STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	1	33

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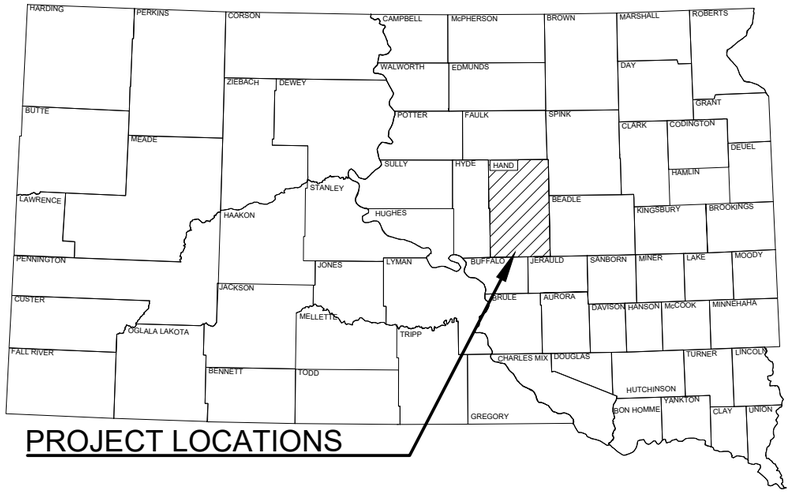


PROJECT LOCATIONS

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED

PROJECT BRO 8030(21) & BRO 8030(22) HAND COUNTY

STRUCTURE REMOVAL
STRUCTURE NO. 30-240-151 & 30-290-144
PCN 08MV & PCN 08MW

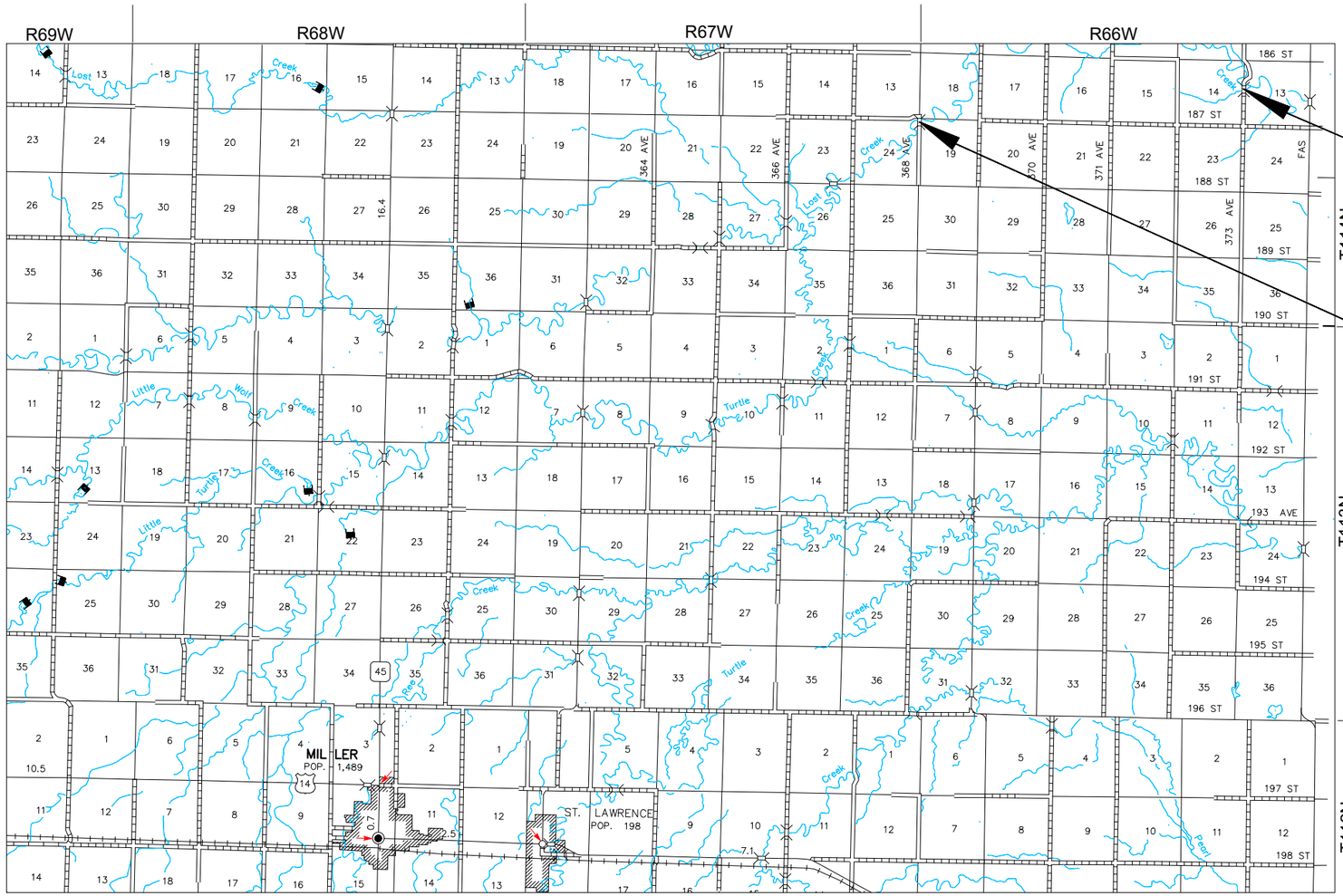
INDEX OF SECTIONS

STORM WATER PERMIT
PROJECT NO. BRO 8030(21) PCN 08MV

Major Receiving	
Body of Water:	Wolf Creek
Area Disturbed:	0.09 Acres
Total Project Area:	0.11 Acres
Approx. Begin Lat/Long	
Latitude:	W98° 49' 33.24"
Longitude:	N44° 40' 42.6"
ADT 2020	10
ADT 2040	13
DHV	2
d	50%
T DHV	3.7%
T ADT	8.0%

STORM WATER PERMIT
PROJECT NO. BRO 8030(22) PCN 08MW

Major Receiving	
Body of Water:	Wolf Creek
Area Disturbed:	0.08 Acres
Total Project Area:	0.10 Acres
Approx. Begin Lat/Long	
Latitude:	W98° 43' 33.6"
Longitude:	N44° 41' 13.56"
ADT 2020	10
ADT 2040	13
DHV	2
d	50%
T DHV	3.7%
T ADT	8.0%



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6.5.25

2

August 6, 2025

Revised: 6/5/25 VLV

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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	A1	A4

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

PCN 08MV - Str. No. 30-240-151

Section B – Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
120E0010	Unclassified Excavation	266	CuYd

Section C - Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0110	Traffic Control Signs	52.0	SqFt
634E0275	Type 3 Barricade	6	Each

Section D - Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	0.4	CuYd
230E0010	Placing Topsoil	113	CuYd
734E0010	Erosion Control	Lump Sum	LS
734E0103	Type 3 Erosion Control Blanket	200	SqYd
734E0154	12" Diameter Erosion Control Wattle	180	Ft
734E0165	Remove and Reset Erosion Control Wattle	45	Ft
734E0630	Floating Silt Curtain	150	Ft

Section E – Structure

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

Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	1	Each
632E1321	2.0"x2.0" Perforated Tube Post	1	Each
632E2535	Type 4 Object Marker	6	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	26.4	SqFt

PCN 08MW – Str. No. 30-290-144

Section B - Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
120E0010	Unclassified Excavation	257	CuYd

Section C – Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0110	Traffic Control Signs	80.5	SqFt
634E0275	Type 3 Barricade	7	Each

Section D – Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	0.3	CuYd
230E0010	Placing Topsoil	98	CuYd
734E0010	Erosion Control	Lump Sum	LS
734E0103	Type 3 Erosion Control Blanket	270	SqYd
734E0154	12" Diameter Erosion Control Wattle	140	Ft
734E0165	Remove and Reset Erosion Control Wattle	35	Ft
734E0630	Floating Silt Curtain	180	Ft

Section E – Structure

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

Section S – Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	3	Each
632E1321	2.0"x2.0" Perforated Tube Post	2	Each
632E2535	Type 4 Object Marker	6	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	29.1	SqFt

INDEX OF SHEETS

Specifications

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

REGISTERED PROFESSIONAL ENGINEER
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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 A: AQUATIC RESOURCES

COMMITMENT A2: STREAMS

All efforts to avoid and minimize stream impacts from the project have resulted in approximately 0.002 acres of stream (PCN 08MV) and 0.036 acres of stream (PCN 08MW) (includes temporary and permanent) becoming impacted. Refer to plans for location and boundaries of the impacted streams.

Table of Impacted Streams

PCN 08MV

Stream Name	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
Wolf Creek	53+24.00 to 53+70.00	0.001	0.00	0.001	0.00	0.002

PCN 08MW

Stream Name	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
Wolf Creek	10+00	0.00	0.00	0.018	0.018	0.036

Action Taken/Required:

It has been determined that project impacts do not require mitigation. Temporary impacts identified in the Table of Impacted Streams will not be mitigated as the finished ground under the bridge will be shaped to match the upstream channel and flood plain and the existing low water channel will be maintained as near as practical to the existing location as designated in the plans.

The Contractor will notify the Project Engineer if additional easement is needed to complete work adjacent to any stream. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any streams beyond the work limits and easements shown in the plans.

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT B5: NORTHERN LONG-EARED BAT

This project is within the range of suitable habitat for the Northern Long-Eared Bat (NLEB) and project work will avoid conflicts with NLEB roosting habitat.

Action Taken/Required:

Project activities that include tree removal, structure work, and/or work within one-quarter mile of a known hibernacula or 150 feet of a known maternity roost tree, or suitable habitat should not occur within the location(s) listed below during the NLEB seasonal work restriction timeframe without approval from the SDDOT Environmental Office.

Station	NLEB Seasonal Work Restriction
53+24.00 to 53+70.00 (L and R)	April 1 to October 31

Tree removal will occur between November 1st and March 31st.

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.

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:
< https://sdleastwanted.sd.gov/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

Wolf Creek is classified as warm water, marginal fishery with a total suspended solids standard of less than 150 mg/L 30-day average, less than 263 mg/L daily maximum.

Wolf Creek is classified as fish and wildlife propagation, recreation, irrigation, and stock watering waters. Because of these beneficial uses, special construction measures may have to be taken to ensure that this water body is not impacted.

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.

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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: < https://danr.sd.gov/OfficeOfWater/SurfaceWaterQuality/swdpermitting/Ereporting.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.

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) 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.

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COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES CONT

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 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	PCN
53+24.00 to 53+70.00 (L and R)	Wolf Creek	1,377.10'	08MV
10+00	Wolf Creek	1335.0	08MW

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 M: SECTION 4(f)/6(f) RESOURCES

COMMITMENT M1: SECTION 4(f) PROPERTY

A Section 4(f) Evaluation concluded there are no feasible and prudent alternatives to avoiding Section 4(f) property located within the project.

Station	Section 4(f) Property	PCN
53+24.00 to 53+70.00	Historic Structure 30-240-151	08MV
10+00	Historic Structure 30-290-144	08MW

Action Taken/Required:

The following measures are required to minimize harm to the above Section 4(f) property:

The removal and replacement of structure 30-240-151 has resulted in an Adverse Effect to historic properties. A Memorandum of Agreement was signed and MOA stipulations must be fulfilled prior to construction. The SDDOT Environmental Office will ensure MOA stipulations I-III are complete prior to construction.

A Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges for 30-240-151 was approved by FHWA.

The Contractor will notify the Project Engineer if additional easement is needed to complete the work adjacent to any Section 4(f) property. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any Section 4(f) property.

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.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	B1	B7

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Section B: Grading Plans

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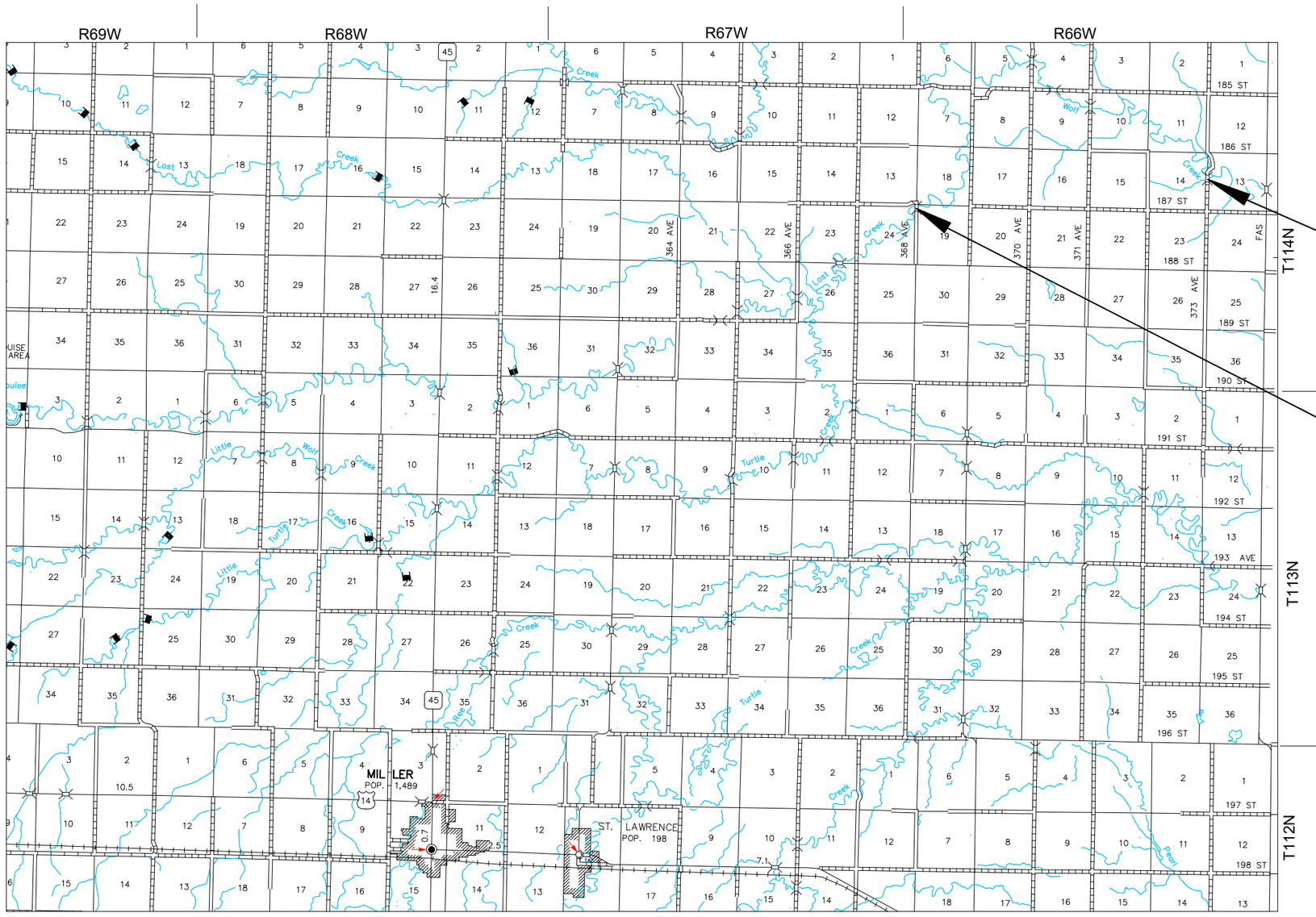

