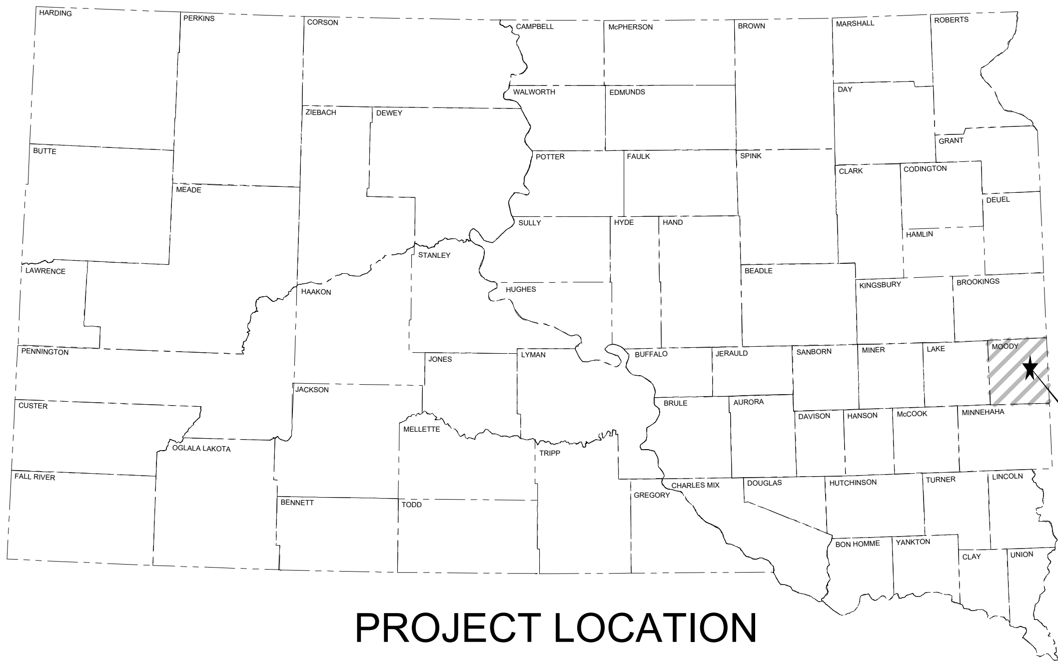
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	1	23

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT BRO 8051(17)
CITY OF FLANDREAU

STRUCTURE REMOVAL
STRUCTURE NO. 51-147-097
PCN 08AD

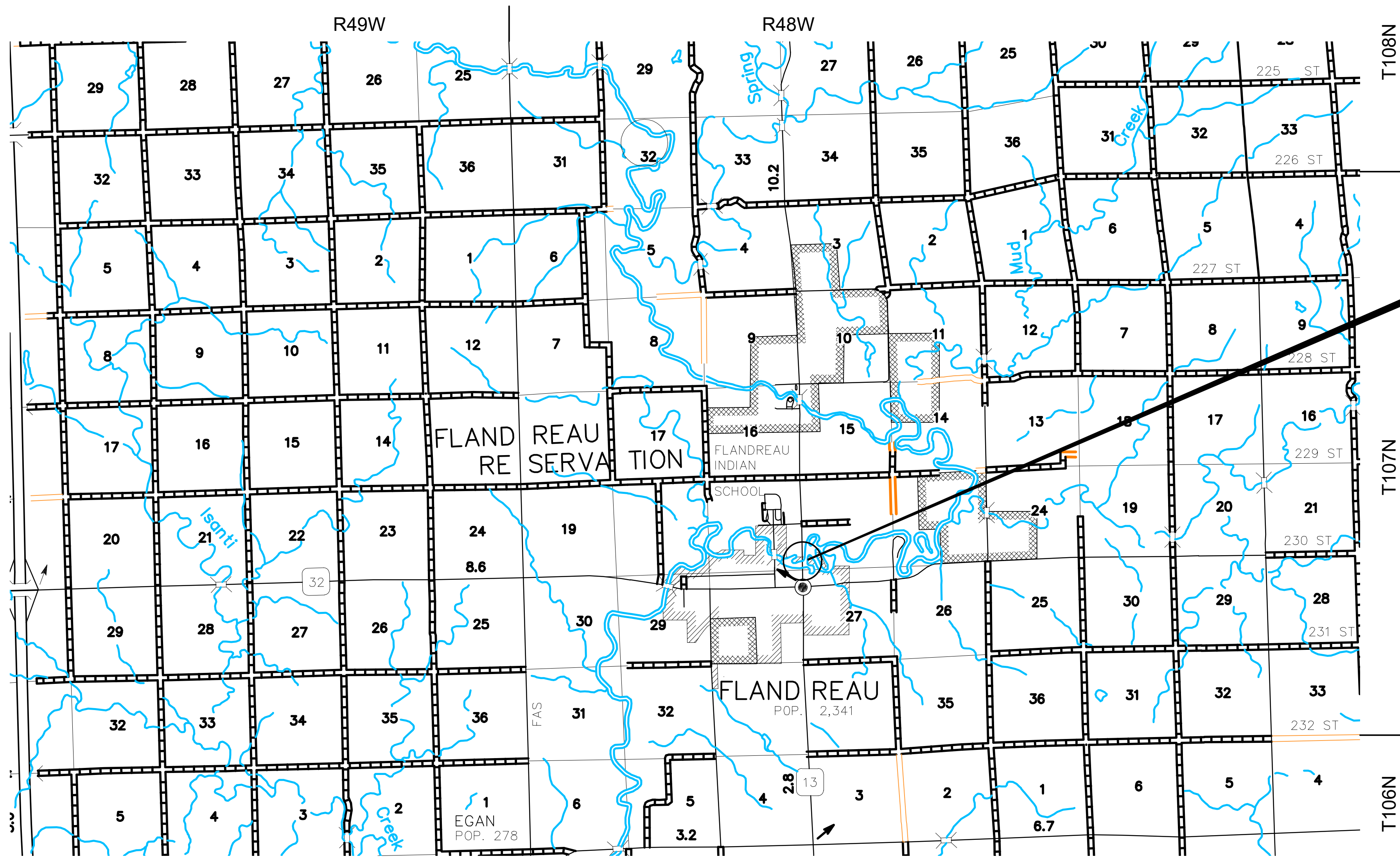


PROJECT LOCATION

INDEX OF SECTIONS

STORM WATER PERMIT
PROJECT NO. BRO 8051(17) PCN 08AD
None Required

Approx. Begin Lat/Long
Latitude: 44.0533
Longitude: -96.5935



LOCATION MAP

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
10964
VANESSA
VICTOR
SOUTH DAKOTA
10-28-21

6

January 19, 2022

infrAstructure
design group inc.

S:\0-2020 Projects\20152 - Bridge Removal Program 2020 BRO 8051(17) PCN 08AD City of Flandreau SN 51-147-097\Design\CAD\SHEETS\PROJECT COVER.dwg
PLOT DATE: 8/2/2021 8:37 AM Iasmin Rosa

ESTIMATE OF QUANTITIES

GRADING

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E0130	Remove Traffic Sign	10	Each
110E0135	Remove Delineator	12	Each
110E1160	Remove Concrete Barrier	32	Ft
120E0010	Unclassified Excavation	123	CuYd
120E0600	Contractor Furnished Borrow Excavation	269	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
632E1320	2.0"x2.0" Perforated Tube Post	60.6	Ft
632E2535	Type 4 Object Marker	6	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	32.0	SqFt
634E0110	Traffic Control Signs	68.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
730E0204	Type C Permanent Seed Mixture	2	Lb
732E0350	Bonded Fiber Matrix	400	Lb
734E0103	Type 3 Erosion Control Blanket	450	SqYd
734E0510	Shaping for Erosion Control Blanket	152	Ft
734E0604	High Flow Silt Fence	400	Ft
734E0610	Mucking Silt Fence	28	CuYd
734E0620	Repair Silt Fence	100	Ft
734E0630	Floating Silt Curtain	250	Ft

STRUCTURE 51-147-097

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
250E0030	Incidental Work, Structure	Lump Sum	LS

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at:
< https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:
< http://sdleastwanted.com/maps/default.aspx >

< South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D1: SURFACE WATER QUALITY

The Big Sioux River is classified as a warm water semi-permanent fishery with a total suspended solids standard of less than 90 mg/L 30-day average, less than 158 mg/L daily maximum.

This project may be in the vicinity of multiple streams and wetlands. These waters are considered waters of the state and are protected under Administrative Rules of South Dakota (ARSD) Chapter 74:51. Special construction measures may have to be taken to ensure that this water body is not impacted.

Action Taken/Required:

The Contractor is advised that the South Dakota Surface Water Quality Standards, administered by the South Dakota Department of Agriculture and Natural Resources (DANR), apply to this project. Special construction measures will be taken to ensure the above standard(s) of the surface waters are maintained and protected.

COMMITMENT D2: SURFACE WATER DISCHARGE

The DANR General Permit for Temporary Discharge is required for temporary dewatering and discharges to waters of the state. The effluent limit for total suspended solids will be 90 mg/L 30-day average. The effluent limit applies to discharges to all waters of the state except discharges to waters classified as cold water permanent fish life propagation waters according to the ARSD 74:51:01:45. For discharges to waters of the state classified as cold water permanent fish life propagation waters, the effluent limit for total suspended solids will be 53 mg/L daily maximum.

The permittee has the option of completing effluent testing or implementing a pollution prevention plan for compliance with this permit. If the permittee develops a pollution prevention plan instead of total suspended solids sampling, the plan must be developed and implemented prior to discontinuing total suspended solids sampling. Refer to Section 4.0 of the permit. If any pollutants are suspected of being discharged, a sample must be taken for those parameters listed in Section 3.4 of the permit.

Refer to Commitment D1: Surface Water Quality for stream classification.

Action Taken/Required:

If construction dewatering is required and this project is currently covered under a General Permit for Stormwater Discharges Associated with Construction Activities, the contractor will need to submit the dewatering information to the SDDANR using the following form:

<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_AddTempInfoFillable.pdf >

The Contractor will provide a copy of the approved permit or the submitted dewatering information to the Project Engineer prior to proceeding with any dewatering activities. The approved permit or submitted dewatering information must be kept on-site and as part of the project records.

Effluent monitoring, as a result of dewatering activities, will be summarized for each month and recorded on a separate Discharge Monitoring Report (DMR) and submitted to DANR monthly. Additional information can be found at:
<http://denr.sd.gov/des/sw/WhatisaDMR.aspx >

COMMITMENT E: STORM WATER

Construction activities constitute 1 acre or more of earth disturbance and/or work in a waterway.

Action Taken/Required:

The DANR General Permit for Stormwater Discharges Associated with Construction Activities is required for construction activity disturbing one or more acres of earth and work in a waterway. The SDDOT is the owner of this permit and will submit the NOI to DANR 15 days prior to project start in order to obtain coverage under the General Permit. Work can begin once the DANR letter of approval is received.

The Contractor must adhere to the "Special Provision Regarding Storm Water Discharges to Waters of the State."

The Contractor will complete the DANR Contractor Certification Form prior to the pre-construction meeting. The form certifies under penalty of law that the Contractor understands and will comply with the terms and conditions of the permit for this project. Work may not begin on this project until this form is signed and submitted to DANR.

The form can be found at:
<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/docs/DANR_CGPAppendixCCA2018Fillable.pdf >

The Contractor is advised that permit coverage may also be required for off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

The Contractor is advised that permit coverage may also be required for off-site activities, such as borrow and staging areas, which are the responsibility of the Contractor.

Storm Water Pollution Prevention Plan

The Storm Water Pollution Prevention Plan (SWPPP) will be developed prior to the submittal of the NOI and will be implemented for all construction activities for compliance with the permit. The SWPPP must be kept on-site and updated as site conditions change. Erosion control measures and best management practices will be implemented in accordance with the SWPPP.

The DOT 298 Form will be used for site inspections and to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents and retained for a minimum of three years.

The inspection will include disturbed areas of the construction site that have not been finally stabilized, areas used for storage materials, structural control measures, and locations where vehicles enter or exit the site. These areas will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWPPP will be observed to ensure that they are operating correctly, and sediment is not tracked off the site.

Information on storm water permits and SWPPPs are available on the following websites:

SDDOT: < https://dot.sd.gov/doing-business/environmental/stormwater >

DANR:<https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/stormwater/default.aspx >

EPA: < https://www.epa.gov/npdes >

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".

2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.
Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 150 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

COMMITMENT J: CONSTRUCTION PRACTICES FOR TEMPORARY WORKS IN WATERWAYS OF THE U.S.

The Contractor is advised that special construction measures must be taken to ensure that the waterways of the U.S. are not impacted.

Action Taken/Required:

Excavation will not occur below the ordinary high-water elevation in waterways outside of caissons, cribs, cofferdams, steel piling, or sheeting. The natural streambed will not be disturbed unless specified by the plans and under the observation of the Project Engineer. Refer to the Table of U.S. Waterways to Protect for ordinary high-water elevations. Any structure work over or within the waterway will be constructed according to Section 7.21 C of the Specifications.

