s) will be used in its place.

- 4) Chemical treatment of dewatering activities for sediment removal must be conducted in accordance with the chemical manufacturer's specifications. Treatment chemicals must be appropriately selected for the anticipated soil particle size and characteristics of the stormwater (pH, turbidity, flow rate of stormwater flowing into the chemical treatment system, etc.). A description of the chemical treatment process must be included in the SWPPP. Permittees shall ensure the selection and management of chemicals minimize the potential for harmful effects in the discharge. The following information must be included in the SWPPP.
    - a. Material Safety Data Sheet/Safety Data Sheet (MSDS/SDS);
    - b. Proposed water additive discharge concentration;
    - c. Discharge frequency (i.e., number of hours per day and number of days per year);
    - d. Monitoring point for product discharge;
    - e. Type of removal treatment, if any, that the water additive receives prior to discharge;
    - f. Product function (e.g., coagulant, flocculant, etc.);
    - g. A 48-hour LC<sub>50</sub> or EC<sub>50</sub> for a North American freshwater planktonic crustacean (*Ceriodaphnia* sp., *Daphnia* sp., or *Simocephalus* sp.); and
    - h. Results for a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean).
  - 5) Local authorities may require specific BMPs for discharges affecting their storm sewer system.
4. **Erosion and Sediment Controls.** Erosion and sediment controls and stabilization requirements must be implemented for each major phase of site activity (e.g., clearing, grading, building, and landscaping phases). A description of the erosion and sediment controls and site stabilization methods must be provided in accordance with Part II(C)(2) of this permit. Erosion and sediment controls, and site stabilization must conform to the requirements provided in Appendix 1. The description and implementation of controls shall address the following minimum components:
- a. The selection of erosion and sediment controls, and site stabilization shall consider the following:
    - 1) The expected amount, frequency, intensity, and duration of precipitation events. Permittees may state that selected erosion and sediment controls and site stabilization methods are industry standards;
    - 2) The nature of stormwater run-on and runoff from the site as well as changes during, and as a result of, construction activity. This includes changes to impervious surfaces, slopes, seasonal changes, and drainage features on-site;
    - 3) Channelized flow must be handled in order to minimize erosion at outlets and to minimize impacts to downstream receiving waters;
    - 4) Soil types (wind and water erodibility, and settling time); and
    - 5) Seasonal conditions.
  - b. Sediment basins, or an appropriate combination of equivalent sediment controls such as smaller sediment basins and/or sediment traps, silt fences, fiber logs, vegetative buffer strips, berms, etc., are required for all down slope boundaries of the disturbance area and for those side slope boundaries as may be appropriate for site conditions.

- c. Temporary or permanent erosion protection and stabilization (such as cover crop planting or mulching) must be initiated immediately, as described in Appendix 1(A), for all exposed soil areas where activities have been completed or temporarily ceased.
- d. All control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations. Corrective actions must be made prior to the next anticipated rainfall event or within 24 hours of discovery (whichever comes first) or as soon as field conditions allow. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

The permittee may deviate from the manufacturer's specifications and erosion and sediment control requirements in Appendix 1 if they provide justification for the deviation and document the rationale for the deviation in the SWPPP. Any deviation must provide equivalent erosion and sediment control.

- e. If sediment escapes from the site, off-site accumulations of sediment must be removed in a manner and frequency sufficient to minimize off-site impacts as outlined in Appendix 1(B). The SWPPP must be modified to prevent further sediment deposition off site.
  - f. Stormwater controls are expected to withstand and function properly during precipitation events of up to the 2-year, 24-hour storm event. Visible erosion and/or off-site sediment deposition from such storm events should be minimal. The 2-year, 24-hour rainfall event in North Dakota ranges from about 1.76 inches in the west to 2.50 inches in the east (NOAA Atlas 14, Volume 8, Version 2, Midwestern States 2013).
  - g. For projects that discharge stormwater which flows to a water body for which there is a TMDL allocation the SWPPP must be consistent with the assumptions, allocations, and requirements in the approved TMDL. If a TMDL specifies certain BMPs or controls to meet a WLA applicable to the project's discharges, the BMPs or controls must be incorporated into the SWPPP. Information about TMDL allocations may be found at the following website: [deq.nd.gov/WQ](http://deq.nd.gov/WQ)
5. **Stormwater Management.** The SWPPP must identify permanent practices incorporated into the project to control pollutants in stormwater discharges occurring after construction operations have been completed.
- a. Identify stormwater ponds; flow reduction methods; infiltration of runoff on-site; sequential systems which combine several practices or other post-construction stormwater management features.
  - b. Identify velocity / energy dissipation devices placed at discharge locations and appropriate erosion protection for outfall channels and ditches.
  - c. Maintenance for on-site stormwater management features is the responsibility of the permittee until the NOT is submitted or the feature is accepted by the party responsible for long term maintenance.
  - d. The design, installation and use of stormwater management features must comply with applicable local, state or federal requirements.

6. **Maintenance.** The SWPPP shall describe preventative maintenance practices used to ensure the proper operation of erosion and sediment control devices and equipment used or stored on site. All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. The SWPPP must indicate, as appropriate, the maintenance or clean out interval for sediment controls. If site inspections, required in Part III of this permit, identify BMPs that are not operating effectively, maintenance shall be arranged and accomplished in accordance to Appendix 1 or as soon as practicable.
7. **Inspections.** The SWPPP must provide for site inspections as outlined in Part III. The permittee shall ensure that personnel conducting site inspections are familiar with permit conditions and the proper installation and operation of control measures. Inspectors must be knowledgeable in their role of the SWPPP, as outlined in Part II(C)(3)(e) of this permit. The erosion and sediment control measures and stabilized areas identified in the SWPPP shall be observed to ensure they are operating correctly and in serviceable condition. Inspections shall include areas used for storage of materials, permanent stormwater control measures, vehicle maintenance areas, and dewatering activities. These areas shall be inspected for evidence of, or the potential for, pollutants entering a drainage system. If necessary, the plan shall be revised based on the observations and deficiencies noted during the inspection.
8. **SWPPP Review and Revisions.**
  - a. The SWPPP shall be signed in accordance with the Signatory Requirements, Part IV(A)(6), and retained on-site for the duration of activity as outlined in Part III(B). The owner, or owner jointly with the operator (usually the general contractor), shall sign the SWPPP.
  - b. The permittee shall make the SWPPP available upon request to the department, EPA, or, in the case of discharges to a municipal storm sewer system, the operator of the municipal system.
  - c. The permittee shall amend the SWPPP whenever there is a change in design, construction, operation, maintenance, or BMPs. The SWPPP shall be amended if the plan is found to be ineffective in controlling pollutants present in stormwater. The SWPPP shall include a description of the amendment process.

#### **D. Local Requirements**

All stormwater discharges must comply with the requirements, policies, or guidelines of municipalities and other local agencies as applicable to the construction site. Any discharges to a storm sewer, ditch or other water course under the jurisdiction of a municipality must comply with any specific conditions or BMPs required by the municipality or agency.

#### **E. Final Stabilization**

The permittee(s) must ensure final stabilization of the site. Permittees should submit a NOT within 30 days after final stabilization has been achieved, or another owner/operator (permittee) has assumed control according to Part I(F) for all areas of the site that have not undergone final stabilization. Final stabilization can be achieved in one of the following ways.

1. All soil disturbing activities at the site have been completed and all soils must be stabilized by a uniform perennial vegetative cover with a density of 70 percent of the pre-existing cover over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions and;

- a. All drainage ditches, constructed to drain water from the site after construction is complete, must be stabilized to preclude erosion;
  - b. All temporary erosion prevention and sediment control BMPs (such as silt fence) must be removed as part of the site final stabilization; and
  - c. The permittee(s) must remove all sediment from conveyances and temporary sedimentation basins that will be used as permanent water quality management basins. Sediment must be stabilized to prevent it from being washed into basins, conveyances or drainage ways discharging off-site or to surface waters. The cleanout of permanent basins must be sufficient to return the basin to design capacity.
2. For areas of the state where the average annual rainfall is less than 20 inches, all soil disturbing activities at the site have been completed and erosion control measures (e.g., degradable rolled erosion control product) and stabilization methods are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years and achieve 70 percent of the pre-existing vegetative cover within three (3) years without active maintenance. Sites must meet the criteria outlined in items 1(a), (b), and (c) above.
  3. Disturbed areas on land used for agricultural purposes that are restored to their pre-construction agricultural use are not subject to these final stabilization criteria. If the construction activity removed standing crop, the area must be restored in accordance with the landowner.

Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to waters of the state, and areas which are not being returned to their pre-disturbance use must meet the final stabilization criteria in (1) or (2) above.

4. For residential construction only, final stabilization may be achieved when soil is stabilized (see Appendix 1(A)(3)) and down gradient perimeter control for individual lots has been implemented and the residence has been transferred to the homeowner. Additionally, the permittee must distribute a "homeowner fact sheet" to the homeowner to inform the homeowner of the need for, and benefits of, final stabilization. The permittee also must demonstrate that the homeowner received the fact sheet.

### **III. SELF MONITORING AND REPORTING**

#### **A. Inspection and Maintenance Requirements**

1. Inspections shall be performed by or under the direction of the permittee at least once every 14 calendar days and within 24 hours after any storm event of greater than 0.25 inches of rain per 24-hour period. Rainfall inspections do not take the place of the scheduled once every 14-calendar day inspection unless the rainfall inspection occurs on the same day as the once every 14-calendar day inspection. Inspections are only required during normal working hours. The permittee shall use a rain gauge on-site or utilize the nearest National Weather Service precipitation gauge station. Rain gauge locations or stations must be representative of the site.
  - a. "Within 24 hours after any storm event greater than 0.25 inches rain per 24-hour period" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. If there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

2. There may be times when a site inspection may not be practical at the specified time. Adverse climatic conditions, such as flooding, high winds, tornadoes, electrical storms, site access constraints, etc., may prohibit inspections. The permittee must include a description of why the inspection(s) could not be performed at the designated time in the next inspection record. If an inspection is delayed due to adverse weather conditions or rain events outside normal working hours, an inspection must be conducted during the next working day, or as conditions allow.
3. Some erosion and sediment control measures may require more frequent inspection based on location (e.g., sensitive areas or waters of the state) or as a result of recurring maintenance issues. Erosion or sediment control measures found in need of maintenance between inspections must be repaired or replaced with appropriate measures as soon as practicable. Erosion and sediment control measures which require more frequent inspection based on location or as a result of recurring maintenance issues must be identified in the SWPPP.
4. All inspections conducted during construction must be recorded. These records (or reports) must be retained in accordance with Part III(B). Records (or reports) of each inspection activity shall include:
  - a. Date of inspections;
  - b. Name of person(s) conducting inspections;
  - c. Findings of inspections, including recommendations and schedule for corrective actions;
  - d. Date and amount of all rainfall events greater than 1/4 inch (0.25 inches) in 24 hours;
  - e. Documentation that the SWPPP has been amended when changes are made to BMPs in response to inspections; and
  - f. Signature of person(s) conducting the inspection or other means used to verify an inspector (e.g., work order or preventative maintenance schedule completion).
5. Corrective actions (maintenance activities) performed during construction must be recorded and these records must be retained in accordance with Part III(B). Records for maintenance activity shall include:
  - a. Best Management Practice corrected;
  - b. Date of corrective action;
  - c. Name of person(s) performing corrective actions;
  - d. Corrective actions taken; and
  - e. Corrective actions/maintenance records shall be signed or use another means to verify corrective actions/maintenance were completed (e.g., work order or preventative maintenance schedule completion).
6. Completed areas that have been stabilized but do not meet the 70 percent perennial vegetative cover criteria for final stabilization may be inspected once per month. Inspections may be suspended for parts of the construction site that meet final stabilization requirements of Part II(E) of this permit. The SWPPP must update to identify any areas which meet this condition.

7. Inspections may be suspended where earthwork has been suspended due to frozen ground conditions. The required inspections and maintenance must resume as soon as runoff occurs or the ground begins to thaw at the site. The permittee must record freeze/thaw and runoff dates as part of the inspection records.
8. Dewatering activities shall be inspected daily. The inspection must include the dewatering site, areas where BMPs are being implemented and the discharge location. A record (or report) shall be maintained to document the inspections of the dewatering operation and actions taken to correct any problems that may be identified. Records shall contain at a minimum:
  - a. Date of inspections;
  - b. Name of person(s) conducting inspections;
  - c. Approximate volume of water discharged;
  - d. Findings of the inspection, including recommendations and schedule for corrective actions;
  - e. Corrective actions taken (including dates and party completing maintenance activities);
  - f. Documentation that the SWPPP has been amended when changes are made to the dewatering activity in response to inspections; and
  - g. Signature of person(s) conducting inspections and maintenance or other means used to verify an individual (e.g., work order or preventative maintenance schedule completion).

## **B. Records Location**

A copy of the completed and signed NOI, coverage letter from the department, SWPPP, site inspection records, corrective actions/maintenance records, and this general permit shall be kept at the site of the construction activity in a field office, trailer, shed, vehicle that is on-site during normal working hours, or other reasonable on-site location. If the site does not have a reasonable on-site location, then the documents must be retained at a readily available alternative location; preferably with the individual responsible for overseeing the implementation of the SWPPP. Electronic copies of records are acceptable if the records can be accessed on-site. If the site is inactive, then the documents may be stored at a local office. Permittees should avoid using personal electronic devices for storing electronic records.

## **IV. STANDARD CONDITIONS**

### **A. COMPLIANCE RESPONSIBILITIES BP 2019.05.29**

#### **1. Duty to Comply**

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

#### **2. Proper Operation and Maintenance**

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

**3. Planned Changes**

The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

**4. Duty to Provide Information**

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

**5. Records Retention**

All records and information (including calibration and maintenance) required by this permit shall be kept by the permittee for at least three years from the date that permit coverage expires or is terminated or longer if requested by the department or EPA.

**6. Signatory Requirements**

All applications, reports, or information submitted to the department shall be signed and certified.

All permit applications shall be signed by a responsible corporate officer for a corporation; a general partner or the proprietor for a partnership or sole proprietorship; or a principal executive officer or ranking elected official for a municipality, State, Federal, or other public agency.

All reports required by the permit and other information requested by the department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and included in the SWPPP; and
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

A copy of the written authorization must be submitted to the department upon request. If an authorization under 6. Signatory Requirements is no longer accurate for any reason, a new authorization satisfying the above requirements must be included in the SWPPP.

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**7. Twenty-four Hour Notice of Noncompliance Reporting**

- a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The oral report shall be made the department at 701.328.5210.
- b. A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:
  - 1) A description of the noncompliance and its cause;
  - 2) The period of noncompliance, including exact dates and times;
  - 3) The estimated time noncompliance is expected to continue if it has not been corrected; and
  - 4) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Reports shall be submitted to the department at the following address:

ND Department of Environmental Quality  
Division of Water Quality  
918 East Divide Ave  
Bismarck ND 58501-1947

The department may waive the written report on a case by case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

**8. Bypass of Treatment Facilities**

- a. Prohibition of Bypass. Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:
  - 1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - 2) There were no feasible alternatives to the bypass. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of preventive maintenance; and

The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the two (2) conditions listed above.

**9. Upset Conditions**

An upset constitutes an affirmative defense to an action brought for noncompliance with erosion and sediment or site stabilization methods if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and the permittee can identify its cause(s);
- b. The permitted facility was, at the time being, properly operated;

- c. The permittee submitted notice of the upset as required under 7. Twenty-four Hour Notice of Noncompliance Reporting and
- d. The permittee complied with any remedial measures required under 10. Duty to Mitigate.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

**10. Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

**11. Removed Materials**

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard.

**12. Duty to Reapply**

Any request to have this permit renewed should be made fifteen days prior to its expiration date.

**B. GENERAL PROVISIONS**

**1. Inspection and Entry**

The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the construction activity and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

**2. Availability of Reports**

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

**3. Transfers**

This permit is not transferable except upon the filing of a Transfer/Modification request (Part I(F)) by the new party. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also notify the department of the possible change.

**4. New Limitations or Prohibitions**

The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

**5. Permit Actions**

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. **Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

7. **State Laws**

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

8. **Oil and Hazardous Substance Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

9. **Property Rights**

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

10. **Severability**

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

## V. DEFINITIONS

**“303(d) list”** or **“section 303(d) list”** means a list of North Dakota’s water quality-limited waters needing total maximum daily loads or TMDLs developed to comply with section 303(d) of the Clean Water Act. A copy of the list is available on the state’s web site at: [deq.nd.gov/WQ](http://deq.nd.gov/WQ)

**“Act”** means the Clean Water Act.

**“Bankfull”** means the channel is filled to the top of one or both of its banks.

**“BMP”** or **“best management practices”** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment requirements, operating procedures and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**“Bypass”** means the intentional diversion of waste streams from any portion of a treatment facility.

**“Common plan of development or sale”** means a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

**“Construction activity”** means construction activity as defined in 40 CFR part 122.26(b)(14)(x) and small construction activity as defined in 40 CFR part 122.26(b)(15). This includes a disturbance to the land that results in a change in topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling and excavating. Construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb one (1) acre or more. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

**“Department”** means the North Dakota Department of Environmental Quality, Division of Water Quality.

**“Energy dissipation”** means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to: concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion.

**“Indian country”** means (1) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservations; (2) All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

**“Infeasible”** means not technologically possible or not economically practicable and achievable in light of best industry practices.

**“Immediately”** means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

**“Large construction activity”** means land disturbance of equal to or greater than five (5) acres. Large construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than five acres.

**“Normal wetted perimeter”** means the area of a conveyance, such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur once every year.

**“Non-stormwater discharges”** means discharges other than stormwater. The term includes both process and non-process sources. Process wastewater sources that require a separate NDPDES permit include, but are not limited to industrial processes, domestic facilities and cooling water. Non-stormwater sources that may be addressed in this permit include, but are not limited to: fire-fighting, fire hydrant flushing, potable water line flushing, equipment wash down without detergents or hazardous cleaning products, uncontaminated foundation drains, springs, surface water, lawn watering, chemical treatment of stormwater and air conditioning condensate.

**“Operator”** means the person (usually the general contractor) designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the SWPPP. The person must be knowledgeable in those areas of the permit for which the operator is responsible and must perform those responsibilities in a workmanlike manner.

**“Owner”** means the person or party possessing the title of the land on which the construction activities will occur; or if the construction activity is for a lease holder, the party or individual identified as the lease holder; or the contracting government agency responsible for the construction activity.