Structure
30-290-144
BRO 8030 (22)
PCN 08MW

Structure
30-240-151
BRO 8030 (21)
PCN 08MV

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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	B2	B7

FOR BIDDING PURPOSES ONLY

LEGEND OF SYMBOLS

- EXISTING FIRE HYDRANT
- EXISTING VALVE & BOX
- EXISTING TEE
- EXISTING REDUCER
- EXISTING SLEEVE
- EXISTING CROSS
- EXISTING WATER MANHOLE
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LAMPHOLE
- EXISTING JUNCTION BOX
- EXISTING APPROACH
- EXISTING SIDEWALK
- EXISTING DROP INLET
- EXISTING CULVERT
- 1400 EXISTING CONTOURS
- 8" S VCP EX. SANITARY SEWER (SIZE/TYPE/MATERIAL)

MATERIAL FOR LINES:

- VCP VITRIFIED CLAY PIPE
- PVC SOLID WALL POLYVINYL CHLORIDE PIPE
- PVC TRUSS POLYVINYL CHLORIDE TRUSS COMPOSITE PIPE
- ABS TRUSS ACRYLONITRILE–BUTADIENNE–STYRENE COMPOSITE
- PVC CP CLOSED PROFILE WALL POLYVINYL CHLORIDE PIPE
- DIP DUCTILE IRON PIPE
- RCP REINFORCED CONCRETE PIPE
- CIP CAST IRON PIPE
- CIPP CURED IN PLACE PIPE
- PE POLYETHYLENE PIPE

- 8"W EXISTING WATER MAIN & SIZE
- 18"SS EXISTING STORM SEWER & SIZE
- 8"S GRAVITY SANITARY SEWER (TYPE/SIZE)
- SFM FORCE MAIN SANITARY SEWER
- CS COMBINED SEWER
- WATER SHUTOFF
- 8"W WATER MAIN & SIZE
- CLEAN OUT
- CAP END
- PROPOSED MANHOLE
- V PROPOSED VALVE & BOX
- T PROPOSED TEE
- X PROPOSED CROSS
- R PROPOSED REDUCER OR INCREASER
- S PROPOSED SLEEVE
- H PROPOSED FIRE HYDRANT
- B90 PROPOSED 90° BEND
- B45 PROPOSED 45° BEND
- B22 PROPOSED 22 1/2° BEND
- B11 PROPOSED 11 1/4° BEND
- SJP PROPOSED S.J. PLUG
- MJP PROPOSED M.J. PLUG
- Y PROPOSED WYE
- 2"G GAS MAIN & SIZE
- UT UNDERGROUND TELEPHONE
- OT OVERHEAD TELEPHONE
- UP UNDERGROUND POWER
- OP OVERHEAD POWER
- F FIBER OPTIC
- UTV UNDERGROUND CABLE TV
- OTV OVERHEAD CABLE TV
- TR TRAFFIC
- IW INDUSTRIAL WASTE

- LS LAWN SPRINKLER LINE
- WOOD FENCE
- CHAIN LINK FENCE
- BARBED WIRE FENCE
- CENTERLINE
- PROPERTY LINE
- CONC. CURB & GUTTER
- PROPOSED APPROACH
- PROPOSED SIDEWALK
- 18"SS STORM SEWER & SIZE
- PROPOSED DROP INLET
- PROPOSED STORM SEWER JUNCTION BOX
- 1400 PROPOSED CONTOURS
- WATER
- W WELL
- #4 TEST HOLE AND NUMBER
- STREET LIGHT
- TRAFFIC SIGNAL LIGHT
- PEDESTRIAN SIGNAL LIGHT
- GUY ANCHOR
- POWER POLE
- UTILITY CLOSURE
- SIGN
- SPRINKLER HEAD
- GAS METER
- MAILBOX
- HEDGE, BRUSH, SHRUBS, WOODS
- 30" DECIDUOUS TREE & SIZE
- 8" CONIFEROUS TREE & SIZE

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SECTION B ESTIMATE OF QUANTITIES

PCN 08MV - Str. No. 30-240-151

Section B - Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
120E0010	Unclassified Excavation	266	CuYd

PCN 08MW - Str. No. 30-290-144

Section B - Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
120E0010	Unclassified Excavation	257	CuYd

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 on the grading plan and profile sheets.

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%

WORK AREA

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

PROCEDURES FOR DETERMINING UNCLASSIFIED EXCAVATION QUANTITY

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.

The Excavation quantities from individual balances and the Table of Unclassified Excavation have been reduced by the volume of in place surfacing that will be removed and/or salvaged.

TABLE OF EXCAVATION QUANTITIES BY BALANCES

Refer to grading plan and profile sheets for estimates of quantities by balances for each project site.

PCN 08MV
TABLE OF UNCLASSIFIED EXCAVATION

Excavation (Finish Grade to Existing Grade)	153
Topsoil	113
Total	266 CY

PCN 08MW
TABLE OF UNCLASSIFIED EXCAVATION

Excavation (Finish Grade to Existing Grade)	159
Topsoil	98
Total	257 CY

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

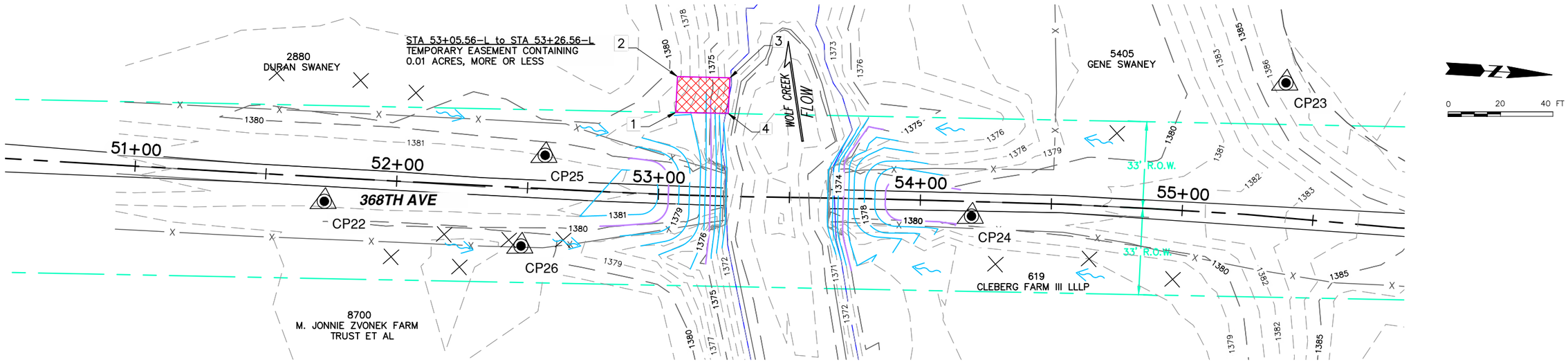
6.5.25

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

SURVEY DATA & EASEMENTS - PCN 08MV

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	B4	B7



LEGEND — TEMPORARY CONSTRUCTION EASEMENT

ALIGNMENT DATA				
PI Station	Northing	Easting	Distance	Direction
BEGIN				
52+00.00	310,185.4250'	2,273,884.9750'		
			99.15'	N0° 31' 21"W
52+96.29	310,284.5678'	2,273,884.0711'		
			28.33'	N1° 32' 21"W
53+24.63	310,312.8920'	2,273,883.3100'		
			41.25'	N2° 29' 20"W
53+65.87	310,354.0990'	2,273,881.5189'		
			16.38'	N2° 29' 20"W
53+82.25	310,370.4589'	2,273,880.8079'		
			27.87'	N1° 52' 59"W
54+10.12	310,398.3170'	2,273,879.8920'		
			44.90'	N1° 43' 36"W
54+50.00	310,443.1980'	2,273,878.5390'		
END				

HORIZONTAL/VERTICAL CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING (Y)	EASTING (X)	ELEVATION	DESCRIPTION
22	51+72.85	9.229	310161.21	2273894.28	1381.52	CP 5/8
23	55+35.21	-51.300	310524.79	2273827.30	1386.86	CP 5/8
24	54+19.70	5.558	310408.21	2273885.29	1380.66	CP 5/8
25	52+56.10	-12.710	310244.16	2273871.66	1381.23	CP 5/8
26	52+48.58	22.285	310237.11	2273906.83	1382.40	BM NAIL

TEMPORARY EASEMENTS			
#	STATION	OFFSET	SIDE
1	53+05.56	-31.386	LT
2	53+05.80	-45.088	LT
3	53+26.56	-45.245	LT
4	53+26.09	-31.629	LT

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SOUTH DAKOTA

6.5.25

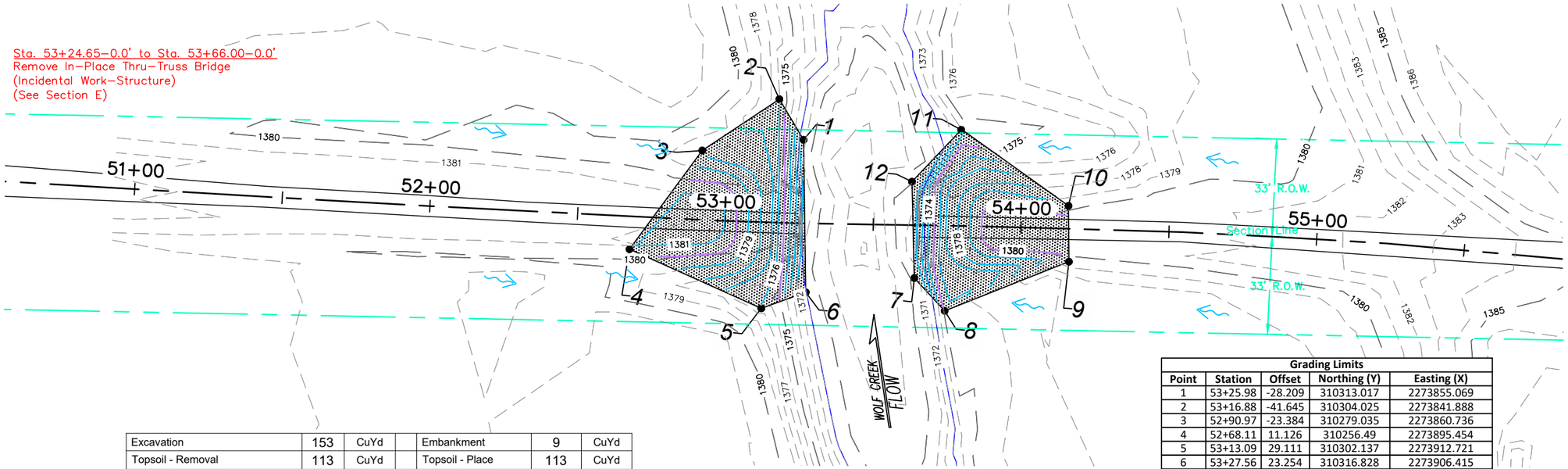
Vertical Survey Datum–NAVD88
Horizontal Survey Datum–UTM Zone 14 South NAD83(86)

GRADING PLAN - PCN 08MV

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	B5	B7

Sta. 53+24.65–0.0' to Sta. 53+66.00–0.0'
Remove In–Place Thru–Truss Bridge
(Incidental Work–Structure)
(See Section E)



LEGEND
Grading Limits
Flow Arrow

Excavation	153	CuYd		Embankment	9	CuYd
Topsoil - Removal	113	CuYd		Topsoil - Place	113	CuYd
				35% Shrinkage	3	CuYd
				Waste	141	CuYd
Total	266	CuYd		Total	266	CuYd

Grading Limits

Point	Station	Offset	Northing (Y)	Easting (X)
1	53+25.98	-28.209	310313.017	2273855.069
2	53+16.88	-41.645	310304.025	2273841.888
3	52+90.97	-23.384	310279.035	2273860.736
4	52+68.11	11.126	310256.49	2273895.454
5	53+13.09	29.111	310302.137	2273912.721
6	53+27.56	23.254	310316.828	2273906.415
7	53+64.18	17.833	310353.18	2273899.409
8	53+74.61	28.755	310364.072	2273909.868
9	54+16.47	11.09	310404.998	2273890.786
10	54+15.79	-7.752	310403.746	2273871.973
11	53+79.20	-32.443	310365.999	2273848.528
12	53+62.86	-14.673	310350.453	2273866.991

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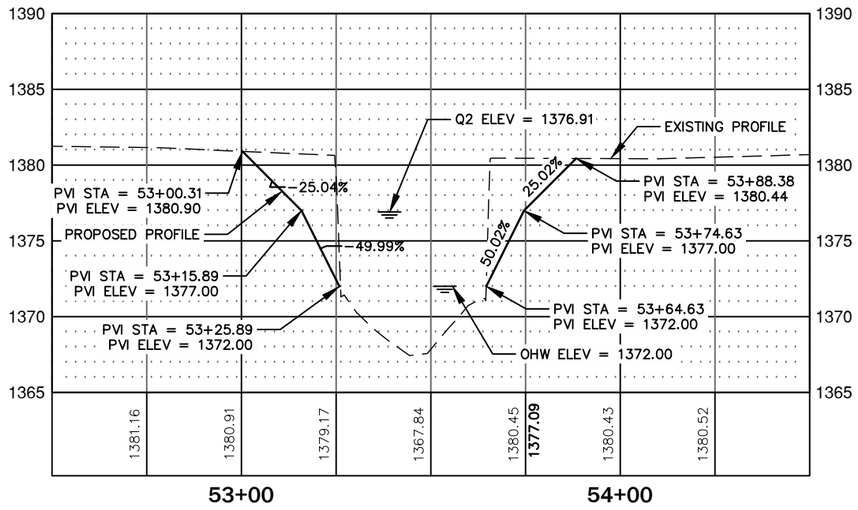
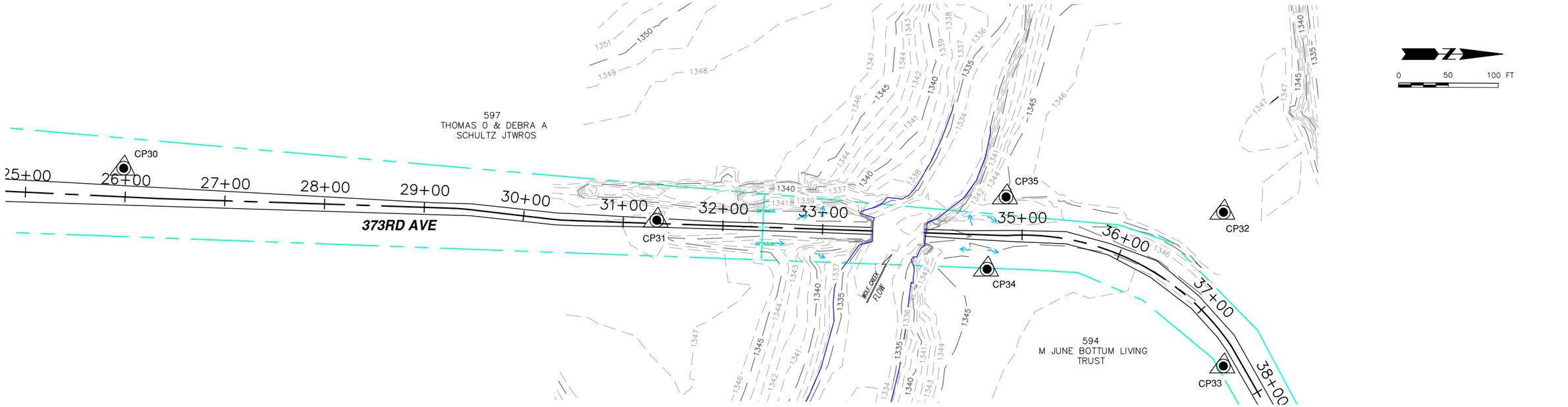


