

# SECTION D: EROSION AND SEDIMENT CONTROL PLANS

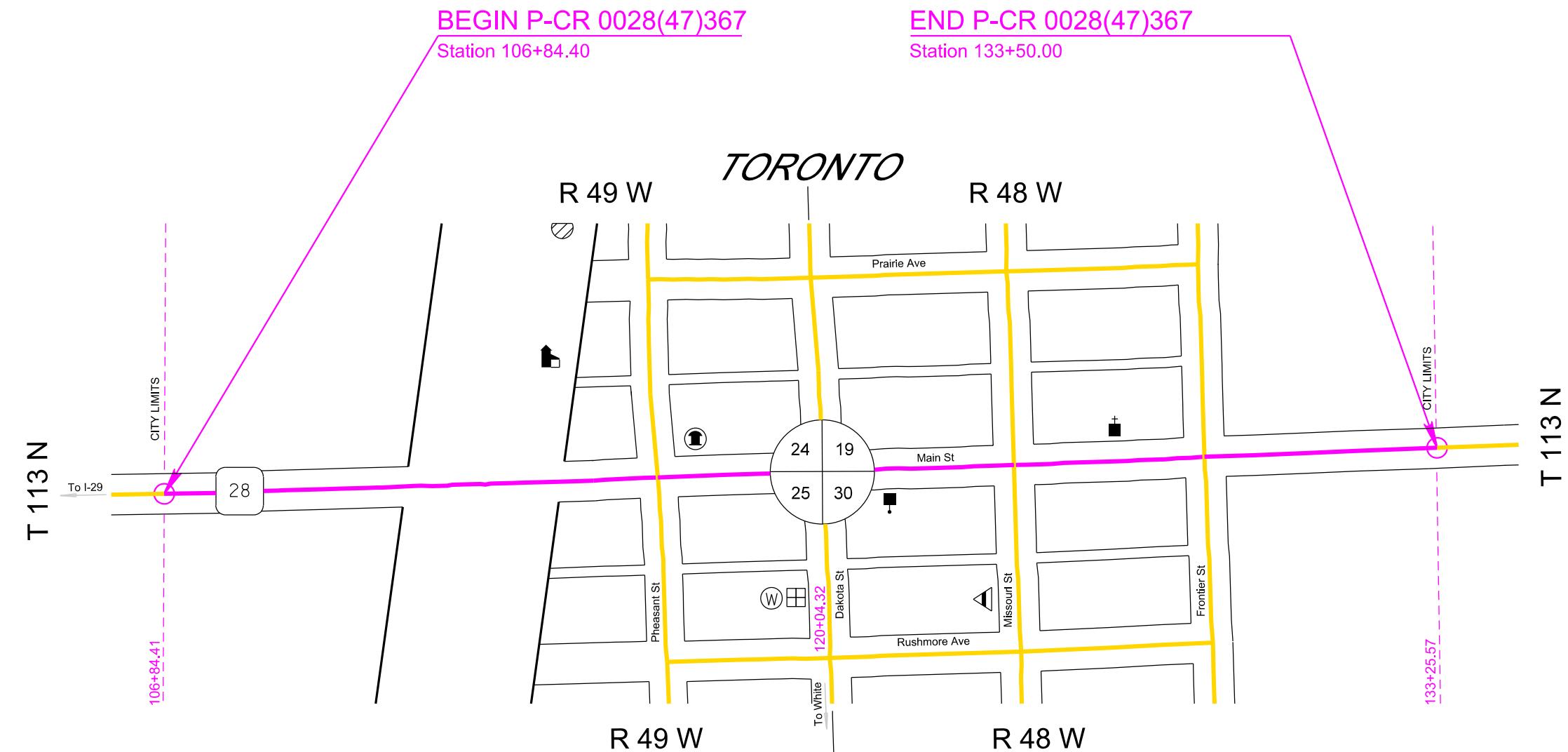
STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	HEET D1	TOTAL SHEETS D21
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Plotting Date: 09/29/2025

## INDEX OF SHEETS

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D2-D5	Estimate with General Notes and Tables
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Plot Scale: 1:200



Plotted From: TRPR13525

<u>SECTION D ESTIMATE OF QUANTITIES</u>				STATE OF SOUTH DAKOTA		PROJECT P-CR 0028(47)367	SHEET D2	TOTAL SHEETS D21																																																																																																																										
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The Contractor will be required to furnish and place 4 inches of topsoil on the disturbed area as determined by the Engineer during construction.</p> <p>Contractor furnished topsoil will be free from clay lumps, stones, coarse gravel, or similar objects larger than 3/4 inch in diameter. Brush, stumps, roots, wood, objectionable weeds, litter, or any other material which may be harmful to plant growth will not be allowed. Organic material will be decomposed.</p> <p>All costs to furnish and place the Contractor furnished topsoil will be incidental to the contract unit price per cubic yard for "Contractor Furnished Topsoil".</p>		<p style="text-align: center;"><b>PERMANENT SEEDING</b></p> <p>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.</p> <p>Lawn and turf seed, such as the Type D Permanent Seed Mixture, will be tested within 12 months prior to planting, exclusive of the calendar month in which the test was completed.</p> <p>Type D Permanent Seed Mixture will consist of the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Grass Species</th> <th style="text-align: left; padding: 2px;">Variety</th> <th style="text-align: right; padding: 2px;">Pure Live Seed (PLS) (Pounds/1000 SqFt)</th> </tr> </thead> <tbody> <tr><td>Kentucky Bluegrass</td><td>Avalanche, Appalachian, Wildhorse, Blue Bonnet, Action</td><td style="text-align: right;">1.4</td></tr> <tr><td>Perennial Ryegrass</td><td>Turf Type Varieties</td><td style="text-align: right;">1.4</td></tr> <tr><td>Creeping Red Fescue</td><td>Epic, Boreal, Chantilly</td><td style="text-align: right;">1.4</td></tr> <tr><td>Chewings Fescue</td><td>Ambrose, K2, Zodiac, Shadow III</td><td style="text-align: right;">1.4</td></tr> <tr><td>Alkali Grass</td><td>Fults, Fults II, Quill, Salty</td><td style="text-align: right;">1.4</td></tr> <tr><td style="text-align: right; vertical-align: bottom;"><b>Total:</b></td><td></td><td style="text-align: right; vertical-align: bottom;"><b>7</b></td></tr> </tbody> </table>			Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)	Kentucky Bluegrass	Avalanche, Appalachian, Wildhorse, Blue Bonnet, Action	1.4	Perennial Ryegrass	Turf Type Varieties	1.4	Creeping Red Fescue	Epic, Boreal, Chantilly	1.4	Chewings Fescue	Ambrose, K2, Zodiac, Shadow III	1.4	Alkali Grass	Fults, Fults II, Quill, Salty	1.4	<b>Total:</b>		<b>7</b>
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<p style="text-align: center;"><b>PLACING TOPSOIL</b></p> <p>The thickness will be approximately 4 inches within the right-of-way and 6 inches on temporary easements.</p> <p>The estimated amount of topsoil to be placed is as follows:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Station to</th> <th style="text-align: left; padding: 2px;">Station</th> <th style="text-align: left; padding: 2px;">Topsoil (CuYd)</th> </tr> </thead> <tbody> <tr><td>106+84.40</td><td>112+00</td><td>426</td></tr> <tr><td>112+00</td><td>118+00</td><td>1</td></tr> <tr><td>118+00</td><td>124+00</td><td>1</td></tr> <tr><td>124+00</td><td>130+00</td><td>319</td></tr> <tr><td>130+00</td><td>133+25</td><td>495</td></tr> <tr><td style="text-align: right; vertical-align: bottom;"><b>Total:</b></td><td style="text-align: right; vertical-align: bottom;"><b>1,242</b></td><td></td></tr> </tbody> </table>				Station to	Station	Topsoil (CuYd)	106+84.40	112+00	426	112+00	118+00	1	118+00	124+00	1	124+00	130+00	319	130+00	133+25	495	<b>Total:</b>	<b>1,242</b>		<p style="text-align: center;"><b>FERTILIZING</b></p> <p>The Contractor will apply an all-natural slow-release fertilizer prior to seeding or placing sod. The all-natural fertilizer will have a minimum guaranteed analysis of 4-4-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 2.07%, a minimum of 4% (P2O5) available phosphate, a minimum of 4% (K2O) soluble potash, and a maximum carbon to nitrogen ratio (C:N ratio) of 5:1. The all-natural fertilizer will be free of weed-seed and pathogens accomplished through thermophilic composting, and not mechanical or chemical sterilization, to assure presence of beneficial soil microbiology. The fertilizer will have a near neutral pH, a low salt index, a low biological oxygen demand, contain organic humic and fulvic acids, and have high aerobic organism counts. The fertilizer will also be stable, free of bad odors, and be unattractive as a food source for animals. It should also be in a granular form that is easily spread.</p> <p>The application rate is 34 pounds per 1,000 square feet.</p> <p>The fertilizer provided will be from the approved products list. The approved product list may be viewed at the following internet site:</p> <p style="text-align: center;"><a href="https://apps.sd.gov/HC60ApprovedProducts/main.aspx">https://apps.sd.gov/HC60ApprovedProducts/main.aspx</a></p>																																																																																																									
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<p style="text-align: center;"><b>WATER FOR VEGETATION</b></p> <p>Water for vegetation consists of applying water to seeded areas to enhance germination and/or root growth. When watering, use the following guidelines:</p> <p>Immediately after seeding:</p> <ul style="list-style-type: none"> <li>• Keep the topsoil moist but not excessively wet until the seed has germinated.</li> <li>• Water a minimum of 3 days a week for 2 weeks preferably watering 2 or 3 times a day in small quantities.</li> <li>• Use fine spray and low pressure to avoid topsoil wash and to prevent uncovering buried seeds.</li> </ul> <p>After emergence:</p> <ul style="list-style-type: none"> <li>• Topsoil will be kept thoroughly moistened by sprinkling, as necessary, for 4 weeks. After the 4-week period, an inspection will be made to determine if grass is established enough to suspend watering. Continue watering until grass has been thoroughly established.</li> <li>• Never apply water at a rate faster than the topsoil can absorb.</li> <li>• Water during early morning hours or early evening hours.</li> <li>• Do not water when rain is forecasted for the area.</li> <li>• If rainfall occurs, suspend watering according to rainfall amount.</li> </ul>				<p>An estimated 15 Gallons of water per square yard of seeding area was used to compute the quantity for the bid item "Water for Vegetation".</p> <p>All costs for furnishing and applying the water including hauling, materials, equipment, labor, and incidentals necessary will be paid for at the contract unit price per MGal for "Water for Vegetation".</p>																																																																																																																														

			STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	FILE D3	Sheet D21	TOTAL SHEETS
<b>FIBER REINFORCED MATRIX</b>							
Fiber reinforced matrix will be applied in a separate operation following permanent seeding at all locations to be permanently seeded. The application rate is 3,000 pounds per acre.							
The contractor will use a Fiber Reinforced Matrix from the approved products list, or an approved equal. The approved product list for Fiber Reinforced Matrix may be viewed at the following internet site.							
<a href="https://apps.sd.gov/HC60ApprovedProducts/main.aspx">https://apps.sd.gov/HC60ApprovedProducts/main.aspx</a>							
<b>EROSION CONTROL WATTLE</b>							
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 until vegetation has been established and then they will be removed in accordance with the Engineer.							
An additional quantity of 12" Diameter Erosion Control Wattles has been added to the Estimate of Quantities for temporary erosion and sediment control in highway ditch channels and as an alternative to low flow or high flow silt fence at wetland areas adjacent to the highway.							
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:							
<a href="https://apps.sd.gov/HC60ApprovedProducts/main.aspx">https://apps.sd.gov/HC60ApprovedProducts/main.aspx</a>							
<b>TABLE OF 12" EROSION CONTROL WATTLE</b>							
<b>Quantity</b>							
Station	Location	(Ft)					
107+03 L	Inlet and outlet ends of pipe	40					
109+01 R	Inlet and outlet ends of pipe	40					
109+29 L	Outlet end of pipe	20					
127+67 R	Inlet and outlet ends of pipe	40					
133+23 L	Outlet end of pipe	40					
Additional Quantity:		220					
<b>Total:</b>	<b>400</b>						
<b>LOW FLOW SILT FENCE</b>							
The low flow silt fence fabric provided will be from the approved product list. The approved product list for low flow silt fence may be viewed at the following internet site:							
<a href="https://apps.sd.gov/HC60ApprovedProducts/main.aspx">https://apps.sd.gov/HC60ApprovedProducts/main.aspx</a>							
Low 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 734.04 for details.							
An additional quantity of Low Flow Silt Fence has been added to the Estimate of Quantities for temporary sediment control.							
<b>TABLE OF LOW FLOW SILT FENCE</b>							
<b>Quantity</b>							
Station	Location	(Ft)					
106+50 L/R	Perimeter control	200					
135+00 L/R	Perimeter control	200					
	Additional Quantity:	200					
	<b>Total:</b>	<b>600</b>					
<b>HIGH FLOW SILT FENCE</b>							
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:							
<a href="https://apps.sd.gov/HC60ApprovedProducts/main.aspx">https://apps.sd.gov/HC60ApprovedProducts/main.aspx</a>							
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.							
<b>TABLE OF HIGH FLOW SILT FENCE</b>							
<b>Quantity</b>							
Location	(Ft)						
Quantity from Interim Sediment Control at Inlets:		904					
Additional Quantity:		150					
<b>Total:</b>	<b>1,054</b>						
<b>EROSION CONTROL BLANKET</b>							
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:							
<a href="https://apps.sd.gov/HC60ApprovedProducts/main.aspx">https://apps.sd.gov/HC60ApprovedProducts/main.aspx</a>							
An additional quantity of Type 3 Erosion Control Blanket has been added to the Estimate of Quantities for temporary erosion control.							
<b>TABLE OF TYPE 3 EROSION CONTROL BLANKET</b>							
<b>Quantity</b>							
Station	Location	(SqYd)					
109+01 R	Outlet end of pipe	53					
109+29 L	Outlet end of pipe	53					
128+05 – 50' L	Outlet end of pipe	53					
133+23 L	Outlet end of pipe	53					
Additional Quantity:		250					
<b>Total Type 3 Erosion Control Blanket:</b>	<b>462</b>						
<b>SHAPING FOR EROSION CONTROL BLANKET</b>							
The ditches will be shaped for the erosion control blanket as specified on Standard Plate 734.01.							
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## **INTERIM SEDIMENT CONTROL AT INLETS, MANHOLES, AND JUNCTION BOXES AFTER SURFACING REMOVAL AND BEFORE PLACEMENT OF SURFACING**

Refer to Standard Plate 734.05 for details of installation of high flow silt fence at drop inlets, manholes, and junction boxes.

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:

<https://apps.sd.gov/HC60ApprovedProducts/main.aspx>

In addition, the Contractor will do the following for this installation

- A space of at least 1' will be provided between the silt fence installation and the inlet. This space will be filled completely with a 2" depth of aggregate, 2" minus or smaller.
- The top elevation of the silt fence will be such that a 12" horizontal flap of silt fence will remain at the bottom.
- The base of the silt fence will conform to the natural ground profile but does not need to be trenched in at the bottom.
- The extra 12" of the silt fence material may be cut so that the material will lay flat upon the subgrade.
- Sediment filter bags will be placed on the 12" flap around the perimeter of the silt fence installation. The sediment filter bags will overlap 6" at the ends and be placed tightly together.
- The sediment filter bags will be filled with clean aggregate 2" minus or smaller.

The Sediment Filter Bag provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<https://apps.sd.gov/HC60ApprovedProducts/main.aspx>

All costs for furnishing and installing the sediment filter bags will be incidental to the contract unit price per foot for "Sediment Filter Bag."

All costs for removing the sediment filter bags will be incidental to the contract unit price per foot for "Remove Sediment Filter Bag".

Payment for high flow silt fence will be as stated in Section 734.5 of the Specifications.

All costs for furnishing, installing, and removing the 2" depth of aggregate will be incidental to other erosion and sediment control contract items.

All costs for removing and disposing of sediment collected by the sediment control device will be incidental to the contract unit price per cubic yard for

The removed sediment will be placed at a location away from the drop inlet

sewer system.

device once every week and within 24 hours after every rainfall event greater than 1/2".

**TABLE OF INTERIM SEDIMENT CONTROL AT INLETS, MANHOLES, AND JUNCTION BOXES AFTER SURFACING REMOVAL AND BEFORE PLACEMENT OF SURFACING**

Station	High Flow Silt Fence Quantity (Ft)	Sediment Filter Bag Quantity (Ft)	Remove Sediment Quantity (CuYd)
109+63 – 20' R	24	32	0.25
110+20 – 20' L	30	40	0.25
110+20 – 42' L	30	40	0.25
110+79 – 20' L	26	32	0.25
110+79 – 20' R	26	32	0.25
110+79 – 39' R	26	32	0.25
112+18 – 20' L	24	32	0.25
112+18 – 20' R	18	24	0.25
112+18 – 33' L	26	32	0.25
112+18 – 33' R	26	32	0.25
113+54 – 20' L	24	32	0.25
113+54 – 32' L	26	32	0.25
114+56 – 20' L	24	32	0.25
114+56 – 20' R	18	24	0.25
114+56 – 37' L	26	32	0.25
116+27 – 20' L	24	32	0.25
116+49 – 44' L	18	24	0.25
117+02 – 49' L	18	24	0.25
117+06 – 47' R	18	24	0.25
117+20 – 29' L	22	28	0.25
117+20 – 29' R	22	28	0.25
118+79 – 29' L	18	24	0.25
118+79 – 29' R	18	24	0.25
119+54 – 29' L	22	28	0.25
119+54 – 29' R	18	24	0.25
119+73 – 48' L	18	24	0.25
120+32 – 46' L	18	24	0.25
120+54 – 29' L	22	28	0.25
121+70 – 27' L	18	24	0.25
121+70 – 29' R	18	24	0.25
123+29 – 29' L	22	28	0.25
123+29 – 27' R	18	24	0.25
123+65 – 53' L	18	24	0.25
124+05 – 53' L	22	28	0.25
124+30 – 29' L	22	28	0.25
124+30 – 29' R	18	24	0.25
125+75 – 29' R	18	24	0.25
125+85 – 29' L	22	28	0.25
127+26 – 29' L	30	40	0.25
127+26 – 29' R	18	24	0.25
127+43 – 50' L	30	40	0.25
<b>Totals:</b>	<b>904</b>	<b>1,176</b>	<b>10.25</b>

## **SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES**

This type of sediment control device should be used where there is pavement in the vicinity of the drop inlets and storm water or sediment could possibly enter the frame and grate. Sediment Control at Inlet with Frame and Grate will be installed prior to working in the vicinity of the drop inlets.

The Contractor will be responsible for maintaining and repairing the sediment control devices for the duration of the project for which sediment control measures are required. Maintenance will be scheduled to prevent storm water from backing up into the driving lane.

"Sediment Control at Inlet with Frame and Grate" will be paid for one time at each location, regardless of the number of times the sediment control devices are installed, inspected, cleaned, removed, repaired, or replaced. All costs associated with furnishing, installing, inspecting, maintaining, cleaning, sediment removal, and repairing Sediment Control at Inlet with Frame and Grate will be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

The Sediment Control at Inlets with Frames and Grates provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<https://apps.sd.gov/HC60ApprovedProducts/main.aspx>

## **TABLE OF SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES**

Station	Quantity (Each)
109+63 - 20' R	1
110+20 - 20' L	1
110+20 - 42' L	1
110+79 - 20' L	1
110+79 - 20' R	1
110+79 - 39' R	1
112+18 - 20' L	1
112+18 - 20' R	1
112+18 - 33' L	1
112+18 - 33' R	1
113+54 - 20' L	1
113+54 - 32' L	1
114+56 - 20' L	1
114+56 - 20' R	1
114+56 - 37' L	1
116+27 - 20' L	1
116+49 - 49' L	1
117+02 - 49' L	1
117+06 - 47' R	1
117+20 - 29' L	1
117+20 - 29' R	1
118+79 - 29' L	1
118+79 - 29' R	1
119+54 - 29' L	1

(continued)	
119+54 – 29' R	1
119+73 – 48' L	1
120+32 – 46' L	1
120+54 – 29' L	1
121+70 – 27' L	1
121+70 – 29' R	1
123+29 – 29' L	1
123+29 – 27' R	1
123+65 – 53' L	1
124+05 – 53' L	1
124+30 – 29' L	1
124+30 – 29' R	1
125+75 – 29' R	1
125+85 – 29' L	1
127+26 – 29' L	1
127+26 – 29' R	1
127+43 – 50' L	1
<b>Totals:</b>	<b>41</b>

#### DEWATERING AND SEDIMENT COLLECTING

Dewatering and Sediment Collection is expected to be necessary on this project due to underground construction of storm sewers and other underground utilities.

The Contractor has the option to treat sediment laden water trapped within the project limits or the Contractor may elect to transport sediment laden water off the project. Refer to the **OPTIONS FOR DEWATERING AND SEDIMENT COLLECTING** detail sheet for more information.

Water transported off the project limits will not be disposed of in an area where it can enter a waterway. The disposal site must be approved by the Engineer.

#### STREET SWEEPING

Vehicle tracking of sediment from the construction site will be minimized. Street sweeping will be used if erosion and sediment control best management practices are not adequate to prevent sediment from being tracked onto the street.