**“Permanently ceased”** means clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

**“Permanent Cover”** means final stabilization. Examples include grass, gravel, asphalt, and concrete.

**“Severe property damage”** means substantial physical damage to property, damage to best management practices which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in construction.

**“Significant materials”** includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

**“Significant spills”** includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (see 40 CFR 302.4).

**“Small construction activity”** means land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale, if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.

**“Stabilized”** means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, or other material that prevents erosion from occurring. Grass seeding alone is not stabilization. Snow cover and frozen ground conditions are not considered stabilized.

**“Steep Slopes”** means slopes which are 3:1 (Horizontal:Vertical) or greater in grade.

**“Stormwater”** means stormwater runoff, snow melt runoff, and surface runoff and drainage.

**“Stormwater associated with industrial activity”** means stormwater runoff, snow melt runoff, or surface runoff and drainage from industrial activities as defined in 40 CFR 122.26(b)(14).

**“Stormwater associated with small construction activity”** means the discharge of stormwater from:

(i) Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

(ii) Any other construction activity designated by EPA or the Department, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the state.

**“Temporarily ceased”** means clearing, grading, and excavation within any area of the site that will not include permanent structures, will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

**“Temporary erosion protection”** means methods employed to prevent erosion. Examples of temporary cover include; mulch, straw, erosion control blanket, wood chips, tackifiers, and erosion netting.

**“Upset”** means an exceptional incident in which there is unintentional and temporary noncompliance with permit requirements because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed erosion and sediment controls or site stabilization methods, inadequate erosion and sediment controls or site stabilization methods, lack of preventive maintenance, or careless or improper operation.

**“Waters of the state”** means any and all surface waters that are contained in or flow in or through the state of North Dakota as defined in NDCC 61-28-02. This definition includes all water courses, even if they are usually dry.

## Appendix 1 – Erosion and Sediment Control Requirements

Requirements for designing, implementing and maintaining erosion and sediment controls.

### A. Erosion and Sediment Control Practices

1. Sites using temporary (or permanent) sediment basins must meet the following requirements:
  - a. Sediment basins shall be designed for a calculated volume of runoff from a 2-year, 24-hour storm per acre drained to the basin and provides not less than 1,800 cubic feet of sediment storage below the invert of the outlet pipe from each acre drained to the basin; or
  - b. Basins shall be sized to provide 3,600 cubic feet of sediment storage below the invert of the outlet pipe per acre drained to the basin if calculations are not performed.
  - c. Basin outlets must be designed to avoid short-circuiting and the discharge of floating debris. Basins must be designed with the ability to allow complete basin drawdown for maintenance activities. Basins must release the storage volume in at least 24 hours. Outlet structures must be designed to withdraw water from the surface, unless not practicable. If not practicable, rationale must be provided in the SWPPP. The basin must have a stabilized emergency overflow to prevent failure of pond integrity. Energy dissipation must be provided for the basin outlet.
2. Erosion, sediment, and stabilization practices shall be provided. Erosion, sediment, and stabilization practices include such things as: silt fences, fiber logs, stabilized earth berms, vegetative buffer strips, erosion control blankets, mulch, hydro-seeding combined with mulch or tackifiers, etc.
3. All exposed soil areas must be stabilized (see definitions). Stabilization must be initiated immediately where activities have been permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. Stabilization must be completed as soon as practicable, but no later than fourteen (14) calendar days after the initiation of soil stabilization. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) are exempt from this requirement.
  - a. For slopes with a grade of 3:1 or greater, stabilization must be initiated immediately once activities have been completed or temporarily ceased. Stabilization must be completed as soon as practicable, but no later than seven (7) calendar days after the initiation of soil stabilization.
4. Temporary soil stockpiles must have effective sediment controls, and cannot be placed in surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches.
5. The normal wetted perimeter of any temporary or permanent drainage ditch that drains water from a construction site, or diverts water around a site, must be stabilized at least 200 linear feet from the property edge, or from the point of discharge to any surface water. Stabilization shall be completed prior to connection with a surface water. Any remaining portion of the temporary or permanent drainage ditch must be stabilized within fourteen (14) calendar days for portions which construction activities have temporarily or permanently ceased.
6. If stabilization requirements cannot be met due to circumstances beyond the control of the permittee, the permittee may comply with following:
  - a. If vegetative stabilization is to be used, immediately initiate, and within 14 calendars days complete, the installation of temporary non-vegetated stabilization; or
  - b. Complete all methods of initiating stabilization as soon as conditions or circumstances allow.

If any conditions in parts (a) or (b) above are encountered, the permittee must document in the SWPPP the circumstances which prevented the stabilization requirements from being met and provide a schedule in the SWPPP which will be followed in order to meet the stabilization requirements.

Permittees are responsible for implementing winter stabilization methods during frozen ground conditions if the site was not stabilized prior to the ground freezing.

7. Stream diversions, or any temporary or permanent drainage ditch or trench which will have continuous flow, shall be stabilized with appropriate controls prior to connection with any surface water. The entire area (channel and bank) of the stream diversion or temporary or permanent drainage ditch, or trench, must be appropriately stabilized to bankfull height.
8. While working in or around surface waters, sediment and erosion controls must be used above the anticipated level of the surface water. Floating silt curtain does not satisfy the down slope and side slope boundary requirements in Part II(C)(4)(b) of this permit, unless the construction activity is on or below the elevation of the surface water. Floating silt curtain must be placed as close to shore as possible. Sediment controls must be installed where exposed soils drain to the surface water immediately after construction activity along the waterline has been completed.
9. Pipe and culvert outlets must be provided with energy dissipation prior to connection with a surface water.
10. Splash pads and/or downspout extensions must be provided for roof drains to prevent erosion from roof runoff.
11. All storm drain inlets in the immediate vicinity of the construction site must be protected by appropriate BMPs during construction until all disturbed areas and stockpiles with the potential to discharge to the inlet have been stabilized. This includes storm drain inlets which may be affected by sediment tracked onto paved surfaces by vehicles or equipment.
12. Inlet protection devices are a last line of control – erosion and sediment control practices must be used on site. Inlet protection devices must conform to local ordinances or regulations. In general, inlet protection devices need to provide for adequate drainage to prevent excessive roadway flooding. Inlet protection may be removed for a particular inlet if a specific concern (i.e., street flooding/freezing, snow removal) has been identified and documented in the SWPPP. In this situation, additional erosion and sediment control practices, or stabilization methods must be used to supplement the loss of the inlet protection device to prevent sediment from entering the storm sewer system.
13. Vegetated buffers must have a minimum width of 1 foot for every 5 feet of disturbed area that drains to the buffer. The width of the buffer shall have a slope of 5 percent or less and the area draining to the buffer shall have a slope of 6 percent or less. Concentrated flows should be minimized throughout the buffer.  
  
Buffers shall consist of dense grassy vegetation, 3 to 12 inches tall with uniform coverage over 90 percent of the buffer. Woody vegetation shall not be counted for the 90 percent coverage. No more than 10 percent of the overall buffer may be comprised of woody vegetation.
14. A 50-foot natural buffer or equivalent erosion and sediment controls must be provided when a project is within 50 feet of a surface water and stormwater flows to the surface water. If equivalent erosion and sediment controls are used, rationale for using equivalent controls must be provided in the SWPPP.

If working within 100 feet of a surface water listed as impaired for sediment, suspended solids or turbidity, a 100-foot natural buffer or equivalent sediment and erosion controls must be provided. If equivalent erosion and sediment controls are to be used, rationale for using equivalent controls must be provided in the SWPPP.

15. Discharges from the chemical treatment of stormwater must not cause a violation of the standards of quality for waters of the state (NDAC 33.1-16-02.1). The discharge must meet the dewatering or basin draining requirements provided in Part II(C)(3)(g) of this permit.
16. Minimize the duration of exposed soils on steep slopes.

## **B. Maintenance Requirements for Erosion and Sediment Controls**

1. All erosion prevention and sediment control BMPs must be inspected to ensure integrity and effectiveness. All nonfunctional BMPs must be repaired, maintained, or replaced with functional BMPs. Corrective actions must be made prior to the next anticipated rainfall event or within 24 hours of discovery (whichever comes first), or as soon as field conditions allow access. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

Permittees must investigate and comply with the following inspection and maintenance requirements:

- a. All control devices similar to, and including, silt fence or fiber rolls must be repaired, replaced, maintained or supplemented when they become nonfunctional (torn from posts, visible tears, etc.). Collected sediment must be removed as it approaches 1/2 of the above ground capacity of the control device.
  - b. Fiber rolls must be replaced when 1/2 of the original above ground height of the device when it was installed has been lost as a result of flattening or other damage.
  - c. Sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches 1/2 the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.
  - d. Maintenance and cleaning of inlet protection devices must be performed when sediment accumulates, the filter becomes clogged, and/or performance is compromised.
2. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of sediment deposited by erosion. Permittees must remove all deltas and sediment deposits in surface waters, drainage ways, catch basins, and other drainage systems. Areas where sediment removal results in exposed soil must be stabilized. Removal and stabilization must take place immediately, but no more than, seven (7) calendar days after the discovery unless precluded by legal, regulatory or physical access constraints. Permittees shall use all reasonable efforts to obtain access. If precluded, removal and stabilization shall take place immediately, but no more than, seven (7) calendar days after obtaining access. Permittees are responsible for contacting all local, regional, state, and federal authorities, and receiving any applicable permits prior to conducting any work.
  3. Vehicle tracking of sediment from the site must be minimized by BMPs. This may include having a designated egress with aggregate surfacing from the site or by designating off-site parking. Permittees are responsible for (or making the arrangements for) street sweeping and/or scraping if BMPs are not adequate to prevent sediment from being tracked onto the street from the site.

Construction site egress locations must be inspected for evidence of sediment being tracked offsite by vehicles or equipment onto paved surfaces. Accumulations of tracked and deposited sediment must be removed from all off-site paved surfaces by the end of the work day, shift or if applicable, within a shorter time specified by local authorities or the department.

4. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain event and/or pose a safety hazard to users of public streets). BMPs shall be used to minimize further impacts of off-site accumulations of sediment until the off-site accumulations are removed. Impervious surface wash water may not be directed into any surface water or storm drain inlet unless appropriate pollution prevention measures have been implemented.
5. Vegetative buffers must be inspected for proper distribution of flows, sediment accumulation and signs of rill formation. If a buffer becomes silt covered, contains rills, or is otherwise rendered ineffective, other control measures shall be implemented. Eroded areas shall be repaired and stabilized within 24 hours of discovery, or as soon as conditions allow access. Documentation must be provided in the maintenance records if field conditions do not allow access along with a plan of action for performing maintenance activities.

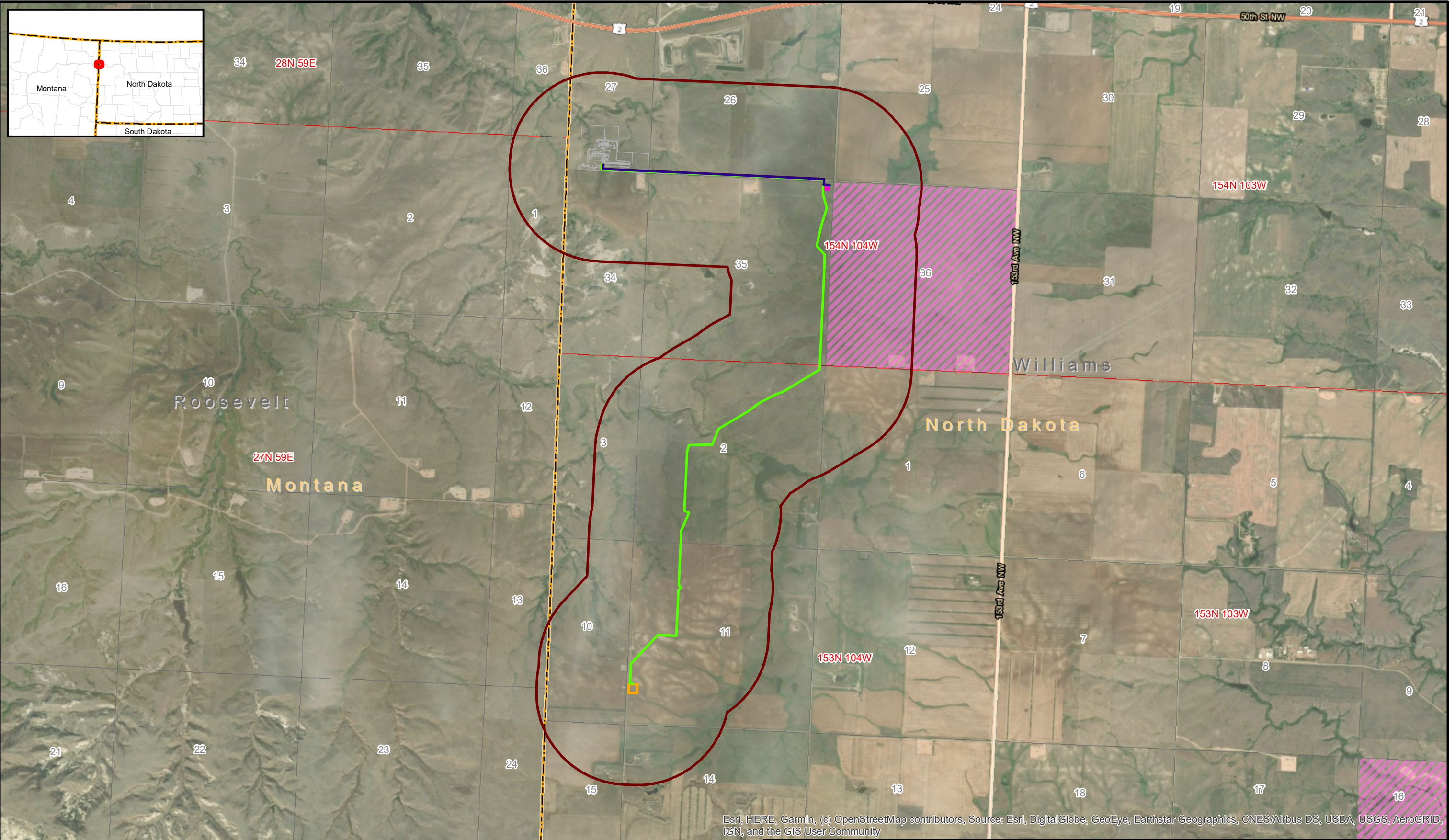
### **C. Operational Controls**

1. Properly handle construction debris and waste materials.
  - a. Debris and waste must be handled appropriately until disposal. Litter and debris shall be collected and stored to reduce the potential for wind and water to carry the materials off-site or leachate discharging from a site. Collected material shall be taken to the appropriate facility for disposal or recycling.
  - b. Liquid or soluble materials including oil, fuel, paint, and any other hazardous substances must be properly stored, to prevent spills, leaks or other discharges. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of liquid or soluble material must be in compliance with applicable regulations.
2. Wash water containments must be cleaned out (solids and liquid) before 80 percent of storage capacity is attained.
3. BMPs used in surface waters must be cleaned immediately upon removal from surface waters to prevent the transfer of aquatic nuisance species.
4. Fueling operations must be managed to minimize spills or leaks. Collected spill or leak material must be disposed in compliance with applicable regulations.

**APPENDIX B**  
**PROJECT OVERVIEW MAP**

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Date: 5/6/2020 User: ALeonard Path: \\azrgis\storp01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlant\MXD\PS\IOE\_AppA\_Fig1\_Overview.mxd



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LEGEND			
	NGL 8in Steel Pipeline		State Land
	Residue 20in Steel Pipeline		County Boundary
	NGL Meter Site		Township/Range
	Residue Meter Site		Section
	Study Area		

0 0.25 0.5 1  
Miles

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**OUTRIGGER ENERGY**

PROJECT NO.	20203533
CREATED:	5/6/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_AppA_Fig1_Overview.mxd

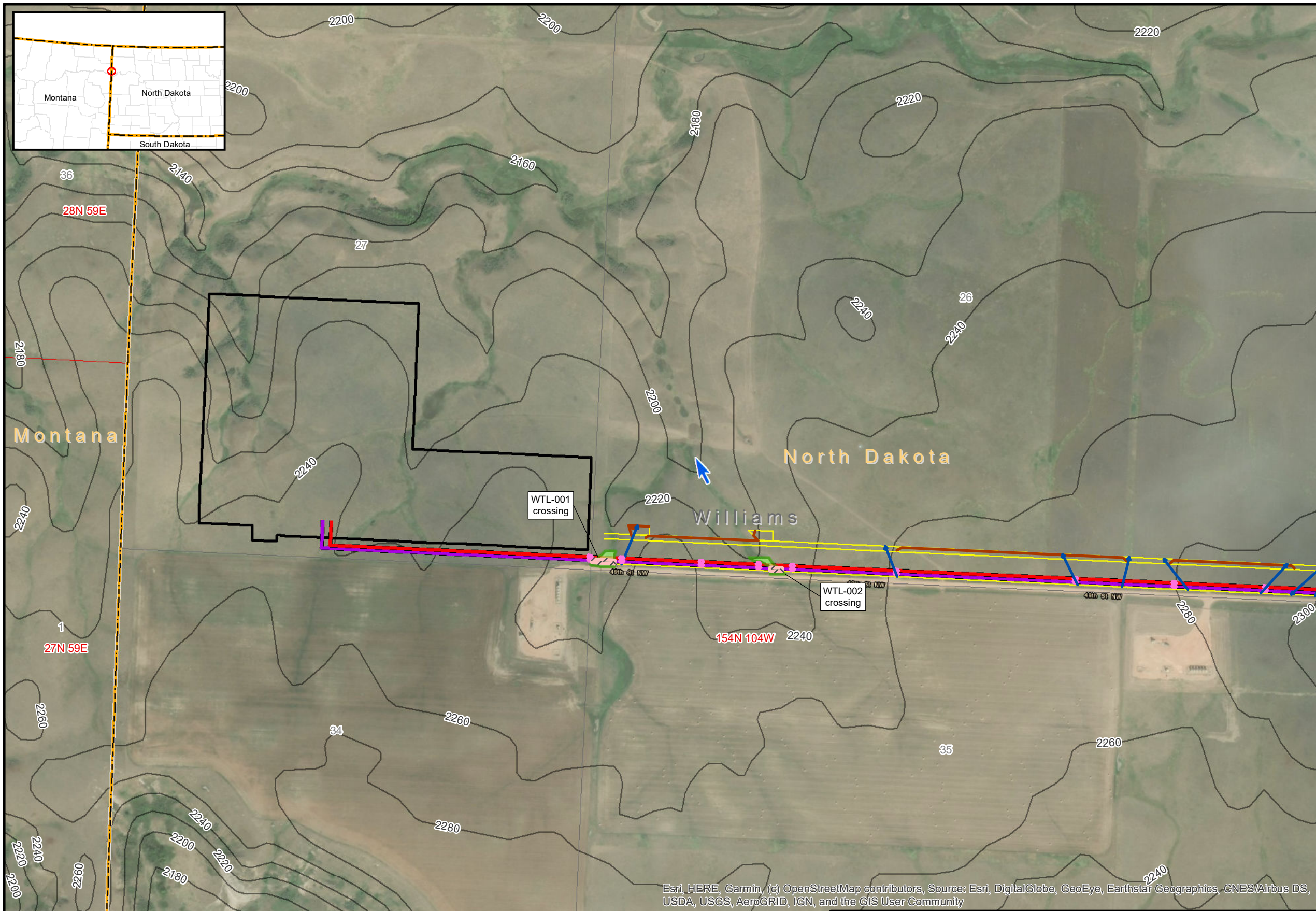
<b>Project Overview Map</b>	
OE2 North, LLC Pipeline Project	
Secs. 26, 27, & 35, T154N, R104W Secs. 11 & 2, T153N, R103W Williams County, North Dakota	