Vertical Survey Datum–NAVD88
Horizontal Survey Datum–UTM Zone 14 South NAD83(86)

SURVEY DATA - PCN 08MW

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	B6	B7



ALIGNMENT DATA				
PI Station	Northing	Easting	Distance	Direction
0+00.00	310,480.6833'	2,299,857.9144'		
			1,782.92'	N0° 15' 15"W
17+82.92	312,263.5834'	2,299,850.0042'		
			852.88'	N0° 42' 19"W
26+35.80	313,116.4021'	2,299,839.5042'		
			300.00'	N1° 32' 12"W
29+35.80	313,416.2942'	2,299,831.4587'		
			100.88'	N3° 13' 27"E
30+36.67	313,517.0127'	2,299,837.1323'		
			591.13'	N2° 50' 54"W
36+28.35	314,107.4122'	2,299,807.7574'		
			564.08'	N55° 45' 26"E
41+66.15	314,424.8218'	2,300,274.0604'		
			287.89'	N3° 45' 55"E
44+30.49	314,712.0864'	2,300,292.9652'		

HORIZONTAL/VERTICAL CONTROL POINTS						
POINT	STATION	OFFSET	NORTHING (Y)	EASTING (X)	ELEVATION	DESCRIPTION
30	25+97.21	-28.665	313077.63	2299808.62	1361.54	CP 5BAR
31	31+33.70	-3.259	313614.24	2299821.56	1347.07	CP 5BAR
32	36+59.93	-88.710	314180.59	2299787.27	1346.86	CP 5BAR
33	37+60.55	16.728	314189.58	2299940.76	1346.94	CP 5BAR
34	34+66.15	34.259	313947.16	2299854.86	1345.30	CP 5BAR
35	34+86.20	-38.645	313962.91	2299781.61	1347.15	BM PPC

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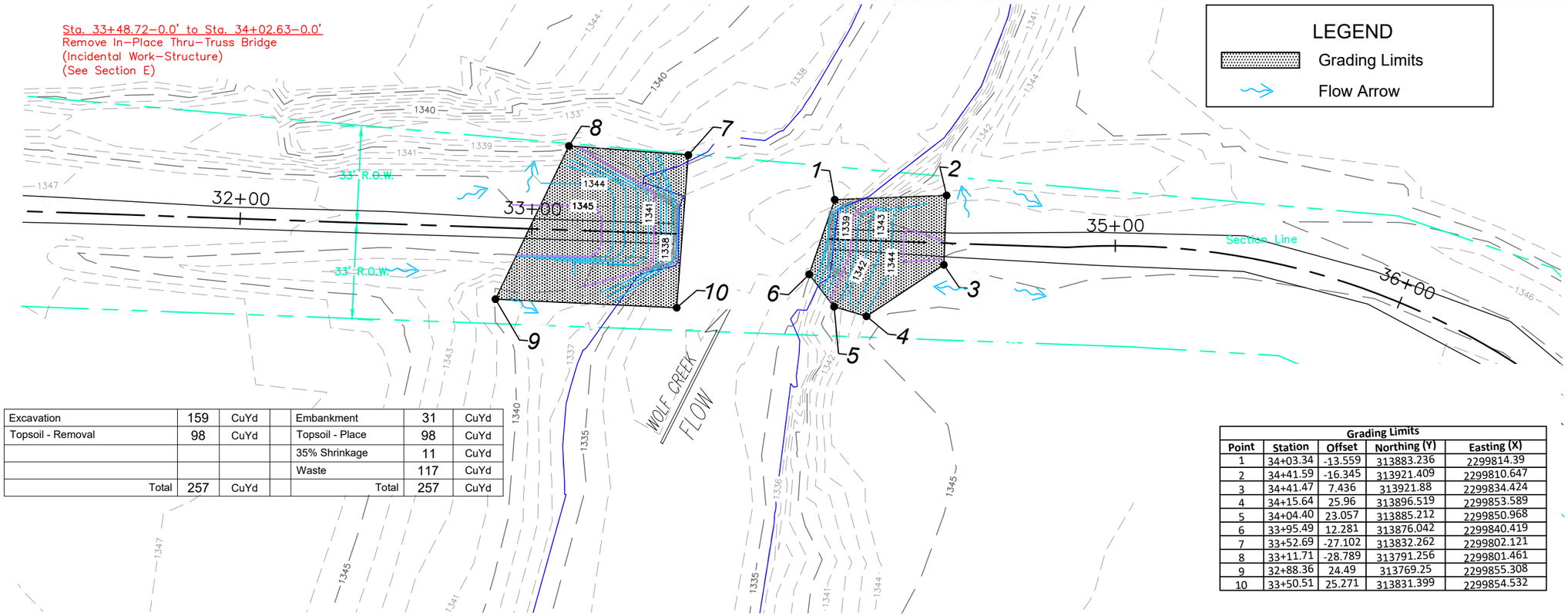
Vertical Survey Datum–NAVD88
Horizontal Survey Datum–UTM Zone 14 South NAD83(86)

GRADING - 08MW

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	B7	B7

Sta. 33+48.72–0.0' to Sta. 34+02.63–0.0'
Remove In–Place Thru–Truss Bridge
(Incidental Work–Structure)
(See Section E)



Excavation	159	CuYd		Embankment	31	CuYd
Topsoil - Removal	98	CuYd		Topsoil - Place	98	CuYd
				35% Shrinkage	11	CuYd
				Waste	117	CuYd
Total	257	CuYd		Total	257	CuYd

Grading Limits

Point	Station	Offset	Northing (Y)	Easting (X)
1	34+03.34	-13.559	313883.236	2299814.39
2	34+41.59	-16.345	313921.409	2299810.647
3	34+41.47	7.436	313921.88	2299834.424
4	34+15.64	25.96	313896.519	2299853.589
5	34+04.40	23.057	313885.212	2299850.968
6	33+95.49	12.281	313876.042	2299840.419
7	33+52.69	-27.102	313832.262	2299802.121
8	33+11.71	-28.789	313791.256	2299801.461
9	32+88.36	24.49	313769.25	2299855.308
10	33+50.51	25.271	313831.399	2299854.532

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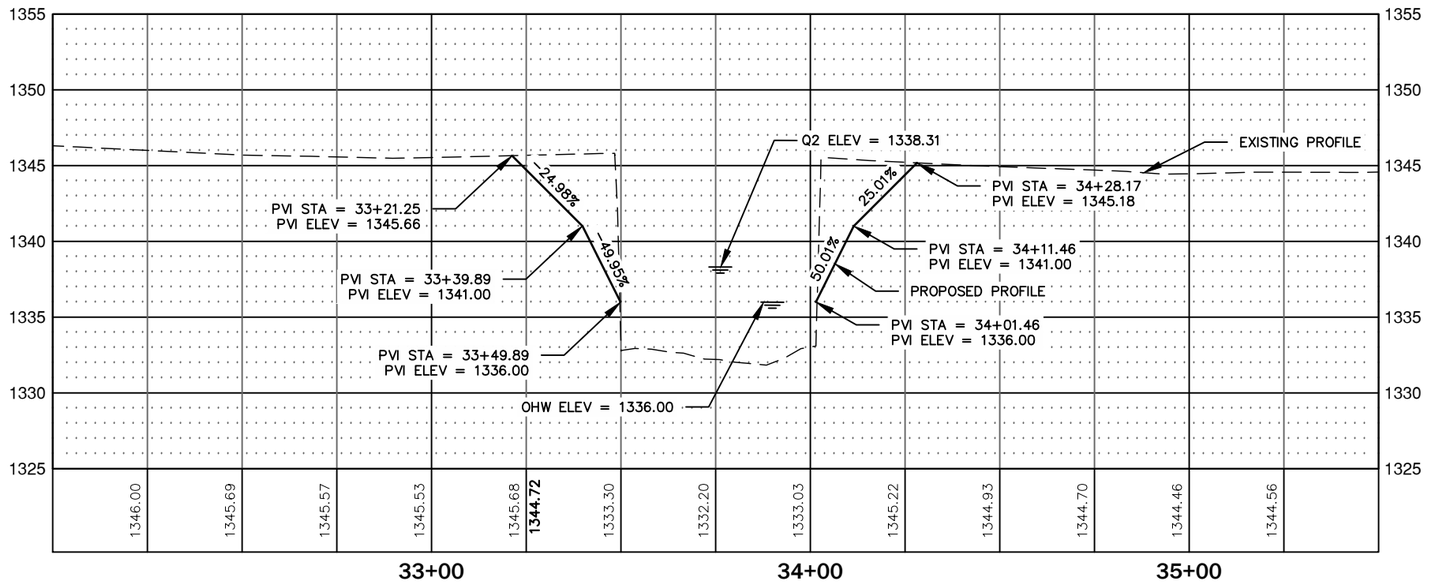
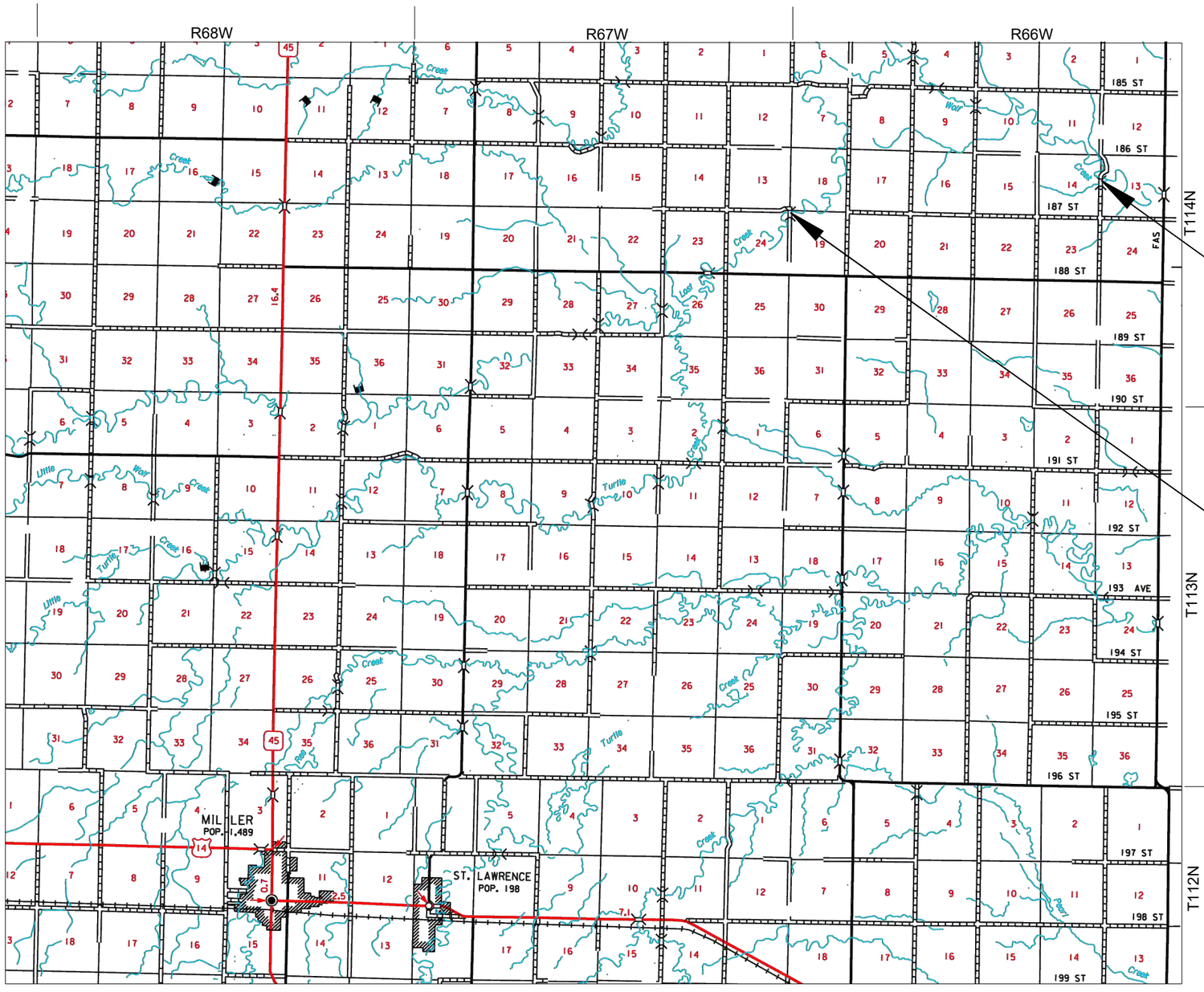


STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	C1	C5

FOR BIDDING PURPOSES ONLY

Section C: Traffic Control Plans



INDEX OF SHEETS

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SECTION C ESTIMATE OF QUANTITIES

PCN 08MV - Str. No. 30-240-151

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0110	Traffic Control Signs	52.0	SqFt
634E0275	Type 3 Barricade	6	Each

PCN 08MW - Str. No. 30-290-144

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0110	Traffic Control Signs	80.5	SqFt
634E0275	Type 3 Barricade	7	Each

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 a 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.

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.