The Contractor will use a pickup broom having integral self-contained storage to clean the roadway. The pickup broom used will be a minimum of 6 feet wide and have working gutter brooms.

At a minimum, sweeping will be required:

1. Prior to opening any segment or roadway to traffic.
2. Following pavement grooving operations and prior to the application of the pavement marking tape.
3. When sawing operations are underway in the inside driving lanes, the outside driving lanes and gutter may need to be swept to control dust.
4. As directed by the Engineer.

All costs for cleaning the roadway with a pickup broom will be incidental to the contract unit price per hour for "Sweeping".

#### CONSTRUCTION ENTRANCE

The Contractor will install a Construction Entrance at locations where there is a potential for mud tracking and sediment flow from the construction site and work area onto a paved public roadway.

It is the Contractor's option to use the SDDOT Construction Entrance (See SDDOT Construction Entrance notes and details), a product from the list provided in these notes, or other products or processes as approved by the Engineer during construction.

If the Contractor elects to use one of the products listed in the table, then the Contractor will install the construction entrance product in accordance with the manufacturer's installation instructions or as directed by the Engineer.

The Contractor will maintain the construction entrance such that mud tracking and sediment flow will not enter the roadway or adjacent drainage areas. The construction entrance will be routinely inspected, and the Contractor will repair or replace material as deemed necessary by the Engineer.

The Construction Entrance provided will be from the approved product list. The approved product list may be viewed at the following internet site:

<https://apps.sd.gov/HC60ApprovedProducts/main.aspx>

All costs for furnishing, installing, maintaining, and removal of the construction entrance including equipment, labor, materials, and incidentals will be included in the contract unit price per each for "Construction Entrance".

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#### SDDOT CONSTRUCTION ENTRANCE

If the SDDOT Construction Entrance is utilized, then the Contractor will install the SDDOT Construction Entrance in accordance with these notes and the detail drawings.

Pit run material will be obtained from a granular source and will conform to the following gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
6"	100%
#4	0-60%
#200	0-20%

The pit run material will be compacted to the satisfaction of the Engineer.

The aggregate for the granular material will conform to the following gradation requirements:

<u>Sieve Size</u>	<u>Percent Passing</u>
3"	100%
2 1/2"	90-100%
1 1/2"	25-60%
3/4"	0-10%
1/2"	0-5%

The granular material will be placed in 6" maximum lifts.

It is anticipated that the granular material will need to be periodically removed and replaced as it becomes inundated with mud and sediment.

The Reinforcement Fabric (MSE) will be in conformance with Section 831 of the Specifications. The Reinforcement Fabric (MSE) will be on the Approved Products List for this material or will be certified by the supplier to meet this specification prior to installation.

The Reinforcement Fabric (MSE) should be kept as taut as possible prior to placing.

Equipment will not be allowed on the Reinforcement Fabric (MSE) until the first lift of granular material is in place.

All seams in the Reinforcement Fabric (MSE) will be overlapped at least 2' and shingled.

**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 8 Acres
- 5.3 (3b): Total Area to be Disturbed 7 Acres
- 5.3 (3c): Maximum Area Disturbed at One Time
- 5.3 (3d): Existing Vegetative Cover 85%
- 5.3 (3d): Description of Vegetative Cover Typical East River roadside vegetation and turf grass
- 5.3 (3e): Soil Properties: Silty Clay Loams
- 5.3 (3f): Name of Receiving Water Body/Bodies Six Mile Creek
- 5.3 (3g): Location of Construction Support Activity Areas

**5.3 (3h): ORDER OF CONSTRUCTION ACTIVITIES**

- Special sequencing requirements (see Section C).
- 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.	
Clearing and grubbing.	
Remove and stockpile topsoil.	
Stabilize disturbed areas.	
Install utilities, storm sewers, curb and gutter.	
Install inlet and culvert protection after completing storm drainage and other utility installations.	
Final grading.	
Final paving.	
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
<input type="checkbox"/> Natural Buffers (within 50 ft of Waters of State)	
<input checked="" type="checkbox"/> Silt Fence	
<input type="checkbox"/> Erosion Control Wattles	
<input type="checkbox"/> Temporary Berm / Windrow	
<input type="checkbox"/> Floating Silt Curtain	
<input type="checkbox"/> Stabilized Construction Entrances	
<input type="checkbox"/> Entrance/Exit Equipment Tire Wash	
<input type="checkbox"/> Other:	

**Structural Erosion and Sediment Controls**

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

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**Dust Controls**

Description	Estimated Start Date
<input type="checkbox"/> Tarps & Wind impervious fabrics	
<input type="checkbox"/> Watering	
<input type="checkbox"/> Stockpile location/orientation	
<input type="checkbox"/> Dust Control Chlorides	
<input type="checkbox"/> Other	

**Dewatering BMPs**

Description	Estimated Start Date
<input type="checkbox"/> Sediment Basins	
<input type="checkbox"/> Dewatering bags	
<input type="checkbox"/> Weir tanks	
<input type="checkbox"/> Temporary Diversion Channel	
<input type="checkbox"/> 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
<input type="checkbox"/> Vegetation Buffer Strips	
<input type="checkbox"/> Temporary Seeding (Cover Crop Seeding)	
<input checked="" type="checkbox"/> Permanent Seeding	
<input type="checkbox"/> Sodding	
<input type="checkbox"/> Planting (Woody Vegetation for Soil Stabilization)	
<input type="checkbox"/> Mulching (Grass Hay or Straw)	
<input type="checkbox"/> Fiber Mulching (Wood Fiber Mulch)	
<input type="checkbox"/> Soil Stabilizer	
<input type="checkbox"/> Bonded Fiber Matrix	
<input checked="" type="checkbox"/> Fiber Reinforced Matrix	
<input checked="" type="checkbox"/> Erosion Control Blankets	
<input type="checkbox"/> Surface Roughening (e.g. tracking)	
<input type="checkbox"/> 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.

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<b>5.3 (6): PROCEDURES FOR INSPECTIONS</b>					
▪ 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 $\frac{1}{3}$ 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 $\frac{1}{2}$ 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.					
<b>5.3 (7): POST CONSTRUCTION STORMWATER MANAGEMENT</b>					
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.					
<b>5.3 (8): POLLUTION PREVENTION PROCEDURES</b>					
<b>5.3 (8a): Spill Prevention and Response Procedures</b>					
➤ <b>Material Management</b>					
▪ <u>Housekeeping</u>					
• 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.					
▪ <u>Hazardous Materials</u>					
• 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.					
➤ <b>Spill Control Practices</b>					
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.					
➤ <b>Spill Response</b>					
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 SDDANR.					
▪ 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.					
<b>5.3 (8b): WASTE MANAGEMENT PROCEDURES</b>					
➤ <b>Waste Disposal</b>					
• 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.					
➤ <b>Hazardous Waste</b>					
• 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.					
➤ <b>Sanitary Waste</b>					
• 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.					

<p>Plot Scale -</p> <p>1:200</p> <p>Plotted From -</p> <p>TRPR13525</p>	<p><b>5.3 (9): CONSTRUCTION SITE POLLUTANTS</b></p> <p>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).</p> <ul style="list-style-type: none"> <li>➤ <input checked="" type="checkbox"/> Concrete and Portland Cement</li> <li>➤ <input type="checkbox"/> Detergents</li> <li>➤ <input checked="" type="checkbox"/> Paints</li> <li>➤ <input checked="" type="checkbox"/> Metals</li> <li>➤ <input type="checkbox"/> Bituminous Materials</li> <li>➤ <input checked="" type="checkbox"/> Petroleum Based Products</li> <li>➤ <input type="checkbox"/> Diesel Exhaust Fluid</li> <li>➤ <input type="checkbox"/> Cleaning Solvents</li> <li>➤ <input checked="" type="checkbox"/> Wood</li> <li>➤ <input type="checkbox"/> Cure</li> <li>➤ <input type="checkbox"/> Texture</li> <li>➤ <input type="checkbox"/> Chemical Fertilizers</li> <li>➤ <input type="checkbox"/> Other:</li> </ul> <p><b>Product Specific Practices</b></p> <ul style="list-style-type: none"> <li>▪ <b>Petroleum Products</b> 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.</li> <li>▪ <b>Fertilizers</b> 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.</li> <li>▪ <b>Paints</b> 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.</li> <li>▪ <b>Concrete Trucks</b> 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.</li> </ul> <p><b>5.3 (10): NON-STORMWATER DISCHARGES</b></p> <p>The following non-stormwater discharges are anticipated during the course of this project (check all that apply).</p> <ul style="list-style-type: none"> <li>➤ <input type="checkbox"/> Discharges from water line flushing.</li> <li>➤ <input type="checkbox"/> Pavement wash-water, where no spills or leaks of toxic or hazardous materials have occurred.</li> <li>➤ <input type="checkbox"/> Uncontaminated ground water associated with dewatering activities.</li> </ul> <p><b>5.3 (11): INFEASIBILITY DOCUMENTATION</b></p> <p>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.</p>	<p><b>7.0: SPILL NOTIFICATION</b></p> <p>In the event of a spill, the Contractor's site superintendent will make the appropriate notification(s), consistent with the following procedures:</p> <ul style="list-style-type: none"> <li>➤ A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to SDDANR immediately if <b>any one of the following</b> conditions exists: <ul style="list-style-type: none"> <li>• The release or spill threatens or is able to threaten waters of the state (surface water or ground water)</li> <li>• The release or spill causes an immediate danger to human health or safety</li> <li>• The release or spill exceeds 25 gallons</li> <li>• The release or spill causes a sheen on surface water</li> <li>• The release or spill of any substance that exceeds the ground water quality standards of ARSD Chapter 74:54:01</li> <li>• The release or spill of any substance that exceeds the surface water quality standards of ARSD Chapter 74:51:01</li> <li>• The release or spill of any substance that harms or threatens to harm wildlife or aquatic life</li> <li>• 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.</li> </ul> </li> <li>➤ To report a release or spill, call SDDANR 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 SDDANR 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 SDDANR within 14 days of the discharge.</li> </ul>				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center; padding: 2px;">STATE OF SOUTH DAKOTA</td> <td style="width: 40%; text-align: center; padding: 2px;">PROJECT P-CR 0028(47)367</td> <td style="width: 10%; text-align: center; padding: 2px;">SHEET D8</td> <td style="width: 10%; text-align: center; padding: 2px;">TOTAL SHEETS D21</td> </tr> </table>	STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	SHEET D8	TOTAL SHEETS D21
STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	SHEET D8	TOTAL SHEETS D21			
		<p>Plotting Date: 09/29/2025</p> <p>File - ...\\p1\\Duel0527\\NotesSectionD.dwg</p>				



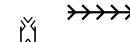
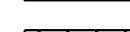
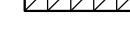
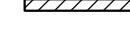
# EROSION AND SEDIMENT CONTROL LEGEND

STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	Plotting Date: 09/29/2025
		SHEET D10

1:200

Plot Scale -

Plotted From - TRPR13525

-  Silt Fence J-Hooks
-  Low Flow Silt Fence
-  High Flow Silt Fence
-  High Flow Silt Fence at Pipe
-  Sediment Control at Inlet After Placement of Surfacing
-  Sediment Control at Inlet Before Placement of Surfacing
-  Temporary Sediment Barrier
-  Temporary Water Barrier
-  Floating Silt Curtain
-  Sediment Filter Bags
-  Triangular Silt Barriers
-  Erosion Control Wattles on Slopes
-  Erosion Control Wattles at Inlets
-  Erosion Control Wattles in Ditches
-  Erosion Bales
-  Surfacing Roughening
-  Temporary Grass Hay or Straw Mulch/ Soil Stabilizer
-  Cut Interceptor Ditch
-  Temporary Slope Drain
-  Bonded Fiber Matrix/ Fiber Reinforced Matrix
-  Rock Check Dam
-  Type 1 Erosion Control Blanket
-  Type 2 Erosion Control Blanket
-  Type 3 Erosion Control Blanket
-  Type 4 Erosion Control Blanket
-  Type 1 Turf Reinforcement Mat
-  Type 2 Turf Reinforcement Mat
-  Type 3 Turf Reinforcement Mat
-  Transition Mat
-  Articulated Concrete Matress
-  Silt Trap (See Standard Plate 734.04)

## BEST MANAGEMENT PRACTICES

Best Management Practices (BMPs) are split into three 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.

