STORMWATER POLLUTION PREVENTION PLAN

Philip Wind

Haakon County, South Dakota

MARCH 2026

PREPARED FOR:

Invenergy

Chicago, IL

PREPARED BY:

Westwood

Stormwater Pollution Prevention Plan (SWPPP) Narrative

Philip Wind

Haakon County, South Dakota
NPDES Permit Identification #: SDR10XXXX

Prepared For:

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Project Number: R0015504.03
Date: March 2026

Westwood

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1.0 Introduction and Purpose

This SWPPP is prepared in accordance with the National Pollutant Discharge Elimination System (NPDES) regulations as established by the Clean Water Act and guided by the State of South Dakota. The South Dakota Department of Agriculture and Natural Resource's General Permit for Stormwater Discharges Associated with Construction Activity SDR100000 (Expires: October 21, 2028) provides the framework of requirements for compliance to discharge stormwater from a construction site.

This SWPPP is for implementation by the Owner, as listed in Section 5.1 of this SWPPP, at the Philip Wind site, with the project location as defined in Section 4.0 of this SWPPP. This report shall be on the site at all times during construction.

The following are outlined in this site specific SWPPP:

- Control measures for stormwater pollution prevention during each phase of construction,
- Control measures for stormwater pollution prevention after construction,
- Sources of stormwater and non-stormwater pollution, and
- Inspection and maintenance procedures.

2.0 SWPPP Certification Statement

"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."

Bryan Schueler, Senior Executive VP

Name & Title

DocuSigned by:
Bryan Schueler
485AED04FDD945B...

Signature

4/30/2026

Date

3.0 SWPPP Amendments

This plan and the attachments must be amended to include additional requirements, or modified requirements, which take place during construction if one or more of the following occur.

1. There is a change in design, construction, operation, maintenance, weather, or seasonal conditions that significantly impacts the discharge of pollutants from the site to surface or groundwater.
2. Inspections or investigations by the site owner, Environmental Protection Agency, or South Dakota Department of Agriculture and Natural Resources officials indicate this plan is not effective in eliminating or significantly minimizing the discharge of pollutants.
3. This SWPPP is not achieving the general objectives of minimizing pollutants in stormwater discharges or if this plan is not consistent with the SDR100000 General Permit for Stormwater Discharges Associated with Construction Activities.
4. If the South Dakota Department of Agriculture and Natural Resources notifies the Owner (i.e. permittees) that additional requirements are needed, requirements are not being met for TMDL or other water quality standards, or that the SWPPP did not incorporate the necessary requirements.

3.1 SWPPP Amendment Log

The following table should be completed as necessary during construction to document changes and amendments to this document. Place the Amendment Number next to all application changes, redlines and information in the document to reference back to the changes summarized below. If an additional sheet is necessary, attach the additional sheet to the SWPPP.

Table 1: Amendment Log

Amend #	Date	Reason, location and brief description of modification, or amendment	Requested by:	Prepared by:

3.2 SWPPP Amendment 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."

Amendment #: _____

_____	_____	_____
Signature	Title	Date
_____	_____	_____
Printed Name	Contact Number	Company

Amendment #: _____

_____	_____	_____
Signature	Title	Date
_____	_____	_____
Printed Name	Contact Number	Company

Amendment #: _____

_____	_____	_____
Signature	Title	Date
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Printed Name	Contact Number	Company

Amendment #: _____

Signature	Title	Date
Printed Name	Contact Number	Company

Amendment #: _____

Signature	Title	Date
Printed Name	Contact Number	Company

Amendment #: _____

Signature	Title	Date
Printed Name	Contact Number	Company

Amendment #: _____

Signature	Title	Date
Printed Name	Contact Number	Company

4.0 Site Information and Description

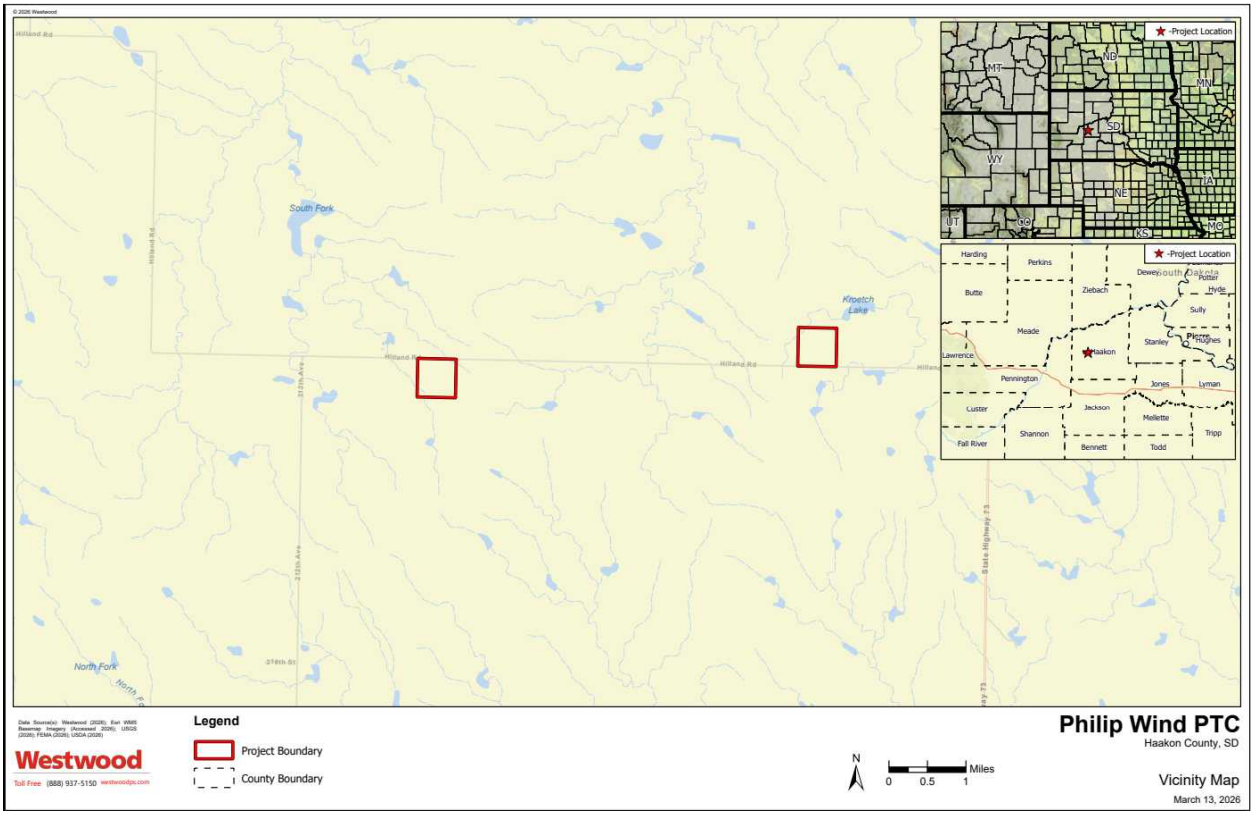
4.1 Site Location and Vicinity Map

The Philip Wind site is located in the county of Haakon, about 10 miles west of Lucerne. The nearest intersection is 188th Street and SD Highway 15. The site is bordered upon the north and south by Hilland Rd and agricultural fields, and the west and the east by agricultural fields.

Table 2: Project Location

Section #	Township	Range
21	4 N	20 E
27	4 N	19 E
Latitude and Longitude Points (Decimal) #		
Latitude	44.286203	
Longitude	-101.713282	

Vicinity Map:



4.2 Existing Conditions

The slope and terrain of the site generally consists of flatter agricultural fields. The site drains to the northeast via unnamed streams and overland flow. The streams flow north and northeast and eventually discharge to South Fork Bridger Creek, West Plum Creek, and Kroetch Lake.

4.2.1 Non-vegetative Cover

Prior to construction, there is no non-vegetative cover in the site area.

4.2.2 Vegetative Cover

Prior to construction, the vegetative cover on-site primarily consists of soybean and corn agricultural fields. Secondary cover includes grass / pastureland.

4.2.3 Land Use

Prior to construction the site area was primarily used for / as agricultural land. Secondary uses include developed / open space. A Phase I Environmental assessment was not available at the time of draft SWPPP completion.

4.3 Soil Names and Types

The soil types on-site primarily consist of silty clay. The primary Hydrologic Soil Group (HSG) represented is C. K factors on site range from 0.24 to 0.37. Erosivity ratings for on-site soils are slight due to lack of slope. Comprehensive soil maps are provided in Appendix C.

4.3.1 Soil Erosivity

Table 3: Soil K Factors and Erosivity Hazards

Soil Name / Type	Hydrologic Soil Group	K Factor	Erosivity Hazard				Reason(s) for Erosivity Rating
			Slight	Moderate	Severe	Very Severe	
Lohmiller silty clay, channeled	C	0.24	X				Lack of slope
Ottumwa silty clay, 0 to 3 percent slopes	C	0.37	X				Lack of slope
Ottumwa silty clay, 3 to 6 percent slopes	C	0.37	X				Lack of slope
Ottumwa-Capa complex, 0 to 3 percent slopes	C	0.37	X				Lack of slope

Table 4: Soil Particle Size

Soil Type	% Sand	% Silt	% Clay	% Site Area
Lohmiller silty clay, channeled	7.2	47.8	45.0	1.8
Ottumwa silty clay, 0 to 3 percent slopes	5.0	42.0	53.0	3.1
Ottumwa silty clay, 3 to 6 percent slopes	5.0	42.0	53.0	89.2
Ottumwa-Capa complex, 0 to 3 percent slopes	5.0	42.0	53.0	5.9

5.0 Project Information

5.1 Owner and Operator Information

Table 5: Owner and Operator Contact Information

Owner Information	Operator Information
PHILIP WIND PARTNERS, LLC	
Brianna Gries	
One South Wacker Drive, Suite 1500, Chicago, IL 60606	
720-861-9439, bgries@invenergy.com	

5.1.1 Owner Responsibilities

The owner responsibilities include:

- Developing a SWPPP prior to submitting the Notice of Intent (NOI);
- Submitting a complete and accurate NOI;
- Complying with all terms and conditions of the General Permit for Stormwater Discharges Associated with Construction Activities;
- Keeping the permit up to date (partial, whole, contractor, builders, etc.);
- Submitting the Notice of Termination (NOT) within thirty days of meeting requirement of final stabilization;
- Identifying who has long term operation and maintenance responsibility of the permanent stormwater controls;
- Developing a chain of responsibility with the operators to ensure NPDES and SWPPP compliance;
- Identifying trained personnel to oversee the SWPPP and conduct inspections;
- Identifying trained personnel to develop a SWPPP; and
- Identifying trained personnel to install and maintain best management practices.

5.2 Project Type and Proposed Conditions

5.2.1 Non-Vegetative Cover

Proposed non-vegetative cover will include access paths to the excavation areas. These will be temporary and removed post-construction.

5.2.2 Vegetative Cover

Proposed vegetative cover includes preservation of existing vegetation and restoration of disturbed areas with the seed mix in Section 9.3.3.

5.2.3 Land Use

The project will consist of access paths and turbine excavations to prepare for potential vertical installation of wind turbines for a future wind facility.

5.3 Pre and Post Project Estimates

Table 6: Project Area Estimates

Project Area	Disturbed Area	Existing Impervious Area	Post Construction Impervious Area
319 Acres	4.26 Acres	0.0 Acres	0.0 Acres

5.4 Construction Activity Overview

Construction activity includes the excavation of two turbine foundations pits and installation of mud mats. Construction on-site will include, but is not limited to, the installation of access paths, excavation of 80–120 feet diameter foundation pits, and installation of concrete mud mats. The excavation pits will be backfilled following mud mat construction. Minor improvements may be necessary for some existing roads and radii for equipment access and stability. This SWPPP shall be amended to show locations and disturbance areas as necessary should locations change during construction.

5.5 Construction Activity Description

NOTE: All sensitive areas shall be marked prior to start of earth disturbance activities. If any subsurface (tile drains, culverts, etc.) and/or surface drainage features (ditches, etc.) are altered during construction, they will be restored to pre-construction conditions and drainage patterns. Restoration work will be coordinated with the landowner.

1. Phase/Sequence: Pre-Mobilization

Construction Activity	Schedule Considerations and BMP References
Crew / Team Orientation	Plan page turn, scope clarification, work instructions and crew orientation. Contractors and landowner coordination or landowner liaison coordination is recommended.

Phase/Sequence: 1

Construction Activity	Schedule Considerations and BMP References
Identify clearing and grading limits, sensitive areas, and wetlands prior to construction.	Flag, delineate, installation of barriers and/or signage should be installed for areas of interest, sensitive areas, buffer setbacks, vegetated areas to be preserved (do not disturb areas).

Phase/Sequence: 2

Construction Activity	Schedule Considerations and BMP References
Construction Access – installation of entrances to the site and initial construction routes (access paths), storage, and parking areas	This is the first land disturbing activity. Clear and grub areas to complete construction activity and install perimeter sediment controls as shown in the plan and as deemed necessary by a certified or knowledgeable inspector on site. Minimal clearing/grading should take place in preparation for access installation as indicated on site drawings. Utilize timber matting for access paths to avoid excessive compaction during rainy conditions. Install geotextile liners at rock exit pads to minimize track out. Clear topsoil and stockpile material for reapplication, as necessary. Stockpiles should be tracked, seeded, and temporarily stabilized.

Phase/Sequence: 3

Construction Activity	Schedule Considerations and BMP References
Perimeter Sediment Control BMP Installation	Continue necessary tree clearing and grubbing as necessary to install perimeter sediment controls. Plan temporary seeding and permanent seeding with temporary stabilization of perimeter slopes; install temporary seed and permanent seed and temporary stabilization within timeframes of the CGP.

Phase/Sequence: 4

Construction Activity	Schedule Considerations and BMP References
Turbine Excavation Areas	Strip and segregate topsoil and apply topsoil in a soil berm around the downgradient perimeter of the turbine pad area. Install silt fence at the perimeter, as necessary, and as shown on the plans. Excavate areas required for the foundation installation and stockpile the subsoils. Construct concrete washout areas or using a common concrete washout during concrete work of mud mat and foundation work. Dewater accumulated groundwater and/or stormwater via pump and dewatering bag, as necessary, ensuring discharged water does not contribute sedimentation to receiving waters. Utilize timber matting for stabilized access to excavation area for concrete pump trucks. Provide temporary stabilization measures, such as mulch and erosion control blanket. Temporarily cover the stockpiles with hydromulch or other temporary stabilization BMP for water and wind erosion protection within timeframes of the permit. Backfill foundation excavations following mud mat.

Phase/Sequence: 5

Construction Activity	Schedule Considerations and BMP References
Continuation of BMP maintenance and routine inspections.	Continue routine inspections until final perennial vegetation or non-vegetative cover is achieved per requirements of the CGP. Maintain all BMPs in working and effective order until final stabilization is achieved. Confirm with site inspector on timing of Notice of Termination to close the NPDES Permit.

Phase/Sequence: 6

Construction Activity	Schedule Considerations and BMP References
Reclamation and Restoration	Stabilize all remaining disturbed areas with perennial seeding, temporary stabilization, and non-vegetative stabilization controls as indicated on site drawings and recommended from the site certified or knowledgeable site inspector. Temporary BMPs should be removed where permanent stabilization is achieved. Clean out accumulated sediment from BMPs and clean up and remove all construction-related materials and equipment.

Phase/Sequence: Post Construction

Construction Activity	Schedule Considerations and BMP References
Submission of NOT and retention of records.	Submit the NOT to the state agency and local jurisdiction, as necessary. Retain all records, inspections, and documentation for at minimum 3 years after the NOT is authorized.

5.6 Project Activity Schedule

Table 7: Project Schedule

Activity	Start Date	End Date
Overall Project	TBD	TBD
Installation of Stormwater Controls / BMPs		
Grading Activity		
Access Paths		
Excavations / Foundations		
Final Restoration		
Notice of Termination		

5.7 Project Phasing

Construction will follow a general rolling phasing sequence to account for limitations of crews and resources. The sequence of construction activity will also take place to limit the extent and duration of exposed soils. Areas that are cleared, graded, or disturbed at any given time shall be limited to the portion of site that is necessary for construction and can be effectively controlled by the available personnel and material. Construction activities will take place along with erosion/sediment control BMP installation. BMPs will be installed prior to ground disturbing activities and will be maintained throughout the entirety of the project, and site cleanup and restoration of disturbances will be ensured once construction is complete.

5.8 Project Contacts and Chain of Responsibility

Table 8: Project Contacts

Company*	Name or Position	Responsibility	Contact Number
PHILIP WIND PARTNERS, LLC	Brianna Gries	Site Development	720-861-9439
		Dirt Work / Grading / Turbine Excavation	
Rachel Contracting	Matt Peterson	Project Environmental Contact	608-844-7732
Rachel Contracting	Matt Peterson	Routine SWPPP Inspections	608-844-7732
Westwood Professional Services	Aaron Mlynek, CPESC	SWPPP development	612-363-6146
		Restoration	
Rachel Contracting	Matt Peterson	BMP installation	608-844-7732
Rachel Contracting	Matt Peterson	BMP Maintenance	608-844-7732

6.0 Additional Site or Project Considerations

6.1 Chemical Treatments

At the time of SWPPP completion the use of chemical additives or polymers for purposes of sediment flocculation are not anticipated for this project. Should chemical treatment become necessary based upon inspection results, weather conditions or construction means and methods the table below must be updated to reflect the chemical used. IMPORTANT: Prior approval from the SDDANR is necessary for any chemical additive for discharging stormwater.

Table 9: Flocculation Plan Summary

Flocculation Chemical	Application Location	Primary Soil Types	Settling BMPs Used	Application Method	Receiving Water	Mfr Dosing Rate

6.2 Environmental Review Document

At the time of SWPPP completion, there are no known environmental review documents which apply to this project.

6.3 Endangered or Threatened Species

The proposed project is not federally funded and does not require EPA approval, however the SDR100000 General Permit does not authorize stormwater discharges that threaten federally listed endangered species. At the time of SWPPP completion, an updated IPaC Resource List was not obtained. Once that report becomes available, applicable information will be added to this section and Table 10.

Table 10: Endangered and Threatened Species

Species Common Name	Species Scientific Name	Federal Status	Proposed Effect	Explanation

6.4 Wetlands

At the time of SWPPP completion, updated wetland delineation was not obtained. When that report becomes available, the delineation information will be updated in this section.

6.5 Cultural Resources

According to the South Dakota State Historical Society's website, the project area and surrounding property is not included on the National Register of Historic Places, and it is also not included on the National Park Service's list of National Historic Landmarks.

Therefore, the stormwater discharges or related activity will not affect property protected by federal, state, or local historic preservation laws.

7.0 Receiving Waters

The table below summarizes the immediate receiving waters from the site. Where necessary the receiving waters has been designated immediate (for the first surface water receiving drainage from the site) and ultimate (for the surface water receiving runoff from site after the immediate receiving waters). The receiving waters listed are located within a mile and receive water from the site discharge location(s).

The site drains to the northeast via unnamed streams and overland flow. The streams flow north and northeast and eventually discharge to South Fork Bridger Creek, West Plum Creek, and Kroetch Lake. Refer to Appendix D for drainage maps.

Table 11: Receiving Waters

Name of Receiving Waterbody	Immediate (I) or Ultimate (U)	Type (wetland, lake, stream, ditch)	Impaired? Y/N	MS4? Y/N
Unnamed tributaries of South Fork Bridger Creek	I	Stream	N	N
Unnamed tributaries of West Plum Creek	I	Stream	N	N
Kroetch Lake	U	Lake	N	N

7.1 Impaired and/or TMDL Waters

There are no impaired waterbodies which receive stormwater discharge within one mile of the site's disturbed area according to the Surface Water Quality Standards Search, South Dakota Department of Agriculture and Natural Resources website: (https://sdgis.sd.gov/portal/apps/experiencebuilder/experience/?id=60c4f285d6c1458db0f6eac2b4f26c04 accessed 03/10/2026) and the 2022 South Dakota Integrated Report for Surface Water Quality Assessment website: https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_2022_IR_approved.pdf Refer to Appendix D for impaired waters maps.

8.0 Stormwater Management

8.1 Temporary Practices

There are no anticipated temporary stormwater management practices at the time of SWPPP completion due to no contiguous 10 acre drainage areas discharging to a common point or no contiguous 5 acre areas in impaired or special waters areas.

8.1.1 Calculations

Calculations are not applicable to this project as there are no temporary stormwater management practices requiring calculations. Should a temporary basin or trap become necessary during construction the site inspector shall coordinate with the engineer of record and the SWPPP developer to amend the SWPPP narrative, erosion control plan, and Table 11 below.

Table 12: Temporary Sediment Basin Calculations, if required.

Basin #	Storm Frequency	Rainfall Amount	Runoff Area	Runoff Volume	Capacity Needed
1	2 yr. / 24 hr.	2.20"			
2	2 yr. / 24 hr.	2.20"			
3	2 yr. / 24 hr.	2.20"			

8.2 Permanent Practices

There are no permanent stormwater practices anticipated for this project activity.

8.2.1 Calculations

Calculations are not applicable to this project as there are no permanent stormwater management practices requiring calculations.

9.0 Implementation of Temporary and Permanent Control Measures

9.1 Soil Management and Compaction Minimization

After clearing and grubbing, the grading contractor will strip and stockpile topsoil material for reapplication on all future permanent pervious surface areas. During development, grading and utility construction the subsoils will be compacted as necessary for construction using typical excavation techniques. During final grade, reapplication of 4 to six inches of topsoil will be done by a wide-pad dozer and other equipment to minimize compaction of the topsoil material.

9.2 Natural Buffers and No-Disturbance Areas

9.2.1 Natural Buffers

An undisturbed fifty foot buffer zone will be preserved for all water bodies near disturbance limits. The use of linear sediment controls will be installed upgradient to provide sediment control and delineate the fifty foot buffer. Refer to the site erosion and sediment control plans for the location of the buffer. The following activities are prohibited to take place within the buffer area:

- Placing stockpiles ;
- Disturbing vegetation;
- Placing construction material; and
- Storing gas, oils, or other potentially polluting material.

9.2.2 No-disturbance Areas

There are no no-disturbance areas within the project boundary.

9.3 Erosion Prevention Practices

The following controls are anticipated to minimize soil loss from the construction site area. The controls should help to minimize soil from being transported from water and wind as well as aide in establishment of temporary and permanent vegetation. Prior to grading and during clearing and grubbing, the areas of vegetation preservation, buffers and other areas of no-disturbance should be flagged, staked or otherwise delineated.

9.3.1 Timing for disturbed areas and slopes

Temporary erosion prevention practices should be initiated immediately after construction activity disturbing soil in an area is temporarily or permanently ceased for a period of 14 days. The application of temporary erosion control management practices should be completed prior to the fourteenth day of temporarily or permanently ceasing construction activity in an area of the project.

9.3.2 Stockpile Management

- Locate the stockpiles and debris outside of any natural buffers established and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated;
- Protect the stockpile debris from contact with stormwater run-on by using temporary sediment controls, berms, or other best management practices;
- Properly maintain and position stockpiles to minimize dust generation and wind transport of sediment; and
- Minimize stormwater runoff from the piles by properly positioning stockpiles and debris or installing effective sediment controls.
- Operators shall not place stockpiles in surface waters of the state.

Table 13: Erosion Controls

Potential BMPs	Construction Phase or Activity		Application Notes	
	Access Paths	Turbine Excavation/ Mud Mats		
Construction Phasing	X	X	Minimize soil disturbance, as feasible, per phase. Stake/flag areas that are to be left undisturbed.	
Buffer Strips	X	X	See Section 9.3 for more information.	
Slope Roughing	X	X	Use tracked equipment perpendicular to contour on steep slopes for temp/short term erosion control.	
Straw / Hay Mulch	X	X	Apply at two tons / acre. Disc anchor to soil. Weed Free mulch should be used.	
Erosion Control Blanket	X	X	Install per manufacturer's recommendations.	
Hydroseed	X	X	Apply at a rate defined from manufacturer or supplier from two directions to prevent shadowing.	
Temporary Seed Mix	X	X	See below	Prepare soil prior to seeding. Broadcast and rake seed into soil prior to mulch or blanket.
Permanent Seed Mix	X	X	See below	Prepare soil prior to seeding. Broadcast and rake seed into soil prior to mulch or blanket.
Timber Matting	X		Heavy-duty wooden platforms used to create temporary working surfaces for construction equipment in order to minimize soil disturbance.	

9.3.3 Potential Seed Mix

South Dakota Department of Transportation Type B Permanent Seed Mixture:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana, Walsh	7
Switchgrass	Dacotah, Forestburg, Nebraska 28, Pathfinder, Summer, Sunburst, Trailblazer	3
Indiangrass	Holt, Tomahawk, Chief, Nebraska 54	3
Big Bluestem	Bison, Bonilla, Champ, Sunnyview, Rountree, Bonanza	3
Canada Wildrye	Mandan	2
	Total:	18

9.4 Sediment Control Practices

The following controls are anticipated to minimize sediment discharge, capture sediment in suspension and minimize sedimentation off site.

Table 14: Sediment Controls

Potential BMPs	Construction Phase or Activity		Application Notes
	Access Paths	Turbine Excavation / Mud Mats	
Silt fence	X	X	Machine sliced install w/ wood posts at six feet spacing. Install perimeter silt fence prior to grading
Fiber rolls	X	X	Install on contour, minimum of nine-inch roll, wood or straw fiber. Secure with two inch posts every two feet on center.
Topsoil Berms	X	X	Side slopes of 3:1 with at least one foot height. Use temporary erosion control to stabilize berm.

9.5 Run-on and Runoff Controls

The following controls are anticipated to minimize scour, transport water across or down steep slopes or critical areas, divert clean water, and / or provide temporary conveyances to maintain drainage.

Table 15: Run-on and Runoff Controls

Potential BMPs	Construction Phase or Activity		Application Notes
	Access Paths	Turbine Excavation/ Mud Mats	
Riprap Apron / Energy Dissipation		X	See detail in plans. Install within twenty-four hours of connection to surface water in the state.
Diversion Berm	X	X	See detail in plans. Use temp erosion control to stabilize berm. Install prior to disturbing down gradient areas.
Perimeter Overflow Buffer	X	X	Stabilize disturbed soils to existing vegetation line on upgradient and downgradient sides of outlet. Refer to detail SW-22 in the plans.
Dewatering Outlet		X	Refer to detail SW-51 in Appendix E for more information.

9.6 Tracking Controls

The following controls are anticipated to minimize or prevent sediment track-out from construction site exits to paved surfaces or to retrieve material tracked onto paved surfaces to minimize or prevent the material from being washed into surface waters or stormwater inlets.

Table 16: Tracking Controls

Potential BMPs	Construction Phase or Activity		Application Notes
	Access Paths	Turbine Excavation/ Mud Mats	
Rock Pad	X		See detail in plans. Install at all site exits prior to grading. Maintain for duration of project.
Street Scraping	X		Scrape large clumps/amounts of material with soft tracked or wheeled equipment prior to sweeping.
Street Sweeping	X		Sweep paved surfaces within twenty-four hours of discovery.

9.7 Dewatering and Basin Draining Practices

The project is not anticipated to have site dewatering occur. However, if it should be necessary, it will be performed in accordance with the SDDANR standard specifications described below.

Dewatering Accumulated Water (via pulp, trench, temporary ditch or grade cuts):
Dewatering of turbid water (water that is visibly cloudy or brown in color) should be discharged via pump and hose or overland flow to a temporary sediment basin for pretreatment. The use of riprap apron (energy dissipation) should be used for the discharge location. If riprap is not used, an alternative form of energy dissipation should be used to prevent scour and re-suspension of soil at the discharge point of the hose. If discharge to a temporary sediment basin is not feasible, the use of dewatering dumpsters, dewatering bags or other prefabricated product should be used. The use of rock checks, erosion control blanket and sumps or traps may be considered for overland flow. After the use of BMPs, the water could be discharged through a vegetated buffer and energy dissipation. The discharge of water from the site should be visibly clear in appearance.

The discharge of accumulated water should not:

- Contain oil, grease, a sheen, odor, or concrete washout;
- Adversely impact adjacent properties with water or sediment;
- Adversely impact waters of the state;
- Cause erosion of slopes and channels;
- Cause nuisance conditions; or
- Contribute to inundation of wetlands which negatively impact the wetlands.

NOTE: The permittee may be required to obtain a Temporary Water Right. Contact the SDDANR at 605-773-3351 for more information. It is the operator and permittee responsibility to obtain necessary water rights.

9.8 Sampling Requirements

If the discharge observed contains suspended solids the following must be implemented:

- Installation of additional best management practices and update this SWPPP.
- Sample the dewatering discharge for total suspended solids on a daily basis until there is no longer a discharge of visible solids.
- Samples must be analyzed in accordance with 40 CFR, Part 136 which may require sending the samples to an off-site laboratory for analysis.
- If the sample results exceed 53 mg/L in any sample or measurement you must cease the dewatering discharge to surface waters of the state until the operator can demonstrate additional best management practices are sufficient to eliminate visible pollutants.
- Document sampling and results or any updates in this SWPPP.

10.0 Pollution Prevention Management

10.1 Potential Pollutant Sources

Potential pollutant sources including construction and waste materials that are used or stored at the site are described below. Upon proper implementation of the BMPs, potential pollutant sources are not reasonably expected to affect the stormwater discharges from the site. Construction materials and chemicals used or stored on site should be kept in small quantities whenever possible. Materials shall only be stored in non-sensitive areas and not in close proximity to watercourses, wetlands or floodplains.

A spill prevention, control, and countermeasure plan (SPCC) will be needed if materials or tanks present on site contain more than, or have the ability to contain more than, 1,320 gallons of petroleum products. When not in use, petroleum products should be stored in sealed containers and out of contact with the elements to prevent direct contact with stormwater. Inadvertent spills should be cleaned up immediately upon discovery and the materials should be disposed of in accordance with local, state, and federal requirements. Contractors should have spill kits available on site for rapid deployment to contain and cleanup spills.

Table 17: Potential Pollutants List

Potential Pollutant	Location	Control Measure*
Antifreeze	Vehicle/Equipment	S.C./Drip pan
Diesel Fuel	Vehicle/Equipment/Fuel Tank	S.C./Drip pan
Gasoline	Vehicle/Equipment/Fuel Tank	S.C./Drip pan
Hydraulic Oils/Fluids	Vehicle/Equipment	S.C./Drip pan
Grease	Vehicle/Equipment	S.C./Drip pan
Sanitary Waste Restrooms	Portable	Service provider to secure units from tipping
Building Materials and Products	Various	Under cover (such as plastic sheeting or tarps)
Trash and Construction Debris	Various	Dumpster with covers or tarps, plastic sheeting, or temporary roof
Paints	Contractor	S.C. and secure/covered storage.
Glue/Adhesives/Curing Compounds	Contractor	S.C. and secure/covered storage.
Soil Amendments	Various	S.C. and secure/covered storage.
Landscaping Materials/Fertilizer	Various	S.C. and secure/covered storage.
Concrete Mortar	Mobile Mixer	S.C./Washout Area and secure/covered storage
Concrete	Trucks/Washout	S.C./Washout Area

Bentonite	Directional Boring/Utility Contractor	S.C./Sump area
Sediment	Exposed soils/Disturbed Areas	Sediment, Erosion, Tracking, and Runoff Controls

*S.C. refers to secure secondary containment unit or area.

10.2 Potential Non-Stormwater Pollutant Sources

Non-stormwater discharges shall be eliminated or reduced to the extent feasible, with the exception of those necessary for the completion of certain construction activities. However, it is recognized that this permit does not authorize discharges mixed with non-stormwater.
A list of allowable non-stormwater discharges includes the items below.

Table 18: Potential Non-Stormwater Discharges

Type of Allowable Non-Stormwater Discharge	Likely to be present at site? Yes / No
Discharges from emergency fire-fighting activities	No
Fire hydrant flushing (uncontaminated and not hyper-chlorinated)	No
Waters used to wash vehicles, buildings, and structures to remove mud, dirt, or dust. (Detergents and soaps are not allowed; external building wash down cannot contain hazardous substances such as paint or caulk containing PCBs)	No
Water used to control dust	Yes
Potable water; including uncontaminated waterline flushing (not hyper-chlorinated)	No
Uncontaminated air conditioning or compressor condensate	No
Uncontaminated, non-turbid discharges of ground water, spring water, or foundation or footing drains	Yes
Landscape irrigation	No
Pavement wash waters (if no spills, leaks, or detergent use)	No
Uncontaminated flows from excavation dewatering activities, if operational and structural controls are used	Yes

These authorized non-stormwater discharges should be conducted in accordance with the requirements of the Construction General Permit (CGP), and every effort should be made to minimize non-stormwater runoff from these site activities.

