

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 1902(61)0	D1	D47

Plotting Date: 04-29-2015

Section D: Erosion and Sediment Control Plans

INDEX OF SHEETS

- D1 General Layout w/ Index
- D2-D11 Estimate with General Notes and Tables
- D12-D14 Stormwater Pollution Prevention Plan Checklist
- D15 Erosion and Sediment Control Legend
- D16-D43 Erosion and Sediment Control Plan Sheets
- D44 Special Details
- D45-D47 Standard Plate

END IM 1902(61)0

INTERSTATE 190
Station 155+33.00
14.87 Feet East & 4265.99 Feet North
of the East Quarter of Section 35 -
Township 2 North, Range 7 East

INTERSTATE 190
Station 154+00.00 - End Resurfacing

Sec. 26-T2N-R7E
Sec. 35-T2N-R7E

INTERSTATE 190
Station 149+60.00 - End Grading, Begin Resurfacing

END IM 1902(61)0

WEST BLVD.
Station 26+75.28 - End Grading

BEGIN IM 1902(61)0

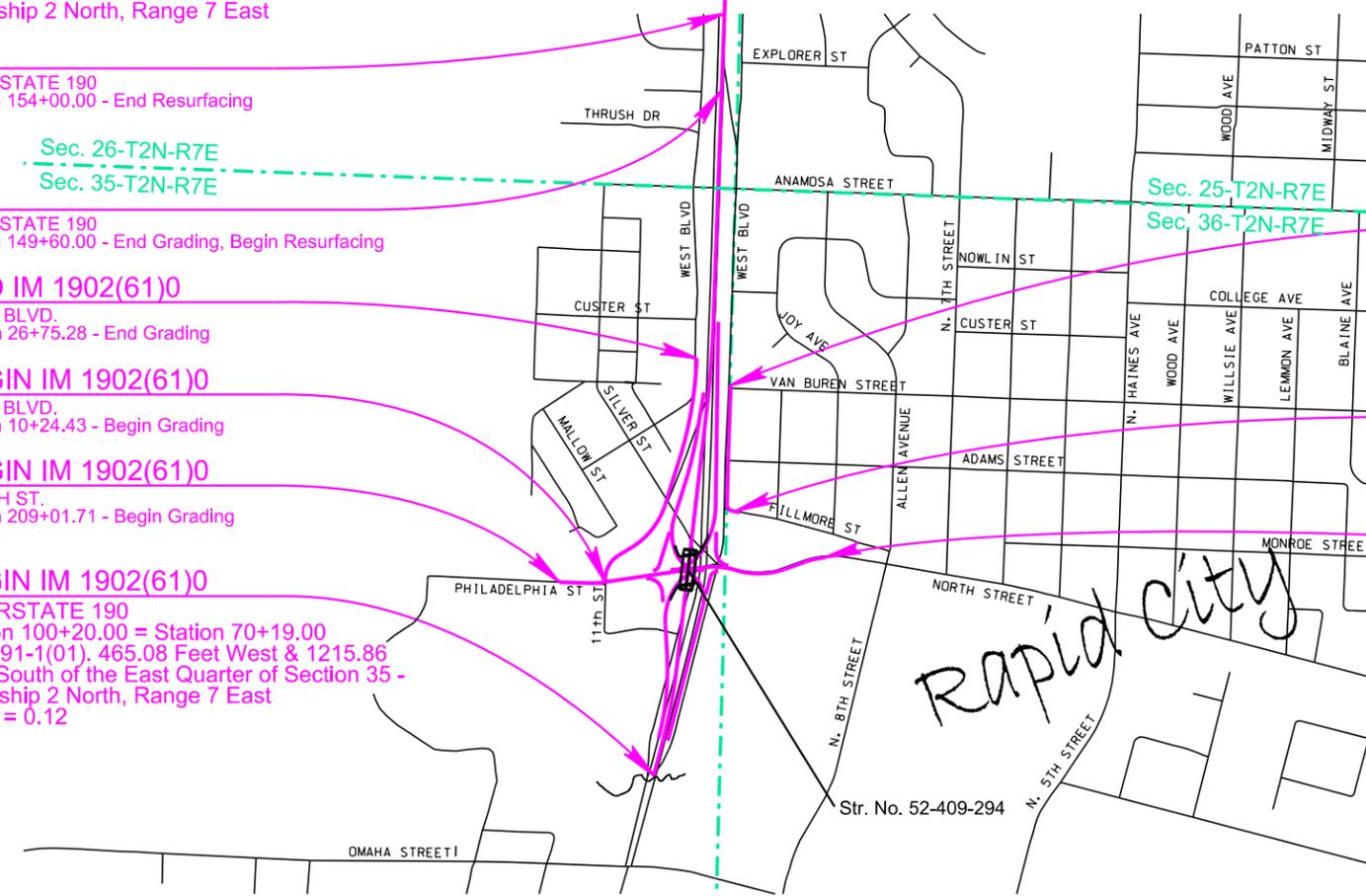
WEST BLVD.
Station 10+24.43 - Begin Grading

BEGIN IM 1902(61)0

NORTH ST.
Station 209+01.71 - Begin Grading

BEGIN IM 1902(61)0

INTERSTATE 190
Station 100+20.00 = Station 70+19.00
on I 091-1(01), 465.08 Feet West & 1215.86
Feet South of the East Quarter of Section 35 -
Township 2 North, Range 7 East
MRM = 0.12



END IM 1902(61)0

WEST BLVD. NORTH
Station 59+08.72 - End Grading

BEGIN IM 1902(61)0

WEST BLVD. NORTH
50+24.42 - Begin Grading

END IM 1902(61)0

NORTH ST.
Station 224+72.00 - End Grading



Plot Scale - 1:200

sslowey

Plotted From -

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SECTION D ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
110E1690	Remove Sediment	38.0	CuYd
110E1695	Remove Sediment Filter Bag	6,181	Ft
110E1700	Remove Silt Fence	1,093	Ft
120E6300	Water for Vegetation	1,620.0	MGal
205E0010	Dust Control Chloride	1,500	Lb
230E0010	Placing Topsoil	3,623	CuYd
230E0020	Placing Contractor Furnished Topsoil	6,031	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0100	Cover Crop Seeding	7.0	Bu
730E0206	Type D Permanent Seed Mixture	23	Lb
730E0210	Type F Permanent Seed Mixture	484	Lb
730E0251	Special Permanent Seed Mixture 1	40	Lb
731E0200	Fertilizing	16.40	Ton
732E0200	Fiber Mulching	29.8	Ton
734E0044	Soil Stabilizer	3.6	Acre
734E0103	Type 3 Erosion Control Blanket	8,930	SqYd
734E0132	Type 2 Turf Reinforcement Mat	778.0	SqYd
734E0170	Temporary Sediment Barrier	9,650	Ft
734E0180	Sediment Filter Bag	6,181	Ft
734E0325	Surface Roughening	19.8	Acre
734E0604	High Flow Silt Fence	4,372	Ft
734E0610	Mucking Silt Fence	303	CuYd
734E0620	Repair Silt Fence	1,093	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	192	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	235	Ft
734E3100	Portable Sediment Containment System	1	Each
734E5010	Sweeping	200	Hour
735E1360	6' Coniferous Evergreen, Furnish and Plant	6	Each
735E1510	1 Gallon Coniferous Shrub, Furnish and Plant	52	Each
900E1320	Construction Entrance	6	Each
900E5152	Weed Barrier Fabric	796	SqYd
900E5153	Mulch Ring	6	Each
900E5157	4" Depth Shredded Bark Mulch	796.0	SqYd

PLACING TOPSOIL

The thickness will be approximately 4 inches within the right-of-way and 6 inches on temporary easements on unreinforced slopes.

The estimated amount of topsoil to be placed is as follows:

Station	to Station	Topsoil (CuYd)
Interstate 190		
115+00	130+00	1915
130+00	145+00	1203
145+00	156+00	208
North St		
217+00	222+00	143
222+00	225+00	84
West Blvd N		
50+00	55+00	35
55+00	59+00	35
Total:		3,623

PLACING CONTRACTOR FURNISHED TOPSOIL

It is anticipated that a larger volume of topsoil will be needed for the new grade than can be salvaged from the existing grade. The Contractor will be required to furnish and place 4 inches of topsoil on roadway inslopes and areas as determined by the Engineer during construction.

Topsoil will be required to fill the outermost 1.5' of the reinforced fill slope. Topsoil shall be placed both inside and outside the welded wire forms (See Section E for details and quantity required).

All costs to furnish and place the topsoil shall be incidental to the contract unit price per cubic yard for "Placing Contractor Furnished Topsoil".

Station	to Station	Topsoil (CuYd)
Interstate 190		
100+00	115+00	3,444
North St		
207+00	212+00	188
212+00	217+00	286
West Blvd W		
10+00	16+00	1469
16+00	22+00	404
22+00	27+00	240
Total:		6,031

REMOVE AND REPLACE TOPSOIL

Prior to beginning grading operations on I-190 from station 114+90 to 154+00, a 4" depth of topsoil shall be bladed down the respective inslopes and left in a windrow 11'+/- from the subgrade shoulder on the median side and 16'+/- from the subgrade shoulder on the outside shoulder. Following completion of resurfacing operations, topsoil shall be bladed back up the inslope to the point indicated on the typical section.

The estimated amount of topsoil to be removed and replaced is 3,792 CuYd.

All costs associated with removing and replacing the topsoil along areas to be graded shall be incidental to the lump sum price for "Remove and Replace Topsoil".

MYCORRHIZAL INOCULUM

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

<i>Glomus intraradices</i>	25%
<i>Glomus aggregatu</i>	25%
<i>Glomus mosseae</i>	25%
<i>Glomus etunicatum</i>	25%

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

The mycorrhizal inoculum shall be as shown below or an approved equal:

Product
MycoApply

Manufacturer
Mycorrhizal Applications, Inc.
Grants Pass, OR
Phone: 1-866-476-7800
<http://www.mycorrhizae.com/>



FERTILIZING

The Contractor shall apply an all-natural slow release fertilizer prior to seeding. The all-natural fertilizer shall have a minimum guaranteed analysis of 4-6-4 and be USDA Certified BioBased. It should provide a minimum of 4% (N) nitrogen with a minimum water insoluble nitrogen (WIN) fraction of 3.2%, a minimum of 6% (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 shall 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 shall 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 shall 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.

The all-natural slow release fertilizer shall be applied according to the manufacturer's application recommendations.

The application rate is 1,500 pounds per acre.

The all-natural slow release fertilizer shall be as shown below or an approved equal:

Product	Manufacturer
Sustane	Sustane Corporate Headquarters Cannon Falls, Minnesota Phone: 1-800-352-9245 http://www.sustane.com/

DRILLS

In addition to the drills specified in Section 730 of the Specifications, other types of drills including no-till drills will be allowed as long as they have baffles, partitions, agitators, or augers which keep the seed distributed throughout the seed box and the seed is planted at a depth of 1/4" to 1/2".

SEED ORIGATION LIMITATIONS

Grass seed furnished shall be the grass species listed in these plans. The Contractor may use one of the grass varieties listed in these plans for the specified grass species or the Contractor may use a different grass variety of the same grass species specified. If the Contractor uses a grass variety listed in these plans for the specified grass species, the grass seed origin limitations will not apply. If the Contractor uses a grass variety not listed in these plans for the specified grass species, the grass seed furnished must originate in South Dakota, North Dakota, Montana, Wyoming, Nebraska, Iowa, Minnesota, Kansas, Colorado, or Wisconsin. Grass seed grown outside this area may be approved after the Contractor has furnished written certification from three seed suppliers confirming seed grown within this area is not readily available.

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.

All permanent seed shall be planted in the topsoil at a depth of 1/4" to 1/2".

All seed broadcast must be raked or dragged in (incorporated) within the top 1/4" to 1/2" of topsoil when possible. This requirement may be waived by the Engineer during construction when raking or dragging is deemed not feasible by conventional methods.

The varieties listed for seed mixtures are preferred varieties. Type D Permanent Seed Mixture shall be used on all boulevard areas within Temporary Easements. Special Permanent Seed Mixture 1 shall be used in the Sediment Pond to establish vegetation on the side slopes and bottom.

Type F Permanent Seed Mixture shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/Acre)
Western Wheatgrass	Arriba, Flintlock, Rodan, Rosana	7
Green Needlegrass	Lodorm	4
Sideoats Grama	Butte, Killdeer, Pierre, Trailway	3
Blue Grama	Bad River, Willis	2
Oats or Spring Wheat: April through May; Winter Wheat: August through November		10
Total:		26

Type D Permanent Seed Mixture shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Kentucky Bluegrass	Avalanche, Appalachian, Wildhorse, Blue Bonnet	1.4
Perennial Ryegrass	Turf Type Varieties	1.4
Creeping Red Fescue	Epic, Boreal	1.4
Chewings Fescue	Ambrose, K2, VNS, Zodiac	1.4
Alkali Grass	Fults, Fults II, Quill, Salty	1.4
Total:		7

Special Permanent Seed Mixture 1 shall consist of the following:

Scientific Name	Common Name	Pure Live Seed (PLS) (Pounds/ Acre)
Agropyron cristatum	Crested Wheatgrass-Fairway	2.02
Agropyron trachycaulum	Slender Wheatgrass	5.68
Bouteloua curtipendula	Sideoats Grama-Butte	7.08
Bouteloua gracilis	Blue Grama-Bad River	0.08
Buchloe dactyloides	Buffalograss-Bowie/Cody	5.61
Lolium multiflorum	Annual Ryegrass	2.89
Poa palustris	Fowl Bluegrass	0.50
Schizachyrium scoparium	Little Bluestem-Itasca	3.91
Sporobolus heterolepis	Prairie Dropseed	0.52
Triticum aestivum X Secale cereale	Quickguard Sterile Triticale	15.00
Total:		43.29

WATER FOR VEGETATION

Water for vegetation consists of applying water to seeded areas to enhance germination and/or root growth. When watering, use the following guidelines:

Immediately after seeding:

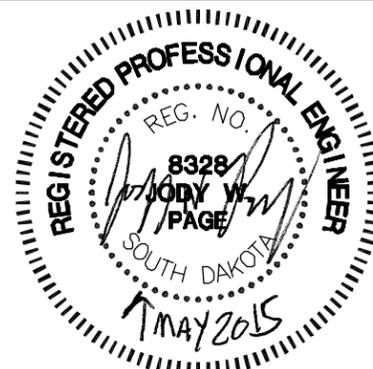
- Keep the topsoil moist but not excessively wet until the seed has germinated.
- Water a minimum of 3 days a week for 2 weeks preferably watering 2 or 3 times a day in small quantities.
- Use fine spray and low pressure to avoid topsoil wash and to prevent uncovering buried seeds.

After emergence:

- Topsoil shall be kept thoroughly moistened by sprinkling, as necessary, for 6 weeks. After the 6 week period, an inspection shall be made to determine if grass is established enough to suspend watering. Continue watering until grass has been thoroughly established.
- Never apply water at a rate faster than the topsoil can absorb.
- Water during early morning hours or early evening hours.
- Do not water when rain is forecasted for the area.
- If rainfall occurs, suspend watering according to rainfall amount.

An estimated 18 Gallons of water per square yard of seeding area was used to compute the quantity for the bid item "Water for Vegetation".

All costs for furnishing and applying the water including hauling, materials, equipment, labor, and incidentals necessary shall be paid for at the contract unit price per Mgal for "Water for Vegetation".



COVER CROP SEEDING

Oats or spring wheat seed shall be used April through July and winter wheat seed shall be used August through November.

Cover crop seeding shall be used on this project as a temporary erosion control measure for the stockpiles. The actual limits and use of cover crop seeding shall be determined by the Engineer during construction.

SURFACE ROUGHENING

Surface roughening shall be done after topsoil placement and before permanent seeding, fertilizing, and mulching applications. Refer to Standard Plate 734.25 for details.

TABLE OF SURFACE ROUGHENING

Station to Station	Area (Acre)
Interstate 190	
100+00 to 115+00	6.3
115+00 to 130+00	3.6
130+00 to 145+00	2.2
145+00 to 156+00	0.4
North St	
207+00 to 212+00	0.4
212+00 to 217+00	0.5
217+00 to 222+00	0.3
222+00 to 225+00	0.2
West Blvd W	
10+00 to 16+00	2.7
16+00 to 22+00	0.7
22+00 to 27+00	0.5
West Blvd N	
50+00 to 55+00	0.1
55+00 to 59+00	0.1
Reinforced Slopes	
10+80 to 13+40	1.8
	<u>19.8</u>

FIBER MULCHING

Fiber mulch shall be applied in a separate operation following permanent seeding and shall be hydraulically applied to the areas listed in the table and any other areas deemed necessary by the Engineer.

An additional 2% by weight of tackifier shall be added to the fiber mulch product selected from the approved product list. If the product selected has guar gum tackifier included, then the additional 2% of tackifier shall be guar gum. If the product selected has synthetic tackifier included, then the additional 2% of tackifier shall be synthetic.

Fiber mulch shall be applied at the rate of 2000 pounds per acre.

The Contractor shall allow the fiber mulch to cure a minimum of 18 hours prior to watering or any storm event to ensure proper cohesion between the soil and fiber particles.

The fiber mulch provided shall be from the approved product list. The approved product list for fiber mulch may be viewed at the following internet site:

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

TABLE OF FIBER MULCHING

Station to Station	L/R	Quantity (Ton)
10+53 to 16+00	R	1.23
15+21 to 16+00	L	0.11
16+00 to 22+00	R	0.49
16+00 to 18+25	L	0.22
18+13 to 22+00	L	0.32
22+00 to 26+75	R	0.25
22+00 to 22+89	L	0.08
22+72 to 27+00	L	0.80
27+00 to 29+09	L	0.41
29+46 to 29+79	L	0.01
50+00 to 53+77	R	0.18
54+06 to 55+00	R	0.07
55+00 to 58+54	R	0.18
100+19 to 105+00	R	0.96
100+20 to 105+00	L	0.93
105+00 to 105+72	R	0.09
105+00 to 105+90	L	0.29
105+80 to 111+00	R	0.43
105+99 to 111+00	L	0.42
111+00 to 112+56	R	0.34
111+00 to 112+56	L	0.20
115+20 to 117+00	R	0.28
115+20 to 117+00	L	0.41
117+00 to 123+00	R	0.96
117+00 to 122+54	L	0.51
123+00 to 126+94	R	0.18
125+53 to 129+00	R	0.33
127+90 to 129+00	L	0.10
129+00 to 135+00	R	0.66
129+00 to 135+00	L	0.56
135+00 to 141+00	R	0.76
135+00 to 141+00	L	0.76
141+00 to 147+00	R	0.97
141+00 to 147+00	L	0.39
147+00 to 149+60	R	0.44
147+00 to 154+00	L	0.54
209+78 to 211+47	R	0.07
211+81 to 214+81	R	0.48
212+19 to 215+13	L	0.05
219+55 to 222+00	L	0.05
219+62 to 222+00	R	0.11
222+00 to 224+62	L	0.12
222+00 to 222+52	R	0.05

Station to Station	L/R	Quantity (Ton)
222+93 to 224+65	R	0.06
302+01 to 303+73	R	0.13
302+85 to 307+00	R	0.60
307+00 to 313+00	R	0.44
403+32 to 406+00	R	0.33
406+00 to 410+62	R	0.55
410+37 to 411+19	R	0.06
603+43 to 606+00	L	0.63
606+00 to 609+70	L	0.63
609+26 to 610+58	L	0.10
701+68 to 703+25	L	0.20
Stockpiles		7.00
Additional Quantity		<u>2.30</u>
Total:		29.8

SHREDDED BARK MULCH

Shredded hardwood or cedar bark mulch shall be placed at a thickness of 4 inches at locations under the bridge as shown on the plans.