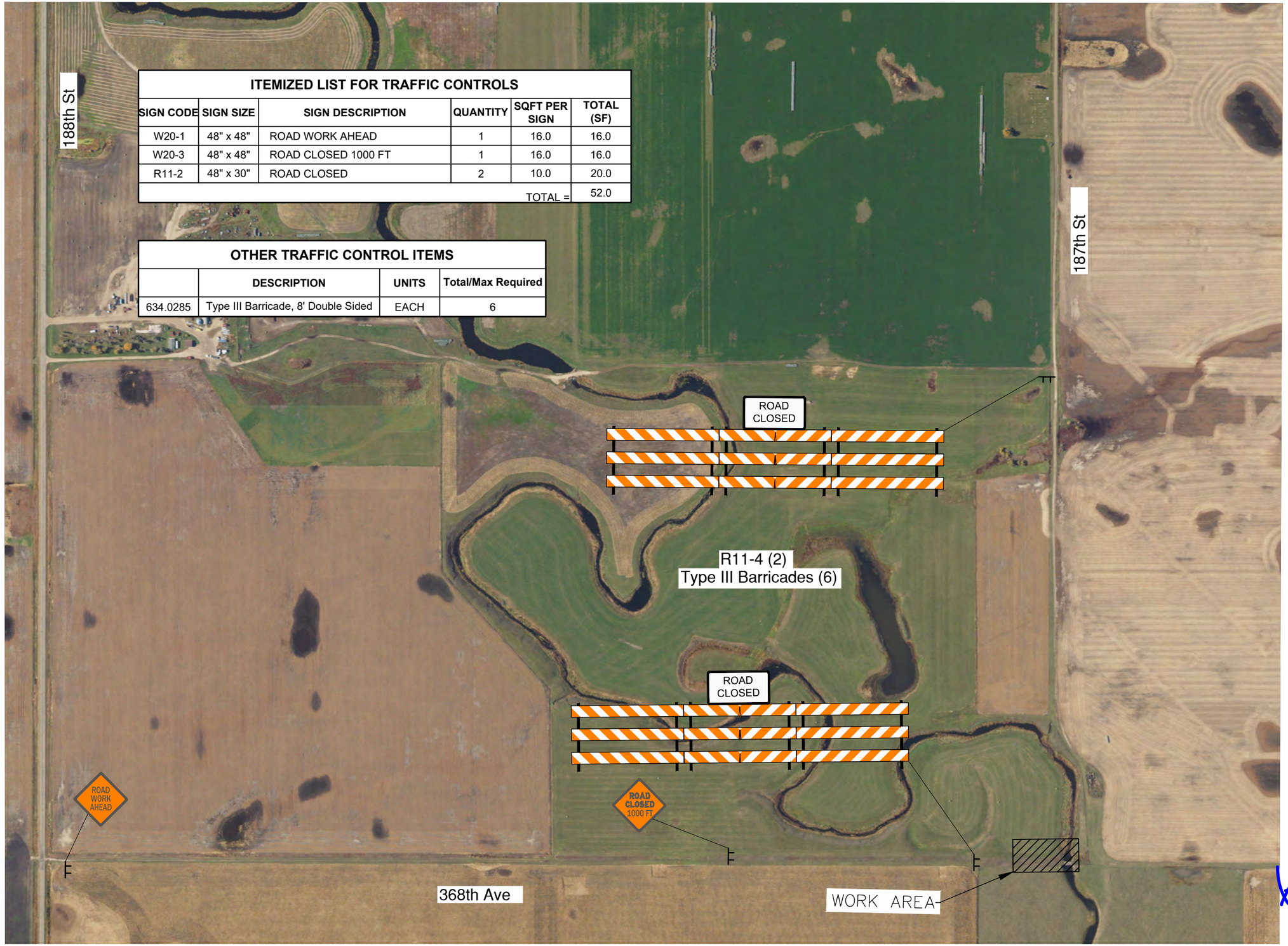
All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

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 CONTROL PLAN - PCN 08MV

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	C3	C5



0 250 500 FT

ITEMIZED LIST FOR TRAFFIC CONTROLS

SIGN CODE	SIGN SIZE	SIGN DESCRIPTION	QUANTITY	SQFT PER SIGN	TOTAL (SF)
W20-1	48" x 48"	ROAD WORK AHEAD	1	16.0	16.0
W20-3	48" x 48"	ROAD CLOSED 1000 FT	1	16.0	16.0
R11-2	48" x 30"	ROAD CLOSED	2	10.0	20.0
				TOTAL =	52.0

OTHER TRAFFIC CONTROL ITEMS

	DESCRIPTION	UNITS	Total/Max Required
634.0285	Type III Barricade, 8' Double Sided	EACH	6

REGISTERED PROFESSIONAL ENGINEER
REG. NO.
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VICTOR
SOUTH DAKOTA

6.5.25

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	C4	C5

TRAFFIC CONTROL PLAN - PCN 08MW

FOR BIDDING PURPOSES ONLY

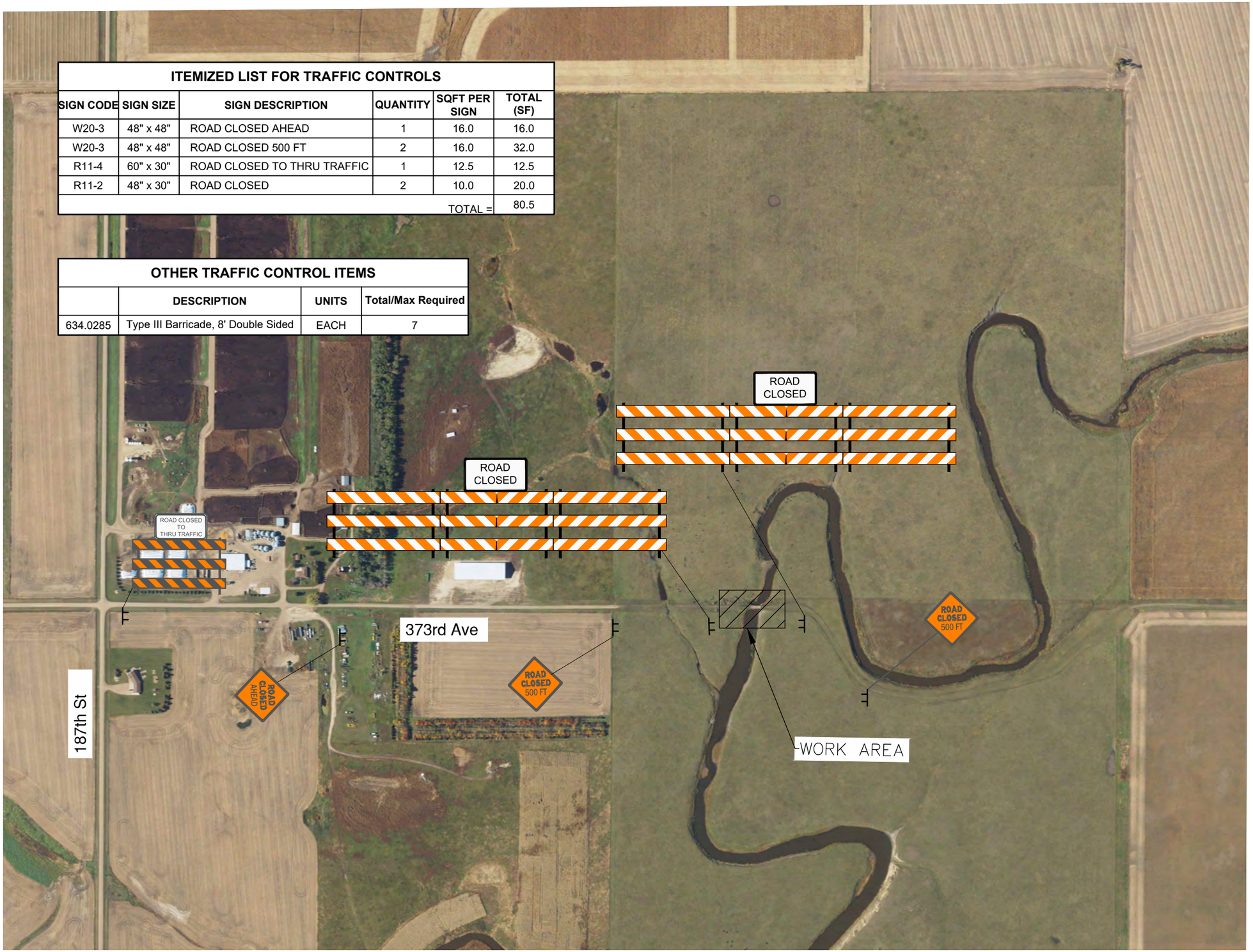
0 250 500 FT

ITEMIZED LIST FOR TRAFFIC CONTROLS

SIGN CODE	SIGN SIZE	SIGN DESCRIPTION	QUANTITY	SQFT PER SIGN	TOTAL (SF)
W20-3	48" x 48"	ROAD CLOSED AHEAD	1	16.0	16.0
W20-3	48" x 48"	ROAD CLOSED 500 FT	2	16.0	32.0
R11-4	60" x 30"	ROAD CLOSED TO THRU TRAFFIC	1	12.5	12.5
R11-2	48" x 30"	ROAD CLOSED	2	10.0	20.0
				TOTAL =	80.5

OTHER TRAFFIC CONTROL ITEMS

	DESCRIPTION	UNITS	Total/Max Required
634.0285	Type III Barricade, 8' Double Sided	EACH	7



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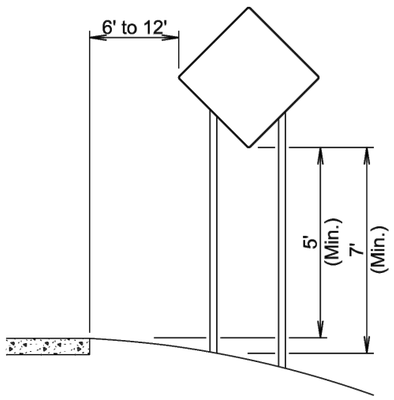
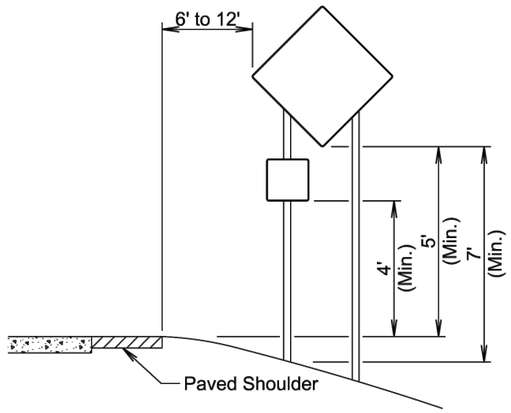
SOUTH DAKOTA

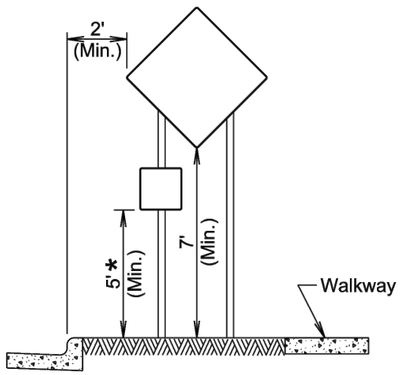
6.5.25



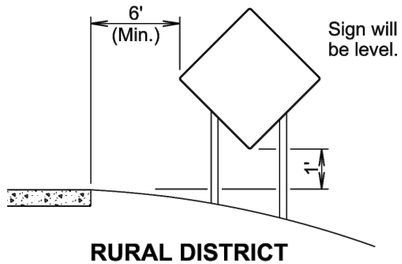
RURAL DISTRICT



RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT

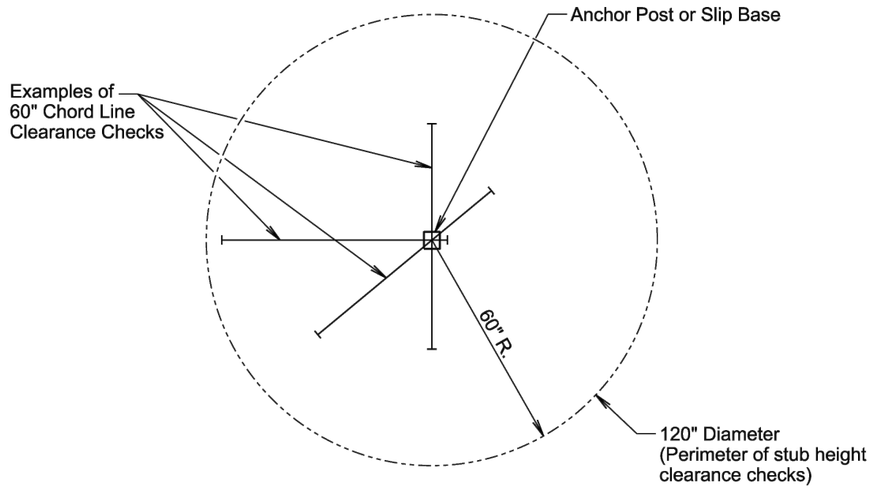


RURAL DISTRICT
3 DAY MAXIMUM
(Not applicable to regulatory signs)

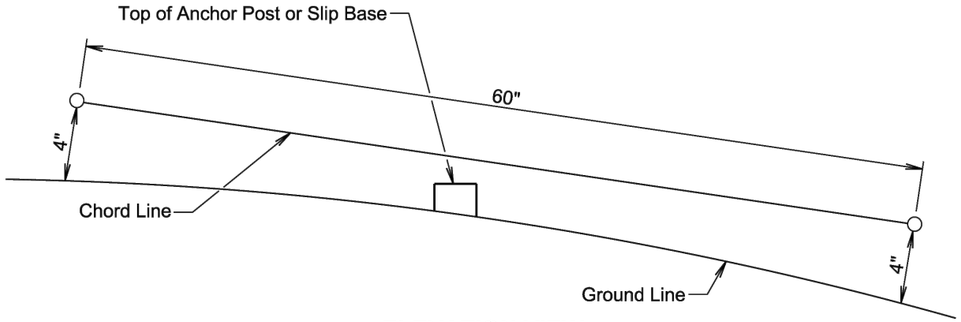
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

Published Date: 2026	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

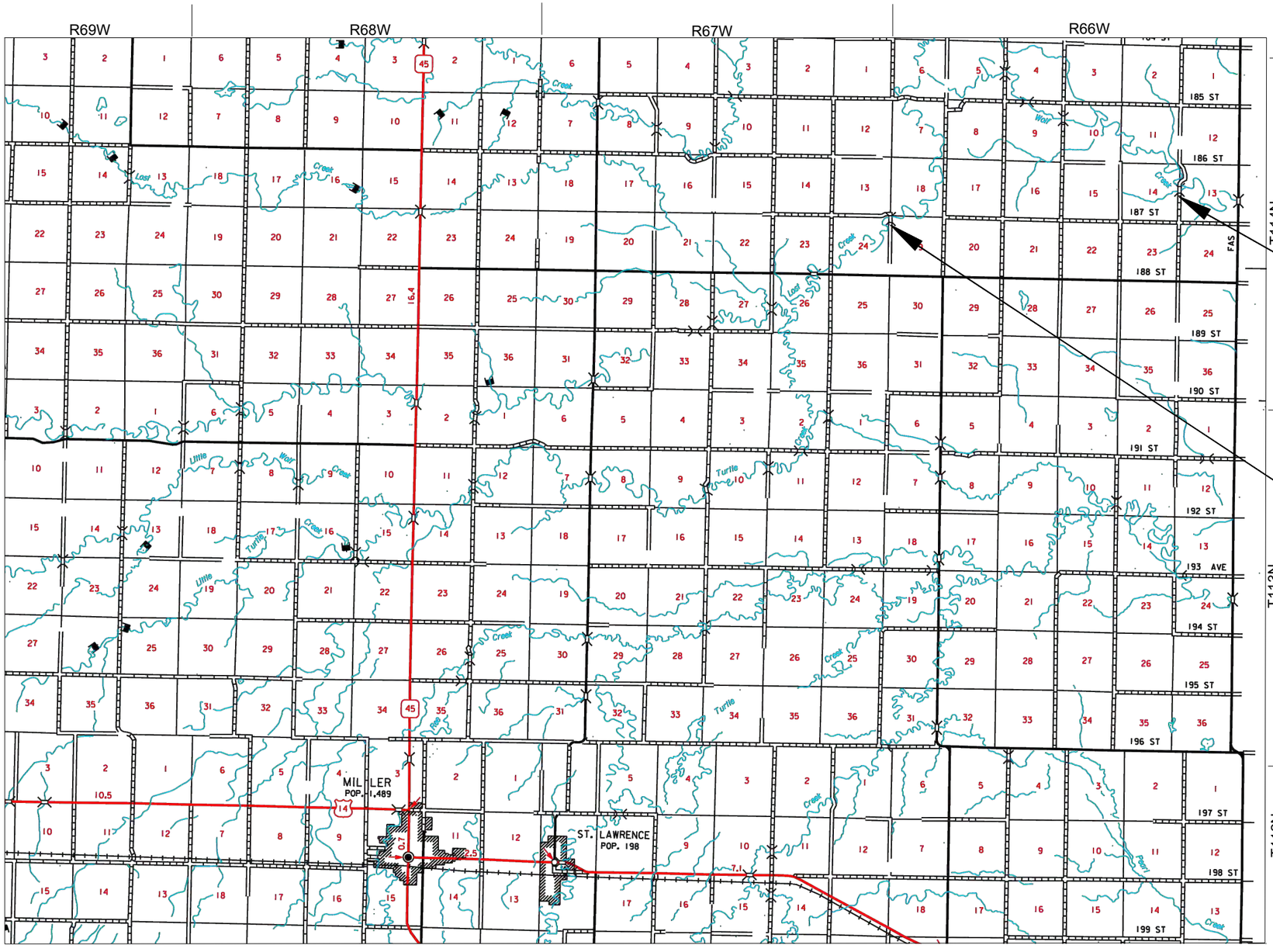
Published Date: 2026	SDDOT	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