The operators are responsible to implement adequate BMPs and management for non-stormwater discharges.

10.3 Storage, Handling and Disposal of Construction Materials

10.3.1 Storage and Handling

- All products shall be kept in their original container, with original labels still attached, unless the container is not re-sealable.
- Storage of all diesel fuel, oil, hydraulic fluids, other petroleum products and other chemical and products must be within water-tight containers.
- Hazardous materials shall be returned to the hazardous material storage area at the end of each day and be contained within sealed containers and provide secondary containment as applicable.
- An effort should be made to store only enough products to do the required job.
- The contractor shall provide tanks or barrels to collect liquid byproducts that pose a pollution hazard.
- The pollutants shall be removed from the site on a weekly basis and disposed of in accordance with federal, state, and local regulations.
- All spills shall be cleaned up immediately after discovery, in accordance with the manufacture's recommended methods.
- Hazardous materials shall be properly stored to prevent vandalism or unauthorized access.
- Containment units shall be installed in accordance with federal, state, and local regulations.
- No hazardous material shall be stored within 200 feet of an identified critical area.
- If building materials, chemicals, or general refuse is being used, stored, disposed of, or otherwise managed inappropriately, the contractor shall correct such defects within twenty-four hours of detection or notification.

10.3.2 Disposal (Dumpsters)

- Locate dumpsters away from watercourses, streams, creeks and other surface waters or conveyances.
- Site inspector shall regularly observe for and report excess litter and solid waste and request pickup and retrieval of wastes.
- Wastes, litter, debris shall be deposited into dumpsters in a central location and / or in various satellite locations where work is active.
- Dumpsters should be supplied by and regularly maintained, emptied, and removed by a waste management company.

10.4 Fueling and Maintenance of Equipment and Vehicles; Spill Response

- Routine maintenance of vehicles may occur in staging areas only if necessary.
- Avoid maintaining equipment and vehicles on site and perform maintenance off site where feasible.
- If fueling is done by mobile tank and dispenser, provide close supervision for the transfer of fuel, use drip pans, and make spill containment and cleanup materials readily available.
- If fueling is done via temporary tank, store the tank within a bermed, area and away from surface waters.
- Make Spill Kits with absorbent materials available on site for use in cleaning up small spills.

- In the event of a spill or discharge of hazardous material of reportable quantity, contact the South Dakota Notification Center (605-773-3296), the South Dakota After Hours Center (605-773-3231), If the hazardous condition involves the release of an EPA regulated material or an oil as defined by the EPA, the release may also need to be reported to the National Response Center. Federal Reporting is required within 15 minutes of event occurrence or discovery. Contact the National Response Center at (800) 424-8802. The NRC is staffed twenty-four hours a day. For more information reference the following website: https://www.epa.gov/emergency-response/when-are-you-required-report-oil-spill-and-hazardous-substance-release .

Table 19: Reportable Spill Quantities

Material	Reportable Spill Quantities	Where Discharged
Petroleum Material – other than gasoline	5 gallons or more; OR any amount that threatens or is in a position to threaten waters	Onto pervious surface or runs off an impervious surface
Gasoline	1 Gallon	Onto pervious surface or runs off an impervious surface
PCB Oil	1 Pound	Onto pervious surface or runs off an impervious surface
Other Material	25 gallons or more; OR Any quantity that causes impact to human health; impact to the environment (surface or ground water, wildlife, aquatic life); creates a fire, explosion, or safety hazard; or has any other obvious indicator of pollutants such as odor, color, sheen, or foam.	Onto pervious surfaces or runs off an impervious surface

10.5 Vehicle and Equipment Washing

If necessary, the contractor shall develop a designated wash area with basin containment to prevent the untreated water from discharging from the site to surface waters. BMPs include, temporary basins, inspecting the vehicles and equipment for leaks prior to washing, and prohibiting washing activity until discovered leaks are repaired and maintenance is completed of the equipment or vehicle. The area shall be identified on the site plan. Contain the water, and pump from the site into a truck for proper disposal at a waste water facility. No engine degreasing may be done on site.

10.6 Concrete Washout and Other Washout

10.6.1 Mobile Concrete and Mortar Mixers

Implement the following BMPs with the use of mortar or concrete mixers.

- Store bags of concrete and mortar in dry storage.
- Position mixers a minimum of 100 feet from the nearest watercourse or conveyance.
- If mixers must be positioned closer than 100 feet from a conveyance, install a temporary berm to prevent runoff from the mixer from flowing into the conveyance.

- Use Tarpaulins or plastic sheeting as a liner to prevent concrete or mortar from contacting the soil.
- Use buckets to contain washout /rinse water when cleaning the mobile mixer.
- Dump buckets of washout water in a designated concrete washout area.

10.6.2 Concrete Washout

Implement the following BMPs implemented for concrete washout areas.

- Contain washout water from the tools, equipment, and the chutes of concrete trucks, mobile mixers, or other containers with concrete material, and do not allow it to be discharged into waters of the state or drain onto adjacent properties.
- Define the washout area with signage notifying the contactors of the location and use.
- The washout area should be a sufficient size to contain the expected washout material. 10'x10'x3' area should suffice for most activities.
- Multiple washout areas may be needed. Locations of the washouts should be shown on the construction plans by the contractor.
- When identifying the location of the concrete washout areas, include the date of install, date of last maintenance, and date of removal.
- Use thick poly sheeting to prevent contamination of the soil, and prevent infiltration of the washout material.

Once the material is hardened it can be disposed of in a dumpster. If the material is liquid or not hardened, vacuum the material up, haul it off site to properly disposed of or recycle at an approved facility. Some sites will not need the separate washout area if a truck chute washout is available from the concrete supplier.

10.6.3 Truck Chute Washout

Where available, all trucks with self-contained washout and water recycle systems must be used for every truck chute, tool, and equipment rinse and washout. Position the truck in a flat area, away from inlets and surface waters where feasible.

10.7 Portable Sanitary Facilities

- Locate facilities away from watercourses, streams, creeks, and other surface waters or conveyances.
- Place facilities upgradient of perimeter sediment controls, and not on paved or other impervious surfaces.
- Secure facilities to the soil with stakes or tether to other non-movable structure to prevent tipping from wind or other factors.
- Schedule routine and regular cleanout and maintenance of facility from a reliable company.

11.0 Inspection, Maintenance, and Corrective Actions

Construction activity and all support activities must be inspected (using the inspection form found in Appendix F or an alternative form) within the parameters of the schedule below. The inspector shall be a person trained and familiar with the requirements of this SWPPP and the SDR100000 Permit. This person is delegated by the owner and listed in Section 5.7.

Scope of inspections* should include:

- Date and time of inspections;
- Inspector's name;
- Findings of the inspection;
- Locations of corrective actions needed;
- Corrective actions taken (date/time/ who);
- Date and amount of rainfall**
- Observed discharge locations;
- Description of discharges with color, odor, floating, settled, solids, foam, or oil sheen;
- Photographs of discharges

Amendments from inspections need to be completed within seven days (see SWPPP section 3.1).

*All inspections should be documented within twenty-four hours after completing the field inspection, and available in paper or electronic form on site.

**Rainfall amounts should be taken from an onsite rain gauge. If a rain gauge is not feasible, the rain fall data should be observed from the following website: (https://forecast.weather.gov/MapClick.php?lat=44.040608&lon=-101.665575).

11.1 Inspection Schedule

Table 20: Inspection Schedule

If the site is:	Then an inspection is needed:	Notes and Information
Active	☐ Once every fourteen calendar days and within twenty-four hours of a rainfall ≥ 0.25", OR ☒ Once every seven calendar days	A rain gauge should be used or rain data should be taken from the link listed above.
Active and Inactive areas: "Partial Final Stabilization"	• Once every month	Allowed in areas where work is completed and vegetation is established. Other/active areas must follow above.

Inactive: "Final Stabilization"	• Once every month, for 12 months (not including frozen conditions)	Once 12 months of inactivity and stabilized conditions has past, inspections can be ceased until site activity resumes.
Subject to Winter/Frozen Conditions	• Once every month	Applies if all disturbed areas of the site have been temporarily or permanently stabilized and earth-disturbing activities are suspended due to conditions. Required to resume "active" inspection frequency no later than March 1st of each year.

11.2 Maintenance Schedule

Table 21: Maintenance Schedule

BMP	Observed Condition for Maintenance	Maintenance Interval
All non-functional BMPs	Sediment overtopping, under water, scoured ends, undermined, destroyed, non-functional as designed, etc.	Maintenance must be done by the end of the next work day or if the BMP requires replacement: it should be done within seven calendar days or prior to forecast rainfall, whichever is sooner. If sediment escapes the construction site: begin removing the offsite accumulations by the end of the same work day.
Vegetative Buffer	Silt covered, rill erosion observed or otherwise ineffective	Repair by the end of the next working day.
Stabilized Areas (temporary or permanently)	Rill erosion, gulley erosion is observed. Mulch washed away or erosion control blanket is undermined.	Repair and stabilize eroded areas and non-functional stabilization BMPs by the end of the same work day.
Perimeter Sediment Control (silt fence, fiber logs, berms, etc.)	½ full of sediment, flattened to ½ height, driven over, undermined, scoured, moved for access etc.	Maintenance of the BMP: by the end of the next work day or if replacement is required: complete replacement within seven days of discovery or notice or prior to forecast rainfall, whichever is soonest.
Inlet protection BMPs, conveyances, surface waters	Sediment deposition, sediment deltas and accumulation of sediment material.	Removal/cleanout of accumulated sediment and deltas to be removed within seven days. Stabilize as needed if soils are exposed during removal/cleanout.
Temp sed basins and traps; permanent sediment basins	Sediment deposition and accumulation to ½ of the storage volume.	Cleanout, remove accumulated sediment material within seven calendar days or prior to forecast rainfall, whichever is sooner.
Site exit locations, rock exit pads, other anti-tracking practices	Accumulated sediment in rock or other anti-tracking BMP, tracking of sediment from the site onto paved surfaces	Top dress rock, maintain rock exit or other anti-tracking controls, scrap paved surfaces, sweep paved surfaces by the end of the same work day.
Paved surfaces; adjacent streets	Tracked sediment and soil material from the site hauling or access	Sweep within the same work day of discovery; additional and/or more frequent sweeping may be needed to maintain public safety or prevent washing from forecast rains.

11.3 Corrective Actions

A corrective action report is needed if: a repair; modification; or replacement of any stormwater control is necessary; or if cleanup and disposal of spills, releases, or other deposits are needed; or if a permit violation is remedied. For each corrective action taken, a report with the following information must be documented and maintained with the SWPPP within twenty-four hours:

1. Which condition requiring correction was identified at the site;
2. The nature of the condition identified; and
3. The date and time of the condition identified and how it was identified.

Within seven calendar days after the inspection resulting in a corrective action report being necessary, the following is needed:

1. Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred;
2. A summary of stormwater control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and
3. Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

12.0 Training Requirements and Documentation

12.1 Training Requirements

The person inspecting the project site shall be knowledgeable in the principles and practice of erosion and sediment controls and pollution, possess the skills to assess conditions at the site that could impact stormwater quality, and is able to assess the effectiveness of any control measures selected and installed to meet the requirements of the SDR100000 General Permit.

Training for how to conduct site inspections and how to implement the SWPPP must be provided annually at a minimum, as new employees or responsible parties are hired, or as necessary to ensure compliance with the SWPPP and the SDDANR SDR100000 General Permit. Responsible parties include individuals who are responsible for conducting inspections or who are responsible for the design, installation, maintenance, or repair of stormwater controls.

Therefore, all staff who is responsible for the SWPPP and stormwater controls must have formal training and documentation (certificate of completion) in order to conduct site inspections. Options for formal training are listed below. Only one course is required, not all.

- Federal EPA CGP Site Inspector training
  - No fees
  - Will need to also familiarize with the State of South Dakota's construction and training requirements
  - Found at: https://www.epa.gov/npdes/construction-general-permit-inspector-training
- South Dakota SWPPP Training Course provided by Stormwater ONE
  - $549 per person
  - Found at: https://stormwaterone.com/program/course/CP240R/south-dakota/storm-water-pollution-prevention-plans
- Other approved non-EPA training courses can be found at: https://www.epa.gov/npdes/construction-general-permit-inspector-training#nonepa

The following topics must be covered in the training, and the training should be related to the scope of job duties for each personnel. At a minimum, training should include:

- Location of stormwater controls;
- Maintenance requirements and maintenance needs for BMPs;
- Procedures and permit requirements for pollution prevention;
- When and how to conduct inspections;
- Record keeping; and
- Corrective actions.

A more detailed description of site inspector requirements and responsibilities during inspections can be found in Section 4.0 of the SDDANR SDR100000 General Permit located in Appendix A.

12.2 Training Documentation

The site inspector shall keep the training documentation up-to-date using the training log in Appendix F or an alternative form.

The following table summarizes the personnel involved with this project, their training status, and their responsibilities.

Table 22: Training Role and Summary

Project Role / Task	Name	Company	Training Course / Entity
SWPPP Preparer	Aaron Mlynek	Westwood Professional Services	CPESC
Site Inspector / SWPPP Amendments			
Alternate Inspector, if applicable			
BMP Installer and Maintenance Provider			
Corrective Actions			

NOTE: At the time of SWPPP preparation, not all details were finalized for specific contacts for each project role and / or their training status. Roles are subject to change. All changes will be included in the SWPPP Amendments section of this report.

13.0 Final Stabilization

Final stabilization is achieved for the project when permanent erosion control BMPs are applied to the site. The permanent erosion control BMPs may be a combination of vegetative and no vegetative cover types. Additional requirements to achieving final stabilization include:

- All soil disturbing activity is complete;
- Permanent stormwater treatment system (if required) is constructed and accumulated sediment from construction activity has been removed;
- All temporary, synthetic BMPs have been removed from the site;
- In agricultural areas (as applicable), the construction activity area has been restored to the pre-construction agricultural use; and
- The vegetative cover for the site is at a density, with a uniform perennial cover of 70 percent of the expected final growth density.

13.1 Vegetative Cover / Permanent Erosion Control

The planned permanent erosion control vegetative cover BMPs for this site include temporary and permanent seed mixes after construction activities.

Minimization of the presence of invasive species is required. The following seven weeds are declared to be noxious in South Dakota: Canada thistle, hoary cress, leafy spurge, perennial sow thistle, purple loosestrife, Russian knapweed, and salt cedar.

13.2 Non-vegetative Cover / Permanent Erosion Control

The planned permanent erosion control non-vegetative cover BMPs for this site include gravel for access paths if necessary.

14.0 Notice of Termination (NOT)

The project permit may be terminated in one of the following scenarios.

- All construction activity is complete, temporary synthetic BMPs are removed, accumulated sediment from construction is removed, and final stabilization is completed with vegetative and/or non-vegetative cover. The Notice of Termination form from the South Dakota Department of Agriculture and Natural Resources should be completed within thirty days of meeting the conditions above. Upon midnight of the post marked date, the permit coverage is terminated unless otherwise notified by the SDDANR.
- Within thirty days of selling or otherwise legally transferring ownership of the site in its entirety (including street sweeping and stormwater infrastructure) from the original owner to another party taking responsibility of ownership.
- Where the project obtained permit coverage but never started construction activity due to cancellation or other reasons. Documentation should be sent to the SDDANR with the NOT form and is subject to SDDANR approval.

15.0 Record of Retention

15.1 During Construction

This report, amendments and attachments, inspections, and maintenance records should be kept on site during normal business hours. The records should be kept by the owner or operator listed on the permit application. The records should be in a mailbox, in a vehicle or in an on-site office trailer or model home.

15.2 Post Construction / Notice of Termination (NOT)

The site owner must retain all the following records for a period of at least three years after the submittal of the NOT:

- The final SWPPP with all field notes/amendments;
- Other stormwater related permits in addition to the NPDES permit from SDDANR;
- Inspection and maintenance records;
- All permanent operation and maintenance agreements; and
- All required calculations for design of the temporary and permanent stormwater management systems

Appendix A

South Dakota General Permit for Stormwater Discharges Associated with Construction Activities SDR100000

STATEMENT OF BASIS

Permit Number: SDR100000

Permit Type: General Permit for Stormwater Discharges Associated with Construction Activities

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This document is intended to explain the basis for the requirements contained in the draft General Permit for Stormwater Discharges Associated with Construction Activities (General Permit). This document provides guidance to aid in complying with the stormwater regulations as listed in the General Permit requirements. This guidance is not a substitute for reading the draft General Permit and understanding its requirements as they apply to your project or site.

SUMMARY OF MAJOR CHANGES FROM PREVIOUS PERMIT ISSUANCE

Major changes that have been made to the draft General Permit include, but are not limited to:

- All references to South Dakota Department of Environment and Natural Resources (SDDENR) have been updated to South Dakota Department of Agriculture and Natural Resources (SDDANR). This is due to the merger between the departments that went into effect April 19, 2021.
- All South Dakota Codified Laws (SDCL) referencing SDDENR have been updated to SDDANR. This is due to the merger between the departments that went into effect April 19, 2021.
- Updated Section 2.7 Electronic Reporting Requirements to require electronic submission of forms and documents required under the General Permit via the United States Environmental Protection Agency's (U.S. EPA) National Pollution Discharge Elimination System (NPDES) eReporting Tool (NeT).
- Updated the Administrative Rules of South Dakota (ARSD) regarding Municipal Separate Storm Sewer Systems (MS4) in the Definitions section.
- Addition of Section 3.22 Prohibition of Bypass and Emergency Discharges to reflect the required ARSD.
- Updated Section 7.2.2 regarding reporting requirements to reflect the required ARSD.
- Addition of Section 7.3.4 regarding the records of monitoring information to reflect the required ARSD.
- Addition of Section 7.6 Reporting Compliance and Noncompliance to reflect the required ARSD.
- Addition of Section 7.7 Effluent Violation, Bypass, and Emergency Discharge Requirement to reflect the required ARSD.

- Removal of redundant spill procedure reporting in Section 8.4.2.c. Upset Conditions because spill reporting procedures are covered in Section 7.1.

- Some additional formatting and clarification updates were made that do not affect the content and intent of the General Permit; not all of those changes are noted in the draft General Permit.

- No significant changes to the information being requested in the forms were made; however, forms were updated to reflect the merger from SDDENR to SDDANR and to align with the information requested electronically.

BACKGROUND INFORMATION

Introduction

Construction activities have the potential to produce pollutants that may contaminate stormwater runoff. Clearing land of grass, trees, shrubs, rocks, and other ground cover can change natural water runoff patterns and increase erosion. The disturbed soil, if not managed properly, can easily be washed off the construction site during storms, allowing sediment to enter water bodies. Sediment is one of the leading causes of water quality impairment nationwide. The deposition of sediment has contributed to reducing water depth in small streams, lakes, and reservoirs, which can impair a waterbody's beneficial uses. Sediment runoff rates from unmanaged construction sites are typically 10 to 20 times greater than those from agricultural lands, and 1,000 to 2,000 times greater than those from forest lands. During a short period of time, construction activity, when not managed properly, can contribute more sediment to streams than can be deposited naturally over several decades, causing physical and biological harm to waterbodies.

Some construction activities require the use of toxic or hazardous materials which contain pollutants such as pesticides, toxic chemicals, metals, and oil that may be harmful to humans, fish, wildlife, and plants. When these materials are not properly handled or stored, the resulting leaks and spills can pollute stormwater and negatively impact waters protected for drinking water, recreation, aquatic life, and other beneficial uses.

In 1972, Congress passed the Federal Water Pollution Control Act, commonly referred to as the federal Clean Water Act (CWA). The goal of the CWA was to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA further states that the discharge of any pollutant by any person shall be unlawful except in compliance with other provisions of the statute. To achieve these goals, the CWA requires control of discharges of pollutants from point sources through the issuance of the NPDES permits.

In 1987, Congress amended the CWA to require implementation of a comprehensive national program for addressing stormwater discharges. On November 16, 1990, the U.S. EPA promulgated Phase I of the national program. Under Phase I, the U.S. EPA established the permitting requirements for discharges of "stormwater associated with construction activity," which the U.S. EPA included in its definition of "stormwater discharges associated with industrial activity." Construction activities that disturb five or more acres of land were designated as point source discharges that must receive a permit for any discharge of pollutants into waters of the United States.

On December 8, 1999, U.S. EPA promulgated Phase II of the stormwater regulations, expanding the point source discharge definition to include small construction activities that disturb between one and five acres of land.

On December 1, 2009, U.S. EPA published final regulations establishing technology-based Effluent Limitations Guidelines (ELGs) and New Source Performance Standards (NSPS) for the Construction & Development (C&D) point source category, which became effective on February 1, 2010. Litigation was initiated challenging the 2009 rule and EPA reached settlement agreements with the parties. The C&D rule was amended on March 6, 2014, in accordance with the settlement agreements. All NPDES construction permits issued by the U.S. EPA or states after this date must incorporate the requirements in the C&D rule.

The intent of the stormwater regulations is to improve and protect water quality by minimizing pollutants in stormwater runoff. The discharge of pollutants into surface waters of the state from construction activities disturbing one or more acres is considered a point source and shall obtain a Surface Water Discharge (SWD) permit from the SDDANR. Stormwater runoff consists of rainwater and melted snow that runs off the land and directly, or indirectly by way of storm sewers, enters surface waters of the state, such as lakes, rivers, streams, wetlands, and ponds. The term "construction activity" includes point source discharges from areas undergoing operations such as clearing, grading, and excavation. Construction activities can include road building, construction of residential houses, office buildings, industrial sites, or demolition. The term construction activity does not include agricultural, silviculture, or maintenance activities.

Permit Description

The current General Permit was issued under South Dakota's SWD regulations on April 1, 2018, and expired March 31, 2023. The General Permit was administratively extended, pending the reissuance of the permit.

SDDANR proposes to reissue the General Permit. The General Permit contains requirements that are based on technology-based effluent limitations, best management practices, South Dakota's Surface Water Quality Standards (SDSWQS), and other conditions applicable to the types of stormwater generated by construction activities.

Stormwater runoff from construction activities disturbing one or more acres of land is designated as a "point source" by Phases I and II of EPA's stormwater regulations. All point sources discharging pollutants into surface waters of the state shall have a SWD permit. Due to the nature of scheduling these construction activities, obtaining an individual SWD permit would significantly impact the timing of a project. The General Permit regulations within ARSD 74:52:02:46 provide for the issuance of general permits for stormwater point sources. Therefore, SDDANR has issued a General Permit for these activities in order to:

1. Facilitate the scheduling of these activities by reducing the administrative delays in their authorization;
2. Establish uniform criteria for management practices and effluent limits for discharges from these activities; and
3. Promote consistent permitting with respect to these activities.

Coverage Under the General Permit
The draft General Permit authorizes the following discharges of stormwater from new or ongoing construction activities located in South Dakota:

1. Stormwater discharges associated with construction activity from construction sites greater than or equal to one (1) acre, including stormwater runoff, snowmelt runoff, and surface runoff and drainage.
2. Stormwater discharges from individual sites that are part of a common plan of development or sale that will ultimately disturb one (1) or more acres of land.
3. Stormwater discharges from construction sites less than one (1) acre that have been designated by the Secretary as needing a permit.
4. Stormwater discharges from construction support activities provided: 1) The support activity is directly related to the construction site required to have permit coverage; 2) The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; 3) The support activity is included in the Stormwater Pollution Prevention Plan (SWPPP); 4) Control measures are implemented for discharges from the support activity area; and 5) A separate permit is obtained for support activities continuing past the initial permitted project timeframe.

Electronic Reporting Requirements
On October 22, 2015, the U.S. EPA published a rule in the federal register making electronic reporting of permit and compliance monitoring information mandatory for all NPDES permits. These are referred to as SWD permits in South Dakota. The final rule became effective December 21, 2015.

Phase II of the final rule requires authorized state NPDES programs begin electronically collecting, managing, and sharing construction stormwater permitting information by December 21, 2025. This information includes General Permit reports such as: Notice of Intent (NOI); Notice of Termination (NOT); and all other remaining NPDES program forms and reports.

Currently, the SDDANR is approved to use NeT to allow electronic reporting under 40 CFR 122, 403, and 503. Requirements to request and terminate permit coverage are listed below.

New Construction Projects
To request coverage under the draft General Permit, which is required to be signed and notarized by the construction project owner, shall be submitted to the SDDANR at least 15 calendar days prior to the commencement of construction activities.

Note: You must identify the person(s) responsible for day-to-day operations at the construction site. A Contractor Authorization form must be submitted to SDDANR as soon as a contractor is identified. This form is required to be submitted by all entities responsible for earthwork activities or installation and maintenance of stormwater controls. As an operator of the site, any contractor performing work at the site also has responsibility for compliance with the terms of the General Permit.

SDDANR will review each complete NOI submission and determine whether to grant or reject coverage.

Existing Construction Projects
For existing construction operations already covered under the current General Permit, you will need to submit the NOI for Reauthorization to continue coverage under the reissued General Permit. Coverage under the current General Permit will expire on the effective date of the reissued General Permit. If you do not submit the NOI for Reauthorization prior to the effective date of the General Permit, your coverage under the current General Permit will be terminated and any stormwater discharges associated with construction activity at the site will not be authorized and could be subject to enforcement.

Secretary Designation
While most construction sites less than one acre do not significantly impact surface waters in South Dakota, this is not universally true. In some cases, the Secretary of the SDDANR may require smaller construction sites to obtain coverage under a permit. In making this determination, the Secretary will consider the beneficial uses of the receiving waters, the slope of the project, the management of the site, and other appropriate factors. SDDANR is making the draft General Permit available to these designated sites. Alternatively, the owner of the designated site may request an individual permit for the site.

Oil and Gas Exemption
Title 40 CFR 122.26(a)(2) states that the U.S. EPA may not require a permit for discharges of stormwater runoff from mining operations or oil and gas exploration, production, processing or treatment operations, or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that has not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

Therefore, owners of oil and gas field activities are exempt from the permitting requirements for any construction activity at these facilities. However, SDDANR expects these operations to employ best management practices to minimize the discharge of pollutants from the site and ensure the SDSWQS are maintained.

RECEIVING WATERS

The SDSWQS (ARSD 74:51:03:01 and 74:51:03:06) designate beneficial uses for all surface waters of the state. These classifications designate the minimum quality at which the surface waters of the state are to be maintained and protected. All waterbodies in South Dakota have been assigned one or more of the following beneficial uses:

1. Domestic water supply waters;
2. Coldwater permanent fish life propagation waters;
3. Coldwater marginal fish life propagation waters;
4. Warmwater permanent fish life propagation waters;
5. Warmwater semipermanent fish life propagation waters;
6. Warmwater marginal fish life propagation waters;
7. Immersion recreation waters;

8. Limited contact recreation waters;
9. Fish and wildlife propagation, recreation, and stock watering waters;
10. Irrigation waters; and
11. Commerce and Industry waters.

The draft General Permit was developed to ensure these beneficial uses are maintained and protected.

ANTIDEGRADATION

SDDANR has fulfilled the antidegradation review requirements for this draft General Permit. In accordance with South Dakota's Antidegradation Implementation Procedure and the SDSWQS, no further review is required. The results of SDDANR's review are included in Attachment 1.

TOTAL MAXIMUM DAILY LOAD

Section 303(d) of the CWA requires states to develop Total Maximum Daily Loads (TMDLs) for waters at levels necessary to achieve and maintain water quality standards. TMDLs are calculations of the amount of pollution a waterbody can receive and still maintain applicable water quality standards. TMDLs are necessary for waters that do not meet or are not expected to meet water quality standards with the application of technology-based controls for point sources. TMDLs address specific waterbodies, segments of waterbodies, or even entire watersheds, and are pollutant specific. TMDLs must allow for seasonal variations and a margin of safety, which accounts for any lack of knowledge concerning the relationship between pollutant loads and water quality.

The draft General Permit is a SWD permit that requires best management practices to ensure the surface water quality standards are met and maintained. Therefore, the draft General Permit will be able to authorize discharges to waterbodies that are listed as impaired or have an approved TMDL. However, if SDDANR determines a specific site has the potential to cause or contribute to an impairment of the surface water quality standards or best management practices (BMPs) are not sufficient, SDDANR can require the owner to implement additional controls and/or obtain an individual discharge permit.

EFFLUENT LIMITS

Under the CWA, dischargers shall comply with both technology-based and water quality-based effluent limits.

The CWA allows states and the U.S. EPA to meet the requirement for technology-based limits using non-numeric, or "narrative," effluent limits in permits where appropriate. The U.S. EPA has developed regulations allowing the use of narrative best management practices as effluent limits (40 CFR 122.44(k)). On March 6, 2014, the U.S. EPA promulgated the final technology-based C&D Effluent Guidelines in 40 CFR 450. The draft General Permit includes narrative effluent limits, including best management practices, to ensure the federal effluent limitations guideline requirements are met. SDDANR has included additional narrative effluent limitations to ensure the SDSWQS are met.

All permittees and their contractors shall comply with the effluent limits specified below. These limits are based on the C&D Effluent Guidelines (40 CFR 450), SDCL, ARSD, SDSWQS, the permit writer's judgment, and current General Permit limits.

1. **Proper Operation and Maintenance**. You must properly operate and maintain all the sediment and erosion controls used to meet the conditions of the draft General Permit. This limit is based on ARSD 74:52:03:02(5) and the current General Permit limits.

2. **Erosion and Sediment Control Requirements**. You must design, install, and maintain effective erosion and sediment controls to minimize soil erosion and the discharge of pollutants during earth-disturbing activities. The controls must be designed for a 2-year, 24-hour precipitation event. Your controls must be able to control stormwater volume, velocity, and peak flow rates and account for the anticipated soil characteristics at the site. This limit is based on 40 CFR 450.21(a)(1), (2), and (5), and the current General Permit limits.

3. **Installation Requirements**. You must install the erosion and sediment controls prior to the commencement of land disturbing activities. All other controls must be installed as soon as site conditions on the site allow. The controls must be installed using good engineering practices and should follow the manufacturer's specifications. You must document any deviations from the manufacturer's specifications in the SWPPP. This limit is based on the permit writer's judgement and the current General Permit limits.

4. **Perimeter Controls**. You must have effective down gradient sediment controls and controls for any side slope boundaries. This limit is based on the permit writer's judgement and the current General Permit limits.

5. **Sediment Basins**. If you use a sediment basin at the site to control the discharge of sediment, the basin must meet the following requirements:

    a. The sediment basin must be designed, constructed, and operated in accordance with any local ordinances;

    b. The outlet structures must withdraw water from the surface of the sediment basin to allow for proper sediment removal in the pond;

    c. You must use erosion control and velocity dissipation devices to prevent erosion within the basin and at the inlets and outlets from the basin; and

    d. Sediment basins must be situated outside of surface waters and any natural buffers. Basins must be designed to avoid collecting water from wetlands and other waterbodies.

    This limit is based on 40 CFR 450.21(f) and the current General Permit limits.

6. **Minimize Sediment Track-Out**. You must minimize the track-out of sediment from the construction site where vehicles leave the site. To comply, you must:

a. Restrict vehicle use to properly designated access points;

b. Use appropriate stabilization techniques at every construction site access point so sediment removal occurs prior to vehicle exit; and

c. Where sediment has been tracked out from your site onto offsite streets, other paved areas, and/or sidewalks, remove the deposited sediment by the end of the same workday in which the track-out occurs. You must remove the track-out by sweeping, shoveling, vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into storm drain inlets, surface waters of the state, or any stormwater conveyance unless the conveyance is connected to a sediment basin, sediment trap, or similar effective control. You must obtain approval from the owner of the sediment traps before hosing or sweeping sediment into those controls.

This limit is based on the permit writer's judgement and the current General Permit limits.

7. **Remove Offsite Accumulation**. If sediment escapes the construction site, you must begin removing the offsite accumulations by the end of the same workday. You must revise your SWPPP and implement controls to minimize further offsite accumulation. This limit is based on the permit writer's judgement and the current General Permit limits.

8. **Minimize Dust**. You must minimize the generation of dust at the construction site to avoid pollutants from being deposited into surface waters of the state. This limit is based on the permit writer's judgement and the current General Permit limits.