All costs for furnishing, handling, and placing the shredded bark mulch including the materials, equipment, labor, and incidentals necessary shall be incidental to the contract unit price per square yard for "4" Depth Shredded Bark Mulch".

WEED BARRIER FABRIC/LANDSCAPE FABRIC

Weed barrier fabric shall be placed at locations under the bridge as shown on the plans.

Weed barrier fabric shall be anchored to the ground with 6" U shaped staples. The staples shall be placed at a 4' spacing along all edges, overlaps, and throughout the area of weed barrier fabric. The weed barrier fabric shall be overlapped 4" between rolls.

Weed barrier fabric shall be measured to the nearest square yard. Measurement of the overlaps will not be made.

All costs for furnishing, handling, and placing the weed barrier fabric including the materials, equipment, labor, and incidentals necessary shall be incidental to the contract unit price per square yard for "Weed Barrier Fabric".

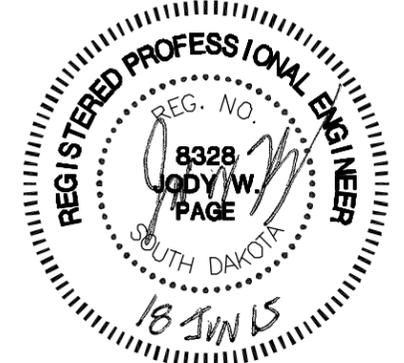


TABLE OF SHREDDED BARK MULCH & WEED BARRIER FABRIC

Station	to	Station	L/R	Quantity (Ton)
216+47		217+00	R	104
216+76		217+00	L	57
217+00		218+27	R	408
217+00		217+93	L	227
				796

SOIL STABILIZER

An estimated quantity of 3.6 acres of soil stabilizer has been included in the Estimate of Quantities. The soil stabilizer shall be applied on temporarily seeded areas and areas deemed necessary by the Engineer.

The Contractor shall apply soil stabilizer according to the manufacturer's application instructions and at the rate specified in the list of approved soil stabilizers.

Wood fiber mulch that contains a green dye shall be mixed with the soil stabilizer to be used as a tracer when the soil stabilizer is applied hydraulically. Wood fiber mulch shall be added at a rate of 300 pounds per acre to all of the approved soil stabilizers listed in the table except for the Pam-12 Plus product. The wood fiber mulch shall be a 100% wood fiber product and does not need to contain a tackifier.

All costs for furnishing and applying the soil stabilizer including wood fiber mulch, hauling, materials, equipment, labor, and incidentals necessary shall be paid for at the contract unit price per Acre for "Soil Stabilizer".

The soil stabilizer shall be from the list below or an approved equal:

Product	Manufacturer
StarTak 600 Applied at a rate of 150 Lb/Acre	Chemstar Products Company Minneapolis, MN Phone: 1-800-328-5037 www.chemstar.com
Pam-12 Plus Applied at a rate of: Slope None to 4:1 1000 Lb/Acre 4:1 to 3:1 1000 to 2000 Lb/Acre 3:1 to 2:1 2000 to 3000 Lb/Acre	ENCAP, LLC Green Bay, WI Phone: 1-877-405-5050 http://professional.encap.net/
M-Binder Applied at a rate of 150 Lb/Acre	Ecology Controls Carpinteria, CA Phone: 1-805-684-0436 www.ssseeds.com
FiberRX Applied at a rate of: Slope None to 4:1 50 Lb/Acre 3:1 60 Lb/Acre 2:1 70 Lb/Acre 1:1 or steeper 80 Lb/Acre	Hydrostraw, LLC Manteno, IL Phone: 1-800-545-1755 http://hydrostraw.com/

Enviropam
Applied at a rate of 9 Lb/Acre

HydraTack, Tack Plus,
Tack-P, or Tack-P Plus
Applied at a rate of 30 Lb/Acre

FI-1045 Hydrobond or
FI-1046 Hydrobond
Applied at a rate of 15 Lb/Acre
HF5000 Tack
Applied at a rate of 60 Lb/Acre

R-Tack
Applied at a rate of 150 Lb/Acre

SpecTack
Applied at a rate of:
Slope
None 30 to 80 Lb/Acre
4:1 50 to 100 Lb/Acre
3:1 80 to 120 Lb/Acre
2:1 100 to 170 Lb/Acre

Super Tack
Applied at a rate of 60 Lb/Acre

EarthGuard SFM
Applied at a rate of 60 LB/Acre
(approx. 6 Gallons/Acre)

TEMPORARY SEDIMENT BARRIER

Temporary sediment barriers shall be installed at locations noted in the table and at locations determined by the Engineer during construction. All temporary sediment barriers used for perimeter control shall be 12" diameter. For installations on slopes and in areas approved by the Engineer 8-9" diameter barriers may be allowed.

All costs for furnishing, installing, and maintaining the temporary sediment barrier including hauling, materials, equipment, labor, and incidentals necessary shall be paid for at the contract unit price per foot for "Temporary Sediment Barrier".

An additional quantity of Temporary Sediment Barrier has been added to the Estimate of Quantities for erosion and sediment control on areas that require an increased level of filtration and sediment control.

Innovative Turf Solutions, LLC
Cincinnati, OH
Phone: 1-513-317-8311
www.innovativeturfsolutions.com

Innovative Turf Solutions, LLC
Cincinnati, OH
Phone: 1-513-317-8311
www.innovativeturfsolutions.com

JRM Chemical, Inc.
Cleveland, OH
Phone: 1-216-475-8488
www.soilmoist.com

Rantec Corporation
Ranchester, WY
Phone: 1-307-655-9565
www.ranteccorp.com

Terra Novo Inc.
Bakersfield, CA
Phone: 1-661-747-5956
www.terranovo.com

The temporary sediment barriers shall be from the list below or an approved equal:

Product	Manufacturer
ProWattle Perimeter Guard	ERTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724 www.ertecsystems.com
Compost Filter Sock 9" and 12"	Dioten Engineering, Inc. Rapid City, SD Phone: 1-605-430-7213 www.dioten.com/
SedimentSTOP Or SediMax-FR Filtration Rolls	North American Green Poseyville, IN Phone: 1-800-772-2040 www.tensarnagreen.com
Typar Geocells	Fiberweb Inc. Old Hickory, TN Phone: 1-615-847-7500 www.typargeocells.com
Silt Sock 8" and 12"	Aspen Ridge Lawn and Landscaping, LLC Rapid City, SD Phone: 1-605-415-0695 www.siltsocksd.com
Terra-Tubes	Profile Products LLC Buffalo Grove, IL Phone: 1-800-366-1180 www.profileproducts.com



TABLE OF TEMPORARY SEDIMENT BARRIER

Station	L/R	Location	Quantity (Ft)
100+20.10 to 102+33.98	L	Perimeter Control	217
100+19.88 to 101+46.93	R	Perimeter Control	41
101+56.35 to 105+67.86	R	Perimeter Control	424
102+04.80 to 105+76.65	L	Perimeter Control	460
127+02.45 to 129+00.00	R	Perimeter Control	203
102+56.00 to 102+77.00	L	Outlet Protection	75
103+58.00 to 103+75.00	L	Outlet Protection	64
129+00.00 to 135+00.00	R	Perimeter Control	600
135+00.00 to 141+00.00	R	Perimeter Control	600
136+10.00 to 141+00.00	L	Perimeter Control	490
141+00.00 to 145+54.84	R	Perimeter Control	455
141+00.00 to 142+62.55	L	Perimeter Control	163
144+48.00 to 144+76.00	L	Outlet Protection	64
209+80.18 to 211+36.89	R	Perimeter Control	169
209+87.98 to 211+17.26	L	Level on Contours	125
209+89.74 to 210+77.13	L	Level on Contours	86
209+98.45 to 210+38.79	L	Level on Contours	40
211+97.20 to 214+65.28	R	Perimeter Control	443
219+66.62 to 222+00.00	R	Perimeter Control	189
222+00.00 to 222+34.94	R	Perimeter Control	42
222+41.32 to 222+52.52	R	Perimeter Control	25
222+95.81 to 224+63.88	R	Perimeter Control	177
10+38.15 to 10+99.08	L	Level on Contours	84
10+56.76 to 11+49.98	L	Level on Contours	146
10+70.76 to 13+87.85	L	Level on Contours	408
10+80.83 to 13+39.20	L	Level on Contours	380
10+96.64 to 12+51.51	L	Level on Contours	263
11+30.54 to 11+52.65	L	Level on Contours	48
13+23.12 to 14+56.12	L	Level on Contours	124
13+40.00 to 15+12.53	L	Level on Contours	160
18+22.98 to 20+07.60	L	Perimeter Control	208
20+32.59 to 22+00.00	L	Perimeter Control	163
22+00.00 to 22+36.35	L	Perimeter Control	37
23+08.90 to 26+94.64	L	Perimeter Control	310
28+61.52 to 28+89.55	L	Outlet Protection	64
302+87.28 to 304+71.66	R	Perimeter Control	227
311+81.69 to 313+00.00	R	Perimeter Control	118
313+00.00 to 314+50.55	R	Perimeter Control	151
403+32.45 to 406+00.00	R	Perimeter Control	305
406+00.00 to 410+49.14	R	Perimeter Control	530
603+43.75 to 606+00.00	L	Perimeter Control	208
606+00.00 to 606+88.45	L	Perimeter Control	93
607+28.49 to 608+44.41	L	Perimeter Control	172
608+62.97 to 609+34.96	L	Perimeter Control	99
Additional Quantity:			200
Total:			9,650

HIGH FLOW SILT FENCE

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

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

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

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

TABLE OF HIGH FLOW SILT FENCE

Station	L/R	Location	Quantity (Ft)
144+65.01	L	Inlet end of pipe	36
146+54.85	R	Inlet end of pipe	36
Additional Quantity:			100
Total:			172

MUCKING SILT FENCE

Mucking silt fence shall consist of removing muck trapped by the silt fence and spreading the material evenly over the adjacent area to conform to the existing grade.

REMOVE SILT FENCE

Silt fence shall be removed when vegetation is established. Some or all of the silt fence may be left on the project until vegetation is established.

EROSION CONTROL BLANKET

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

Erosion control blanket shall be installed as a lining inside the welded wire forms of the Reinforced Fill Slope and over the topsoil on the Reinforced Fill Slope (See Section E for details and quantity required).

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

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

The Contractor shall install erosion control blanket according to the manufacturer's installation instructions.

An additional quantity of Type 3 Erosion Control Blanket has been added to the Estimate of Quantities for temporary erosion control.

The general notes on standard plate 734.01 regarding the shaping of ditch sections prior to installation of erosion control blanket shall be disregarded. All costs associated with furnishing and installing the erosion control blanket shall be incidental to the contract unit price per square yard for "Type 3 Erosion Control Blanket".

TABLE OF EROSION CONTROL BLANKET

Station to	Station	L/R	Location	Type	Quantity (SqYd)
10+24.02	15+39.79	L	Back Slope – West Blvd	3	6,738
209+87.95	211+37.16	L	Back Slope – North St	3	1,692
Additional Quantity:					500
Total Type 3 Erosion Control Blanket:					8,930

TURF REINFORCEMENT MAT

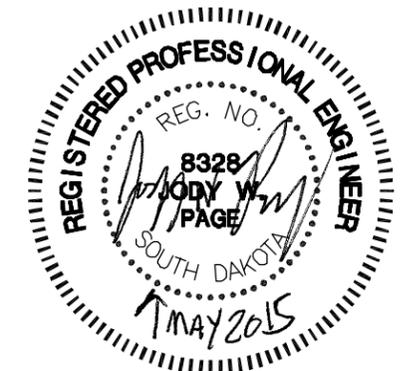
Turf Reinforcement Mat shall be installed at locations shown in the table at the widths specified, and at locations determined by the Engineer during construction. The Contractor shall use a turf reinforcement mat from the approved products list. The approved product list for turf reinforcement mat may be viewed at the following internet site:

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

Installation of the Turf Reinforcement Mat shall be according to the manufacturer's installation instructions.

TABLE OF TURF REINFORCEMENT MAT

Station to	Station	Location	L/R	Type	Quantity (SqYd)
102+62.26	103+05.53	Pond	L	2	170
104+27.88	104+75.09	Pond	L	2	161
106+39.40	107+47.79	Pond	L	2	447
Total Type 2 Turf Reinforcement Mat:					778



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

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

In addition, the Contractor shall do the following for this installation:

- A space of at least 1' shall be provided between the silt fence installation and the inlet. This space shall be filled completely with a 2" depth of aggregate, 2" minus or smaller.
- The top elevation of the silt fence shall be such that a 12" horizontal flap of silt fence will remain at the bottom.
- The base of the silt fence shall 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 shall be placed on the 12" flap around the perimeter of the silt fence installation. The sediment filter bags shall overlap 6" at the ends and be placed tightly together.
- The sediment filter bags shall be filled with clean aggregate 2" minus or smaller.

Sediment Filter Bag

Product	Manufacturer
Snake Bag	Sacramento Bag Manufacturing Co. Sacramento, CA Phone: 1-800-287-2247 www.sacbag.com

The sediment filter bag shall be the Snake Bag from Sacramento Bag Manufacturing Company or an approved equal.

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

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

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

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

All costs for removing and disposing of sediment collected by the sediment control device shall be incidental to the contract unit price per cubic yard for "Remove Sediment".

The removed sediment shall be placed at a location away from the drop inlet where the sediment will not be washed back into the drop inlet or other storm sewer system.

The Contractor and Engineer shall inspect and maintain the sediment control 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	L/R	Inlet No.	High Flow Silt Fence Quantity (Ft)	Sediment Filter Bag Quantity (Ft)	Remove Sediment Quantity (CuYd)
10+47.79	L	IN #36	31	46	0.25
10+79.48	R	IN #38	31	46	0.25
11+83.65	L	IN #37	22	32	0.25
15+46.49	R	IN #34	22	32	0.25
15+46.49	L	IN #35	31	46	0.25
16+72.16	L	IN #98	42	62	0.25
16+72.71	R	IN #97	22	32	0.25
17+68.41	L	IN #93	42	62	0.25
17+69.57	L	IN #94	42	62	0.25
18+09.62	L	IN #91	42	62	0.25
18+11.21	L	IN #92	42	62	0.25
18+51.34	L	IN #116	22	32	0.25
18+51.42	R	IN #115	42	62	0.25
20+60.97	R	IN #121	22	32	0.25
20+62.11	L	IN #33	34	50	0.25
23+57.09	L	IN #32	34	50	0.25
23+58.06	R	IN #122	22	32	0.25
25+24.37	L	IN #31	22	32	0.25
25+26.30	R	IN #30	22	32	0.25
50+49.95	L	IN #95	32	47	0.25
51+11.07	L	IN #113	21	31	0.25
51+14.35	R	IN #112	22	32	0.25
100+34.95	L	IN #76	21	31	0.25
100+34.97	R	IN #78	21	31	0.25
100+35.00	L	IN #77	22	32	0.25
100+35.00	R	IN #79	26	38	0.25
102+59.60	L	IN #73	22	32	0.25
102+59.85	R	IN #74	26	38	0.25
104+09.86	L	IN #85	21	31	0.25
104+12.92	R	IN #75	22	32	0.25
105+96.63	L	IN #66	22	32	0.25
105+96.78	R	IN #65	31	46	0.25
106+03.00	L	IN #67	31	46	0.25
106+21.52	R	IN #3	26	38	0.25
108+70.00	L	IN #5	22	32	0.25
108+70.00	R	IN #14	26	38	0.25
109+49.84	L	IN #2	22	32	0.25
109+49.84	L	IN #61	22	32	0.25
109+49.88	R	IN #62	22	32	0.25
109+50.00	R	IN #63	26	38	0.25
111+85.00	R	IN #89	21	31	0.25
111+85.00	L	IN #87	21	31	0.25
111+85.00	L&R	IN #60	26	38	0.25
115+30.34	L	IN #86	21	31	0.25

Station	L/R	Inlet No.	High Flow Silt Fence Quantity (Ft)	Sediment Filter Bag Quantity (Ft)	Remove Sediment Quantity (CuYd)
115+30.35	R	IN #90	21	31	0.25
115+30.35	L	IN # 131	22	32	0.25
115+30.36	R	IN #29	22	32	0.25
118+63.10	L	IN #101	26	38	0.25
118+63.16	R	IN #114	22	32	0.25
118+63.43	R	IN #26	22	32	0.25
118+63.43	L	IN #151	22	32	0.25
121+53.83	L	IN #118	22	32	0.25
121+53.91	R	IN #117	31	46	0.25
121+54.34	L&R	IN #25	38	56	0.25
125+13.82	L	IN #123	21	31	0.25
125+13.92	R	IN #124	22	32	0.25
125+14.15	L&R	IN #24	38	56	0.25
125+14.59	R	IN #133	22	32	0.25
125+15.45	R	IN #125	31	46	0.25
126+98.70	R	IN #127	22	32	0.25
126+99.51	L&R	IN #23	38	56	0.25
127+00.37	L	IN #126	21	31	0.25
128+50.00	L&R	IN #128	38	56	0.25
130+10.21	R	IN #17	42	62	0.25
130+22.03	R	IN #16	42	62	0.25
130+22.94	L	IN #21	28	42	0.25
130+24.14	R	IN #18	26	38	0.25
130+24.15		IN #19	38	56	0.25
130+24.15	L	IN #20	31	46	0.25
130+79.37	L	IN #129	31	46	0.25
130+80.82	L	IN #22	31	46	0.25
131+80.01	R	IN #139	31	46	0.25
131+96.54	L	IN #11	38	56	0.25
131+97.68	L	IN #130	31	46	0.25
134+20.25	L	IN #138	31	46	0.25
134+22.36	L	IN #10	38	56	0.25
134+22.71	R	IN #132	31	46	0.25
136+12.21	L	IN #135	31	46	0.25
136+12.81	L	IN #150	38	56	0.25
136+15.18	R	IN #134	31	46	0.25
138+08.34	R	IN #13	21	31	0.25
138+11.18	L	IN #8	31	46	0.25
138+11.48	L	IN #9	38	56	0.25