All dredged or excavated materials will be placed at a site above the ordinary high-water elevation in a confined area (not classified as a wetland) that is a minimum of 50 feet away from concentrated flows of storm water, drainage courses, and inlets to prevent return of such material to the waterway.

The construction of temporary work platforms, crossings, or berms below the ordinary high-water elevation will be allowed if all material placed below the ordinary high-water elevation consists of Class B or larger riprap.

All temporary caissons, cribs, cofferdams, steel piling, sheeting, work platforms, crossings, and berms will be removed with minimal disturbance to the streambed. Proper construction practices will be used to minimize increases in suspended solids and turbidity in the waterway.

Bridge berms, wing dams, traffic diversions, channel reconstruction, stream diversions, grading, etc. will be constructed in close conformity with the plans to ensure that the hydraulic capacity of the waterway is not changed.

Temporary waterway crossings required for the Contractor's construction operations will be constructed with an adequate drainage structure size and minimum fill height to reduce the potential for upstream flooding. The Contractor will be responsible for sizing the temporary drainage structure for these crossings.

All temporary works in waterways of the US are required to be covered in the Corp of Engineers 404 Permit. At the time of the preconstruction meeting, the Contractor will submit documentation for all temporary works for the purpose of complying with the 404 Permit requirements in accordance with Section 423.3 A of the Specifications.

Table of U.S. Waterways to Protect

Station	Waterway	Ordinary High-Water Elevation
15+00	Big Sioux River	1521.43

Stream channel excavation within "Waters of the US" is subject to USACE regulatory jurisdiction. Stream channel excavation cannot exceed the permitted quantities and/or surface area. The 404 Permit is included in the Special Provisions.

The Contractor will take all precautions necessary to prevent any incidental discharges associated with the excavation and hauling of material from the stream channel. This pertains to any excavation operations such as, foundation, pier, or abutment excavation, channel cleanout, excavation for riprap protection, and removal of any temporary fill associated with construction activities.

COMMITMENT N: SECTION 404 PERMIT

The SDDOT has obtained a Section 404 Permit from the USACE for the permanent actions associated with this project.

Action Taken/Required:

The Contractor will comply with all requirements contained in the Section 404 Permit.

The Contractor will also be responsible for obtaining a Section 404 Permit for any dredge, excavation, or fill activities associated with material sources, storage areas, waste sites, and Contractor work sites outside the plan work limits that affect wetlands, floodplains, or waters of the United States.

SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work.

CITY RESPONSIBILITIES

The City of Flandreau will be responsible for the following at no cost to the Contractor:

1. Coordination of any utility adjustments.
2. Final removal of silt fence in permanently seeded areas.

UTILITIES

The Contractor will be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor will contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided below:

Natural Gas
MidAmerican Energy: 1-888-427-5632

Telephone/Fiber
Century Link: 1-800-244-1111
Mediacom: 1-800-332-0245
SDN: 1-800-247-1442
2900 W 10th Street
Sioux Falls, SD, 57104

Electric
City of Flandreau: 1-605-997-2492
1005 W. Elm Avenue
Flandreau, SD 57028

The City of Flandreau will coordinate any utility adjustments.

WORK AREA

The Contractor's work limits will be confined to the existing right-of-way and easement areas.

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
10964
VANESSA
VICTOR
SOUTH DAKOTA

10-28-21

FOR BIDDING PURPOSES ONLY

Revised 12/06/21 IMR

GRADING OPERATIONS

Water for Embankment may be required. No separate payment will be made for the Water for Embankment and all costs associated will be incidental to the contract unit price per cubic yard of "Unclassified Excavation".

The estimated cubic yards of excavation and/or embankment required to construct outlet ditches, stream embankments and approaches are included in the earthwork balance notes on the profile sheets.

Grades will be constructed to the limits shown to blend the existing roadway section into the stream embankment. If significant changes to the cross sections are necessary during construction, the Engineer will contact the Designer for the proposed change.

SHRINKAGE FACTOR: Embankment +35%

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION QUANTITY

The plan shown quantity will be the basis of payment. However, if there are additional areas of excavation other than what is shown in the plans, the Engineer will direct removal of these areas and the additional areas will be measured according to the Engineer.

When plan quantities are used for payment, the Unclassified Excavation quantity will be used for final payment and the plans quantity of Topsoil listed in the Table of Unclassified Excavation will not be adjusted according to field measurements

TABLE OF EXCAVATION QUANTITIES BY BALANCES

Refer to grading plan and profile sheet for estimates of quantities by balance.

TABLE OF UNCLASSIFIED EXCAVATION

Excavation (Finish Grade to Existing Grade)	95
Total	95 CY

CONTRACTOR FURNISHED BORROW EXCAVATION

The Contractor will provide a suitable site for Contractor furnished borrow excavation material. The Contractor is responsible for obtaining all required permits and clearances for the borrow site. The borrow material will be approved by the Engineer. The plans quantity for "Contractor Furnished Borrow Excavation" as shown in the Estimate of Quantities will be the basis of payment for this item.

Restoration of the Contractor furnished borrow excavation site will be the responsibility of the Contractor.

REMOVE CONCRETE BARRIER

The Contractor will be required to remove existing concrete barriers blocking traffic from the existing bridge. These barriers should be delivered to the City of Flandreau. Contact Jeff Pederson with the City of Flandreau at 605-997-2492 for drop off location.

REMOVING, STOCKPILING, AND REPLACING TOPSOIL

The Contractor will be required to remove and salvage 4 inches of the existing topsoil throughout the anticipated embankment widening areas. The topsoil removal will be done prior to work commencing throughout the areas. The estimated amount of topsoil to be removed and replaced is 28 CuYd.

The Contractor will stockpile the material at a site above the "ordinary high water mark" approved by the Engineer, and/or windrow the material near the disturbed areas to control potential sediment runoff as determined by the Engineer. The replacement of topsoil will be spread evenly throughout all disturbed areas upon completion of the work. Any clumps larger than 3 inches will be broken up prior to seeding the areas.

Measurement of topsoil quantities will not be made, and all cost associated with removing, salvaging, stockpiling, windrowing, and replacing topsoil will be incidental to the lump sum price for "Remove and Replace Topsoil". All topsoil removal, stockpiling, salvaging, windrowing, and replacement will be done according to the plans and/or as directed by the Engineer.

MYCORRHIZAL INOCULUM

Mycorrhizal inoculum will consist of mycorrhizal fungi spores and mycorrhizal fungi-infected root fragments in a solid carrier. The carrier may include organic materials, calcinated clay, or other materials consistent with application and good plant growth. The supplier will provide certification of the fungal species claimed and the live propagule count. The inoculum will include the following fungal species:

25% *Glomus intraradices*
25% *Glomus aggregatum or deserticola*
25% *Glomus mosseae*
25% *Glomus etunicatum*

All seed will be inoculated by the seed supplier with a minimum of 100,000 live propagules of mycorrhizal fungi per acre. All costs of inoculating the seed will be incidental to the contract unit price per pound for the corresponding permanent seed mixture.

PERMANENT SEEDING

The areas to be seeded consist of all newly graded areas within the project limits except for the top of roadways and temporary easements under cultivation.

Type C Permanent Seed Mixture will consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana, Walsh	16
Canada Wildrye	Mandan	2
	Total:	18

BONDED FIBER MATRIX

Bonded fiber matrix will be hydraulically applied to the areas listed in the table and any other areas deemed necessary by the Engineer.

The Contractor will use a bonded fiber matrix from the approved products list, or an approved equal. The approved product list for bonded fiber matrix may be viewed at the following internet site:

http://sddot.com/business/certification/products/Default.aspx

TABLE OF BONDED FIBER MATRIX

Station to	Station	Quantity (Lb)
11+82 – 14' L	12+00 – 12' R	40
13+64 – 18' R	14+08 – 32' L	145
16+09 – 28' R	16+51 – 10' L	139
	Additional Quantity:	76
	Total:	400

HIGH FLOW SILT FENCE

The high flow silt fence fabric provided will be from the approved product list. The approved product list for high flow silt fence may be viewed at the following internet site:

http://apps.sd.gov/HC60ApprovedProducts/main.aspx

High flow silt fence will be placed at the locations noted in the table and at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction. Refer to Standard Plate 734.05 for details.

An additional quantity of high flow silt fence has been added to the Estimate of Quantities for temporary sediment control.

TABLE OF HIGH FLOW SILT FENCE

Station	to	Station	Quantity (Ft)
13+49 – 43' R		13+69 – 46' L	180
16+37 – 33' R		16+57 – 25' L	153
		Additional Quantity:	67
		Total:	400

EROSION CONTROL BLANKET

Erosion control blanket will be installed 16 feet wide at the locations noted in the table and at locations determined by the Engineer during construction.

The erosion control blanket provided will be from the approved product list. The approved product list for erosion control blanket may be viewed at the following internet site:

http://apps.sd.gov/HC60ApprovedProducts/main.aspx

An additional quantity of high flow silt fence has been added to the Estimate of Quantities for temporary erosion control.

TABLE OF EROSION CONTROL BLANKET

Station to	Station	Type	Quantity (SqYd)
11+82 – 14' L	12+00 – 12' R	3	49
13+64 – 18' R	14+08 – 32' L	3	180
16+09 – 28' R	16+51 – 10' L	3	172
	Additional Quantity:		49
	Total:		450

SHAPING FOR EROSION CONTROL BLANKET

The ditches will be shaped for the erosion control blanket as specified on Standard Plate 734.01.

FLOATING SILT CURTAIN

Floating silt curtains will be installed at locations noted in the table and at locations determined by the Engineer during construction.

The Contractor will determine the water depth and other waterway characteristics such as stream flow velocity and seek technical advice from the manufacturer before ordering the floating silt curtain so that the floating silt curtain installed is the correct type for the individual sites.

The Contractor will install the floating silt curtain in accordance with the manufacturer's installation instructions or as directed by the Engineer.

The Contractor will maintain the floating silt curtains for the duration of the project to ensure continuous protection of the waterway.

A list of known manufacturers of floating silt curtain is shown below for informational purpose. Contractors may also use Engineer approved floating silt curtain from manufacturers that are not included in the list.

ABASCO, LLC
Houston, TX
Phone: 1-800-242-7745
www.abasco.net

Aer-Flo, Inc.
Bradenton, FL
Phone: 1-800-823-7356
www.aerflo.com

American Boom and Barrier Corp.
Cape Canaveral, FL
Phone: 1-800-843-2110
www.abbcoboom.com

ENVIRO-USA, LLC
Cocoa, FL
Phone: 1-321-222-9551
www.enviro-usa.com

Elastec/American Marine, Inc.
Carmi, IL
Phone: 1-618-382-2525
www.turbiditycurtains.com

Geo-Synthetics, LLC (GSI)
Waukesha, WI
Phone: 1-800-444-5523
www.geosynthetics.com

Parker Systems, Inc.
Chesapeake, VA
Phone: 1-866-472-7537
www.parkersystemsinc.com

An additional quantity of floating silt curtain has been added to the Estimate of Quantities for temporary sediment control.

TABLE OF FLOATING SILT CURTAIN

Station	to	Station	Quantity (Ft)
14+17 – 43' R		13+69 – 46' L	190
		Additional Quantity:	60
		Total:	250

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights will be incidental to the various related contract items.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
10964
VANESSA
VICTOR
SOUTH DAKOTA
10-28-21

GENERAL PERMANENT SIGNING

New sign installations will be staked in the field by the Contractor and checked by the Engineer. The Contractor will give the Engineer a minimum of one week to check staked locations prior to signpost installation. Lateral offset of signs will be as shown in the plans or as directed by the Engineer.

The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

When signs are mounted in an assembly, they will be 1-2 inches apart vertically and horizontally.

The height of the post must not exceed the minimum height needed by more than 0.5 feet. Any portion that extends above the sign will be cut off. No separate payment will be made for cutting the post or for that length cut off.

Aluminum U-Channel stiffeners will be used on all signs 36 inches or greater in width and will conform to ASTM B221 Alloy 6063-T6 or 6061-T6. The U-Channel will be 2 inches in width and free of holes. The U-Channel stiffeners will also be used to connect various signs together so that an entire sign assembly can be erected on a single installation. Stiffeners may be fastened to signs by use of 1/4-inch diameter drive rivets.

The Contractor will use 3/8-inch diameter rust proof machine sign bolts, flat metal washers, neoprene washers (against the sign sheeting), lock washers, and nuts to fasten the sign to the channel aluminum and posts. A minimum of two bolts will extend through each post.

Prior to ordering signs, the Contractor will verify dimensions, background, border, and legend of the signs.

Prior to use, the Contractor will provide documentation for the sign support devices showing they meet the applicable NCHRP 350 or MASH requirements.