FIGURE  
**1**

**APPENDIX C**  
**SWPPP SITE MAPS**

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Date: 5/29/2020 User: ALeonard Path: \\azrgis\storp01\GIS\_Projects\Client\Outrigger\Energy\20203533\_SandersonGasPlant\MXD\PSC\IOE\_PSC\_SWPPP.mxd

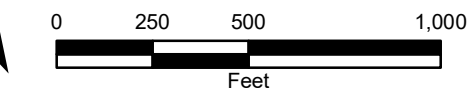


- NOTES:**
1. The contractor shall be responsible for all site preparation, grading, fence installation, and environmental controls. Contractor shall install all soil erosion and sediment controls at the commencement of construction and shall provide maintenance and ensure effectiveness throughout the life of the Project.
  2. BMP locations will be determined in the field based on in-field conditions.
  3. Hand-written living document changes (mark-ups) on SWPPP Site Maps are needed to document changes in field conditions as required by the Project. Living document changes are useful for documenting the status of BMPs drawn on the Site Maps but are especially important for documenting ever-changing features. When markups become too extensive, individual copies of Site Map sheets can be retired with their applicable date range marked on them.
  4. Existing work site conditions and environmental features shall be retained and protected with minimal disturbance to the maximum extent practical, this effort includes maintaining existing drainage features, contours, slopes, soil conditions, and vegetation patterns as far as development and local conditions permit and otherwise minimizing disturbances and damages to the work site and adjoining lands. Vegetation shall be left in place wherever possible within construction areas.
  5. All waters to be avoided and other environmentally sensitive areas that are not permitted for impacts shall be clearly marked (e.g., mandatory keep-out signage and brightly colored snow fence or other clear visual boundary marker) in the field, and all site personnel shall be trained to avoid unpermitted activities in these areas.
  6. Postponing work during wet, rainy conditions will be done as much as possible to prevent vehicle wheel ruts and soil erosion.
  7. Filter bags, or other temporary sediment control BMPs, will be placed down-gradient of soil disturbances as needed when stabilization is not completed immediately (e.g. overnight, over weekends, or during inclement weather).
  8. Seeding and straw mulching will be used to stabilize disturbed surfaces as needed to prevent soil erosion within the limits of disturbance. Seed mixes will follow North Dakota State University Extension and Natural Resources Conservation Service recommendations unless the landowner specifies otherwise. Please see the appropriate district seed mix storm water BMP detail.
  9. Spoils, topsoil, and other materials from construction activities shall be stockpiled outside of any floodways and at least 50 feet away from surface waters and drainage areas.
  10. Construction entrances shall be properly stoned to adequately clean tires when transitioning from dirt roads to public roadways.
  11. Inlet protection is required at all sewer inlets, grates, and manholes for sediment control.
  12. The contractor shall restore/repair all access roads, both public and private, state and local roads, and areas outside of the construction area to their preconstruction conditions or better to the satisfaction of the owner and in accordance with any landowner agreements and/or permits.
  13. Trash and construction debris will be properly disposed of by the Contractor. Locations of dumpsters will be marked on the Site maps.

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**LEGEND**

NGL 8in Steel Pipeline	Proposed ONEOK Meter Site	Surface Water Flow Direction	County Boundary
Residue 20in Steel Pipeline Centerline	Limits of Disturbance	Potential WOTUS Avoidance Area	State Boundary
Proposed Northern Border Meter Site	Facility Boundary	Elevation Contour	Township/Range
	Site Features		Section



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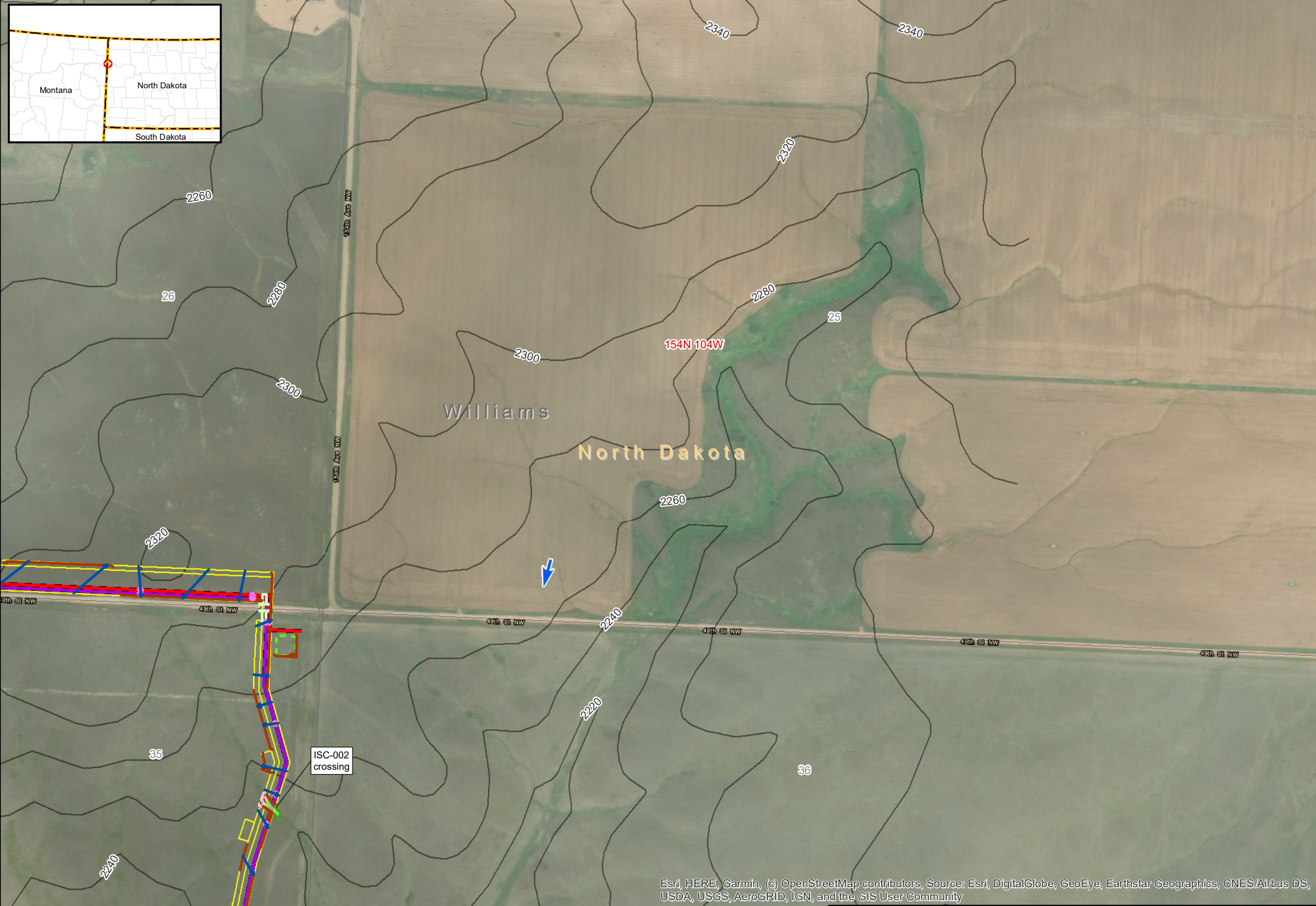
PROJECT NO.	20203533
CREATED:	5/29/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_SWPPP.mxd

**SWPPP Map**

OE2 North, LLC  
Bill Sanderson Residue and NGL Pipelines Project  
Sec. 27, T154N, R104W  
Williams County, North Dakota

FIGURE  
**1**

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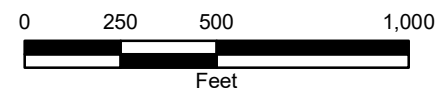


- NOTES:**
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- LEGEND**
- NGL 8in Steel Pipeline
  - Residue 20in Steel Pipeline Centerline
  - Proposed Northern Border Meter Site
  - Proposed ONEOK Meter Site
  - Limits of Disturbance
  - Facility Boundary
  - Site Features
  - Surface Water Flow Direction
  - Potential WOTUS Avoidance Area
  - Elevation Contour

- County Boundary
- State Boundary
- Township/Range
- Section



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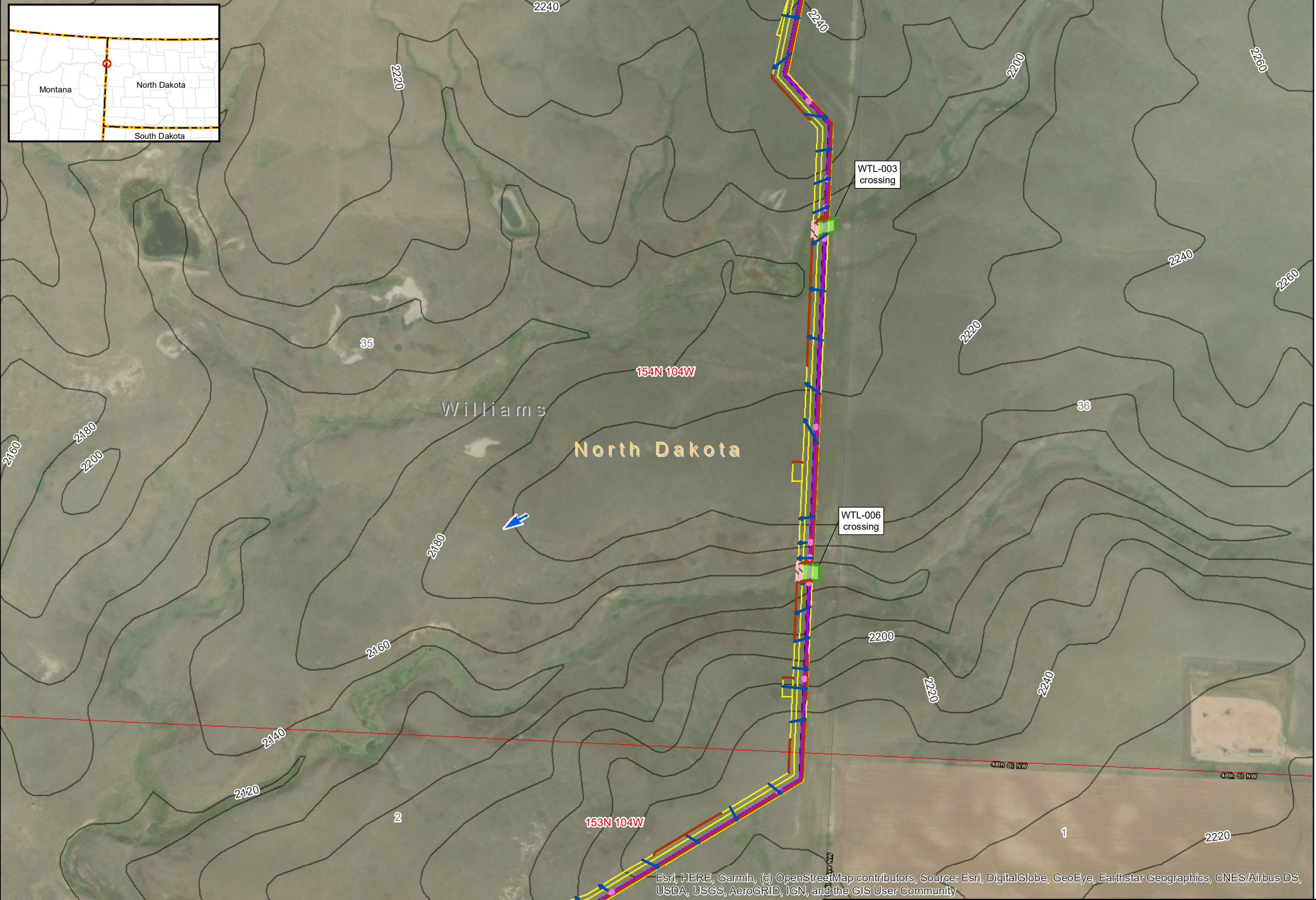
PROJECT NO.	20203533
CREATED:	5/29/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_SWPPP.mxd

**SWPPP Map**

OE2 North, LLC  
 Bill Sanderson Residue and NGL Pipelines Project  
 Sec. 27, T154N, R104W  
 Williams County, North Dakota

FIGURE  
**1**

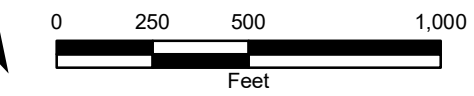
Date: 5/29/2020 User: ALeonard Path: \\azrgis\corp01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlant\MXD\PSC\IOE\_PSC\_SWPPP.mxd



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LEGEND		
NGL 8in Steel Pipeline	Proposed ONEOK Meter Site	Surface Water Flow Direction
Residue 20in Steel Pipeline Centerline	Limits of Disturbance	Potential WOTUS Avoidance Area
Proposed Northern Border Meter Site	Facility Boundary	Elevation Contour
	Site Features	
County Boundary	State Boundary	Township/Range
Section		



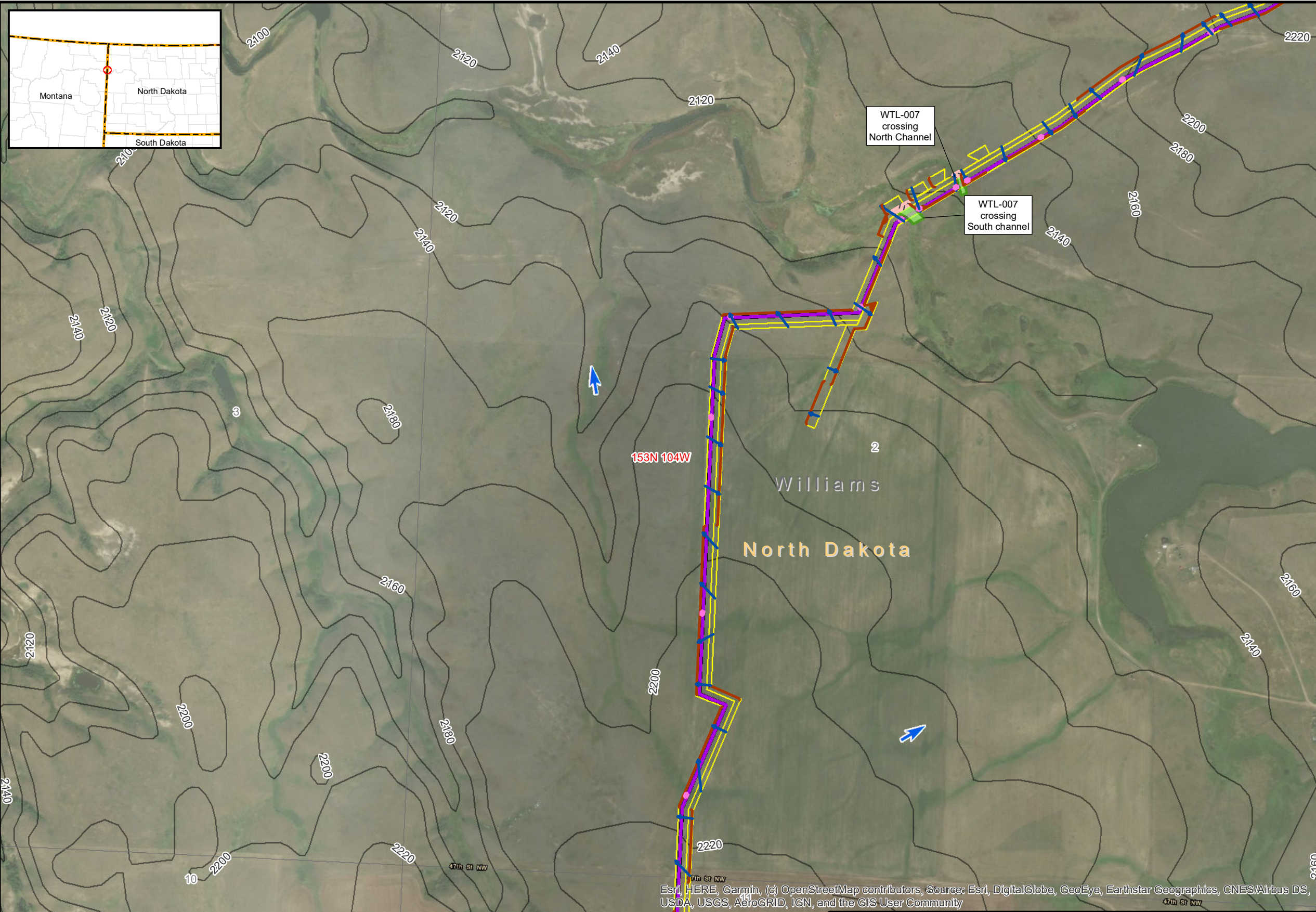
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PROJECT NO.	20203533
CREATED:	5/29/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_SWPPP.mxd

<b>SWPPP Map</b>	
OE2 North, LLC	
Bill Sanderson Residue and NGL Pipelines Project	
Sec. 27, T154N, R104W	
Williams County, North Dakota	

FIGURE  
**1**

Date: 5/29/2020 User: ALeonard Path: \\azrgis\storp01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlant\MXD\PSC\IOE\_PSC\_SWPPP.mxd

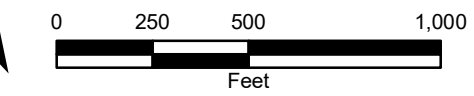


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**LEGEND**

NGL 8in Steel Pipeline	Proposed ONEOK Meter Site	Surface Water Flow Direction	County Boundary
Residue 20in Steel Pipeline Centerline	Limits of Disturbance	Potential WOTUS Avoidance Area	State Boundary
Proposed Northern Border Meter Site	Facility Boundary	Elevation Contour	Township/Range
	Site Features		Section