Station	L/R	Inlet No.	High Flow Silt Fence Quantity (Ft)	Sediment Filter Bag Quantity (Ft)	Remove Sediment Quantity (CuYd)
140+18.23	L	IN #7	21	31	0.25
140+18.74	R	IN #12	31	46	0.25
140+21.42	L	IN #6	38	56	0.25
142+46.18	R	IN #136	28	42	0.25
142+46.87	L&R	IN #144	38	56	0.25
144+73.66	L&R	IN #1	38	56	0.25
144+74.01	L	IN #4	28	42	0.25
144+74.25	R	IN #39	34	50	0.25
148+24.60	L&R	IN #137	38	56	0.25
214+40.04	R	IN #108	22	32	0.25
214+84.92	L	IN #109	22	32	0.25
216+22.57	R	IN #40	31	46	0.25
216+63.66	L	IN #148	26	38	0.25
217+53.36	R	IN #46	31	46	0.25
218+73.58	R	IN #47	31	46	0.25
218+79.94	R	IN #55	26	38	0.25
219+15.32	R	IN #107	28	42	0.25
219+18.16	L	IN #53	28	42	0.25
219+99.43	L	IN #145	31	46	0.25
220+52.53	R	IN #54	22	32	0.25
221+68.77	L	IN #80	26	38	0.25
221+69.80	R	IN #149	22	32	0.25
222+23.55	R	IN #81	26	38	0.25
223+40.33	R	IN #82	42	62	0.25
223+41.82	L	IN #84	42	62	0.25
223+51.57	R	IN #83	42	62	0.25
302+08.27	L	IN #141	22	32	0.25
302+32.46	R	IN #140	42	62	0.25
304+65.04	L	IN #15	22	32	0.25
304+67.95	R	IN #51	31	46	0.25
306+59.84	L	IN #45	22	32	0.25
306+60.83	R	IN #50	21	31	0.25
308+62.53	R	IN #49	21	31	0.25
308+63.04	L	IN #96	22	32	0.25
310+61.56	L	IN #48	22	32	0.25
310+61.64	R	IN #99	21	31	0.25
350+98.73	L	IN #111	26	38	0.25
351+41.29	R	IN #52	31	46	0.25
403+39.89	L	IN #100	22	32	0.25
403+41.95	L	IN #72	31	46	0.25
408+59.96	L	IN #104	22	32	0.25
408+60.22	R	IN #70	22	32	0.25
409+63.13	R	IN #71	22	32	0.25
409+64.85	L	IN #105	22	32	0.25
410+96.15	R	IN #64	42	62	0.25
410+99.89	L	IN #106	22	32	0.25
451+09.49	R	IN #57	42	62	0.25
603+48.69	L	IN #69	21	31	0.25
603+51.75	R	IN #68	22	32	0.25
607+87.25	L	IN #102	26	38	0.25
608+29.53	R	IN #103	26	38	0.25
609+97.12	R	IN #59	31	46	0.25
650+79.25	R	IN #58	42	62	0.25
650+79.56	L	IN #88	22	32	0.25
701+09.89	R	IN #44	22	32	0.25
701+72.25	L	IN #110	26	38	0.25
701+74.03	R	IN #43	31	46	0.25

Station	L/R	Inlet No.	High Flow Silt Fence Quantity (Ft)	Sediment Filter Bag Quantity (Ft)	Remove Sediment Quantity (CuYd)
702+91.76	R	IN #142	31	46	0.25
704+82.84	L	IN #28	26	38	0.25
704+82.98	R	IN #147	26	38	0.25
706+23.09	L	IN #27	21	31	0.25
706+26.64	R	IN #146	28	42	0.25
709+14.89	L	IN #120	21	31	0.25
709+18.11	R	IN #119	28	42	0.25
750+95.86	R	IN #41	42	62	0.25
750+96.03	L	IN #143	22	32	0.25
Totals:			4,200	6,181	38

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 Inlets with Frames and Grates shall be installed prior to working in the vicinity of the drop inlets.

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

“Sediment Control at Inlets with Frames and Grates” 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 Inlets with Frames and Grates shall be incidental to the contract unit price per each for “Sediment Control at Inlet with Frame and Grate”.

Sediment collection devices shall be:

A commercial made sediment collection device from the “Sediment Control at Inlet with Frame and Grate” list or an approved equal. The device shall be installed in reinforced concrete drop inlets according to the manufacturer’s recommendations.

Sediment Control at Inlet with Frame and Grate Approved List:

Product	Manufacturer
InfraSafe Debris Collection Device with filter sock	Royal Environmental Systems, Inc. Stacy, MN Phone: 1-800-817-3240 www.royalenterprises.net
Dandy Curb Sack	Dandy Products Inc. Dublin, OH Phone: 1-800-591-2284 www.dandyproducts.com
Silt Trapper	Storm Water Solutions Lakeville, MN Phone: 1-952-461-4376 www.silttrapper.com
DIP Basket	Skyview Construction Co., LLC Waubay, SD Phone: 1-605-520-0555 www.skyviewconst.com
FLEXSTORM Inlet Filters	Inlet and Pipe Protection, Inc. Naperville, IL Phone: 1-866-287-8655 www.inletfilters.com
GR-8 Guard or Combo Guard	ERTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724 www.ertecsystems.com
Sediment Catchers	Shaun Jensen Brookings, SD Phone: 1-605-690-4950
Grate FX, Slammer, or VertPro	Enviroscape ECM, Ltd. Oakwood, OH Phone: 1-419-594-3210 www.strawblanket.com
BX Inlet Sediment Boxes	BX Civil and Construction Dell Rapids, SD Phone: 1-605-428-5483 bx-cc.com



FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 1902(61)0	D9	D47

TABLE OF SEDIMENT CONTROL AT INLETS WITH FRAMES AND GRATES

Station	L/R	Inlet No.	Quantity (Each)	Station	L/R	Inlet No.	Quantity (Each)
10+47.79	L	IN #36	1	142+46.87	L/R	IN #144	1
10+79.48	R	IN #38	1	144+73.66	L/R	IN #1	1
11+83.65	L	IN #37	1	144+73.97	L	Existing IN	1
15+46.49	R	IN #34	1	144+74.01	L	IN #4	1
15+46.49	L	IN #35	1	144+74.20	R	Existing IN	1
16+72.71	R	IN #97	1	144+74.25	R	IN #39	1
17+64.56	L	Existing IN	1	144+74.67	L	Existing IN	1
17+93.73	L	Existing IN	1	144+74.68	R	Existing IN	1
18+09.81	L	Existing IN	1	145+71.00	R	Existing IN	1
18+51.34	L	IN #116	1	148+23.09	L	Existing IN	1
20+60.97	R	IN #121	1	148+24.60	L/R	IN #137	1
20+62.11	L	IN #33	1	152+48.40	L	Existing IN	1
23+57.09	L	IN #32	1	152+48.61	R	Existing IN	1
23+58.06	R	IN #122	1	208+83.38	L	Existing IN	1
25+24.37	L	IN #31	1	208+94.44	L	Existing IN	1
25+26.30	R	IN #30	1	208+94.93	R	Existing IN	1
51+11.07	L	IN #113	1	209+05.42	L	Existing IN	1
51+14.35	R	IN #112	1	209+06.24	R	Existing IN	1
100+04.79	R	Existing IN	1	211+24.04	R	Existing IN	1
100+06.58	L	Existing IN	1	211+25.16	R	Existing IN	1
100+30.60	L	Existing IN	1	211+41.02	R	Existing IN	1
100+30.69	R	Existing IN	1	211+43.06	R	Existing IN	1
100+34.95	L	IN #76	1	211+48.68	R	Existing IN	1
100+34.97	R	IN #78	1	211+48.72	R	Existing IN	1
100+35.00	L	IN #77	1	214+40.04	R	IN #108	1
100+35.00	R	IN #79	1	214+84.92	L	IN #109	1
102+17.82	R	Existing IN	1	216+22.57	R	IN #40	1
102+30.10	R	Existing IN	1	216+63.66	L	IN #148	1
102+30.94	L	Existing IN	1	217+53.36	R	IN #46	1
102+59.60	L	IN #73	1	218+73.58	R	IN #47	1
102+59.85	R	IN #74	1	218+79.94	R	IN #55	1
103+36.48	R	Existing IN	1	219+15.32	R	IN #107	1
103+37.21	R	Existing IN	1	219+18.16	L	IN #53	1
103+61.87	L	Existing IN	1	219+96.81	L	Existing IN	1
103+62.75	L	Existing IN	1	219+99.43	L	IN #145	1
104+09.86	L	IN #85	1	220+52.53	R	IN #54	1
104+12.92	R	IN #75	1	221+68.77	L	IN #80	1
105+96.63	L	IN #66	1	221+69.80	R	IN #149	1
105+96.78	R	IN #65	1	222+23.55	R	IN #81	1
106+03.00	L	IN #67	1	224+63.43	L	Existing IN	1
106+21.52	R	IN #3	1	224+95.78	L	Existing IN	1
108+70.00	L	IN #5	1	302+08.27	L	IN #141	1
108+70.00	R	IN #14	1	304+65.04	L	IN #15	1
109+37.52	R	Existing IN	1	304+67.95	R	IN #51	1
109+41.58	R	Existing IN	1	306+59.84	L	IN #45	1
109+43.50	R	Existing IN	1	306+60.83	R	IN #50	1
109+47.54	R	Existing IN	1	308+62.53	R	IN #49	1
109+49.32	L	Existing IN	1	308+63.04	L	IN #96	1
109+49.84	L	IN #2	1	310+61.56	L	IN #48	1
109+49.84	L	IN #61	1	310+61.64	R	IN #99	1
109+49.88	R	IN #62	1	350+98.73	L	IN #111	1
109+50.00	R	IN #63	1	351+04.09	L	Existing IN	1
109+54.25	L	Existing IN	1	351+41.29	R	IN #52	1
109+56.21	L	Existing IN	1	403+39.89	L	IN #100	1
109+60.62	L	Existing IN	1	403+41.95	L	IN #72	1
111+85.00	R	IN #89	1	408+59.96	L	IN #104	1
				408+60.22	R	IN #70	1
				409+63.13	R	IN #71	1
				409+64.85	L	IN #105	1



Station	L/R	Inlet No.	Quantity (Each)
410+99.89	L	IN #106	1
603+48.69	L	IN #69	1
603+51.75	R	IN #68	1
607+87.25	L	IN #102	1
608+29.53	R	IN #103	1
609+97.12	R	IN #59	1
650+79.56	L	IN #88	1
701+09.89	R	IN #44	1
701+72.25	L	IN #110	1
701+74.03	R	IN #43	1
702+91.76	R	IN #142	1
704+82.84	L	IN #28	1
704+82.98	R	IN #147	1
706+23.09	L	IN #27	1
706+26.64	R	IN #146	1
709+14.89	L	IN #120	1
709+18.11	R	IN #119	1
750+96.03	L	IN #143	1

Total: 192

SEDIMENT CONTROL AT TYPE S REINFORCED CONCRETE DROP INLETS

The sediment control device provided shall be from the list shown below. Refer to Standard Plate 734.11 for details.

Product	Manufacturer
Dandy Curb	Dandy Products Inc. Dublin, OH Phone: 1-800-591-2284 www.dandyproducts.com
Gutterbuddy	ACF Environmental Richmond, VA Phone: 1-800-448-3636 www.acfenvironmental.com
SS-300	Silt-Saver, Inc. Conyers, GA Phone: 1-888-382-7458 www.siltsaver.com
Curb Inlet Guard	ECTEC Environmental Systems LLC Alameda, CA Phone: 1-866-521-0724 www.ertecsystems.com

TABLE OF SEDIMENT CONTROL AT TYPE S REINFORCED CONCRETE DROP INLETS

Station	L/R	Inlet No.	Clear Opening Width (Ft)	Quantity* (Ft)
16+72.16	L	IN #98	10	12
17+68.41	L	IN #93	10	12
17+69.57	L	IN #94	10	12
18+09.62	L	IN #91	10	12
18+11.21	L	IN #92	10	12
18+51.42	R	IN #115	10	12
50+49.95	L	IN #95	5	7
130+10.21	R	IN #17	10	12
130+22.03	R	IN #16	10	12
222+02.57	R	Existing IN	10	12
223+40.33	R	IN #82	10	12
223+41.82	L	IN #84	10	12
223+51.57	R	IN #83	10	12
223+72.38	R	Existing IN	10	12
223+75.41	R	Existing IN	10	12
302+32.46	R	IN #140	10	12
410+96.15	R	IN #64	10	12
451+09.49	R	IN #57	10	12
650+79.25	R	IN #58	10	12
750+95.86	R	IN #41	10	12

Total: 235

* Quantity shown is the minimum length required and shall be the basis of payment.

PORTABLE SEDIMENT CONTAINMENT SYSTEM

The Contractor shall utilize a Portable Sediment Containment System when treating sediment laden water. This shall be used whenever the Contractor must pump away storm water from a trench or at other locations where water is being pumped from a site.

The Portable Sediment Containment System shall be available for use at all times throughout the project and shall be stored at a safe location on-site during periods it is not used.

The Portable Sediment Containment System shall be a Wimco Sediment Containment System (WSCS) or approved equal.

All costs, labor and materials for the Portable Sediment Containment System as discussed above shall be included in the bid item "Portable Sediment Containment System". This bid item shall include all furnishing, installing, flocculent, storing, removing, relocating and reuse of the Portable Sediment Containment System throughout the project. The bid item shall be paid for as each, which shall be payment for use of the system during the entire project.

TABLE OF PORTABLE SEDIMENT CONTAINMENT SYSTEM

Location	Quantity (Each)
Entire Project	1
Total:	1

STREET SWEEPING

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

The Contractor shall use a pickup broom having integral self-contained storage to clean the roadway. The pickup broom used shall 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.

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



CONSTRUCTION ENTRANCE

The Contractor shall 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 shall install the construction entrance product in accordance with the manufacturer's installation instructions or as directed by the Engineer.

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

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

The following table is a list of known construction entrance products available for use:

<u>Product</u>	<u>Manufacturer</u>
Grizzly Rumble Grate (10' width and 24' length required)	Trackout Control, LLC Tempe, AZ Phone: 1-800-761-0056 www.trackoutcontrol.com
Rumble Grid (12' width and 24' length including combination of grids and ramps required)	Pro-Tec Equipment, Inc. Charlotte, MI Phone: 1-800-292-1225 www.pro-tecequipment.com

SDDOT CONSTRUCTION ENTRANCE

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

Pit run material shall be obtained from a granular source and shall 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 shall be compacted to the satisfaction of the Engineer.

The aggregate for the granular material shall 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 shall 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 MSE geotextile shall conform to Section 831 of the Specifications. The MSE geotextile shall be on the Approved Products List for this material or will be certified by the supplier to meet this specification prior to installation.

The MSE geotextile should be kept as taut as possible prior to placing.

Equipment shall not be allowed on the MSE geotextile until the first lift of granular material is in place.

All seams in the MSE geotextile shall be overlapped at least 2' and shingled.

GENERAL PLANTING NOTES

All trees and shrubs shall conform to or exceed minimum quality standards as defined by the American Nursery and Landscaping Association, current edition of American Standard for Nursery Stock, and shall be purchased from a Landscape Nursery. Trees and shrubs furnished shall be of the same genus, species, cultivar, and size as specified in the plans or approved equal. Species and variety may be substituted only by the approval of the Engineer. Each tree and shrub shall have an identification label.

All trees and shrubs shall bear the same relationship to the finished grade as the plant's original grade before digging. All trees and shrubs shall be planted in accordance with all the drawings and specifications included in the plans.

Planting locations for each individual species shall be identified prior to planting. Location shall be approved by the Engineer prior to installation.

All trees and shrubs shall be fertilized.

Within 2 hours after being planted, trees and shrubs shall be watered to thoroughly saturate the backfill soil as this provides settlement and filling of voids in the backfill.

As soon as the initial planting is completed, the Engineer shall visually inspect trees and shrubs for health, vigor, and condition, and shall at that time accept or reject them.

The Contractor shall provide a one year warranty for all trees and shrubs. After one year from initial planting, the Engineer shall make an inspection and dead, unhealthy, or otherwise not acceptable trees and shrubs shall be replaced by the Contractor at no additional cost to the State.

All costs for furnishing, handling, storing, fertilizing, and planting the trees and shrubs including the materials, equipment, labor, preparation of the ground, initial watering, clean up of the planted areas, and the warranty, shall be incidental to the contract unit price per each for the corresponding "Tree and Shrub, Furnish and Plant" bid item.

MULCH RING

Trees shall receive a mulch ring with a minimum diameter of 4 feet and a minimum thickness of 4 inches placed around each individual tree.

All costs for furnishing, handling, and placing the mulch rings including the materials, equipment, labor, and incidentals necessary shall be incidental to the contract unit price per each for "Mulch Ring".

PLANT SCHEDULE

Key	Qty	Plant Type	Size
	52	Picea pungens var. St. Mary's Broom St. Mary's Broom Blue Spruce	1 gal.
	6	Picea glauca var. densata Black Hills Spruce	6' HT B&B



STORM WATER POLLUTION PREVENTION PLAN CHECKLIST

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

❖ **SITE DESCRIPTION (4.2 1)**

- **Project Limits: See Title Sheet (4.2 1.b)**
- **Project Description: See Title Sheet (4.2 1.a.)**
- **Site Map(s): See Title Sheet and Plans (4.2 1.f. (1)-(6))**
- **Major Soil Disturbing Activities** (check all that apply)
 - Clearing and grubbing
 - Excavation/borrow
 - Grading and shaping
 - Filling
 - Cutting and filling
 - Other (describe):
- **Total Project Area** 48.4 acres **(4.2 1.b.)**
- **Total Area To Be Disturbed** 36.6 acres **(4.2 1.b.)**
- **Existing Vegetative Cover (%)** 35%
- **Soil Properties:** Loam and Clay, Slopes 0 to 3% **(4.2 1. d.)**
- **Name of Receiving Water Body/Bodies** Rapid Creek **(4.2 1.e.)**

❖ **ORDER OF CONSTRUCTION ACTIVITIES (4.2 1.c.)**

(Stabilization measures shall be initiated as soon as possible, but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Initiation of final or temporary stabilization may exceed the 14-day limit if earth disturbing activities will be resumed within 21 days.)

- **Install stabilized construction entrance(s).**
- **Install perimeter protection where runoff sheets from the site.**
- **Remove and store topsoil.**
- **Stabilize disturbed areas.**
- **Install storm sewers and curb and gutter.**
- **Install inlet and culvert protection after completing storm drainage and other utility installations.**
- **Complete final grading.**
- **Complete final paving and sealing of concrete.**
- **Complete traffic control installation and protection devices.**
- **Reseed areas disturbed by removal activities.**

❖ **EROSION AND SEDIMENT CONTROLS (4.2 2.a.(1)(a)-(f))**

(Check all that apply)

- **Stabilization Practices (See Detail Plan Sheets)**
 - Temporary Seeding (Cover Crop Seeding)
 - Permanent Seeding
 - Sodding
 - Planting (Woody Vegetation for Soil Stabilization)
 - Mulching (Grass Hay or Straw)
 - Hydraulic Mulch (Wood Fiber Mulch)
 - Soil Stabilizer
 - Bonded Fiber Matrix
 - Erosion Control Blankets or Mats
 - Vegetation Buffer Strips
 - Roughened Surface (e.g. tracking)
 - Dust Control
 - Other:

➤ **Structural Temporary Erosion and Sediment Controls**

- Silt Fence
- Floating Silt Curtain
- Straw Bale Check
- Temporary Berm
- Temporary Slope Drain
- Straw Wattles or Rolls
- Turf Reinforcement Mat
- Rip Rap
- Gabions
- Rock Check Dams
- Sediment Traps/Basins
- Inlet Protection
- Outlet Protection
- Surface Inlet Protection (Area Drain)
- Curb Inlet Protection
- Stabilized Construction Entrances
- Entrance/Exit Equipment Tire Wash
- Interceptor Ditch
- Concrete Washout Area
- Temporary Diversion Channel
- Work Platform
- Temporary Water Barrier
- Temporary Water Crossing
- Other: Temporary Sediment Barrier

➤ **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.