Section D: Erosion Control Plans

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	D1	D6

INDEX OF SHEETS



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SOUTH DAKOTA

6.5.25

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	D2	D6

FOR BIDDING PURPOSES ONLY

SECTION D ESTIMATE OF QUANTITIES

PCN 08MV - Str. No. 30-240-151

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	0.4	CuYd
230E0010	Placing Topsoil	113	CuYd
734E0010	Erosion Control	Lump Sum	LS
734E0103	Type 3 Erosion Control Blanket	200	SqYd
734E0154	12" Diameter Erosion Control Wattle	180	Ft
734E0165	Remove and Reset Erosion Control Wattle	45	Ft
734E0630	Floating Silt Curtain	150	Ft

PCN 08MW - Str. No. 30-290-144

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	0.3	CuYd
230E0010	Placing Topsoil	98	CuYd
734E0010	Erosion Control	Lump Sum	LS
734E0103	Type 3 Erosion Control Blanket	270	SqYd
734E0154	12" Diameter Erosion Control Wattle	140	Ft
734E0165	Remove and Reset Erosion Control Wattle	35	Ft
734E0630	Floating Silt Curtain	180	Ft

REMOVING, STOCKPILING, AND REPLACING TOPSOIL

The Contractor will be required to remove and salvage 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 as follows:

Project Site	Remove and Replace Topsoil	Thickness of Removal
	(CuYd)	(in)
PCN 08MV	113	3
PCN 08MW	98	3
Totals:	211	

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 unit price for “Unclassified Excavation”. All topsoil removal, stockpiling, salvaging, windrowing, and replacement will be done according to the plans and/or as directed by the Engineer.

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

Square yardage for seeding is presented in the plansheets. Costs associated with seeding will be incidental to the lump sum unit price for Erosion Control.

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

Project Site	Station	to	Station	Quantity (Ft)
PCN 08MV	53+24-98-31’ L	to	53+27-80-25’ R	63
	53+71.96-31’ L	to	53+71.13-29’ R	75
			Added Misc.	12
PCN 08MW	33+54.44-30’ L	to	33+29.06-26’ R	95
	34+23.89-23’ L	to	33+92.65-26’ R	76
			Added Misc.	9
			Total:	330

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

Project Site	Station	to	Station	Type	Quantity (SqYd)
PCN 08MV	52+92.63-21’ L	to	53+24.67-20’ R	3	130
	53+65.35-12’ L		53+74.06-27’ R		
		to		3	58
			Added Misc.		
				3	12
PCN 08MW	33+15.44-28’ L	to	33+47.68-11’ R	3	159
	34+03-00-10’ L		34+15.54-25’ R		
		to		3	97
			Added Misc.		
				3	14
			Total Type 3 Erosion Control Blanket:		470

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6.5.25

EROSION CONTROL WATTLE

Erosion control wattles for restraining the flow of runoff and sediment will be installed at locations noted in the table and at locations determined by the Engineer during construction. Refer to Standard Plate 734.06 for details.

The Contractor will provide certification that the erosion control wattles do not contain noxious weed seeds.

Erosion control wattles will remain on the project to decompose.

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

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

TABLE OF EROSION CONTROL WATTLE

Project Site	Station	Diameter	Quantity (Ft)
PCN 08MV	53+09.51-32' L & 53+21.87-45' L	12	40
	53+12.55-23' R & 53+23.86-28' R	12	40
	53+74.08-30' L & 53+86.69-27' L	12	40
	53+72.34-27' R & 53+84.54-27' R	12	40
	Added Misc.		20
PCN 08MW	33+35.28-28' L & 33+50.74-32' L	12	40
	33+29.34-19' R	12	20
	34+25.93-17' L & 34+38.55-11' L	12	40
	33+97.35-32' R	12	20
	Added Misc.		20
		Total:	320

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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	D4	D6

22.22160-EROS_CONT PCN 08MV - D8

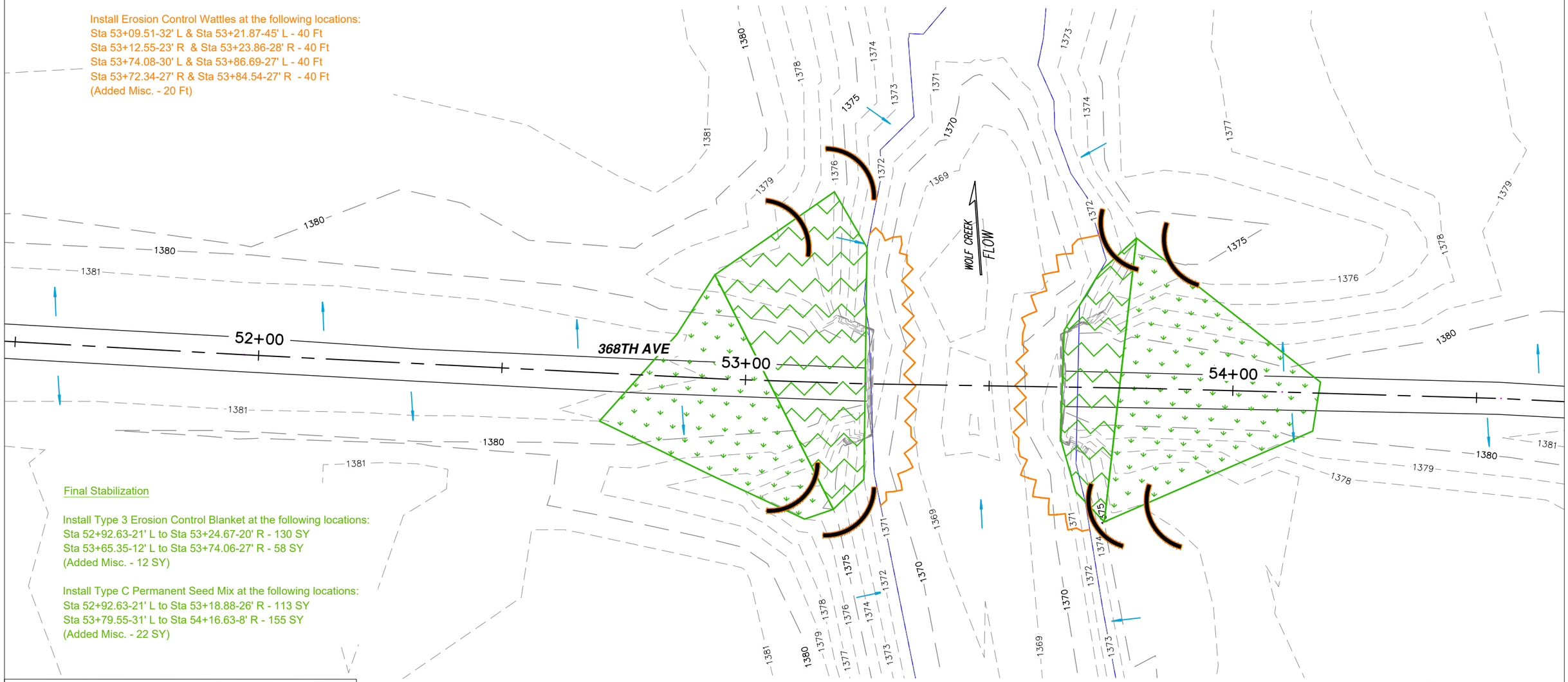
FOR BIDDING PURPOSES ONLY

EROSION CONTROL - PCN 08MV

Initial Stabilization

Install Floating Silt Curtain along the bank of the river at the following location:
Sta 53+25-31' L to Sta 53+28-25' R - 63 Ft
Sta 53+72-31' L to Sta 53+71-29' R - 75 Ft
(Added Misc. - 12 Ft)

Install Erosion Control Wattles at the following locations:
Sta 53+09.51-32' L & Sta 53+21.87-45' L - 40 Ft
Sta 53+12.55-23' R & Sta 53+23.86-28' R - 40 Ft
Sta 53+74.08-30' L & Sta 53+86.69-27' L - 40 Ft
Sta 53+72.34-27' R & Sta 53+84.54-27' R - 40 Ft
(Added Misc. - 20 Ft)



Final Stabilization

Install Type 3 Erosion Control Blanket at the following locations:
Sta 52+92.63-21' L to Sta 53+24.67-20' R - 130 SY
Sta 53+65.35-12' L to Sta 53+74.06-27' R - 58 SY
(Added Misc. - 12 SY)

Install Type C Permanent Seed Mix at the following locations:
Sta 52+92.63-21' L to Sta 53+18.88-26' R - 113 SY
Sta 53+79.55-31' L to Sta 54+16.63-8' R - 155 SY
(Added Misc. - 22 SY)

LEGEND

- Erosion Control Wattle
- Floating Silt Curtain
- Type 3 Erosion Control Blanket and Type C Permanent Seed Mix
- Type C Permanent Seed Mix
- 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 activities 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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STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	D5	D6

22.22160-EROS_CONT PCN08 MW - D5

Revised: 6/5/25 VLV

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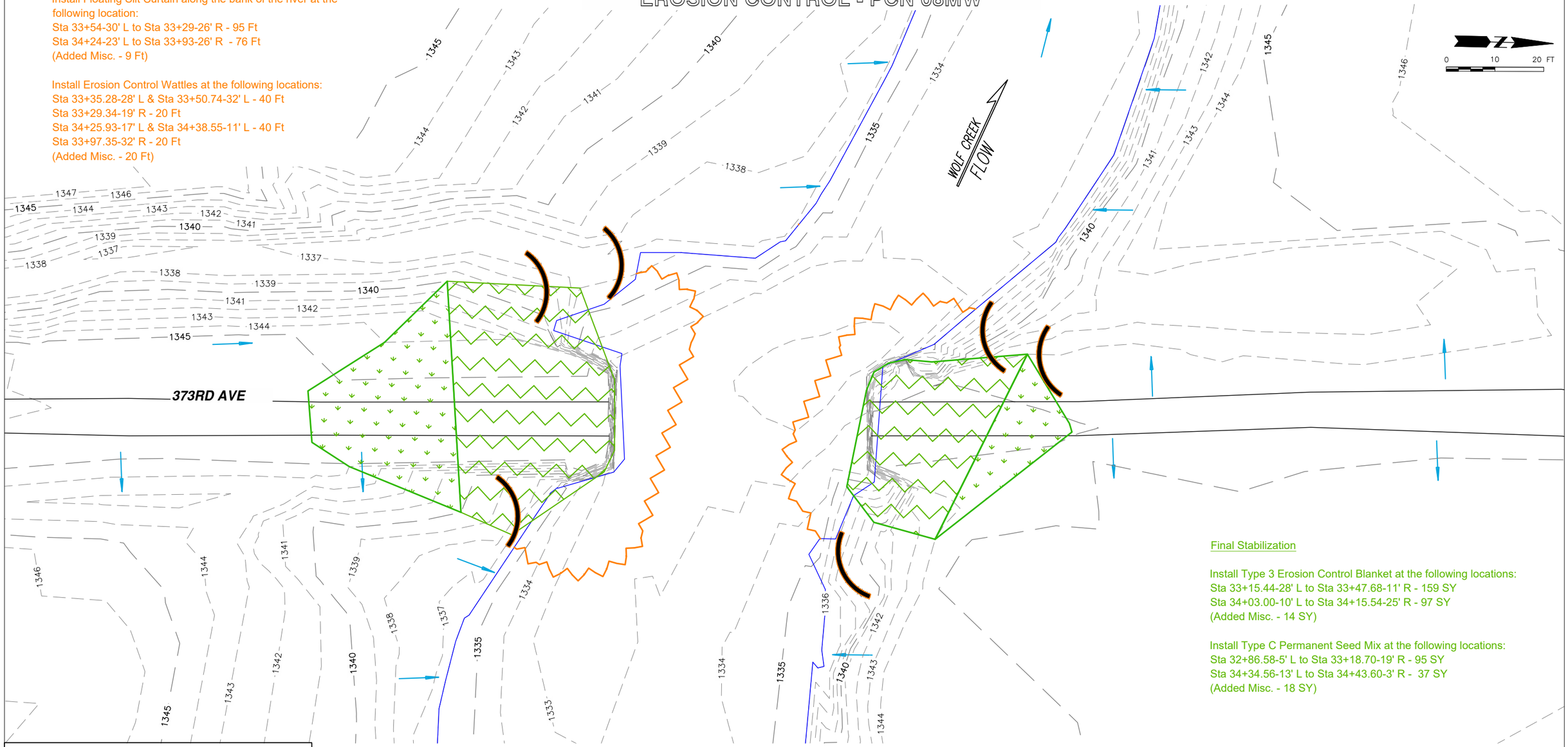
EROSION CONTROL - PCN 08MW

Initial Stabilization

Install Floating Silt Curtain along the bank of the river at the following location:
Sta 33+54-30' L to Sta 33+29-26' R - 95 Ft
Sta 34+24-23' L to Sta 33+93-26' R - 76 Ft
(Added Misc. - 9 Ft)

Install Erosion Control Wattles at the following locations:
Sta 33+35.28-28' L & Sta 33+50.74-32' L - 40 Ft
Sta 33+29.34-19' R - 20 Ft
Sta 34+25.93-17' L & Sta 34+38.55-11' L - 40 Ft
Sta 33+97.35-32' R - 20 Ft
(Added Misc. - 20 Ft)



Final Stabilization

Install Type 3 Erosion Control Blanket at the following locations:
Sta 33+15.44-28' L to Sta 33+47.68-11' R - 159 SY
Sta 34+03.00-10' L to Sta 34+15.54-25' R - 97 SY
(Added Misc. - 14 SY)

Install Type C Permanent Seed Mix at the following locations:
Sta 32+86.58-5' L to Sta 33+18.70-19' R - 95 SY
Sta 34+34.56-13' L to Sta 34+43.60-3' R - 37 SY
(Added Misc. - 18 SY)

LEGEND

- Erosion Control Wattles
- Floating Silt Curtain
- Type 3 Erosion Control Blanket and Type C Permanent Seed Mix
- Type C Permanent Seed Mix
- 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 activities 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.