REMOVE TRAFFIC SIGN

Existing signs that are shown as being removed in the Permanent Signing Table will become the property of the Contractor. Existing signposts and bases will be removed in their entirety. All existing signs, posts, and/or hardware removed will not be reused. Holes remaining from the removal of wood posts will be backfilled and compacted with material placed in layers not to exceed 6 inches in depth.

All costs associated with the removal of existing signs, posts, hardware, and backfilled holes will be incidental to the contract unit price per each for “Remove Traffic Sign”. Quantities will be per assembly at the contract unit price per each.

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer’s recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films.

All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type XI.

All costs associated with furnishing and installing the new permanent signs, and with furnishing and installing stiffeners and hardware will be incidental to the contract unit price per square foot for “Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity”.

SQUARE TUBE ANCHOR SLEEVE

The Contractor will furnish and install new 2.5” x 2.5” x 18”, 12 Gauge square tube anchor sleeve or equivalent components as approved by the Engineer for 2.0” x 2.0” perforated tube posts. A 2.25” x 2.25” x 4’, 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

DIGITALLY PRINTED SIGNS

Digitally printed signs will be allowed on this project. If the Contractor elects to provide digitally printed signs, such signs will adhere to the following specifications.

PROTECTIVE OVERLAY FILM

Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminate will comply with the retroreflective sheeting manufacturer’s recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1: Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
I	0	7
III	7	10
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

FABRICATION

Retroreflective sheeting will be applied to a properly cleaned and prepared aluminum sign blank in accordance with the retroreflective sheeting manufacturer’s recommendations. Sign legend will be applied using digital print technologies and systems in accordance with the retroreflective sheeting manufacturer’s recommendations and the requirements of these plans.

Finished signs will be free of ragged edges and must be supplied clean and free of scratches, grease, oil, lubricants or other contaminants. Minor blemishes (dirt speck, dust, etc.) may settle on the fresh ink surface or become entrapped between the sheeting surface and transparent overlay film due to static charge within the sign shop environment. Any blemish must be minor and not interfere with the communication of the sign message to the motorist. The blemish must not be visible to the naked eye when viewed from 30 feet or greater.

After application of the retroreflective sheeting, sign blanks will be stacked and packaged face to face, back to back, and protected in accordance with the sheeting manufacturer’s recommendations. Finished signs will be securely packaged to prevent damage during transit or storage according to the sheeting manufacturer’s recommendations.

TRAFFIC SIGN PERFORMANCE WARRANTY PROVISIONS

Based on the ASTM Type of sheeting specified, traffic control signs will be warranted for the duration shown in Table 1. Full product terms and conditions are as established by each sheeting manufacturer and may contain certain limitations based on sheeting and ink colors, and geographic exposure of the sign. A copy of the warranty document with complete details of terms and conditions will be supplied if requested by the Engineer.

CERTIFIED DIGITAL SIGN FABRICATOR

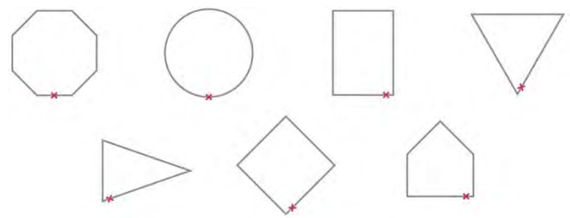
Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

DATE TAGGING SIGNS WITH PERTINENT INFORMATION

All digitally printed signs are required to be date-tagged with the following 2 components:

1. Date tags on the back of signs
   Tags will have the following information and be fabricated with material and printing system that are as durable as the warranted sign.
   - Name of Sign Fabricator
   - Date the sign was fabricated (month and year)
   - Process that was used for sign fabrication (digitally printed)
   - Supplier of sheeting that was used for fabricating the sign.
2. Border date

The month and year (mm/yyyy) of sign fabrication will be printed in the border of the sign in 3/8” sans serif font. Border date will be printed with the same warranted printed system as the sign face. The date should be printed in the locations indicated below.



STORMWATER POLLUTION PREVENTION PLAN CHECKLIST

*(The numbers left of the title headings are **reference numbers** to the GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES (Stormwater Permit))*

5.3 (2): STAFF TRAINING/SWPPP IMPLEMENTATION

To promote stormwater management awareness specific for this project, the Contractor's Erosion Control Supervisor should provide correspondence of how the SWPPP will be implemented. The Contractor's Erosion Control Supervisor is responsible for providing this information at the preconstruction meeting, and subsequently completing an attendance log, which should identify site-specific implementation of the SWPPP and the names of the personnel who attended the preconstruction meeting. Documentation of the preconstruction meeting will be filed with the SWPPP documents.

5.3 (3): DESCRIPTION OF CONSTRUCTION ACTIVITIES

- **5.3 (3a): Project Limits** (See Title Sheet)
- **5.3 (3a): Project Description** (See Title Sheet)
- **5.3 (4): Site Map(s)** (See Title Sheet and Plans)
- **Major Soil Disturbing Activities** (check all that apply)
  - ☐ Clearing and grubbing
  - ☒ Excavation/borrow
  - ☒ Grading and shaping
  - ☐ Filling
  - ☐ Other (describe):
- **5.3 (3b): Total Project Area** 0.41 acres
- **5.3 (3b): Total Area to be Disturbed** 0.26 acres
- **5.3 (3c): Maximum Area Disturbed at One Time** 0.21 acres
- **5.3 (3d): Existing Vegetative Cover (%)** 100
- **5.3 (3d): Description of Vegetative Cover** Dense trees and grassed stream embankments
- **5.3 (3e): Soil Properties:** USDA-NRCS Soil Series Classification chaska loam, bon loam
- **5.3 (3f): Name of Receiving Water Body/Bodies** Big Sioux River
- **5.3 (3g): Location of Construction Support Activity Areas**

5.3 (3h): ORDER OF CONSTRUCTION ACTIVITIES

The Contractor will enter the Estimated Start Date.

Description	Estimated Start Date
Install stabilized construction entrance(s).	
Install perimeter protection where runoff may exit site.	
Install perimeter protection around stockpiles.	
Install channel and ditch bottom protection.	
Remove and stockpile topsoil.	
Stabilize disturbed areas.	
Final grading.	
Removal of protection devices.	
Reseed areas disturbed by removal activities.	

5.3 (5): DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES

All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report. Include the technical reasoning for selecting each control. (check all that apply)

Perimeter Controls (See Detail Plan Sheets)

Description	Estimated Start Date
☐ Natural Buffers (within 50 ft of Waters of State)	
☒ Silt Fence	
☐ Erosion Control Wattles	
☐ Temporary Berm / Windrow	
☒ Floating Silt Curtain	
☐ Stabilized Construction Entrances	
☐ Entrance/Exit Equipment Tire Wash	
☐ Other:	

Structural Erosion and Sediment Controls

Description	Estimated Start Date
☒ Silt Fence	
☐ Temporary Berm/Windrow	
☐ Erosion Control Wattles	
☐ Temporary Sediment Barriers	
☐ Erosion Bales	
☐ Temporary Slope Drain	
☐ Turf Reinforcement Mat	
☐ Riprap	
☐ Gabions	
☐ Rock Check Dams	
☐ Sediment Traps/Basins	
☐ Culvert Inlet Protection	
☐ Transition Mats	
☐ Median/Area Drain Inlet Protection	
☐ Curb Inlet Protection	
☐ Interceptor Ditch	
☐ Concrete Washout Facility	
☐ Work Platform	
☐ Temporary Water Barrier	
☐ Temporary Water Crossing	
☐ Permanent Stormwater Ponds	
☐ Permanent Open Vegetated Swales	
☐ Natural Depressions to allow for Infiltration	
☐ Sequential Systems that combine several practices	
☐ Other:	

Dust Controls

Description	Estimated Start Date
☐ Tarps & Wind impervious fabrics	
☒ Watering	
☐ Stockpile location/orientation	
☐ Dust Control Chlorides	
☐ Other	

Dewatering BMPs

Description	Estimated Start Date
☐ Sediment Basins	
☐ Dewatering bags	
☐ Weir tanks	
☐ Temporary Diversion Channel	
☐ Other:	

Stabilization Practices (See Detail Plan Sheets)

(Stabilization measures will begin the following work day whenever earth disturbing activity on any portion of the site has temporarily or permanently ceased. Temporary stabilization will be completed as soon as practicable but no later than 14 days after initiating soil stabilization activities (**3.18**))

Description	Estimated Start Date
☐ Vegetation Buffer Strips	
☐ Temporary Seeding (Cover Crop Seeding)	
☒ Permanent Seeding	
☐ Sodding	
☐ Planting (Woody Vegetation for Soil Stabilization)	
☐ Mulching (Grass Hay or Straw)	
☐ Fiber Mulching (Wood Fiber Mulch)	
☐ Soil Stabilizer	
☐ Bonded Fiber Matrix	
☐ Fiber Reinforced Matrix	
☒ Erosion Control Blankets	
☐ Surface Roughening (e.g. tracking)	
☐ Other:	

Wetland Avoidance

Will construction and/or erosion and sediment controls impinge on regulated wetlands? Yes ☐ No ☒ If yes, the structural and erosion and sediment controls have been included in the total project wetland impacts and have been included in the 404 permit process with the USACE.

5.3 (6): PROCEDURES FOR INSPECTIONS

- Inspections will be conducted at least once every 7 days.
- All controls will be maintained in good working order. Necessary repairs will be initiated within 24 hours of the site inspection report.
- Silt fence will be inspected for depth of sediment and for tears to ensure the fabric is securely attached to the posts and that the posts are well anchored. Sediment buildup will be removed from the silt fence when it reaches 1/3 of the height of the silt fence.
- Sediment basins and traps will be checked. Sediment will be removed when depth reaches approximately 50 percent of the structure's capacity, and at the conclusion of the construction.
- Check dams will be inspected for stability. Sediment will be removed when depth reaches ½ the height of the dam.
- All seeded areas will be checked for bare spots, washouts, and vigorous growth free of significant weed infestations.
- Inspection and maintenance reports will be prepared on form DOT 298 for each site inspection, this form will also be used to document changes to the SWPPP. A copy of the completed inspection form will be filed with the SWPPP documents.
- The SDDOT Project Engineer and Contractor's Erosion Control Supervisor are responsible for inspections. Maintenance and repair activities are the responsibility of the Contractor. The SDDOT Project Engineer will complete the inspection and maintenance reports and distribute copies per the distribution instructions on DOT 298.

5.3 (7): POST CONSTRUCTION STORMWATER MANAGEMENT

Stormwater management will be handled by temporary controls outlined in "DESCRIPTION AND MAINTENANCE OF CONTROL MEASURES" above, and any permanent controls needed to meet permanent stormwater management needs in the post construction period will be shown in the plans and noted as permanent.

5.3 (8): POLLUTION PREVENTION PROCEDURES

5.3 (8a): Spill Prevention and Response Procedures

➢ **Material Management**

- Housekeeping
  - Only needed products will be stored on-site by the Contractor.
  - Except for bulk materials the contractor will store all materials under cover and/or in appropriate containers.
  - Products must be stored in original containers and labeled.
  - Material mixing will be conducted in accordance with the manufacturer's recommendations.
  - When possible, all products will be completely used before properly disposing of the container off-site.
  - The manufacturer's directions for disposal of materials and containers will be followed.
  - The Contractor's site superintendent will inspect materials storage areas regularly to ensure proper use and disposal.
  - Dust generated will be controlled in an environmentally safe manner.

- Hazardous Materials
  - Products will be kept in original containers unless the container is not resealable and provide secondary containment as applicable.
  - Original labels and material safety data sheets will be retained in a safe place to relay important product information.
  - If surplus product must be disposed of, manufacturer's label directions for disposal will be followed.
  - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants will be conducted on an impervious surface and under cover during wet weather to prevent the release of contaminants onto the ground.
  - Wheel wash water will be collected and allowed to settle out suspended solids prior to discharge. Wheel wash water will not be discharged directly into any stormwater system or stormwater treatment system.
  - Potential pH-modifying materials such as: bulk cement, cement kiln dust, fly ash, new concrete washings, concrete pumping, residuals from concrete saw cutting (either wet or dry), and mixer washout waters will be collected on site and managed to prevent contamination of stormwater runoff.

➢ **Spill Control Practices**

In addition to the previous housekeeping and management practices, the following practices will be followed for spill prevention and cleanup if needed.

- For all hazardous materials stored on site, the manufacturer's recommended methods for spill cleanup will be clearly posted. Site personnel will be made aware of the procedures and the locations of the information and cleanup supplies.
- Appropriate cleanup materials and equipment will be maintained by the Contractor in the materials storage area on-site. As appropriate, equipment and materials may include items such as brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for cleanup purposes.
- All spills will be cleaned immediately after discovery and the materials disposed of properly.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- After a spill a report will be prepared describing the spill, what caused it, and the cleanup measures taken. The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring, as well as clean up instructions in the event of reoccurrences.
- The Contractor's site superintendent, responsible for day-to-day operations, will be the spill prevention and cleanup coordinator.