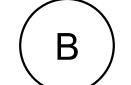
### INTERMEDIATE PHASE

BMPs from the Legend shown as Blue Symbols on the Erosion and Sediment Control Plan Sheets are to be installed in the Intermediate Phase for temporary stabilization and remain in place 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.

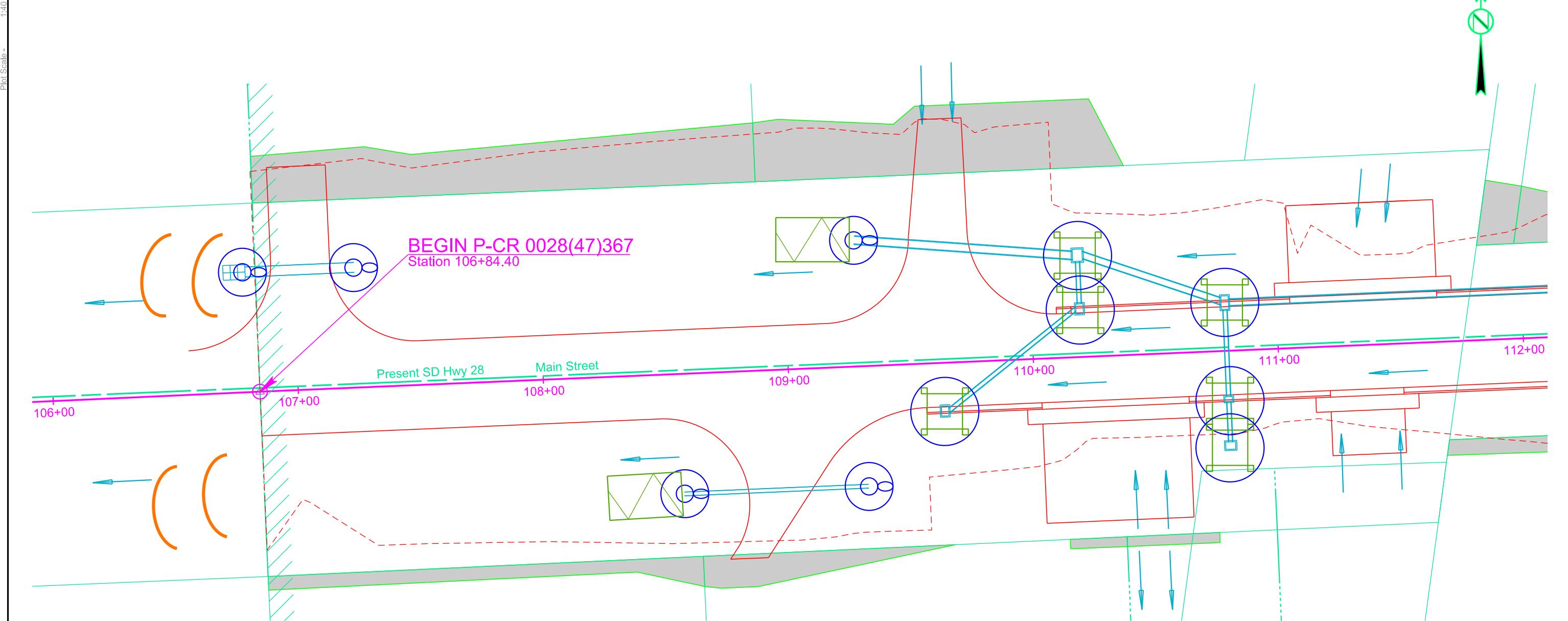
If these items are applicable they are to be shown in the updated SWPPP using the Symbols given.

 TS	Topsoil Stockpile	 M	On-Site Construction Material Storage Area
 B	Borrow Area	 SK	Spill Kit
 CE	Stabilized Construction Entrance	 WP	Work Platform
 VB	Vegetated Buffer Strip	 CC	Cover Crop Seeding
 CW	Concrete Washout	 PT	Portable Toilet
 AP	Asphalt Plant Site		
 CP	Concrete Plant Site		
 V	Vehicle and Equipment Parking Area, Fueling Area, or Maintenance Area		
 D	Dumpster or other Trash and Debris Containers		

Install Low Flow Silt Fence at the following locations:  
106+50 L/R Perimeter control 200 Ft

STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	HEET D11	TOTAL SHEETS D21
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Plotting Date: 09/29/2025 REV. 9-16-25 BS



Plotted From - TPRR13525

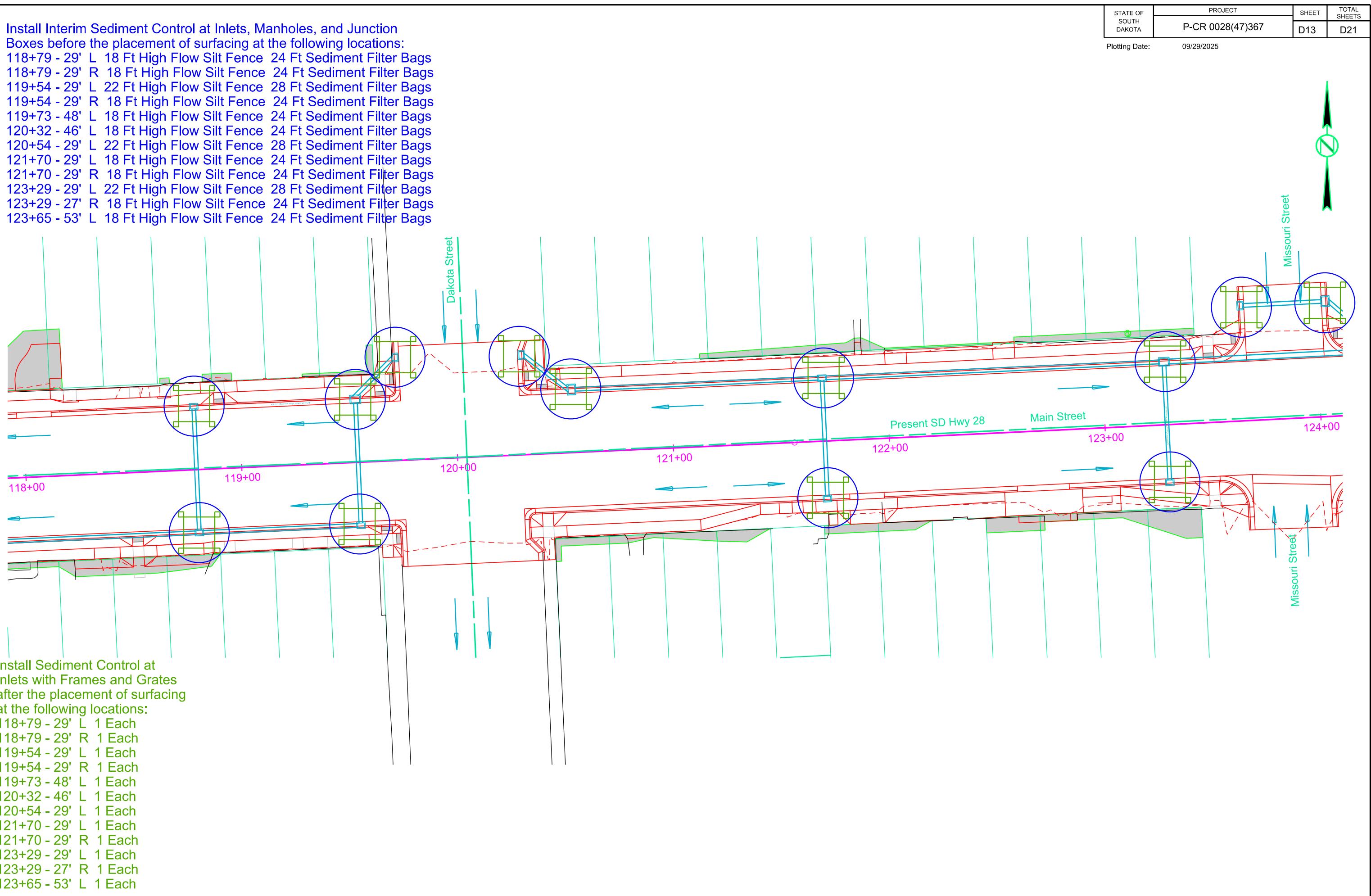
Install Interim Sediment Control at Inlets, Manholes, and Junction Boxes before the placement of surfacing at the following locations:  
109+63 - 20' R 24 Ft High Flow Silt Fence 32 Ft Sediment Filter Bags  
110+20 - 20' L 30 Ft High Flow Silt Fence 40 Ft Sediment Filter Bags  
110+20 - 42' L 30 Ft High Flow Silt Fence 40 Ft Sediment Filter Bags  
110+79 - 20' L 26 Ft High Flow Silt Fence 32 Ft Sediment Filter Bags  
110+79 - 20' R 18 Ft High Flow Silt Fence 24 Ft Sediment Filter Bags  
110+79 - 39' R 26 Ft High Flow Silt Fence 32 Ft Sediment Filter Bags

Install 12" Diameter Erosion Control Wattles\* at the following locations:  
107+03 L Inlet and outlet ends of pipe 40 Ft  
109+01 R Inlet and outlet ends of pipe 40 Ft  
109+29 L Outlet end of pipe 20 Ft  
\*Remove and Reset Wattles as needed.