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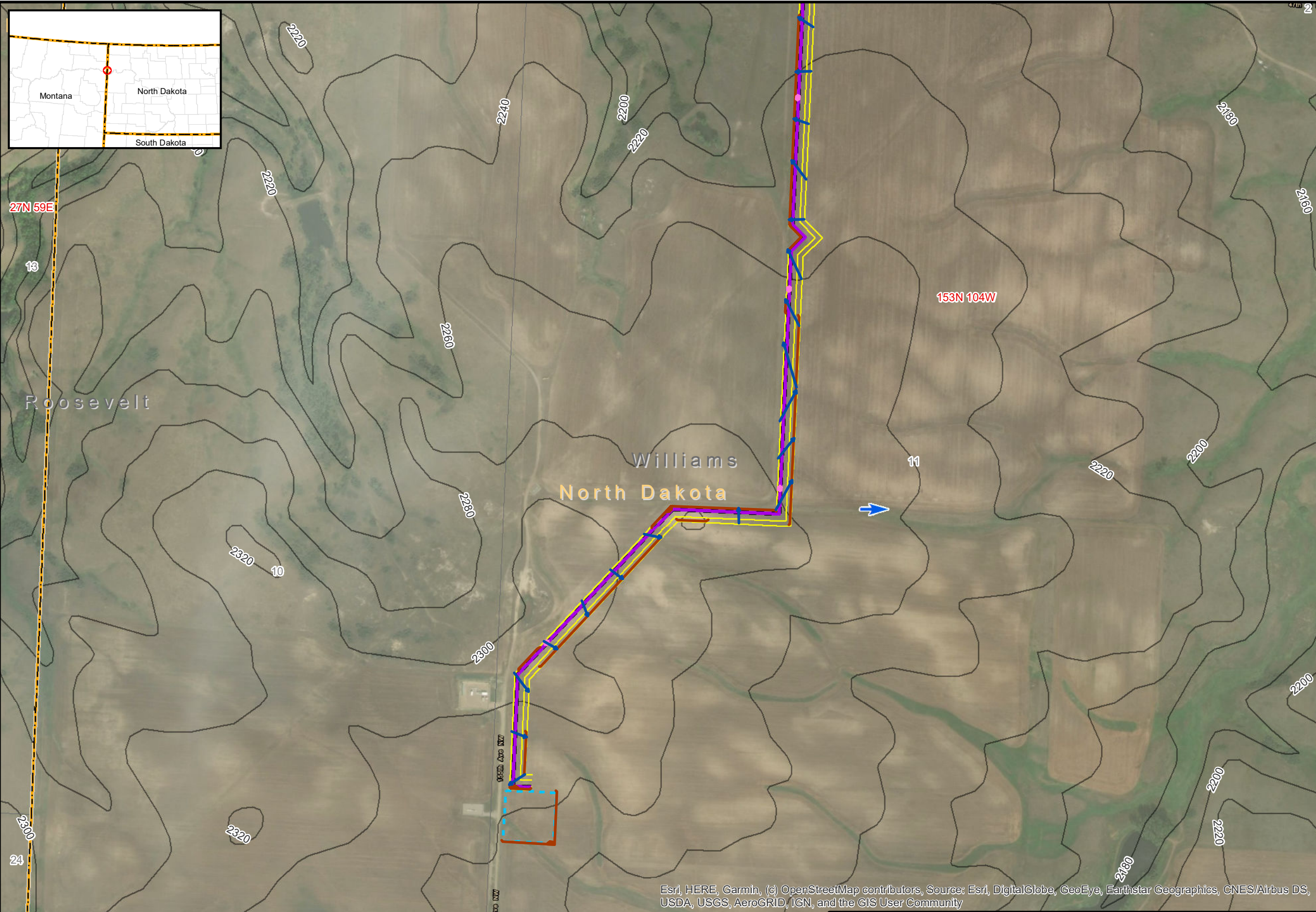
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**SWPPP Map**

OE2 North, LLC  
Bill Sanderson Residue and NGL Pipelines Project  
Sec. 27, T154N, R104W  
Williams County, North Dakota

FIGURE  
**1**

Date: 5/29/2020 User: ALeonard Path: \\azrgis\storp01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlant\MXD\PSC\IOE\_PSC\_SWPPP.mxd



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	Site Features		Section

0 250 500 1,000  
Feet

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**OUTRIGGER ENERGY**

PROJECT NO.	20203533
CREATED:	5/29/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_SWPPP.mxd

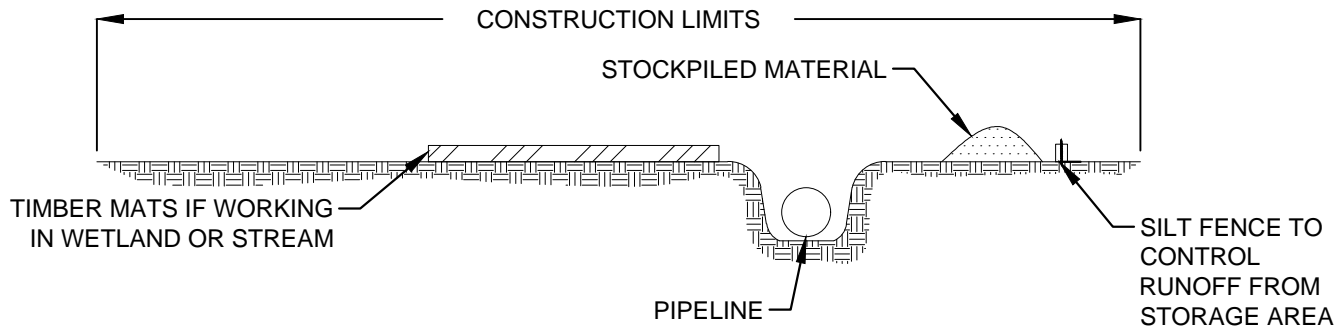
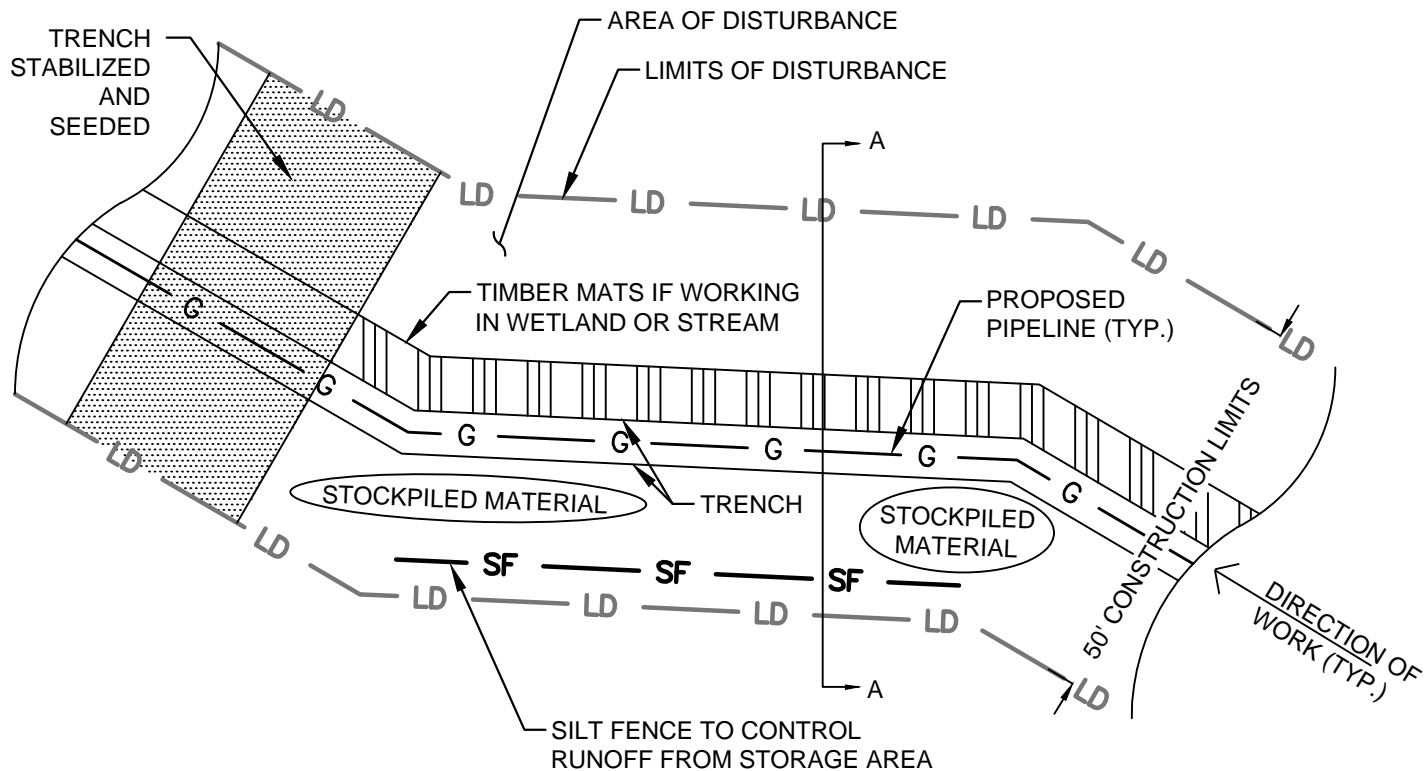
**SWPPP Map**

OE2 North, LLC  
Bill Sanderson Residue and NGL Pipelines Project  
Sec. 27, T154N, R104W  
Williams County, North Dakota

FIGURE  
**1**

**APPENDIX D**  
**BMP DETAILS**

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SECTION A-A

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NOT TO SCALE

PROJECT NO.	20203533
DRAWN:	DEC 2019
DRAWN BY:	JP
CHECKED BY:	NE
FILE NAME:	OE2 - Details.dwg

TYPICAL TRENCH  
E&S CONTROLS

OE2 NORTH LLC  
BILL SANDERSON RESIDUE AND NGL  
PIPELINES PROJECT

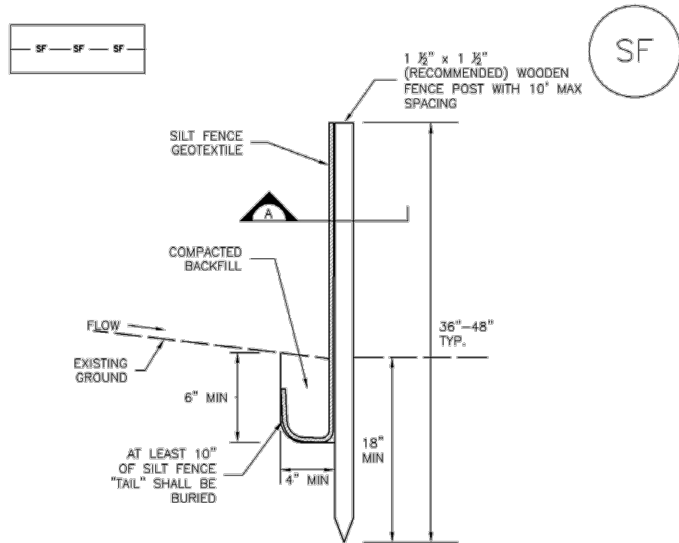
FIGURE  
-

**Silt Fence (SF)**

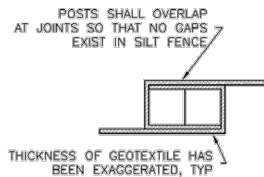
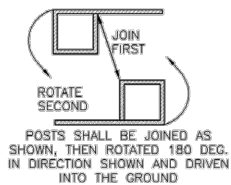
**SC-1**

**SC-1**

**Silt Fence (SF)**



**SILT FENCE**



**SECTION A**

**SF-1. SILT FENCE**

**SILT FENCE INSTALLATION NOTES**

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

**SILT FENCE MAINTENANCE NOTES**

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

November 2010

Urban Drainage and Flood Control District  
Urban Storm Drainage Criteria Manual Volume 3

SF-3

SF-4

Urban Drainage and Flood Control District  
Urban Storm Drainage Criteria Manual Volume 3

November 2010

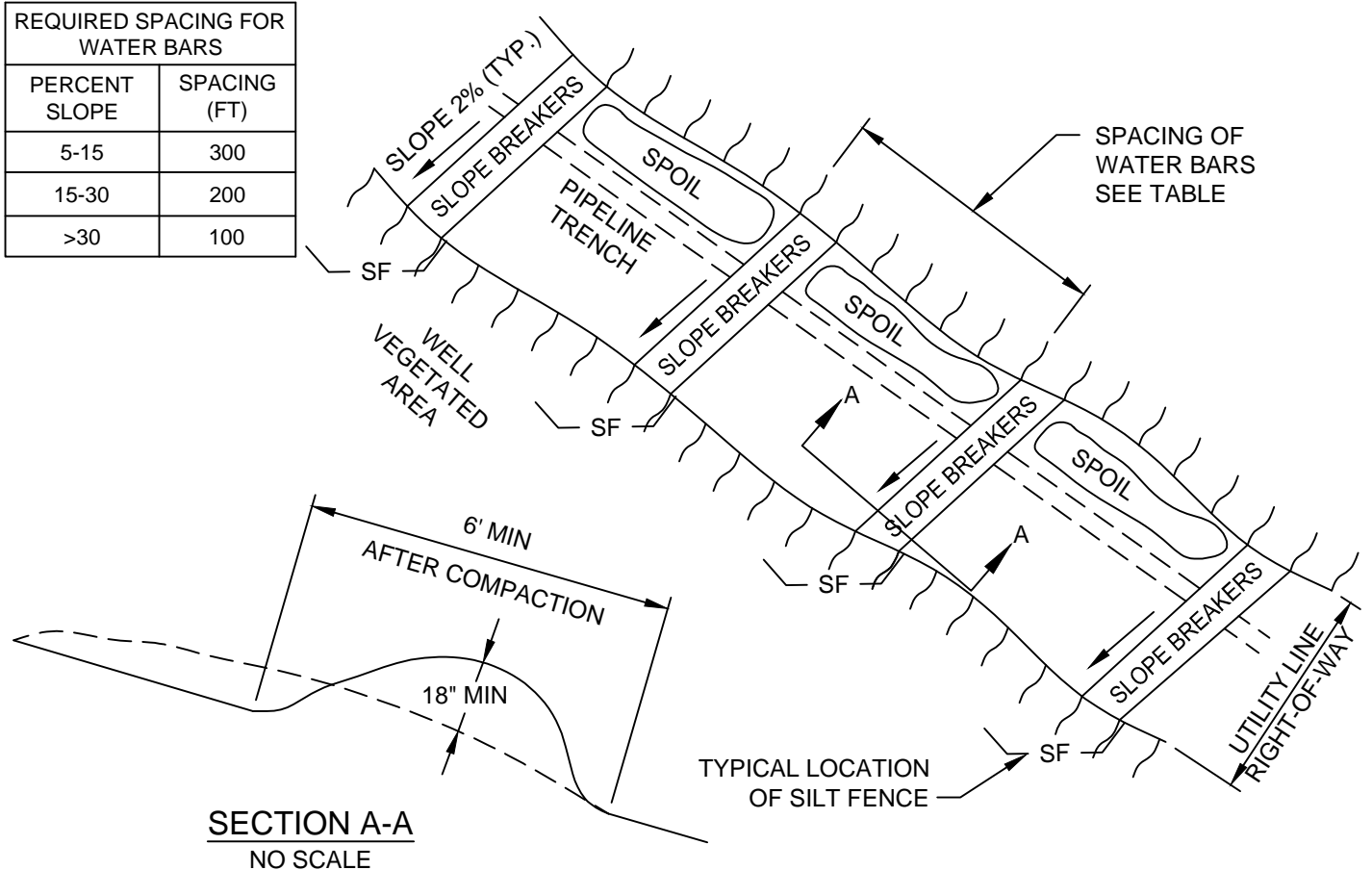
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<b>PROJECT NO.</b> 20203533	<b>SILT FENCE</b>	<b>FIGURE</b> -
<b>DRAWN:</b> DEC 2019		
<b>DRAWN BY:</b> JP	<b>OE2 NORTH LLC BILL SANDERSON RESIDUE AND NGL PIPELINES PROJECT</b>	
<b>CHECKED BY:</b> NE		
<b>FILE NAME:</b> OE2 - Details.dwg		

REQUIRED SPACING FOR WATER BARS	
PERCENT SLOPE	SPACING (FT)
5-15	300
15-30	200
>30	100




**SECTION A-A**  
NO SCALE

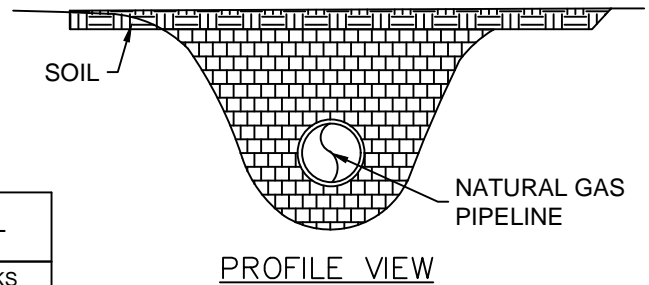
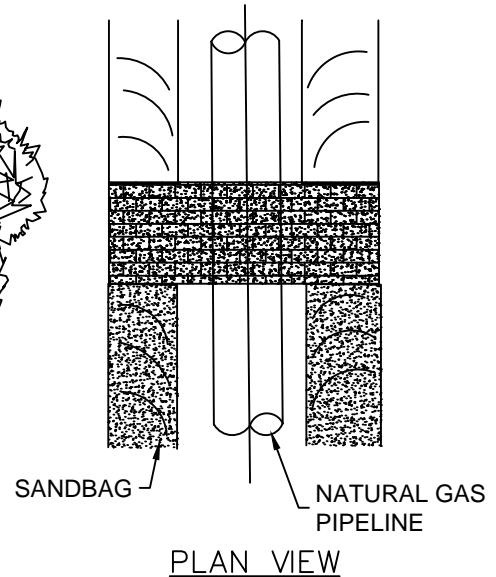
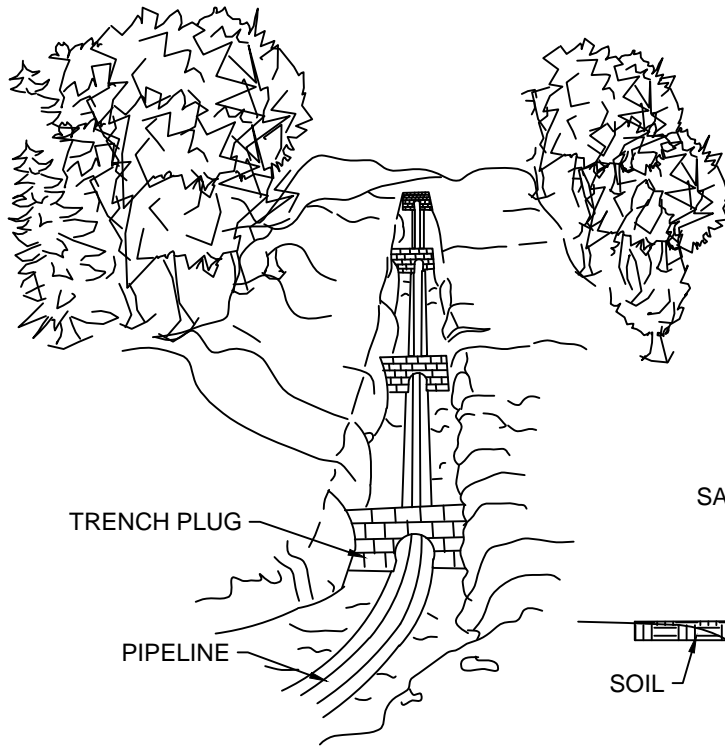
**NOTES:**