9. **Minimize Run-On**. You must minimize run-on to your construction site. This limit is included to minimize, not eliminate, the volume of water managed at the site where practicable and represents a best management practice to further reduce the likelihood of erosion and sedimentation. This limit is based on the permit writer's judgement and the current General Permit limits.

10. **Provide Natural Buffers**. You must provide natural buffers if disturbed portions of the construction site are within 50 feet of a lake assigned immersion recreation or limited contact recreational beneficial uses in ARSD 74:51:02:02 and listed in ARSD 74:51:02:04; or a river or stream assigned any of the warmwater or coldwater fish life propagation beneficial uses in ARSD 74:51:03:02 and ARSD 74:51:03:04 to 74:51:03:27, inclusive. The draft General Permit requires a 50-foot undisturbed natural buffer, or equivalent controls. Equivalent controls are outlined in Appendix F of EPA's 2022 Construction General Permit. This limit is based on 40 CFR 450.21(a)(6) and the current General Permit limits.

11. **Preserve Topsoil**. You must preserve the native topsoil on your site, unless infeasible. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed. This limit is based on 40 CFR 450.21(a)(8) and the current General Permit limits.

12. **Minimum Steep Slope Disturbance**. You must minimize the disturbance of slopes that are greater than a three horizontal to one vertical (3:1) slope, unless infeasible. This limit is based on 40 CFR 450.21(a)(4) and the current General Permit limits.

13. **Protect Storm Drain Inlets**. You must protect all storm drain inlets that receive stormwater flows from the construction site to minimize the discharge of pollutants from the site. You must maintain the inlet protection until you have permanently stabilized all sources that have the potential to discharge pollutants to the inlet. If local officials require you to remove the inlet controls during the winter, you must install alternative controls to prevent sediment from entering the storm drain inlet. This limit is based on the permit writer's judgement and the current General Permit limits.

14. **Erosive Velocity Control**. You must use erosion controls and velocity dissipation devices where necessary along the length of stormwater conveyance channels, if utilized onsite, and outlets to minimize erosion of the channel, adjacent stream bank, slope, and downstream waters. You must provide energy dissipation best management practices prior to connecting pipe or culvert outlets to surface waters. Conveyances that collect and channelize the stormwater runoff can result in high flows leaving the site at a concentrated point. This can cause erosion and scour downstream of the construction site, which in turn discharges pollutants to surface waters. You must install controls to manage both the peak flowrates and the total stormwater volume leaving the site. This limit is based on 40 CFR 450.21(a)(1), (2), and (5), and the current General Permit limits.

15. **Minimize Soil Compaction**. In areas where final vegetative stabilization or infiltration will occur, you must ensure the areas allow proper drainage following construction. You must either restrict vehicle and equipment use in these locations to avoid soil compaction or condition areas of compacted soil prior to seeding or planting. This limit is based on 40 CFR 450.21(a)(7) and the current General Permit limits.

16. **Minimize Exposed Soil**. You must schedule and sequence soil disturbing activities to minimize the amount and duration of soil exposure to erosion and sedimentation by wind, rain, surface runoff, and vehicle tracking. You should consider factors such as high precipitation seasons when scheduling soil disturbing activities. This limit is based on 40 CFR 450.21(a)(3) and the current General Permit limits.

17. **Protect Stockpiles**. For any stockpiles or land clearing debris, you must take the following steps:

    a. Locate the stockpiles and debris outside of any natural buffers established in paragraph 10 above (Provide Natural Buffers) and away from any stormwater conveyances, drain inlets, and areas where stormwater flow is concentrated;

    b. Protect the stockpile or debris from contact with stormwater run-on by using temporary sediment controls, berms, or other best management practices;

    c. Properly maintain and position stockpiles to minimize dust generation and wind transport of sediment; and,

d. Minimize stormwater runoff by properly positioning stockpiles and/or debris or installing effective sediment controls.

e. You are prohibited from placing stockpiles in surface waters of the state.

This limit is based on the SDSWQS (ARSD 74:51:01:06), SDCL 34A-2-21, and the current General Permit limits.

18. **Stabilization Requirements**. You are required to stabilize exposed portions of your site once construction has ceased, both temporarily and permanently.

    a. You must begin soil stabilization measures the following workday whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site. Earth-disturbing activities have permanently ceased when you complete clearing, grading, and excavation within any area of your site that will not include permanent structures. Earth-disturbing activities have temporarily ceased when you cease clearing, grading, and excavation within any area for a period of at least 14 calendar days, but will resume such activities in the future.

    b. You must complete temporary stabilization as soon as practicable, but no later than 14 calendar days after initiating soil stabilization measures. This includes,

        i. All activities necessary to initially seed or plant the area to be stabilized for vegetative stabilization practices.

        ii. The installation or application of all non-vegetative measures.

        iii. As soon as practicable after seeding or planting, select, design, and install non-vegetative erosion controls (e.g., mulch or rolled erosion control products) to prevent erosion on the seeded or planted areas while vegetation establishes.

    c. You must meet the criteria for final stabilization, as defined in the draft General Permit:

        i. ***Final Stabilization*** *– on areas not covered by permanent structures, means either (1) vegetation has been established that provides a uniform (i.e., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the natural background vegetative cover, (2) permanent non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site, or (3) disturbed portions of a construction site on land used for agricultural purposes must be returned to pre-construction agricultural use.*

ii. If you are seeding or planting vegetation to stabilize the site, you must minimize the presence of invasive (aka noxious) species within your site. The following seven (7) weeds are declared to be noxious statewide: Canada thistle, hoary cress, leafy spurge, perennial sow thistle, purple loosestrife, Russian knapweed, and salt cedar (ARSD 12:62:03:01.06). Refer to the following SDDANR webpage for more information: https://danr.sd.gov/Conservation/PlantIndustry/WeedPest/WeedandPestInfo/StateNoxious/default.aspx

This limit is based on 40 CFR 450.21(b) and the current General Permit limits.

19. **Maintenance Requirements**. You must ensure that all erosion and sediment controls remain in effective operating condition until final stabilization is complete. At a minimum, you must:

a. Remove sediment from any sedimentation basins when the design capacity has been reduced by 50% or more.

b. Remove sediment from sediment controls before the deposit reaches 50% of the above-ground height of the control.

c. Repair vegetative buffers if they become silt-covered, contain rills, or are otherwise rendered ineffective.

d. Repair and stabilize eroded areas by the end of the same workday they are identified. If repair is infeasible, you must implement alternative control measures.

e. Clean inlet protection devices when sediment accumulates, or when the filter becomes clogged, or performance is compromised.

f. You must ensure all controls remain in effective operating condition and are protected from activities that would reduce their effectiveness.

g. All nonfunctional BMPs must be repaired, replaced, maintained, or supplemented with functional BMPs. If a nonfunctioning BMP is supplemented, the nonfunctional BMP shall be removed.

If you find a problem or if your inspections identify that control measures are not operating effectively, you must make the necessary repairs or modifications as follows:

a. If you discover a problem that does not require repair or replacement, you must initiate work to fix the problem on the same day. If the problem is identified at a time in the workday when it is too late to complete the corrective actions, you must initiate work to fix the problem on the following workday or before the next anticipated runoff event, whichever comes first.

b. If you need to install new erosion or sediment controls or need to complete repairs, you must complete the work before the next anticipated runoff event or by no later than seven (7) calendar days from the time the problem is discovered, whichever comes first.

c. You must modify your SWPPP within seven (7) calendar days of completing the work. The SWPPP must address any changes to the controls and must detail the necessary steps to prevent similar damage in the future.

This limit is based on 40 CFR 450.21(a)(1) and (5), and the current General Permit limit.

20. **Pollution Prevention Procedures**. You must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants from the activities listed below. Spills must be reported as required in Section 7.1 of the draft General Permit.

a. ***Prohibited Discharges***. You are prohibited from discharging the following from your construction site, based on 40 CFR 450.21(e):

i. Wastewater from washout and cleanout of concrete, stucco, paint, form release oils, curing compounds, and other construction materials.

ii. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.

iii. Detergents, soaps, or solvents used in vehicle and equipment washing.

iv. Toxic or hazardous substances from a spill or other release.

v. Waste, garbage, floatable debris, construction debris, and sanitary waste.

b. ***Fueling and Maintenance of Equipment and Vehicles***. If you fuel or maintain equipment and vehicles at your site, you must minimize the discharge of spilled or leaked materials from the area where these activities take place. This limit is based on the SDSWQS (ARSD 74:51:01:10) and 40 CFR 450.21(e)(3).

c. ***Washing of Equipment and Vehicles***. You must provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing. The washing must be limited to a defined area of the site and must be properly disposed. This limit is based on 40 CFR 450.21(d)(1).

d. ***Management of Construction Products, Chemicals, Materials, and Wastes***. You must properly store, handle, and dispose of any construction products and materials, chemicals, landscape materials, and wastes in order to minimize the exposure to stormwater. Products or wastes that are either not a source of contamination to stormwater or are designed to be exposed to stormwater are not held to this requirement. This limit is based on 40 CFR 450.21(d)(2) and (3), and SDCL 34A-2-21. Requirements are as follows:

i. You must cover or otherwise protect any materials that have the potential to leach pollutants in order to minimize contact with stormwater and prevent the discharge of pollutants.

ii. Clean up spills by the end of the same workday in which the spill occurred, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or continuation of an ongoing discharge.

iii. For registered pesticides and fertilizers, you must comply with all application and disposal requirements included on the label. Pesticides and fertilizers must be stored under cover or other effective means designed to minimize contact with stormwater. You must document any departures from the manufacturer's specifications for applying fertilizers and pesticides.

iv. Store all diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals and products in water-tight container.

v. Hazardous or toxic wastes that may be present at construction sites include, but are not limited to, paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids, and alkaline materials. For these materials and wastes, you must:

(1) Separate hazardous or toxic wastes and materials from construction and domestic waste.

(2) Store hazardous or toxic wastes and materials in sealed containers and provide secondary containment as applicable. These containers must be constructed of suitable materials to prevent leakage and corrosion. These containers must be labeled in accordance with the applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, or local requirements.

(3) Dispose of hazardous or toxic wastes in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, and local requirements.

vi. You must provide effective containment for all liquid and solid wastes generated by washout operations including, but not limited to, concrete, stucco, paint, form release oils, curing compounds, and other construction materials related to the construction activity. For these materials and wastes, you must comply with the following requirements:

(1) Designate areas to be used for washout and cleanout activities. The containment must be designed so that it does not result in runoff from washout operations or during runoff events;

(2) Install signs adjacent to each washout facility directing site personnel to use the proper facilities for concrete disposal and other washout wastes;

(3) Direct all wash water into a leak-proof container or leak-proof pit;

(4) Do not dump liquid wastes in the storm sewers; and,

(5) Clean up and properly dispose of any accumulated wastes in designated waste containers.

vii. You must provide proper waste disposal receptacles of sufficient size and number to handle construction wastes including, but not limited to, packaging materials, scrap construction materials, masonry products, timber, pipe, electrical cuttings, plastics, Styrofoam®, concrete, and other trash or building materials.

viii. For sanitary waste, you must position portable toilets so they are secure and will not be tipped or knocked over. You must properly remove and dispose of wastes from the portable toilets.

These limits are based on 40 CFR 450.21, the SDSWQS, SDCL and the current General Permit limits.

21. **Construction Dewatering**. You are prohibited from discharging from dewatering activities, including discharges from dewatering of trenches and excavation, unless the discharges are managed by the following controls:

a. You shall not discharge toxic pollutants in toxic amounts. This limit is based on the SDSWQS (ARSD 74:51:01:12).

b. Your discharge shall not impart a visible film or sheen to the surface of the receiving water or adjoining shoreline. This limit is based on the SDSWQS (ARSD 74:51:01:10).

c. Your discharge shall not contain visible pollutants. You must visually monitor the discharge for suspended solids. This limit is based on the SDSWQS (ARSD 74:51:01:06). If you observe suspended solids in the discharge, you must implement the following requirements:

i. You must install additional BMPs and update your SWPPP to reduce the visible solids.

ii. You must sample the dewatering discharge for total suspended solids on a daily basis until there is no longer a discharge of visible solids. The samples must be analyzed in accordance 40 CFR 136, which may require sending the sample to an off-site laboratory for analysis. If the total suspended solids value exceeds 53 mg/L in any sample or measurement, you must cease the dewatering discharge to surface waters of the state until you can demonstrate the additional BMPs are sufficient to eliminate the visible pollutants. You must also document this in your SWPPP. Sampling is only required when there are visible pollutants in the dewatering discharge.

d. You must use BMPs to minimize or prevent stream channel scouring or erosion caused by dewatering discharges. This limit is based on 40 CFR 450.21(a)(1) and the current General Permit limits.

e. You cannot add chemicals to the discharge without prior approval from the SDDANR. This limit is based on the SDSWQS (ARSD 74:51:01:12) and the current General Permit limits.

f. You must obtain a Temporary Water Right. Contact SDDANR at (605) 773- 3352 for more information and to obtain a temporary water right.

These limits are based on 40 CFR 450.21(c), the SDSWQS, and the current General Permit limits.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

You are required to develop and implement a SWPPP prior to commencing construction. The objective of the SWPPP is to identify and document 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 surface waters of the state and storm sewer systems. Your SWPPP must describe all control measures that are, or will be, installed and maintained that are site-specific to meet the conditions of the draft General Permit. You are required to certify you have developed the SWPPP when you submit the NOI and are required to implement the necessary sediment and erosion controls before initiating construction.

The SWPPP details the BMPs you will implement to meet the effluent limits specified in the draft General Permit. The draft General Permit requirements for the SWPPP were designed for maximum flexibility to allow the development of needed stormwater controls based on the specifics of the site. Some of the factors to consider when developing your SWPPP include:

1. Local ordinances;
2. Local building codes;
3. Precipitation patterns for the area at the time the project will be underway;
4. Soil types;
5. Slopes;
6. Sensitivity of nearby waterbodies;
7. Safety concerns of the stormwater controls (e.g., potential safety hazards of water in stormwater retention ponds to humans and wildlife, and the potential of drawing birds to retention ponds and the hazards they pose to aircraft); and
8. Coordination with other site operators.

A large number of sites are already covered under the current General Permit. While the draft General Permit is consistent with SDDANR's requirements under the current General Permit, there are some changes. Existing permittees will have **three (3) months** from the effective date of the General Permit to update their SWPPP to reflect the requirements of the reissued General Permit.

The draft General Permit requires the stormwater controls be described in the SWPPP and implemented onsite. A more thorough description of pollution prevention measures and BMPs is provided in *Developing Your Pollution Prevention Plan: A Guide for Construction Sites* (U.S. EPA, 2016). An electronic version of this document is available from the U.S. EPA website (https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp) or a hardcopy of the summary document may be obtained from the SDDANR or U.S. EPA upon request. SDDANR also has SWPPP templates available on the following webpage: https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/StormWaterConstruction.aspx

SELF MONITORING REQUIREMENTS

Qualified Person to Conduct Inspections

Erosion and sediment control and/or stormwater management certification is not required by SDDANR and the definition of qualified inspection personnel is not changing in the draft General Permit. However, those who wish to be considered a qualified person to conduct stormwater inspections, must, at a minimum, be a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the appropriate skills and training to assess conditions at the construction site that could impact stormwater quality, and the appropriate skills and training to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of the draft General Permit.

Although not required, SDDANR encourages inspection personnel consider reviewing available training resources. The U.S. EPA's 2022 Construction General Permit includes training requirements for inspection personnel; therefore, the U.S. EPA has developed an electronic construction inspection training course that consists of five training modules and a final exam that is available at no cost. This training is accessible to everyone, not just U.S. EPA permittees, and can be found on the U.S. EPA's website here: https://www.epa.gov/npdes/construction-inspection-training-course.

The South Dakota Department of Transportation (SDDOT) requires that all SDDOT contracts have a certified Erosion Control Supervisor who understands the requirements for erosion and sediment control for construction and, therefore, conducts Erosion and Sediment Control Certification training annually. More information on the Erosion and Sediment Control Certification course through SDDOT can be found on their website: https://dot.sd.gov/

Inspection Requirements

You shall ensure that qualified personnel (someone who is knowledgeable about your SWPPP and proper operation of erosion and sediment controls) inspect the site at least once every seven (7) days and within twenty-four (24) hours after any rain event that is 0.25 inches or greater or a snowmelt event that generates runoff. Where runoff is unlikely due to winter conditions (i.e., the site is covered with snow, ice, or frozen ground) *and* the site has been temporarily stabilized, you shall conduct such inspections at least once every month. You must resume weekly inspections by no later than March 1st of each year until the site is permanently stabilized and you have submitted a NOT. The inspection shall include:

1. Verify that the required General Permit information is posted;
2. All disturbed areas of the construction site that have not reached final stabilization;

3. All sediment and erosion control measures;
4. Vegetated buffers;
5. Areas used for storage of materials;
6. Areas where stormwater typically flows within the site;
7. All points of discharge from the site;
8. All dewatering activities at the site; and
9. Locations where vehicles enter or exit the site.

You, or a qualified inspector knowledgeable about stormwater controls, shall inspect these areas for evidence of, or the potential for, pollutants entering the drainage system and erosion. You, or the inspector, shall also inspect sediment control measures to ensure that they are operating correctly and that sediment is not tracked offsite. You must also inspect stabilized areas to ensure that stabilization measures are still in place and effective.

If a discharge is occurring during the inspection, you, or the qualified inspector, are required to:

1. Identify all points where there is a discharge;
2. Observe and document the visual quality of the stormwater discharge and note the characteristics of the discharge; and
3. Document whether the control measures are operating effectively.

SDDANR also recommends that you perform a "walk through" inspection of the construction site before any anticipated storm event that could potentially cause a significant amount of runoff. These types of inspections help to ensure the effective implementation of sediment and erosion controls.

Record-Keeping Requirements

You shall maintain on site, or make readily available, the SWPPP and a copy of the SDDANR's letter granting coverage under the draft General Permit from the date construction activities are initiated until final stabilization is achieved and coverage under the draft General Permit is terminated. You shall retain copies of the SWPPP, all reports required by the draft General Permit, and records of all data used to complete the NOI and NOT for this permit for a period of at least three (3) years from the date that the site is finally stabilized. The Secretary may request extension of this period at any time.

ELECTRONIC REPORTING REQUIREMENTS

On October 22, 2015, the U.S. EPA published in the federal register a rule that has made electronic reporting of permit and compliance monitoring information mandatory for all NPDES permits. These are referred to as SWD permits in South Dakota. The final rule became effective December 21, 2015.

Phase II of the final rule requires that authorized state NPDES programs begin electronically collecting, managing, and sharing construction stormwater permitting information by December 21, 2025. This includes general permit reports such as NOI, NOT, and all other remaining NPDES program forms and reports.

SDDANR is approved to accept electronic submissions via NeT.

1. You must use NeT to electronically submit forms and documents required under this General Permit to. Access to NeT is located here: https://cdx.epa.gov/cdx.

Exception: If you are unable to meet the electronic reporting requirements due to extenuating circumstances, such as technology availability, you may apply for a temporary electronic reporting waiver through SDDANR. If the waiver is approved, the electronic reporting requirement will be waived according to SDDANR's procedures.

CONSTRUCTION DEWATERING

The draft General Permit provides for discharges from dewatering activities as long as you employ the following controls:

1. Dewatering that is done within the boundaries of the project site and does not enter waters of the state does not require additional permit coverage.
2. You shall not discharge toxic pollutants in toxic amounts.
3. Your discharge shall not impart a visible film or sheen to the surface of the receiving water or adjoining shoreline.
4. Your discharge shall not contain visible pollutants. You must visually monitor the discharge for suspended solids. If you observe suspended solids in the discharge, you must implement the following requirements:
    a. You must install additional BMPs and update your SWPPP to reduce the visible solids.
    b. You must sample the dewatering discharge for total suspended solids on a daily basis until there is no longer a discharge of visible solids. The samples must be analyzed in accordance with 40 CFR 136. If the total suspended solids value exceeds 53 mg/L in any sample or measurement, you must cease the dewatering discharge to surface waters of the state until you can demonstrate the additional BMPs are sufficient to eliminate the visible pollutants.
5. You must use BMPs to minimize or prevent stream channel scouring or erosion caused by dewatering discharges.
6. You cannot add chemicals to the discharge without prior approval from the SDDANR.
7. You must obtain a Temporary Water Use Permit. Contact the SDDANR at (605) 773-3352 for more information and to obtain a temporary water use permit.

TERMINATION OF COVERAGE

After you complete construction activities in an area, you shall permanently stabilize the site as soon as possible to prevent further soil erosion. When construction activities are complete and final stabilization has been achieved, you are required to submit a NOT to SDDANR. The NOT indicates that all earthmoving activities have ended and the site has achieved final stabilization as required by the draft General Permit. You shall maintain coverage under the draft General Permit until all disturbed areas on the entire project site have achieved final stabilization, as defined in the draft General Permit:

Final Stabilization *– on areas not covered by permanent structures, means either (1) vegetation has been established that provides a uniform (i.e., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the natural background vegetative cover, (2) permanent non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site, or (3) disturbed portions of a construction site on land used for agricultural purposes must be returned to pre-construction agricultural use.*

REQUIRING AN INDIVIDUAL PERMIT

Based upon a number of different situations (e.g., applicable numeric effluent limitations resulting from a TMDL, or a determination that the operator has the potential to cause or contribute to a water quality standard excursion), SDDANR may determine that coverage under an individual permit is necessary. If you are currently discharging under this General Permit and SDDANR determines that individual coverage is required, written notification of this required change in permit coverage, including reasoning for this decision, an application form, and a deadline for filing the application, will be provided to you by SDDANR.

Additionally, any permittee may apply for an individual permit rather than applying for coverage under this draft General Permit. Any permittee applying for an individual permit shall submit an individual application for coverage with reasoning supporting the request. SDDANR will review the request and will determine if individual permit coverage is appropriate. If SDDANR issues an individual permit to a permittee currently covered under this General Permit, or coverage under an alternative general permit is obtained, coverage under the draft General Permit is terminated on the effective date of the new permit.

If a permittee, covered under the current General Permit, requests an alternative permit and is denied, coverage under the draft General Permit may also be terminated on the date of such denial, unless otherwise specified by SDDANR.

ENDANGERED SPECIES

This is a renewal of an existing general permit. No listed endangered species are expected to be impacted by activities related to this draft General Permit.

DRAINAGE ISSUES

Local governments have the authority to regulate drainage. You are responsible for getting any necessary drainage permits from the county *prior* to discharging.

GENERAL PERMIT EXPIRATION

A five-year general permit is recommended. Prior to the expiration of the draft General Permit, all permittees covered under the General Permit will be requested to submit a NOI for Reauthorization Form (Appendix E of the draft General Permit).

If the General Permit should expire before a new permit is reissued, the terms and conditions of the expired General Permit will remain effective and enforceable until the effective date of the reissued general permit. SDDANR will continue the General Permit coverage for each facility

covered under the draft General Permit upon the expiration date, provided the facility has submitted a NOI for Reauthorization Form to continue coverage prior to the General Permit expiration.

GENERAL PERMIT CONTACT

This Statement of Basis and the draft General Permit were developed by Jill Riedel, Engineer III, for the Water Quality Program. Any questions pertaining to this Statement of Basis or the draft General Permit can be directed to the Water Quality Program by phone at (800) 737-8676 or by email at stormwater@state.sd.us.

August 15, 2023

ATTACHMENT 1

Antidegradation Review

Permit Type: **General Permit for Stormwater Discharges Associated with Construction Activities**

Permit #: **SDR100000**

Receiving Stream: **Varies** Classification: **Varies**

APPLICABILITY

1. Is the permit or the stream segment exempt from the antidegradation review process under ARSD 74:51:01? Yes ☐ No ☒ If no, go to question #2. If yes, check those reasons why the review is not required:

☐ Existing facility covered under a surface water discharge permit is operating at or below design flows and pollutant loadings;

☐ *Existing effluent quality from a surface water discharge permitted facility is in compliance with all discharge permit limits;

☐ *Existing surface water discharge permittee was discharging to the current stream segment prior to March 27, 1973, and the quality and quantity of the discharge has not degraded the water quality of that segment as it existed on March 27, 1973;

☐ *The existing surface water discharge permittee, with DANR approval, has upgraded or built new wastewater treatment facilities between March 27, 1973, and July 1, 1988;

☐ The existing surface water discharge permittee discharges to a receiving water assigned only the beneficial uses of (9) and (10); the discharge is not expected to contain toxic pollutants in concentrations that may cause an impact to the receiving stream; and DANR has documented that the stream cannot attain a higher use classification. This exemption does not apply to discharges that may cause impacts to downstream segments that are of higher quality;
Receiving water meets Tier 1 waters criteria. Any permitted discharge must meet water quality standards;
The permitted discharge will be authorized by a Section 404 Corps of Engineers Permit, will undergo a similar review process in the issuance of that permit, and will be issued a 401 certification by the department, indicating compliance with the state's antidegradation provisions; or

☐ Other:

FORMAL REVIEW

1. Is the stream segment classified as an OSRW? Yes ☐ No ☒ If no, go to question #3. **If yes, no change in water quality allowed. No further review required.**

2. Will there be an insignificant change in water quality? Yes ☒ No ☐ If no, go to question #4. **If yes, no further review required. List reason why discharge is insignificant**

- ☒ Only temporary change in water quality will result from the discharge; **Antidegradation will not apply to this draft General Permit due to the intermittent and temporary nature of most stormwater runoff from construction sites and the expected limited impact of the discharge**
- ☐ Resulting change in water quality from the discharge will only affect a water quality parameter that is only regulated by a narrative standard and the discharge will not adversely impact the stream's beneficial uses;
- ☐ Volume of the proposed discharge is small compared to the flow in the stream. The ratio of the average stream flow to discharge flow is greater than 50:1;
- ☐ The increase in pollutant loading at critical low flow is expected to be less than 20% of the stream's assimilative capacity;
- ☐ The resulting change in water quality from the discharge is less than one standard deviation of the mean concentration of the ambient water quality; or
- ☐ Other: _____

ANTIDEGRADATION REVIEW SUMMARY

The outcome of the review is:

- ☐ A formal antidegradation review was not required for reasons stated in this worksheet. Any permitted discharge must ensure water quality standards will not be violated.
- ☐ The review has determined that degradation of water quality should not be allowed. Any permitted discharge would have to meet effluent limits or conditions that would not result in any degradation estimated through appropriate modeling techniques based on ambient water quality in the receiving stream, or pursue an alternative to discharging to the waterbody.
- ☒ The review has determined that the discharge will cause an insignificant change in water quality in the receiving stream. The appropriate agency may proceed with permit issuance with the appropriate conditions to ensure water quality standards are met.
- ☐ The review has determined, with public input, that the permitted discharge is allowed to discharge effluent at concentrations determined through a total maximum daily load (TMDL). The TMDL will determine the appropriate effluent limits based on the upstream ambient water quality and the water quality standard(s) of the receiving stream.
- ☐ The review has determined that the discharge is allowed. However, the full assimilative capacity of the receiving stream cannot be used in developing the permit effluent limits or conditions. In this case, a TMDL must be completed based on the upstream ambient water quality and the assimilative capacity allowed by the antidegradation review.
- ☐ Other: _____

3. Describe any other requirements to implement antidegradation or any special conditions that are required as a result of this antidegradation review:
Antidegradation will not apply to this draft General Permit due to the intermittent and temporary nature of most stormwater runoff from construction sites and the expected limited impact of the discharge.

Jill M. Riedel	August 7, 2023
Reviewer	Date
Jeanne Goodman	August 15, 2023
Team Leader	Date

Appendix B

Permitting Documentation

(NOI, Permit Card, Permit Letters, Blank NOT/MOD)

DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES
NOTICE OF INTENT (NOI)
to Obtain Coverage Under the SWD General Permit for
Stormwater Discharges Associated with Construction Activities

Submit form to: SD Department of Agriculture and Natural Resources
Surface Water Quality Program
523 East Capitol Avenue
Pierre, South Dakota 57501
stormwater@state.sd.us
Telephone: 1-800-SDSTORM

ALL QUESTIONS MUST BE ANSWERED COMPLETELY FOR THIS FORM TO BE VALID

I. Site Owner Contact Information:

Company Name: _____

Primary Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Email Address: _____

Type of Ownership: ☐ Private ☐ Federal ☐ State ☐ Other (Municipal, County, etc.)
(any type not listed previously)

II. Contractor Information:

Will any contractors be responsible for erosion and sediment control practices: ☐ Yes ☐ No

(A contractor authorization form must be submitted for each contractor that will have day to day responsibility for erosion and sediment control practices. If these contractors have not been identified at the time this NOI is submitted, the contractor authorization form may be submitted after they have been identified, but before they begin construction work.)

III. Engineering Firm Contact Information (if applicable):

Contact Person: _____

Contact's Email Address: _____

IV. Construction Project Information:

Project Name: _____

Physical Project Address or Description of Construction Site Location: _____

_____

City: _____ State: _____ Zip Code: _____

On-Site Contact Person: _____

Contact's Email Address: _____

Contact's Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ County of Construction Site: _____

Latitude: _____ Longitude: _____ Source (GPS, Google, etc.): _____

Quarter(s): _____ Section(s): _____ Township(s): _____ Range(s): _____

FOR DANR USE ONLY

Permit Number: _____ Date Approved: _____ Approved by: _____

Construction Project Information (Continued):

Is this project on Tribal Lands? ☐ Yes ☐ No

Total area disturbed by the project (in acres): _____

Will this project encroach, damage, or destroy one of the historic sites identified at the following wesites:

https://www.nps.gov/subjects/nationalhistoriclandmarks/list-of-nhls-by-state.htm ☐ Yes ☐ No

http://history.sd.gov/Preservation/nationalregisterofhistoricplaces.aspx ☐ Yes ☐ No

V. Stormwater Pollution Prevention Plan (SWPPP):

Has the SWPPP been developed as required? ☐ Yes ☐ No

(The plan must be developed **before** the NOI is submitted. DENR will not issue coverage before this has been developed.)

VI. Receiving Waters:

Please list all possible waters that may receive a discharge from this site. If discharging to a Municipal Storm Sewer System, indicate which municipality and the ultimate receiving water.

_____

_____

VII. Nature of Discharge:

Please include a brief description of the construction project:

_____

_____

Will construction dewatering be required? ☐ Yes ☐ No If yes, please complete section IX also.

VIII. Construction Dates:

Project Start Date (MM/DD/YYYY): _____

Estimated Completion Date (MM/DD/YYYY): _____

IX. Dewatering Activities (Complete this section if you answered yes in VII):

Date dewatering will commence (MM/DD/YYYY): _____

Date dewatering will end (MM/DD/YYYY): _____

Total volume of dewatering (gallons): _____ Average flow rate (gallons per minute): _____

Source of water to be discharged: _____

Receiving water: _____

Brief description of water treatment processes to be employed, if any: _____

_____

Will the dewatering discharge contain anything other than uncontaminated groundwater and stormwater: ☐ Yes ☐ No

NOTE: If there will be dewatering activities, please place points of withdrawal and discharge on a topographic map, or other map if a topographic map is unavailable. This map should extend to one (1) square mile beyond the property boundaries of the facility and each of its discharge facilities, and those wells, springs, and other surface water bodies, drinking water wells, and surface water intake structures listed in public records, or otherwise known to the applicant in the map area.

X. Other Information

List other information you feel should be brought to the attention of the SDDENR regarding coverage under this general permit. Attach additional sheets if necessary.

_____

_____

_____

STATE OF SOUTH DAKOTA

BEFORE THE SECRETARY OF

THE DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF	)	
	)	**CERTIFICATION OF**
_____	)	
	)	**APPLICANT**
STATE OF _____	)	
	)	
COUNTY OF _____	)	

I, _____, the applicant in the above matter after being duly sworn upon oath hereby certify the following information in regard to this application:

I have read and understand South Dakota Codified Law Section 1-40-27 which provides:

"The secretary may reject an application for any permit filed pursuant to Titles 34A or 45, including any application by any concentrated swine feeding operation for authorization to operate under a general permit, upon making a specific finding that:

(1) The applicant is unsuited or unqualified to perform the obligations of a permit holder based upon a finding that the applicant, any officer, director, partner, or resident general manager of the facility for which application has been made:

(a) Has intentionally misrepresented a material fact in applying for a permit;

(b) Has been convicted of a felony or other crime involving moral turpitude;

(c) Has habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage;

(d) Has had any permit revoked under the environmental laws of any state or the United States; or

(e) Has otherwise demonstrated through clear and convincing evidence of previous actions that the applicant lacks the necessary good character and competency to reliably carry out the obligations imposed by law upon the permit holder; or

(2) The application substantially duplicates an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Nothing in this subdivision may be construed to prohibit an applicant from submitting a new application for a permit previously denied, if the new application represents a good faith attempt by the applicant to correct the deficiencies that served as the basis for the denial in the original application.