➤ **Storm Water Management (4.2 2.b., (1) and (2))**

Storm water management will be handled by temporary controls outlined in "EROSION AND SEDIMENT CONTROLS" above, and any permanent controls needed to meet permanent storm water management needs in the post construction period. Permanent controls will be shown on the plans and noted as permanent.

➤ **Other Storm Water Controls (4.2 2.c., (1) and (2))**▪ **Waste Disposal**

All liquid waste materials will be collected and stored in sealed metal containers approved by the project engineer. 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 in the field office. The general contractor's representative responsible for the conduct of work on the site will be responsible for seeing waste disposal procedures are followed.

▪ **Hazardous Waste**

All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Site personnel will be instructed in these practices, and the individual designated as the contractor's on-site representative will be responsible for seeing that these practices are followed.

▪ **Sanitary Waste**

Portable sanitary facilities will be provided on all construction sites. Sanitary waste will be collected from the portable units in a timely manner by a licensed waste management contractor or as required by any local regulations.

❖ **Maintenance and Inspection (4.2 3. and 4.2 4.)**➤ **Maintenance and Inspection Practices**

- Inspections will be conducted at least one time per week and after a storm event of 0.50 inches or greater.
- 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 in order 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 site superintendent are responsible for inspections. Maintenance, 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.

❖ **Non-Storm Water Discharges (3.0)**

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

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

❖ **Materials Inventory (4.2. 2.c.(2))**

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 headings "EROSION AND SEDIMENT CONTROLS" and "SPILL PREVENTION" (check all that apply).

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



❖ **Spill Prevention (4.2 2.c.(2))**➤ **Material Management**▪ **Housekeeping**

- Only needed products will be stored on-site by the contractor.
- Except for bulk materials the contractor will store all materials under cover and 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.
- Vegetation areas not essential to the construction project will be preserved and maintained as noted on the plans.

▪ **Hazardous Materials**

- Products will be kept in original containers unless the container is not resealable.
- 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, degreasing 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 storm water system or storm water 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 storm water runoff.

➤ **Product Specific Practices (6.8)**▪ **Petroleum Products**

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

▪ **Fertilizers**

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

▪ **Paints**

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

▪ **Concrete Trucks**

Contractors will provide designated truck washout areas on the site. These areas must be self contained and not connected to any storm water outlet of the site. Upon completion of construction washout areas will be properly stabilized.

➤ **Spill Control Practices (4.2 2 c.(2))**

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 clean up 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 clean up 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. The contractor is responsible for ensuring that the site superintendent has had appropriate training for hazardous materials handling, spill management, and cleanup.

➤ **Spill Response (4.2 2 c.(2))**

The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on-site and prevent their release into receiving waters. If a spill of pollutants threatens storm water 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 SD DENR.
- Personnel with primary responsibility for spill response and clean up 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.

❖ **Spill Notification**

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

- A release or spill of a regulated substance (includes petroleum and petroleum products) must be reported to DENR immediately **if any one of the following** conditions exists:
 - The discharge threatens or is in a position to threaten the waters of the state (surface water or ground water).
 - The discharge causes an immediate danger to human health or safety.
 - The discharge exceeds 25 gallons.
 - The discharge causes a sheen on surface water.
 - The discharge of any substance that exceeds the ground water quality standards of ARSD (Administrative Rules of South Dakota) chapter 74:51:01.
 - The discharge of any substance that exceeds the surface water quality standards of ARSD chapter 74:51:01.
 - The discharge of any substance that harms or threatens to harm wildlife or aquatic life.
 - The discharge of crude oil in field activities under SDCL (South Dakota Codified Laws) chapter 45-9 is greater than 1 barrel (42 gallons).

To report a release or spill, call DENR at 605-773-3296 during regular office hours (8 a.m. to 5 p.m. Central time). To report the release after hours, on weekends or holidays, call State Radio Communications at 605-773-3231. Reporting the release to DENR does not meet any obligation for reporting to other state, local, or federal agencies. Therefore, the responsible person must also contact local authorities to determine the local reporting requirements for releases. DENR recommends that spills also be reported to the National Response Center at (800) 424-8802.



❖ **Construction Changes (4.4)**

When changes are made to the construction project that will require alterations in the temporary erosion controls of the site, the Storm Water Pollution Prevention Plan (SWPPP) will be amended to provide appropriate protection to disturbed areas, all storm water structures, and adjacent waters. The SDDOT Project Engineer will modify the SWPPP plan (DOT 298) and drawings to reflect the needed changes. Copies of changes will be routed per DOT 298. Copies of forms and the SWPPP will be retained in a designated place for review over the course of the project.

❖ **CERTIFICATIONS**

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

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

➤ **South Dakota Department of Transportation**

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

Tom Leibel

Authorized Signature (See the General Permit, Section 6.7.1.C.)

➤ **Prime Contractor**

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

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

Authorized Signature

❖ **CONTACT INFORMATION**

➤ **Contractor Information:**

- Prime Contractor Name: _____
- Contractor Contact Name: _____
- Address: _____
- _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ **Erosion Control Supervisor**

- Name: _____
- Address: _____
- _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ **SDDOT Project Engineer**

- Name: _____
- Business Address: _____
- Job Office Location: _____
- City: _____ State: _____ Zip: _____
- Office Phone: _____ Field: _____
- Cell Phone: _____ Fax: _____

➤ **SD DENR Contact Spill Reporting**

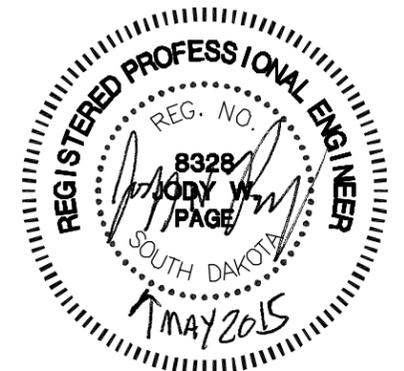
- Business Hours Monday-Friday (605) 773-3296
- Nights and Weekends (605) 773-3231

➤ **SD DENR Contact for Hazardous Materials.**

- (605) 773-3153

➤ **National Response Center Hotline**

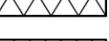
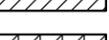
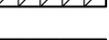
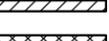
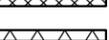
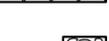
- (800) 424-8802.



FOR BIDDING PURPOSES ONLY

Erosion and Sediment Control Legend

SYMBOLOLOGY FOR BEST MANAGEMENT PRACTICES

-  STORM WATER DISCHARGE POINT
-  SEDIMENT CONTROL AT INLET BEFORE PLACEMENT OF SURFACING
-  SEDIMENT CONTROL AT TYPE S DROP INLETS
-  SEDIMENT CONTROL AT DROP INLETS WHEN FRAME AND GRATE IS IN PLACE
-  TEMPORARY FLOCCULANT INSTALLATION IN OR AROUND INLETS
-  LOCATIONS FOR CAPTURING AND TREATING STORMWATER
-  TEMPORARY SEDIMENT BARRIER
-  HIGH FLOW SILT FENCE
-  HIGH FLOW SILT FENCE AT PIPE INLET
-  LOW FLOW SILT FENCE
-  SILT TRAP
-  EROSION CONTROL WATTLES ON SLOPES
-  EROSION CONTROL WATTLES AT INLETS
-  EROSION CONTROL WATTLES IN DITCHES
-  SHREDDED BARK MULCH & WEED BARRIER FABRIC
-  COVER CROP SEEDING AND TEMPORARY STRAW MULCH
-  HYDRAULIC MULCHES
-  SODDING
-  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
-  ROCK CHECK DAM
-  SYNTHETIC CHANNEL PROTECTION
-  CUT INTERCEPTOR DITCH
-  TRIANGULAR SILT BARRIERS
-  EROSION BALES
-  TEMPORARY SLOPE DRAIN
-  FLOATING SILT CURTAIN
-  TEMPORARY WATER BARRIER

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. Other BMPs installed during the initial phase, like inlet protection on existing inlets, may remain in place, be removed, or be replaced depending on the fate of the inlet it is protecting. Most BMPs installed during this phase should remain in place until water is diverted or until Final Phase BMPs are installed.

INTERMEDIATE PHASE

BMPs from the Legend shown as Blue Symbols on the Erosion and Sediment Control Plan Sheets are to be installed during the Intermediate Phase to do one of the following:

- Dewater and/or collect sediment and debris from storm water
- Temporarily stabilize soil to reduce the need for excessive sediment capture

Sediment control BMPs should remain in place until Final Stabilization is achieved unless they are replaced by another BMP.

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 do one of the following:

- Achieve final stabilization through permanent erosion control.
- Capture sediment during final stabilization. BMPs used to capture sediment, such as inlet protection, should be removed once the vegetation reaches 75% of the background level. Other BMPs, like erosion control wattles, can be left to decompose.



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

- | | | | |
|--|-----------------------------------|--|---|
|  TS | TOPSOIL STOCKPILES |  M | ON-SITE CONSTRUCTION MATERIAL STORAGE AREAS |
|  B | BORROW AREAS |  SK | SPILL KIT |
|  CE | STABILIZED CONSTRUCTION ENTRANCES |  WP | WORK PLATFORM |
|  VB | VEGETATED BUFFER STRIPS |  CP | CONCRETE PLANT SITES |
|  CW | CONCRETE WASHOUTS |  V | VEHICLE AND EQUIPMENT PARKING, FUELING, AND MAINTENANCE AREAS |
|  AP | ASPHALT PLANT SITES |  D | DUMPSTER OR OTHER TRASH AND DEBRIS CONTAINERS |

Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_D1001E&SCLegend.dgn



Erosion and Sediment Control Plan Phase 2 & 3

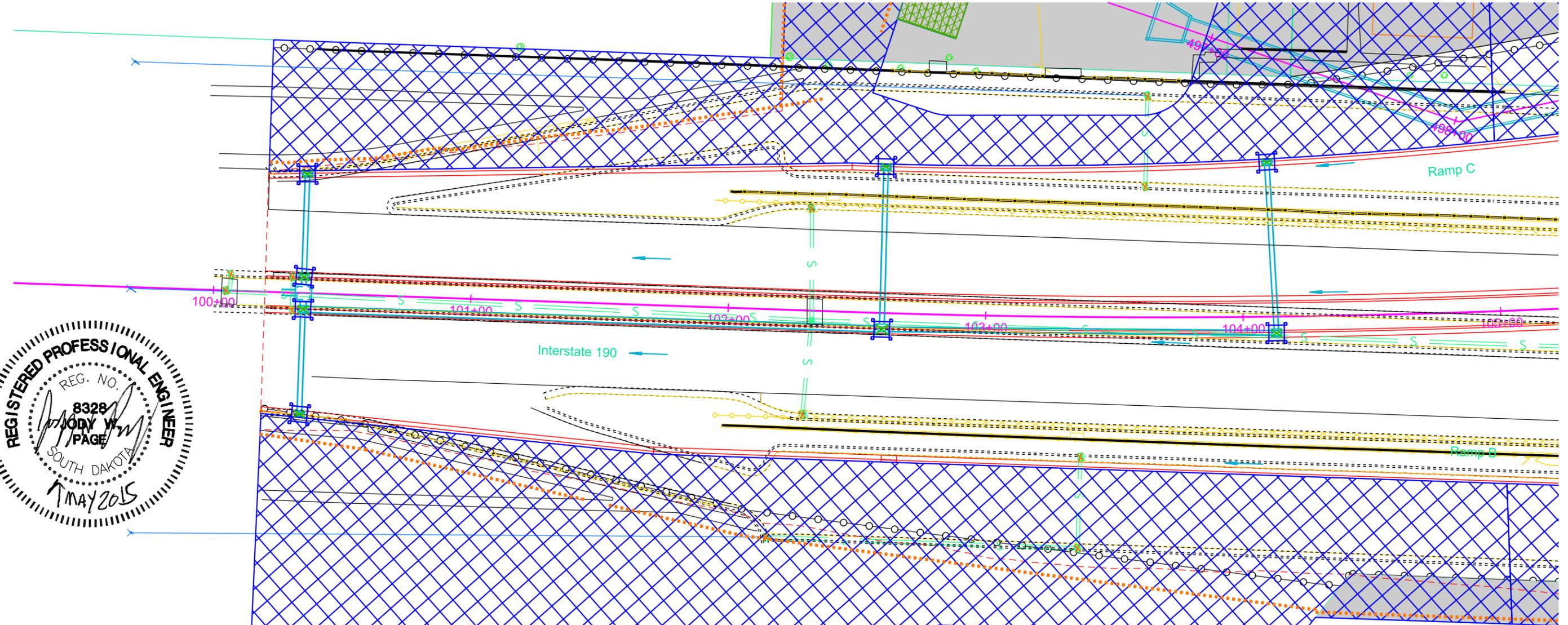
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D16	TOTAL SHEETS D45
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Plotting Date: 04-29-2015



Plot Scale - 1"=40'



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:

- 100+04 -0.10' R 1 Each (removing)
- 100+06 -6.32' L 1 Each (removing)
- 100+30 -6.11' L 1 Each (removing)
- 100+30 -6.83' R 1 Each (removing)
- 102+17 -88.29' R 1 Each (removing)
- 102+30 -39.52' L 1 Each (removing)
- 102+30 -40.40' R 1 Each (removing)
- 103+37 -54.32' R 1 Each (removing)
- 103+36 -89.69' R 1 Each (removing)
- 103+62 -85.56' L 1 Each (removing)
- 103+61 -50.58' L 1 Each (removing)

Install Temporary Sediment Barriers before earth moving activities at the following locations:

- 100+20 to 102+33 L 217 Ft
- 100+19 to 101+46 R 41 Ft
- 101+56 to 105+67 R 424 Ft
- 102+04 to 105+76 L 460 Ft
- 102+56 to 102+77 L 75 Ft
- 103+58 to 103+75 L 64 Ft

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:

- 100+34 - 46.15' L (IN #76) 21 Ft HFSF 31 Ft Sed. Filter Bags
- 100+34 - 46.95' R (IN #78) 21 Ft HFSF 31 Ft Sed. Filter Bags
- 104+09 - 59.86' L (IN #85) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:

- 100+35 - 6.33' R (IN #79) 26 Ft HFSF 38 Ft Sed. Filter Bags
- 102+59 - 6.33' R (IN #74) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:

- 100+35 - 6.33' L (IN #77) 22 Ft HFSF 32 Ft Sed. Filter Bags
- 102+59 - 56.69' L (IN #73) 22 Ft HFSF 32 Ft Sed. Filter Bags
- 104+12 - 6.33' R (IN #75) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

- 100+34 - 46.15' L (IN #76) 1 each
- 100+34 - 46.95' R (IN #78) 1 each
- 104+09 - 59.86' L (IN #85) 1 each

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

- 100+35 - 6.33' L (IN #77) 1 each
- 102+59 - 56.69' L (IN #73) 1 each
- 104+12 - 6.33' R (IN #75) 1 each

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

- 100+35 - 6.33' R (IN #79) 1 each
- 102+59 - 6.33' R (IN #74) 1 each

Apply Fiber Mulch at the following locations:

- 100+19 R to 105+00 R Inslope 0.96 Ton
- 100+20 L to 105+00 L Inslope and Pond 0.93 Ton

Plotted From - sslowey

File - ...Section_D16Sec_Mainline



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:

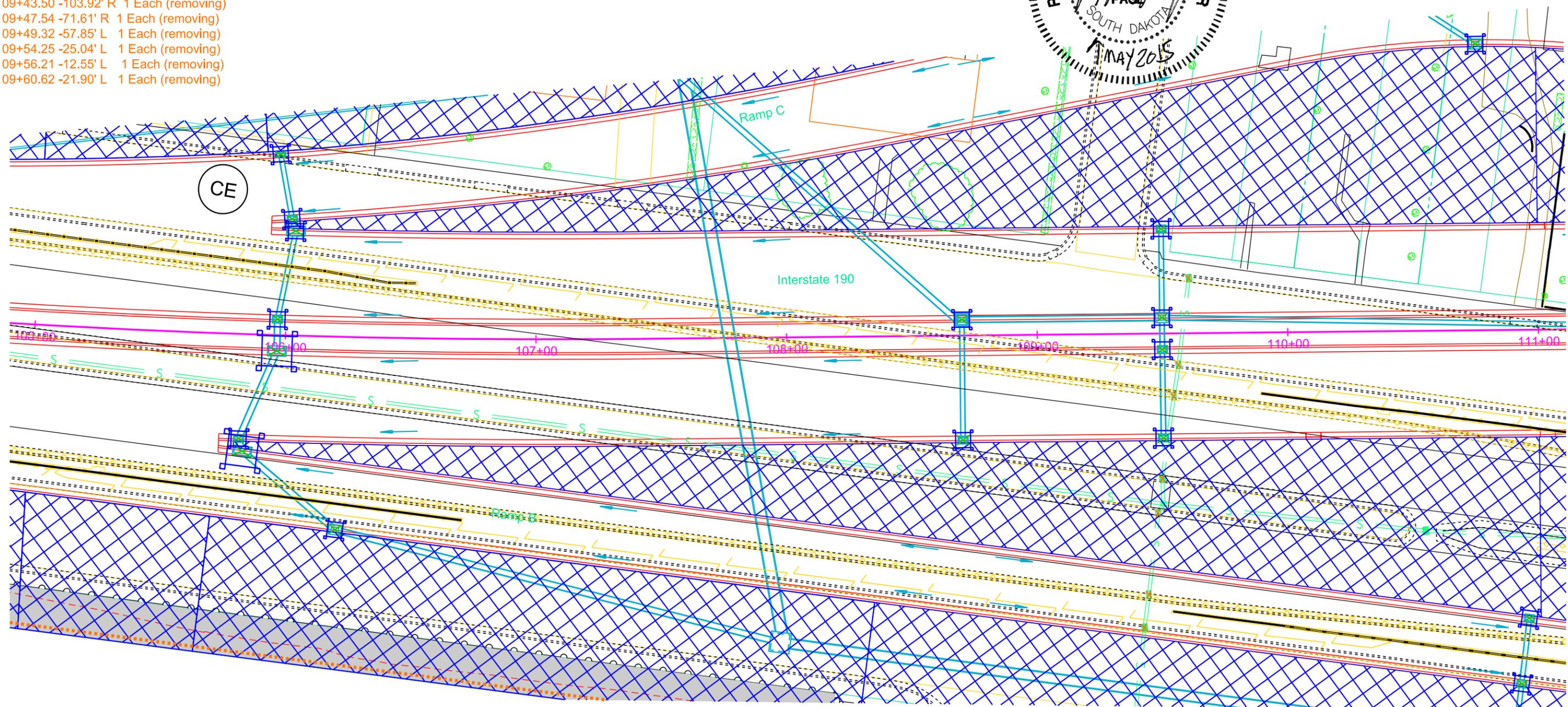
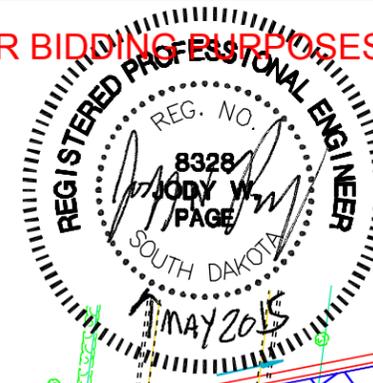
- 109+37.52 -152.48' R 1 Each (removing)
- 109+41.58 -117.08' R 1 Each (removing)
- 109+43.50 -103.92' R 1 Each (removing)
- 109+47.54 -71.61' R 1 Each (removing)
- 109+49.32 -57.85' L 1 Each (removing)
- 109+54.25 -25.04' L 1 Each (removing)
- 109+56.21 -12.55' L 1 Each (removing)
- 109+60.62 -21.90' L 1 Each (removing)