Install Sediment Control at Inlets with Frames and Grates after the placement of surfacing at the following locations:  
109+63 - 20' R 1 Each  
110+20 - 20' L 1 Each  
110+20 - 42' L 1 Each  
110+79 - 20' L 1 Each  
110+79 - 20' R 1 Each  
110+79 - 39' R 1 Each

Install Type 3 Erosion Control Blanket at the following locations:  
109+01 R Outlet end of pipe 53 SqYd  
109+29 L Outlet end of pipe 53 SqYd





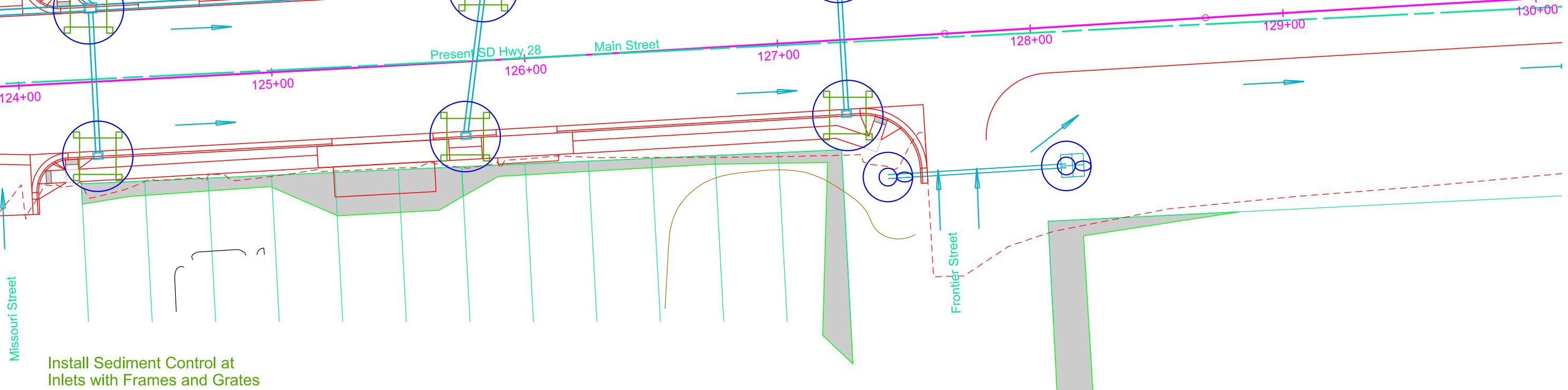
Plot Scale -

Missouri Street

Missouri Street

Install 12" Diameter Erosion Control Wattles\* at the following locations:  
127+67 R Inlet and outlet ends of pipe 40 Ft  
\*Remove and Reset Wattles as needed.

Install Interim Sediment Control at Inlets, Manholes, and Junction Boxes before the placement of surfacing at the following locations:  
124+05 - 53' L 22 Ft High Flow Silt Fence 28 Ft Sediment Filter Bags  
124+30 - 29' L 22 Ft High Flow Silt Fence 28 Ft Sediment Filter Bags  
124+30 - 29' R 18 Ft High Flow Silt Fence 24 Ft Sediment Filter Bags  
125+75 - 29' R 18 Ft High Flow Silt Fence 24 Ft Sediment Filter Bags  
125+85 - 29' L 22 Ft High Flow Silt Fence 28 Ft Sediment Filter Bags  
127+26 - 29' L 30 Ft High Flow Silt Fence 40 Ft Sediment Filter Bags  
127+26 - 29' R 18 Ft High Flow Silt Fence 24 Ft Sediment Filter Bags  
127+43 - 50' L 30 Ft High Flow Silt Fence 40 Ft Sediment Filter Bags



Install Sediment Control at Inlets with Frames and Grates after the placement of surfacing at the following locations:

124+05 - 53' L 1 Each  
124+30 - 29' L 1 Each  
124+30 - 29' R 1 Each  
125+75 - 29' R 1 Each  
125+85 - 29' L 1 Each  
127+26 - 29' L 1 Each  
127+26 - 29' R 1 Each  
127+43 - 50' L 1 Each

Install Type 3 Erosion Control Blanket at the following locations:  
128+05 - 50' L Outlet end of pipe 53 SqYd

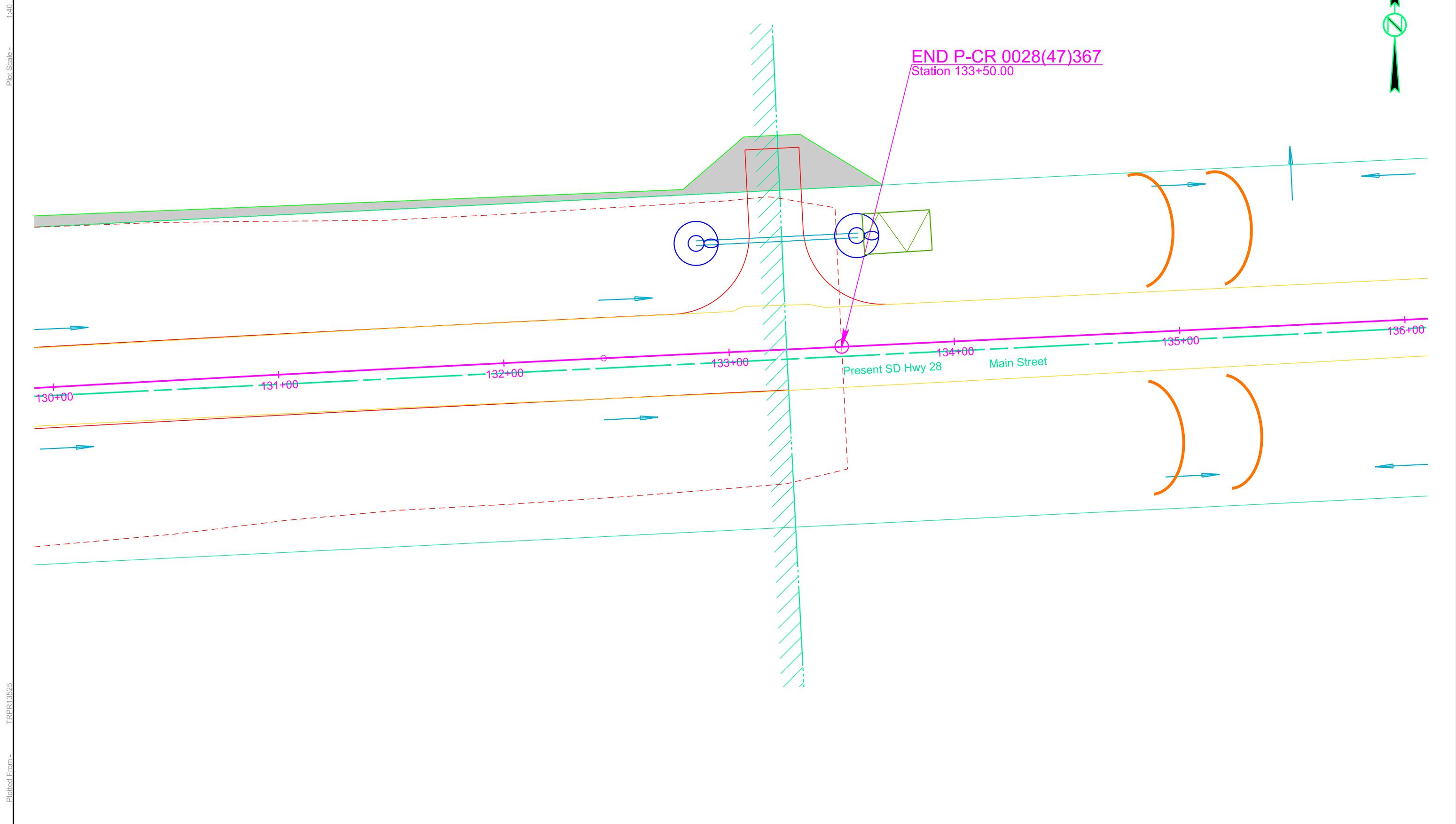
Install Low Flow Silt Fence at the following locations:  
135+00 L/R Perimeter control 200 Ft

Install 12" Diameter Erosion Control Wattles\*  
at the following locations:  
133+23 L Inlet and outlet ends of pipe 40 Ft  
\*Remove and Reset Wattles as needed.

Install Type 3 Erosion Control Blanket  
at the following locations:  
133+23 L Outlet end of pipe 53 SqYd