REGISTERED PROFESSIONAL ENGINEER
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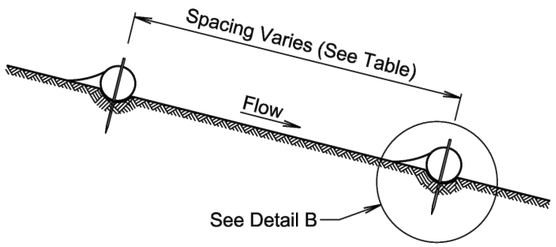
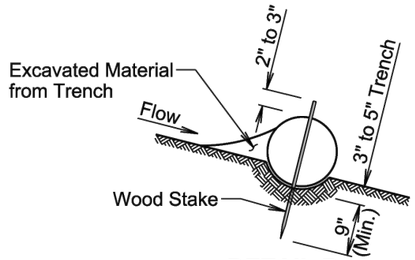
SOUTH DAKOTA

6.5.25

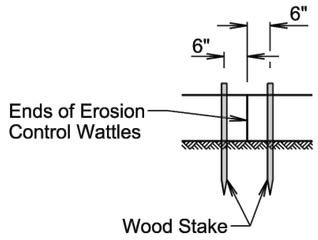


ELEVATION VIEW
(Cut or Fill Slope Installation)

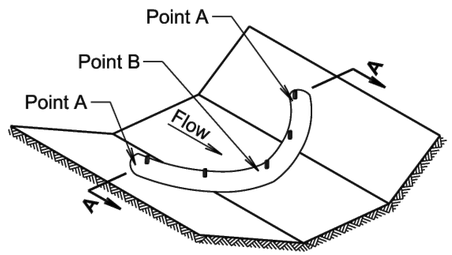
CUT OR FILL SLOPE INSTALLATION	
Slope	Spacing (Ft.)
1:1	10
2:1	20
3:1	30
4:1	40



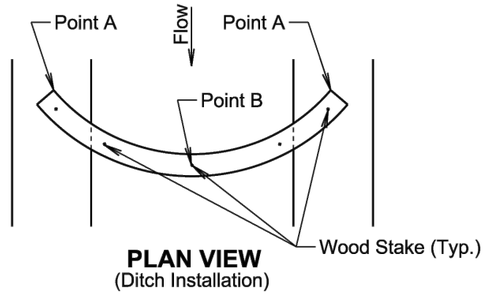
DETAIL B
(Typical of All Installations)



DETAIL C
(See General Notes)

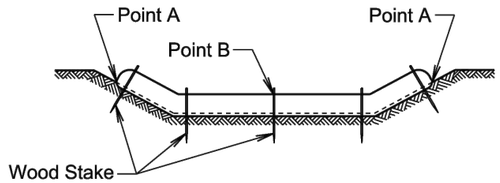


ISOMETRIC VIEW
(Ditch Installation)



PLAN VIEW
(Ditch Installation)

DITCH INSTALLATION	
Grade	Spacing (Ft.)
2%	150
3%	100
4%	75
5%	50



SECTION A-A

February 14, 2020

Published Date: 2026	SDDOT	EROSION CONTROL WATTLE	PLATE NUMBER 734.06
			Sheet 1 of 2

GENERAL NOTES:

At cut or fill slope installations, wattles will be installed along the contour and perpendicular to the water flow.

At ditch installations, point A must be higher than point B to ensure that water flows over the wattle and not around the ends.

The Contractor will dig a 3" to 5" trench, install the wattle tightly in the trench so that daylight can not be seen under the wattle, and then compact the soil excavated from the trench against the wattle on the uphill side. See Detail B.

The stakes will be 1"x2" or 2"x2" wood stakes, however, other types of stakes such as rebar may be used only if approved by the Engineer. The stakes will be placed 6" from the ends of the wattles and the spacing of the stakes along the wattles will be 3' to 4'.

Where installing running lengths of wattles, the Contractor will butt the second wattle tightly against the first and will not overlap the ends. See Detail C.

The Contractor and Engineer will inspect the erosion control wattles in accordance with the storm water permit. The Contractor will remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

Sediment removal, disposal, or necessary shaping will be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping will be incidental to the contract unit price per cubic yard for "Remove Sediment".

All costs for furnishing and installing the erosion control wattles including labor, equipment, and materials will be incidental to the contract unit price per foot for the corresponding erosion control wattle contract item.

All costs for removing the erosion control wattle from the project including labor, equipment, and materials will be incidental to the contract unit price per foot for "Remove Erosion Control Wattle".

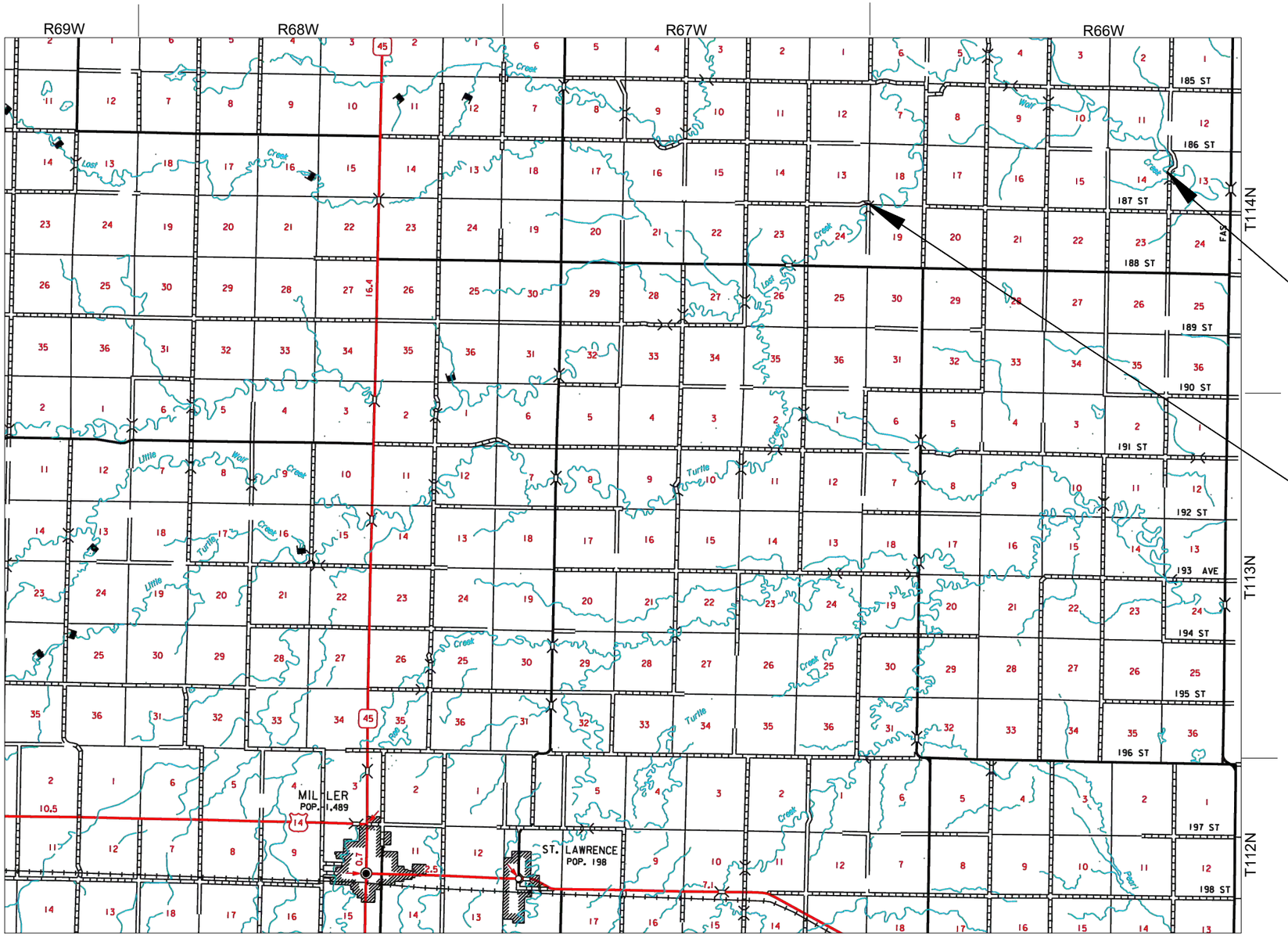
February 14, 2020

Published Date: 2026	SDDOT	EROSION CONTROL WATTLE	PLATE NUMBER 734.06
			Sheet 2 of 2

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	E1	E3

Section E: Structure Removal Plans

FOR BIDDING PURPOSES ONLY



INDEX OF SHEETS

N

Structure
30-290-144
BRO 8030 (22)
PCN 08MW

Structure
30-240-151
BRO 8030 (21)
PCN 08MV

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Sioux Falls, South Dakota 57108
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Vertical Survey Datum - NAVD88
Horizontal Survey Datum - UTM Zone 14 North NAD83(86)

22.22160-E2-STRUCTURE-HAND08MV.DGN

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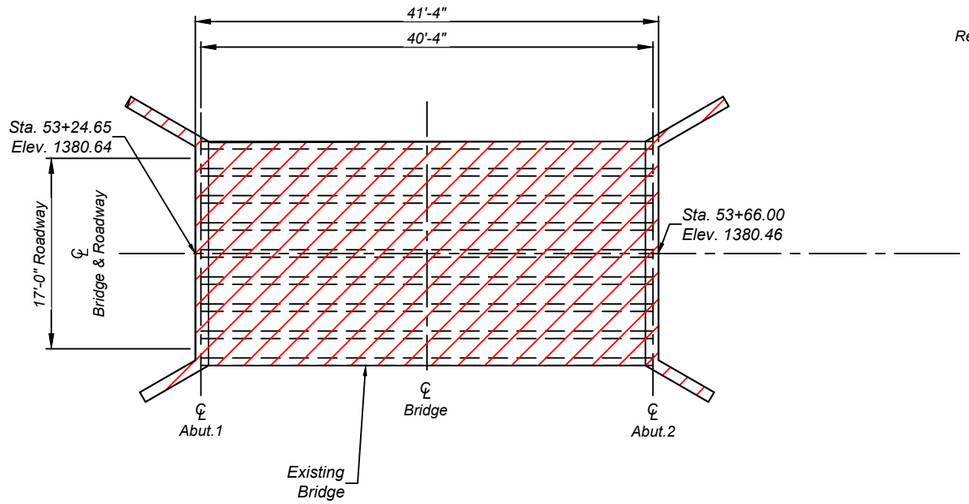
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	E2	E3



PLAN

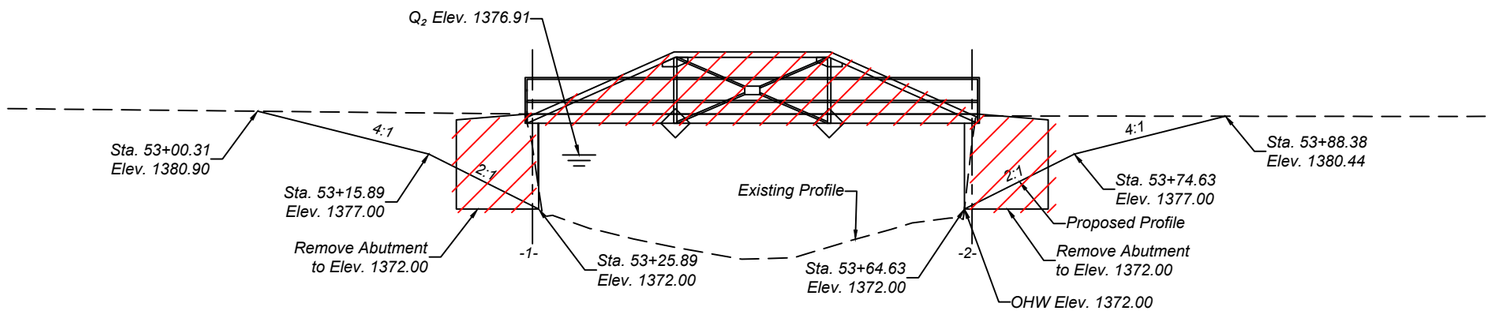
Remove structure from STA 53+24.65 to STA 53+66.00

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
250E0030	Incidental Work, Structure	1	LS

INCIDENTAL WORK, STRUCTURE

1. *In place is a 41' long, single-span pony truss bridge with a 17'-0" roadway. The superstructure consists of steel beams. Bridge decking consists of timber planks. The substructure consists of reinforced concrete vertical abutments.*
2. *Break down and remove the existing bridge to the elevations shown. 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 creek.*
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 extents of the work and materials involved.*
5. *Costs associated with the foregoing work will be incidental to the contract lumpsum 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.



ELEVATION

REGISTERED PROFESSIONAL ENGINEER
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6.5.25

LAYOUT FOR REMOVAL
FOR
41'-4" STEEL PONY TRUSS BRIDGE

17'-0" ROADWAY
OVER WOLF CREEK
STA. 53+24.65 TO STA. 53+66.00
STR. NO. 30-240-151
PCN 08MV

0° SKEW
SEC. 24-T114N-R67W
BRO 8030(21)

HAND COUNTY
S.D. DEPT. OF TRANSPORTATION
AUGUST 2023

1 OF 1

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

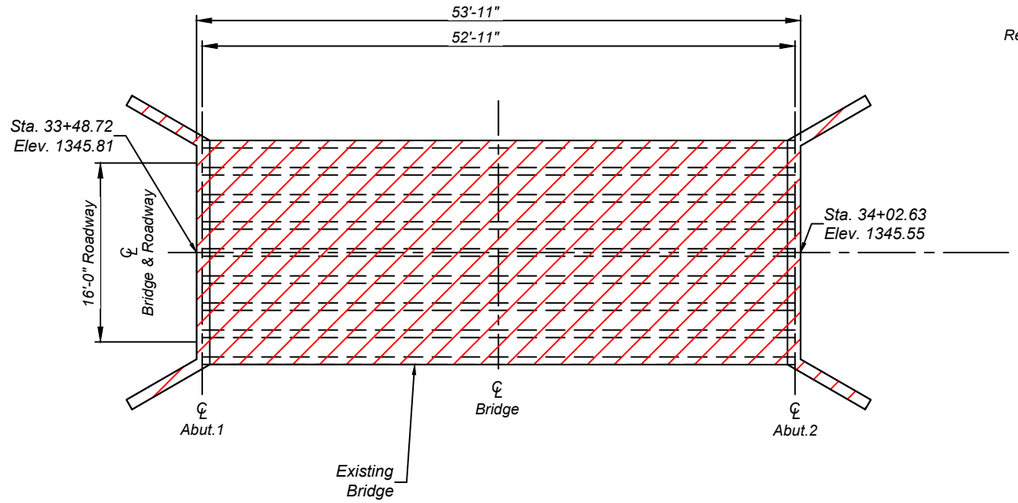
G:\2022\22.22160\C3D Design\E - Structure\22.22160-E2-STRUCTURE-HAND08MV.dwg PLOT DATE: 4/4/2025 11:42 AM Chad Stensland Autodesk-MDND.stb

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

22.22160-E2-STRUCTURE-HAND08MW-E3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	E3	E3



PLAN

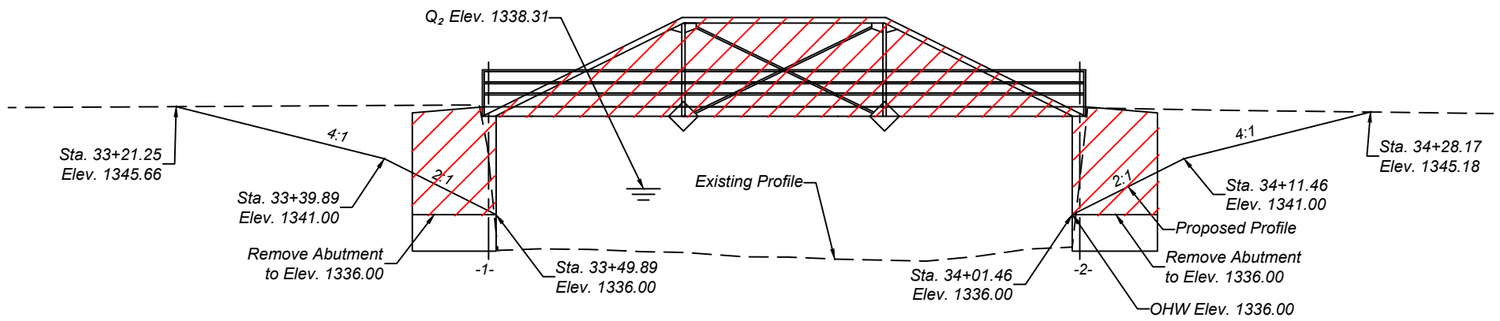
Remove structure from STA 33+48.72 to STA 34+02.63

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
250E0030	Incidental Work, Structure	1	LS

INCIDENTAL WORK, STRUCTURE

1. *In place is a 54' long, single-span pony truss bridge with a 16'-0" roadway. The superstructure consists of steel beams. Bridge decking consists of timber planks. The substructure consists of reinforced concrete vertical abutments.*
2. *Break down and remove the existing bridge to the elevations shown. 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 creek.*
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 extents of the work and materials involved.*
5. *Costs associated with the foregoing work will be incidental to the contract lumpsum 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.