1. WATER BARS (TEMPORARY RIGHT-OF-WAY DIVERSIONS) SHOULD BE INSTALLED ACROSS THE ENTIRE RIGHT-OF-WAY ON ALL SLOPES.
2. WATER BARS SHOULD BE CONSTRUCTED AT A SLOPE OF 2% AND DISCHARGE TO A WELL-VEGETATED AREA. WATER BARS SHOULD NOT DISCHARGE INTO AN OPEN TRENCH. WATER BARS SHOULD BE ORIENTED SO THAT THE DISCHARGE DOES NOT FLOW BACK ONTO THE RIGHT-OF-WAY. OBSTRUCTIONS, (E.G. STRAW BALES, SILT FENCE, ROCK FILTERS, ETC.) SHOULD NOT BE PLACED IN ANY WATER BARS. WHERE NEEDED, THEY SHOULD BE LOCATED BELOW THE DISCHARGE END OF THE WATER BAR.
3. WATER BARS SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS REACHED.
4. WATER BARS SHALL BE INSPECTED EVERYDAY OF CONSTRUCTION ACTIVITY AND AFTER EACH RAIN EVENT FOR DEGRADATION IN SIZE AND FOR WATER BUILDUP. IF REPAIR IS NECESSARY, THE WATER BARS SHALL BE REPLACED/RESLOPED WITHIN 24 HOURS OF INSPECTION TO PREVENT FURTHER WATER BUILDUP.
5. WATER BARS SHALL REMAIN AFTER STABILIZATION IS ACHIEVED, EXCEPT IN AGRICULTURAL AREAS.
6. SILT FENCE SHALL BE INSTALLED AT ALL DISCHARGING POINTS.
7. WATER BARS THAT MAY DISCHARGE OVER FILL SLOPES, SHOULD HAVE SCOUR PROTECTION INSTALLED SUCH AS GEOTEXTILE MATERIAL AND NATIVE STONE ALONG DISCHARGE PATH OVER FILL SLOPE.

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NOT TO SCALE

	PROJECT NO. 20203533	WATERBAR	FIGURE -
	DRAWN: DEC 2019		
	DRAWN BY: JP	OE2 NORTH LLC BILL SANDERSON RESIDUE AND NGL IPELINES PROJECT	
	CHECKED BY: NE		
	FILE NAME: OE2 - Details.dwg		



**TRENCH PLUG SPACING**

ALIGNMENT SLOPE %*	SPACING L (FT)	PLUG MATERIAL
5-15 %	500	* EARTH FILLED SACKS
15-30 %	300	* EARTH FILLED SACKS
>30 %	200	* EARTH FILLED SACKS

\* FOAM PLUGS MAY BE USED IN LIEU OF EARTH FILLED SACKS

**NOTES:**

1. OE2 REPRESENTATIVE SHALL DETERMINE REQUIREMENTS FOR, AND SPACING OF, TRENCH PLUGS.
2. TRENCH PLUGS SHALL BE INSTALLED AT THE SAME SPACING AS, AND UPSLOPE OF, TERRACES AND/OR PERMANENT SLOPE BREAKERS.
3. IN AGRICULTURAL FIELDS AND RESIDENTIAL AREAS WHERE SLOPE BREAKERS ARE NOT TYPICALLY REQUIRED, TRENCH PLUGS SHALL BE INSTALLED AT THE SAME SPACING AS IF PERMANENT SLOPE BREAKERS WERE REQUIRED.
4. TRENCH PLUGS SHALL BE INSTALLED AT THE BASE OF SLOPES GREATER THAN 5% WHERE THE BASE OF THE SLOPE IS LESS THAN 50 FEET FROM A WATER BODY OR WETLAND.
5. TRENCH PLUGS SHALL BE INSTALLED WHERE NEEDED TO AVOID DRAINING A WATER BODY OR WETLAND (TO PREVENT SEDIMENT FLOW INTO WETLANDS).
6. TRENCH PLUGS SHALL NOT BE CONSTRUCTED OF TOPSOIL. SAND MAY BE USED AS A SUBSTITUTE.

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NOT TO SCALE



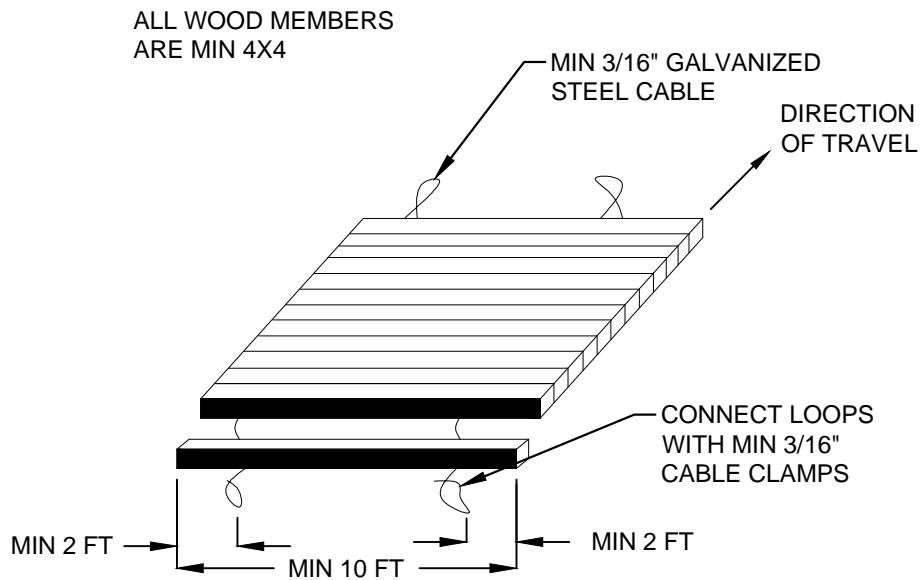
PROJECT NO.	20203533
DRAWN:	DEC 2019
DRAWN BY:	JP
CHECKED BY:	NE
FILE NAME:	OE2 - Details.dwg

**TRENCH PLUG**

OE2 NORTH LLC  
BILL SANDERSON RESIDUE AND NGL  
PIPELINES PROJECT

FIGURE

-



**NOTES:**


1. THERE SHALL BE NO SPACING BETWEEN MATS.
2. ALL MATS SHALL BE PROVIDED WITH SIDE BOARDS AND A SOLID DECK.
3. MATS SHALL BE ABLE TO SUPPORT THE WEIGHT OF THE EQUIPMENT TO PREVENT EXCESSIVE RUTTING IN WETLAND AREAS.
4. THE LENGTH OF TIMBER MAT REQUIRED SHALL BE SUCH THAT THE TIMBER MAT EXTENDS PAST THE WETLAND EDGES ON EACH SIDE OF THE CROSSING A SUFFICIENT DISTANCE TO SUPPORT THE MAXIMUM EQUIPMENT SIZE USING THE CROSSING.

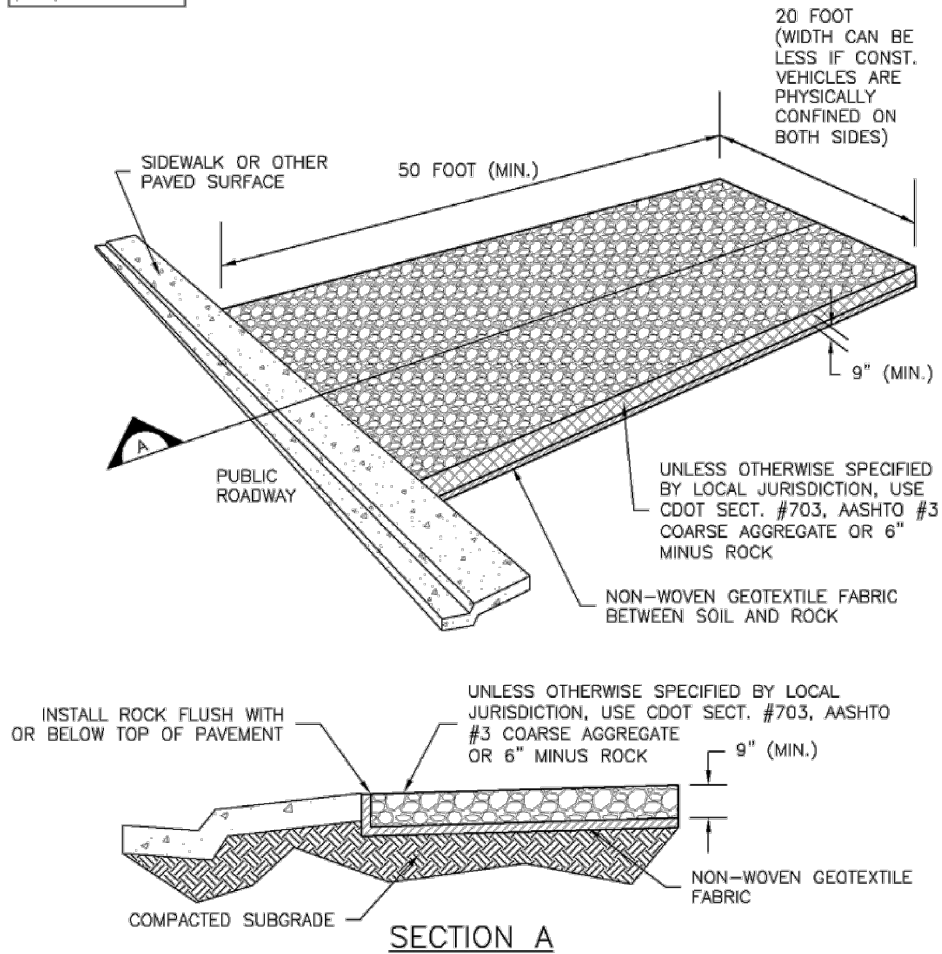
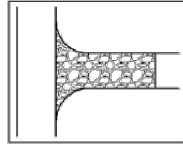
**MAINTENANCE:**

1. INSPECT CROSSINGS AFTER RUNOFF-PRODUCING RAINS TO CHECK FOR BLOCKAGE IN CHANNEL, EROSION OF ABUTMENTS, CHANNEL SCOUR, RIPRAP DISPLACEMENT, OR PIPING. MAKE ALL REPAIRS IMMEDIATELY TO PREVENT FURTHER DAMAGE TO THE INSTALLATION.
2. AT THE END OF CONSTRUCTION, MATS SHALL BE HOSED CLEAN OF SEDIMENT ON-SITE TO PREVENT OFFSITE SEDIMENTATION.

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NOT TO SCALE

	PROJECT NO. 20203533	TIMBER MAT	FIGURE  -
	DRAWN: DEC 2019		
	DRAWN BY: JP	OE2 NORTH LLC BILL SANDERSON RESIDUE AND NGL PIPELINES PROJECT	
	CHECKED BY: NE		
FILE NAME: OE2 - Details.dwg			



**VTC-1. AGGREGATE VEHICLE TRACKING CONTROL**

November 2010

Urban Drainage and Flood Control District  
Urban Storm Drainage Criteria Manual Volume 3

VTC-3

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PROJECT NO.	20203533
DRAWN:	DEC 2019
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FILE NAME:	OE2 - Details.dwg

AGGREGATE VEHICLE TRACKING CONTROL

OE2 NORTH LLC  
BILL SANDERSON RESIDUE AND NGL PIPELINES PROJECT

FIGURE

-

OE2 NORTH LLC

BILL SANDERSON RESIDUE AND NGL PIPELINES PROJECT

SEED MIX

UPLAND MIXTURE <sup>1</sup>	
Grass Species	PLS lb/acre <sup>2</sup>
Western wheatgrass	2.5
Green needlegrass	2.0
Slender wheatgrass	1.5
Little bluestem	1.0
Prairie sandreed	1.0
Sideoats grama	2.0
Blue grama	0.5
Forb Species	PLS lb/acre
Maximilian sunflower	0.1
White prairieclover	0.1
Black-eyed Susan	0.05
<b>Total seed mixture</b>	<b>10.75</b>

WET MEADOW MIXTURE <sup>1</sup>	
Grass Species	PLS lb/acre
Western wheatgrass	7.5
Slender wheatgrass	2.5
Prairie cordgrass	1.5
Inland saltgrass	0.5
Forb Species	PLS lb/acre
Western yarrow	0.05
<b>Total seed mixture</b>	<b>12.05</b>

1. Seed mixtures provided by North Dakota State University Extension and Natural Resources Conservation Service recommended seeding mixtures for western North Dakota.
2. PLS = Pure live seed: Seeding rates are 1.5 times the normal seeding rate based on 30 seed/ft<sup>2</sup>



# National Pollutant Discharge Elimination System (NPDES)

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Construction Site Stormwater Runoff Control

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Pollution Prevention/Good Housekeeping for Municipal Operations

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## General Construction Site Waste Management

**Minimum Measure:** Construction Site Stormwater Runoff Control

**Subcategory:** Good Housekeeping/Materials Management

### Description

Building materials and other construction site wastes must be properly managed and disposed of to reduce the risk of pollution from materials such as surplus or refuse building materials or hazardous wastes. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater runoff to mobilize construction site wastes and contaminate surface or ground water.

### Applicability

The proper management and disposal of wastes should be practiced at every construction site to reduce stormwater runoff. Use waste management practices to properly locate refuse piles, to cover materials that might be displaced by rainfall or stormwater runoff, and to prevent spills and leaks from hazardous materials that were improperly stored.

### Siting and Design Considerations

#### *Solid Wastes:*

- Designate a waste collection area on the site that does not receive a substantial amount of runoff from upland areas and does not drain directly to a waterbody.
- Ensure that containers have lids so they can be covered before periods of rain, and keep containers in a covered area whenever possible.
- Schedule waste collection to prevent the containers from overflowing.
- Clean up spills immediately. For hazardous materials, follow cleanup instructions on the package. Use an absorbent material such as sawdust or kitty litter to contain the spill.
  - During the demolition phase of construction, provide extra containers and schedule more frequent pickups.
  - Collect, remove, and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites.

#### *Hazardous Materials and Wastes:*

- Consult with local waste management authorities about the requirements for disposing of

hazardous materials.

- To prevent leaks, empty and clean hazardous waste containers before disposing of them.
- Never remove the original product label from the container because it contains important safety information. Follow the manufacturer's recommended method of disposal, which should be printed on the label.
- Never mix excess products when disposing of them, unless specifically recommended by the manufacturer.

To ensure the proper disposal of contaminated soils that have been exposed to and still contain hazardous substances, consult with state or local solid waste regulatory agencies or private firms. Some landfills might accept contaminated soils, but they require laboratory tests first.

Paint and dirt are often removed from surfaces by sandblasting. Sandblasting grits are the byproducts of this procedure and consist of the sand used and the paint and dirt particles that are removed from the surface. These materials are considered hazardous if they are removed from older structures because they are more likely to contain lead-, cadmium-, or chrome-based paints. To ensure proper disposal of sandblasting grits, contract with a licensed waste management or transport and disposal firm.

#### *Pesticides and fertilizers:*

- Follow all federal, state, and local regulations that apply to the use, handling, or disposal of pesticides and fertilizers.
- Do not handle the materials any more than necessary.
- Store pesticides and fertilizers in a dry, covered area.
- Construct berms or dikes to contain stored pesticides and fertilizers in case of spillage.
- Follow the recommended application rates and methods.
- Have equipment and absorbent materials available in storage and application areas to contain and clean up any spills that occur.

#### *Petroleum Products:*

- Store new and used petroleum products for vehicles in covered areas with berms or dikes in place to contain any spills.
- Immediately contain and clean up any spills with absorbent materials.
- Have equipment available in fuel storage areas and in vehicles to contain and clean up any spills that occur.

#### *Detergents:*

Phosphorous- and nitrogen-containing detergents are used in wash water for cleaning vehicles. Excesses of these nutrients can be a major source of water pollution. Use detergents only as recommended, and limit their use on the site. Do not dump wash water containing detergents into the storm drain system; direct it to a sanitary sewer or contain it so that it can be treated at a wastewater treatment plant.

### **Limitations**

An effective waste management system requires training and signage to promote awareness of the hazards of improper storage, handling, and disposal of wastes. The only way to be sure that waste management practices are being followed is to be aware of worker habits and to inspect storage areas regularly. Extra management time may be required to ensure that all workers are following the proper procedures.

### **Maintenance Considerations**

Inspect storage and use areas and identify containers or equipment that could malfunction and cause leaks or spills. Check equipment and containers for leaks, corrosion, support or foundation failure, or other signs of deterioration, and test them for soundness. Immediately repair or replace any that are found to be defective.

### **Effectiveness**

Waste management practices are effective only when they are regularly practiced at a construction site. In storage and use areas, post the guidelines for proper handling, storage, and disposal of construction site wastes; train workers in these practices to ensure that everyone is knowledgeable enough to participate.

### **Cost Considerations**

The costs associated with construction site waste management are mainly attributed to purchasing and posting signs, increased management time for oversight, additional labor required for special handling of wastes, transportation costs for waste hauling, and fees charged by disposal facilities to take the wastes.