➢ **Spill Response**

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into stormwater runoff and conveyance systems. If the release has impacted on-site stormwater, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens stormwater or surface water at the site, the spill response procedures outlined below must be implemented in a timely manner to prevent the release of pollutants.

- The Contractor's site superintendent will be notified immediately when a spill or the threat of a spill is observed. The superintendent will assess the situation and determine the appropriate response.
- If spills represent an imminent threat of escaping erosion and sediment controls and entering receiving waters, personnel will be directed to respond immediately to contain the release and notify the superintendent after the situation has been stabilized.
- Spill kits containing appropriate materials and equipment for spill response and cleanup will be maintained by the Contractor at the site.
- If oil sheen is observed on surface water (e.g. settling ponds, detention ponds, swales), action will be taken immediately to remove the material causing the sheen. The Contractor will use appropriate materials to contain and absorb the spill. The source of the oil sheen will also be identified and removed or repaired as necessary to prevent further releases.
- If a spill occurs the superintendent or the superintendent's designee will be responsible for completing the spill reporting form and for reporting the spill to SDDENR.
- Personnel with primary responsibility for spill response and cleanup will receive training by the Contractor's site superintendent or designee. The training must include identifying the location of the spill kits and other spill response equipment and the use of spill response materials.
- Spill response equipment will be inspected and maintained as necessary to replace any materials used in spill response activities.

5.3 (8b): WASTE MANAGEMENT PROCEDURES

➢ **Waste Disposal**

- All liquid waste materials will be collected and stored in approved sealed containers. All trash and construction debris from the site will be deposited in the approved containers. Containers will be serviced as necessary, and the trash will be hauled to an approved disposal site or licensed landfill. All onsite personnel will be instructed in the proper procedures for waste disposal and notices stating proper practices will be posted. The Contractor is responsible for ensuring waste disposal procedures are followed.

➢ **Hazardous Waste**

- All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the Contractor will be responsible for seeing that these practices are followed.

➢ **Sanitary Waste**

- Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units which must be secured to prevent tipping and serviced in a timely manner by a licensed waste management Contractor or as required by any local regulations.

5.3 (9): CONSTRUCTION SITE POLLUTANTS

The following materials or substances are expected to be present on the site during the construction period. These materials will be handled as noted under the heading "POLLUTION PREVENTION PROCEDURES" (check all that apply).

- ☒ Concrete and Portland Cement
- ☐ Detergents
- ☐ Paints
- ☒ Metals
- ☒ Bituminous Materials
- ☐ Petroleum Based Products
- ☐ Diesel Exhaust Fluid
- ☐ Cleaning Solvents
- ☐ Wood
- ☐ Cure
- ☐ Texture
- ☐ Chemical Fertilizers
- ☐ Other:

Product Specific Practices

- **Petroleum Products**
  All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled.

- **Fertilizers**
  Fertilizers will be applied only in the amounts specified by the SDDOT. Once applied, fertilizers will be worked into the soil to limit the exposure to stormwater. Fertilizers will be stored in an enclosed area. The contents of partially used fertilizer bags will be transferred to sealable containers to avoid spills.

- **Paints**
  All containers will be tightly sealed and stored when not required for use. The excess will be disposed of according to the manufacturer's instructions and any applicable state and local regulations.

- **Concrete Trucks**
  Contractors will provide designated truck washout facilities on the site. These areas must be self-contained and not connected to any stormwater outlet of the site. Upon completion of construction, the area at the washout facility will be properly stabilized.

5.3 (10): NON-STORMWATER DISCHARGES

The following non-stormwater discharges are anticipated during the course of this project (check all that apply).

- ☐ Discharges from water line flushing.
- ☐ Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.
- ☒ Uncontaminated ground water associated with dewatering activities.

5.3 (11): INFEASIBILITY DOCUMENTATION

If it is determined to be infeasible to comply with any of the requirements of the Stormwater Permit, the infeasibility determination must be thoroughly documented in the SWPPP.

7.0: SPILL NOTIFICATION

In the event of a spill, the Contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:

- A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to SDDENR immediately **if any one of the following** conditions exists:
  - The release or spill threatens or is able to threaten waters of the state (surface water or ground water)
  - The release or spill causes an immediate danger to human health or safety
  - The release or spill exceeds 25 gallons
  - The release or spill causes a sheen on surface water
  - The release or spill of any substance that exceeds the ground water quality standards of ARSD Chapter 74:54:01
  - The release or spill of any substance that exceeds the surface water quality standards of ARSD Chapter 74:51:01
  - The release or spill of any substance that harms or threatens to harm wildlife or aquatic life
  - The release or spill is required to be reported according to Superfund Amendments and Reauthorization Act (SARA) Title III List of Lists, Consolidated List of Chemicals Subject to Reporting Under the Emergency Planning and Community Right to Know Act, US Environmental Protection Agency.

- To report a release or spill, call SDDENR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central Standard Time). To report the release after hours, on weekends or holidays, call South Dakota Emergency Management at 605-773-3231. Reporting the release to SDDENR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, you must also contact local authorities to determine the local reporting requirements for releases. A written report of the unauthorized release of any regulated substance, including quantity discharged, and the location of the discharge will be sent to SDDENR within 14 days of the discharge.

5.4: SWPPP CERTIFICATIONS

➢ **Certification of Compliance with Federal, State, and Local Regulations**

The Storm Water Pollution Prevention Plan (SWPPP) for this project reflects the requirements of all local municipal jurisdictions for storm water management and sediment and erosion control as established by ordinance, as well as other state and federal requirements for sediment and erosion control plans, permits, notices or documentation as appropriate.

➢ **South Dakota Department of Transportation**

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.

_____

Authorized Signature (See the General Permit, Section 7.4 (1))

➢ **Prime Contractor**

This section is to be executed by the General Contractor after the award of the contract. This section may be executed any time there is a change in the Prime Contractor of the project.

I certify under penalty of law that this document and all attachments will be revised or maintained 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.

_____

Authorized Signature

CONTACT INFORMATION

The following personnel are duly authorized representatives and have signatory authority for modifications made to the SWPPP:

➢ **Contractor Information**:

- Prime Contractor Name: _____
- Contractor Contact Name: _____
- Address: _____
- _____
- City: _____State: _____Zip: _____
- Office Phone: _____Field: _____
- Cell Phone: _____Fax: _____

➢ **Erosion Control Supervisor**

- Name: _____
- Address: _____
- _____
- City: _____State: _____Zip: _____
- Office Phone: _____Field: _____
- Cell Phone: _____Fax: _____

➢ **SDDOT Project Engineer**

- Name: _____
- Business Address: _____
- Job Office Location: _____
- City: _____State: _____Zip: _____
- Office Phone: _____Field: _____
- Cell Phone: _____Fax: _____

➢ **SDDENR Contact Spill Reporting**
- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➢ **SDDENR Contact for Hazardous Materials.**
- (605) 773-3153

➢ **National Response Center Hotline**
- (800) 424-8802.

➢ **SDDENR Stormwater Contact Information**
- SDDENR Stormwater (800) 737-8676
- Surface Water Quality Program (605) 773-3351

5.5: REQUIRED SWPPP MODIFICATIONS

➢ **5.5 (1): Conditions Requiring SWPPP Modification**

The SWPPP must be modified, including the site map(s), in response to any of the following conditions:

- When a new operator responsible for implementation of any part the SWPPP begins work on the site.
- When changes to the construction plans, sediment and erosion control measures, or any best management practices on site that are no longer accurately reflected in the SWPPP. This includes changes made in response to corrective actions triggered by inspections.
- To reflect areas on the site map where operational control has been transferred (including the date of the transfer) or has been covered under a new permit since initiating coverage under this general permit.
- If inspections by site staff, local officials, SDDENR, or U.S. EPA determine that SWPPP modifications are necessary for compliance with the Stormwater Permit.
- To reflect any revisions to applicable federal, state, or local requirements that affect the control measures implemented at the site.
- If approved by the Secretary, to reflect any changes in chemical water treatment systems or controls, including the use of a different water treatment chemical, age rates, different areas, or methods of application.

➢ **5.5 (2): Deadlines for SWPPP Modification**

Any required revisions to the SWPPP must be completed within 7 calendar days following any of the items listed above.

➢ **5.5 (3): Documentation of Modifications to the Plan**

All SWPPP modification records are required to be maintained showing the dates of when the modification occurred. The records must include the name of the person authorizing each change and a brief summary of all changes.

➢ **5.5 (4): Certification Requirements**

All modifications made to the SWPPP must be signed and certified as required in Section 7.4.

➢ **5.5 (5): Required Notice to Other Operators**

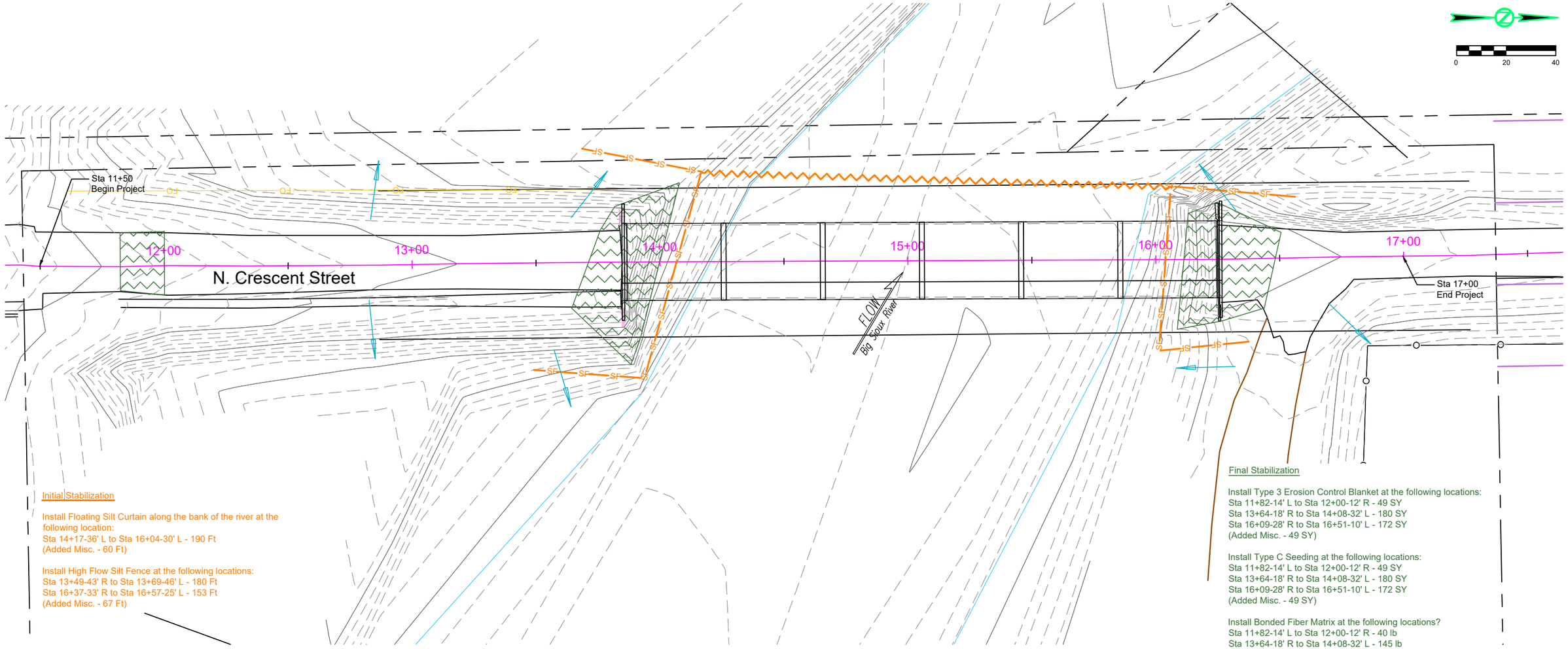
If there are multiple operators at the site, the Contractor's Erosion Control Supervisor must notify each operator that may be impacted by the change to the SWPPP within 24 hours.

When modifications as described above occur, the SWPPP will be modified to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP using the DOT 298 form and drawings on the plan will be modified to reflect the needed changes. Copies of the DOT 298 forms and the SWPPP will be retained on site in a designated place for review throughout the course of the project. A copy of the DOT 298 form will be given to the Contractor Erosion Control Supervisor and a copy will be emailed to the SDDOT Environmental Section in accordance with the DOT 298 Form.