All applications filed pursuant to Titles 34A and 45 shall include a certification, sworn to under oath and signed by the applicant, that he is not disqualified by reason of this section from obtaining a permit. In the absence of evidence to the contrary, that certification shall constitute a prima facie showing of the suitability and qualification of the applicant. If at any point in the application review, recommendation or hearing process, the secretary finds the applicant has intentionally made any material misrepresentation of fact in regard to this certification,

consideration of the application may be suspended and the application may be rejected as provided for under this section.

Applications rejected pursuant to this section constitute final agency action upon that application and may be appealed to circuit court as provided for under chapter 1-26."

I certify pursuant to 1-40-27, that as an applicant, officer, director, partner, or resident general manager of the activity or facility for which the application has been made that I; a) have not intentionally misrepresented a material fact in applying for a permit; b) have not been convicted of a felony or other crime of moral turpitude; c) have not habitually and intentionally violated environmental laws of any state or the United States which have caused significant and material environmental damage; (d) have not had any permit revoked under the environmental laws of any state or the United States; or e) have not otherwise demonstrated through clear and convincing evidence of previous actions that I lack the necessary good character and competency to reliably carry out the obligations imposed by law upon me. I also certify that this application does not substantially duplicate an application by the same applicant denied within the past five years which denial has not been reversed by a court of competent jurisdiction. Further;

"I declare and affirm under the penalties of perjury that this claim (petition, application, information) has been examined by me, and to the best of my knowledge and belief, is in all things true and correct."

Dated this _____ day of _____ , 20____ .

_____
Applicant (print)

_____
Applicant (signature)

Subscribed and sworn before me this _____ day of _____ , 20_____ .

_____
Notary Public (signature)

My commission expires: _____

(SEAL)

PLEASE ATTACH ANY ADDITIONAL INFORMATION NECESSARY TO DISCLOSE ALL FACTS AND DOCUMENTS PERTAINING TO SDCL 1-40-27 (1) (a) THROUGH (e). ALL VIOLATIONS MUST BE DISCLOSED, BUT WILL NOT AUTOMATICALLY RESULT IN THE REJECTION OF AN APPLICATION

DEPARTMENT OF ARICULTURE AND NATURAL RESOURCES
NOTICE OF TERMINATION (NOT)
of Coverage Under the SWD General Permit for
Stormwater Discharges Associated with Construction Activities

This form is required to be submitted when a discharge permit is no longer required or necessary. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form to the following address:

Submit form to: SD Department of Agriculture and Natural Resources
Surface Water Quality Program
523 East Capitol Avenue
Pierre, South Dakota 57501
stormwater@state.sd.us
Telephone: 1-800-SDSTORM

I. Permit Number: _____

II. Primary Contact Information:

Company Name: _____

Primary Contact Person: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Phone Number: _____ Email Address: _____

III. Mailing Address for Facility/Site Location:

Project Name: _____

Primary Contact Person: _____

Contact's Email Address: _____

Contact's Mailing Address: _____

City: _____ State: _____ Zip Code: _____

I certify under penalty of law that all stormwater discharges associated with construction activity from the identified facility that are authorized by a SWD general permit have been eliminated. I understand that by submitting the Notice of Termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the state is unlawful under the federal Clean Water Act and the South Dakota Water Pollution Control Act if the discharge is not authorized by a SWD permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the South Dakota Water Pollution Control Act. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NOTE: Notice of Termination shall be signed by the authorized chief elective or executive officer of the applicant, or by the applicant, if an individual.

Name: _____ Title: _____

Signature: _____ Date: _____

FOR DANR USE ONLY

Permit Number: _____ Date Approved: _____ Letter Date: _____ Approved by: _____

Appendix C

Soil Maps

United States Department of Agriculture

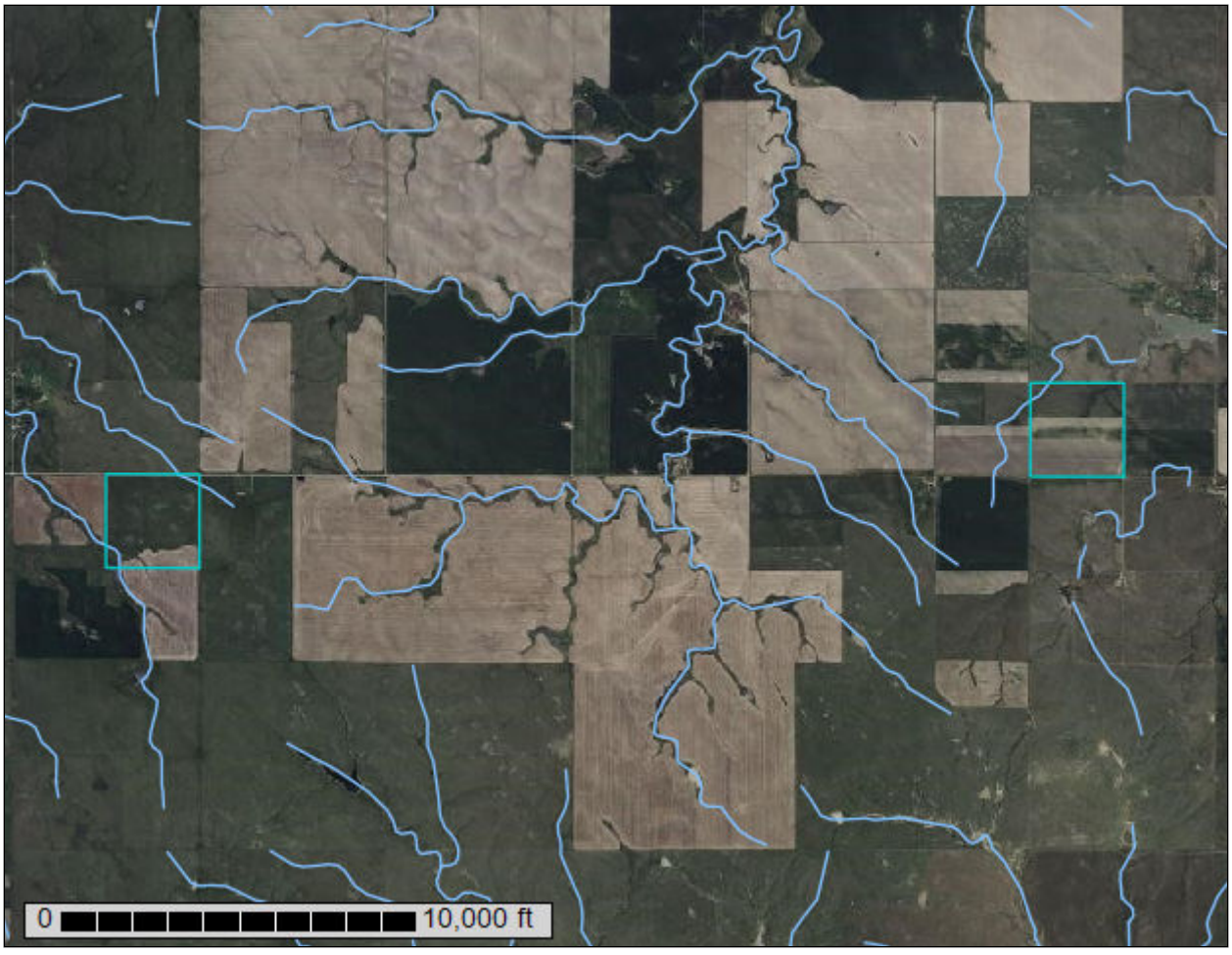
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Haakon County, South Dakota

Philip Wind PTC



March 11, 2026

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

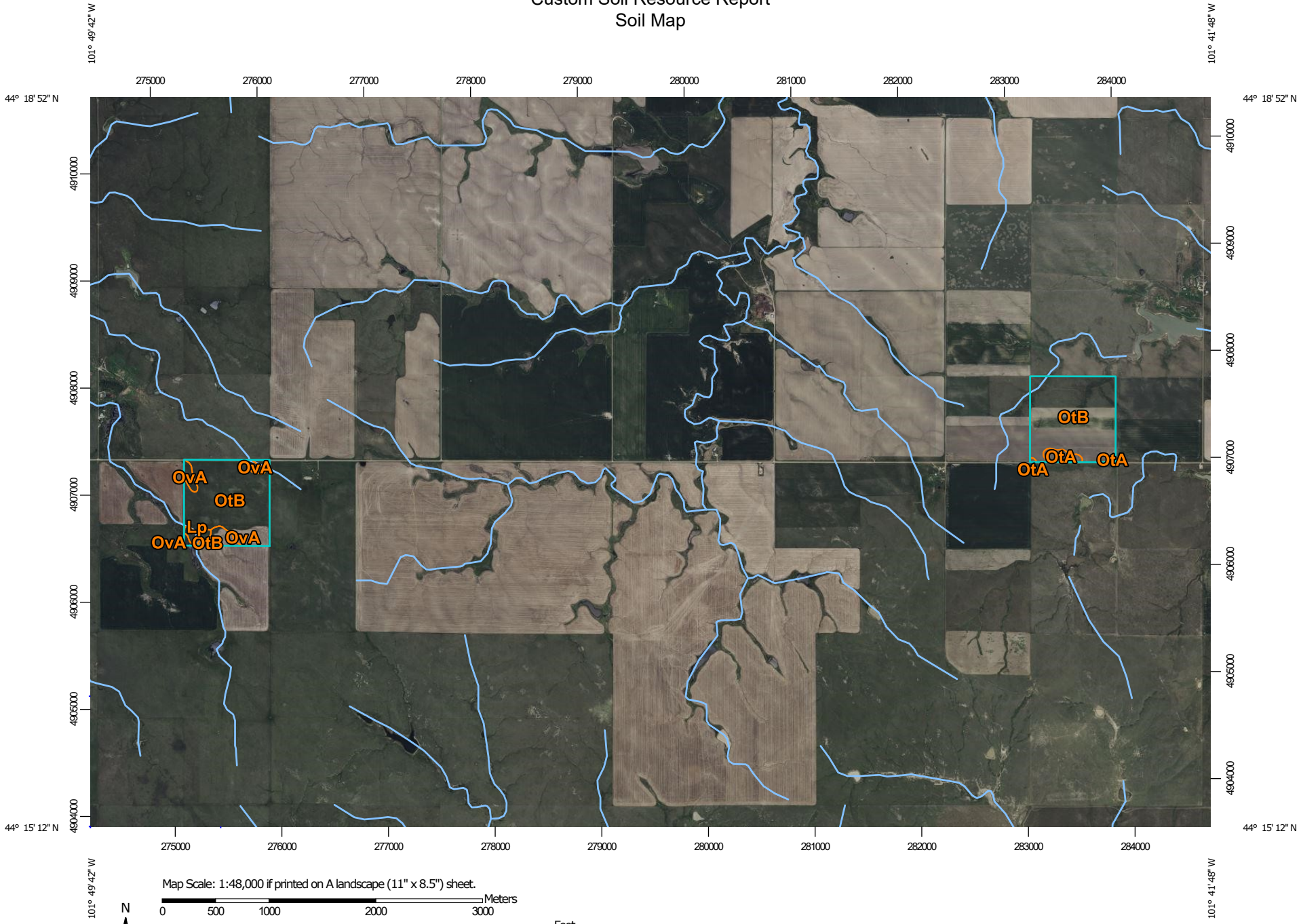
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

Soil Survey Area: Haakon County, South Dakota
Survey Area Data: Version 28, Sep 10, 2025

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

Date(s) aerial images were photographed: Jun 19, 2022—Jul 18, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Lp	Lohmiller silty clay, channeled	5.8	1.8%
OtA	Ottumwa silty clay, 0 to 3 percent slopes	10.0	3.1%
OtB	Ottumwa silty clay, 3 to 6 percent slopes	284.7	89.2%
OvA	Ottumwa-Capa complex, 0 to 3 percent slopes	18.8	5.9%
Totals for Area of Interest		**319.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Haakon County, South Dakota

Lp—Lohmiller silty clay, channeled

Map Unit Setting

National map unit symbol: cwgz
Landscape: River valleys
Elevation: 1,300 to 1,640 feet
Mean annual precipitation: 14 to 19 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Lohmiller, channeled, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lohmiller, Channeled

Setting

Landscape: River valleys
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Clayey alluvium derived from shale

Typical profile

H1 - 0 to 4 inches: silty clay
H2 - 4 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 6w
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: C
Ecological site: R063AY020SD - Loamy Overflow
Forage suitability group: Overflow (G063AY500SD)
Other vegetative classification: Overflow (G063AY500SD)
Hydric soil rating: No

Minor Components

Arvada

Percent of map unit: 3 percent
Landscape: Uplands
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R063AY015SD - Thin Claypan
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Haverson

Percent of map unit: 2 percent
Landscape: River valleys
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R063AY020SD - Loamy Overflow
Other vegetative classification: Overflow (G063AY500SD)
Hydric soil rating: No

Kyle

Percent of map unit: 2 percent
Landscape: Uplands
Landform: Alluvial fans
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R063AY011SD - Clayey
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Pierre

Percent of map unit: 2 percent
Landscape: Uplands
Landform: Dissected plains
Landform position (two-dimensional): Backslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R063AY011SD - Clayey
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Herdcamp

Percent of map unit: 1 percent
Landscape: River valleys
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R063AY002SD - Wet Land
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: Yes

OtA—Ottumwa silty clay, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: cwhl
Landscape: Uplands
Elevation: 1,300 to 1,640 feet
Mean annual precipitation: 14 to 19 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Ottumwa and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ottumwa

Setting

Landscape: Uplands
Landform: Plains
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Clayey alluvium and/or clayey residuum weathered from shale

Typical profile

H1 - 0 to 6 inches: silty clay
H2 - 6 to 26 inches: clay
H3 - 26 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 7.0
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C

Ecological site: R063AY011SD - Clayey
Forage suitability group: Clayey Subsoil (G063AY210SD)
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Minor Components

Kolls
Percent of map unit: 8 percent
Landscape: Uplands
Landform: Depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R063AY019SD - Closed Depression
Other vegetative classification: Wet (G063AY900SD)
Hydric soil rating: Yes

Capa
Percent of map unit: 7 percent
Landscape: Uplands
Landform: Terraces
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R063AY015SD - Thin Claypan
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

OtB—Ottumwa silty clay, 3 to 6 percent slopes

Map Unit Setting
National map unit symbol: cwhm
Landscape: Uplands
Elevation: 1,300 to 1,640 feet
Mean annual precipitation: 14 to 19 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Ottumwa and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ottumwa

Setting
Landscape: Uplands
Landform: Plains

Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Clayey alluvium and/or clayey residuum weathered from shale

Typical profile

H1 - 0 to 6 inches: silty clay
H2 - 6 to 26 inches: clay
H3 - 26 to 60 inches: silty clay

Properties and qualities

Slope: 3 to 6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 7.0
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R063AY011SD - Clayey
Forage suitability group: Clayey Subsoil (G063AY210SD)
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Minor Components

Capa

Percent of map unit: 5 percent
Landscape: Uplands
Landform: Terraces
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R063AY015SD - Thin Claypan
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Kolls

Percent of map unit: 5 percent
Landscape: Uplands
Landform: Depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R063AY019SD - Closed Depression
Other vegetative classification: Wet (G063AY900SD)
Hydric soil rating: Yes

Lakoma

Percent of map unit: 5 percent
Landscape: Uplands
Landform: Dissected plains
Landform position (two-dimensional): Summit, backslope
Down-slope shape: Linear
Across-slope shape: Convex, linear
Ecological site: R063AY012SD - Thin Upland
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

OvA—Ottumwa-Capa complex, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: cwhn
Landscape: Uplands
Elevation: 1,300 to 1,640 feet
Mean annual precipitation: 14 to 19 inches
Mean annual air temperature: 43 to 50 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Ottumwa and similar soils: 55 percent
Capa and similar soils: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ottumwa

Setting

Landscape: Uplands
Landform: Plains
Landform position (two-dimensional): Summit
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Clayey alluvium and/or clayey residuum weathered from shale

Typical profile

H1 - 0 to 6 inches: silty clay
H2 - 6 to 26 inches: clay
H3 - 26 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 7.0
Available water supply, 0 to 60 inches: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C
Ecological site: R063AY011SD - Clayey
Forage suitability group: Clayey Subsoil (G063AY210SD)
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Description of Capa

Setting

Landscape: Uplands
Landform: Terraces
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Clayey alluvium derived from clayey shale

Typical profile

H1 - 0 to 2 inches: silt loam
H2 - 2 to 20 inches: clay
H3 - 20 to 60 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 42 to 60 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Gypsum, maximum content: 5 percent
Maximum salinity: Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 25.0
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R063AY015SD - Thin Claypan
Forage suitability group: Not suited (G063AY000SD)
Other vegetative classification: Not suited (G063AY000SD)
Hydric soil rating: No

Minor Components

Wendte

Percent of map unit: 4 percent
Landscape: River valleys
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R063AY021SD - Clayey Overflow
Other vegetative classification: Overflow (G063AY500SD)
Hydric soil rating: No

Kolls

Percent of map unit: 3 percent
Landscape: Uplands
Landform: Depressions
Landform position (two-dimensional): Toeslope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R063AY019SD - Closed Depression
Other vegetative classification: Wet (G063AY900SD)
Hydric soil rating: Yes

Lakoma

Percent of map unit: 3 percent
Landscape: Uplands
Landform: Dissected plains
Landform position (two-dimensional): Summit, backslope
Down-slope shape: Linear
Across-slope shape: Convex, linear
Ecological site: R063AY012SD - Thin Upland
Other vegetative classification: Clayey Subsoil (G063AY210SD)
Hydric soil rating: No

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Management

Land management interpretations are tools designed to guide the user in evaluating existing conditions in planning and predicting the soil response to various land management practices, for a variety of land uses, including cropland, forestland, hayland, pastureland, horticulture, and rangeland. Example interpretations include suitability for a variety of irrigation practices, log landings, haul roads and major skid trails, equipment operability, site preparation, suitability for hand and mechanical planting, potential erosion hazard associated with various practices, and ratings for fencing and waterline installation.

Erosion Hazard (Off-Road, Off-Trail)

The ratings in this interpretation indicate the hazard of soil loss from off-road and off-trail areas after disturbance activities that expose the soil surface. The ratings are based on slope, soil erosion factor K, and an index of rainfall erosivity (R). The soil loss is caused by sheet or rill erosion in off-road or off-trail areas where 50 to 75 percent of the surface has been exposed by logging, grazing, mining, or other kinds of disturbance.

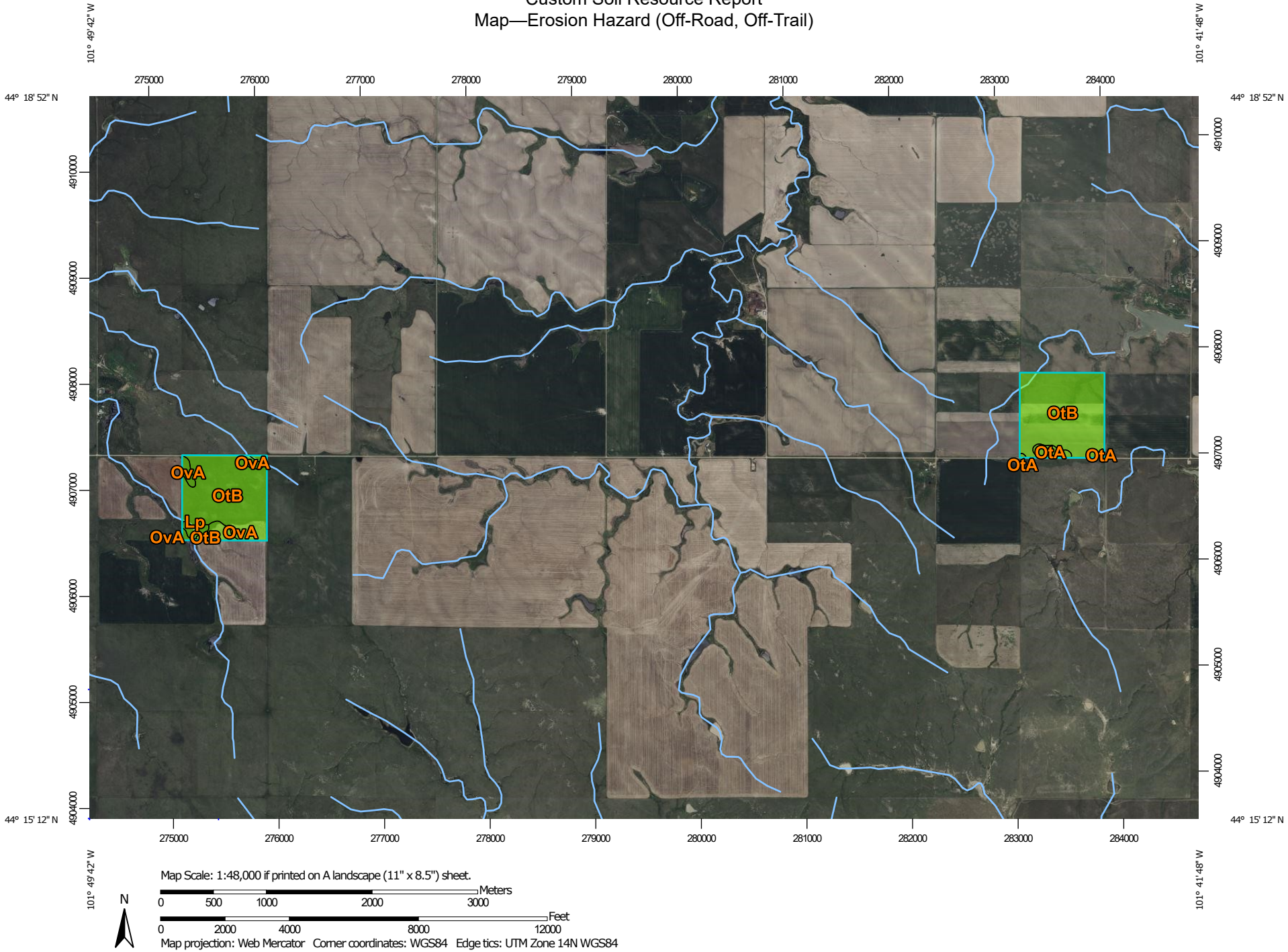
The ratings are both verbal and numerical. The hazard is described as "slight," "moderate," "severe," or "very severe." A rating of "slight" indicates that erosion is unlikely under ordinary climatic conditions; "moderate" indicates that some erosion is likely and that erosion-control measures may be needed; "severe" indicates that erosion is very likely and that erosion-control measures, including revegetation of bare areas, are advised; and "very severe" indicates that significant erosion is expected, loss of soil productivity and off-site damage are likely, and erosion-control measures are costly and generally impractical.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Custom Soil Resource Report
Map—Erosion Hazard (Off-Road, Off-Trail)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very severe
- Severe
- Moderate
- Slight
- Not rated or not available

Soil Rating Lines
- Very severe
- Severe
- Moderate
- Slight
- Not rated or not available

Soil Rating Points
- Very severe
- Severe
- Moderate
- Slight
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

Soil Survey Area: Haakon County, South Dakota
Survey Area Data: Version 28, Sep 10, 2025

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

Date(s) aerial images were photographed: Jun 19, 2022—Jul 18, 2022

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

Tables—Erosion Hazard (Off-Road, Off-Trail)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
Lp	Lohmiller silty clay, channeled	Slight	Lohmiller, channeled (90%)		5.8	1.8%
			Arvada (3%)			
			Haverson (2%)			
			Kyle (2%)			
			Herdcamp (1%)			
OtA	Ottumwa silty clay, 0 to 3 percent slopes	Slight	Ottumwa (85%)		10.0	3.1%
			Kolls (8%)			
			Capa (7%)			
OtB	Ottumwa silty clay, 3 to 6 percent slopes	Slight	Ottumwa (85%)		284.7	89.2%
			Capa (5%)			
			Kolls (5%)			
			Lakoma (5%)			
OvA	Ottumwa-Capa complex, 0 to 3 percent slopes	Slight	Ottumwa (55%)		18.8	5.9%
			Capa (35%)			
			Wendte (4%)			
			Kolls (3%)			
			Lakoma (3%)			
Totals for Area of Interest					**319.3**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Slight	319.3	100.0%
Totals for Area of Interest	**319.3**	**100.0%**

Rating Options—Erosion Hazard (Off-Road, Off-Trail)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Soil Erosion

This folder contains a collection of tabular reports that present soil erosion factors and groupings. The reports (tables) include all selected map units and components for each map unit. Soil erosion factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

RUSLE2 Related Attributes

This report summarizes those soil attributes used by the Revised Universal Soil Loss Equation Version 2 (RUSLE2) for the map units in the selected area. The report includes the map unit symbol, the component name, and the percent of the component in the map unit. Soil property data for each map unit component include the hydrologic soil group, erosion factor Kf for the surface horizon, erosion factor T, and the representative percentage of sand, silt, and clay in the mineral surface horizon. Missing surface data may indicate the presence of an organic layer.

Report—RUSLE2 Related Attributes

Soil properties and interpretations for erosion runoff calculations. The surface mineral horizon properties are displayed or the first mineral horizon below an organic surface horizon. Organic horizons are not displayed.

RUSLE2 Related Attributes–Haakon County, South Dakota

Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
Lp—Lohmiller silty clay, channeled								
Lohmiller, channeled	90	—	C	.24	5	7.2	47.8	45.0
OtA—Ottumwa silty clay, 0 to 3 percent slopes								
Ottumwa	85	—	C	.37	5	5.0	42.0	53.0

RUSLE2 Related Attributes–Haakon County, South Dakota								
Map symbol and soil name	Pct. of map unit	Slope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
OtB—Ottumwa silty clay, 3 to 6 percent slopes								
Ottumwa	85	—	C	.37	5	5.0	42.0	53.0
OvA—Ottumwa-Capa complex, 0 to 3 percent slopes								
Ottumwa	55	—	C	.37	5	5.0	42.0	53.0
Capa	35	—	D	.49	2	26.5	53.5	20.0

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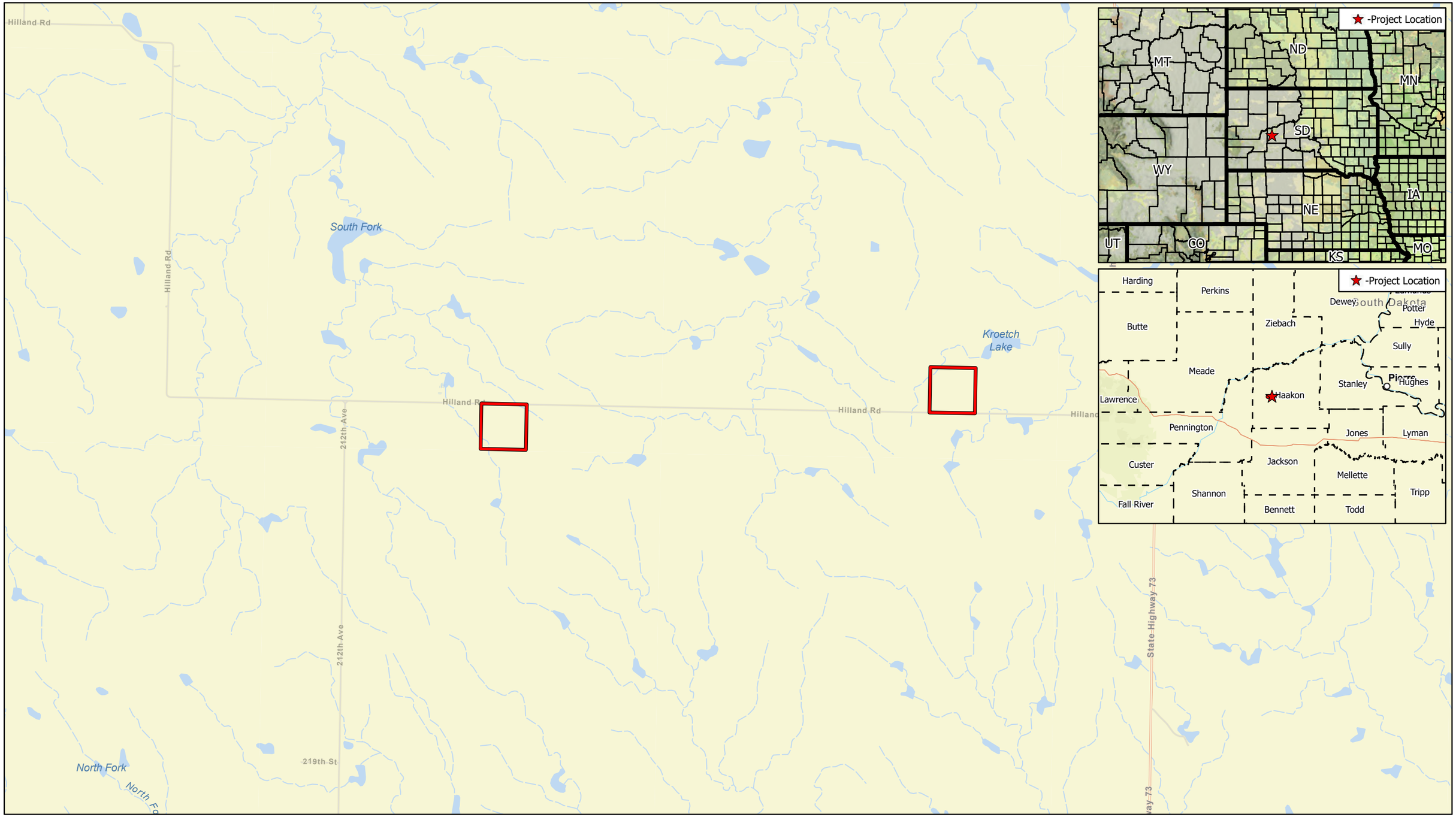
Appendix D

Pre and Post Drainage Maps, Impaired Water Maps



Data Source(s): Westwood (2026); Esri WMS Basemap Imagery (Accessed 2026); USGS (2026); FEMA (2026); USDA (2026)

Westwood
Toll Free (888) 937-5150 westwoodps.com

Legend

- Project Boundary
- County Boundary

N

0 0.5 1 Miles

Philip Wind PTC

Haakon County, SD

Vicinity Map

March 13, 2026

Data Source(s): Westwood (2026); Esri WMS Basemap Imagery (Accessed 2026); USGS (2026); FEMA (2026); USDA (2026)

Legend

- Project Boundary
- County Boundary

Westwood

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N

0 0.25 0.5 Miles

Philip Wind PTC

Haakon County, SD

USGS Topographic Map

March 13, 2026

\\westwoodps.local\Global Projects\0015504.03_GIS\R0015504.03_070_SWPPP\Philip Wind PTC\Philip Wind PTC.aprx
USGS Topo Map - USGSTopoMap | 3/13/2026 11:38 AM | Ekeith

ID #	Latitude	Longitude
1	44.281781	-101.812913
2	44.286398	-101.71289
3	44.28486	-101.713169

Name: Middle Bridger Creek
HUC 12: 101201120502
Drains to: 101201120503

Name: Headwaters of West Plum Creek
HUC 12: 101201120801
Drains to: 101201120803

Name: Kroetch Lake
HUC 12: 101201120802
Drains to: 101201120803

Name: Upper Bridger Creek
HUC 12: 101201120501
Drains to: 101201120502

Name: Upper Grindstone Creek
HUC 12: 101401020601
Drains to: 101401020602

Name: Medicine Creek
HUC 12: 101401020604
Drains to: 101401020605

213th Ave
Royer Rd
216th Ave
217th Ave
213th
Hilland Rd
Hi land Rd
Kroetch Lake
221 Ave
220th Ave
West Plum Creek
Grindstone Creek
Medicine Creek
217th St

Data Source(s): Westwood (2026); Esri WMS Basemap Imagery (Accessed 2026); USGS (2026); FEMA (2026); USDA (2026)