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-CR 0028(47)367	D15	D21

Plotting Date: 09/29/2025



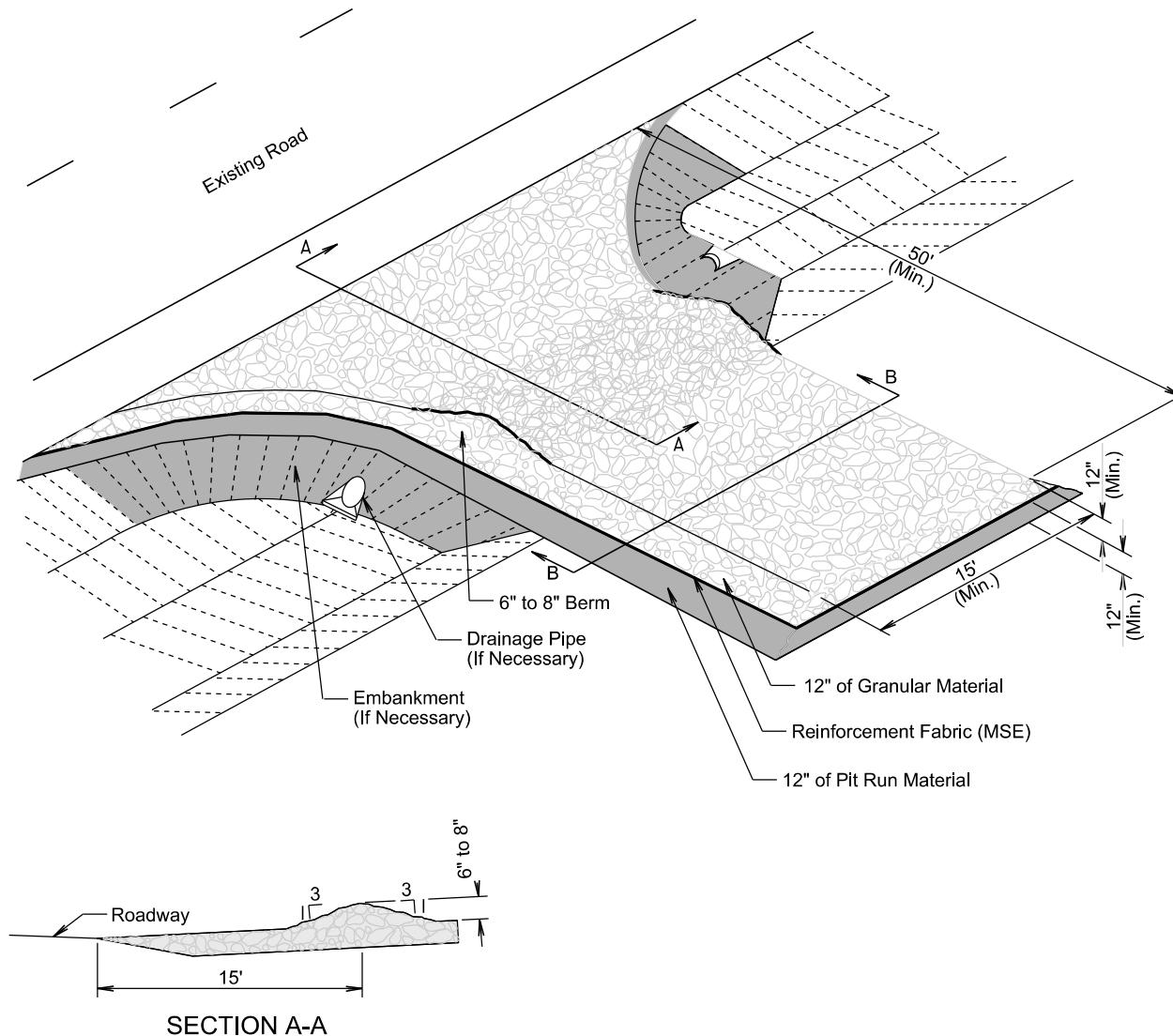


# SDDOT CONSTRUCTION ENTRANCE

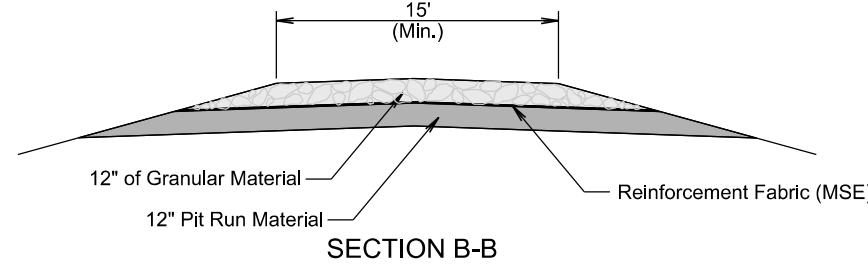
STATE OF SOUTH DAKOTA	PROJECT P-CR 0028(47)367	HEET D17	TOTAL SHEETS D21
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Plotting Date: 09/29/2025

Plot Scale: 1:200



SECTION A-A



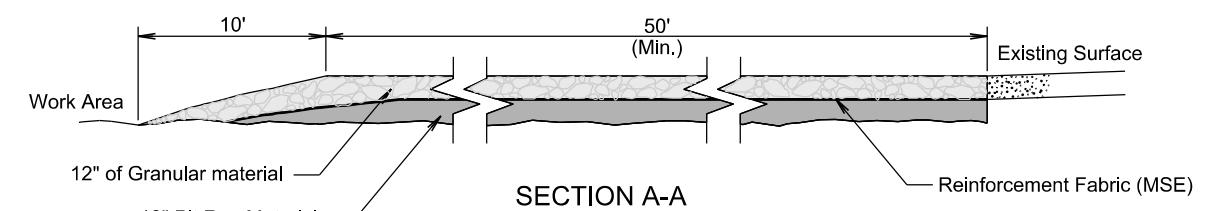
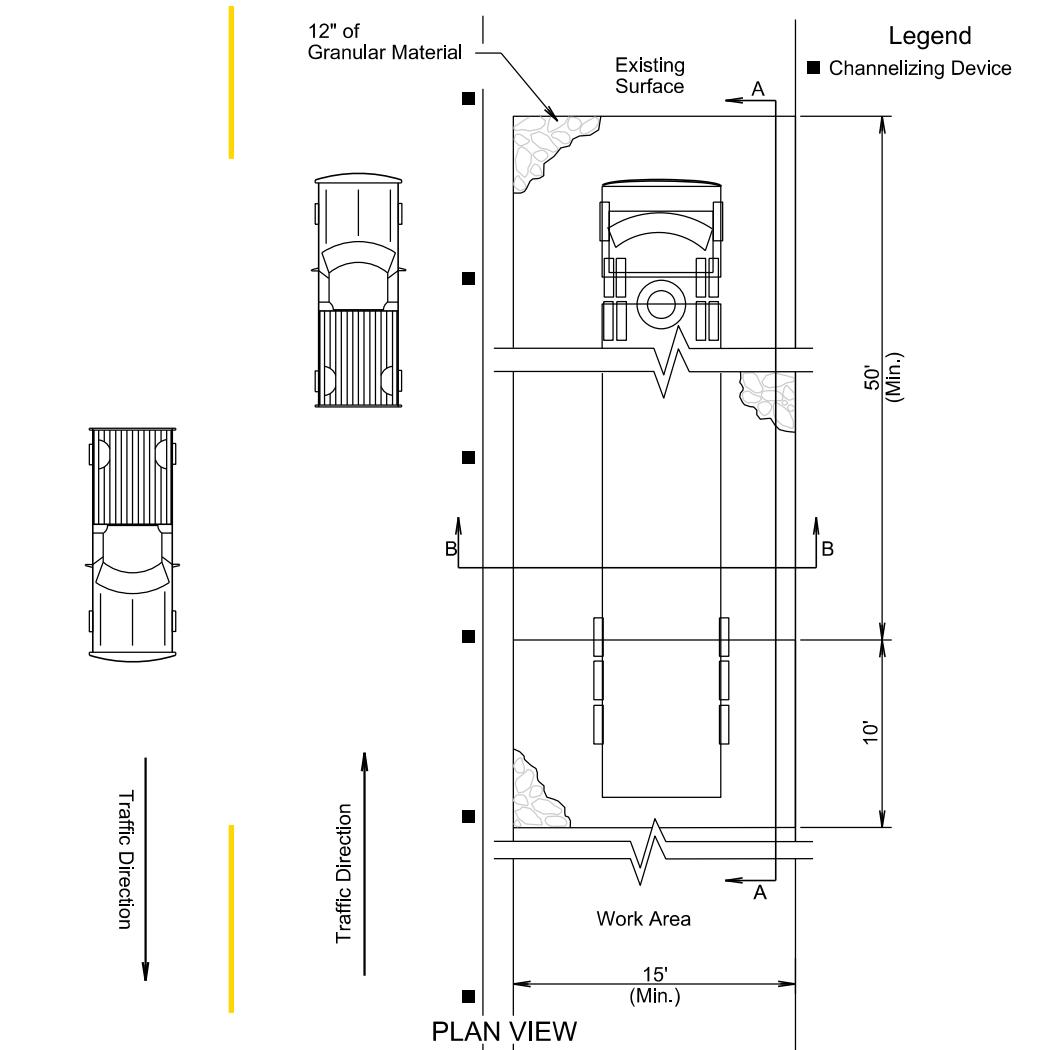
SECTION B-B

## GENERAL NOTES:

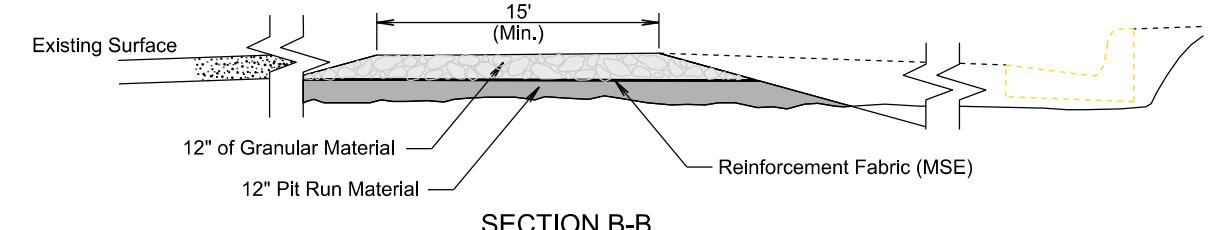
If the grade of the entrance slopes down to the roadway, a berm of extra rock will be used to prevent sediment or mud from being deposited on the roadway. See SECTION A-A.

If a drainage pipe is necessary the size and type will be determined by the Contractor to meet field conditions. All cost will be incidental to the various contract items.

If embankment is necessary it will be pit run material.



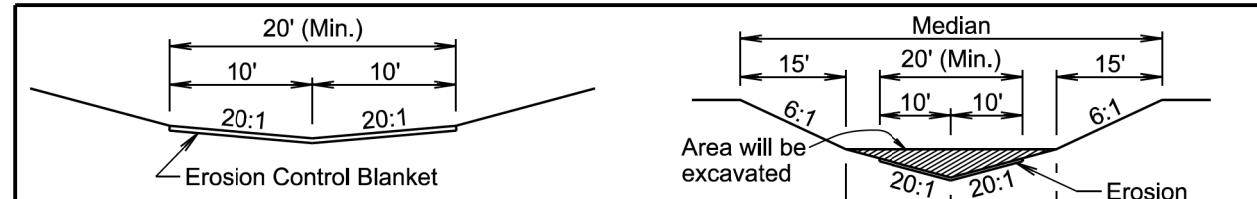
SECTION A-A



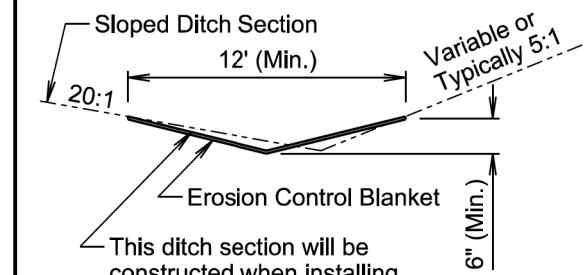
SECTION B-B

TRANSVERSE TO ROADWAY

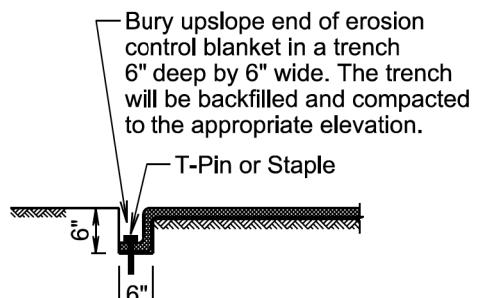
PARALLEL TO ROADWAY



### STANDARD DITCH SECTION



### SLOPED DITCH SECTION



### TRENCH DETAIL

### GENERAL NOTES:

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

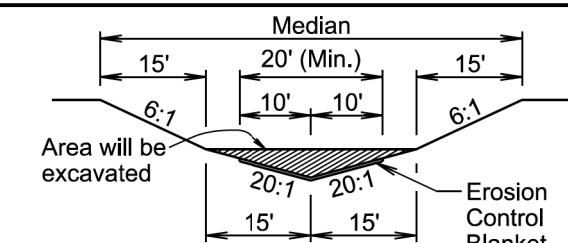
Erosion control blanket will be unrolled in the direction of the flow of water when placed in ditches and on slopes. The up-slope end of the erosion control blanket will be buried in a trench 6" wide by 6" deep. There will be at least a 6" overlap wherever one roll of erosion control blanket ends and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

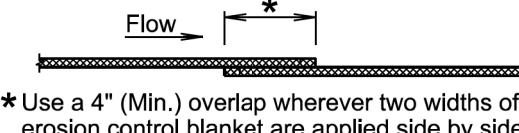
All ditch sections will be shaped when installing the erosion control blanket. All costs for shaping the ditches will be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

February 14, 2020



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

### MEDIAN SECTION

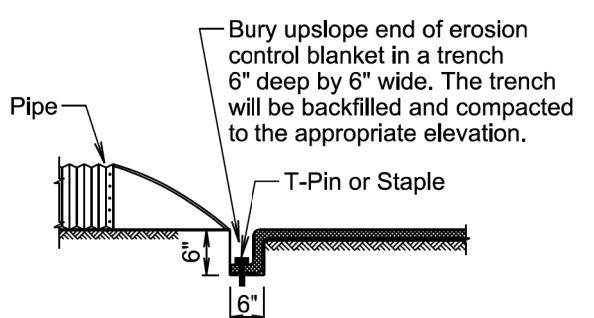


\* Use a 4" (Min.) overlap wherever two widths of erosion control blanket are applied side by side.