EROSION CONTROL PLAN

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	12	23



Initial Stabilization

Install Floating Silt Curtain along the bank of the river at the following location:
Sta 14+17-36' L to Sta 16+04-30' L - 190 Ft
(Added Misc. - 60 Ft)

Install High Flow Silt Fence at the following locations:
Sta 13+49-43' R to Sta 13+69-46' L - 180 Ft
Sta 16+37-33' R to Sta 16+57-25' L - 153 Ft
(Added Misc. - 67 Ft)

Final Stabilization

Install Type 3 Erosion Control Blanket at the following locations:
Sta 11+82-14' L to Sta 12+00-12' R - 49 SY
Sta 13+64-18' R to Sta 14+08-32' L - 180 SY
Sta 16+09-28' R to Sta 16+51-10' L - 172 SY
(Added Misc. - 49 SY)

Install Type C Seeding at the following locations:
Sta 11+82-14' L to Sta 12+00-12' R - 49 SY
Sta 13+64-18' R to Sta 14+08-32' L - 180 SY
Sta 16+09-28' R to Sta 16+51-10' L - 172 SY
(Added Misc. - 49 SY)

Install Bonded Fiber Matrix at the following locations?
Sta 11+82-14' L to Sta 12+00-12' R - 40 lb
Sta 13+64-18' R to Sta 14+08-32' L - 145 lb
Sta 16+09-28' R to Sta 16+51-10' L - 139 lb
(Added Misc. - 76 lb)

LEGEND

- SF — High Flow Silt Fence
- Floating Silt Curtain
- Type 3 Erosion Control Blanket and Type C Permanent Seed Mix Bonded Fiber Matrix
- Drainage Arrows

BEST MANAGEMENT PRACTICES

Best Management Practices (BMPs) are split into two categories and are to be used throughout construction.

INITIAL PHASE

BMPs from the Legend shown as Orange Symbols on the Erosion and Sediment Control Plan Sheets are to be installed in the Initial Phase prior to earth disturbing activitles and remain in place for the Intermediate Phase for temporary stabilization and in the Final Phase to achieve final stabilization.

FINAL PHASE

BMPs from the Legend shown as Green Symbols on the Erosion and Sediment Control Plan Sheets are to be installed in the Final Phase to achieve final stabilization.

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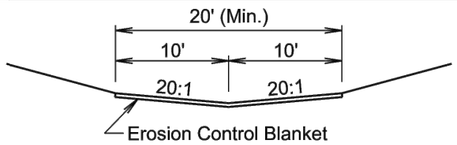
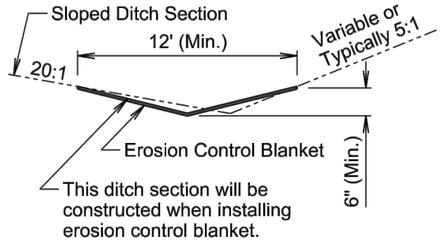
10-28-21

infrastructure design group, inc.

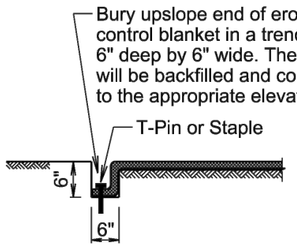
S:\9-2020 Projects\20153 - Bridge Removal Program 2020 BRO 8051(17) PCN 08AD City of Flandreau SN 51-147.00\Design\CAD\SHEETS\D-EROSION.dwg
PLOT DATE: 8/2/2021 8:41 AM Ilarmin Rose



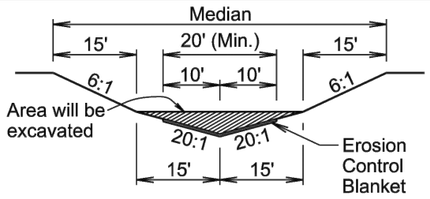
STANDARD DITCH SECTION



SLOPED DITCH SECTION

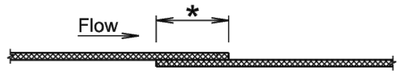


TRENCH DETAIL



The median will be shaped to the limits shown in this detail where the erosion control blanket will be placed.

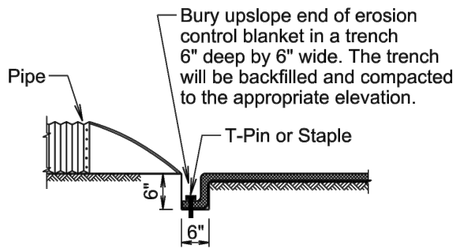
MEDIAN SECTION



* Use a 4" (Min.) overlap wherever two widths of erosion control blanket are applied side by side.

* Use a 6" (Min.) overlap wherever one roll of erosion control blanket ends and another begins.

OVERLAP DETAIL



PIPE END DETAIL

GENERAL NOTES:

Prior to placement of the erosion control blanket, the areas will be properly prepared, shaped, seeded, and fertilized.

Erosion control blanket will be unrolled in the direction of the flow of water when placed in ditches and on slopes. The upslope end of the erosion control blanket will be buried in a trench 6" wide by 6" deep. There will be at least a 6" overlap wherever one roll of erosion control blanket ends and another begins, with the upslope erosion control blanket placed on top of the downslope erosion control blanket.

The erosion control blanket will be pinned to the ground according to the manufacturer's installation recommendations.

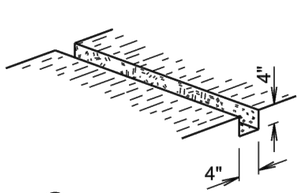
After the placement of the erosion control blanket, the Contractor will fine grade along all edges of the blanket to maintain a uniform slope adjacent to the blanket and level any low spots which might prevent uniform and unrestricted flow of side drainage directly onto the erosion control blanket.

All ditch sections will be shaped when installing the erosion control blanket. All costs for shaping the ditches will be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

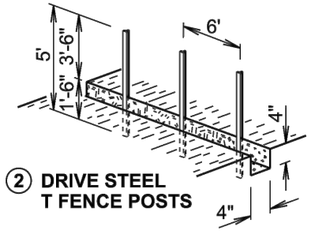
February 14, 2020

Published Date: 4th Qtr. 2021	SDDOT	*EROSION CONTROL BLANKET*	*PLATE NUMBER 734.01*
			Sheet 1 of 1

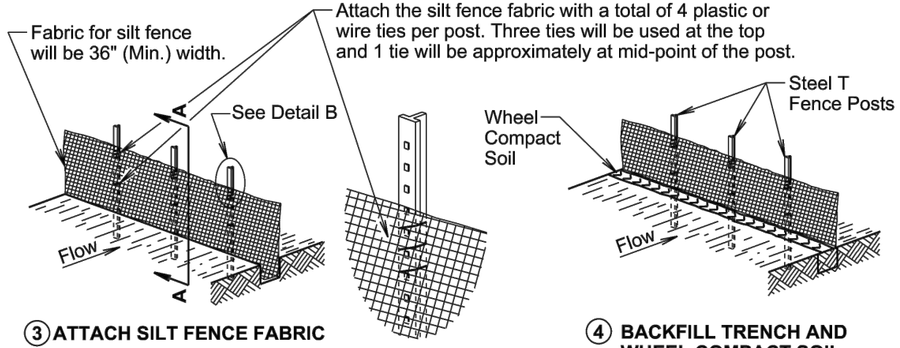
MANUAL HIGH FLOW SILT FENCE INSTALLATION



① EXCAVATE TRENCH



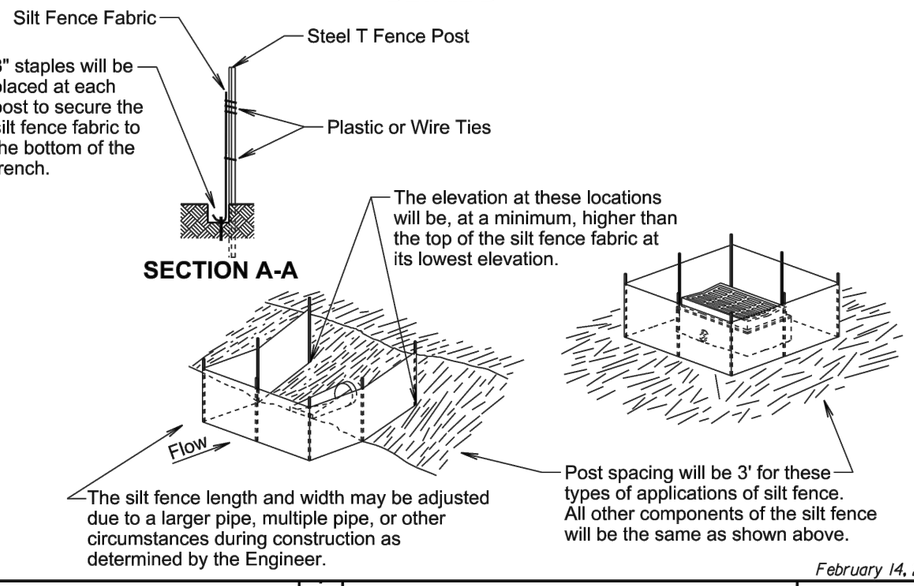
② DRIVE STEEL T FENCE POSTS



③ ATTACH SILT FENCE FABRIC

④ BACKFILL TRENCH AND WHEEL COMPACT SOIL

DETAIL B

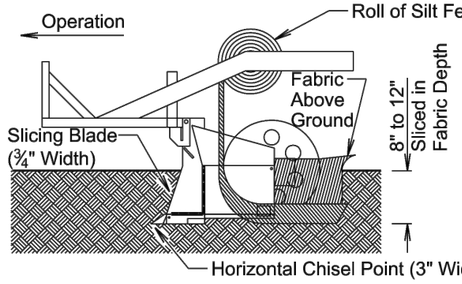


SECTION A-A

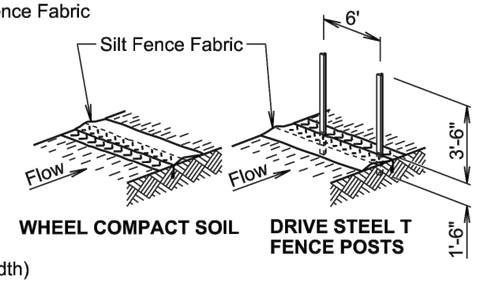
February 14, 2020

Published Date: 4th Qtr. 2021	SDDOT	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05
			Sheet 1 of 2

MACHINE SLICED HIGH FLOW SILT FENCE INSTALLATION



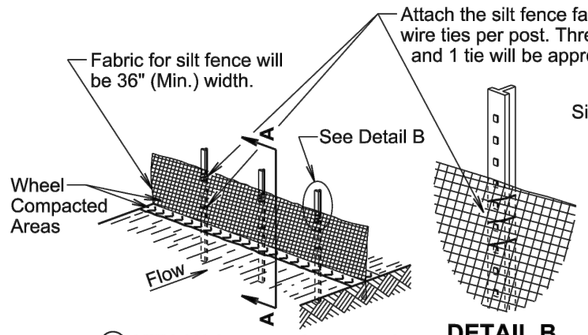
① INSTALL SILT FENCE FABRIC BY MACHINE SLICING METHOD.



WHEEL COMPACT SOIL

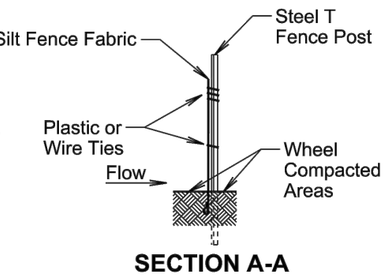
DRIVE STEEL T FENCE POSTS

② WHEEL COMPACT SOIL ABOVE SLICED IN PORTION OF FABRIC AND THEN DRIVE STEEL T FENCE POSTS.

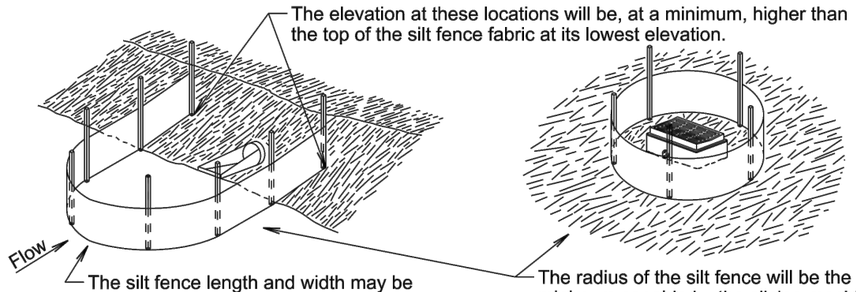


③ ATTACH SILT FENCE FABRIC

DETAIL B



SECTION A-A



GENERAL NOTE:

If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end will be provided on top of the extra length of silt fence fabric to prevent underflow.