Erosion and Sediment Control Plan Phase 2 & 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM 1902(61)0	D17	D47

Plotting Date: 04-29-2015



Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
 109+49 - 6.33' L (IN #61) 21 Ft HFSF 31 Ft Sed. Filter Bags
 Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
 105+96 - 6.33' R (IN #65) 31 Ft HFSF 46 Ft Sed. Filter Bags
 106+03 - 41.67' L (IN #67) 31 Ft HFSF 46 Ft Sed. Filter Bags
 Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
 108+70 - 41.67' R (IN #14) 26 Ft HFSF 38 Ft Sed. Filter Bags
 109+50 - 41.67' R (IN #63) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 105+96 - 6.33' L (IN #66) 22 Ft HFSF 32 Ft Sed. Filter Bags
 105+82- 41.67' R (IN #100) 22 Ft HFSF 32 Ft Sed. Filter Bags
 109+49 - 41.67' L (IN #2) 22 Ft HFSF 32 Ft Sed. Filter Bags
 109+49 - 6.33' L (IN #61) 22 Ft HFSF 32 Ft Sed. Filter Bags
 109+49 - 6.33' R (IN #62) 22 Ft HFSF 32 Ft Sed. Filter Bags
 Apply Fiber Mulch at the following locations:
 105+00 R to 105+72 R Inslope 0.09 Ton
 105+00 L to 105+90 L Inslope and Pond 0.29 Ton
 105+80 R to 111+00 R Inslope 0.43 Ton
 105+99 L to 111+00 L Inslope 0.42 Ton

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 105+96 - 6.33' L (IN #66) 1 each
 105+82- 41.67' R (IN #100) 1 each
 109+49 - 41.67' L (IN #2) 1 each
 109+49 - 6.33' L (IN #61) 1 each
 109+49 - 6.33' R (IN #62) 1 each
 Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 109+49 - 6.33' L (IN #61) 1 each

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 108+70 - 41.67' R (IN #14) 1 each
 109+50 - 41.67' R (IN #63) 1 each
 Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 105+96 - 6.33' R (IN #65) 1 each
 106+03 - 41.67' L (IN #67) 1 each

Plot Scale - 1"=40'

Plotted From - sslowey

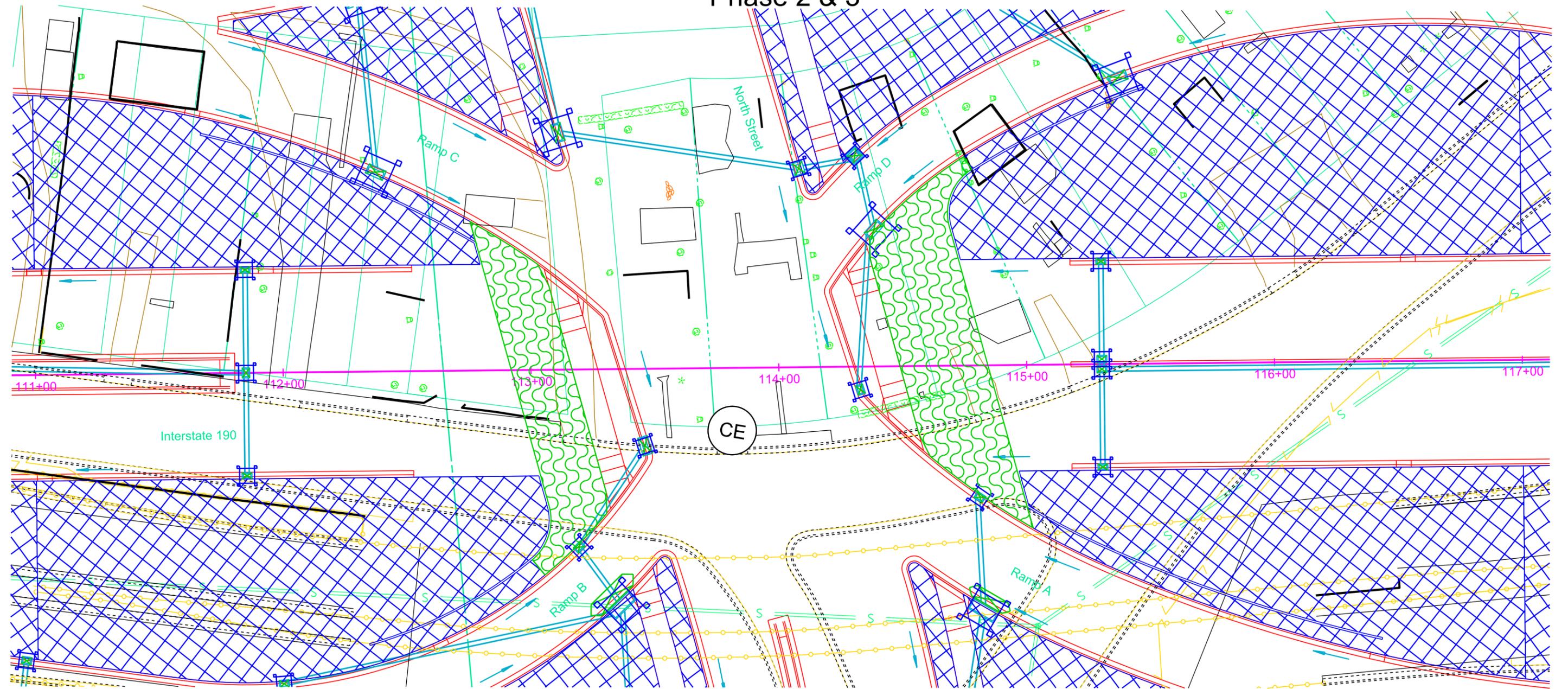
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Erosion and Sediment Control Plan

Phase 2 & 3

FOR BIDDING PURPOSES ONLY



Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
 111+85 - 41.42' R (IN #89) 21 Ft HFSF 31 Ft Sed. Filter Bags
 111+85 - 41.42' L (IN #87) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 111+85 - 41.42' R (IN #89) 1 each
 111+85 - 41.42' L (IN #87) 1 each

Apply Fiber Mulch at the following locations:
 111+00 R to 112+56 R Inslope 0.34 Ton
 111+00 L to 112+56 L Inslope 0.20 Ton
 115+20 R to 117+00 R Inslope 0.28 Ton
 115+20 L to 117+00 L Inslope 0.41 Ton

Install Interim Sediment Control at 3' x 4' Type C Drop Inlet before the placement of surfacing at the following locations:
 111+85 - 0.00' (IN #60) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Sediment Control at 3' x 4' Type C Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 111+85 - 0.00' (IN #60) 1 each

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
 115+30 - 41.42' L (IN #86) 21 Ft HFSF 31 Ft Sed. Filter Bags
 115+30 - 41.42' R (IN #90) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 115+30 - 41.42' L (IN #86) 1 each
 115+30 - 41.42' R (IN #90) 1 each

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 115+30 - 2.00' L (IN # 131) 22 Ft HFSF 32 Ft Sed. Filter Bags
 115+30 - 2.00' R (IN #29) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 115+30 - 2.00' L (IN # 131) 1 each
 115+30 - 2.00' R (IN #29) 1 each



Plot Scale - 1:40

Plotted From - sslowey

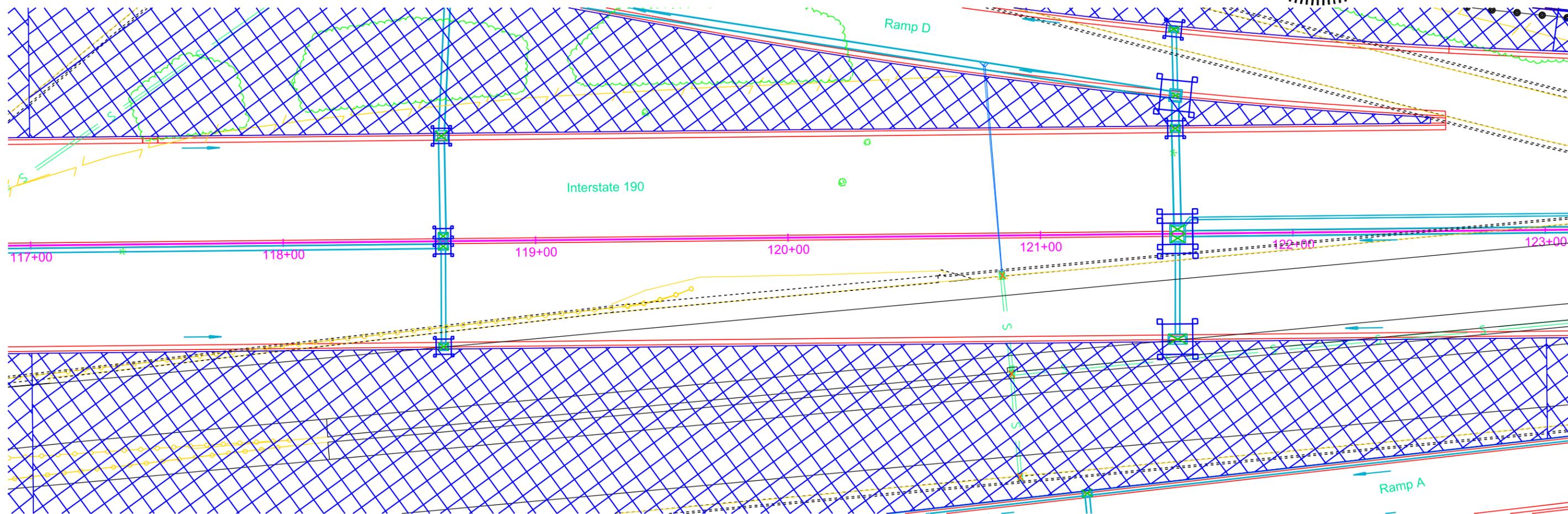
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Erosion and Sediment Control Plan Phase 2 & 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D19	TOTAL SHEETS D46
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Plotting Date: 04-29-2015



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
 120+84 -15.79' R 1 Each (removing)
 120+88 -54.75' R 1 Each (removing)
 120+90 -95.57' R 1 Each (removing)

Install Interim Sediment Control at 7'-2" X 6-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets before the placement of surfacing at the following locations:
 121+54 - 0.00' (IN #25) 38 Ft HFSF 56 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
 121+53 - 41.67' R (IN #117) 31 Ft HFSF 46 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 118+63 - 2.00' L (IN #151) 22 Ft HFSF 32 Ft Sed. Filter Bags
 118+63 - 41.67' R (IN #114) 22 Ft HFSF 32 Ft Sed. Filter Bags
 118+63 - 2.00' R (IN #26) 22 Ft HFSF 32 Ft Sed. Filter Bags
 121+53 - 41.67' L (IN #118) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
 118+63 - 41.67' L (IN #101) 26 Ft HFSF 38 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
 117+00 R to 123+00 R Inslope 0.96 Ton
 117+00 L to 122+54 L Inslope 0.51 Ton

Install Sediment Control at 7'-2" X 6-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets with Frame and Grate after the placement of surfacing at the following locations:
 121+54 - 0.00' (IN #25) 1 each

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 118+63 - 41.67' L (IN #101) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 121+53 - 41.67' R (IN #117) 1 each

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 118+63 - 2.00' L (IN #151) 1 each
 118+63 - 41.67' R (IN #114) 1 each
 118+63 - 2.00' R (IN #26) 1 each
 121+53 - 41.67' L (IN #118) 1 each

Plot Scale - 1:40

sslowey

Plotted From -

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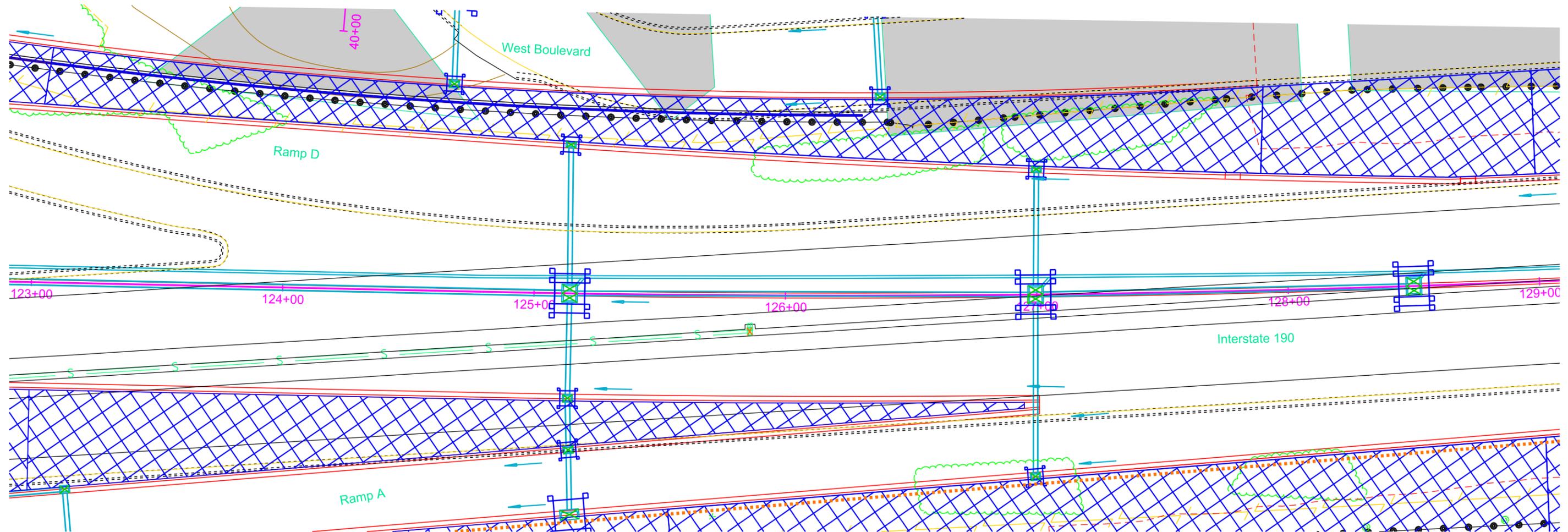


Erosion and Sediment Control Plan Phase 2 & 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D20	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
125+85 - 14.32' L 1 Each (removing)

Install Temporary Sediment Barriers before earth moving activities at the following locations:
127+02 to 129+00 R 203 Ft

Apply Fiber Mulch at the following locations:
123+00 R to 126+94 R Inslope 0.18 Ton
125+53 R to 129+00 R Inslope 0.33 Ton
127+90 L to 129+00 L Inslope 0.10 Ton

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
125+13 - 59.02' L (IN #123) 21 Ft HFSF 31 Ft Sed. Filter Bags
127+00 - 49.70' L (IN #126) 21 Ft HFSF 31 Ft Sed. Filter Bags

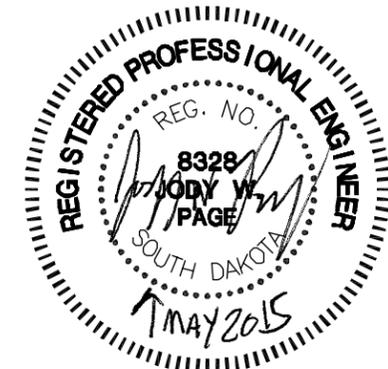
Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
125+13 - 41.67' R (IN #124) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets before the placement of surfacing at the following locations:
125+14 - 0.00' (IN #24) 38 Ft HFSF 56 Ft Sed. Filter Bags
126+99 - 0.00' (IN #23) 38 Ft HFSF 56 Ft Sed. Filter Bags
128+50 - 0.00' (IN #128) 38 Ft HFSF 56 Ft Sed. Filter Bags

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
125+13 - 59.02' L (IN #123) 1 each
127+00 - 49.70' L (IN #126) 1 each

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
125+13 - 41.67' R (IN #124) 1 each

Install Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets with Frame and Grate after the placement of surfacing at the following locations:
125+14 - 0.00' (IN #24) 1 each
126+99 - 0.00' (IN #23) 1 each
128+50 - 0.00' (IN #128) 1 each



Plot Scale - 1:40

Plotted From - sslowey

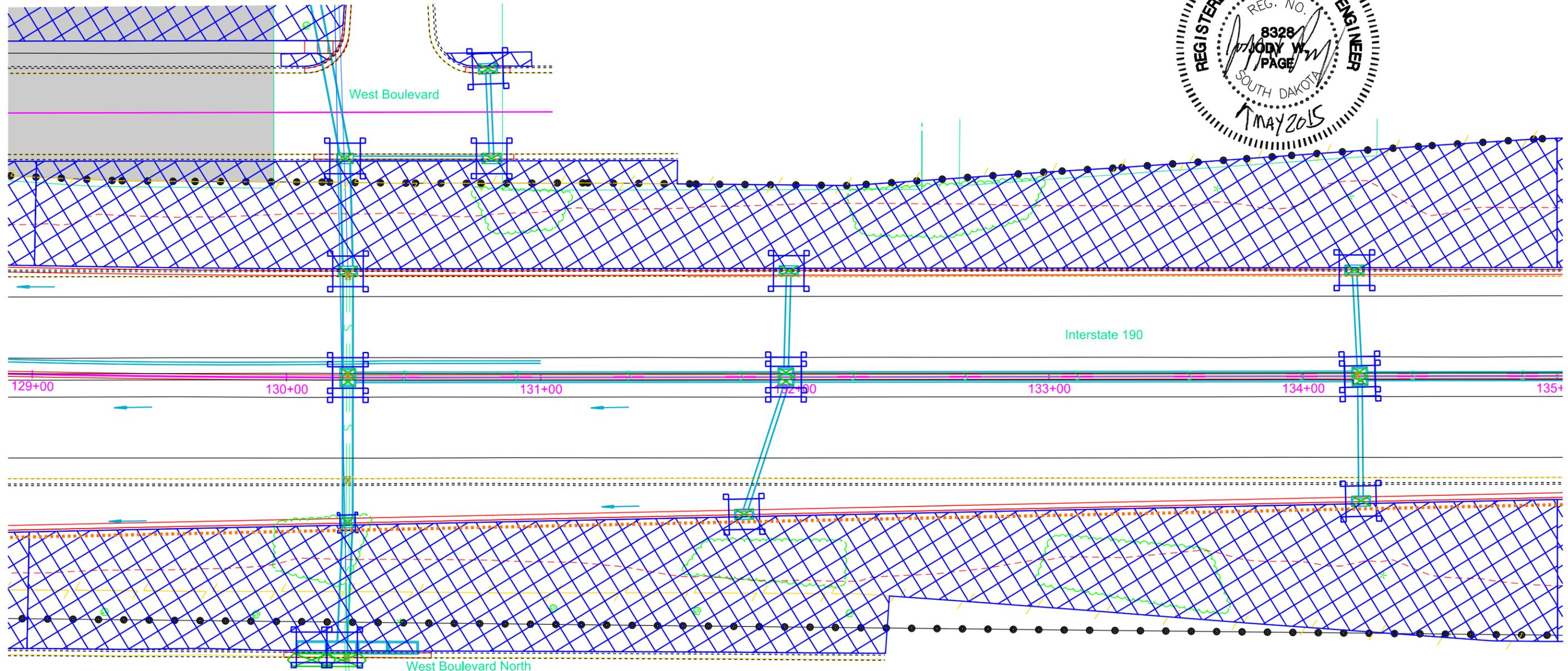
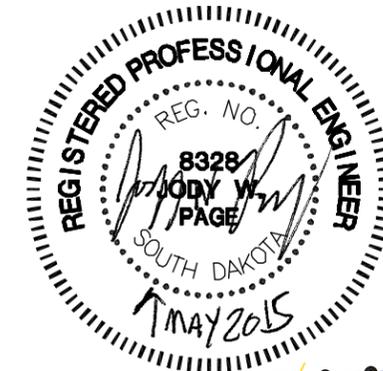
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Erosion and Sediment Control Plan Phase 2 & 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D21	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Plot Scale - 1:38,9999
sslowey
Plotted From -