ELEVATION

REGISTERED PROFESSIONAL ENGINEER
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SOUTH DAKOTA

6.5.25

LAYOUT FOR REMOVAL
FOR
53'-11" STEEL PONY TRUSS BRIDGE

16'-0" ROADWAY
OVER WOLF CREEK
STA. 34+48.72 TO STA. 34+02.63
STR. NO. 30-290-144
PCN 08MW

0° SKEW
SEC. 13/14-T114N-R66W
BRO 8030(22)

HAND COUNTY
S.D. DEPT. OF TRANSPORTATION
AUGUST 2023

1 OF 1

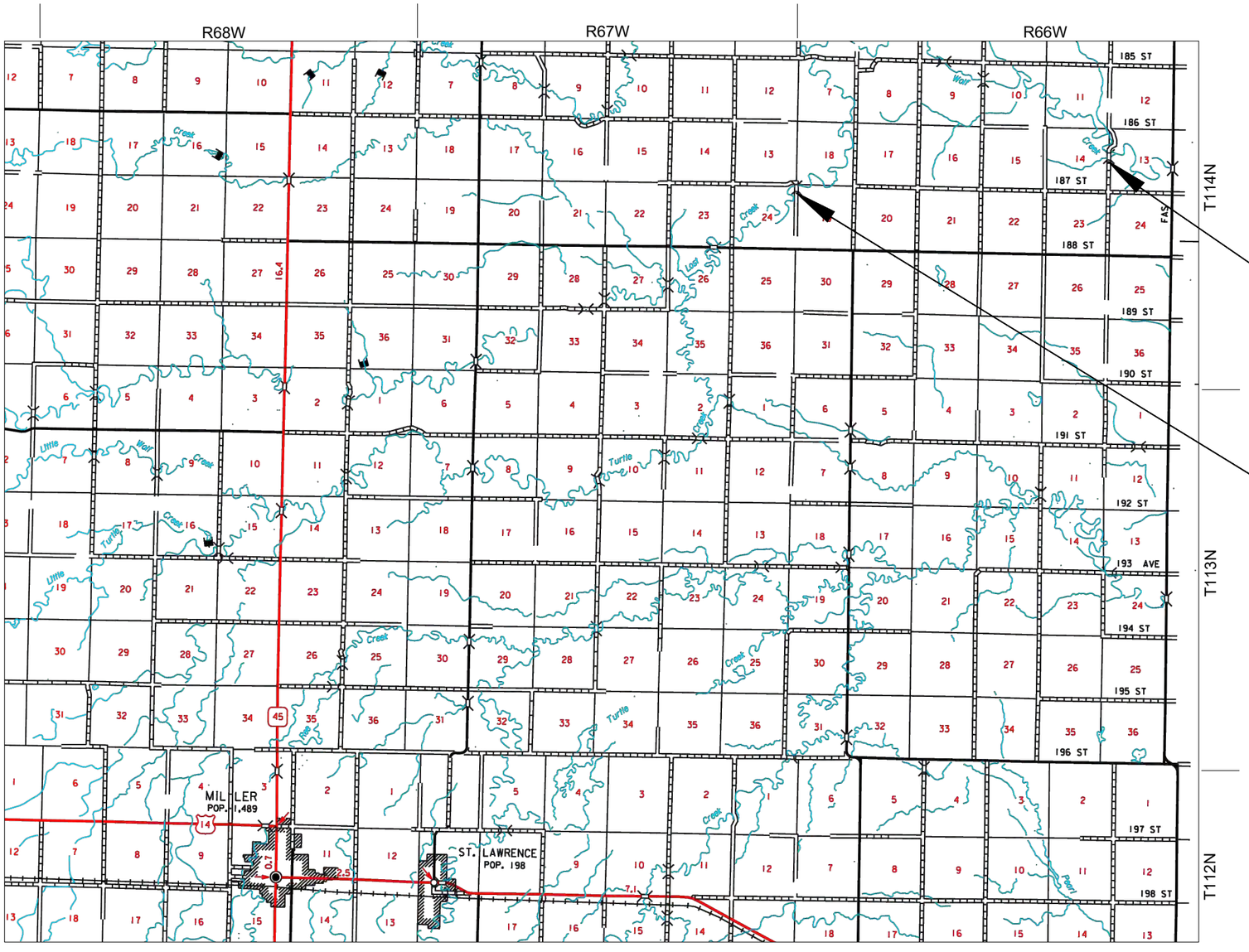
DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED
VV	VV	CS	BRIDGE ENGINEER

G:\2022\22.22160\C3D Design\E - Structure\22.22160-E2-STRUCTURE-HAND08MW.dwg PLOT DATE: 4/4/2025 11:42 AM Chad Stensland Autodesk-MDND.stb

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	S1	S7

Section S: Permanent Signing Plans

FOR BIDDING PURPOSES ONLY



INDEX OF SHEETS

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REGISTERED PROFESSIONAL ENGINEER
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SOUTH DAKOTA

6.5.25

SECTION S ESTIMATE OF QUANTITIES

PCN 08MV - Str. No. 30-240-151

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	1	Each
632E1321	2.0"x2.0" Perforated Tube Post	1	Each
632E2535	Type 4 Object Marker	6	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	26.4	SqFt

PCN 08MW - Str. No. 30-290-144

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	3	Each
632E1321	2.0"x2.0" Perforated Tube Post	2	Each
632E2535	Type 4 Object Marker	6	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	29.1	SqFt

GENERAL PERMANENT SIGNING

Revised 6/5/25 VLV

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.

PCN 08MV

SIGN REMOVAL	
STATION - OFFSET	SIGN DESCRIPTION
54+05.18 - 11.24' L	WEIGHT LIMIT

PCN 08MW

SIGN REMOVAL	
STATION - OFFSET	SIGN DESCRIPTION
32+90.50 - 12.20' R	WEIGHT LIMIT
34+23.93 - 31.25' R	SIGN POST
35+03.44 - 18.30' R	SIGN POST

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.

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

6.5.25

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

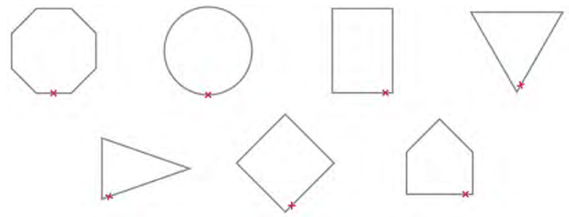
Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

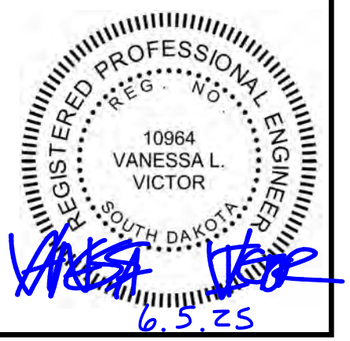
DATE TAGGING SIGNS WITH PERTINENT INFORMATION

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.



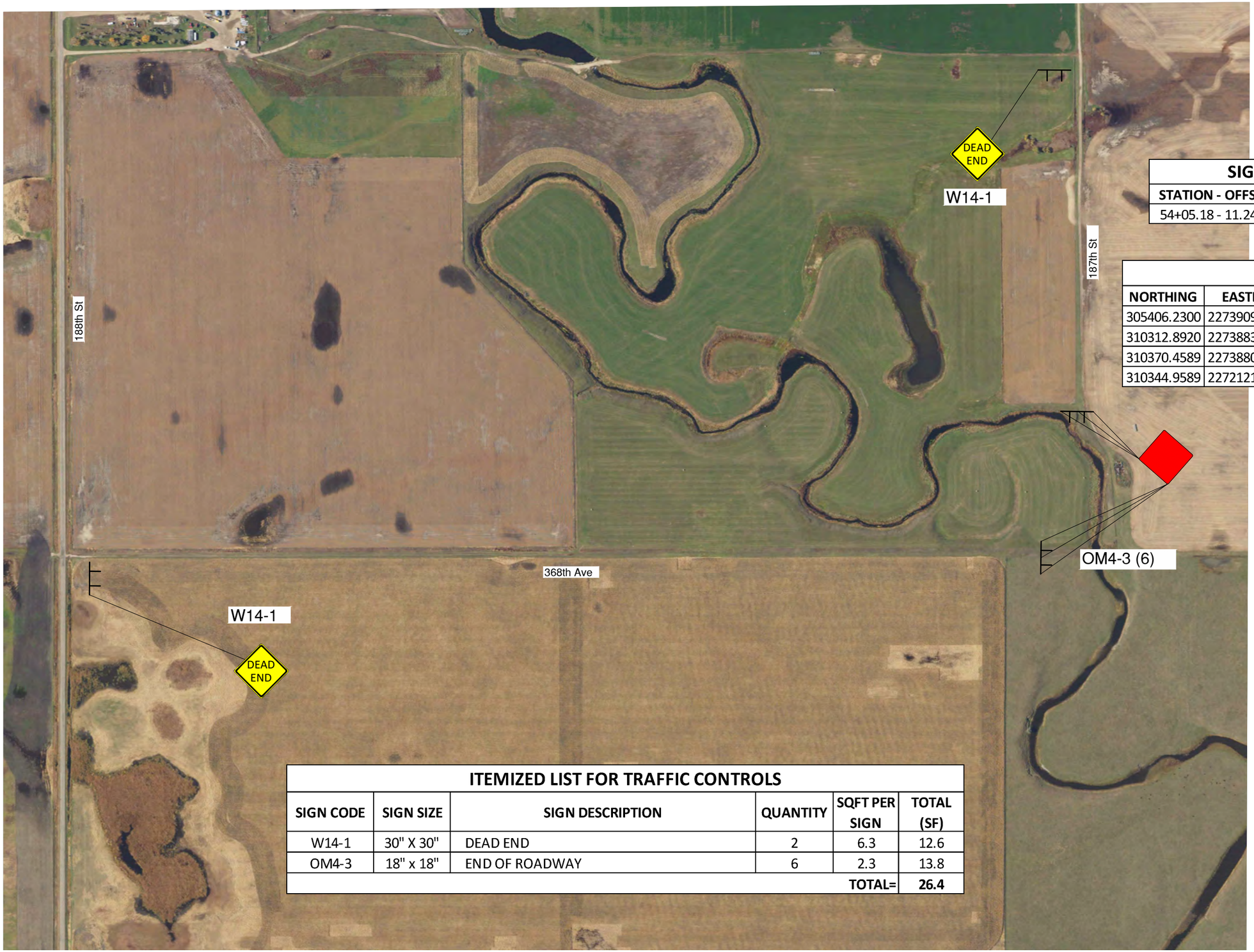


PERMANENT SIGNING LAYOUT - PCN 08MV

Revised: 6/5/25 VLV

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	S4	S7



SIGN REMOVAL	
STATION - OFFSET	**SIGN DESCRIPTION**
54+05.18 - 11.24' L	WEIGHT LIMIT

SIGN INSTALL			
NORTHING	**EASTING**	**SIGN CODE**	**SIGN DESCRIPTION**
305406.2300	2273909.0600	W14-1	DEAD END
310312.8920	2273883.3100	OM4-3	END OF ROAD MARKER
310370.4589	2273880.8079	OM4-3	END OF ROAD MARKER
310344.9589	2272121.8465	W14-1	DEAD END

ITEMIZED LIST FOR TRAFFIC CONTROLS

SIGN CODE	SIGN SIZE	SIGN DESCRIPTION	QUANTITY	SQFT PER SIGN	TOTAL (SF)
W14-1	30" X 30"	DEAD END	2	6.3	12.6
OM4-3	18" x 18"	END OF ROADWAY	6	2.3	13.8
				TOTAL=	**26.4**

REGISTERED PROFESSIONAL ENGINEER
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SOUTH DAKOTA

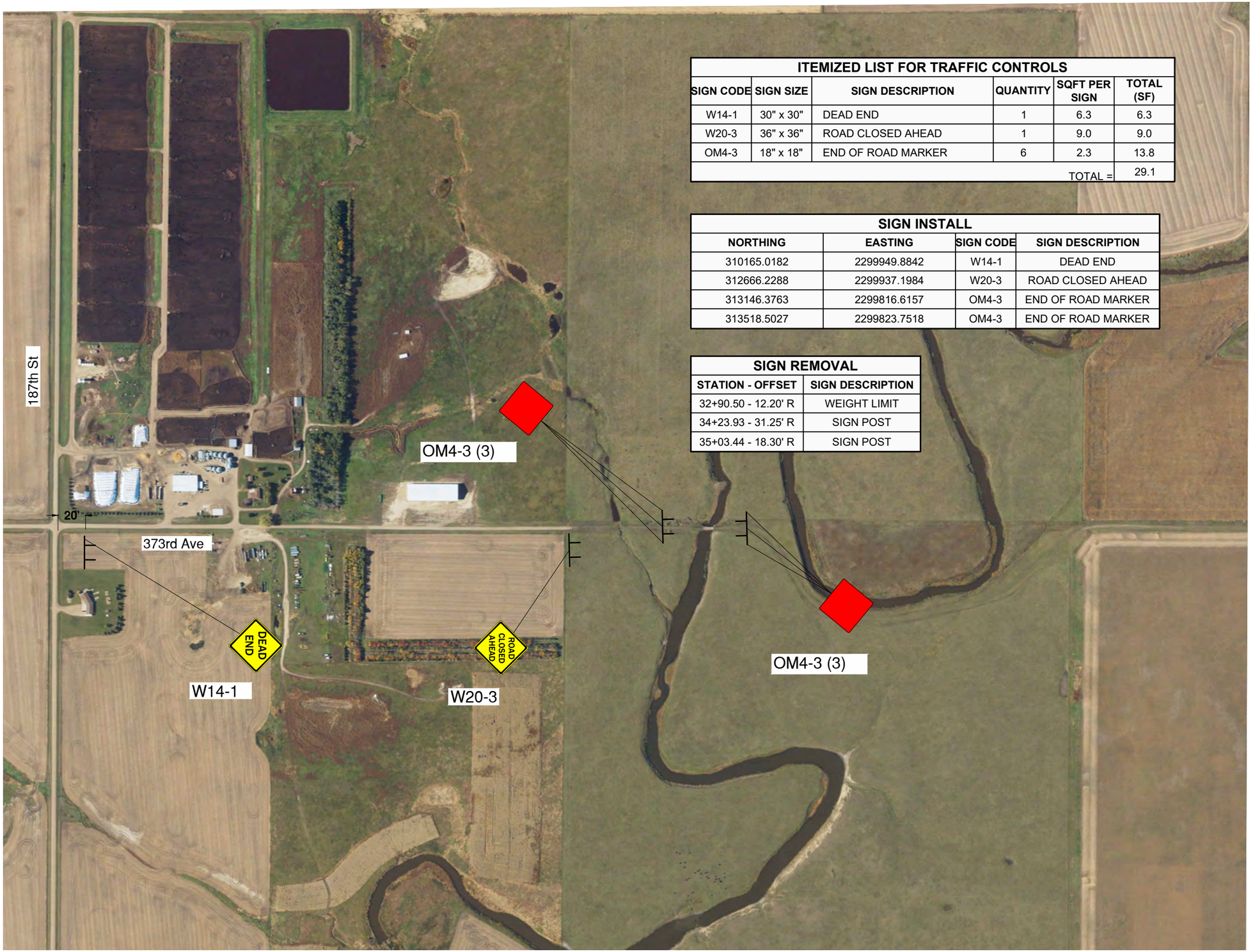
6.5.25

G:\2022\22.22160\C3D Design\S - Permanent Signing\22.22160-S-PERM-SIGN PCN 08MV.dwg PLOT DATE: 6/6/2025 5:07 AM Vanessa Victor Autodesk-MONO.stb