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Legend

- Discharge Locations
- Turbine Excavations
- NHD Flowlines
- Delineated Streams
- Delineated Wetlands
- NHD Waterbodies
- NWI Wetlands
- Disturbance Limits
- Project Boundary
- HUC12 Boundary
- County Boundary

N

0 0.25 0.5 Miles

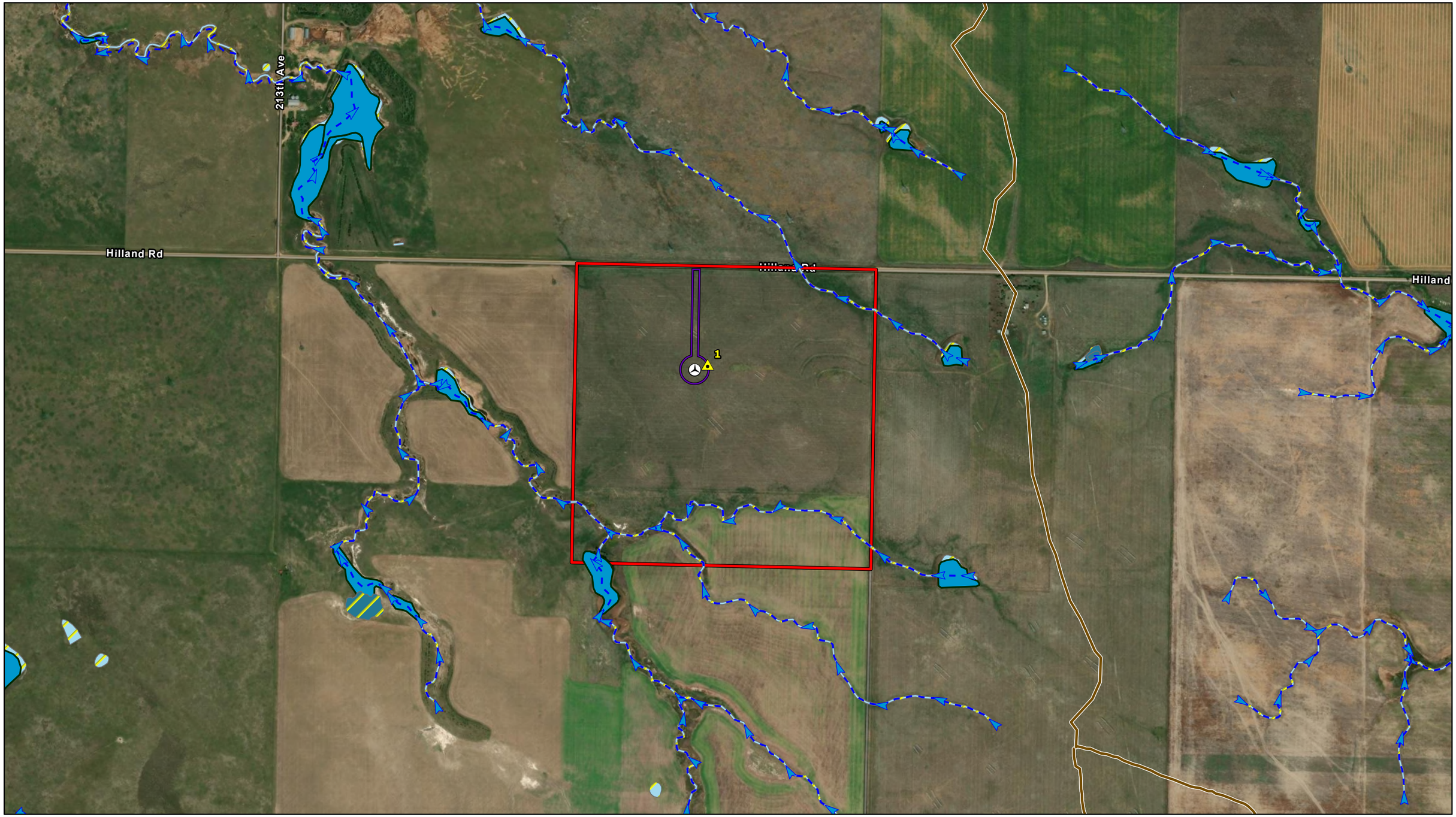
Philip Wind PTC

Haakon County, SD

Drainage Map

March 13, 2026

\\westwoodps.local\Global Projects\0015504.03_GIS\R0015504.03_070_SWPPP\Philip Wind PTC\Philip Wind PTC.aprx
Drainage Map - Drainageflags | 3/12/2026 1:28 PM | EKeith



Data Source(s): Westwood (2026); Esri WMS Basemap Imagery (Accessed 2026); USGS (2026); FEMA (2026); USDA (2026)

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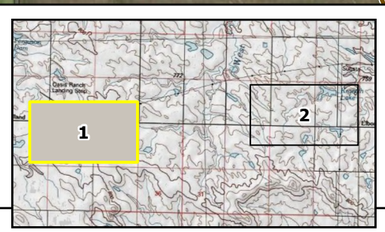
Legend

- Discharge Locations
- Turbine Excavations
- NHD Flowlines
- Delineated Streams
- Delineated Wetlands
- NHD Waterbodies
- NWI Wetlands
- Disturbance Limits
- Project Boundary
- HUC12 Boundary
- County Boundary



N

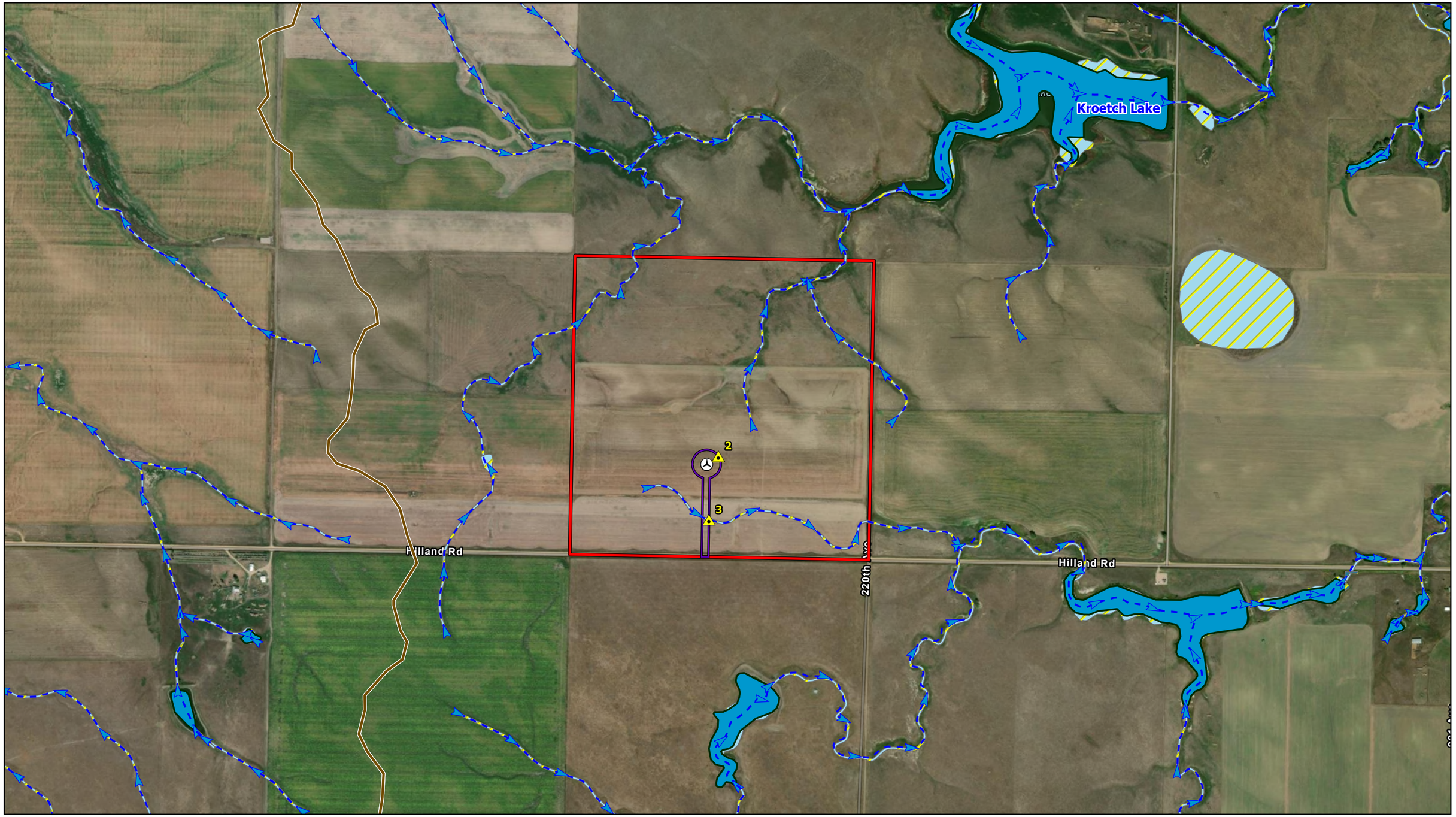
0 400 800 Feet

Philip Wind PTC

Haakon County, SD

Mapbook

March 13, 2026



Data Source(s): Westwood (2026); Esri WMS Basemap Imagery (Accessed 2026); USGS (2026); FEMA (2026); USDA (2026)

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Legend

- Discharge Locations
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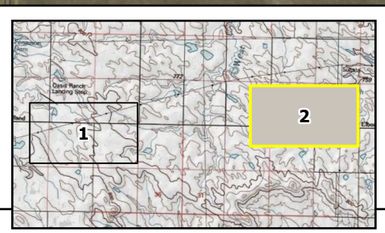

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0 400 800 Feet

Philip Wind PTC

Haakon County, SD

Mapbook

March 13, 2026

Appendix E

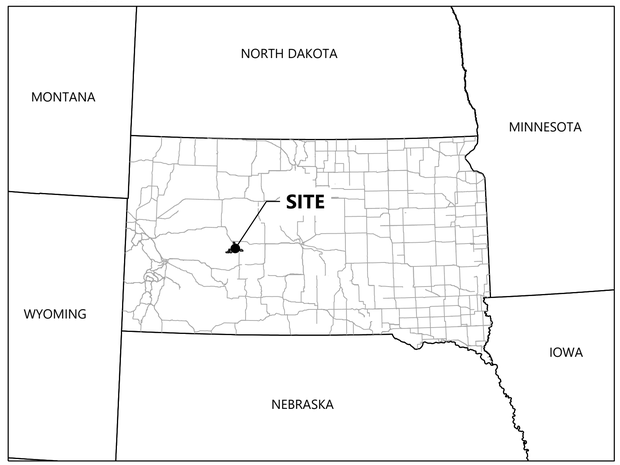
Site Plans, Erosion and Sediment Control Plans, Details

Philip Wind Project

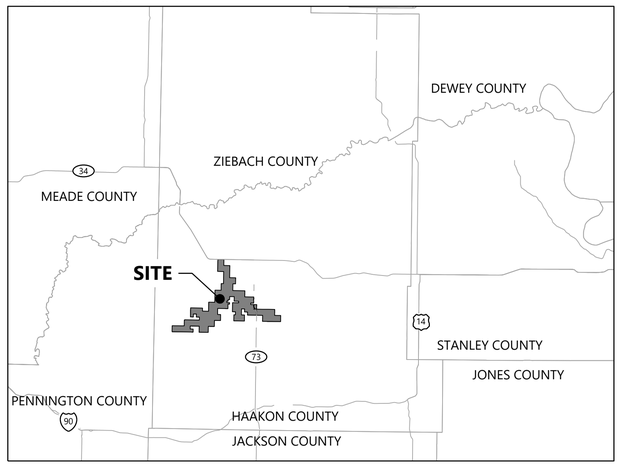
Haakon County, South Dakota

Civil Construction Plans

REGIONAL MAP



VICINITY MAP



Sheet List Table

SHEET NUMBER	SHEET TITLE
C001	Cover Sheet
C300	Overall Site Plan
C301	Site Plan T37
C302	Site Plan T59
C700	Construction Details
C701	Construction Details
C702	Construction Details
C703	Construction Notes
C704	Erosion and Sediment Control Notes

DATA SET INFORMATION			
Coordinate System	South Dakota South NAD83 (2011) SPCS US Feet		
BASE FILE	**FILE NAME / NOTES**	**PROVIDER**	**DATE**
AERIAL IMAGE	0015504_01V-AERIAL.dwg	Westwood	11/21/2024
LAND CONTROL	0015504.02V-LANDCONTROL.dwg	Invenergy	1/21/2026
ALTA SURVEY	0015504_01V-SURV.dwg	Invenergy	2/11/2026
TOPOGRAPHY	0015504.01 Philip Wind_2ft Design Surface.241126.dxf	Invenergy	1/21/2026
TURBINE ARRAY	Philip_2026 MudMats_Locations_01-28-2026. shp	Invenergy	2/24/2026
STREAMS/WETLANDS	2023-07-06_PhilipWind_WetlandShapes	INVENERGY	2/11/2026
CULTURAL RESOURCES	*	*	2/11/2026
BIOLOGICAL	*	*	*

CONTACT INFORMATION			
PROJECT ROLE	CONTACT NAME	COMPANY	PHONE
Principal Project Manager	Eric Guenther	Invenergy	(312) 761-8167
Project Manager	Steve Battaglia	Westwood	(952) 906-7405
Engineer of Record	Dave Keleher	Westwood	(952) 906-7409
Site Design Lead	Hector Rodriguez	Westwood	(214) 473-4640

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Westwood Professional Services, Inc.

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Invenergy

1401 17th Street, Suite 1100
Denver, CO 80202

REVISIONS:

#	DATE	COMMENT	BY	CHK	APR
A	02/27/2026	ISSUE FOR PERMIT	RD	HR	DK

Phillip Wind
Haakon County, South Dakota

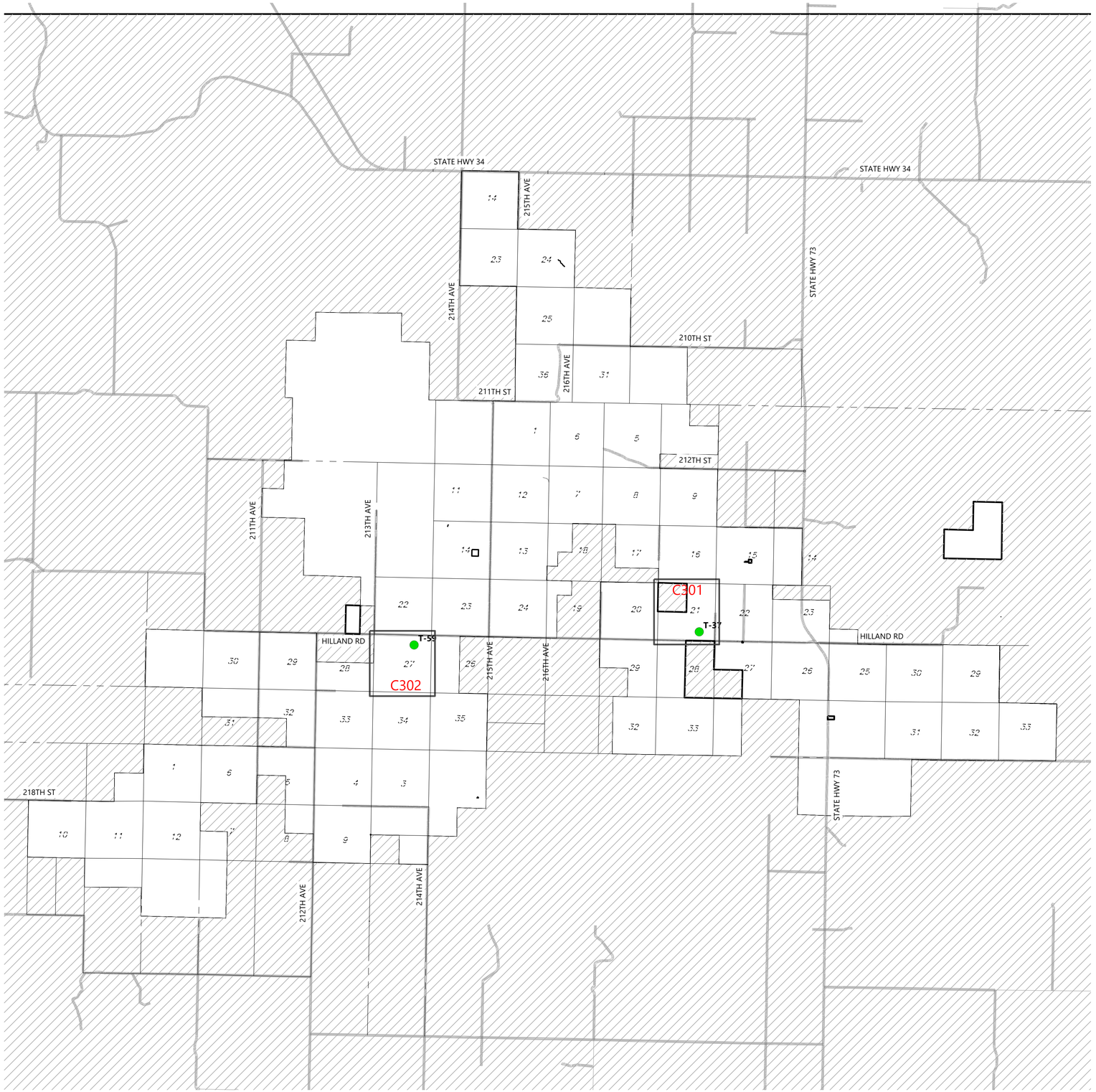
Cover Sheet

ISSUE FOR PERMIT

DATE: 02/27/2026

SHEET: C001

REV: A



LEGEND:

EXISTING:

- NON-PARTICIPATING LAND
- SECTION LINES
- SECTION NUMBERS
- ROAD

PROPOSED:

- ## FOUNDATION LOCATION
- C3XX SHEET VIEWPORT AND NUMBER REFERENCE

Turbine Index - Phillip Wind				
South Dakota South NAD83 (2011) SPCS US Feet				
Turbine ID	Latitude	Longitude	Northing	Easting
T-37	44.286203	101.713282	714794.26	1607151.91
T-59	44.281650	101.813354	713586.11	1580920.42

TURBINE INDEX NOTES:

1. TURBINE COORDINATES PROVIDED ARE FOR VERIFICATION PURPOSES. CONTRACTOR SHALL CONFIRM COORDINATES WITH OWNER AND CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION OR STAKING.
2. TURBINE COORDINATES DETERMINED FROM *Philip_2026 MudMats_Locations_01-28-2026.SHP* PROVIDED ON 2/23/2026.

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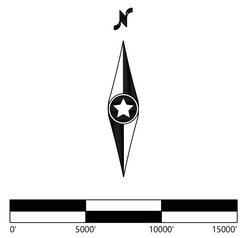


Phillip Wind

Haakon County, South Dakota

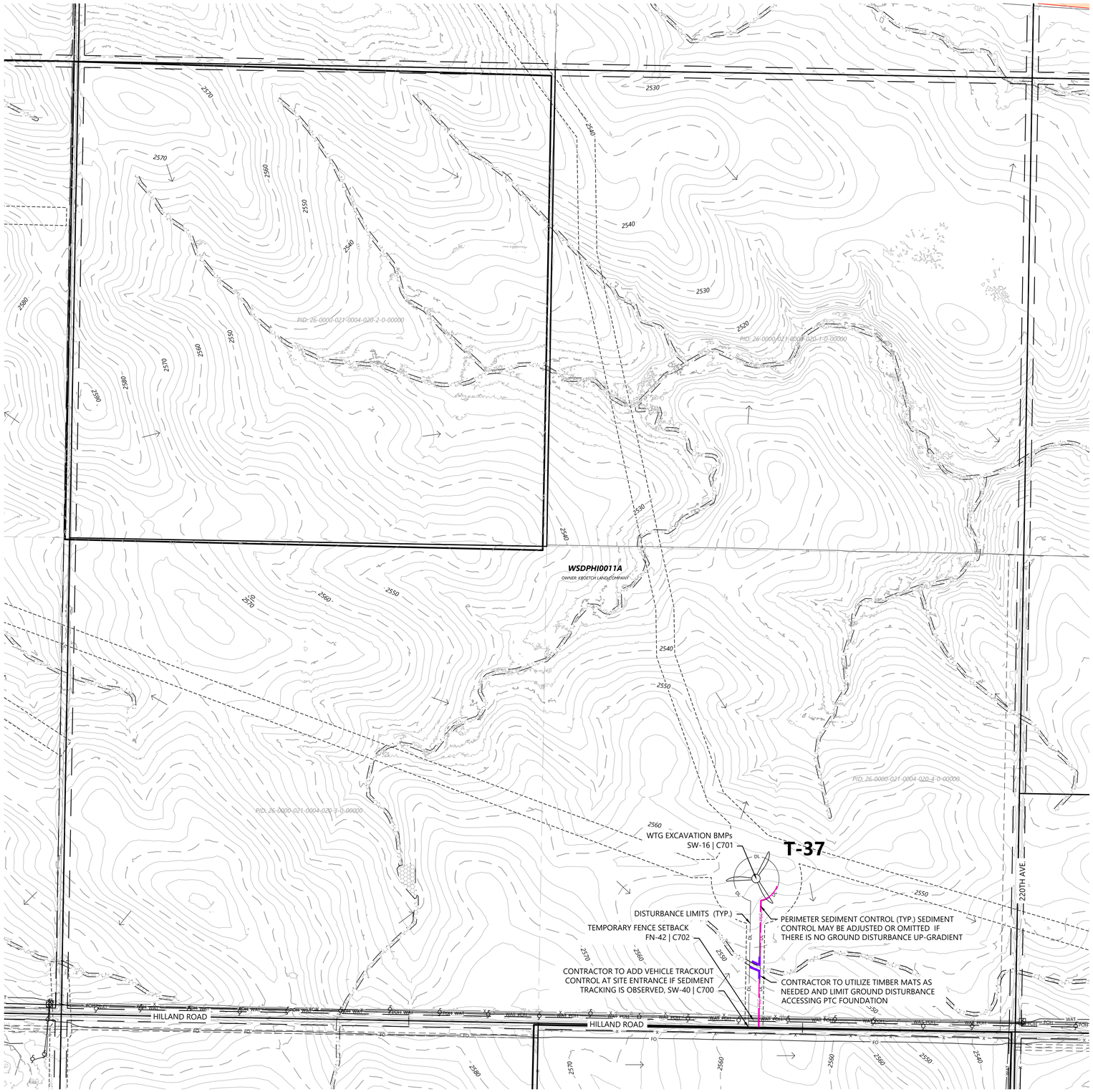
Overall Site Plan

ISSUE FOR PERMIT

DATE: 02/27/2026

SHEET: C300

REV: A



LEGEND:

EXISTING:

- SECTION LINES
- RIGHT-OF-WAY LINES
- EASEMENT LINES
- PARCEL LINES
- CULVERT
- INDEX CONTOUR
- INTERVAL CONTOUR
- DRAINAGE DIRECTION
- ROAD
- FENCE
- BUILDING
- OVERHEAD POWER
- FIBER OPTIC LINE
- GAS PIPELINE
- SURVEYED ENVIRONMENTAL CORRIDOR
- WATERCOURSE LINE (PUBLIC DATA)
- WETLAND (PUBLIC DATA)
- WETLAND (DELINEATED)

PROPOSED:

- FOUNDATION LOCATION
- DISTURBANCE LIMITS
- PERIMETER SEDIMENT CONTROL
- REDUNDANT PSC
- NON-PARTICIPATING LAND

EROSION AND SEDIMENT CONTROL NOTES:

1. REFER TO THE CONSTRUCTION GENERAL PERMIT (CGP), THE STORMWATER POLLUTION PREVENTION PLAN (SWP2), AND SHEET C704 FOR ADDITIONAL INFORMATION.
2. BEST MANAGEMENT PRACTICES (BMPS) INCLUDING PERIMETER SEDIMENT CONTROLS (PSC), TEMPORARY AND PERMANENT STABILIZATION OF DISTURBED SOILS, AND CONSTRUCTION PHASING SHALL BE IMPLEMENTED AS SPECIFIED IN THE SWP2 AND WITHIN THE APPLICABLE TIMEFRAMES OUTLINED IN THE CGP.
3. QUALIFIED, TRAINED, AND KNOWLEDGEABLE PERSONNEL SHALL BE PRESENT ON-SITE TO MANAGE THE IMPLEMENTATION OF BMPS, INSPECTIONS, AND COMPLIANCE.
4. SELECT BMP LOCATIONS ARE SHOWN ON THE PLANS. FIELD ADJUSTMENTS, ALTERNATIVES, OR ADDITIONAL BMPS MAY BE IMPLEMENTED TO ALIGN WITH THE CONTRACTOR'S MEANS AND METHODS, FIELD CONDITIONS, INSPECTIONS, AND ACTIVE CONSTRUCTION ACTIVITIES. MULTIPLE APPLICATIONS MAY BE NECESSARY.
5. REFER TO SHEETS C700-C702 FOR TYPICAL BMP APPLICATIONS INCLUDING:
   - 5.1. PERIMETER SEDIMENT CONTROLS (PSC) ALONG CONSTRUCTION PERIMETER
   - 5.2. SOIL STABILIZATION OF DISTURBED SOIL AREAS

Turbine Index - Phillip Wind				
South Dakota South NAD83 (2011) SPCS US Feet				
Turbine ID	Latitude	Longitude	Northing	Easting
T-37	44.286203	101.713282	714794.26	1607151.91
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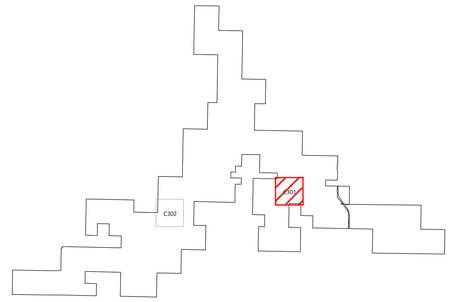
KEYMAP:



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Denver, CO 80202

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A	02/27/2026	ISSUE FOR PERMIT	RD	HR	DK

0' 300' 600' 900'

Phillip Wind

Haakon County, South Dakota

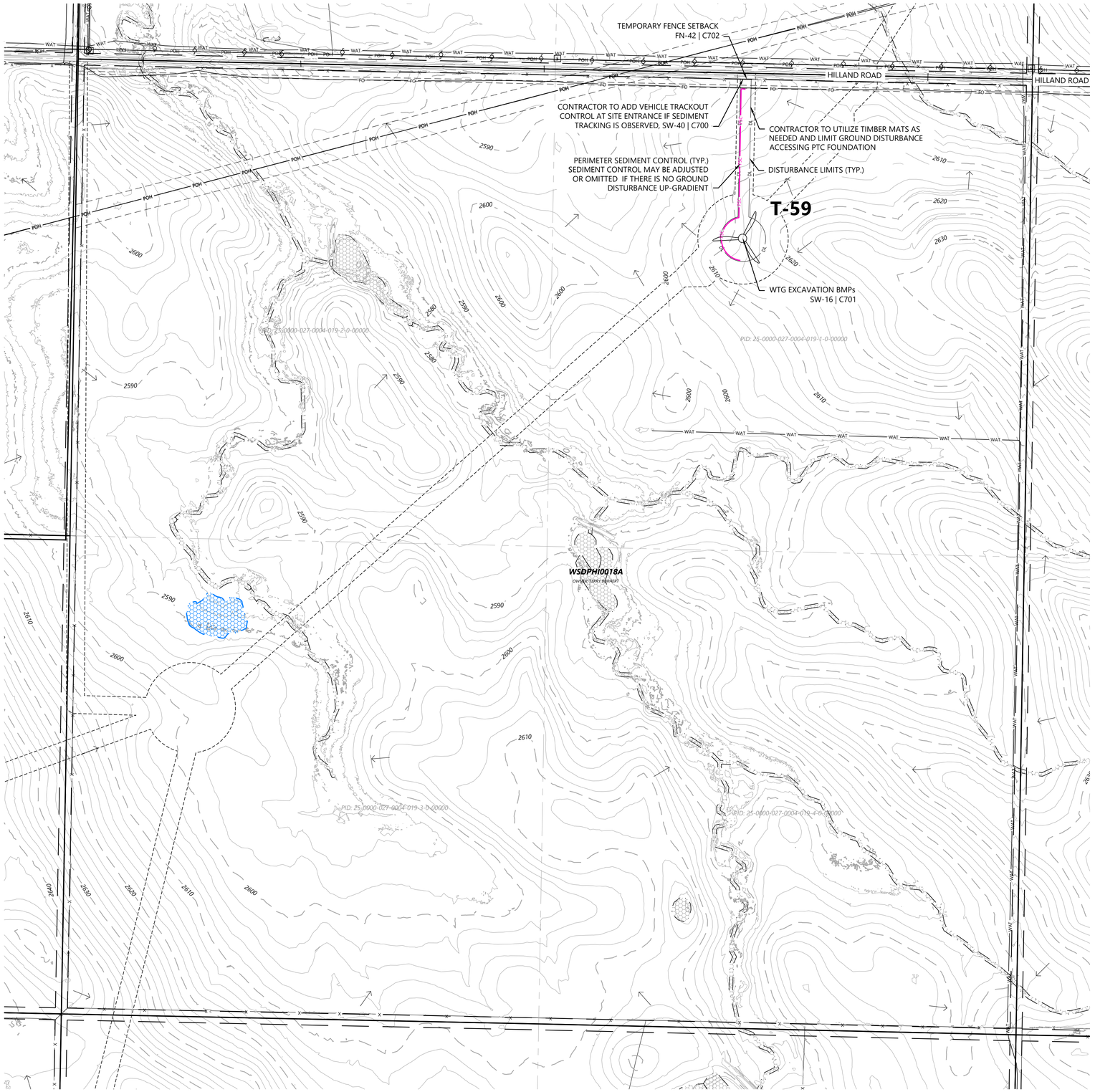
Site Plan T37

ISSUE FOR PERMIT

DATE: 02/27/2026

SHEET: C301

REV: A



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- 900 INDEX CONTOUR
- INTERVAL CONTOUR
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- GAS GAS PIPELINE
- SURVEYED ENVIRONMENTAL CORRIDOR
- WATERCOURSE LINE (PUBLIC DATA)
- WETLAND (PUBLIC DATA)
- WETLAND (DELINEATED)

PROPOSED:

- ## FOUNDATION LOCATION
- DL DISTURBANCE LIMITS
- PSC PERIMETER SEDIMENT CONTROL
- RSC REDUNDANT PSC
- NON-PARTICIPATING LAND

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Turbine ID	Latitude	Longitude	Northing	Easting
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T-59	44.281650	101.813354	713586.11	1580920.42

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2. TURBINE COORDINATES DETERMINED FROM *Philip_2026 MudMats_Locations_01-28-2026.SHP* PROVIDED ON 2/23/2026.