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Last updated on May 24, 2006

URL:<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>

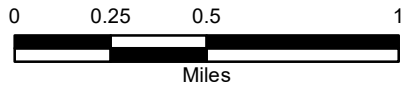
**APPENDIX E**  
**MAPS OF SOILS, VEGETATION, AND HYDROLOGY IN THE PROJECT AREA**

---

Date: 5/7/2020 User: ALeonard Path: \\azrgisstor01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlan\MXD\PSC\VOE\_PSC\_FigA5\_Soil.mxd

SOIL UNITS	
	Amor-Williams-Zahl loams, 3 to 9 percent slopes
	Amor-Zahl-Cabba loams, 9 to 25 percent slopes
	Appam sandy loam, 0 to 6 percent slopes
	Arnegard loam, 0 to 2 percent slopes
	Arnegard-Shambo loams, 2 to 6 percent slopes
	Bowdle loam, 0 to 2 percent slopes
	Cabba-Amor-Zahl loams, 25 to 60 percent slopes
	Cabba-Badland outcrop complex, 9 to 70 percent slopes
	Daglum-Rhoades complex, 0 to 6 percent slopes
	Dooley fine sandy loam, 0 to 6 percent slopes
	Farland silt loam, 0 to 6 percent slopes
	Hamerly-Tonka complex, 0 to 3 percent slopes
	Harriet and Stirum soils, 0 to 2 percent slopes
	Korchea loam, 0 to 2 percent slopes, occasionally flooded
	Korchea-Divide loams, channeled 0 to 2 percent slopes
	Lehr loam, 2 to 6 percent slopes
	Livona fine sandy loam, 0 to 6 percent slopes
	Mondamin silty clay loam, 0 to 2 percent slopes
	Niobell-Williams loams, 0 to 6 percent slopes
	Savage-Grail silty clay loams, 0 to 6 percent slopes
	Shambo loam, 0 to 2 percent slopes
	Vebar-Flasher-Tally fine sandy loams, 3 to 9 percent slopes
	Vebar-Flasher-Zahl complex, 9 to 25 percent slopes
	Vida-Zahill loams, 2 to 8 percent slopes
	Wabek sandy loam, 2 to 6 percent slopes
	Wabek sandy loam, 6 to 25 percent slopes
	Water
	Williams-Bowbells loams, 0 to 3 percent slopes
	Williams-Bowbells loams, 3 to 6 percent slopes
	Zahill loam, 15 to 60 percent slopes
	Zahill-Vida loams, 4 to 15 percent slopes
	Zahl-Cabba-Maschetah complex, 6 to 70 percent slopes

LEGEND					
	NGL 8in Steel Pipeline		Study Area		Township/Range
	Residue 20in Steel Pipeline		Site Features		Section
	NGL Meter Site		State Boundary		State Land
	Residue Meter Site		County Boundary		



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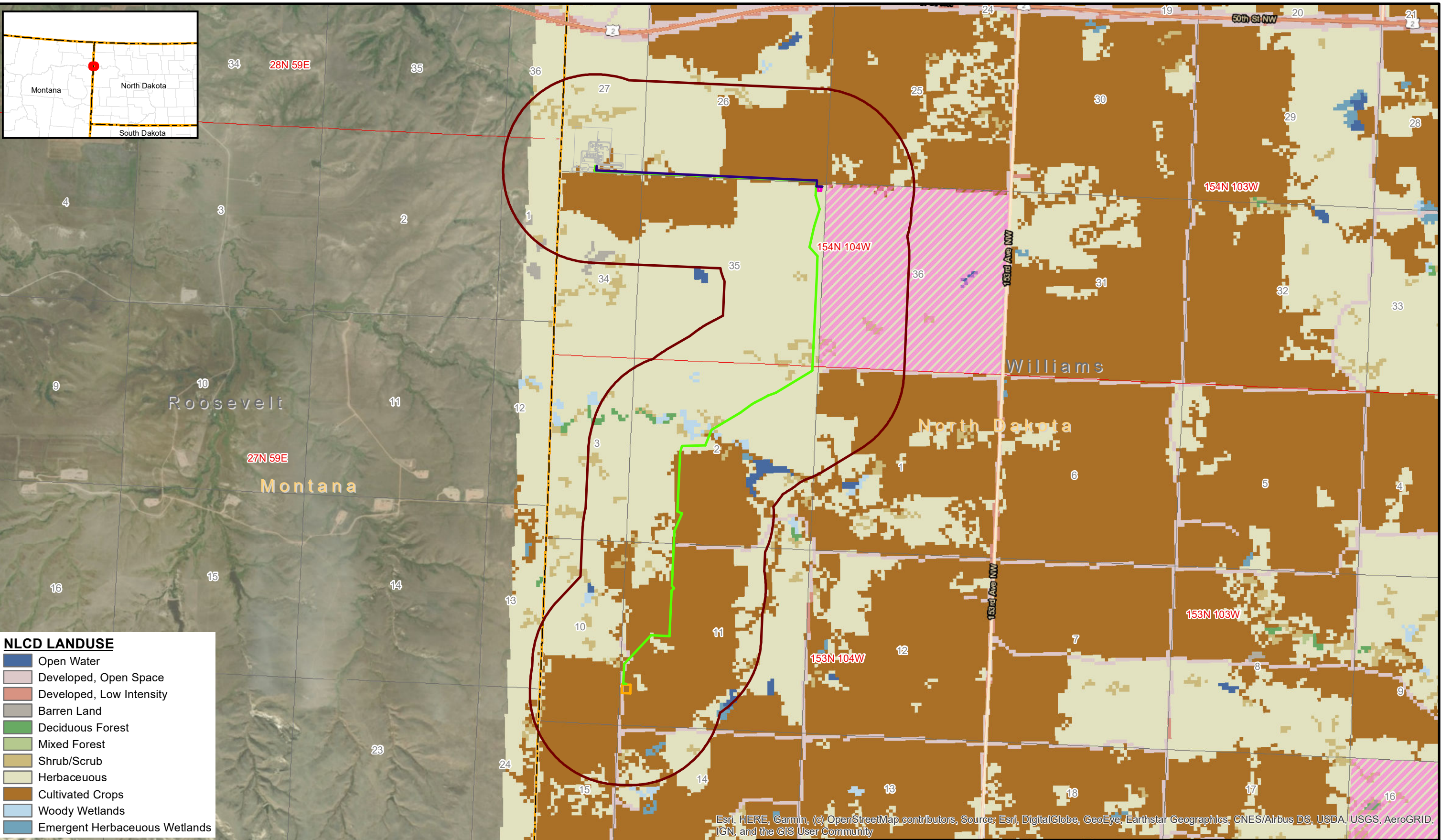
Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

PROJECT NO.	20203533
CREATED:	5/7/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_FigA5_Soil.mxd

<b>Soils Map</b>	OE2 North, LLC Pipeline Project Secs. 26, 27, & 35, T154N, R104W Secs. 11 & 2, T153N, R103W Williams County, North Dakota

FIGURE

Date: 5/7/2020 User: ALeonard Path: \\azrgisstor01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlant\MXD\IPSC\VOE\_PSC\_FigA3\_LU.mxd

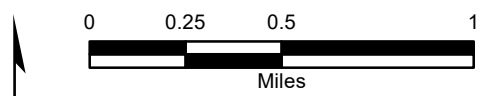


**NLCD LANDUSE**

Open Water
Developed, Open Space
Developed, Low Intensity
Barren Land
Deciduous Forest
Mixed Forest
Shrub/Scrub
Herbaceous
Cultivated Crops
Woody Wetlands
Emergent Herbaceous Wetlands

**LEGEND**

NGL 8in Steel Pipeline	Study Area	Township/Range
Residue 20in Steel Pipeline	Site Features	Section
NGL Meter Site	State Boundary	State Land
Residue Meter Site	County Boundary	



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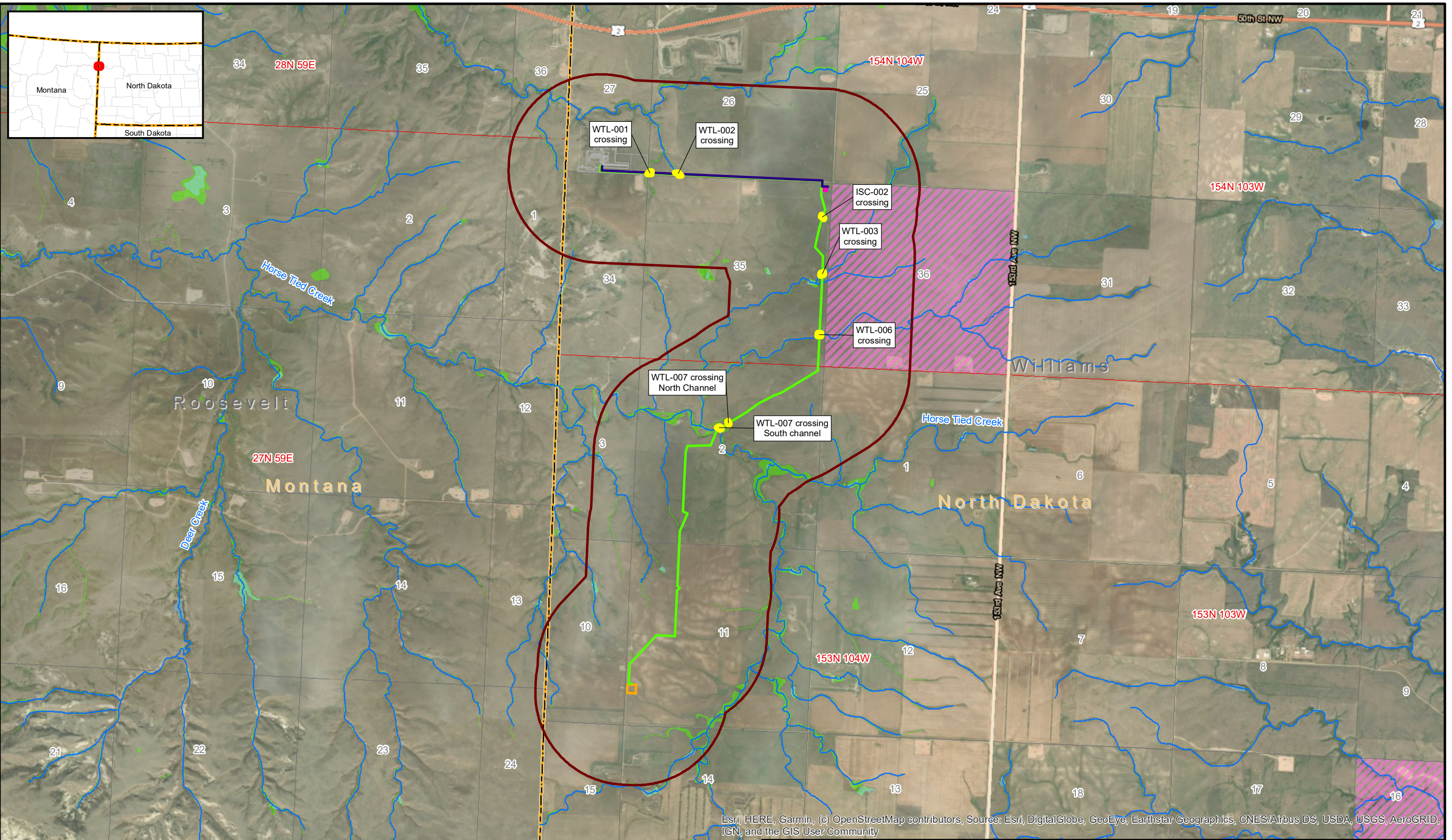
**OUTRIGGER ENERGY**

PROJECT NO.	20203533
CREATED:	5/7/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_FigA3_LU.mxd

<b>Vegetation Map</b>
OE2 North, LLC Pipeline Project Secs. 26, 27, & 35, T154N, R104W Secs. 11 & 2, T153N, R103W Williams County, North Dakota

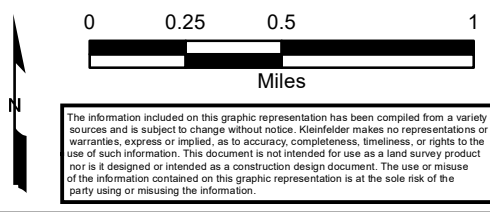
FIGURE

Date: 5/7/2020 User: ALeonard Path: \\azrgis\storp01\GIS\_Projects\Client\OutriggerEnergy\20203533\_SandersonGasPlant\MXD\PSC\VOE\_PSC\_FigA4\_Hydro.mxd



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LEGEND		
	NGL 8in Steel Pipeline	
	Residue 20in Steel Pipeline	
	NGL Meter Site	
	Residue Meter Site	
	Study Area	
	Mapped Field Survey	
	Site Features	
	NHD Flowline	
	NHD Waterbody	
	NWI Wetland	
	State Boundary	
	County Boundary	
	Township/Range	
	Section	
	State Land	



PROJECT NO.	20203533
CREATED:	5/7/2020
CREATED BY:	A. Leonard
CHECKED BY:	A. Daniel
FILE NAME:	OE_PSC_FigA4_Hydro.mxd

<b>Wetlands and Waterbodies Map</b>
OE2 North, LLC Pipeline Project Secs. 26, 27, & 35, T154N, R104W Secs. 11 & 2, T153N, R103W Williams County, North Dakota

FIGURE

**APPENDIX F**  
**STORMWATER INSPECTION REPORTS**

---

## BMP Inspection Checklist

General Information	
<b>Project Name and Location:</b>	
<b>Date of Inspection:</b>	<b>Start/End Time:</b>
<b>Inspector's Name(s):</b>	
<b>Inspector's Title(s):</b>	
<b>Inspector's Contact Information:</b>	
<b>Describe present phase of construction:</b>	
<b>Type of Inspection:</b>	
<input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event	
Weather Information	
<b>Has there been a storm event since the last inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>If yes, provide:</b>	
Storm Start Date & Time: (in):	Storm Duration (hrs):
Approximate Amount of Precipitation	
<b>Weather at time of this inspection?</b>	
<input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds	
<input type="checkbox"/> Other:	Temperature:
<b>Have any discharges occurred since the last inspection?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>If yes, describe:</b>	

Are there any discharges at the time of inspection? Yes No

If yes, describe:

**Site-specific BMPs**

- Number the structural and non-structural BMPs identified in your BMP Plan on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting each BMPs at your site.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9		<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Overall Site Issues**

*Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.*

	<b>BMP/activity</b>	<b>Implemented?</b>	<b>Maintenance Required?</b>	<b>Corrective Action Needed and Notes</b>
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Are perimeter controls around open excavations adequately installed (keyed into substrate) and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Are discharge points and receiving waters free of any sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Is the construction exit preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
8	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Are materials that are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	(Other)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

**Non-Compliance**

Describe any incidents of non-compliance not described above:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**Bill Sanderson Residue  
and  
NGL Pipelines Project**

**Weed Management Plan**

**March 2020**

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## ATTACHMENTS

Attachment 1            Noxious Weed Fact Sheets – North Dakota State University

## LIST OF ACRONYMS AND ABBREVIATIONS

EI	Environmental Inspectors
OE2	OE2 North LLC
Plan	Weed Management Plan
Project	Bill Sanderson Residue and NGL Pipelines Project
USEPA	United States Environmental Protection Agency

## 1.0 INTRODUCTION

Noxious weed control practices for the OE2 North LLC (OE2) Bill Sanderson Residue and NGL Pipelines Project (Project) described in this *Weed Management Plan (Plan)* are being developed in compliance with the Williams Weed District and the 2020 North Dakota Weed Control Guide.

## 2.0 GOALS AND OBJECTIVES

This Plan prescribes methods to prevent and control the spread of noxious weeds during and following construction of the Project. OE2 and its contractors will be responsible for implementing the methods described in this Plan.

This Plan is applicable to the construction and operation of two new pipelines, including an approximately 1.28-mile 8-inch natural gas liquids (NGLs) pipeline and an approximately 4.67-mile 20-inch residue gas pipeline coming from the proposed Bill Sanderson Gas Processing Plant that is disturbed during the construction and operation of the Project.

## 3.0 NOTIFICATION AND APPROVAL

OE2 will execute the following notification procedure:

1. At least 15 days prior to ground-disturbing activity, submit this Plan and the Project revegetation information included in the Project Stormwater Pollution Prevention Plan (SWPPP) to the Williams County Weed Board in North Dakota.
2. Allow the County weed agency to identify revisions to bring the Plan into compliance with the district weed management plan.
3. Wait to commence ground-disturbing activity until the Plan is approved by the County weed agency and signed by the presiding officer of the board and by the person or a representative of the agency responsible for the action. The Plan must be approved, with revisions if necessary, within 10 days of receipt by the Board.

## 4.0 NOXIOUS WEED SPECIES LISTS

A weed is commonly defined as a plant that grows out of place. A noxious weed is any plant officially designated by a federal, state, or county government as injurious to public health, agriculture, recreation, wildlife, or property (Sheley, Petroff, and Borman, 1999). Noxious weeds are opportunistic plant species that readily flourish in disturbed areas, thereby preventing native plant species from establishing successive communities.

### 4.1 North Dakota

Invasive species in North Dakota are controlled and regulated under North Dakota Law (NDCC § 4.1-47-02). Counties and cities have the option to add additional weeds for enforcement only in their jurisdiction.

The State of North Dakota has 13 state-listed noxious weeds:

- Absinth Wormwood (*Artemisia absinthium* L.)
- Canada Thistle (*Cirsium arvense* (L.) Scop.)
- Dalmatian Toadflax (*Linaria genistifolia* spp. *dalmatica*)
- Diffuse Knapweed (*Centaurea diffusa* Lam.)

- Houndstongue (*Cynoglossum officinale* L.)
- Leafy Spurge (*Euphorbia esula* L.)
- Musk Thistle (*Carduus nutans* L.)
- Palmer amaranth (*Amaranthus palmeri*)
- Purple Loosestrife (*Lythrum salicaria* L., *Lythrum virgatum* L., and all cultivars)
- Russian Knapweed (*Centaurea repens* L.)
- Saltcedar (*Tamarisk* spp.)
- Spotted Knapweed (*Centaurea maculosa* Lam.)
- Yellow Toadflax (*Linaria vulgaris*)

Williams County, North Dakota recognizes the following additional plant as an invasive weed:

- Narrowleaf Hawksbeard (*Crepis tectorum*)

To comply with North Dakota Law (NDCC § 4.1-47-02), OE2 has prepared this Plan specifying the weed management procedures to be implemented. **Attachment 1** to this Weed Management Plan includes the fact sheets for the *Identification and Control of Invasive and Troublesome Weeds in North Dakota* developed by the North Dakota State University (NDSU) for each of the species listed above. Regulations also require that OE2 reseed, plant, or otherwise manage the area to establish a beneficial plant cover. To this end, OE2 has included the methods to be used to accomplish revegetation, the time and method of seeding, fertilization practices, and recommended plant species for the Project in the Project SWPPP document.