February 14, 2020

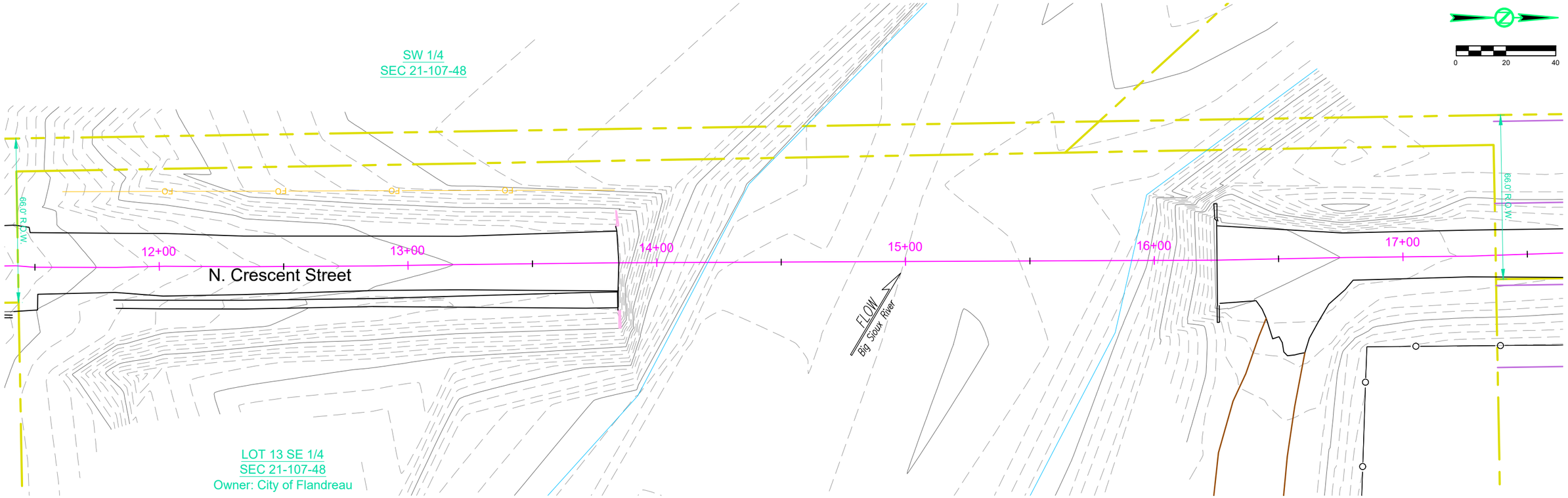
Published Date: 4th Qtr. 2021	SDDOT	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05
			Sheet 2 of 2

Vertical Survey Datum - NAVD88
Horizontal Survey Datum - UTM Zone 14 North NAD83(86)

SURVEY DATA

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	15	23



ALIGNMENT DATA

PI STATION	NORTHING (Y)	EASTING (X)	DISTANCE	DIRECTION
9+49.36	648471.04	2951373.93	58.77	N6° 35' 31.57"W
10+08.13	648529.42	2951367.18	10.06	N8° 10' 48.07"W
10+18.19	648539.39	2951365.75	36.44	N0° 27' 38.60"E
10+54.63	648575.82	2951366.04	16.18	N7° 20' 34.31"W
10+70.81	648591.87	2951363.98	18.22	N2° 35' 09.59"W
10+89.03	648610.07	2951363.15	33.00	N2° 45' 06.01"W
11+22.03	648643.03	2951361.57	8.98	N3° 18' 27.45"W
11+31.00	684651.99	2951361.05	11.40	N2° 52' 37.99"W
11+42.40	648663.37	2951360.48	7.38	N2° 32' 28.26"E
11+49.78	648670.74	2951360.81	33.05	N1° 50' 34.90"W
11+82.83	648703.77	2951359.74	19.37	N3° 17' 27.26"W
12+02.20	648723.11	2951358.63	31.13	N1° 34' 59.22"W
12.33.33	648754.23	2951357.77	53.39	N2° 21' 30.01"W
12+86.72	648807.58	2951355.57	32.72	N3° 00' 35.43"W
13+19.44	648840.25	2951353.86	65.32	N2° 35' 31.37"W
13+84.76	648905.50	2951350.90	240.69	N2° 14' 55.32"W

ALIGNMENT DATA

PI STATION	NORTHING (Y)	EASTING (X)	DISTANCE	DIRECTION
16+25.45	648146.00	2951341.46	51.94	N3° 09' 06.73"W
16+77.39	649197.87	2951338.60	49.24	N2° 37' 37.29"W
17+26.63	649247.06	2951336.35	47.73	N3° 52' 49.27"W
17+74.36	649294.68	2951333.12	110.08	N2° 14' 41.42"W
18+84.44	649404.38	2951328.80	-	-

HORIZONTAL/VERTICAL CONTROL POINTS

POINT	STATION	OFFSET	NORTHING (Y)	EASTING (X)	ELEVATION	DESCRIPTION
1	10+35.63	32.18' RT	648556.59	2951398.09	1554.21	REBAR
2	21+07.31	19.12' LT	649626.68	2951300.96	1530.93	REBAR

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PLOT DATE: 8/2/2021 8:51 AM Iaemi Rose

Vertical Survey Datum - NAVD88
Horizontal Survey Datum - UTM Zone 14 North NAD83(86)

GRADING PLAN AND PROFILE

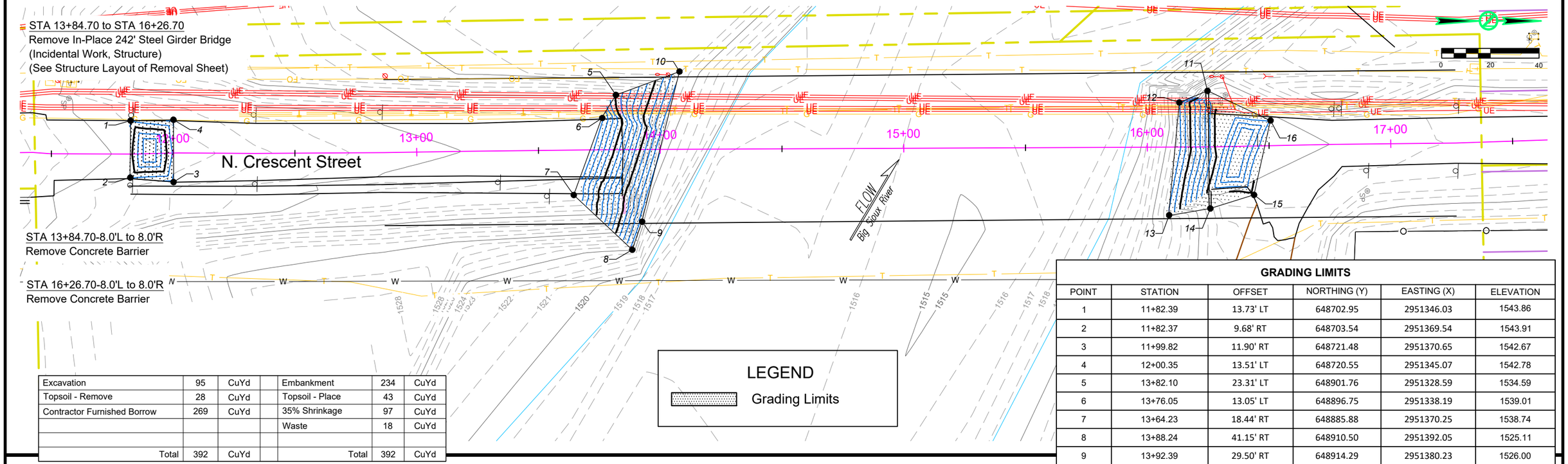
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	16	23

STA 13+84.70 to STA 16+26.70
Remove In-Place 242' Steel Girder Bridge
(Incidental Work, Structure)
(See Structure Layout of Removal Sheet)

STA 13+84.70-8.0'L to 8.0'R
Remove Concrete Barrier

STA 16+26.70-8.0'L to 8.0'R
Remove Concrete Barrier



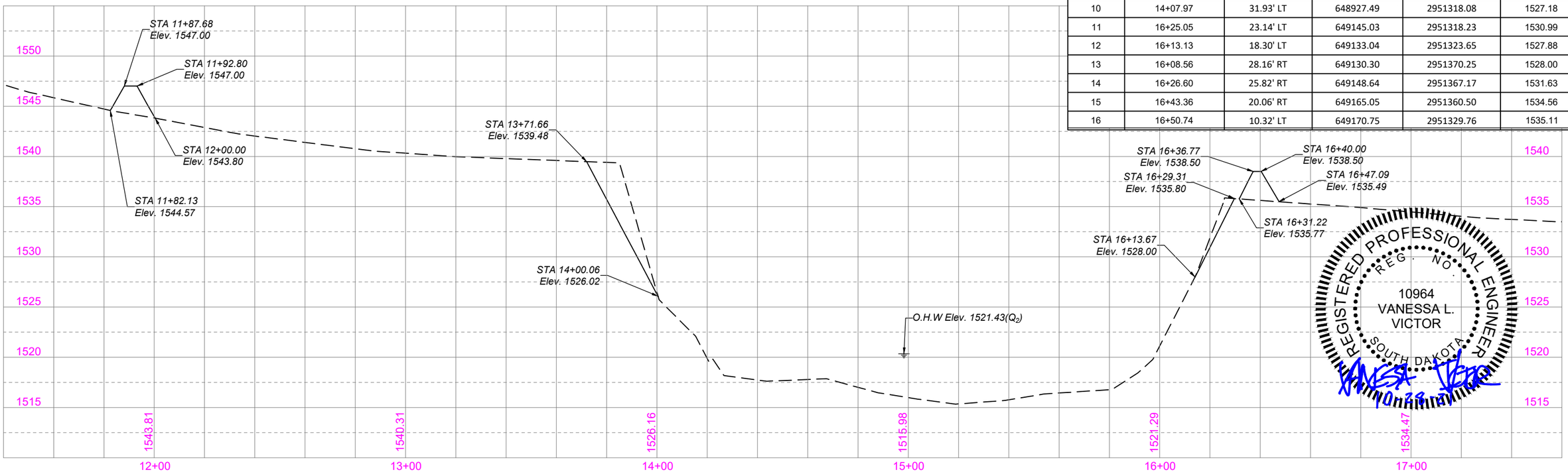
Excavation	95	CuYd		Embankment	234	CuYd
Topsoil - Remove	28	CuYd		Topsoil - Place	43	CuYd
Contractor Furnished Borrow	269	CuYd		35% Shrinkage	97	CuYd
				Waste	18	CuYd
Total	392	CuYd		Total	392	CuYd

LEGEND

Grading Limits

GRADING LIMITS

POINT	STATION	OFFSET	NORTHING (Y)	EASTING (X)	ELEVATION
1	11+82.39	13.73' LT	648702.95	2951346.03	1543.86
2	11+82.37	9.68' RT	648703.54	2951369.54	1543.91
3	11+99.82	11.90' RT	648721.48	2951370.65	1542.67
4	12+00.35	13.51' LT	648720.55	2951345.07	1542.78
5	13+82.10	23.31' LT	648901.76	2951328.59	1534.59
6	13+76.05	13.05' LT	648896.75	2951338.19	1539.01
7	13+64.23	18.44' RT	648885.88	2951370.25	1538.74
8	13+88.24	41.15' RT	648910.50	2951392.05	1525.11
9	13+92.39	29.50' RT	648914.29	2951380.23	1526.00
10	14+07.97	31.93' LT	648927.49	2951318.08	1527.18
11	16+25.05	23.14' LT	649145.03	2951318.23	1530.99
12	16+13.13	18.30' LT	649133.04	2951323.65	1527.88
13	16+08.56	28.16' RT	649130.30	2951370.25	1528.00
14	16+26.60	25.82' RT	649148.64	2951367.17	1531.63
15	16+43.36	20.06' RT	649165.05	2951360.50	1534.56
16	16+50.74	10.32' LT	649170.75	2951329.76	1535.11



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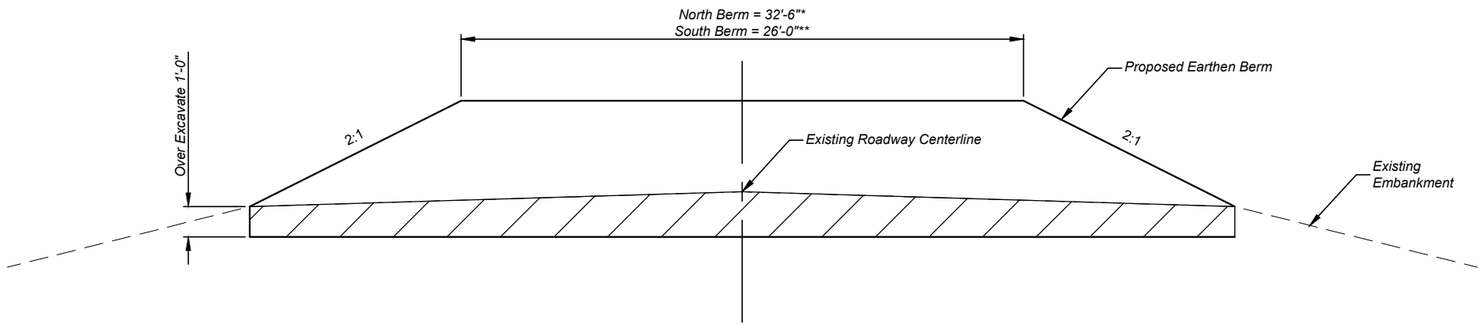
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	17	23



TYPICAL BERM SECTION

* *TOP OF NORTH BERM IS CENTERED AT STATION 11+90.24 WITH A PROPOSED ELEVATION OF 1547.00*

** *TOP OF SOUTH BERM IS CENTERED AT STATION 16+38.39 WITH A PROPOSED ELEVATION OF 1538.50*

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TRAFFIC CONTROL - N. CRESCENT STREET