File - ...Section_D129ec_Mainline.dgn

Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
 130+23 - 110.36' R 1 Each (removing)
 130+24 - 39.89' L 1 Each (removing)
 130+24 - 40.31' R 1 Each (removing)
 130+24 - 0.85' L 1 Each (removing)
 130+26 - 147.24' R 1 Each (removing)
 Install Temporary Sediment Barriers before earth moving activities at the following locations:
 129+00 to 135+00 R 600 Ft

Apply Fiber Mulch at the following locations:
 129+00 R to 135+00 R Inslope 0.66 Ton
 129+00 L to 135+00 L Inslope 0.56 Ton

Install Interim Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets before the placement of surfacing at the following locations:
 130+24 - 0.00' (IN #19) 38 Ft HFSF 56 Ft Sed. Filter Bags
 131+96 - 0.01' L (IN #11) 38 Ft HFSF 56 Ft Sed. Filter Bags
 134+22 - 0.00' L (IN #10) 38 Ft HFSF 56 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations:
 130+22 - 106.02' R (IN #16) 42 Ft HFSF 62 Ft Sed. Filter Bags
 130+10 - 105.99' R (IN #17) 42 Ft HFSF 62 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
 130+24 - 57.00' R (IN #18) 26 Ft HFSF 38 Ft Sed. Filter Bags
 Install Interim Sediment Control at 3' x 5'-6" Type B Drop Inlet before the placement of surfacing at the following locations:
 130+22 - 86.03' L (IN #21) 28 Ft HFSF 42 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
 130+24 - 41.67' L (IN #20) 31 Ft HFSF 46 Ft Sed. Filter Bags
 130+79 - 121.24' L (IN #129) 31 Ft HFSF 46 Ft Sed. Filter Bags
 130+80 - 85.99' L (IN #22) 31 Ft HFSF 46 Ft Sed. Filter Bags
 131+97 - 41.67' L (IN #130) 31 Ft HFSF 46 Ft Sed. Filter Bags
 131+80 - 53.86' R (IN #139) 31 Ft HFSF 46 Ft Sed. Filter Bags
 134+22 - 49.01' R (IN #132) 31 Ft HFSF 46 Ft Sed. Filter Bags
 134+20 - 41.67' L (IN #138) 31 Ft HFSF 46 Ft Sed. Filter Bags

Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:
 130+22 - 106.02' R (IN #16) 12 ft
 130+10 - 105.99' R (IN #17) 12 ft
 Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 130+24 - 57.00' R (IN #18) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

130+24 - 41.67' L (IN #20) 1 each
 130+79 - 121.24' L (IN #129) 1 each
 130+80 - 85.99' L (IN #22) 1 each
 131+97 - 41.67' L (IN #130) 1 each
 131+80 - 53.86' R (IN #139) 1 each
 134+22 - 49.01' R (IN #132) 1 each
 134+20 - 41.67' L (IN #138) 1 each
 Install Sediment Control at 3' x 5'-6" Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 130+22 - 86.03' L (IN #21) 1 each
 Install Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Inlets with Frame and Grate after the placement of surfacing at the following locations:
 130+24 - 0.00' (IN #19) 1 each
 131+96 - 0.01' L (IN #11) 1 each
 134+22 - 0.00' L (IN #10) 1 each



Erosion and Sediment Control Plan Phase 2 & 3

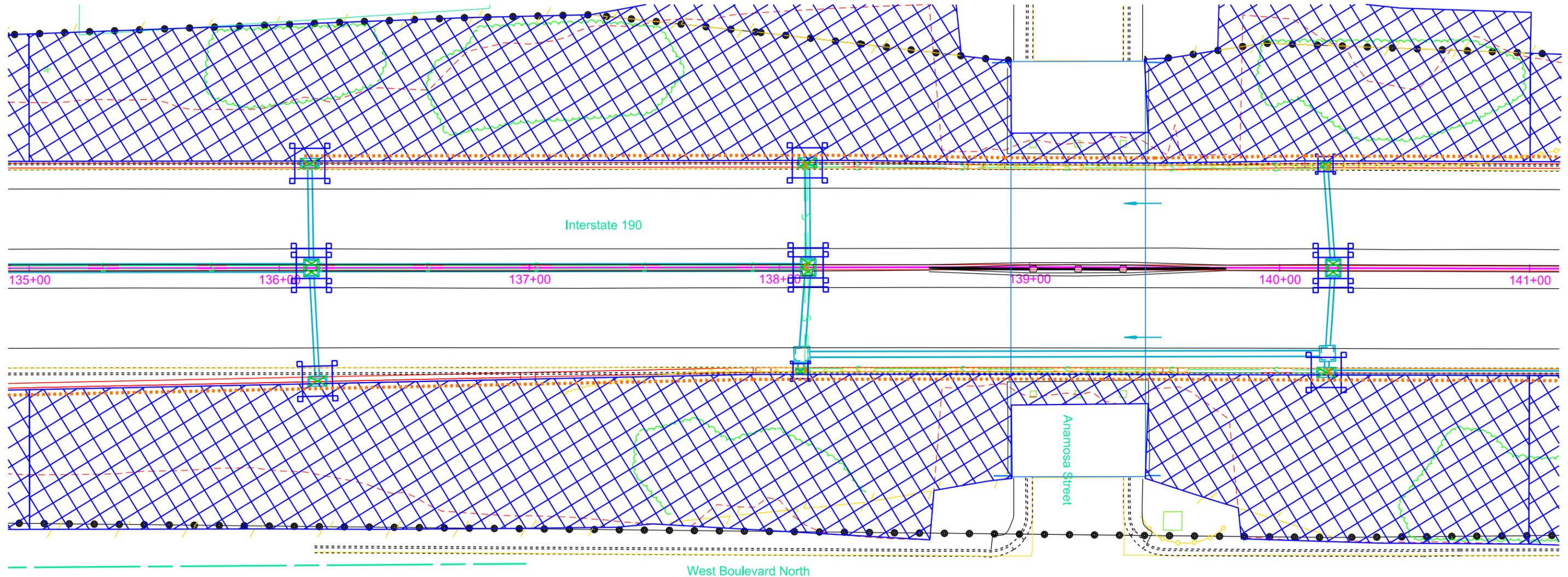
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D22	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Plot Scale - 1:40



Install Temporary Sediment Barriers before earth moving activities at the following locations:
135+00 to 141+00 R 600 Ft
136+10 to 141+00 L 490 Ft

Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
134+21 - 0.41' L 1 Each (removing)
138+10 - 40.95' R 1 Each (removing)
138+10 - 0.14' L 1 Each (removing)
138+10 - 40.60' L 1 Each (removing)
140+19 - 40.20' L 1 Each (removing)
140+19 - 41.35' R 1 Each (removing)

Install Interim Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets before the placement of surfacing at the following locations:
136+12 - 0.00' L (IN #150) 38 Ft HFSF 56 Ft Sed. Filter Bags
138+11 - 0.00' L (IN #9) 38 Ft HFSF 56 Ft Sed. Filter Bags
140+21 - 0.02' L (IN #6) 38 Ft HFSF 56 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
136+15 - 45.16' R (IN #134) 31 Ft HFSF 46 Ft Sed. Filter Bags
136+12 - 41.67' L (IN #135) 31 Ft HFSF 46 Ft Sed. Filter Bags
138+11 - 41.67' L (IN #8) 31 Ft HFSF 46 Ft Sed. Filter Bags
140+18 - 41.67' R (IN #12) 31 Ft HFSF 46 Ft Sed. Filter Bags

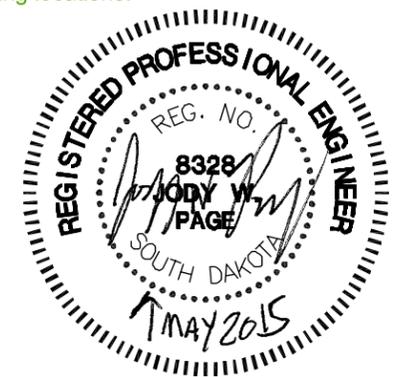
Apply Fiber Mulch at the following locations:
135+00 R to 141+00 R Inslope 0.76 Ton
135+00 L to 141+00 L Inslope 0.76 Ton

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
138+08 - 41.42' R (IN #13) 21 Ft HFSF 31 Ft Sed. Filter Bags
140+18 - 41.42' L (IN #7) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets with Frame and Grate after the placement of surfacing at the following locations:
136+12 - 0.00' L (IN #150) 1 each
138+11 - 0.00' L (IN #9) 1 each
140+21 - 0.02' L (IN #6) 1 each

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
138+08 - 41.42' R (IN #13) 1 each
140+18 - 41.42' L (IN #7) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
136+15 - 45.16' R (IN #134) 1 each
136+12 - 41.67' L (IN #135) 1 each
138+11 - 41.67' L (IN #8) 1 each
140+18 - 41.67' R (IN #12) 1 each



Plotted From - sslowey

File - ...Section_D1135ec_Mainline.dgn

Erosion and Sediment Control Plan Phase 2 & 3

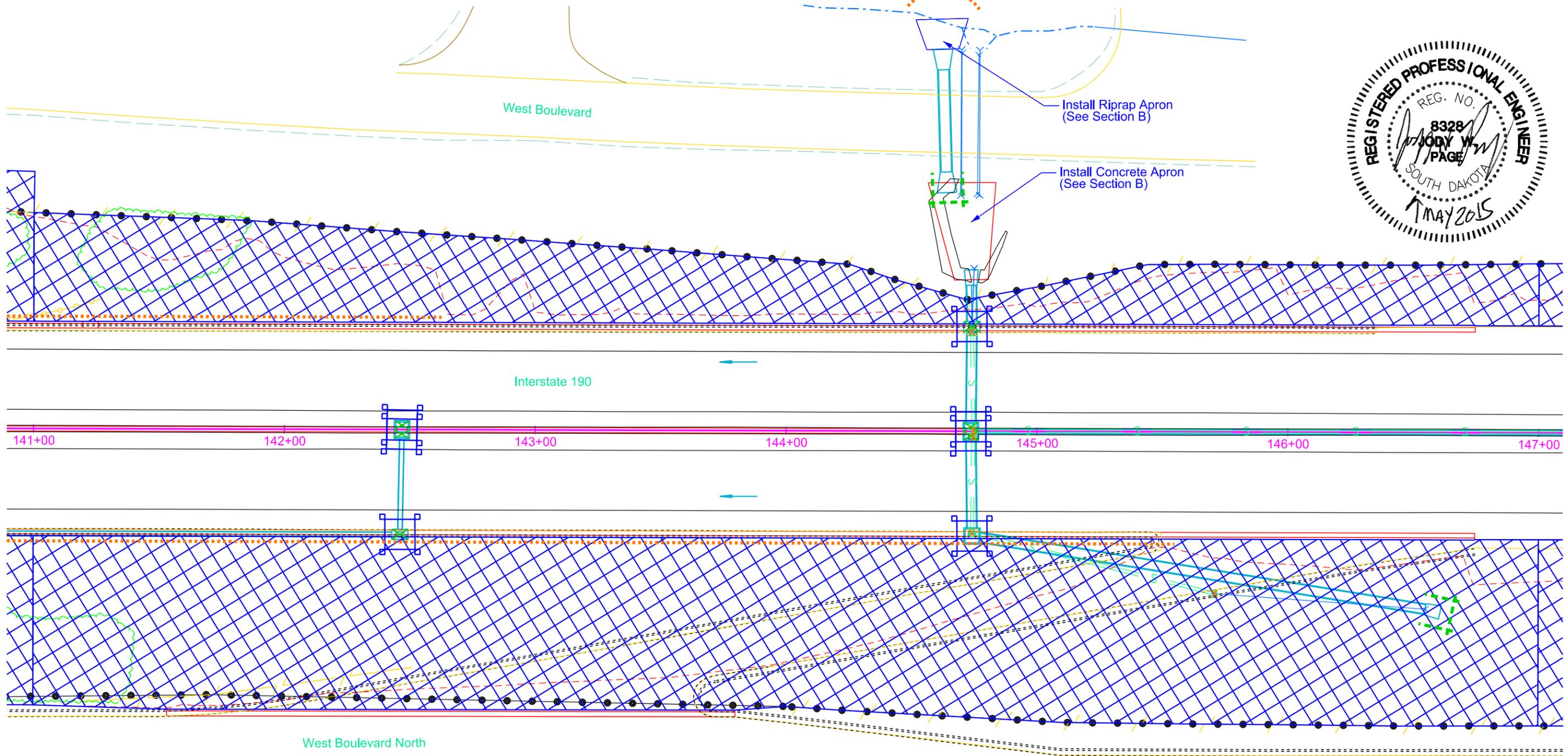
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D23	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Plot Scale - 1:38.9999



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
 144+74 - 40.43' R 1 Each (removing)
 144+74 - 2.28' R 1 Each (removing)
 144+74 - 0.34' L 1 Each (removing)
 144+73 - 39.46' L 1 Each (removing)
 145+71 - 64.34' R 1 Each (removing)
 Install Interim Sediment Control at 5.5' x 5.5' Type B Drop Inlet before the placement of surfacing at the following locations:
 144+74 - 41.67' R (IN #39) 34 Ft HFSF 50 Ft Sed. Filter Bags

Install Temporary Sediment Barriers before earth moving activities at the following locations:
 141+00 to 145+54 R 455 Ft
 141+00 to 142+62 L 163 Ft
 144+48 to 144+76 L 64 Ft
 Install Interim Sediment Control at 3' x 5'-6" Type B Drop Inlet before the placement of surfacing at the following locations:
 142+46 - 41.67' R (IN #136) 28 Ft HFSF 42 Ft Sed. Filter Bags
 144+74- 41.67' L (IN #4) 28 Ft HFSF 42 Ft Sed. Filter Bags

Install Interim Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets before the placement of surfacing at the following locations:
 142+46 - 0.00' (IN #144) 38 Ft HFSF 56 Ft Sed. Filter Bags
 144+73 - 0.00' (IN #1) 38 Ft HFSF 56 Ft Sed. Filter Bags
 Apply Fiber Mulch at the following locations:
 141+00 R to 147+00 R Inslope 0.97 Ton
 141+00 L to 147+00 L Inslope 0.39 Ton
 Install High Flow Silt Fence at the following locations:
 144+65 L Inlet end of pipe 36 Ft
 146+54 R Inlet end of pipe 36 Ft

Install Sediment Control at 3' x 5'-6" Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 142+46 - 41.67' R (IN #136) 1 each
 144+74 - 41.67' L (IN #4) 1 each
 Install Sediment Control at 5.5' x 5.5' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 144+74 - 41.67' R (IN #39) 1 each

Install Sediment Control at 7'-2" X 6'-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets with Frame and Grate after the placement of surfacing at the following locations:
 142+46 - 0.00' (IN #144) 1 each
 144+73 - 0.00' (IN #1) 1 each

Plotted From - sslowey

File - ...Section_Div141rec_Mainline.dgn



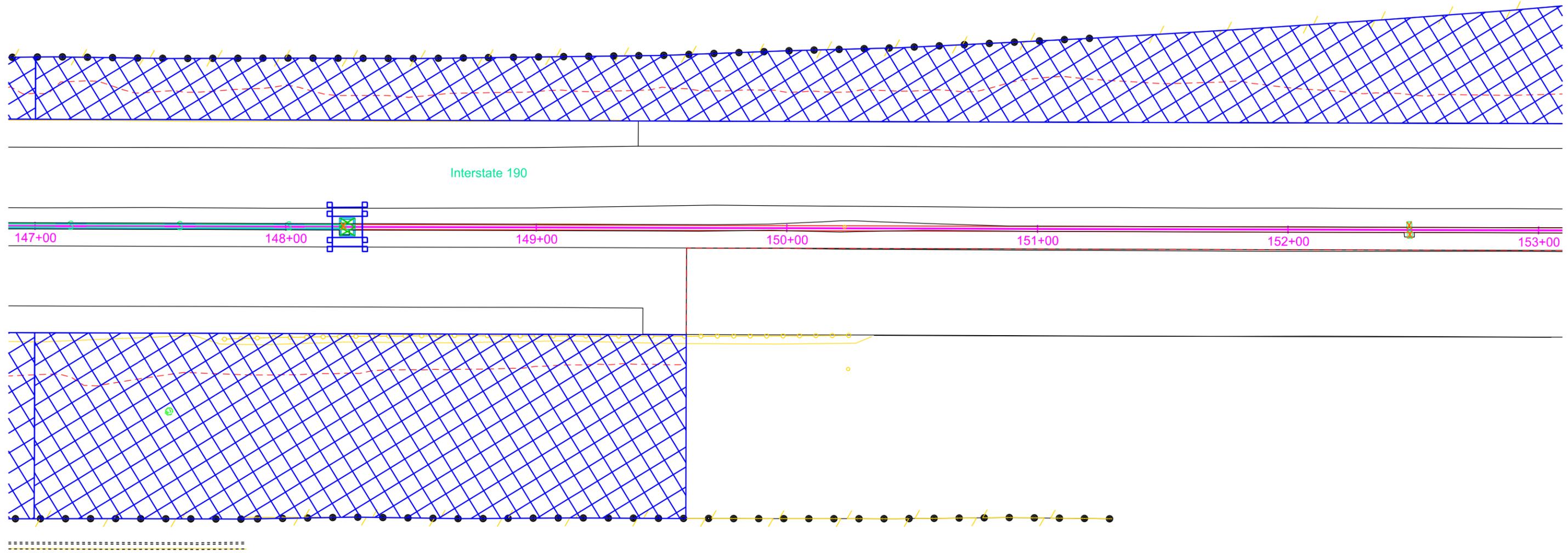
Erosion and Sediment Control Plan Phase 2 & 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D24	TOTAL SHEETS D47
Plotting Date: 04-29-2015			