## 5.0 NOXIOUS WEED SPECIES MANAGEMENT

This Plan is designed to:

- Treat specific infestation areas as recommended by weed districts prior to construction, pending seasonal limitations;
- Prevent the introduction and spread of weeds via construction equipment during construction;
- Contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas; and
- Treat infestations that may develop during operations.

### 5.1 Identification of Problem Areas

OE2 will work with the County Weed Control Board to identify known locations of weed infestations in the Project area. In addition to infestation areas identified by the weed districts and landowners, additional areas containing noxious species may be identified prior to construction by the Environmental Inspectors (EI), which will be demarcated using color-coded flagging or signage within the Project. Identification of existing noxious weed locations will alert environmental inspection and construction personnel to implement weed control measures during construction.

### 5.2 Treatment Measures

OE2 will implement weed control at identified infestation areas based on County weed agency input or by the EIs. Weed control measures may include the application of herbicide or mechanical, and/or alternative methods. The weed control measure chosen will be the best method available for the time, place, and species of weed as identified through consultation with the appropriate regulatory agencies. OE2 will follow the treatment measures listed on the Fact Sheets for each of the species

of concern included in **Attachment 1**.

Herbicide application is an effective means of reducing the size of weed populations. Herbicide treatment methods will be based on species-specific and area-specific conditions (e.g., proximity to wetlands, open water, riparian areas or agricultural areas, and time of year) and will be applied in accordance to the 2020 North Dakota Weed Control Guide (available online). Spot herbicide applications will be the preferred option. In areas of dense infestation, a broader application may be used. Pending the seasonal start of construction, preconstruction treatment of infestation areas may be conducted and will be controlled as described in section 7.1, to minimize the impacts on the surrounding vegetation. Preconstruction applications will be completed in accordance with applicable chemical contact times (as specified by the manufacturer) in advance of clearing and grading within the construction right-of-way. Treatment may be restricted in areas that are not readily accessible (e.g., difficult topography, saturated/inundated soils, etc.).

Mechanical control (e.g., mowing) can also be an effective control measure specifically for annual species (i.e., not for perennial rhizomatous species). The efficacy of mechanical control measures is dependent upon proper timing to cut the vegetation prior to the maturation of seed and may require multiple treatments during the growing season.

### 5.3 *Preventative Measures*

The following measures will be implemented to prevent the spread of noxious weeds.

- Prior to the beginning of construction of the project, all contractor vehicles and equipment (including timber mats) will be cleaned of soil and debris capable of transporting weed propagules. The contractor will maintain logs documenting the cleaning history of each piece of equipment and will make logs available to OE2, upon request. Contractor vehicles and equipment will be inspected and may require additional cleaning, if necessary, prior to mobilization to the Project area. Cleaning will be conducted using high pressure washing equipment or compressed air, and/or manually remove excess soil from the tracks, tires, and blades of equipment.
- Areas of the Project where weed infestations are identified will be clearly marked prior to construction. In these areas, the contractor may elect to conduct full topsoil stripping and will stockpile cleared vegetation and segregated topsoil within the Project area. The stockpiles will be identified as noxious weed stockpiles with signs and be maintained adjacent to the areas from which they were obtained to eliminate the transport of soil-borne noxious weed propagules to other areas within the Project area. During reclamation, the contractor will return topsoil and vegetative material to the areas from which they were obtained. Alternately, for annual weed species the contractor may elect to mow the infested area before the species begins seeding, thus eliminating the threat of spreading seeds during topsoiling and construction.
- In areas where full topsoil stripping is implemented, equipment required for initial vegetation clearing and topsoil segregation will be cleaned using one of the methods described above prior to leaving the area. Once the topsoil has been segregated, subsequent equipment will not require cleaning, as it will not come into contact with noxious weeds or the topsoil containing weed seeds and propagules.

- The contractor will ensure straw bales used to construct sediment control devices or used as mulch applications are certified weed free and obtained from approved certified sources as recommended by the County weed agency.
- The contractor will ensure seed mixes and mulching materials used for revegetation are certified weed free and obtained from approved certified sources as recommended by County weed agencies.

#### 5.4 *Post-Construction Treatment Methods*

OE2's objective is to comply with the requirements to prevent the spread of noxious weeds and treat areas of the Project where weed species form a significant portion of the vegetation community in comparison to adjacent undisturbed areas.

In the event noxious weed species become established in the Project area, OE2 will make good faith efforts to control weeds within the Project area and to work with adjacent landowners to prevent the spread of the species to adjacent lands. Post-construction weed control measures may include the application of herbicide or mechanical methods. OE2 will control noxious weed species at OE2-managed aboveground facility Project areas to prevent the spread onto adjacent properties.

Post-construction herbicide applications will be conducted prior to seed maturation where possible. Applications will be controlled, as described in Section 7, to minimize the impacts on the surrounding vegetation. As discussed in Section 5.2, herbicide treatment methods will be based on species-specific and area-specific conditions (e.g., proximity to water, riparian areas or agricultural areas, and time of year) and will be coordinated with the local county and regulatory agencies. Spot herbicide applications will be the preferred option. In areas of dense infestation, a broader application will be used and a follow-up seeding program implemented according to revegetation measures discussed in the Project SWPPP. The timing of subsequent revegetation efforts will be based on the persistence of the selected herbicide. OE2 will communicate with a designated representative of each county to inform them of the location and type of treatment administered by OE2 or its contractor.

Mechanical methods entail the use of equipment to mow weed populations for annual species (i.e., not for perennial rhizomatous species). Mechanical treatments will be conducted prior to seed maturation where required. If such a method is used, subsequent seeding will be conducted if necessary to re-establish a desirable vegetative cover that will stabilize the soils and slow the potential re-invasion of weeds.

During routine operations activities, if noxious weed species are identified that are not listed on the county or state weed lists, OE2 will treat the affected area as quickly as possible by means of chemical, cultural, or biological control measures.

## **6.0 MONITORING**

EIs will periodically monitor the Project to capture revegetation growth. Should the EIs identify noxious weed populations in the Project, they will report their findings to the OE2 operations and maintenance division to determine the appropriate action to control the spread of the weeds. Noxious weed management will be conducted in accordance with state and county regulations.

## 7.0 HERBICIDE USE

### 7.1 Herbicide Application and Handling

Herbicide application will be based on information gathered from consultations with local weed districts and state agencies. Before application, OE2 or its contractor will obtain required permits from the local weed district or the state agency. Herbicide application will be conducted in accordance with applicable laws and regulations by a state-licensed contractor

All herbicide applications will follow United States Environmental Protection Agency (USEPA) label instructions. Application of herbicides will be suspended when any of the following conditions exists:

- Wind velocity exceeds 6 miles per hour during application of liquid or granular herbicides;
- Snow or ice covers the foliage of noxious weeds; or
- Precipitation is occurring or is imminent.

Vehicle-mounted sprayers (e.g., handgun, boom, and injector) may be used mainly in open areas that are readily accessible by vehicle. Hand application methods (e.g., backpack spraying) that target individual plants may be used to treat small or scattered weed populations or in rough terrain. Calibration checks of equipment will be conducted at the beginning of spraying and periodically to ensure that proper application rates are achieved.

Herbicides will be transported to the Project Project area daily with the following provisions:

- On-Project area herbicide quantities will be limited where practical;
- Concentrate will be transported in approved containers only, in a manner that will prevent tipping or spilling, and in a compartment that is isolated from food, clothing, and safety equipment;
- Mixing will be conducted in an upland area at a distance greater than 100 feet from open or flowing water and wetlands, greater than 200 feet from private wells, and greater than 400 feet from public wells. The property owner would be consulted about the presence and location of wells prior to herbicide application; and
- All herbicide equipment and containers will be maintained as needed and inspected for leaks daily.

### 7.2 Herbicide Spills and Cleanup

OE2 has developed a *Spill Contingency Plan* for the Project that incorporates all reasonable precautions to be taken to avoid spills of all potentially hazardous materials. In the event of a spill, cleanup will be immediate and will be conducted in accordance with the *Spill Contingency Plan*.

Herbicide contractors are responsible to keep spill kits in their vehicles and in herbicide storage areas to allow for quick and effective response to spills. Items to be included in the spill kit are:

- Protective clothing and gloves;
- A minimum of 20 pounds of suitable commercial adsorbent and barrier materials;
- Plastic bags and bucket;
- Shovel;
- Fiber brush and screw-in handle;

- Dust pan;
- Caution tape; and
- Detergent.

Response to an herbicide spill will vary depending on the material spilled and the size and location of the spill. The order of priorities after discovering a spill are to protect the safety of personnel and the public, minimize damage to the environment, and conduct cleanup and remediation activities.

### 7.3 *Worker Safety and Spill Reporting*

All herbicide contractors will obtain and have readily available copies of the appropriate safety data sheets and the herbicide labels for the herbicides used. All herbicide spills will be reported in accordance with applicable laws and requirements. Further information regarding spill response and reporting is detailed in the *Spill Contingency Plan*.

# **OE2 North 8" NGL and 20" Residue Gas Pipelines**

## ***Reclamation Inspection Report***

***Docket Number: PU-20-247***

Prepared for North Dakota Public Service Commission



September 2022

# Reclamation Inspection Report

September 2022

## Contents

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3.1	Methods .....	3
3.2	On-Site Inspection Observations.....	3
4	Issues to Resolve and Recommendations.....	5
5	Signatures.....	6

## List of Appendices

- Appendix A    Exhibit 1 Site Location Map  
                  Exhibit 2 Photo Locations
- Appendix B    Photo Log

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# 1 Executive Summary

The North Dakota Public Service Commission (PSC) retained Barr Engineering Co. (Barr) to complete a reclamation inspection for the construction of an 8-inch Natural Gas Liquids (NGL) and a 20-inch Residue Gas Pipeline in Williams County, North Dakota (ND), constructed by OE2 North LLC (OE2). The purpose of the inspection is to ensure the project is constructed in compliance with siting laws and rules and the applicable PSC Orders for the project.

The reclamation inspection was conducted on 12 August 2022. The inspection included observations of the reclaimed pipeline routes, reclaimed horizontal directional drilling (HDD) bore workspace areas, erosion control installations, and aboveground interconnection locations. No major issues were observed, though continued monitoring and maintenance is recommended in hayland and cropland where annual weeds comprised approximately 50% cover. The landowner should be consulted for possible actions such as mowing or spraying. Overall, reclamation efforts of the project are satisfactory and appeared to have been completed according to Natural Resource Conservation Service (NRCS) recommendations. The project is considered to be in compliance with the applicable siting laws, rules, and PSC orders.

---

## 2 Background and Scope

### 2.1 Introduction

The OE2 8-inch natural gas liquids (NGL) and 20-inch Residue Gas Pipeline (Project) is the installation of an approximately 1.28-mile long NGL pipeline and an approximately 4.67-mile long residue gas pipeline, located in Sections 26, 27, and 35, Township 154 North, Range 104 West and Sections 2 and 11, Township 153 North, Range 104 West (**Appendix A, Exhibit 1**). The 8-inch pipeline transports NGLs from OE2's Bill Sanderson Gas Plant to an interconnection point with a ONEOK pipeline. The 20-inch pipeline transports residue gas from OE2's Bill Sanderson Gas Plant to an interconnection point with a Northern Border/TransCanada pipeline.

The NGL pipeline has a flow rate capacity of up to 80,000 barrels per day, and the residue gas pipeline has a flow rate capacity of up to 250 million cubic feet per day. Aboveground facilities for the Project include valving, measurement and associated instrumentation at the terminus of the NGL and residue gas pipelines. The lines are co-located to the interconnection of the NGL pipeline to the ONEOK facility.

The Project is under the jurisdiction of the North Dakota Public Service Commission (PSC), which issued its Findings of Fact, Conclusions of Law, and Order in Case No. PU-20-247 on 26 August 2020, granting Certificate of Corridor Compatibility No. 218 and Route Permit No. 228 for the 8-inch line and Certificate of Corridor Compatibility No. 219 Route Permit No. 229 for the 20-inch line.

### 2.2 Regulatory Purpose and Need

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) charges the Public Service Commission with determining that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and the welfare of citizens of North Dakota. Inspections during construction ensure that such projects are built in compliance with the siting laws (North Dakota Century Code Chapter 49-22) and rules (North Dakota Administrative Code Article 69-06) and applicable Commission Orders.

### 2.3 Scope of Work

The NDPSC retained Barr Engineering Co. (Barr) to perform a reclamation inspection of the Project. Barr subcontracted with Meadowlark Environmental, LLC (Meadowlark) to complete the reclamation inspection. Barr's scope of work was to complete and document an on-site reclamation inspection upon completion of a minimum of one growing season after the construction phase of the project to verify the project was constructed in compliance with the siting laws, rules, and applicable Commission Orders and to determine whether the area affected by construction activities has been restored as near as practicable to the condition as it existed prior to the beginning of construction, including the reestablishment of desired plant species where applicable. This report contains site visit observations and a summary of findings and issues that should be addressed for the Project to be considered complete and in full compliance.

---

## 3 Findings of Site Inspection

### 3.1 Methods

Sara Simmers, Project Manager/Field Inspector for Meadowlark visited the Project site on 12 August 2022 to conduct the reclamation inspection. Representative for OE2 Tom House, Bakken Operations Manager, accompanied Ms. Simmers. The site was visually inspected by driving to access points and then either walking or driving via side-by-side off-road vehicle within the project right-of-way (ROW). Photos (iPhone 7) and geographic coordinates were recorded at observation points using a handheld Global Positioning System (GPS) device (Trimble R1; <1m accuracy; WGS84 datum).

The inspection included observations of the reclaimed pipeline routes, reclaimed horizontal directional drilling (HDD) bore workspace areas, erosion control installations, and aboveground interconnection locations. Plant species composition was recorded within reclaimed areas.

### 3.2 On-Site Inspection Observations

Overall, reclamation efforts along the pipeline routes are satisfactory and appeared to have been completed according to NRCS recommendations. Refer to **Appendix A, Exhibit 2**, Photo Locations, and **Appendix B**, Photo Log for detailed descriptions of observations. OE2 used Jomax Construction Company, Inc. (Jomax) as their reclamation contractor for the project. OE2 staff regularly monitor the pipeline routes for erosion or other problems. According to OE2 Manager Mr. House, OE2 has a positive working relationship with the landowner. They are in frequent communication and OE2 works to promptly address any problem areas or issues noticed by the landowner.

The majority of the reclaimed pipeline routes went through adjacent native grassland/rangeland and had dense stands of seeded grasses, with 75% cover or more, minimal annual weeds, and minimal bare ground (Photos 1, 3, 8, 9). These areas appeared to have overall good plant establishment with adequate cover to stabilize soils. It appeared these areas had been re-seeded with a grass cultivar seed mix. Intermediate wheatgrass and slender wheatgrass were dominant on the co-located segment of the pipeline routes. The remainder of the reclamation of the residue pipeline through native rangeland was dominated by western wheatgrass, slender wheatgrass, and green needlegrass. Reclamation seeding appeared to be in accordance with NRCS guidelines.

One segment of the residue pipeline where it angled southwest across rolling hills had areas of bare soil (Photos 11, 12). However, the stand of reclaimed grasses was adequate and no erosion problems were apparent. Further, the adjacent undisturbed native grassland hilltops also naturally had bare soils and minimal topsoil development. The reclamation matches the surrounding area.

Reclamation success through hayland and cropland was not as successful as through the native rangeland. Generally, cover of hay or crop (safflower) was roughly 50%, with the remainder of the cover in annual weeds such as kochia or Russian thistle (Photos 5, 14, 15, 16). In contrast, annual weeds were not a problem in soybean cropland (Photos 17, 18). The cause of the high cover of annual weeds is unclear. Dominant annual weed cover is expected within the first few years of reclamation. Over time, annual weeds should decrease. The practices of the

---

landowner may also be a factor, and the landowner should be consulted to discuss how he wants this issue addressed. Spraying or mowing in the early parts of the growing season could help to reduce the seed set of the annual weeds. No noxious weed populations were noted during the inspection.

The steep drainage and stream features avoided by HDD bores were in good condition (Photos 1, 2, 4, 10, 13). The workspace areas on either side of the bore were reclaimed well. Disturbance to erosive slopes and areas of minimal topsoil, as well as aquatic resources, was avoided through the use of this technique.

Interconnections to pipeline end points appeared to be in good condition. Fences around aboveground valves and fences and gates throughout the project route were repaired or replaced. The inspection confirmed that the project route was free of debris and waste (Photos 6, 7, 19). The reclamation of the project appears to meet all siting laws, rules, and Commission Orders.

## 4 Issues to Resolve and Recommendations

The reclamation inspection of the OE2 8-inch NGL and 20-inch Residue Gas Pipelines has verified that the project is constructed in compliance with the siting laws, rules, and applicable Commission Orders. No major issues were observed during the reclamation inspection. However, Meadowlark makes the following recommendations to manage, maintain, and prevent future issues at the site:

Potential Issues	Recommendations
<b>Areas with dense, extensive cover of annual weeds, primarily through hayland and cropland.</b>	Monitor and manage these areas to promote the establishment of hay and crops. Consult with landowner to determine course of action. Spraying or periodic mowing in the early growing season may be necessary to decrease the seed set of the annual weeds.
<b>Additional potential issues</b>	Refer to project Storm Water Pollution Prevention Plan (SWPPP) for additional post-construction recommendations.

## 5 Signatures


The services performed by Barr staff, and its subcontractor Meadowlark, for this project have been conducted in a manner consistent with the technical skill and degree of care exercised by professionals currently practicing in this discipline under similar time and budget constraints. Findings and recommendations represent our professional judgement and are based on available information and accepted practices. No warranty is implied or expressed beyond this.