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

### OVERLAP DETAIL



### PIPE END DETAIL

Published Date: 2026

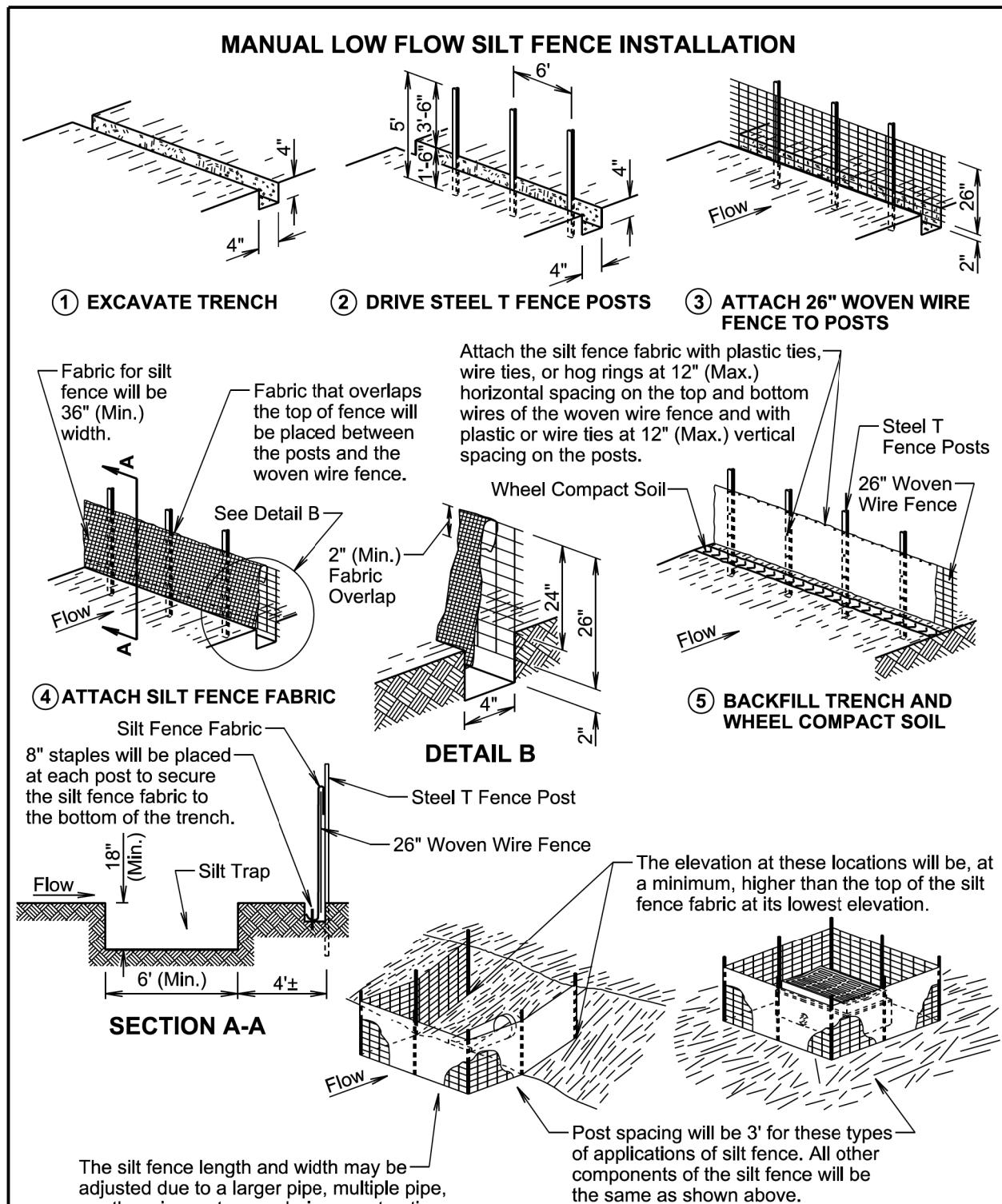
**S  
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**EROSION CONTROL BLANKET**