Plot Scale - 1"=40'



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
 148+23 - 0.28' L 1 Each (retaining)
 152+48 - 1.85' L 1 Each (retaining)
 152+48 - 1.81' R 1 Each (retaining)

Install Interim Sediment Control at 7'-2" X 6-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets before the placement of surfacing at the following locations:
 148+24 - 0.00' (IN #137) 38 Ft HFSF
 56 Ft Sed. Filter Bags

Install Sediment Control at 7'-2" X 6-2" Concrete Barrier Drop Inlet and 2 Barrier Drop Inlets with Frame and Grate after the placement of surfacing at the following locations:
 148+24 - 0.00' (IN #137)

Apply Fiber Mulch at the following locations:
 147+00 R to 149+60 R Inslope 0.44 Ton
 147+00 L to 154+00 L Inslope 0.54 Ton



Plotted From - sslowey

File - ...Section_D147ec_Mainline.dgn

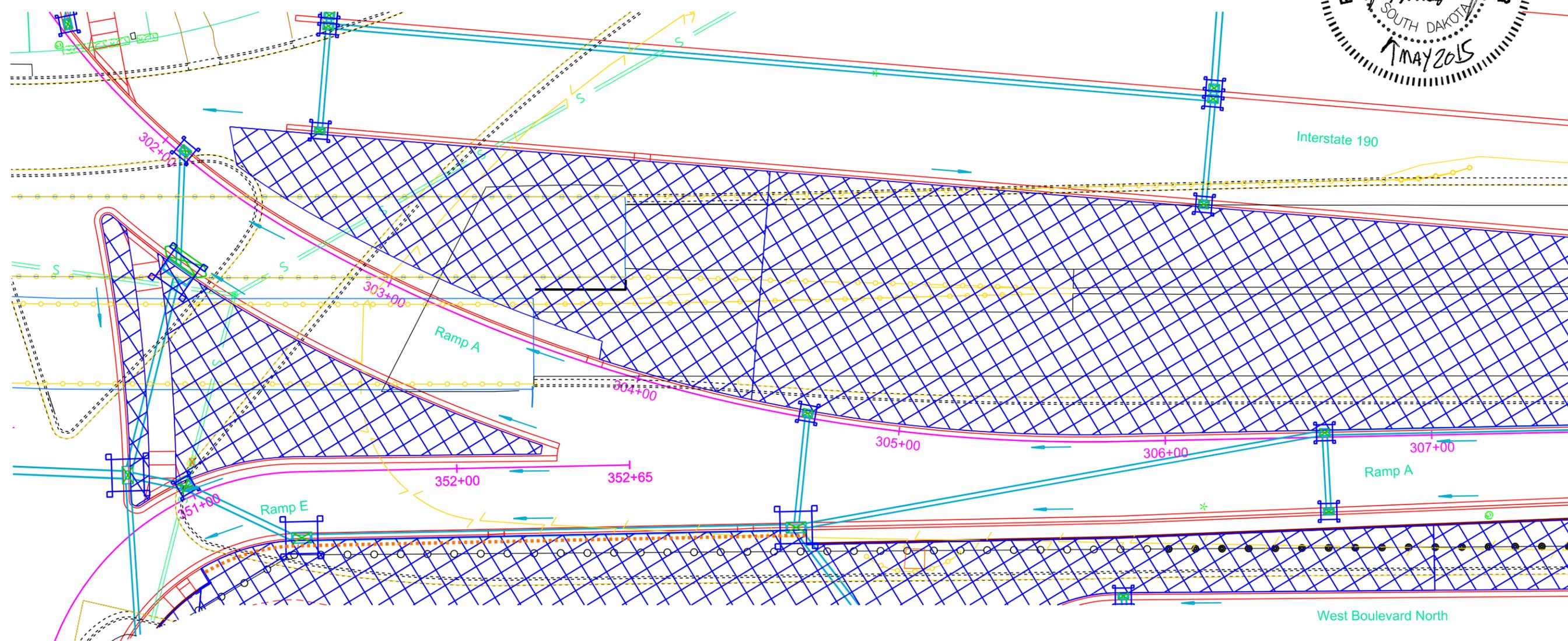
Erosion and Sediment Control Plan

Ramp A - Phase 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D25	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_D300ec_Ramp A.dgn

Install Temporary Sediment Barriers before earth moving activities at the following locations:
302+87 to 304+71 R 227 Ft

Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
351+04 - 11.58' L 1 Each (removing)

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
350+98 - 4.41' L (IN #111) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations:
302+32 - 35.96' R (IN #140) 42 Ft HFSF 62 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
302+08 - 1.67' L (IN #141) 22 Ft HFSF 32 Ft Sed. Filter Bags
304+65 - 1.67' L (IN #15) 22 Ft HFSF 32 Ft Sed. Filter Bags
306+59 - 1.67' L (IN #45) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
306+60 - 27.84' R (IN #50) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
304+67 - 41.15' R (IN #51) 31 Ft HFSF 46 Ft Sed. Filter Bags
351+41 - 24.67' R (IN #52) 31 Ft HFSF 46 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
302+01 R to 303+73 R Splitter Island 0.13 Ton
302+85 R to 307+00 R Inslope 0.60 Ton

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
302+08 - 1.67' L (IN #141) 1 each
304+65 - 1.67' L (IN #15) 1 each
306+59 - 1.67' L (IN #45) 1 each

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
350+98 - 4.41' L (IN #111) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
304+67 - 41.15' R (IN #51) 1 each
351+41 - 24.67' R (IN #52) 1 each

Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:
302+32 - 35.96' R (IN #140) 12 ft

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
306+60 - 27.84' R (IN #50) 1 each



Erosion and Sediment Control Plan

Ramp A - Phase 3

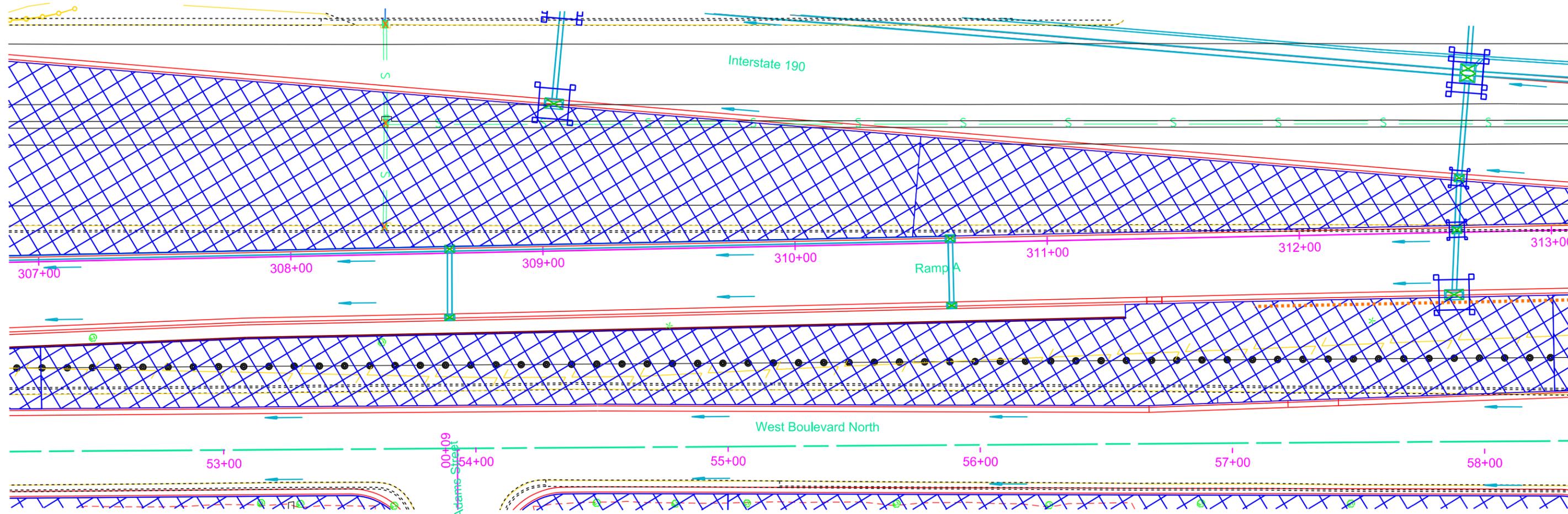
FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D26	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Plot Scale - 1:40



Install Temporary Sediment Barriers before earth moving activities at the following locations:
311+81 to 313+00 R 118 Ft

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
308+62 - 25.42' R (IN #49) 21 Ft HFSF 31 Ft Sed. Filter Bags
310+61 - 24.82' R (IN #99) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
308+63 - 1.67' L (IN #96) 22 Ft HFSF 32 Ft Sed. Filter Bags
312+62 - 1.00' L (IN #133) 22 Ft HFSF 32 Ft Sed. Filter Bags
310+61 - 1.67' L (IN #48) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
312+60 - 24.67' R (IN #125) 31 Ft HFSF 46 Ft Sed. Filter Bags

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
308+62 - 25.42' R (IN #49) 1 each
310+61 - 24.82' R (IN #99) 1 each

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
308+63 - 1.67' L (IN #96) 1 each
312+62 - 1.00' L (IN #133) 1 each
310+61 - 1.67' L (IN #48) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
312+60 - 24.67' R (IN #125) 1 each

Apply Fiber Mulch at the following locations:
307+00 R to 313+00 R Inslope 0.44 Ton



Plotted From - sslowey

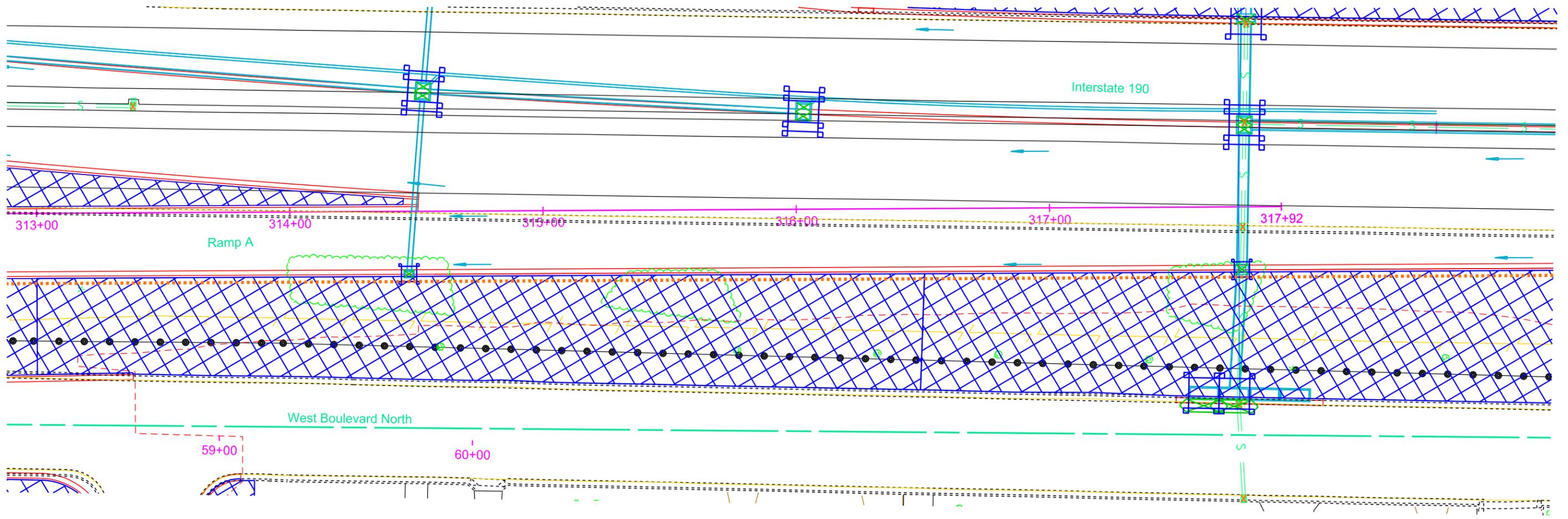
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Erosion and Sediment Control Plan

Ramp A - Phase 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D27	TOTAL SHEETS D47
Plotting Date: 04-29-2015			



Install Temporary Sediment Barriers before earth moving activities at the following locations:
313+00 to 314+50 R 151 Ft

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
126+98 - 72.21' R (IN #127) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
126+98 - 72.21' R (IN #127) 1 each



Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_D1313sec_RampA.dgn

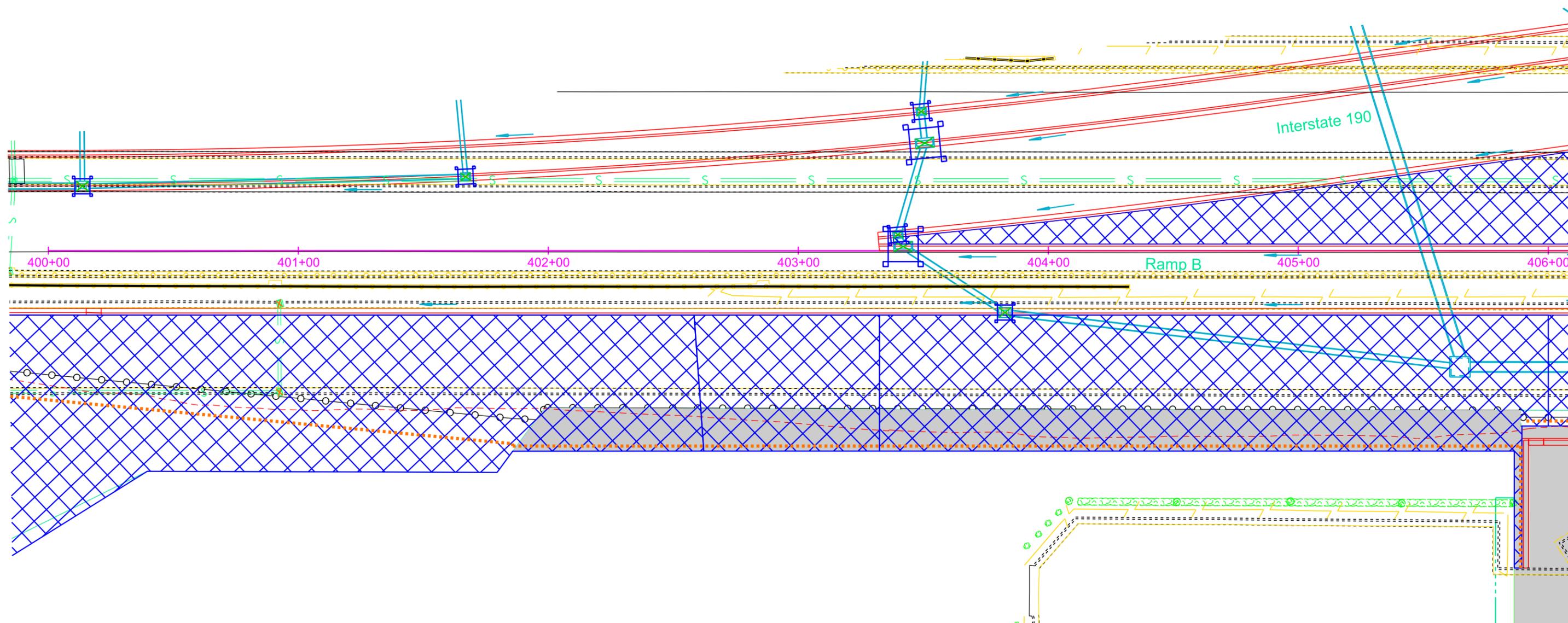
Erosion and Sediment Control Plan

Ramp B - Phase 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D28	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Temporary Sediment Barriers before earth moving activities at the following locations:
403+32 to 406+00 R 305 Ft

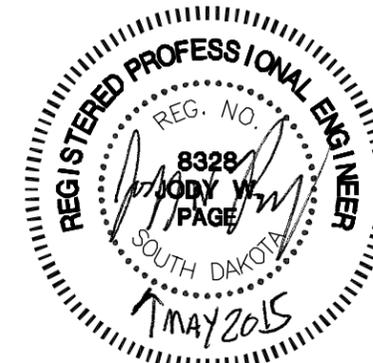
Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
403+41 - 1.67' L (IN #72) 31 Ft HFSF 46 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
403+82 - 24.67' R (IN #3) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
403+41 - 1.67' L (IN #72) 1 each

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
403+82 - 24.67' R (IN #3) 1 each

Apply Fiber Mulch at the following locations:
403+32 R to 406+00 R Inslope 0.33 Ton



Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_Div40dec_Ramp B.dgn

Erosion and Sediment Control Plan

Ramp B - Phase 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D29	TOTAL SHEETS D47
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Plotting Date: 04-29-2015

Install Temporary Sediment Barriers before earth moving activities at the following locations:
406+00 to 410+49 R 530 Ft

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations:
410+96 - 26.96' R (IN #64) 42 Ft HFSF 62 Ft Sed. Filter Bags
451+09 - 26.96' R (IN #57) 42 Ft HFSF 62 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
451+31 - 4.92' L (IN #55) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
408+59 - 1.67' L (IN #104) 22 Ft HFSF 32 Ft Sed. Filter Bags
408+60 - 24.67' R (IN #70) 22 Ft HFSF 32 Ft Sed. Filter Bags
409+63 - 29.11' R (IN #71) 22 Ft HFSF 32 Ft Sed. Filter Bags
409+64 - 1.67' L (IN #105) 22 Ft HFSF 32 Ft Sed. Filter Bags
410+99 - 1.67' L (IN #106) 22 Ft HFSF 32 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
406+00 R to 410+62 R Inslope 0.55 Ton
410+37 R to 411+19 R Splitter Island 0.06 Ton

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
451+31 - 4.92' L (IN #55) 1 each
Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:
410+96 - 26.96' R (IN #64) 12 ft
451+09 - 26.96' R (IN #57) 12 ft
Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
408+59 - 1.67' L (IN #104) 1 each
408+60 - 24.67' R (IN #70) 1 each
409+63 - 29.11' R (IN #71) 1 each
409+64 - 1.67' L (IN #105) 1 each
410+99 - 1.67' L (IN #106) 1 each



Plotted From: sslowey Plot Scale: 1"=40' File: ...Section_Div406ec_Ramp B.dgn

Erosion and Sediment Control Plan

Ramp C - Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D30	TOTAL SHEETS D47
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Plotting Date: 04-29-2015

Install Temporary Sediment Barriers before earth moving activities at the following locations:
603+43 to 606+00 L 208 Ft

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
603+48 - 24.42' L (IN #69) 21 Ft HFSF 31 Ft Sed. Filter Bags