PERMANENT SIGNING LAYOUT - PCN 08MW

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO 8030(21) BRO 8030(22)	S5	S7



ITEMIZED LIST FOR TRAFFIC CONTROLS					
SIGN CODE	SIGN SIZE	SIGN DESCRIPTION	QUANTITY	SQFT PER SIGN	TOTAL (SF)
W14-1	30" x 30"	DEAD END	1	6.3	6.3
W20-3	36" x 36"	ROAD CLOSED AHEAD	1	9.0	9.0
OM4-3	18" x 18"	END OF ROAD MARKER	6	2.3	13.8
				TOTAL =	29.1

SIGN INSTALL			
NORTHING	EASTING	SIGN CODE	SIGN DESCRIPTION
310165.0182	2299949.8842	W14-1	DEAD END
312666.2288	2299937.1984	W20-3	ROAD CLOSED AHEAD
313146.3763	2299816.6157	OM4-3	END OF ROAD MARKER
313518.5027	2299823.7518	OM4-3	END OF ROAD MARKER

SIGN REMOVAL	
STATION - OFFSET	SIGN DESCRIPTION
32+90.50 - 12.20' R	WEIGHT LIMIT
34+23.93 - 31.25' R	SIGN POST
35+03.44 - 18.30' R	SIGN POST

N

0 250 500 FT

REGISTERED PROFESSIONAL ENGINEER
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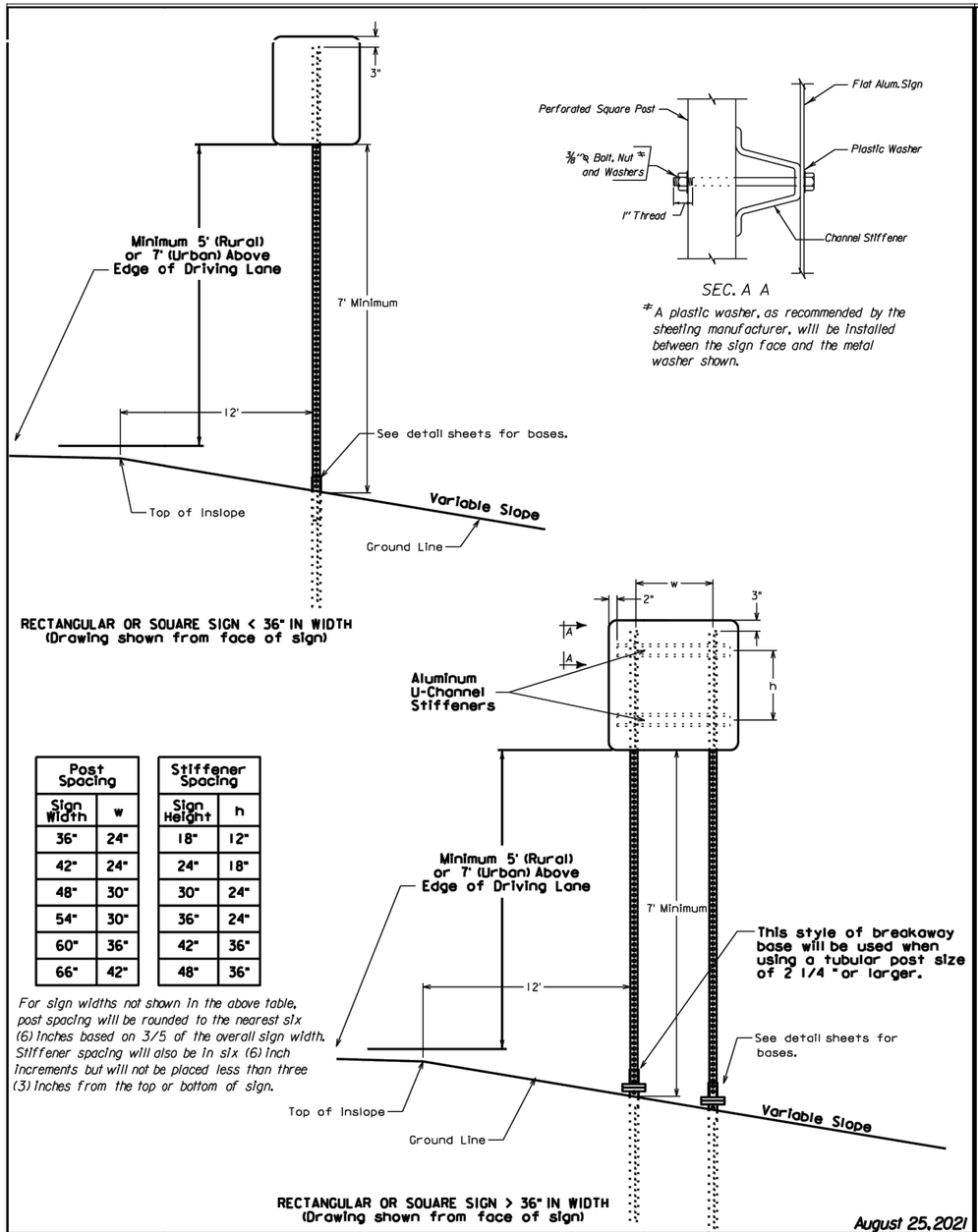
6.5.25

G:\2022\22.22160\C3D Design\S - Permanent Signing\22.22160-S-PERM-SIGN PCN 08MW.dwg PLOT DATE: 4/4/2025 11:43 AM Chad Stensland Autodesk-MOND.stb



SEC. A A

A plastic washer, as recommended by the sheeting manufacturer, will be installed between the sign face and the metal washer shown.

Post Spacing	
Sign Width	w
36"	24"
42"	24"
48"	30"
54"	30"
60"	36"
66"	42"

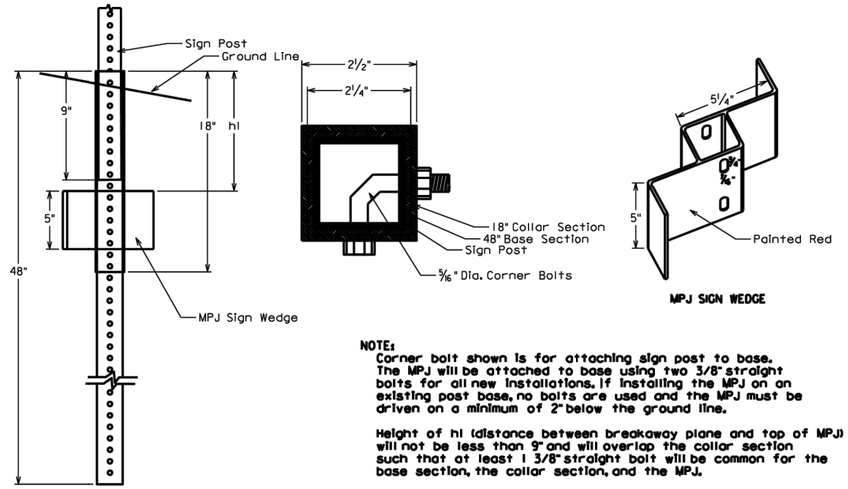
Stiffener Spacing	
Sign Height	h
18"	12"
24"	18"
30"	24"
36"	24"
42"	36"
48"	36"

For sign widths not shown in the above table, post spacing will be rounded to the nearest six (6) inches based on 3/5 of the overall sign width. Stiffener spacing will also be in six (6) inch increments but will not be placed less than three (3) inches from the top or bottom of sign.

August 25, 2021

SDDOT	SQUARE OR RECTANGULAR SIGNS (Typical Sign and Stiffener Details)	SPECIAL DETAIL LO3	Sheet 1 of 1

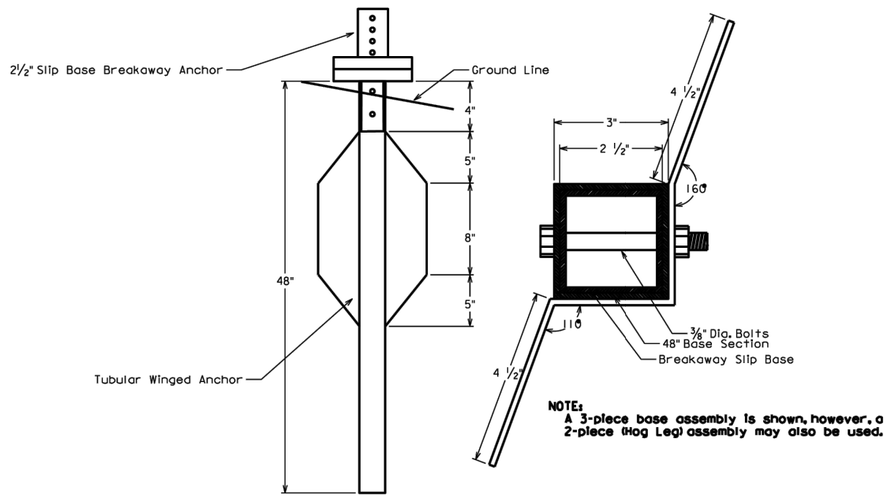
SIGN BASE DETAILS FOR A 2" SIGN POST



NOTE:
Corner bolt shown is for attaching sign post to base. The MPJ will 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 hi (distance between breakaway plane and top of MPJ will not be less than 9" and will overlap the collar section such that at least 1 3/8" straight bolt will be common for the base section, the collar section, and the MPJ.

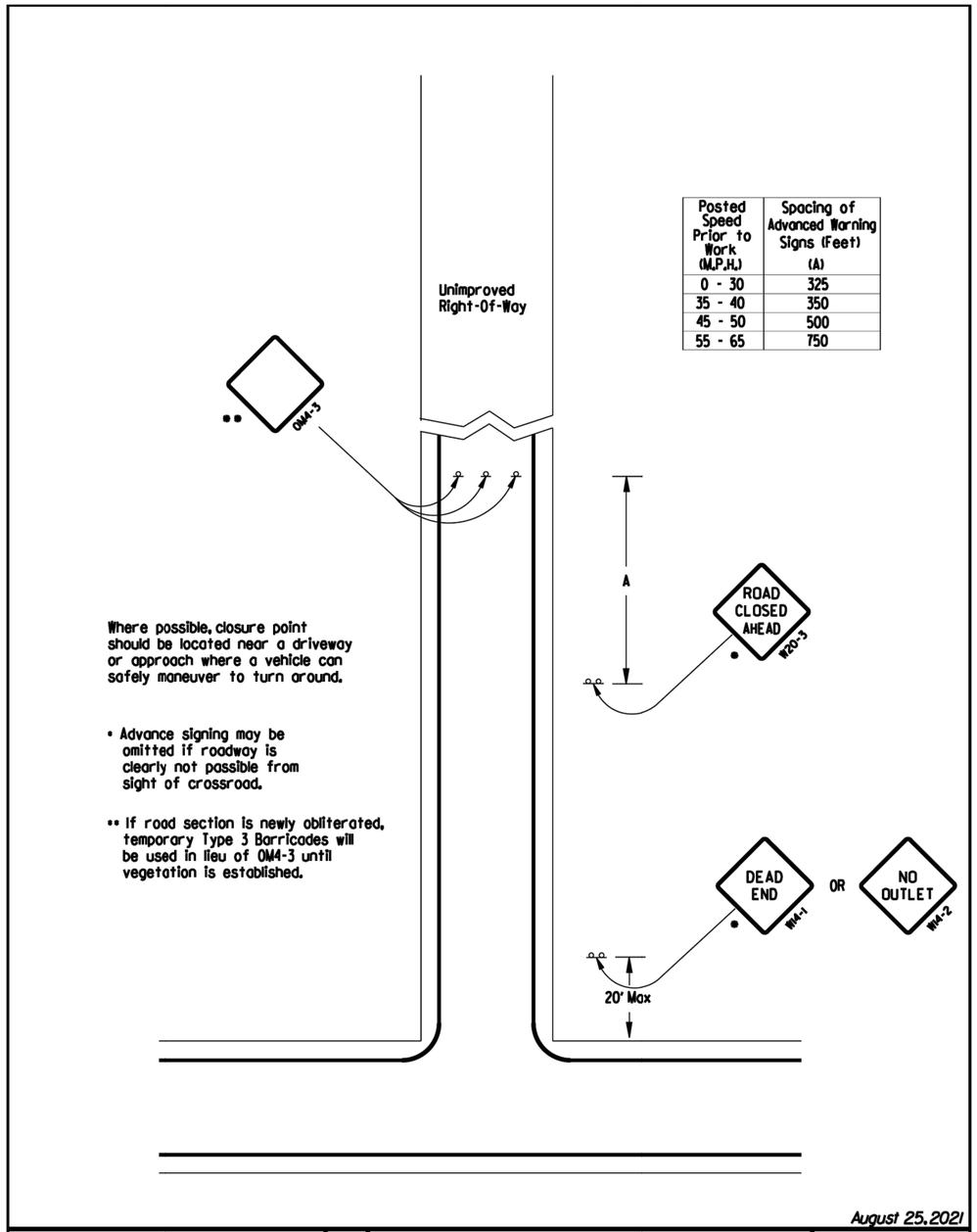
SIGN BASE DETAILS FOR A 2½" SIGN POST



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

August 25, 2021

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 will be used in lieu of OM4-3 until vegetation is established.

August 25, 2021

SDDOT

GUIDES FOR TRAFFIC CONTROL DEVICES
ROAD CLOSED
OBLITERATED OR UNIMPROVED ROADWAY

SPECIAL DETAIL
L71

Sheet 1 of 1