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	18	23

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R11-2	ROAD CLOSED	2	48" x 30"	10.0	20.0
W20-3	ROAD CLOSED AHEAD	3	48" x 48"	16.0	48.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			68.0

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10-28-21

PERMANENT SIGNING - N. CRESCENT STREET

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRO 8051(17)	19	23

SIGN REMOVAL	
STATION - OFFSET	SIGN DESCRIPTION
9+57.33-17.26'R	R5-10a/ TYPE III BARRICADE/ BRIDGE CLOSED
11+83.03-15.95'L	DELINEATOR
11+82.31-12.83'R	DELINEATOR
12+32.87-15.84'L	DELINEATOR
12+33.36-12.55'R	DELINEATOR
12+84.94-16.61'L	DELINEATOR
13+33.14-12.90'R	DELINEATOR
13+53.22-18.87'R	TYPE 3 OBJECT MARKER
13+43.95-11.11'R	TYPE III BARRICADE/ BRIDGE CLOSED
13+83.48-14.68'L	TYPE 3 OBJECT MARKER
16+25.87-14.98'L	TYPE 3 OBJECT MARKER
16+45.26-2.65'L	TYPE II BARRICADE/ BRIDGE CLOSED
16+75.87-14.61'L	TYPE 3 OBJECT MARKER
16+78.84-14.76'L	DELINEATOR
16+78.84-14.76'L	R5-2A/ R12-1
16+89.68-10.93'R	TYPE 3 MARKER
17+27.28-15.14'L	DELINEATOR
17+26.44-11.47'R	DELINEATOR
17+75.46-13.8'L	DELINEATOR
17+74.60-12.56'R	DELINEATOR
18+25.29-12.24'R	DELINEATOR
18+83.80-30.82'L	R5-10a

SIGN INSTALL	
STATION - OFFSET	SIGN DESCRIPTION
11+91.39-8.00' L	OM4-3
11+90.78-0.00'	OM4-3
11+90.18-8.00' R	OM4-3
16+38-56-0.00'	OM4-3
16+40.64-8.00' L	OM4-3
16+36-47-8.00' R	OM4-3

ITEMIZED LIST FOR PERMANENT SIGNS

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W14-1	DEAD END	2	48" x 48"	16.0	32.0
		CONVENTIONAL ROAD PERMANENT SIGNS SQFT			32.0

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10-28-21

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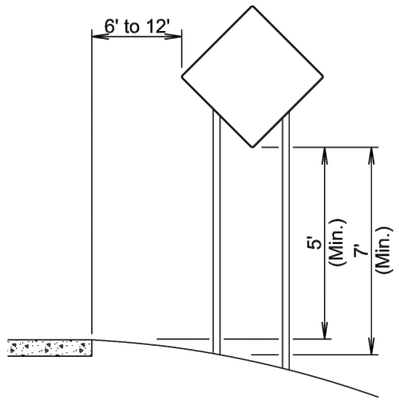
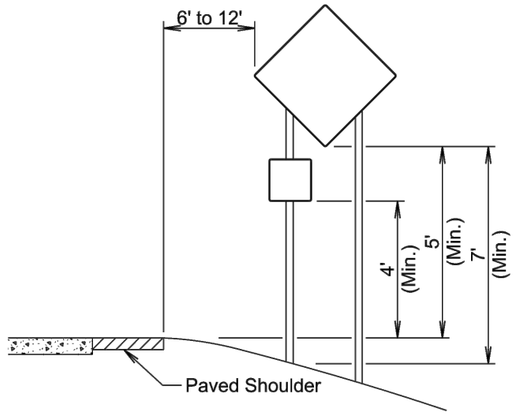
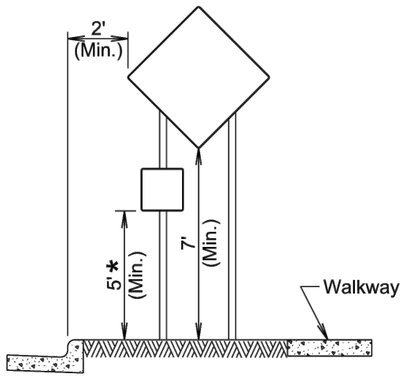
PLOT DATE: 8/2/2021 8:49 AM tasnim Rosa



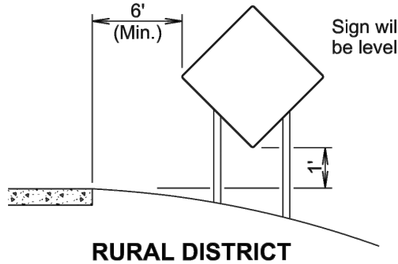
RURAL DISTRICT



RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT

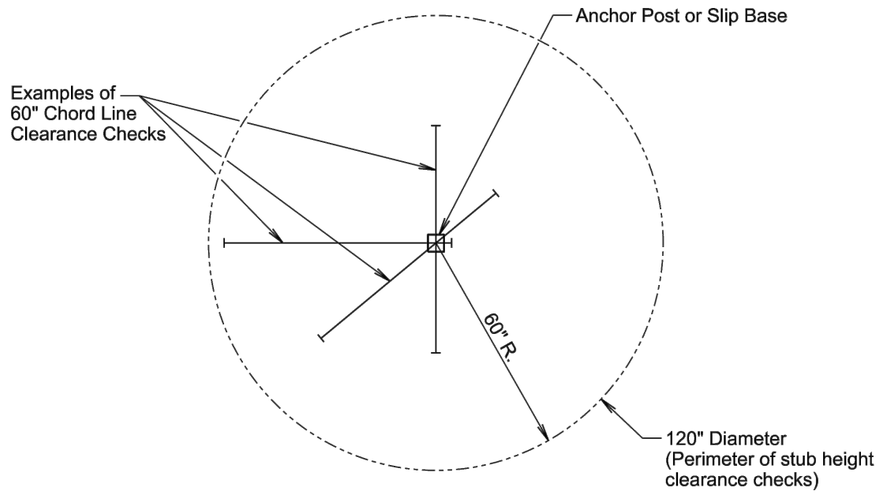


RURAL DISTRICT
3 DAY MAXIMUM
(Not applicable to regulatory signs)

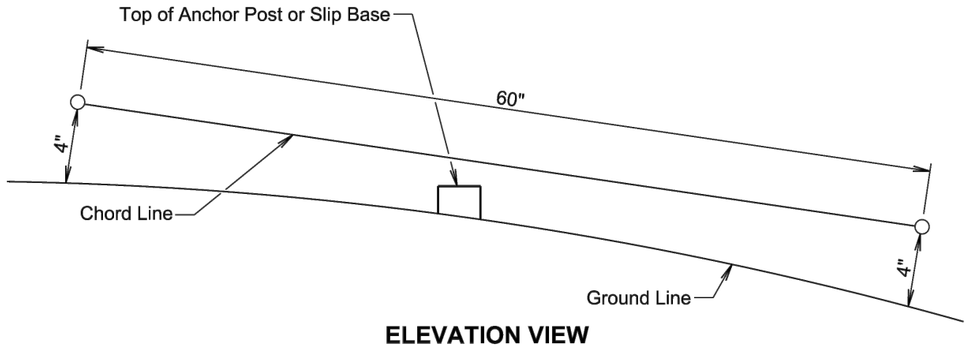
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

Published Date: 4th Qtr. 2021	SDDOT	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW
(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

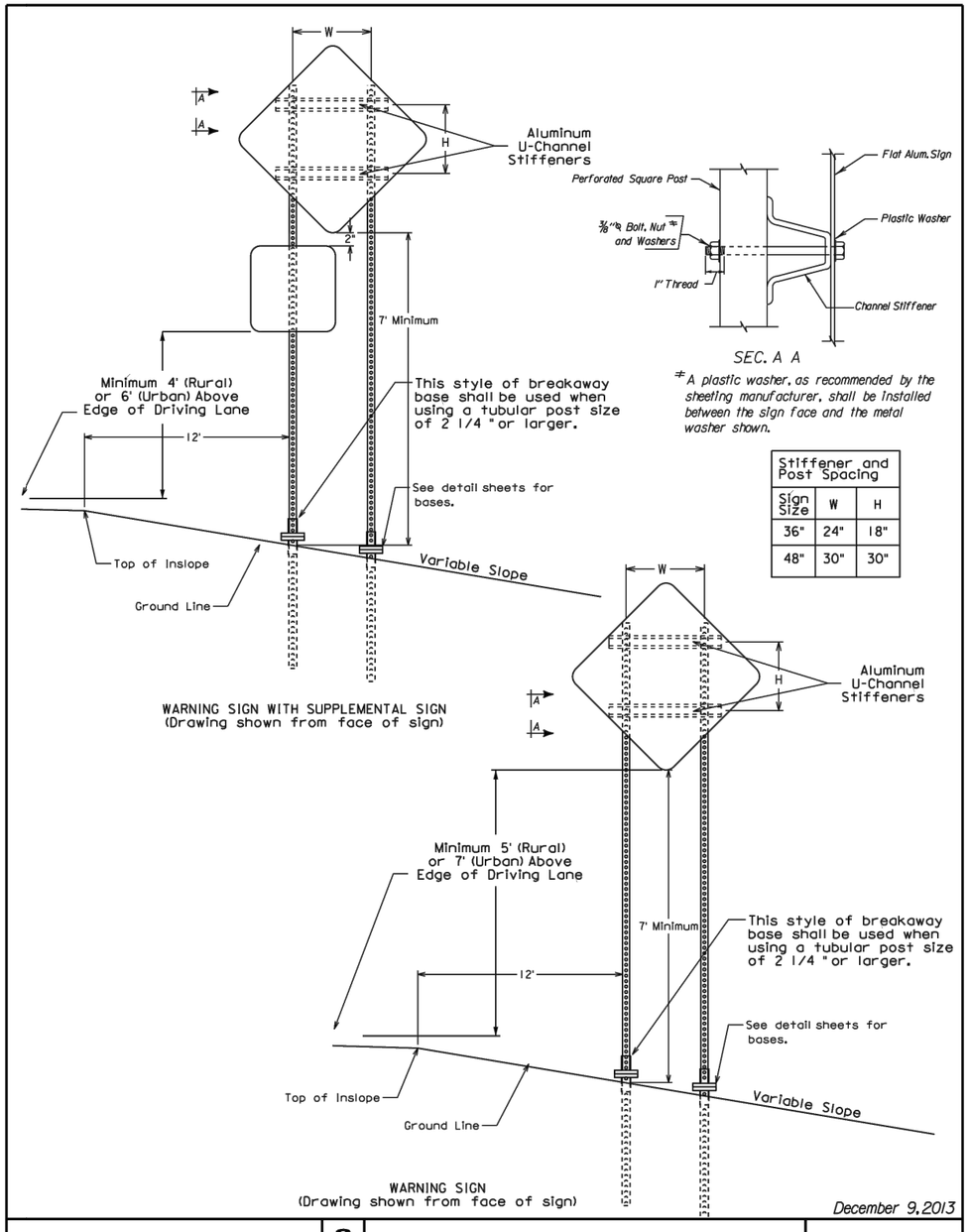
The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

January 22, 2021

Published Date: 4th Qtr. 2021	SDDOT	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

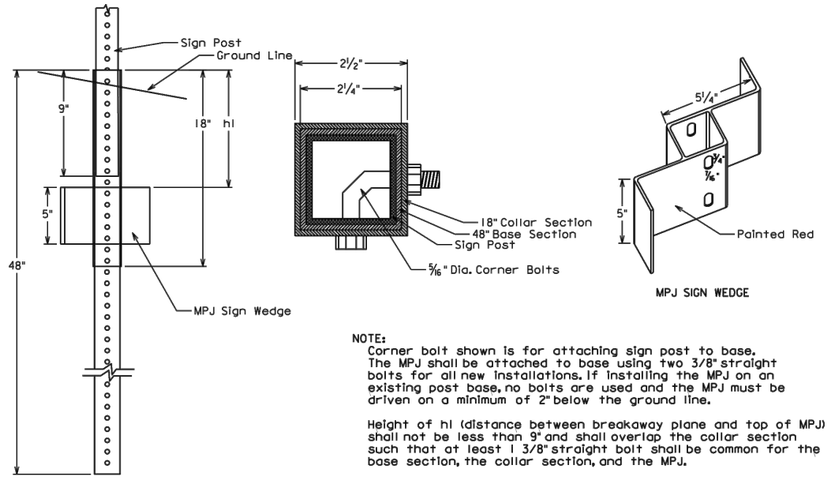


Stiffener and Post Spacing		
Sign Size	W	H
36"	24"	18"
48"	30"	30"

December 9, 2013

SDDOT	36" AND 48" WARNING SIGNS (Typical Sign and Stiffener Detail)	SPECIAL DETAIL L02
		Sheet 1 of 1

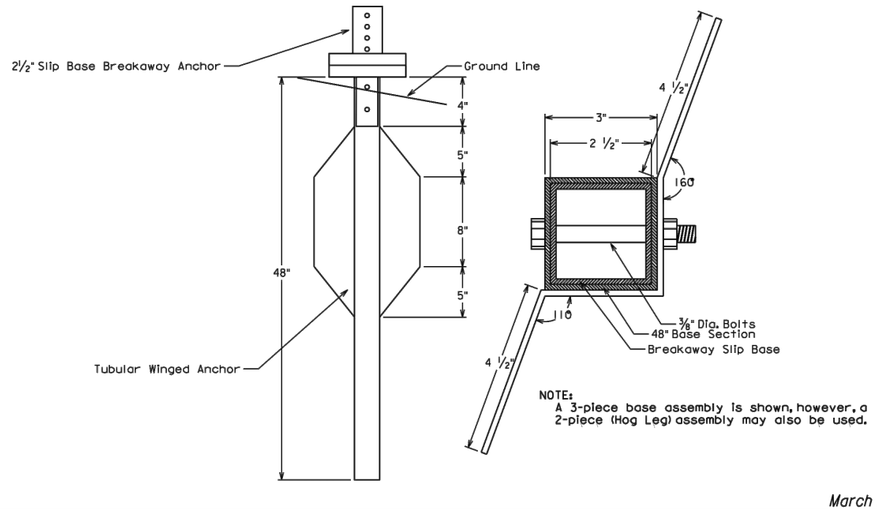
SIGN BASE DETAILS FOR A 2" SIGN POST



NOTE:
Corner bolt shown is for attaching sign post to base. The MPJ shall be attached to base using two 3/8" straight bolts for all new installations. If installing the MPJ on an existing post base, no bolts are used and the MPJ must be driven on a minimum of 2" below the ground line.