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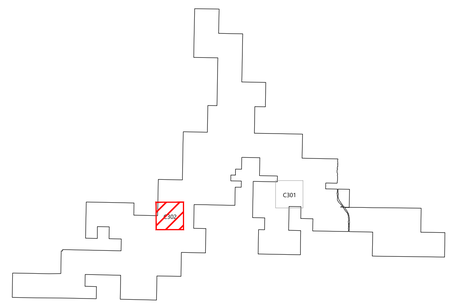

0' 300' 600' 900'

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Phillip Wind

Haakon County, South Dakota

Site Plan T59

ISSUE FOR PERMIT

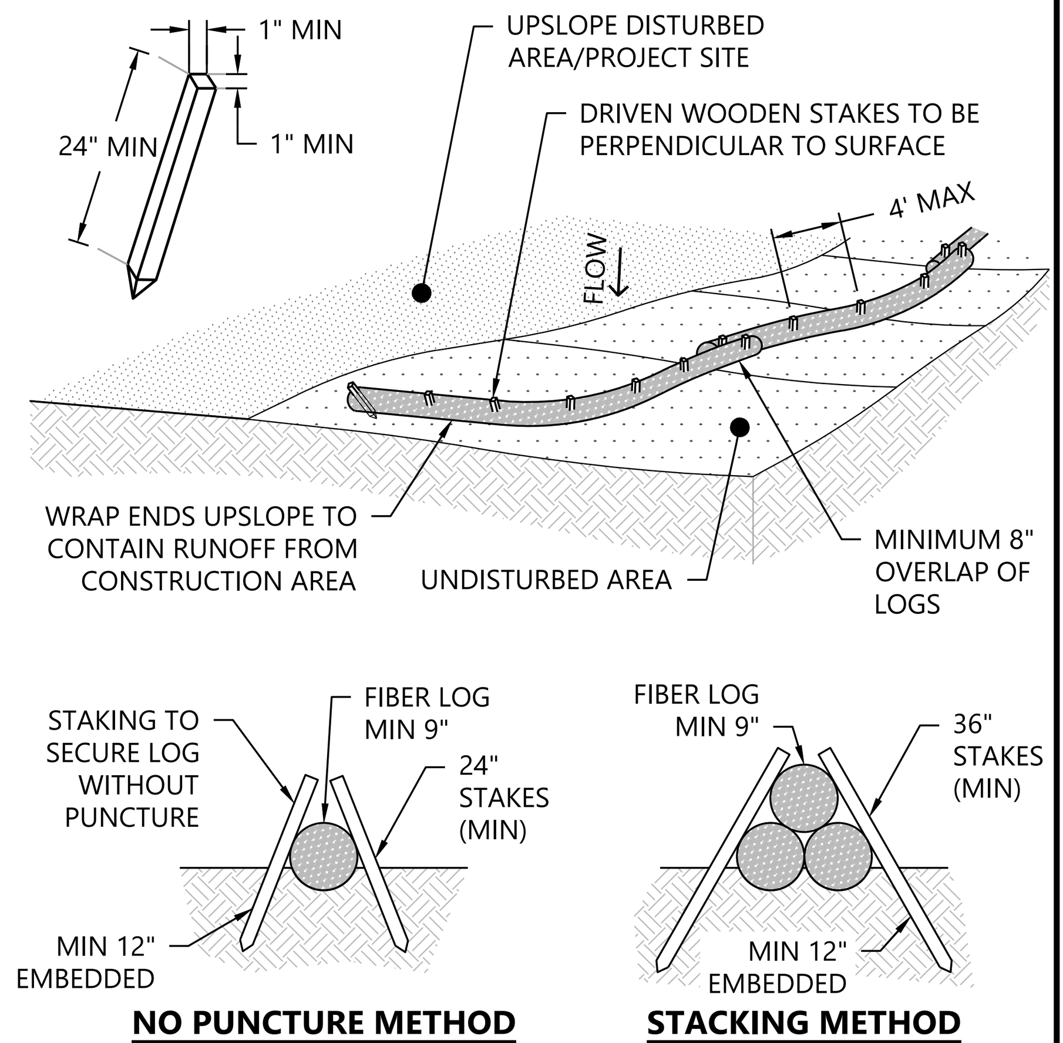
DATE: 02/27/2026

SHEET: C302

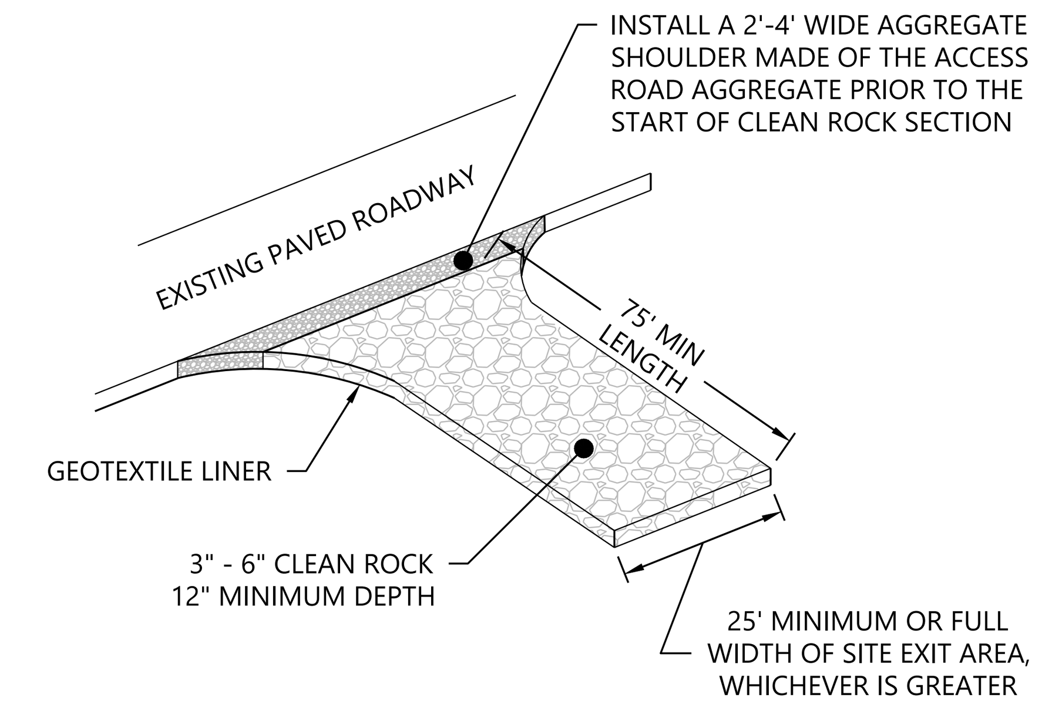
REV: A

NOTES:

1. FIBER LOGS SHALL BE INSTALLED PRIOR TO UPSLOPE DISTURBANCE ACTIVITIES COMMENCE.
2. FIBER LOGS SHALL BE PREFABRICATED AND MADE FROM CERTIFIED STRAW, WOOD, COCONUT FIBER, OR SIMILAR AGRICULTURAL MATERIAL BOUND INTO A TIGHT TUBULAR LOG BY NETTING. USE A 9" DIA. LOG MINIMUM.
3. TRENCHES SHALL BE CREATED ALONG THE SLOPE OF THE PERIMETER. THE TRENCH DEPTH SHOULD BE 1/4 TO 1/3 OF THE THICKNESS OF THE LOG, AND THE WIDTH SHOULD EQUAL THE LOG DIAMETER, IN ORDER TO PROVIDE AREA TO BACKFILL THE TRENCH.
4. STAKE FIBER LOGS INTO THE TRENCH. DRIVE STAKES AT THE END OF EACH FIBER LOG AND SPACED 4 FEET MAXIMUM ON CENTER. USE HARD WOOD STAKES WITH NOMINAL CLASSIFICATION OF AT LEAST 1" BY 1" AND A MINIMUM LENGTH OF 24". STAKES SHALL BE EMBEDDED A MINIMUM DEPTH OF 12".
5. LOGS SHALL BE INSTALLED PERPENDICULAR TO WATER MOVEMENT, AND PARALLEL TO THE SLOPE CONTOUR.
6. TURN THE ENDS OF THE FIBER LOGS UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE LOG. THE UPSLOPE POINT SHOULD BE A MINIMUM 12" HIGHER IN ELEVATION THAN THE LOW POINT.
7. IF MORE THAN ONE FIBER LOG IS PLACED IN A ROW, THE LOGS SHOULD BE OVERLAPPED A MINIMUM OF 8 INCHES, NOT ABUTTED.
8. FIBER LOGS ENCASED WITH PLASTIC NETTING ARE USED FOR A TEMPORARY APPLICATION ONLY AND SHOULD BE REMOVED FOLLOWING STABILIZATION. FIBER LOGS USED IN A PERMANENT APPLICATION SHALL BE ENCASED WITH A BIODEGRADABLE MATERIAL AND MAY BE LEFT IN.
9. TEMPORARY INSTALLATIONS SHOULD ONLY BE REMOVED WHEN UP GRADIENT AREAS ARE STABILIZED PER GENERAL PERMIT REQUIREMENTS, AND/OR POLLUTANT SOURCES NO LONGER PRESENT A HAZARD. BUT, THEY SHOULD ALSO BE REMOVED BEFORE VEGETATION BECOMES TOO MATURE SO THAT THE REMOVAL PROCESS DOES NOT DISTURB MORE SOIL AND VEGETATION THAN IS NECESSARY.
10. FIBER LOGS MUST BE INSPECTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS FOR THE ASSOCIATED PROJECT TYPE AND RISK LEVEL.
11. REPAIR OR REPLACE SPLIT, TORN, UNRAVELING, OR SLUMPING FIBER LOGS.
12. SEDIMENT THAT ACCUMULATES UPSLOPE OF THE BMP SHOULD BE PERIODICALLY REMOVED IN ORDER TO MAINTAIN BMP EFFECTIVENESS. REFER TO CONSTRUCTION GENERAL PERMIT FOR SEDIMENT ACCUMULATION MAINTENANCE INTERVALS.
13. RILL, UNDERMINING, AND/OR GULLIES MAY BEGIN TO FORM FOLLOWING MAJOR STORM EVENTS WHERE RUNOFF HAS OVERTOPPED THE FIBER LOGS. THESE RILLS OR GULLIES SHOULD BE PROMPTLY REPAIRED.



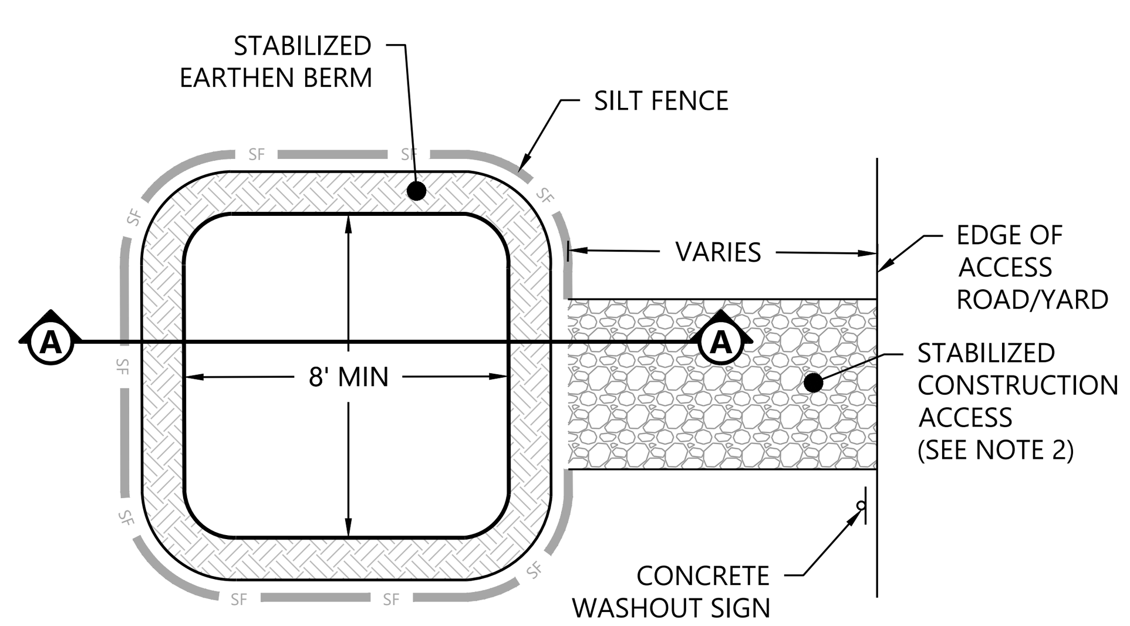
Westwood | PERIMETER SEDIMENT CONTROL - FIBER LOGS | NOT TO SCALE | SW-13



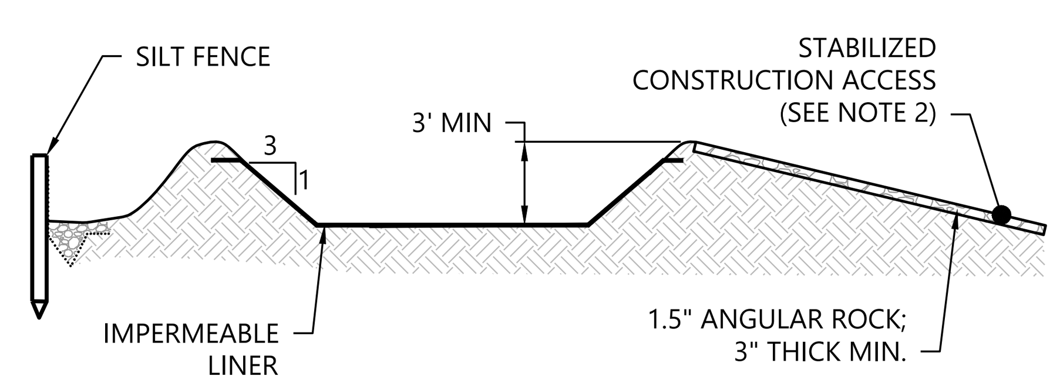
NOTES:

1. IF SEDIMENT TRACKING IS OBSERVED ON EXISTING PAVED ROADWAY, THE CONTRACTOR SHALL SCRAPE AND SWEEP THE SURFACE WITH A PICKUP BROOM ATTACHMENT OR VEHICLE.
2. REGULAR INSPECTION AND MAINTENANCE SHALL BE PERFORMED OVER LIFE OF USE.
3. LENGTH MAY NEED TO BE EXTENDED AS NECESSARY TO IMPROVE PERFORMANCE.
4. CLEAN ROCK MATERIAL SHALL BE SET BACK 2'-4' FROM THE EXISTING PAVED ROAD TO PROTECT INTEGRITY OF THE PAVEMENT.
5. CONTRACTOR SHALL REPAIR DAMAGE TO THE PUBLIC ROAD/SHOULDER IN THE IMMEDIATE VICINITY OF THE ROCK EXIT CAUSED BY CONSTRUCTION ACTIVITIES.

Westwood | VEHICLE TRACKOUT CONTROL - ROCK EXIT | NOT TO SCALE | SW-40



PLAN VIEW

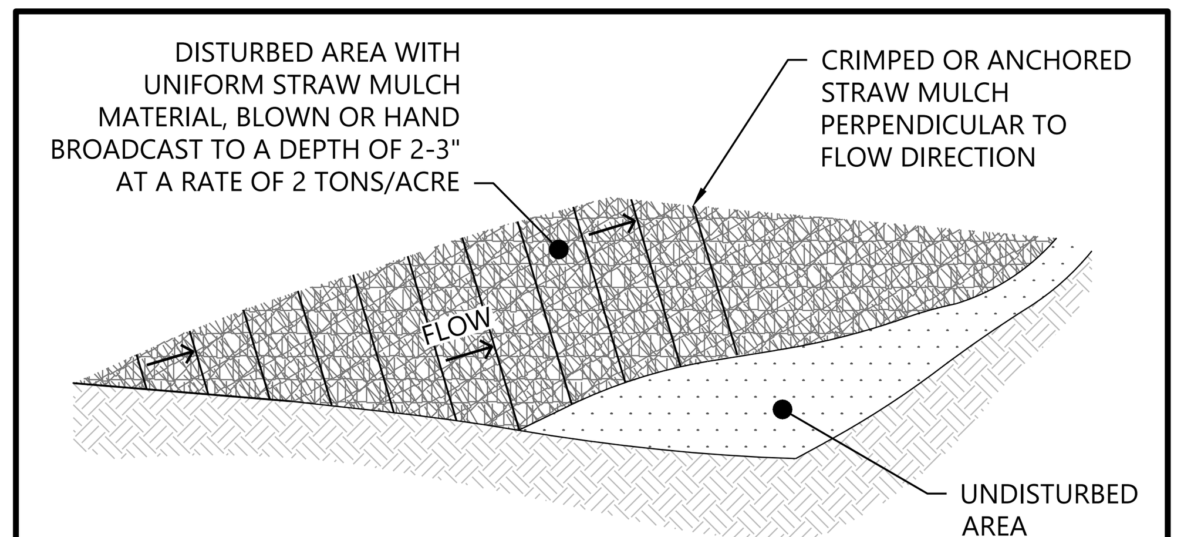


SECTION A-A

NOTES:

1. CONCRETE WASHOUT AREAS SHALL BE LINED WITH A 10 MIL PLASTIC IMPERMEABLE LINER TO PREVENT CONCRETE WASHOUT WATER FROM INFILTRATING/CONTACTING WITH SOIL.
2. PROVIDE STABILIZED CONSTRUCTION ACCESS IF SEDIMENT TRACKING CONTROLS ARE NECESSARY.
3. ALTERNATE WASHOUT SYSTEMS MAY BE USED IF APPROVED.
4. REFER TO PROJECT NPDES PERMIT FOR ADDITIONAL CONSTRUCTION, MAINTENANCE, AND REMOVAL REQUIREMENTS

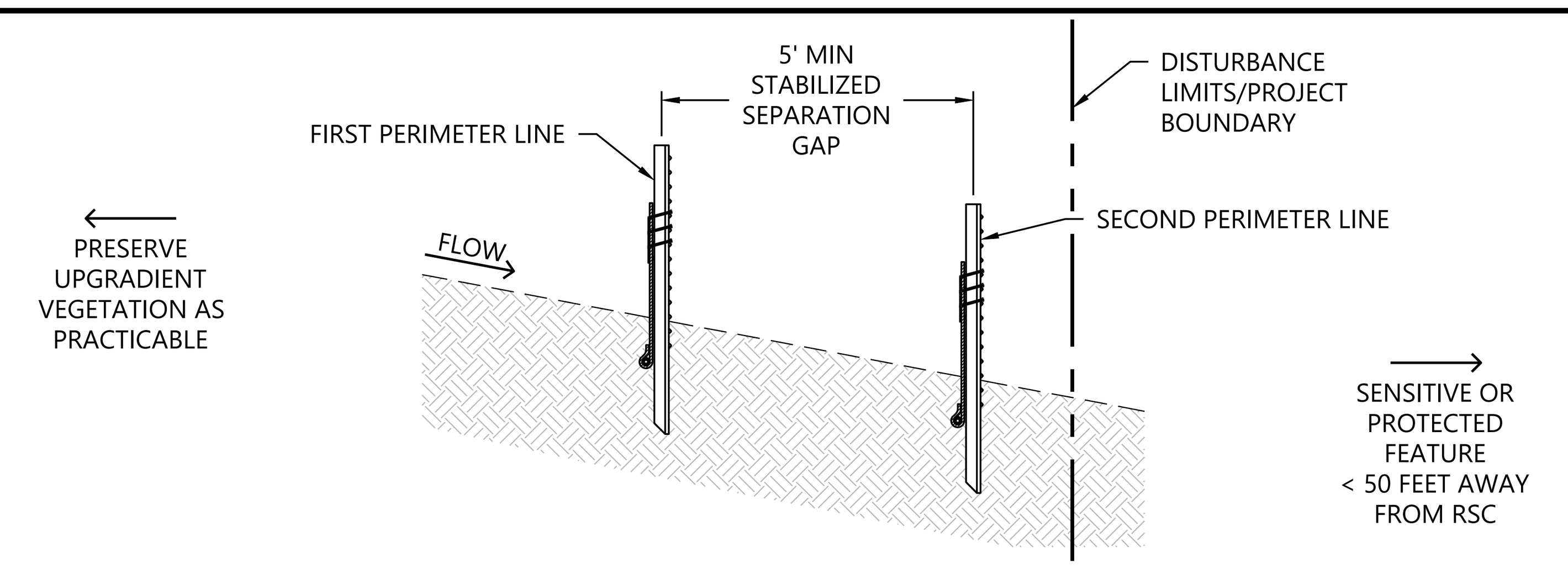
Westwood | CONCRETE WASHOUT AREA | NOT TO SCALE | SW-60



NOTES:

1. STRAW MULCH IS INTENDED TO BE USED AS AN IMMEDIATE TEMPORARY STABILIZATION COVER FOR DISTURBED SLOPES THAT HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED.
2. STRAW MULCH CAN BE APPLIED BY HAND BROADCASTING OR MACHINE BLOWN ONTO THE SLOPE TO ACHIEVE UNIFORM COVER.
3. STRAW MULCH IS TYPICALLY SUITABLE FOR SLOPES 4:1 AND FLATTER. SLOPES STEEPER THAN 4:1 SHALL USE EROSION CONTROL BLANKET OR SUITABLE ALTERNATIVE.
4. STRAW MULCH SHALL NOT BE APPLIED TO AREAS OF CONCENTRATED FLOW.
5. TO INCREASE THE EFFECTIVENESS OF THE MULCH COVER AGAINST WIND AND WATER EROSION, ANCHORING MAY BE APPLIED, POTENTIAL METHODS INCLUDE:
   - 5.1. HAND PUNCHING - HAND TOOLS CAN BE USED TO PUNCH THE STRAW INTO THE GROUND UNTIL ALL AREAS HAVE STRAW STANDING PERPENDICULAR TO THE SLOPE AND EMBEDDED AT LEAST 4" INTO THE GROUND. IT SHOULD BE PUNCHED ABOUT 12" APART.
   - 5.2. ROLLER PUNCHING - A ROLLER EQUIPPED WITH STRAIGHT STUDS NOT LESS THAN 6" LONG, FROM 4-6" WIDE, AND APPROXIMATELY 1" THICK IS ROLLED OVER THE STRAW MULCH.
   - 5.3. TRACKING - A BULLDOZER OR OTHER EQUIPMENT WITH CLEATED TRACKS, IS USED TO PUSH THE STRAW INTO THE SOIL. USED ONLY ON SLOPES WHERE THIS TYPE OF EQUIPMENT CAN SAFELY OPERATE. TRACKING EQUIPMENT MUST OPERATE UP AND DOWN THE SLOPE SO THE CLEAT TRACKS ARE PERPENDICULAR TO FLOW.
   - 5.4. DISK ANCHORING/CRIMPER PUNCHING - DISK ANCHORING IS TYPICALLY PERFORMED WITH A TRACTOR AND TANDEM STRAIGHT DISK PLOW. DISK SPACING SHOULD BE BETWEEN 4-8" APART. WEIGHT CAN BE ADDED TO TOW PLOW, AS NECESSARY, TO FORCE THE STRAW MULCH INTO THE SOIL. DISKING SHOULD BE DONE IN TWO DIRECTIONS WITH THE FINAL PASS ACROSS THE SLOPE.
   - 5.5. NETTING - NETTING MAY BE USED TO SECURE APPLIED MULCH ON STEEPER SLOPES (> 4:1) WHERE MULCH CANNOT BE PUNCHED WITH A ROLLER OR BY HAND. JUTE, WOOD EXCELSIOR OR PLASTIC NETTING IS APPLIED OVER UNPUNCHED STRAW MULCH AND ANCHORED WITH SOD STAPLES.
   - 5.6. TACKIFIER - ON STEEP SLOPES (> 4:1), A TACKIFIER AGENT MAY BE USED TO BOND OR GLUE THE MULCH THAT HAS BEEN SEEDED AND DISK ANCHORED ON THE SLOPE. THIS METHOD INCREASES THE LONGEVITY AND EFFECTIVENESS AND MAY REDUCE THE NEED FOR EROSION CONTROL BLANKETS ON STEEP SLOPES, WHEN PROPERLY APPLIED.

Westwood | STRAW MULCH - APPLICATION AND ANCHORING METHODS | NOT TO SCALE | SW-80



PROFILE VIEW

NOTES:

1. REDUNDANT PERIMETER SEDIMENT CONTROL (RSC) IS REQUIRED TO BE USED WHEN SOIL DISTURBANCE ACTIVITIES TAKE PLACE WITHIN THE 50' BUFFER OF A SENSITIVE OR PROTECTED FEATURE.
2. THE FIRST LINE (NEAREST THE LAND DISTURBANCE) OF PERIMETER SEDIMENT CONTROL SHOULD BE THE MOST ROBUST TO CONTAIN THE LARGEST LOAD OF DEBRIS, SEDIMENT AND SLOUGH IMPACTS.
3. THE TYPES OF REDUNDANT PERIMETER SEDIMENT CONTROLS SELECTED IS A FUNCTION OF THE TYPE OF WORK, WORK LIMITS, SLOPE STEEPNESS, SLOPE LENGTH, TIME OF YEAR AND ABILITY TO PROPERLY MAINTAIN AND MAY VARY ACROSS A PROJECT. THE IMAGE ABOVE IS A PICTORIAL REPRESENTATION ONLY, OTHER TYPES OF CONTROLS MAY BE USED.
4. STAGE AND PHASE DISTURBANCE TO THE SHORTEST PRACTICABLE TIME WHEN WORK ACTIVITIES ARE PLANNED NEAR SENSITIVE OR PROTECTED FEATURES.
5. ENSURE STABILIZATION OCCURS WITHIN THE NPDES PERMIT TIMEFRAMES AND AS RAPIDLY AS POSSIBLE NEAR SENSITIVE OR PROTECTED FEATURES.
6. INSPECT AND REPAIR PERIMETER SEDIMENT CONTROLS AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO **1/3 HEIGHT** OF THE CONTROL OR MORE.

Westwood | REDUNDANT PERIMETER SEDIMENT CONTROL | NOT TO SCALE | SW-91

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Haakon County, South Dakota

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ISSUE FOR PERMIT

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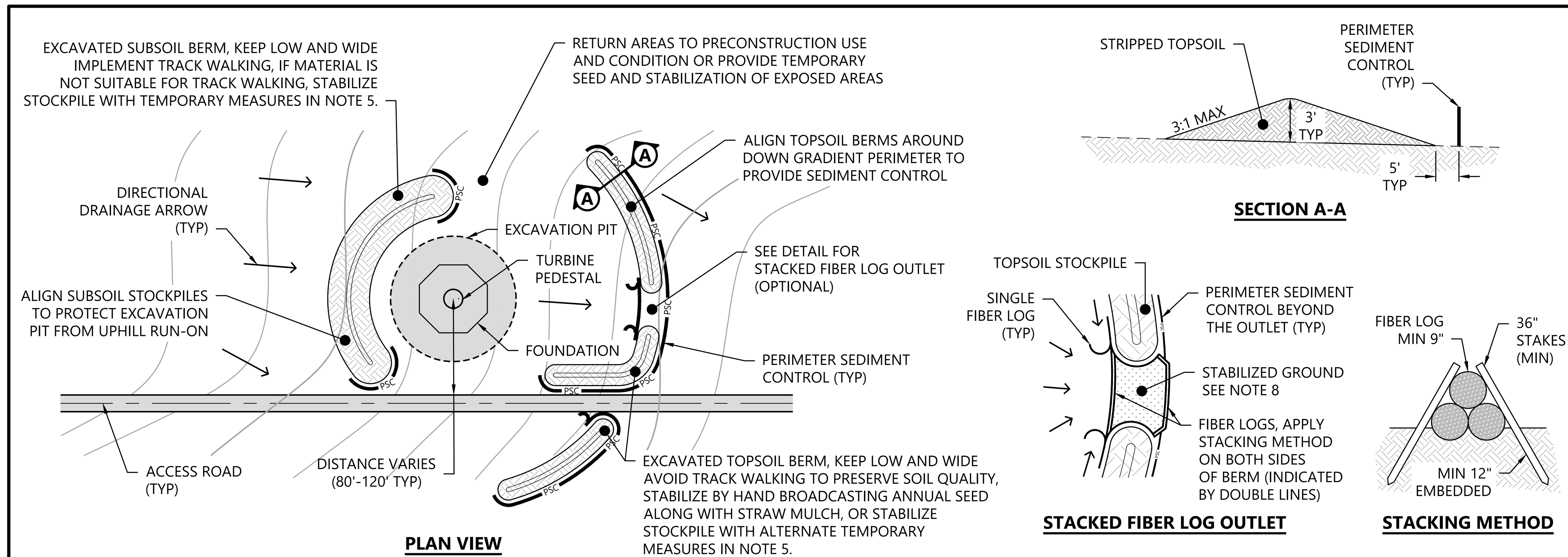
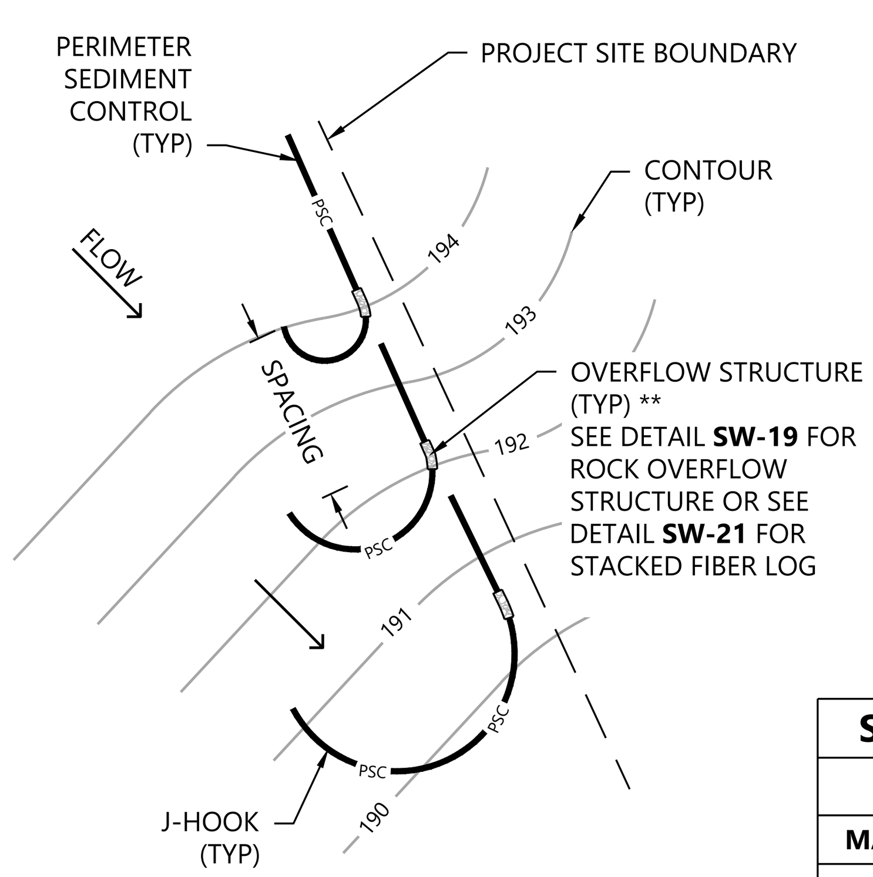


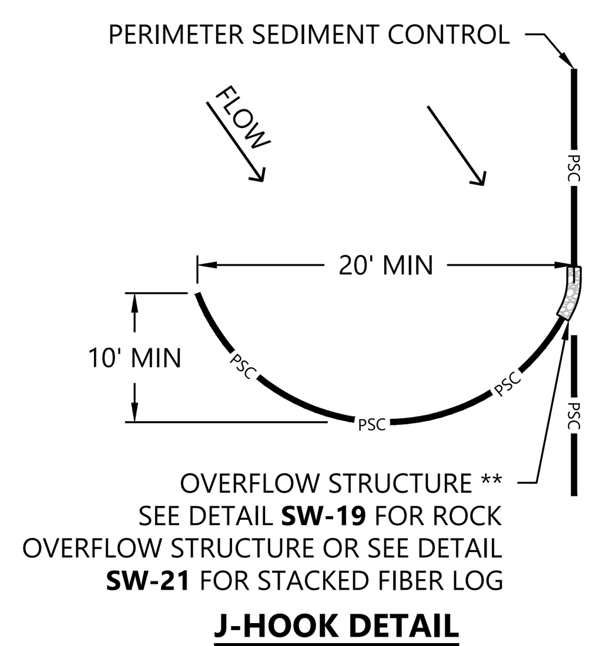
NOTES:

1. REFER TO NPDES PERMIT FOR SPECIFICATIONS OF EROSION AND SEDIMENT CONTROL MEASURES.
2. REDUNDANT PERIMETER SEDIMENT CONTROL IS REQUIRED WITHIN 50' OF WETLANDS AND STREAMS.
3. TERMINAL ENDS OF TOPSOIL BERM SHOULD BE HIGHER IN ELEVATION THAN THE TOP OF BERM.
4. MULTIPLE STACKED FIBER LOG OUTLETS MAY BE NEEDED, CONTRACTOR TO FIELD FIT AS NECESSARY. STACKED FIBER LOGS ARE OPTIONAL TO MINIMIZE WATER ACCUMULATION WITHIN PAD AREA.
5. TEMPORARY STABILIZATION FOR STOCKPILES MAY CONSIST OF HYDROMULCH, SOIL STABILIZER, OR TACKIFIER.
6. PERIMETER SEDIMENT CONTROL MAY CONSIST OF SILT FENCE, FIBER LOGS, OR WOOD MULCH BERMS. REFER TO APPROPRIATE DETAIL FOR INSTALLATION REQUIREMENTS. LOCATION OF PERIMETER SEDIMENT CONTROL MAY VARY DEPENDING UPON THE TERRAIN AT THE TURBINE SITE.
7. ALTERNATE BERM PLACEMENT OPTION - PLACE TOPSOIL BERM ALONG THE UP-GRADIENT PERIMETER. THIS WILL ACT AS A DIVERSION BERM TO ROUTE RUN-ON FLOWS AROUND THE PAD. INSTALL PERIMETER SEDIMENT CONTROL ALONG THE DOWN-GRADIENT SIDE OF THE PAD.
8. EROSION CONTROL BEST PRACTICES TO BE APPLIED TO ALL DISTURBED SOILS BETWEEN AND DOWNGRADIENT OF THE STACKED FIBER LOGS. STABILIZE GROUND BETWEEN THE STACKED FIBER LOGS WITH STRAW OR EROSION CONTROL BLANKET FOR STEEPER SLOPES, GREATER THAN OR EQUAL TO 3:1.