**PLATE NUMBER  
734.01**

*Sheet 1 of 1*

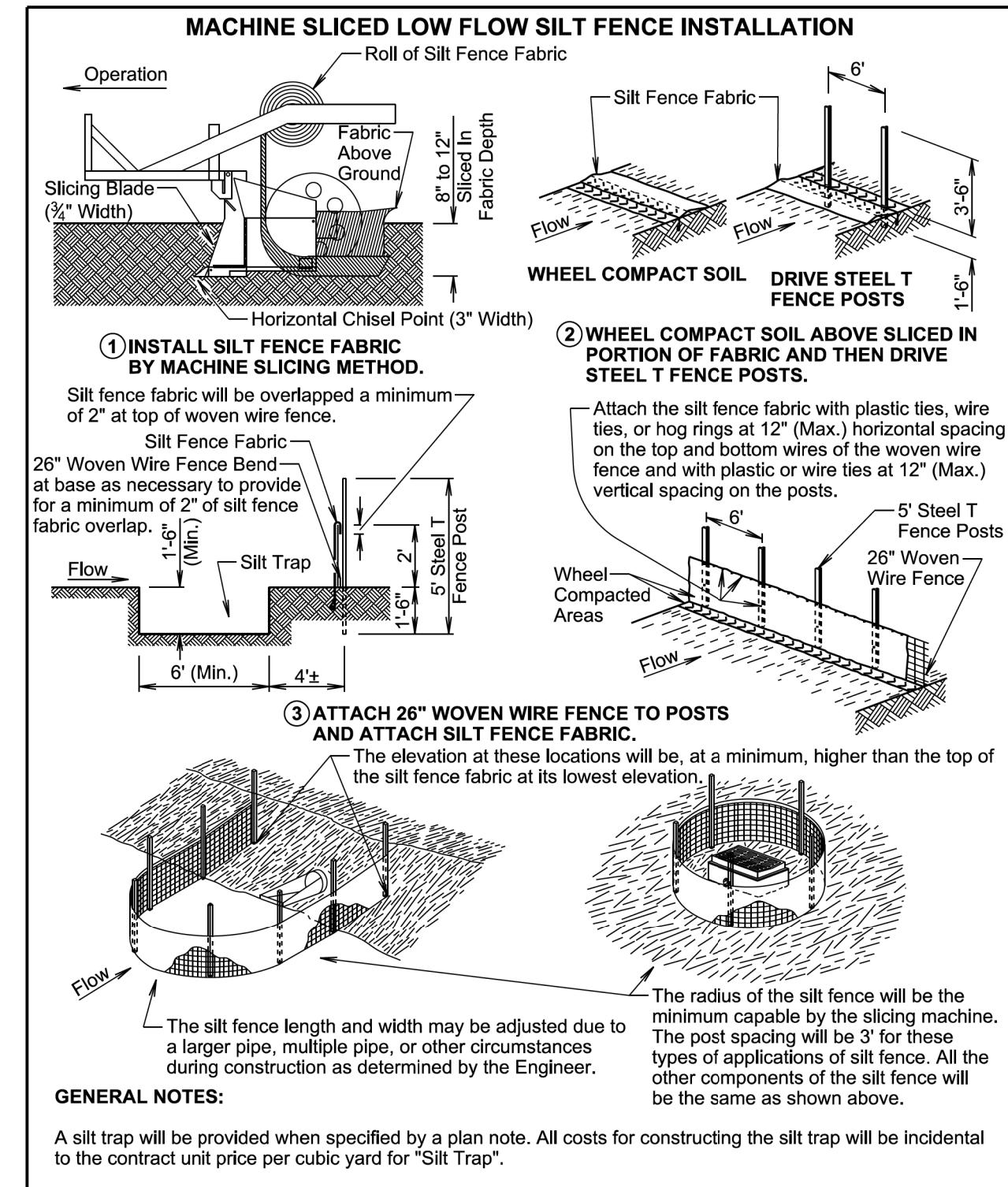
Plot Scale - 1:200



Published Date: 2026

LOW FLOW SILT FENCE  
AND SILT TRAPPLATE NUMBER  
734.04

Sheet 1 of 2



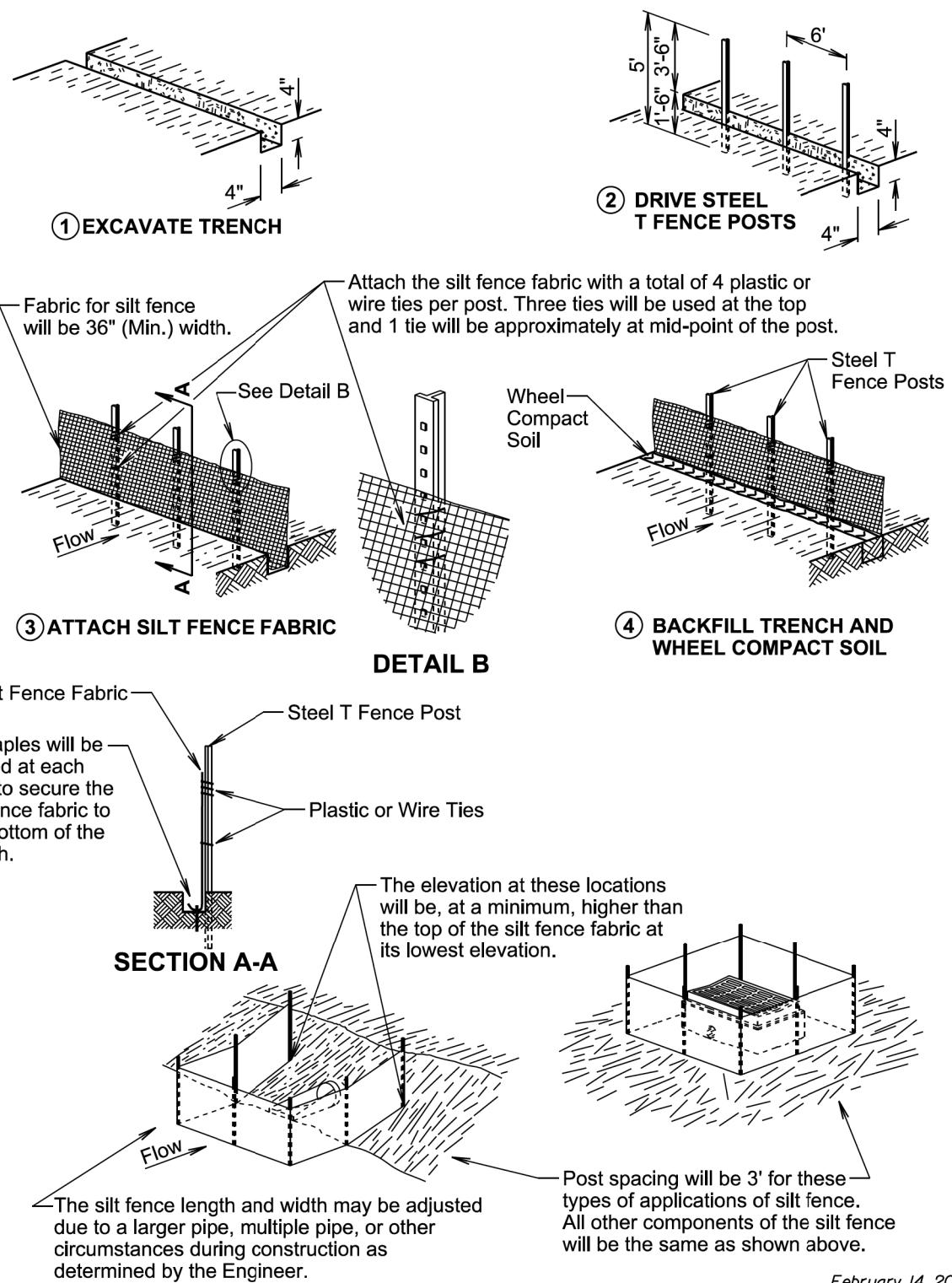
Published Date: 2026

LOW FLOW SILT FENCE  
AND SILT TRAPPLATE NUMBER  
734.04

Sheet 2 of 2

Plot Scale - 1:200

### MANUAL HIGH FLOW SILT FENCE INSTALLATION



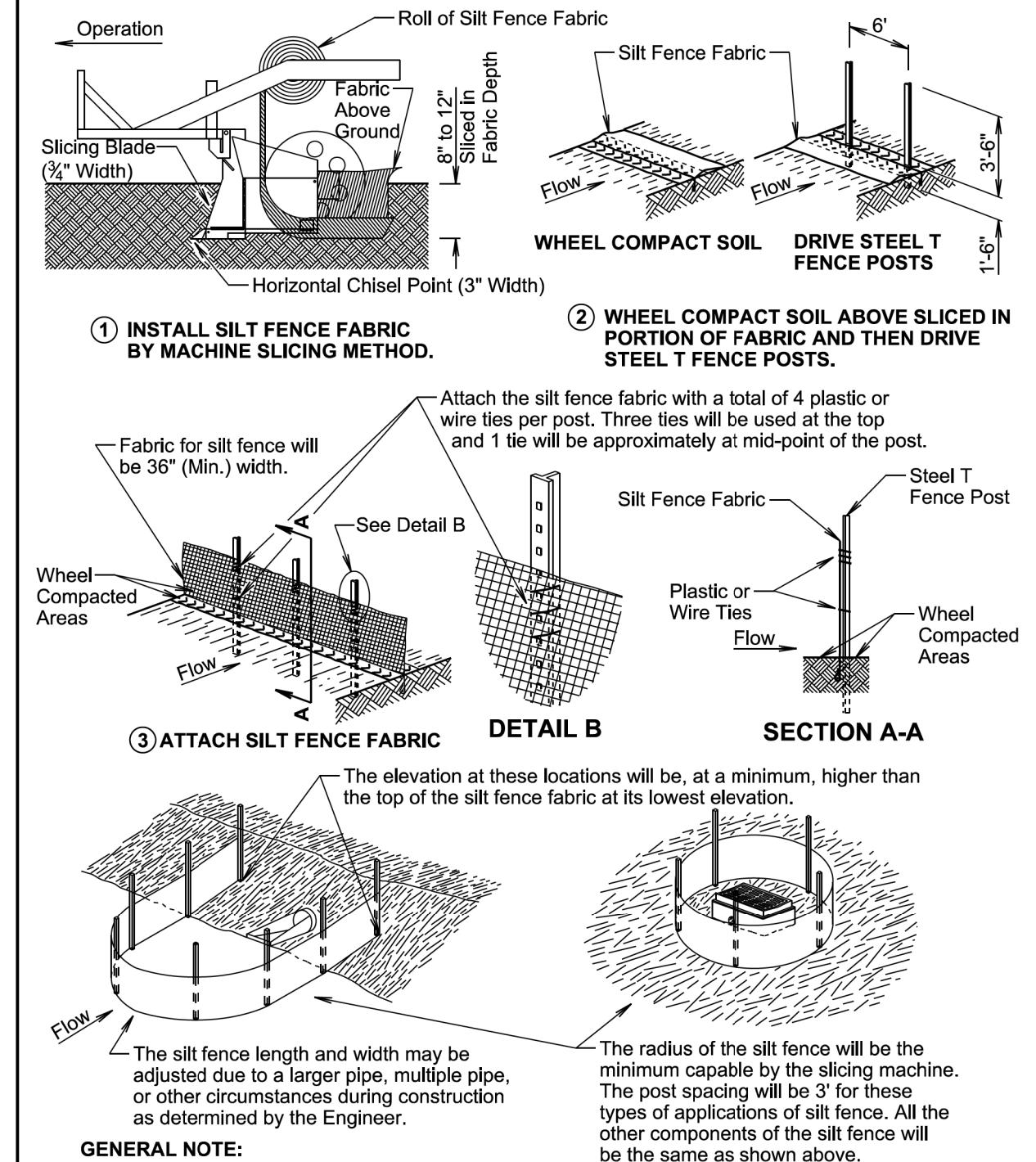
February 14, 2020

Published Date: 2026

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T****HIGH FLOW SILT FENCE****PLATE NUMBER  
734.05**

Sheet 1 of 2

### MACHINE SLICED HIGH FLOW SILT FENCE INSTALLATION



**GENERAL NOTE:**

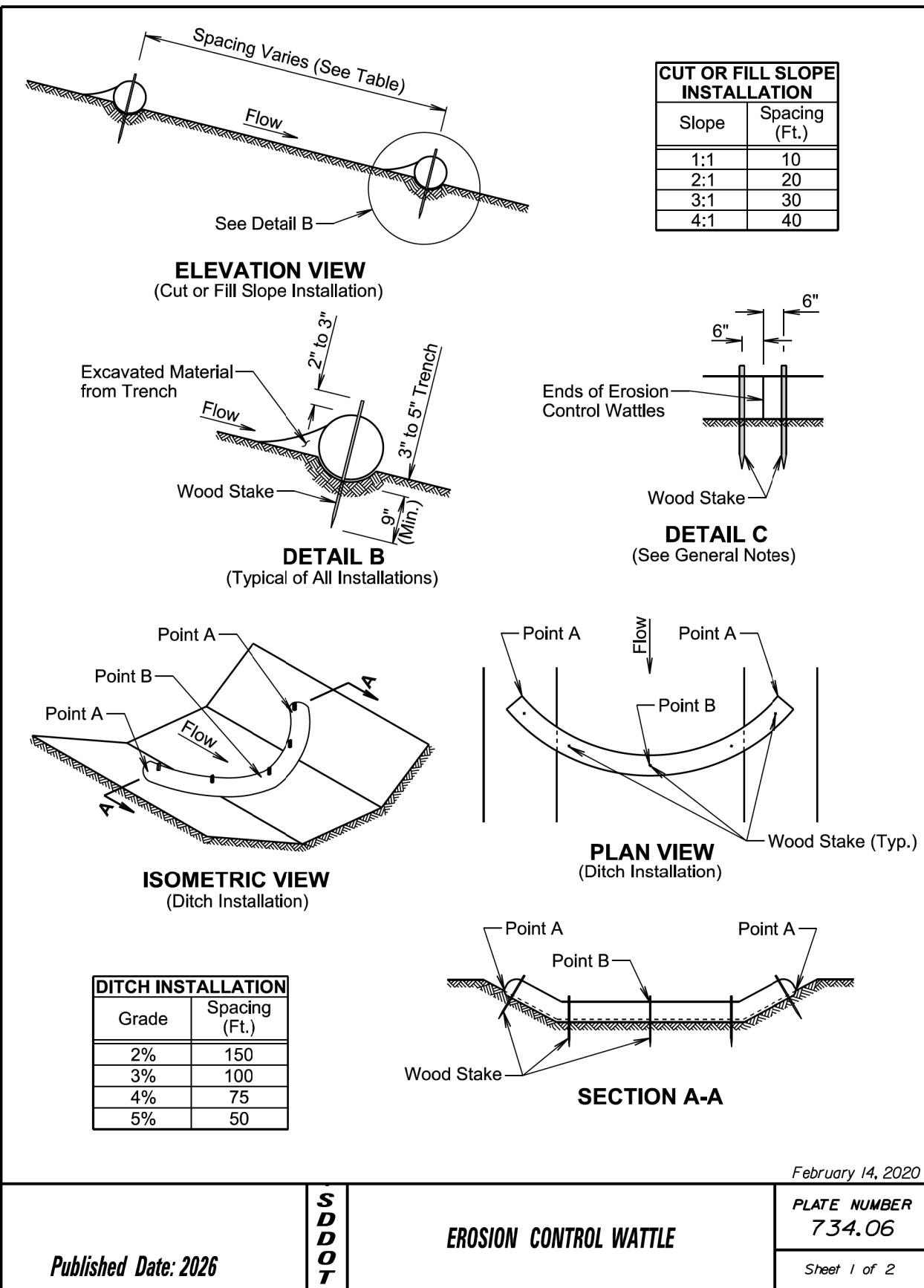
If a trench can not be dug or the silt fence fabric can not be sliced in due to the type of earthen material (such as rock), then a row of 30 to 40 pound sandbags butted end to end will be provided on top of the extra length of silt fence fabric to prevent underflow.

February 14, 2020

Published Date: 2026

**S  
D  
D  
O  
T****HIGH FLOW SILT FENCE****PLATE NUMBER  
734.05**

Sheet 2 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".