Andrew Unbehaun, Project Manager

9/2/2022

Date



Sara Simmers, Inspector

9/2/2022

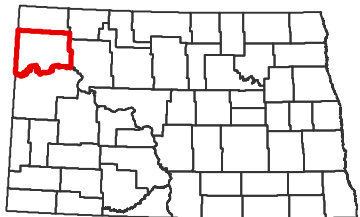
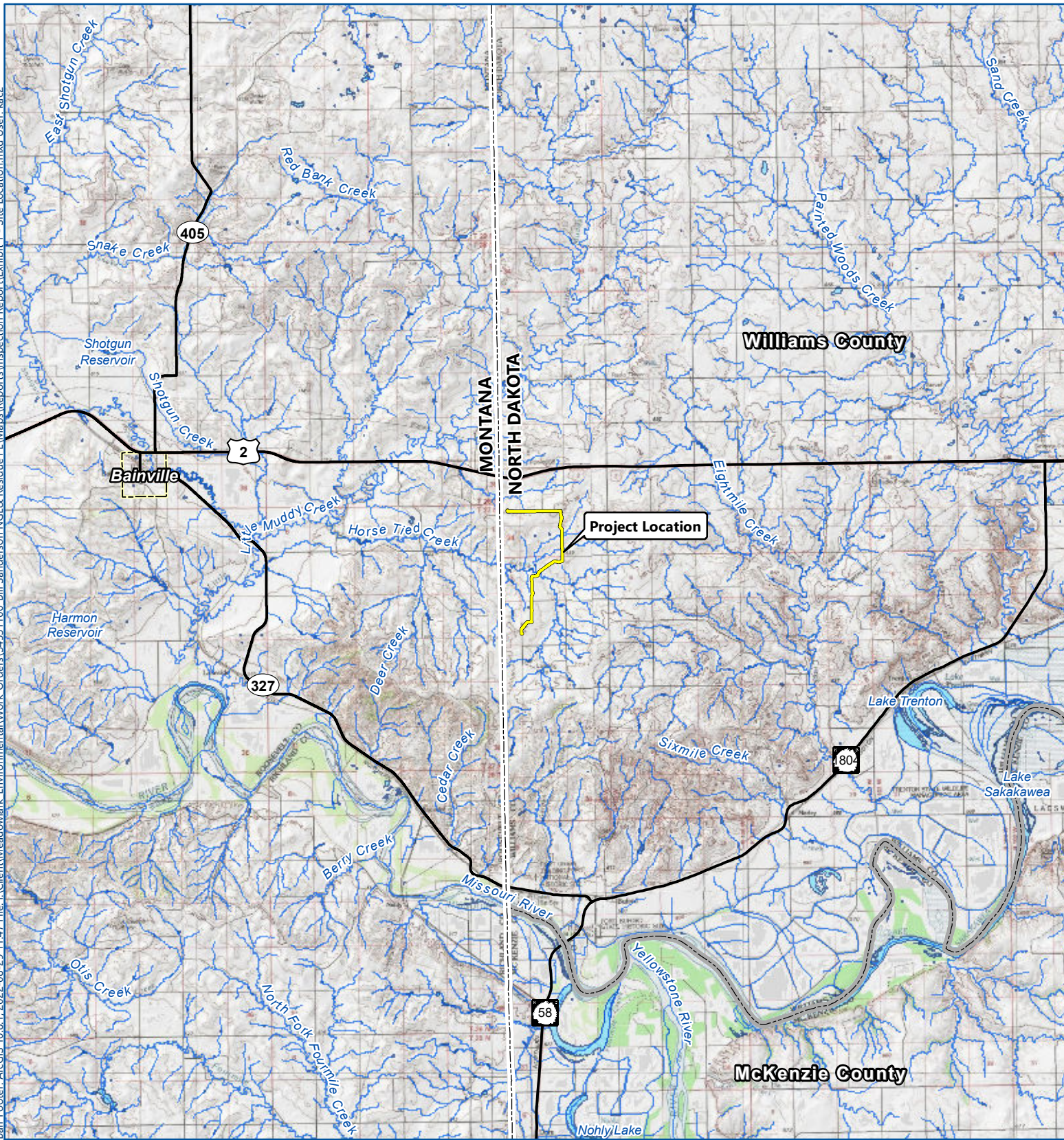
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## Appendices







# Appendix A

## Exhibits

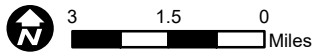
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**Williams County, North Dakota**

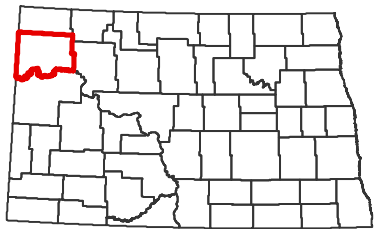
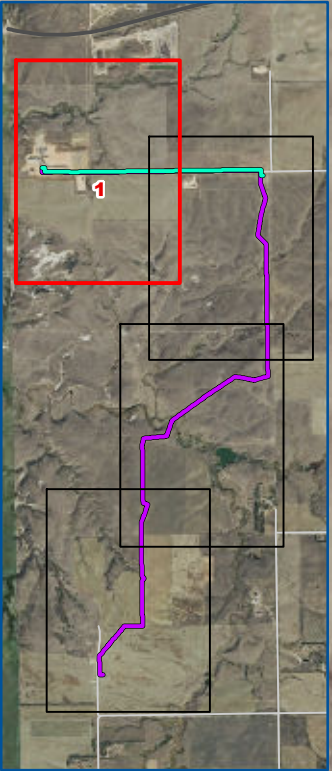
-  Project Boundary
-  Municipality
-  County Boundary
-  State Boundary
-  Stream (USGS NHD)
-  Waterbody (USGS NHD)

Drawn by: KWild (Barr Engineering Co.)  
Date: 8/29/2022  
Photos: SSimmers (Meadowlark)  
Field Date: 8/12/2022  
Imagery: Esri USA Topo Maps



### SITE LOCATION MAP August 2022

**Exhibit 1**



Williams County, North Dakota

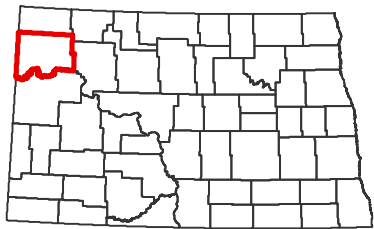
- 8-in NGL Pipeline
- 20-in Residue Pipeline
- Section Boundary
- Stream (USGS NHD)
- Waterbody (USGS NHD)
- Photograph Location



Drawn by: KWild (Barr Engineering Co.)  
Date: 8/29/2022  
Photos: SSimmers (Meadowlark)  
Field Dates: 8/12/2022  
Background Imagery: USDA-FSA NAIP (2021)

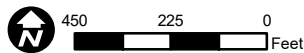
### PHOTO LOCATIONS August 2022

### Exhibit 2.1



Williams County, North Dakota

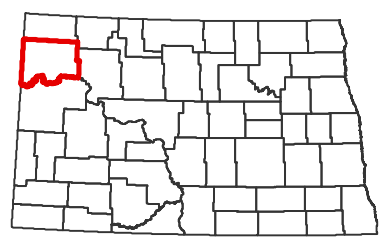
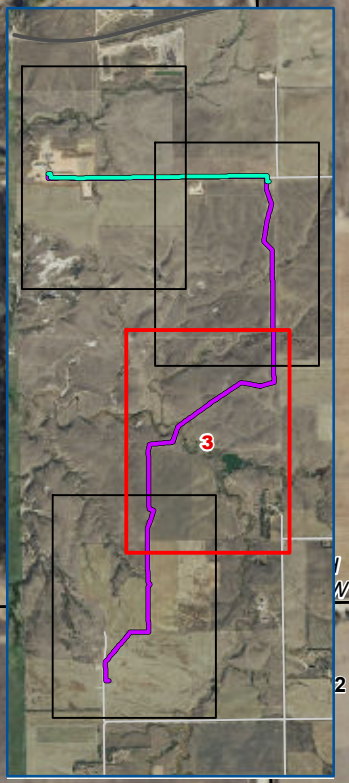
- 8-in NGL Pipeline
- 20-in Residue Pipeline
- Section Boundary
- ~ Stream (USGS NHD)
- Waterbody (USGS NHD)
- ★ Photograph Location



Drawn by: KWild (Barr Engineering Co.)  
 Date: 8/29/2022  
 Photos: SSimmers (Meadowlark)  
 Field Dates: 8/12/2022  
 Background Imagery: USDA-FSA NAIP (2021)

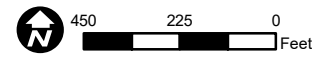
**PHOTO LOCATIONS**  
*August 2022*

**Exhibit 2.2**



Williams County, North Dakota

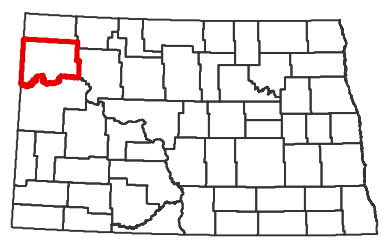
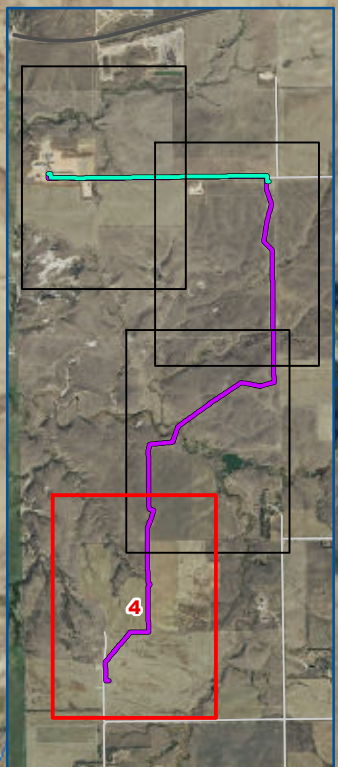
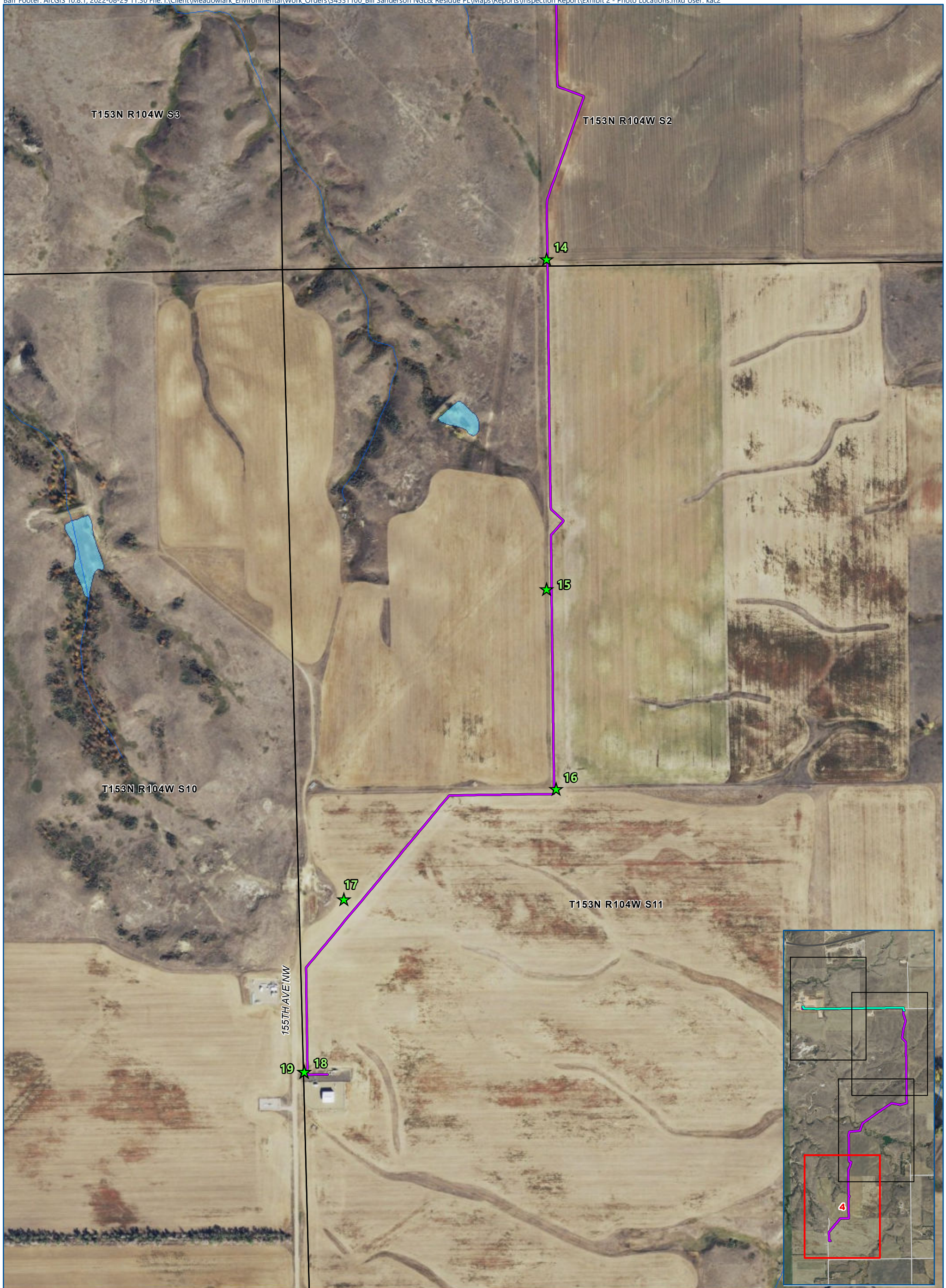
- 8-in NGL Pipeline
- 20-in Residue Pipeline
- Section Boundary
- ~ Stream (USGS NHD)
- Waterbody (USGS NHD)
- ★ Photograph Location



Drawn by: KWild (Barr Engineering Co.)  
 Date: 8/29/2022  
 Photos: SSimmers (Meadowlark)  
 Field Dates: 8/12/2022  
 Background Imagery: USDA-FSA NAIP (2021)

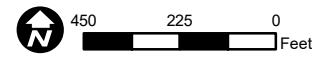
**PHOTO LOCATIONS**  
*August 2022*

**Exhibit 2.3**



Williams County, North Dakota

- 8-in NGL Pipeline
- 20-in Residue Pipeline
- Section Boundary
- ~ Stream (USGS NHD)
- Waterbody (USGS NHD)
- ★ Photograph Location



Drawn by: KWild (Barr Engineering Co.)  
 Date: 8/29/2022  
 Photos: SSimmers (Meadowlark)  
 Field Dates: 8/12/2022  
 Background Imagery: USDA-FSA NAIP (2021)

**PHOTO LOCATIONS**  
*August 2022*

**Exhibit 2.4**

# Appendix B

## Photo Log

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 1

Direction: East

Description: West end of shared route for both the 8-in NGL and 20-in Residue lines. (Red marker in foreground is another line.) The pipelines were bored across a drainage past the edge of the gravel-surfaced area.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.126047

Longitude: -104.037385



Photo #: 2

Direction: East

Description: Markers on horizon for the two pipelines at the bore exit area. Dense stand of reclaimed grasses.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.125879

Longitude: -104.035181

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 3

Direction: East

Description: Shared route continues east, showing dense stand of reclaimed grasses, with over 80% cover of intermediate and slender wheatgrass. Temporary fence installed along north edge of reclaim; to be removed for fall grazing.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.125874

Longitude: -104.034501



Photo #: 4

Direction: West

Description: View back toward the gas plant along shared route of 8-in NGL and 10-in Residue pipelines, on the east side of another drainage crossed using HDD.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.125878

Longitude: -104.031507

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 5

Direction: West

Description: Shared route through hayland. This portion of the route had approximately 50% cover of the planted grasses and about 50% cover of annual weeds (kochia, Russian thistle).

Observer: Simmers

Date: 8/12/2022

Latitude: 48.125922

Longitude: -104.018400



Photo #: 6

Direction: South

Description: Point where routes turn south. Both were bored under road. The 8-in NGL pipeline ends here, where it ties into the Oneok station visible on the left.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.126070

Longitude: -104.015249

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 7

Direction: South

Description: South side of road showing bore exit workspace area on the south side of road. The area was weedy and had high use by cattle, as it is also in the corner of a pasture. The 20-in residue pipeline route continues south.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.125762

Longitude: -104.015290



Photo #: 8

Direction: South

Description: The 20-in Residue line continues south across native rangeland. The reclamation was in good condition, with over 75% cover of western wheatgrass, slender wheatgrass, and green needlegrass.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.123775

Longitude: -104.014809

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 9

Direction: South

Description:  
Continuation of route south across native rangeland (rightmost area within corridor, to the left of the overhead transmission line).

Observer: Simmers

Date: 8/12/2022

Latitude: 48.119534

Longitude: -104.014822



Photo #: 10

Direction: South

Description: Steep upland drainage ravine crossed by HDD bore. Erosive slopes with natural areas of bare ground and minimal topsoil were avoided. Reclamation is in good condition on either side of the bore.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.114452

Longitude: -104.014851

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 11

Direction:  
East/Southeast

Description: Area where route angles southwest across rolling hills. The hilltops had areas of bare soil, which matched with adjacent native hilltops with bare soils. The reclaimed grass stand has adequate cover.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.109533

Longitude: -104.018379



Photo #: 12

Direction: Southwest

Description: Route runs at angle to a large HDD crossing of Horse Tied Creek, visible as line of dark trees in distance. Reclamation is in good condition here, with a few small areas of bare soils.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.109533

Longitude: -104.018379

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 13

Direction: Southwest

Description: View of HDD bore crossing of Horse Tied Creek. Workspace of 20-in Residue Line is in the foreground on the right. The restored route on the left is a Oneok line, which had a workspace closer to the creek.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.107949

Longitude: -104.022086



Photo #: 14

Direction: Northeast

Description: View of route across hayland which had already been cut at the time of the inspection. Reclaimed area was approximately 50% seeded grass and 50% annual weeds.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.096960

Longitude: -104.030109

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 15

Direction: North

Description: Route through cropland, planted in safflower. The pipeline route was dominated by annual weeds.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.092364

Longitude: -104.030192



Photo #: 16

Direction: North

Description: Route through cropland, planted in safflower. The pipeline route was dominated by annual weeds, though the crop was present throughout the annual weed cover.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.089577

Longitude: -104.030051

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 17

Direction: Northeast

Description: Route through cropland of soybeans. Difference between pipeline route and adjacent cropland is minimal. A few bare patches are present within parallel pipeline routes.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.088081

Longitude: -104.034486



Photo #: 18

Direction: North

Description: Route through cropland of soybeans, along west edge of field. The crop growth within the pipeline ROW is slightly shorter compared to the adjacent cropland.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.085689

Longitude: -104.035363

## On-Site Photographs

## OE2 8" NGL &amp; 20" Residue Gas Pipelines



Photo #: 19

Direction: East

Description: South end of 20-in Residue Pipeline at the delivery point, where it connects to a Northern border/TransCanada pipeline at the aboveground valve visible in the fenced area.

Observer: Simmers

Date: 8/12/2022

Latitude: 48.085689

Longitude: -104.035363