Westwood | TURBINE SITE - TOPSOIL BERM WITH STACKED FIBER LOG OUTLET | NOT TO SCALE | SW-16



** OVERFLOW STRUCTURES MAY BE OMITTED WHEN FIBER LOGS ARE UTILIZED AS PERIMETER SEDIMENT CONTROL (PSC)



SPACING RECOMMENDATIONS

MATERIAL	SLOPE	SOIL TYPE: SILTY	CLAYS	SANDY
SILT FENCE	3:1	75 FT	100 FT	125 FT
	4:1	100 FT	125 FT	150 FT
	≤10:1	125 FT	150 FT	200 FT
9" FIBER LOG	≤3%	46 FT	56 FT	75 FT

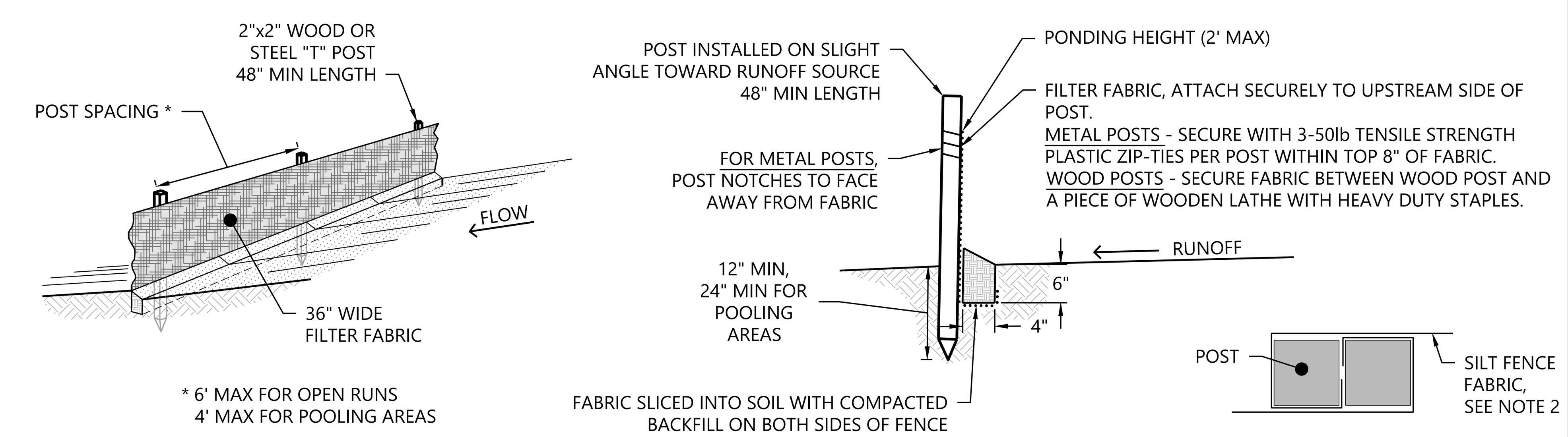
APPLICATION NOTES:

1. INSTALL J-HOOKS WHENEVER THE PERIMETER SEDIMENT CONTROL (PSC) BARRIER IS INSTALLED AT AN ANGLE OF 30 DEGREES OR GREATER FROM PARALLEL TO CONTOURS.
2. ADHERE TO J-HOOK SPACING REQUIREMENTS ACCORDING TO SURFACE SLOPE DETAILED IN TABLE.
3. WHERE MINIMUM HOOK DIMENSIONS SHOWN CANNOT BE ACHIEVED, NARROWER HOOKS MAY BE USED WITH HIGHER FREQUENCY SPACING.
4. WHERE PONDING DEPTH BEGINS TO EXCEED 1.5 FEET OR THE PSC BARRIER AND ROCK OUTLET OTHERWISE FAIL TO PROVIDE CONTROL, FREQUENCY AND SIZING OF J-HOOKS MUST BE ADJUSTED TO REMEDY THE ISSUE.
5. WHEN OVERLAND SHEET FLOW SLOPE IS LESS THAN OR EQUAL TO 3%, FIBER LOGS MAY BE USED AS PERIMETER SEDIMENT CONTROL. IF SHEET FLOW SLOPE IS GREATER THAN 3%, SILT FENCE MUST BE USED.

INSTALLATION NOTES:

1. INSTALL J-HOOK LOCATED IMMEDIATELY DOWN GRADIENT FROM THE ROCK OUTLET TO ENSURE THE WATER IS NOT DIVERTED TO THE LOWEST AREAS WHERE A COMPLEX SLOPE EXISTS.
2. UP-GRADIENT PSC BARRIER AND J-HOOK ARE ONE CONTINUOUS BARRIER.
3. START DOWN-GRADIENT PSC BARRIER AS CLOSE AS POSSIBLE TO THE UP-GRADIENT J-HOOK.
4. BOTTOM OF PSC BARRIER ELEVATIONS AT THE END OF J-HOOK NEED TO BE HIGHER THAN THE TOP OF BARRIER ELEVATIONS AT THE MIDDLE OF J-HOOK.
5. TOP OF BARRIER ELEVATIONS AT THE MIDDLE OF J-HOOK NEED TO BE HIGHER THAN THE ROCK OUTLET ELEVATIONS.

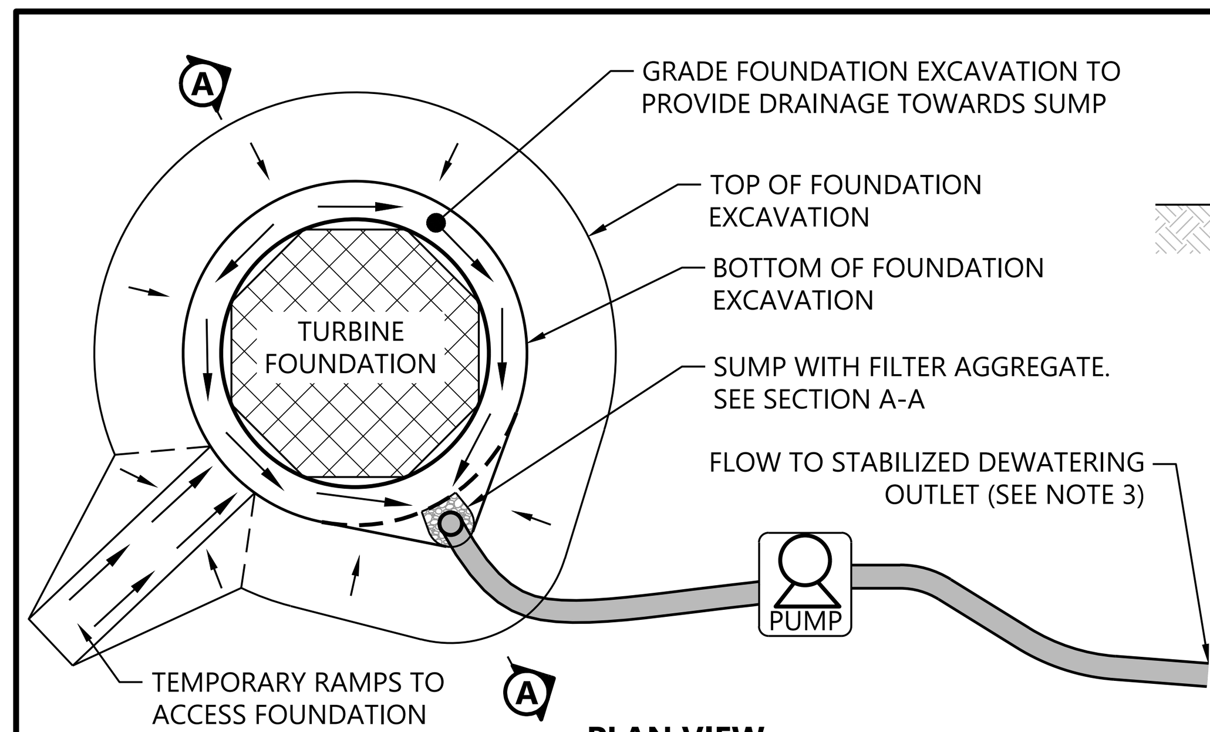
Westwood | PERIMETER SEDIMENT CONTROL - J-HOOK APPLICATION | NOT TO SCALE | SW-18

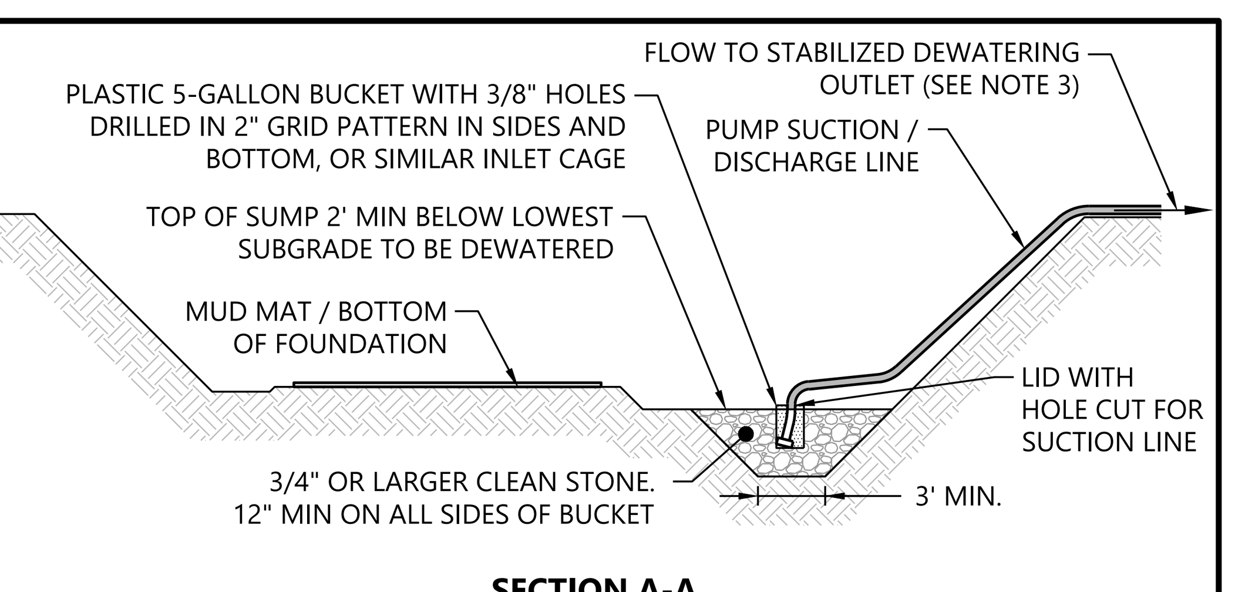


NOTES:

1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST. WHERE FABRIC ENDS MEET, WRAP AND TWIST THE FABRIC AROUND THE POST FOR A SECURE CONNECTION.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
4. ALL ENDS OF THE SILT FENCE SHALL BE WRAPPED UPSLOPE SO THE ELEVATION OF THE BOTTOM OF FABRIC IS HIGHER THAN "PONDING HEIGHT".
5. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO **1/3 HEIGHT** OF THE FABRIC OR MORE.
6. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
7. SILT FENCE SHOULD REMAIN IN PLACE AND MAINTAINED UNTIL THE DOWNGRADIENT AREA IS PERMANENTLY STABILIZED.
8. INSTALL A SECOND ROW OF SILT FENCE APPROXIMATELY 5' FROM INITIAL ROW WHEN REDUNDANT PROTECTION IS REQUIRED WITHIN 50' OF WETLANDS AND STREAMS.
9. AVOID SPLICED SECTIONS IN LOW LYING (LOAD BEARING) LOCATIONS.

Westwood | SILT FENCE - TRENCHED | NOT TO SCALE | SW-11

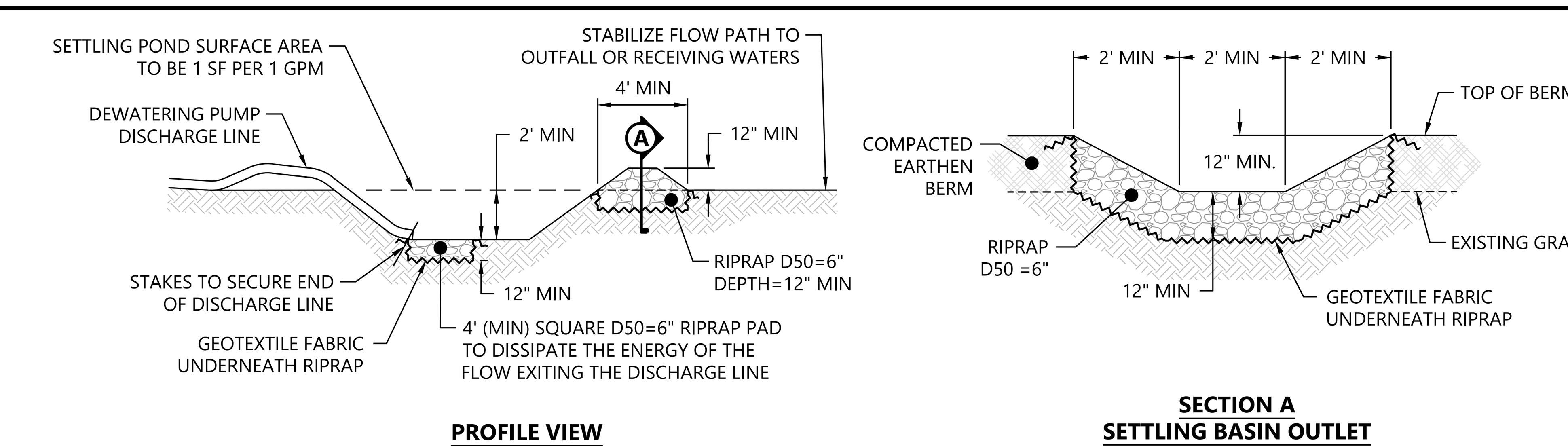




NOTES:

1. DEWATERING DETAILS PROVIDED ARE INTENDED TO BE USED AS SHOWN ON THE PLANS OR AT THE CONTRACTOR'S DISCRETION. REFER TO THE CONSTRUCTION GENERAL PERMIT FOR ADDITIONAL INFORMATION.
2. THE OWNER OR CONTRACTOR SHALL CONFIRM CONSTRUCTION STORMWATER DISCHARGE (DEWATERING) IS COVERED BY THE CONSTRUCTION STORMWATER GENERAL PERMIT PRIOR TO ANY DEWATERING OPERATIONS DISCHARGING FROM THE SITE. ADDITIONAL DEWATERING PERMITS MAY BE REQUIRED. ALL DEWATERING SHALL BE IN ACCORDANCE WITH THE PERMIT REQUIREMENTS.
3. A STABILIZED DEWATERING OUTLET IS REQUIRED TO REDUCE SUSPENDED SEDIMENT TO ALLOWABLE LEVELS PRIOR TO RELEASE OFF SITE OR TO RECEIVING WATER. SEE ADDITIONAL DETAILS FOR DEWATERING OUTLETS.
4. INSPECT EACH WORKDAY AND MAINTAIN IN EFFECTIVE OPERATING CONDITION.
5. ANY DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED PER THE CONSTRUCTION GENERAL PERMIT.

Westwood | DEWATERING INLET - TURBINE EXCAVATION | NOT TO SCALE | SW-50



NOTES:

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3. ALTERNATE DEWATERING OUTLET BMPS MAY BE APPROPRIATE ON A CASE-BY-BASE BASIS INCLUDING A SEDIMENT FILTER BAG, A SEDIMENT TANK, A BASIN WITH A SKIMMER, A SERIES OF SILT FENCE BAFFLES, OR A SERIES OF ROCK CHECK DAMS.
4. INSPECT EACH WORKDAY AND MAINTAIN IN EFFECTIVE OPERATING CONDITION.
5. TEMPORARY SETTLING BASINS SHALL BE REMOVED WHEN NO LONGER NEEDED FOR DEWATERING OPERATIONS. ANY DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED PER THE CONSTRUCTION GENERAL PERMIT.

DETAIL SOURCE: ADAPTED FROM THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT (UDFCD) URBAN STORM DRAINAGE CRITERIA MANUAL VOLUME 3

Westwood | DEWATERING OUTLET - TEMPORARY SETTLING BASIN | NOT TO SCALE | SW-51

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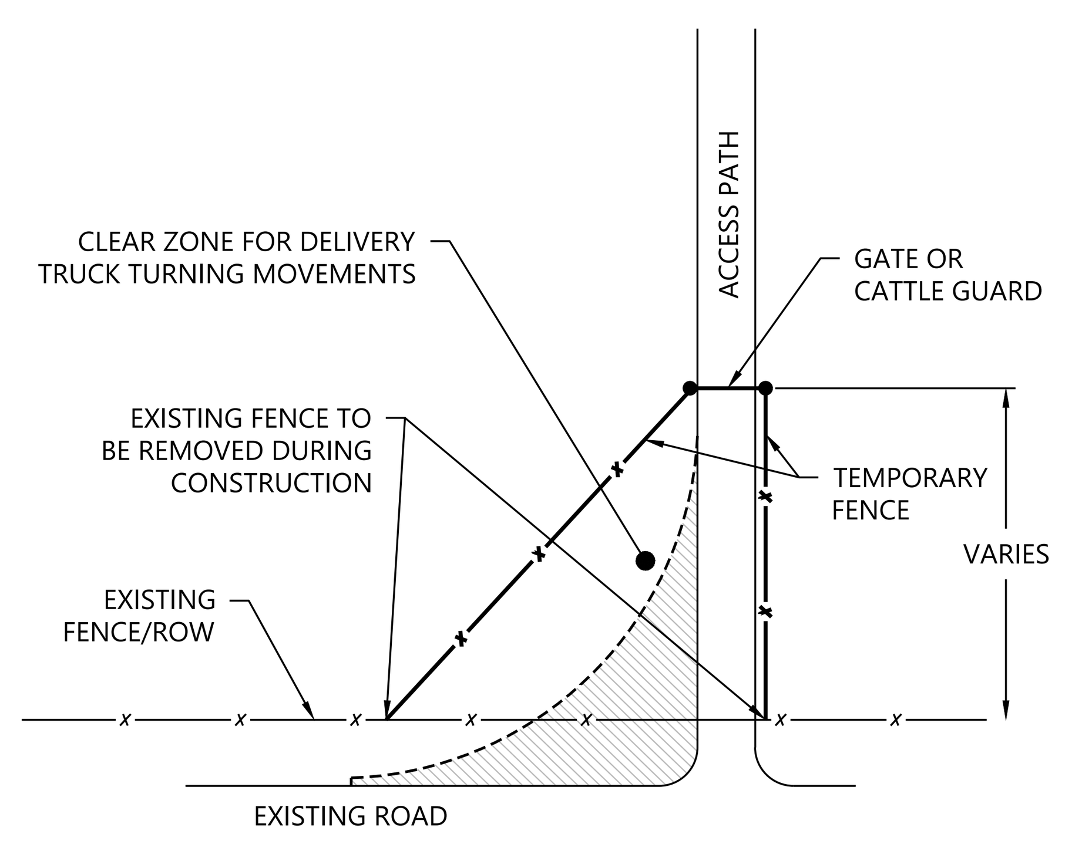
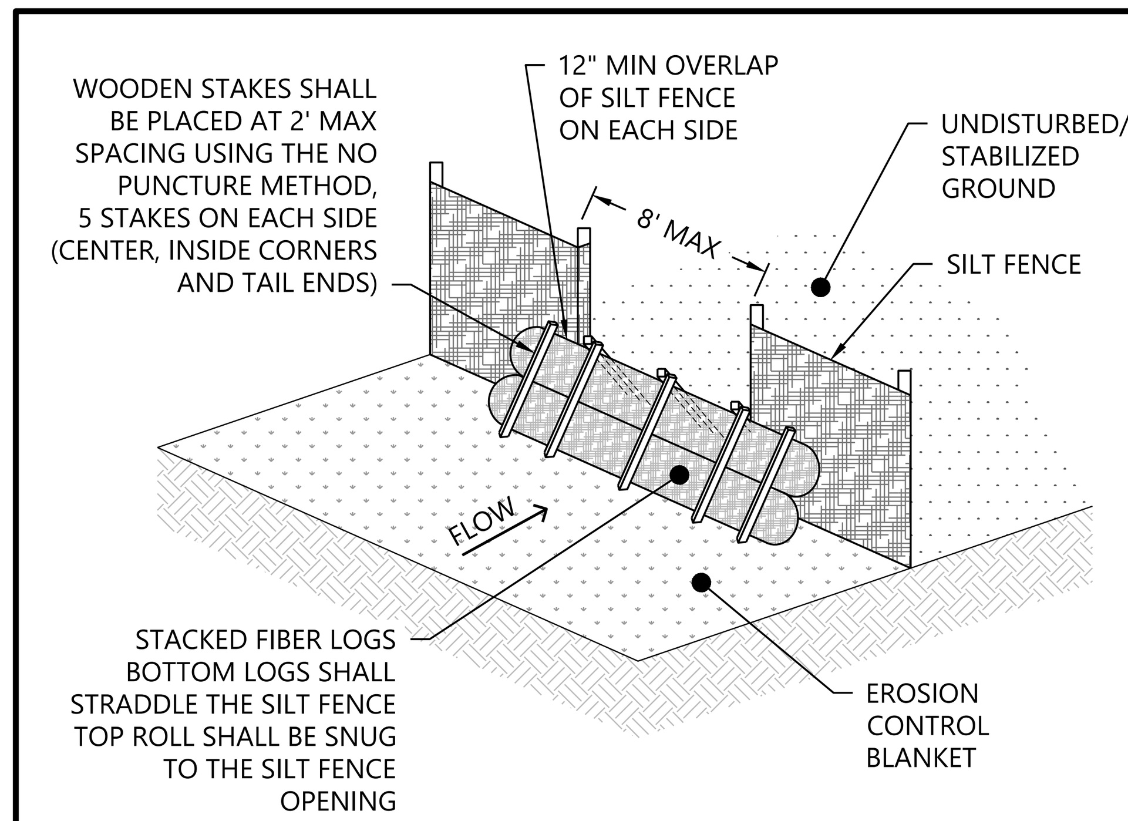


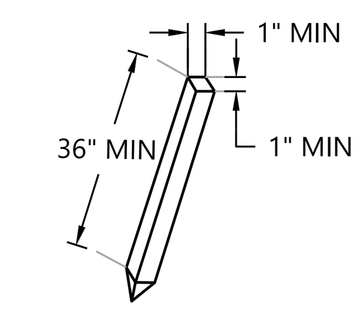
NOTE:

FOLLOWING TURBINE CONSTRUCTION TRAFFIC, THE TEMPORARY FENCE AND GATE SHALL BE REMOVED AND REINSTALLED TO MATCH THE PRE-CONSTRUCTION CONFIGURATION.

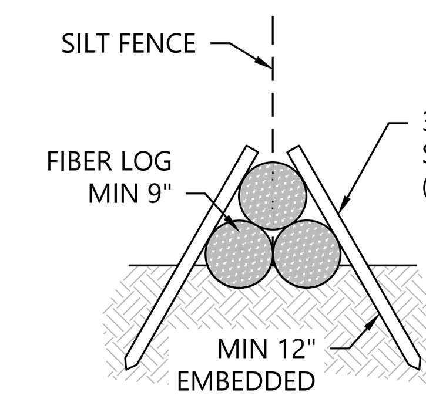
Westwood	TEMPORARY GATE/FENCE SETBACK FROM ROW - STANDARD NOT TO SCALE	FN-42



PERSPECTIVE VIEW



WOODEN STAKE

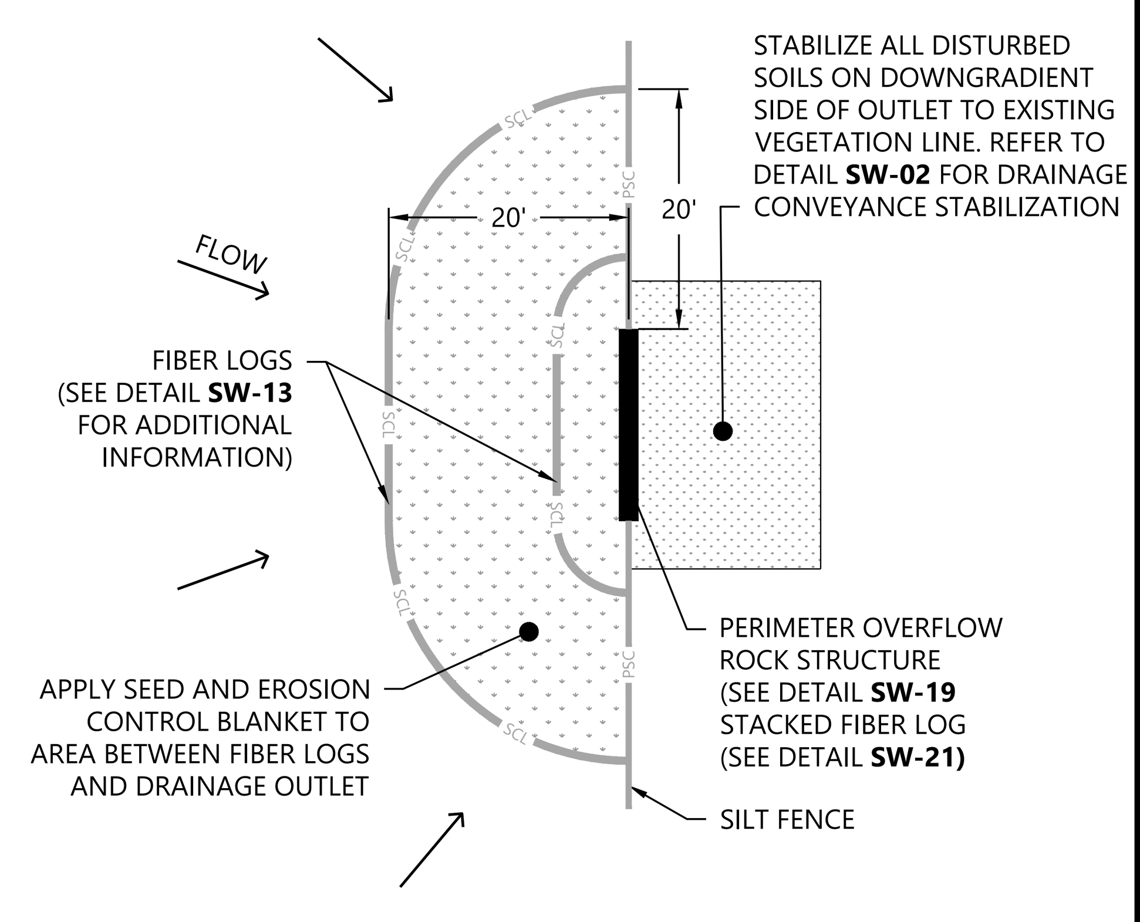


STACKING METHOD

NOTES:

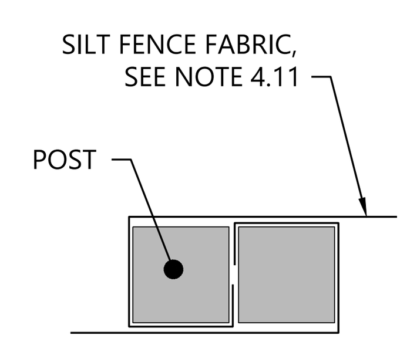
1. LOCATIONS OF STACKED FIBER LOG OVERFLOWS ARE INDICATED ON THE PLANS AND/OR AS DETERMINED BY QUALIFIED PERSONNEL BASED ON FIELD CONDITIONS TO MAINTAIN PERMIT COMPLIANCE. QUALIFIED PERSONNEL MUST BE TRAINED AND CERTIFIED IN EROSION AND SEDIMENT CONTROL.
2. STACKED FIBER LOG OVERFLOWS ARE RECOMMENDED AT ALL LOW POINTS AND AT A SPACING OF 300 FEET WHERE NO LOW POINT IS APPARENT.
3. FIBER LOGS SHALL BE POSITIONED TO ABUT THE SILT FENCE, NO GAP SHALL BE LEFT BETWEEN THE LOG AND SILT FENCE.

Westwood	STACKED FIBER LOG OVERFLOW FOR SILT FENCE NOT TO SCALE	SW-21

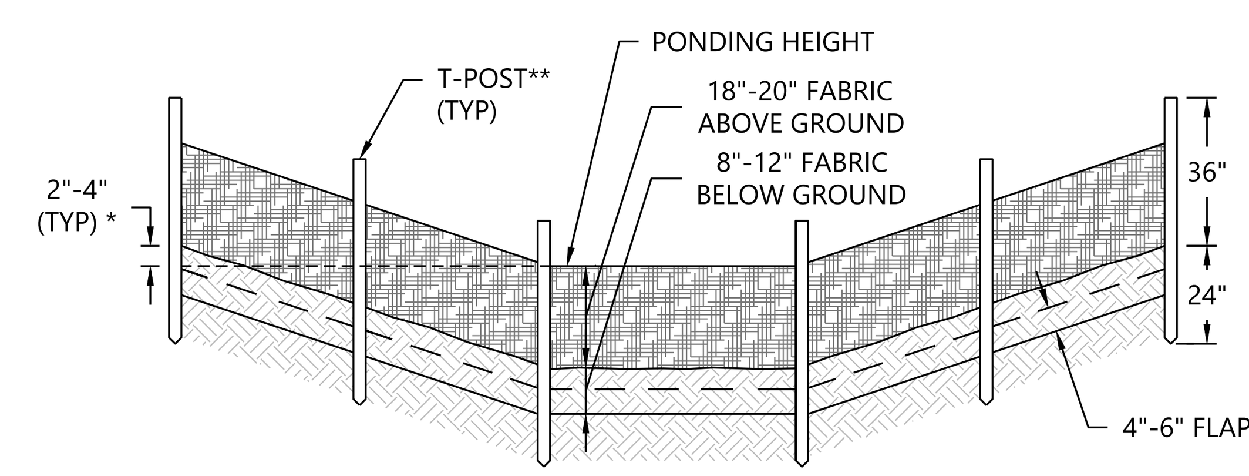


PLAN VIEW

Westwood	PERIMETER OVERFLOW BUFFER NOT TO SCALE	SW-22



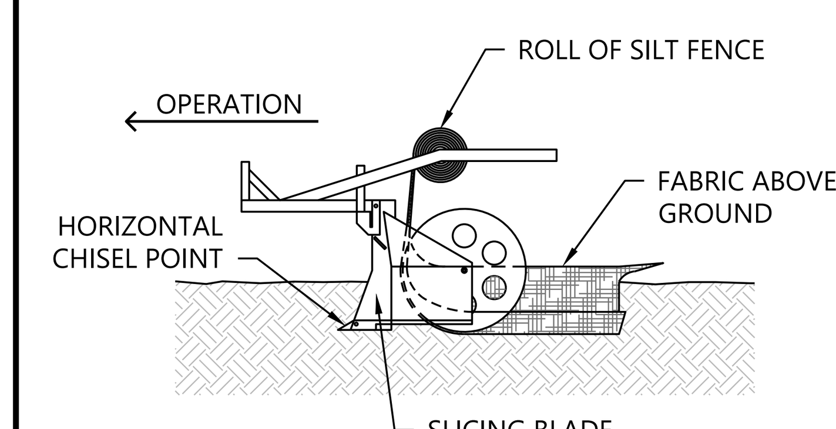
TOP VIEW - JOINT DETAIL



**ALTERNATE POST OPTION: 2"x2" WOOD POST, SECURE FABRIC BETWEEN WOOD POST AND A PIECE OF WOODEN LATHE WITH HEAVY DUTY STAPLES.