Height of h1 (distance between breakaway plane and top of MPJ) shall not be less than 9" and shall overlap the collar section such that at least 1 3/8" straight bolt shall be common for the base section, the collar section, and the MPJ.

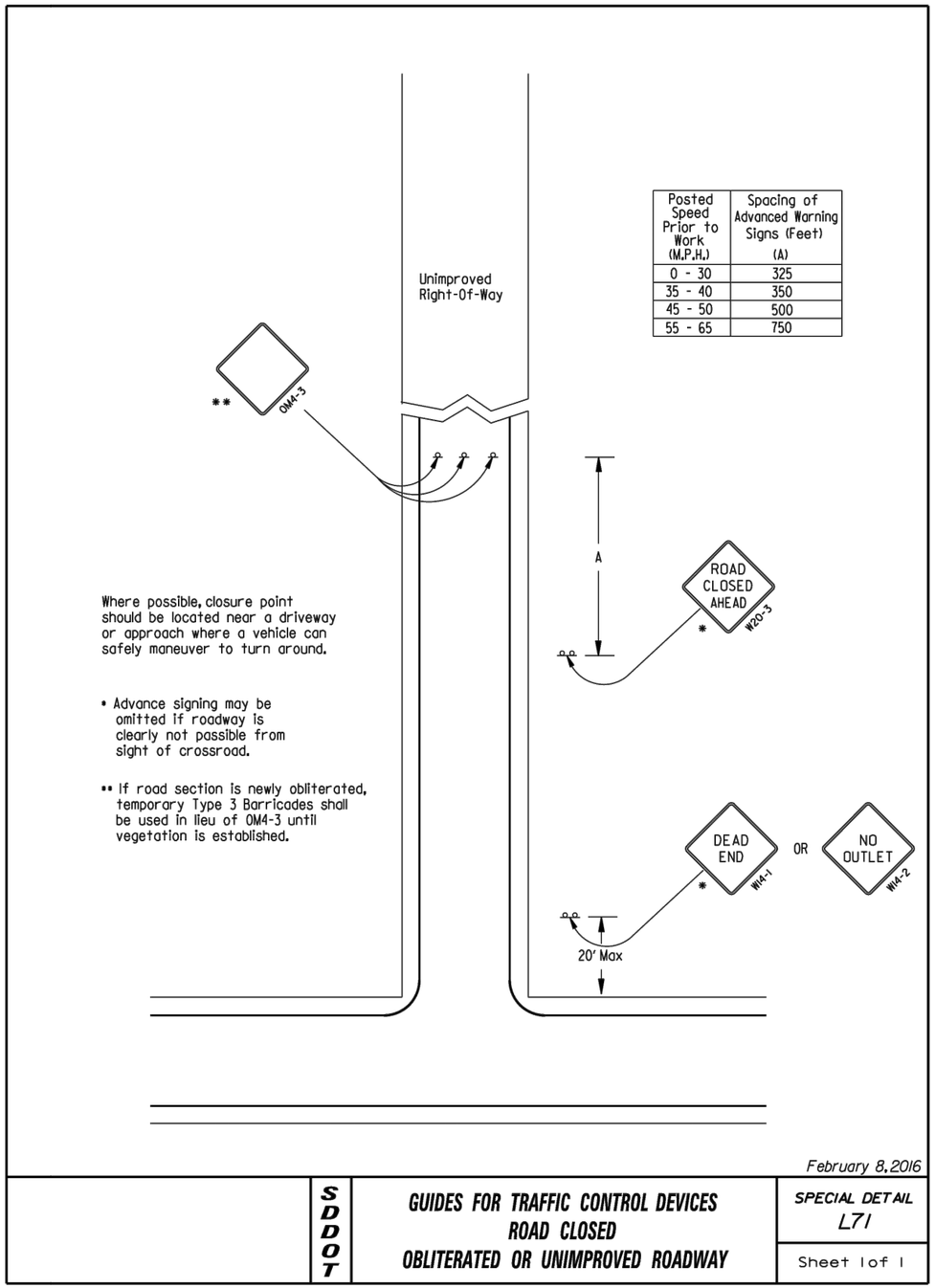
SIGN BASE DETAILS FOR A 2½" SIGN POST



NOTE:
A 3-piece base assembly is shown, however, a 2-piece (Hog Leg) assembly may also be used.

March 28, 2014

SDDOT	TUBULAR POST BASE DETAILS (Typical Soil Installation)	SPECIAL DETAIL L21
		Sheet 1 of 1



Posted Speed Prior to Work (M.P.H.)	Spacing of Advanced Warning Signs (Feet) (A)
0 - 30	325
35 - 40	350
45 - 50	500
55 - 65	750

Where possible, closure point should be located near a driveway or approach where a vehicle can safely maneuver to turn around.

- Advance signing may be omitted if roadway is clearly not passible from sight of crossroad.

** If road section is newly obliterated, temporary Type 3 Barricades shall be used in lieu of OM4-3 until vegetation is established.

February 8, 2016

	SDDOT	GUIDES FOR TRAFFIC CONTROL DEVICES ROAD CLOSED OBLITERATED OR UNIMPROVED ROADWAY	SPECIAL DETAIL L71 Sheet 1 of 1

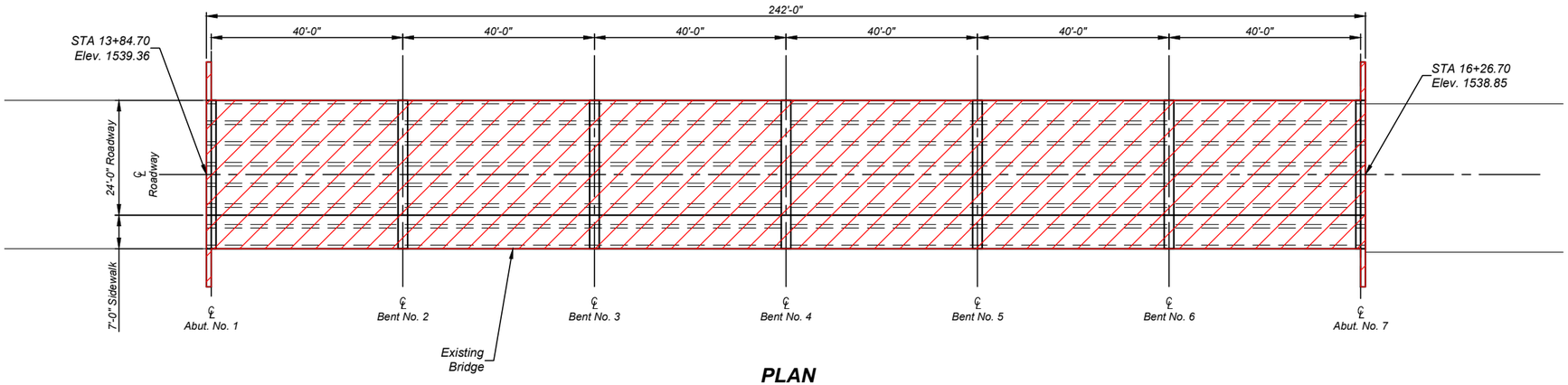
Vertical Survey Datum - NAVD88
Horizontal Survey Datum - UTM Zone 14 North NAD83(86)

FOR BIDDING PURPOSES ONLY

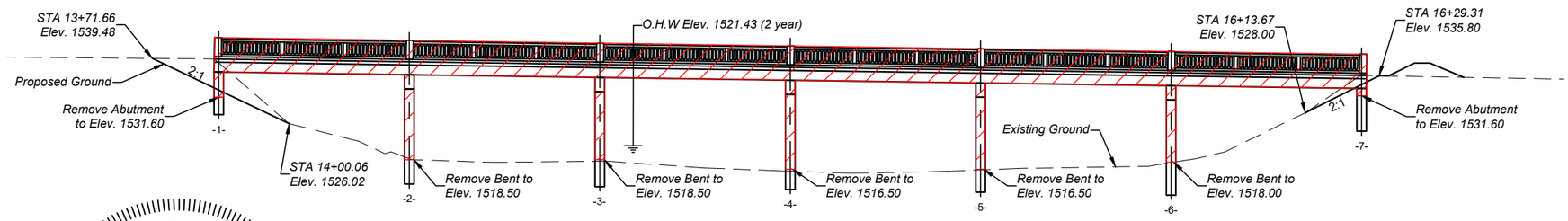
STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	BRO 8051(17)	23	23

Remove structure from STA 13+84.70 to STA 16+26.70

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
INCIDENTAL WORK, STRUCTURE	LS	LUMP SUM



PLAN



ELEVATION

INCIDENTAL WORK, STRUCTURE

1. *In place is a 242' long, 6-span steel girder bridge with a 24'-0" clear roadway. The superstructure consists of steel I-Beams supporting a reinforced concrete slab with a concrete pigeonhole railing continuous across the bridge and 7'-0" sidewalk. The deck has a 1 to 2 inch asphalt overlay. The substructure consists of 2 column reinforced concrete bents and reinforced concrete vertical abutments.*
2. *Break down and remove the existing bridge to 1-foot below finished groundline. All portions of the existing bridge will be removed and disposed of by the Contractor on a site obtained by the Contractor and approved by the Engineer in accordance with the Environmental Commitments found elsewhere in these plans.*
3. *During demolition of the structure, efforts will be taken to prevent material from falling into the Big Sioux River.*
4. *The foregoing is a general description of the in-place bridge and should not be construed to be complete in all details. Before preparing the bid, it will be the responsibility of the Contractor to make a visual inspection of the structure to verify the extend of the work and materials involved.*
5. *It is anticipated that cofferdams will be necessary. Cofferdams will be designed and constructed in accordance with Section 423 of the Specifications.*
6. *The design of the cofferdam must be done by Professional Engineers registered in South Dakota. Sealed calculations of both the original design and design check, performed by different engineers, will be submitted with the cofferdam plans. The cofferdam plans, design, and check design will be submitted to the Office of Bridge Design a minimum of 15 days prior to cofferdam construction.*
7. *Costs associated with the foregoing work will be incidental to the contract lump sum price for "Incidental Work, Structure."*

NOTICE - LEAD BASED PAINT

Be advised that the paint on the steel surfaces of the existing structure contains lead. The Contractor should plan operations accordingly and inform employees of the hazards of lead exposure.

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
10964
VANESSA L.
VICTOR
SOUTH DAKOTA

10-28-21

LAYOUT FOR REMOVAL
FOR
242'-0" STEEL GIRDER BRIDGE

24'-0" ROADWAY — 0° SKEW
OVER BIG SIOUX RIVER — SEC. 21/22-T107N-R48W
STA. 13+84.70 TO STA. 16+26.70 — BRO 8051(17)
STR. NO. 51-147-097
PCN 08AD

MOODY COUNTY
S.D. DEPT. OF TRANSPORTATION
OCTOBER 2021

1 OF 1

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED
VV	IR	VV	BRIDGE ENGINEER

S:\0-2020 Projects\20152 - Bridge Removal Program 2020 BRO 8051(17) PCN 08AD City of Flandreau SN 51-147-097\Design\CAD\SHEETS\E-STRUC.dwg
PLOT DATE: 10/28/2021 9:02 AM tasmin.Ross