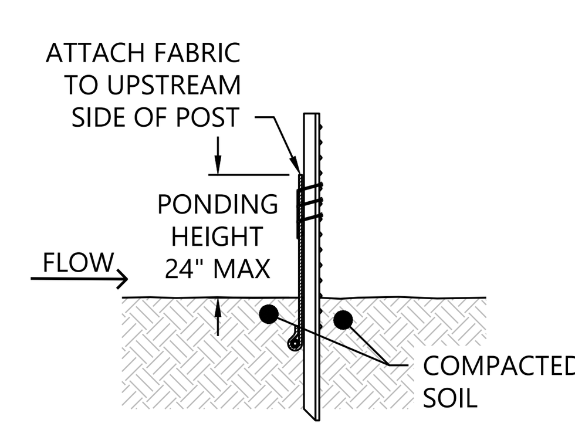
* THE BASE OF BOTH END POSTS MUST BE 2"-4" ABOVE THE FABRIC ON THE MIDDLE POSTS FOR ALL THE SILT FENCE TO PROPERLY DRAIN.

ELEVATION VIEW



- VIBRATORY PLOW IS NOT ACCEPTABLE BECAUSE OF HORIZONTAL COMPACTION.
- NO MORE THAN 24" OF A 36" FABRIC IS ALLOWED ABOVE GROUND.

FABRIC INSTALLATION



- COMPACT GROUND PRIOR TO POST INSTALLATION. BEGIN WITH UPSLOPE SIDE, DRIVE OVER EACH SIDE OF THE SILT FENCE 2 TO 4 TIMES WITH DEVICE EXERTING 60 PSI OR GREATER

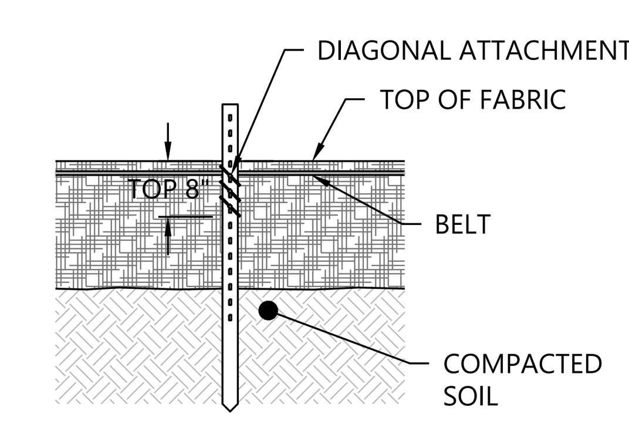
POST SPACING:

- 6' MAX. ON OPEN RUNS
- 4' MAX. ON POOLING AREAS

POST DEPTH:

- 24" MIN. BELOW GRADE

COMPACTION AND POST INSTALLATION



- GATHER FABRIC AT POSTS, IF NEEDED.
- UTILIZE THREE TIES PER POST WITHIN TOP 8" OF FABRIC.
- POSITION EACH TIE DIAGONALLY, PUNCTURING HOLES VERTICALLY AT A MINIMUM OF 1" APART.
- HANG EACH TIE ON A POST NOTCH AND TIGHTEN SECURELY. USE CABLE TIES (50 LBS TENSILE STRENGTH).

ATTACHMENT DETAILS

NOTES:

1. SILT FENCE IS USED TO PROVIDE PERIMETER SEDIMENT CONTROL ON THE DOWN-GRADIENT SIDE OF DISTURBANCE.
2. SILT FENCE SHALL BE INSTALLED PRIOR TO DISTURBANCE.
3. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN 2 , ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
4. SILT FENCE SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. WHEN NOT AVAILABLE INSTALL ACCORDING TO THIS DETAIL AND THE FOLLOWING NOTES:
   - 4.1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
   - 4.2. ALL ENDS OF THE SILT FENCE SHALL BE WRAPPED UPSLOPE SO THE BASE OF BOTH END POSTS WILL BE AT LEAST 2"-4" ABOVE THE TOP OF THE SILT FENCE FABRIC ON THE MIDDLE OR LOWEST POSTS ("PONDING HEIGHT").
   - 4.3. NO MORE THAN 24" OF A 36" FABRIC IS ALLOWED ABOVE GROUND LEVEL.
   - 4.4. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT-BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE SLIT IF NECESSARY.
   - 4.5. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQUARE INCH. COMPACT THE UPSTREAM SIDE FIRST, AND THEN EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
   - 4.6. INSTALL POSTS 3'-4' APART IN PONDING/CRITICAL WATER RETENTION AREAS AND 6' APART ON STANDARD APPLICATIONS.
   - 4.7. INSTALL POSTS 24" DEEP ON THE DOWNSTREAM SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC.
   - 4.8. INSTALL POSTS WITH THE NOTCHES FACING AWAY FROM THE SILT FENCE FABRIC.
   - 4.9. ATTACH THE FABRIC TO EACH POST WITH THREE TIES, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. EACH TIE SHOULD BE POSITIONED TO HANG ON A POST NOTCH WHEN TIGHTENED TO PREVENT SAGGING.
   - 4.10. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
   - 4.11. WHERE FABRIC ENDS MEET, WRAP AND TWIST THE FABRIC AROUND THE POST FOR A SECURE CONNECTION.
5. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO **1/3 HEIGHT** OF THE FABRIC OR MORE.
6. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
7. SILT FENCE SHOULD REMAIN IN PLACE AND MAINTAINED UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.
8. INSTALL A SECOND ROW OF REINFORCED SILT FENCE APPROXIMATELY 5' FROM INITIAL ROW WHEN REDUNDANT PROTECTION IS REQUIRED WITHIN 50' OF WETLANDS AND STREAMS.
9. AVOID SPLICED SECTIONS IN LOW LYING (LOAD BEARING) LOCATIONS.

Westwood	SILT FENCE - MACHINE SLICED NOT TO SCALE	SW-12

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Phillip Wind

Haakon County, South Dakota

Construction Details

ISSUE FOR PERMIT

DATE: 02/27/2026

SHEET: C702 REV: A

EARTHWORK

1. GENERAL
   a. THIS SECTION DESCRIBES WORK RELATED TO EARTHWORK AND MAY INCLUDE CLEARING AND GRUBBING, EXCAVATIONS, GENERAL FILL AND WORK ASSOCIATED WITH ACCESS TO THE TURBINE EXCAVATION LOCATIONS.
   b. THIS SECTION DOES NOT ADDRESS EARTHWORK ASSOCIATED WITH FOUNDATIONS AND MUD MATS, REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION RELATED WORK.

2. SUBMITTALS
   a. THE FOLLOWING MATERIAL SUBMITTALS ARE REQUIRED FOR REVIEW BY THE CIVIL ENGINEER OF RECORD (EOR) PER SPECIFIC PRODUCT AND PRE-PLACEMENT:
      a.1. ON-SITE BORROW SOURCE
      a.2. IMPORTED FILL MATERIAL
   b. EROSION AND SEDIMENT CONTROL (BMP) PRODUCT SUBMITTALS ARE NOT REQUIRED. REFER TO THE NPDES PERMIT FOR INFORMATION.

3. CONSTRUCTION
   a. CLEARING AND GRUBBING
      a.1. THE CONTRACTOR SHALL NOT CLEAR TREES ON SITE, AND SHALL EXERCISE EXTREME CARE AROUND EXISTING TREES TO BE SAVED. CONTACT EOR IF THERE IS A CONFLICT BETWEEN DISTURBANCE LIMITS AND TREE LINE.
   b. EXCAVATIONS
      b.1. TOPSOIL SHALL BE STRIPPED FROM EXCAVATION AREAS AT A MINIMUM DEPTH OF ±6 INCHES.
      b.2. TOPSOIL SHALL BE STRIPPED, TO THE DEPTH OF THE TOPSOIL, FROM ALL AREAS WITH SUBSOIL CUT/FILL (MASS-GRADING)
      b.3. TOPSOIL SHALL NOT BE STRIPPED OUTSIDE OF THE DESIGNATED DISTURBANCE AREAS.
   c. SEEDING, MULCHING, AND STABILIZATION
      c.1. PRIOR TO FINAL STABILIZATION, TOPSOIL SHALL BE DISTRIBUTED OVER THE EXPOSED DISTURBED AREAS, EXCLUDING THE AGGREGATE DRIVING SURFACE.
      c.2. FOLLOWING ROUGH GRADING OPERATIONS, TOPSOIL CAN BE USED TO BRING THE GROUND ELEVATIONS UP TO THE DESIGNED FINISHED GRADE ELEVATIONS IN NON-STRUCTURAL AREAS.
      c.3. ALL DISTURBED AREAS SHALL HAVE TEMPORARY AND PERMANENT STABILIZATION MEASURES ESTABLISHED IN ACCORDANCE WITH THE NPDES PERMIT.

GENERAL NOTES

1. CONSTRUCTION PLANS ARE BASED OFF THE COORDINATE SYSTEM SOUTH DAKOTA STATE PLANE COORDINATE SYSTEM, NAD 1983(2011), SOUTH ZONE, US SURVEY FOOT NAVD88, GEOID 18.
2. SITE DRAINAGE INFRASTRUCTURE INCLUDING SWALES, ACCESS ROAD SWALE CROSSINGS, AND OUTLET FEATURES ARE SIZED FOR A 10 YEAR 24HR RAIN EVENT, 3.26 INCHES PER NOAA ATLAS 14, VOLUME 8, VERSION 2.
3. THE ALTA SURVEY AND EXISTING PLANIMETRIC DATA IS FROM WESTWOOD SURVEYING & ENGINEERING, P.C, DATED 11/26/2025.
4. THE ELEVATIONS AND CONTOURS SHOWN ON THESE CONSTRUCTION DRAWINGS WERE PREPARED FROM A COMBINATION OF ACTUAL FIELD SURVEYING AND AERIAL PHOTOGRAPHY DATA. THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER WHEN THEY FIND THAT GROUND ELEVATIONS DETERMINED DURING FIELD STAKING VARY FROM THE GROUND ELEVATIONS SHOWN ON THE DRAWINGS FOR POTENTIAL DESIGN MODIFICATIONS.
5. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE OWNER SHALL BE NOTIFIED AND ARE NOT TO BE REMOVED WITHOUT PERMISSION FROM THE OWNER. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONSTRUCTION ACTIVITIES SHALL NOT BLOCK THE NATURAL DRAINAGE SWALES CAUSING RAINWATER TO POND. IF CULVERTS ARE NEEDED, THE CIVIL ENGINEER MUST BE CONTACTED FOR APPROPRIATE SIZING OF STRUCTURE. WHEN INSTALLING DRAINAGE CROSSINGS, THE CONTRACTOR SHALL USE JUDGMENT IN SETTING THE FLOW LINE ELEVATIONS TO PROVIDE POSITIVE DRAINAGE. WHEN POSSIBLE, ALL CULVERTS SHOULD BE PLACED AT A MINIMUM 0.5% GRADE.
7. ANY FACILITIES REMOVED TO ALLOW FOR CONSTRUCTION (MAILBOXES, SIGNS, FENCES, ETC.) SHALL BE REPLACED BY THE CONTRACTOR IN A CONDITION AS GOOD AS PRE-EXISTING UNLESS INDICATED FOR REMOVAL.
8. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL NOTIFY SOUTH DAKOTA 811 AT LEAST 48 HOURS BEFORE EXCAVATION ACTIVITIES COMMENCE.
10. ALL CONSTRUCTION PERFORMED SHALL CONFORM WITH THE CURRENT STANDARDS AND SPECIFICATION OF HAAKON COUNTY. WHERE DISCREPANCIES EXIST BETWEEN THE PROJECT SPECIFICATIONS AND THE COUNTY SPECIFICATIONS OR STANDARD, THE CONTRACTOR SHALL ABIDE BY THE GREATER OR MORE RESTRICTIVE REQUIREMENTS.
11. ELECTRONIC FILES ARE AVAILABLE FOR CONSTRUCTION OPERATIONS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS, AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE COUNTY/MUNICIPALITY AND CIVIL ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
13. TEMPORARY FEATURES SHALL, UPON COMPLETION OF ALL PROJECT CONSTRUCTION OR UPON NOTIFICATION OF THE CIVIL ENGINEER, BE REMOVED AND THE AREA RESTORED TO APPROXIMATELY ORIGINAL LINES AND GRADES WITH TOPSOIL REPLACED, EXCEPT WHERE REQUESTED BY THE TOWNSHIP OR COUNTY TO PERMANENTLY REMAIN.
14. ELECTRICAL INFORMATION SHOWN ON THE PLANS IS FOR REFERENCE ONLY. REFER TO ELECTRICAL PLANS FOR SPECIFIC LOCATIONS AND CONSTRUCTION DETAILS.
15. GEOTECHNICAL REPORTS WITH RECOMMENDATIONS HAVE BEEN PROVIDED BY THE OWNER.
16. WETLAND INFORMATION HAS BEEN PROVIDED BY THE OWNER. ALL WETLAND DELINEATIONS AND PERMITTING SHALL BE THE RESPONSIBILITY OF OTHERS. THE OWNER AND CONTRACTOR SHALL VERIFY THAT ALL WETLAND PERMITS HAVE BEEN SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION COMMENCING.
17. CULTURAL RESOURCE INFORMATION HAS BEEN PROVIDED BY THE OWNER. THE CONTRACTOR SHALL BE FAMILIAR WITH THE INFORMATION/REPORT AND REVIEW ALL RECOMMENDATIONS.
18. AN ENVIRONMENTAL ASSESSMENT HAS BEEN PROVIDED. THE CONTRACTOR SHALL BE FAMILIAR WITH THE INFORMATION/REPORT AND REVIEW ALL RECOMMENDATIONS.
19. WILDLIFE REPORT(S) HAVE BEEN PROVIDED. THE CONTRACTOR SHALL BE FAMILIAR WITH THE INFORMATION/REPORT(S) AND REVIEW ALL RECOMMENDATIONS.
20. TURBINE SETBACKS ARE NOT IDENTIFIED ON THE CONSTRUCTION PLANS. IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND CONTRACTOR TO ENSURE ALL TURBINE SETBACKS MEET PROJECT REQUIREMENTS.

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#	DATE	COMMENT	BY	CHK	APR
A	02/27/2026	ISSUE FOR PERMIT	RD	HR	DK

Phillip Wind
Haakon County, South Dakota

Construction Notes

ISSUE FOR PERMIT

DATE: 02/27/2026

SHEET: C703

REV: A

EROSION AND SEDIMENT CONTROL CONSTRUCTION NOTES:

REFERENCE INFORMATION

1. CONSTRUCTION STORMWATER AUTHORITY HAVING JURISDICTION: SOUTH DAKOTA DEPARTMENT OF AGRICULTURE & NATURAL RESOURCES
2. CONSTRUCTION STORMWATER GENERAL PERMIT:
   - GENERAL PERMIT AUTHORIZING STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES UNDER THE SOUTH DAKOTA SURFACE WATER DISCHARGE SYSTEM (SDR100000)
   - https://danr.sd.gov/officeofwater/surfacewaterquality/stormwater/StormWaterConstruction.aspx
   - https://danr.sd.gov/officeofwater/surfacewaterquality/docs/DANR_ConstructionGeneralPermit2023.pdf
3. STATE-SPECIFIC BEST MANAGEMENT PRACTICE (BMP) MANUAL AND GUIDANCE:
   - https://dot.sd.gov/media/fd72b11d/Erosionsedicontrolconstman.pdf
   - https://dot.sd.gov/media/684e1776/ESControlSW.pdf
4. REFER TO STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY WESTWOOD FOR ADDITIONAL AND DETAILED INFORMATION.

PERMIT COVERAGE FOR CONSTRUCTION ACTIVITIES

1. CONSTRUCTION GENERAL STORMWATER PERMIT COVERAGE APPLIES TO ALL CONSTRUCTION ACTIVITIES FROM ANY PARTY/CRAFT/SUBCONTRACTOR.
2. CONTRACTOR IS RESPONSIBLE TO IMPLEMENT AND MAINTAIN BMPS AND CONDUCT REGULAR INSPECTIONS DURING ALL CONSTRUCTION WORK.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR/PRIMARY OPERATOR IS TO PROVIDE EROSION AND SEDIMENT CONTROL MEASURES AS PLANNED AND SPECIFIED FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) OUTLINED IN THESE PLANS AND BY THE SOUTH DAKOTA DEPARTMENT OF AGRICULTURE & NATURAL RESOURCES AND BEING IN CONFORMANCE WITH THE GENERAL PERMIT AUTHORIZING STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES UNDER THE SOUTH DAKOTA SURFACE WATER DISCHARGE SYSTEM (SDR100000).
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND PERMITTEE TO MAINTAIN PERMIT COMPLIANCE.
3. SEE THE PROJECT SITE PLANS AND ASSOCIATED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES AND RESTORATION INFORMATION. UNLESS OTHERWISE NOTED OR MODIFIED IN THE SWPPP/HEREIN, ALL SECTIONS OF THE GENERAL PERMIT SHALL APPLY.
4. THE CONTRACTOR/PRIMARY OPERATOR IS RESPONSIBLE FOR MAINTAINING THE SWPPP'S AVAILABILITY ONSITE AND AS REQUIRED.
5. QUALIFIED, TRAINED, AND KNOWLEDGEABLE PERSONNEL MUST BE PRESENT ON-SITE TO MANAGE THE IMPLEMENTATION OF BMPS, INSPECTIONS, AND COMPLIANCE.
6. ALL CONSTRUCTION CONTRACTORS AND SUBCONTRACTOR PERSONNEL ARE TO BE TRAINED IN THE IMPLEMENTATION AND USE OF THE REQUIRED BMPS AND GOOD HOUSEKEEPING MEASURES FOR THE PROJECT SITE. TRAINING DOCUMENTATION SHALL BE MAINTAINED IN THE SWPPP.
7. THE PROJECT SITE IS TO BE MAINTAINED IN SUCH A CONDITION THAT A STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE. NON-STORMWATER POLLUTANT DISCHARGES ARE PROHIBITED. PROHIBITED DISCHARGES INCLUDE, BUT ARE NOT LIMITED TO: WASTEWATER FROM WASHOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS, FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE, SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING AND MAINTENANCE, AND OTHER HAZARDOUS SUBSTANCES OR WASTES. DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE PHYSICALLY SEPARATE FROM POTENTIAL STORMWATER RUNOFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
8. DISCHARGING CONTAMINATED GROUNDWATER PRODUCED BY DEWATERING THAT HAS INFILTRATED INTO THE CONSTRUCTION SITE IS PROHIBITED.
9. DISCHARGING OF CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED.
10. RUNOFF FROM EQUIPMENT AND VEHICLE WASHING IS TO BE CONTAINED ON-SITE AND NOT DISCHARGED TO RECEIVING WATERS OR LOCAL DRAINAGE SYSTEM.
11. APPROPRIATE BMPS FOR CONSTRUCTION-RELATED MATERIALS, WASTES, SPILLS OR RESIDUES ARE TO BE IMPLEMENTED TO ELIMINATE OR REDUCE TRANSPORT FROM THE SITE TO STREETS, DRAINAGE FACILITIES, OR ADJOINING PROPERTIES BY WIND OR STORMWATER RUNOFF.
12. AT THE END OF EACH DAY OF CONSTRUCTION ACTIVITY, ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS ARE TO BE COLLECTED AND PROPERLY DISPOSED OF IN TRASH OR RECYCLE BINS.
13. REFER TO SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN FOR SPILL CONTAINMENT AND CLEANUP REQUIREMENTS FOR CONTAMINATED SOILS DUE TO SPILLS.
14. ALL DRAINAGE SWALES, DITCHES, AND AREAS OF CONCENTRATED FLOW DISTURBED DURING CONSTRUCTION ARE TO BE REWORKED AND STABILIZED PRIOR TO NEXT PRECIPITATION EVENT OR WITHIN 24 HOURS, WHICHEVER IS SOONER, IN ACCORDANCE WITH THE SWPPP.
15. MAINTAIN EXISTING DRAINAGE WHEN PLACING STOCKPILES AND WINDROWS TO AVOID FLOODING WORK AREA AND ADJACENT FIELDS.
16. TOPSOIL SHALL BE STRIPPED, SEGREGATED, AND STOCKPILED SEPARATELY FROM SUBSOIL. DO NOT MIX TOPSOIL WITH SUBSOIL.

CONSTRUCTION PHASING/SEQUENCING

1. CONSTRUCTION PHASING AND BEST MANAGEMENT PRACTICES ARE TO BE IMPLEMENTED TO REDUCE SEDIMENT RUNOFF, AND PRESERVE NATURAL RESOURCES.
2. GENERAL SEQUENCING WITHIN EACH PHASE AND WORK AREA: INSTALL PERIMETER SEDIMENT CONTROLS (PSC), CLEAR AND GRUB, STRIP AND STOCKPILE TOPSOIL, MASS GRADING, RESPREAD TOPSOIL, SOIL STABILIZATION, TEMPORARY/PERMANENT EROSION AND SEDIMENT CONTROLS, BMP MAINTENANCE, FINAL STABILIZATION, AND REMOVE PSC. REFER TO THE SWPPP FOR ADDITIONAL INFORMATION.
3. THE CONSTRUCTION SITE IS TO BE MANAGED TO MINIMIZE THE EXPOSURE TIME OF DISTURBED SOIL AREAS THROUGH PHASING AND SCHEDULING OF EARTH DISTURBING ACTIVITIES AND PERSISTENT APPLICATIONS OF TEMPORARY AND PERMANENT SOIL STABILIZATION.
4. AREAS THAT ARE CLEARED, GRADED, OR DISTURBED AT ANY GIVEN TIME SHALL BE LIMITED TO:
   - 4.1. ONLY THE PORTION OF THE SITE THAT IS NECESSARY FOR CONSTRUCTION
   - 4.2. ONLY AN AREA THAT CAN BE EFFECTIVELY CONTROLLED AND MAINTAINED BY THE AVAILABLE PERSONNEL AND MATERIAL.
5. IF POSSIBLE, EARTH DISTURBING ACTIVITIES SHOULD COINCIDE WITH THE DRY SEASON TO MINIMIZE EROSION AND SEDIMENT TRANSPORT.
6. IF THERE IS A CARRYOVER OF STOCKPILED MATERIAL FROM ONE PHASE/REGION TO THE NEXT, POSITION CARRYOVER MATERIAL IN A LOCATION EASILY ACCESSIBLE FOR THE PENDING PHASE THAT WILL NOT REQUIRE DISTURBANCE OF STABILIZED AREAS TO ACCESS THE STOCKPILE.

BMP PHASING/IMPLEMENTATION

1. EROSION AND SEDIMENT CONTROL BMPS, INCLUDING TEMPORARY AND PERMANENT STABILIZATION OF ALL DISTURBANCE, ARE TO BE IMPLEMENTED AS SPECIFIED IN THE SWPPP AND WITHIN THE APPLICABLE TIMEFRAMES OUTLINED IN THE CONSTRUCTION GENERAL PERMIT.
2. ALL PERIMETER SEDIMENT CONTROLS ARE TO BE INSTALLED PRIOR TO ANY UP-GRADIENT EARTH DISTURBING ACTIVITIES.
3. ALL BMPS MUST BE INSPECTED, MAINTAINED, AND REPAIRED TO ENSURE CONTINUOUS FUNCTIONALITY.
4. PERSISTENT APPLICATIONS OF SOIL STABILIZATION TO BE APPLIED TO DISTURBED AREA THROUGHOUT CONSTRUCTION.
5. ALL PERIMETER SEDIMENT CONTROLS SHALL REMAIN IN-PLACE UNTIL UP-GRADIENT FINAL STABILIZATION IS COMPLETE.

INSPECTION SCHEDULE

ROUTINE SWPPP INSPECTIONS ARE TO BE CONDUCTED REGULARLY TO ENSURE COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS AND IDENTIFY ANY POTENTIAL ISSUES AT THE FOLLOWING INTERVALS:

1. ONCE EVERY 7 CALENDAR DAYS; OR
2. ONCE EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF PRECIPITATION THAT EXCEEDS 0.25 INCHES OR SNOWMELT THAT GENERATES RUNOFF.
3. ONCE PER MONTH FOR AREAS OF THE SITE THAT MEET FINAL STABILIZATION, OR RUNOFF IS UNLIKELY DUE TO FROZEN CONDITIONS.

STABILIZATION SCHEDULE

1. DEADLINE TO INITIATE STABILIZATION - YOU MUST BEGIN SOIL STABILIZATION MEASURES BY THE FOLLOWING WORKDAY WHENEVER EARTH-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE.
   - 1.1. EARTH-DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED WHEN YOU COMPLETE CLEARING, GRADING, AND EXCAVATION WITHIN ANY AREA OF YOUR SITE THAT WILL NOT INCLUDE PERMANENT STRUCTURES.
   - 1.2. EARTH-DISTURBING ACTIVITIES HAVE TEMPORARILY CEASED WHEN YOU CEASE CLEARING, GRADING, AND EXCAVATION WITHIN ANY AREA FOR A PERIOD OF AT LEAST 14 CALENDAR DAYS BUT WILL RESUME SUCH ACTIVITIES IN THE FUTURE.
2. DEADLINE TO COMPLETE TEMPORARY STABILIZATION - AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER INITIATING SOIL STABILIZATION MEASURES, YOU ARE REQUIRED TO HAVE COMPLETED:
   - 2.1. ALL ACTIVITIES NECESSARY TO INITIALLY SEED OR PLANT THE AREA TO BE STABILIZED FOR VEGETATIVE STABILIZATION PRACTICES.
   - 2.2. THE INSTALLATION OR APPLICATION OF ALL NON-VEGETATIVE MEASURES.
   - 2.3. AS SOON AS PRACTICABLE AFTER SEEDING OR PLANTING, SELECT, DESIGN, AND INSTALL NON-VEGETATIVE EROSION CONTROLS (E.G., MULCH OR ROLLED EROSION CONTROL PRODUCTS) TO PREVENT EROSION ON THE SEEDED OR PLANTED AREAS WHILE VEGETATION ESTABLISHES.
3. TEMPORARY AND PERMANENT SOIL STABILIZATION MEASURES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION PROCESSES UNTIL FINAL STABILIZATION HAS BEEN ACHIEVED AND NO FURTHER DISTURBANCE ACTIVITIES ARE PLANNED.

MAINTENANCE SCHEDULE

1. ALL EROSION AND SEDIMENT CONTROL MEASURES AND BMPS SHALL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING CONDITION, INCLUDING REMOVAL OF EXCESS SEDIMENT AND REPLACEMENT AS NECESSARY.
2. EROSION AND SEDIMENT CONTROLS THAT HAVE BEEN INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE RENDERED INEFFECTIVE MUST BE REPLACED OR CORRECTED IMMEDIATELY UPON DISCOVERY.
3. MAINTENANCE MUST BE COMPLETED PRIOR TO THE NEXT ANTICIPATED RAINFALL EVENT.
4. MAINTENANCE MUST BE COMPLETED PER THE SCHEDULE SPECIFIED IN THE PROJECT SWPPP.

EROSION AND SEDIMENT CONTROL RECOMMENDED PRACTICES

1. CONTACT ENGINEER FOR ALTERNATIVE RECOMMENDATIONS OR ADDITIONAL DETAILS.
2. REFER TO SHEETS C700-C702 FOR BMP DETAILS AND THE PROJECT SWP2.
3. SELECT BMP LOCATIONS ARE SHOWN ON THE PLANS. FIELD ADJUSTMENTS, ALTERNATIVES, OR ADDITIONAL BMPS MAY BE IMPLEMENTED TO ALIGN WITH THE CONTRACTOR'S MEANS AND METHODS, FIELD CONDITIONS, INSPECTIONS, AND ACTIVE CONSTRUCTION ACTIVITIES. MULTIPLE APPLICATIONS MAY BE NECESSARY.
4. DUST CONTROL MEASURES ARE TO BE IMPLEMENTED TO MINIMIZE AIRBORNE DUST EMISSIONS AND PROTECT AIR QUALITY.
5. NATIVE/EXISTING VEGETATION AND BUFFERS ARE TO BE PRESERVED AND PROTECTED TO THE EXTENT POSSIBLE AND REVEGETATED AS REQUIRED.
6. PRESERVE 50' BUFFER FOR ALL WETLANDS, STREAMS, WATER BODIES, AND SENSITIVE AREAS. REDUNDANT SEDIMENT CONTROLS ARE REQUIRED WITHIN 50' BUFFER.
7. ALL SOIL STOCKPILES AND WINDROWS SHALL HAVE TEMPORARY EROSION CONTROL MEASURES APPLIED.
8. ALL DISTURBED AREAS DURING CONSTRUCTION ARE TO BE STABILIZED OR RE-STABILIZED FOLLOWING THE ACTIVITIES THAT CAUSED THE DISTURBANCE.

EROSION AND SEDIMENT CONTROL TYPE OR SITUATION	BEST MANAGEMENT PRACTICE (BMP)			DETAIL REFERENCE
SITE ENTRANCE / EXIT	VEHICLE TRACKOUT CONTROL			SW-40
CONSTRUCTION PERIMETER	REDUNDANT SEDIMENT CONTROLS WITHIN 50' OF SENSITIVE OR PROTECTED FEATURES			SW-91
	PERIMETER SEDIMENT CONTROLS (PSC)	SILT FENCE		SW-11 OR SW-12
		SEDIMENT CONTROL LOGS *SMALL DRAINAGE AREAS WITH SLOPES <3%*		SW-13
		TOPSOIL BERM		SW-29
		J-HOOKS *PSC UP/DOWN CONTOURS*		SW-18
		STRUCTURAL OVERFLOW / DRAINAGE OUTLETS *PSC LOW POINTS*		SW-21 AND SW-22
DISTURBED SOIL AREAS (SOIL STABILIZATION)	SLOPES ≤ 25%	*STABILIZATION*	ANCHORED STRAW MULCH *WITH SEEDING*	SW-80
WTG EXCAVATIONS	TOPSOIL BERM AND PERIMETER SEDIMENT CONTROL			SW-16
CONCRETE WASHOUT	CONCRETE WASHOUT AREA			SW-60

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#	DATE	COMMENT	BY	CHK	APR
A	02/27/2026	ISSUE FOR PERMIT	RD	HR	DK

Phillip Wind

Haakon County, South Dakota

Erosion and Sediment Control Notes

ISSUE FOR PERMIT

DATE: 02/27/2026

SHEET: C704 REV: A

Appendix F

Inspection and Maintenance Forms

Stormwater Construction Site Inspection Report

General Information

Project Name:	
Location:	
Date of Inspection:	Start/End Time:
Inspector's Name:	
Inspector's Title:	
Inspector's Contact Information:	
Describe present phase of construction:	
Type of Inspection: ☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event	

Weather Information

Has there been a storm event since the last inspection? ☐Yes ☐No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
☐ Clear ☐Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature:

Have any discharges occurred since the last inspection? ☐Yes ☐No
If yes, describe:

Are there any discharges at the time of inspection? ☐Yes ☐No
If yes, describe:

Certification Statement

"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 gathered and evaluated 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."

Signature of Inspector *Printed Name and Title* *Date*

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.

BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1. All inactive slopes and disturbed areas have been stabilized.	☐Yes ☐No	☐Yes ☐No	
2. Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐Yes ☐No	☐Yes ☐No	
3. Are all sanitary waste recepticles placed in secondary containment and free of leaks?	☐Yes ☐No	☐Yes ☐No	
4. Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐Yes ☐No	☐Yes ☐No	
5. Are discharge points and receiving waters free of any sediment deposits?	☐Yes ☐No	☐Yes ☐No	
6. Are storm drain inlets properly protected?	☐Yes ☐No	☐Yes ☐No	
7. Is the construction exit preventing sediment from being tracked into the street?	☐Yes ☐No	☐Yes ☐No	
8. Is trash/litter from work areas collected and placed in covered dumpsters?	☐Yes ☐No	☐Yes ☐No	
9. Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐Yes ☐No	☐Yes ☐No	
10. Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐Yes ☐No	☐Yes ☐No	
11. Are materials that are potential stormwater contaminants stored inside or under cover?	☐Yes ☐No	☐Yes ☐No	
12. Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐Yes ☐No	☐Yes ☐No	
13. (Other)	☐Yes ☐No	☐Yes ☐No	

Appendix G

Endangered Species, Wetlands, Cultural Resources (Information and Correspondence)