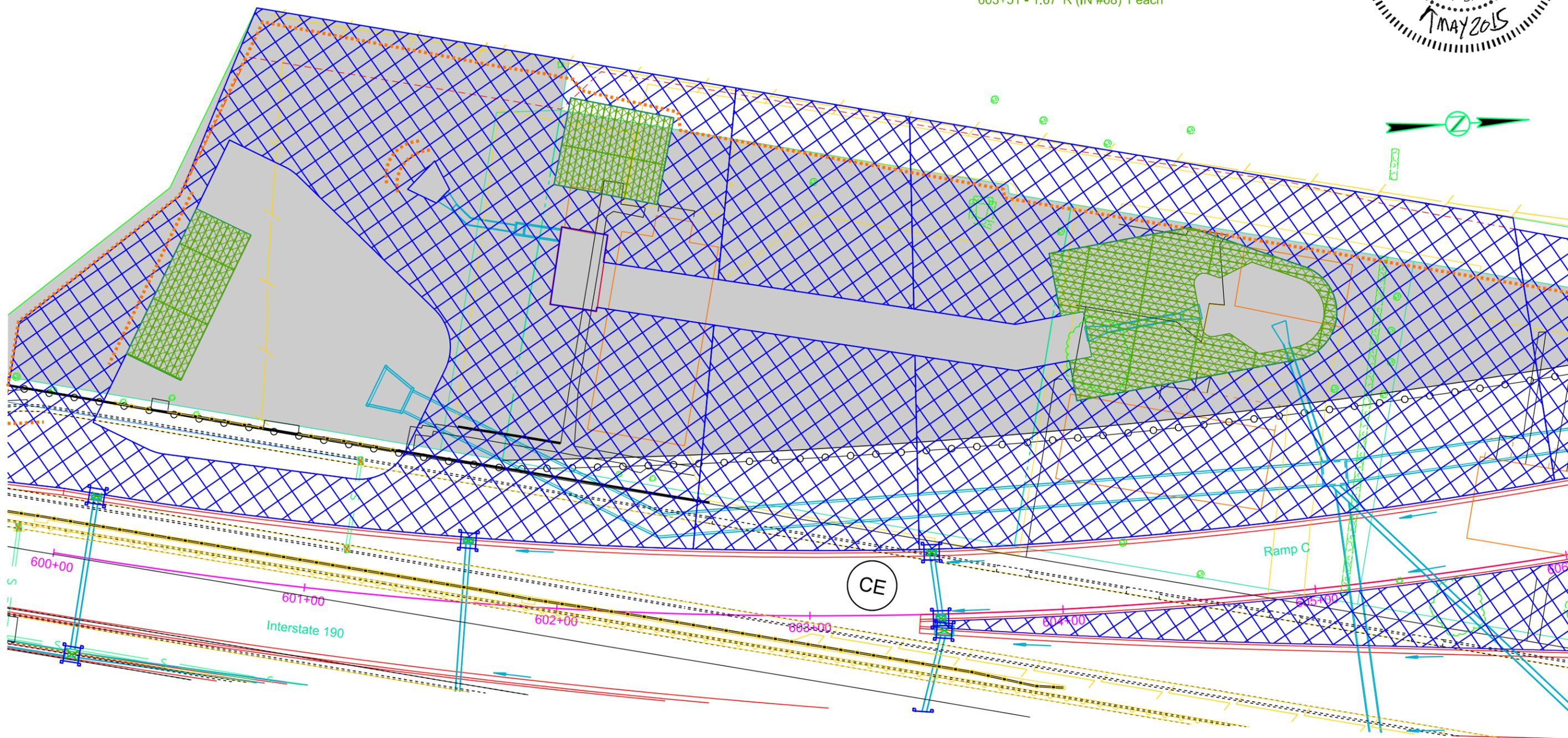
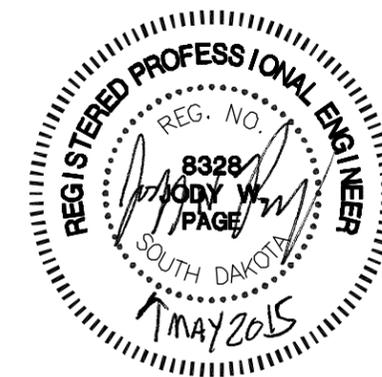
Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
603+51 - 1.67' R (IN #68) 22 Ft HFSF 32 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
603+43 L to 606+00.00 L Inslope 0.63 Ton

Install Turf Reinforcement Mat in the pond at the following locations:
600+16 L to 600+60 L 170 SqYd
601+88 L to 602+39 L 161 SqYd
604+03 L to 605+21 L 447 SqYd

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
603+48 - 24.42' L (IN #69) 1 each

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
603+51 - 1.67' R (IN #68) 1 each



Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_D1600ec_Ramp C.dgn

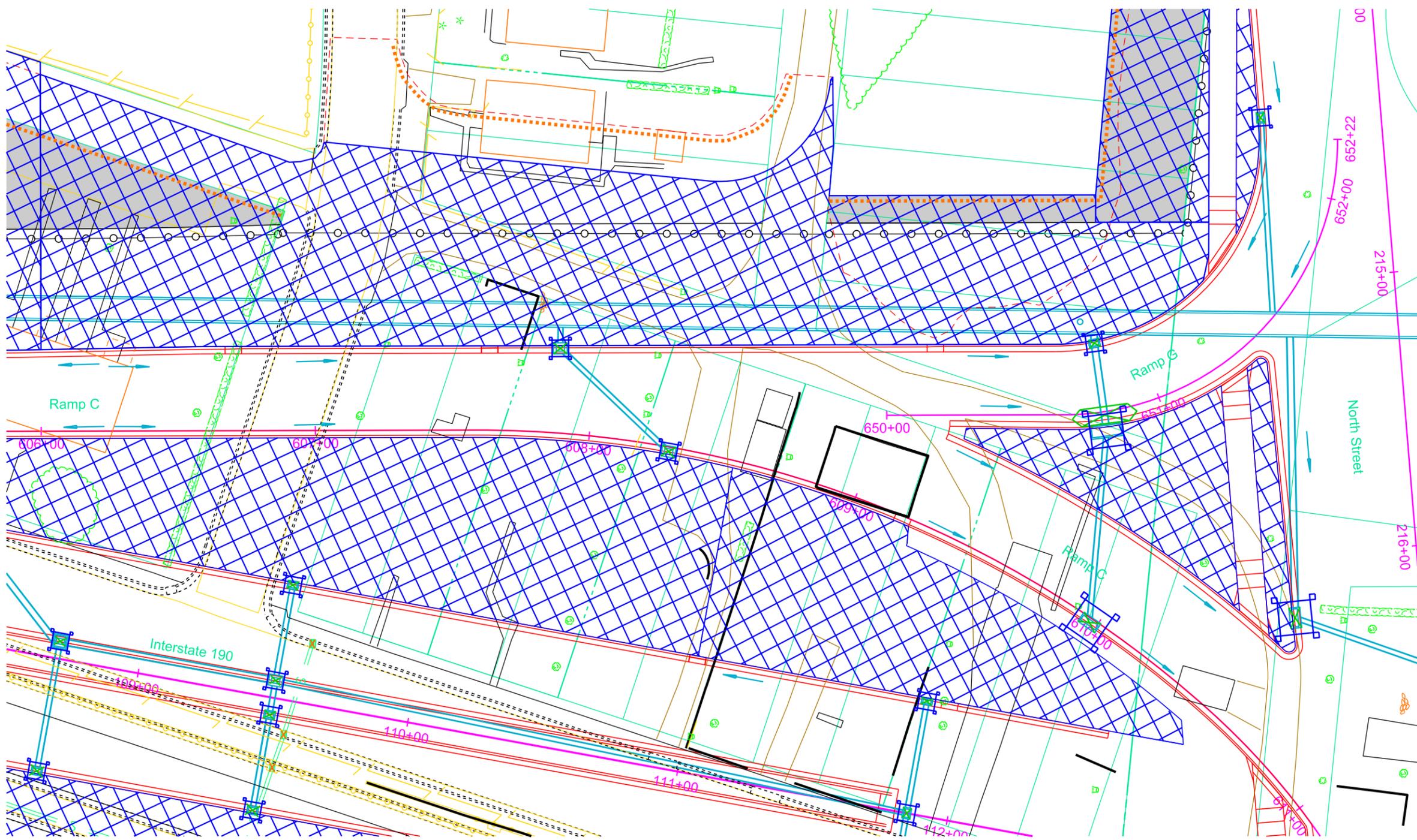


Erosion and Sediment Control Plan Ramp C - Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D31	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



- Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
607+87 - 30.81' L (IN #102) 1 each
608+29 - 1.67' R (IN #103) 1 each
- Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
609+97 - 1.67' R (IN #59) 1 each
- Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
650+79 - 25.17' L (IN #88) 1 each
- Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:
650+79 - 6.92' R (IN #58) 12 ft

Install Temporary Sediment Barriers before earth moving activities at the following locations:
606+00 to 606+88 L 93 Ft
607+28 to 608+44 L 172 Ft
608+62 to 609+34 L 99 Ft

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
607+87 - 30.81' L (IN #102) 26 Ft HFSF 38 Ft Sed. Filter Bags
608+29 - 1.67' R (IN #103) 26 Ft HFSF 38 Ft Sed. Filter Bags
Apply Fiber Mulch at the following locations:
606+00 L to 609+70 L Inslope 0.63 Ton
609+26 L to 610+58 L Splitter Island 0.10 Ton

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
609+97 - 1.67' R (IN #59) 31 Ft HFSF 46 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
650+79 - 25.17' L (IN #88) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations:
650+79 - 6.92' R (IN #58) 42 Ft HFSF 62 Ft Sed. Filter Bags



Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_D1606ec_Ramp C.dgn



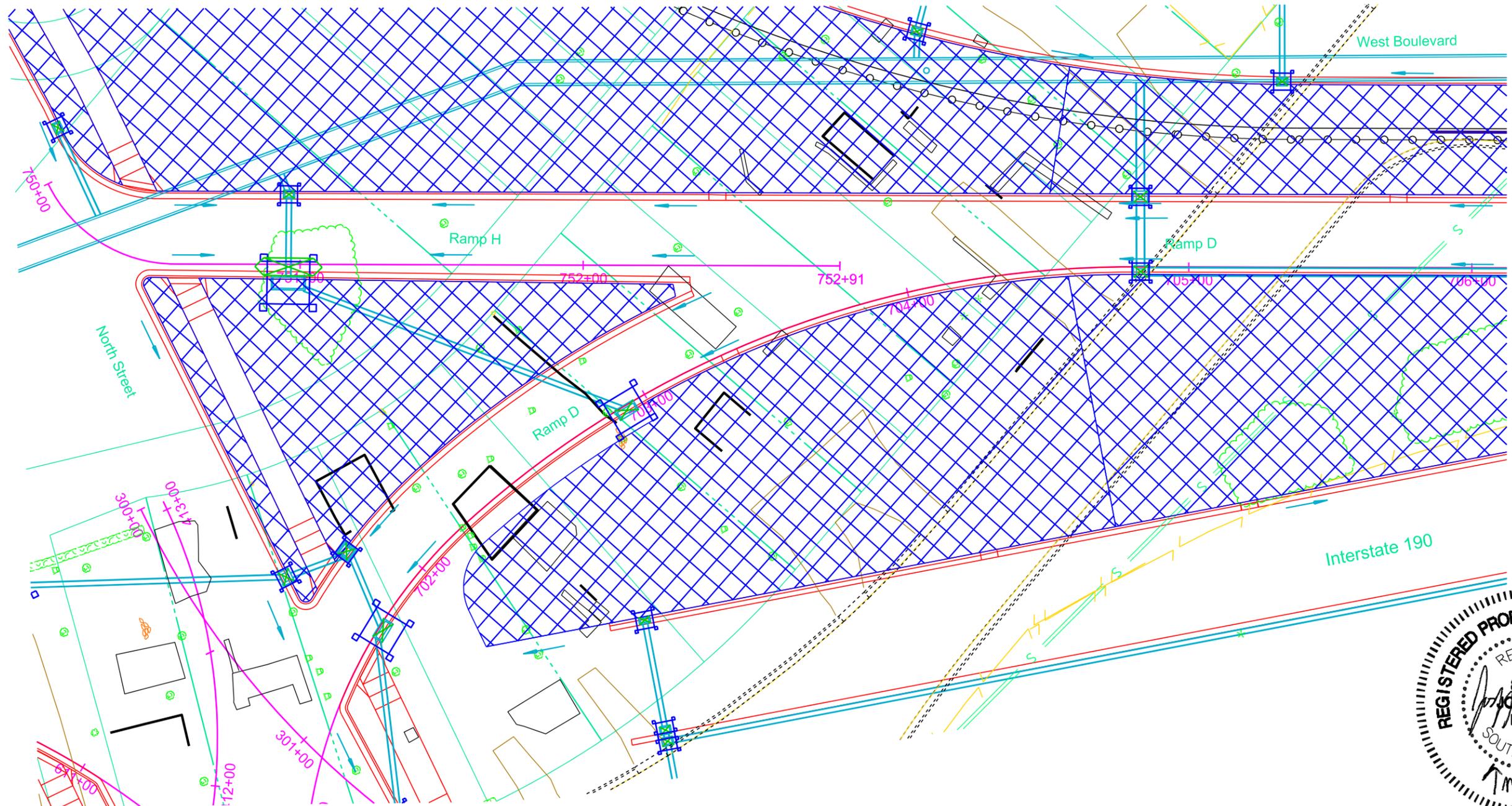
Erosion and Sediment Control Plan

Ramp D - Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D32	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
 701+74 - 1.67' R (IN #43) 31 Ft HFSF 46 Ft Sed. Filter Bags
 702+91 - 1.67' R (IN #142) 31 Ft HFSF 46 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
 701+88 - 24.67' L (IN #148) 26 Ft HFSF 38 Ft Sed. Filter Bags
 704+82 - 1.67' R (IN #147) 26 Ft HFSF 38 Ft Sed. Filter Bags
 704+82 - 24.67' L (IN #28) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 750+96 - 24.67' L (IN #143) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations: 750+95 - 6.49' R (IN #41) 42 Ft HFSF 62 Ft Sed. Filter Bags

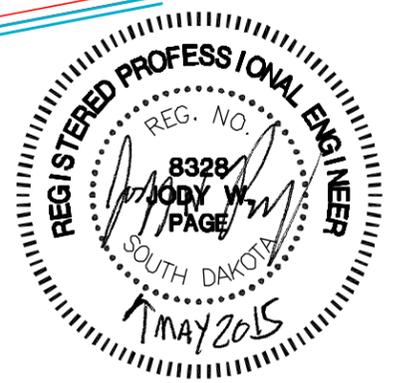
Apply Fiber Mulch at the following locations:
 701+68 L to 703+25 L Splitter Island 0.20 Ton

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 701+74 - 1.67' R (IN #43) 1 each
 702+91 - 1.67' R (IN #142) 1 each

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 701+88 - 24.67' L (IN #148) 1 each
 704+82 - 1.67' R (IN #147) 1 each
 704+82 - 24.67' L (IN #28) 1 each

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 750+96 - 24.67' L (IN #143) 1 each

Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:
 750+95 - 6.49' R (IN #41) 12 ft



Plot Scale - 1"=40'

Plotted From - sslowey

File - ...Section_D1700ec_RampD.dgn

Erosion and Sediment Control Plan Ramp D - Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D33	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:

- 706+23 - 24.42' L (IN #27) 21 Ft HFSF 31 Ft Sed. Filter Bags
- 709+14 - 24.42' L (IN #120) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:

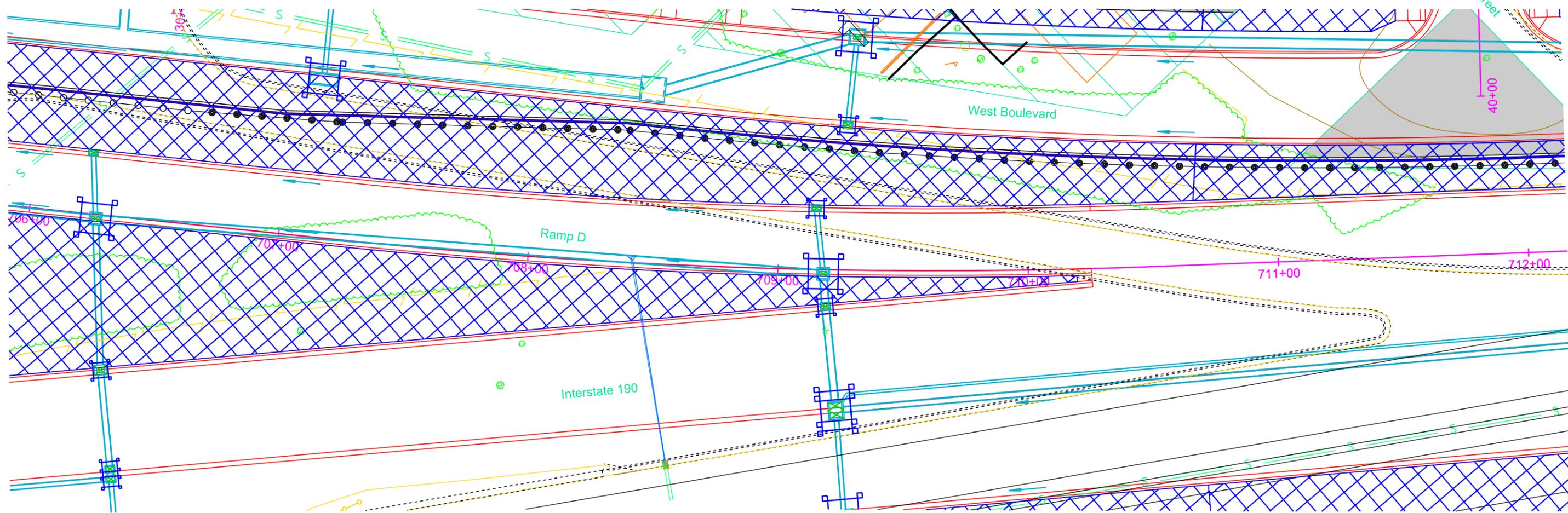
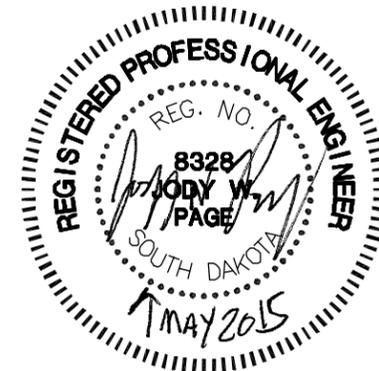
- 706+26 - 1.67' R (IN #146) 28 Ft HFSF 42 Ft Sed. Filter Bags
- 709+18 - 1.67' R (IN #119) 28 Ft HFSF 42 Ft Sed. Filter Bags

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

- 706+23 - 24.42' L (IN #27) 1 each
- 709+14 - 24.42' L (IN #120) 1 each

Install Sediment Control at 4' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

- 706+26 - 1.67' R (IN #146) 1 each
- 709+18 - 1.67' R (IN #119) 1 each



Plot Scale - 1:40

Plotted From - sslowey

File - ...Section_D1706ec_RampD.dgn



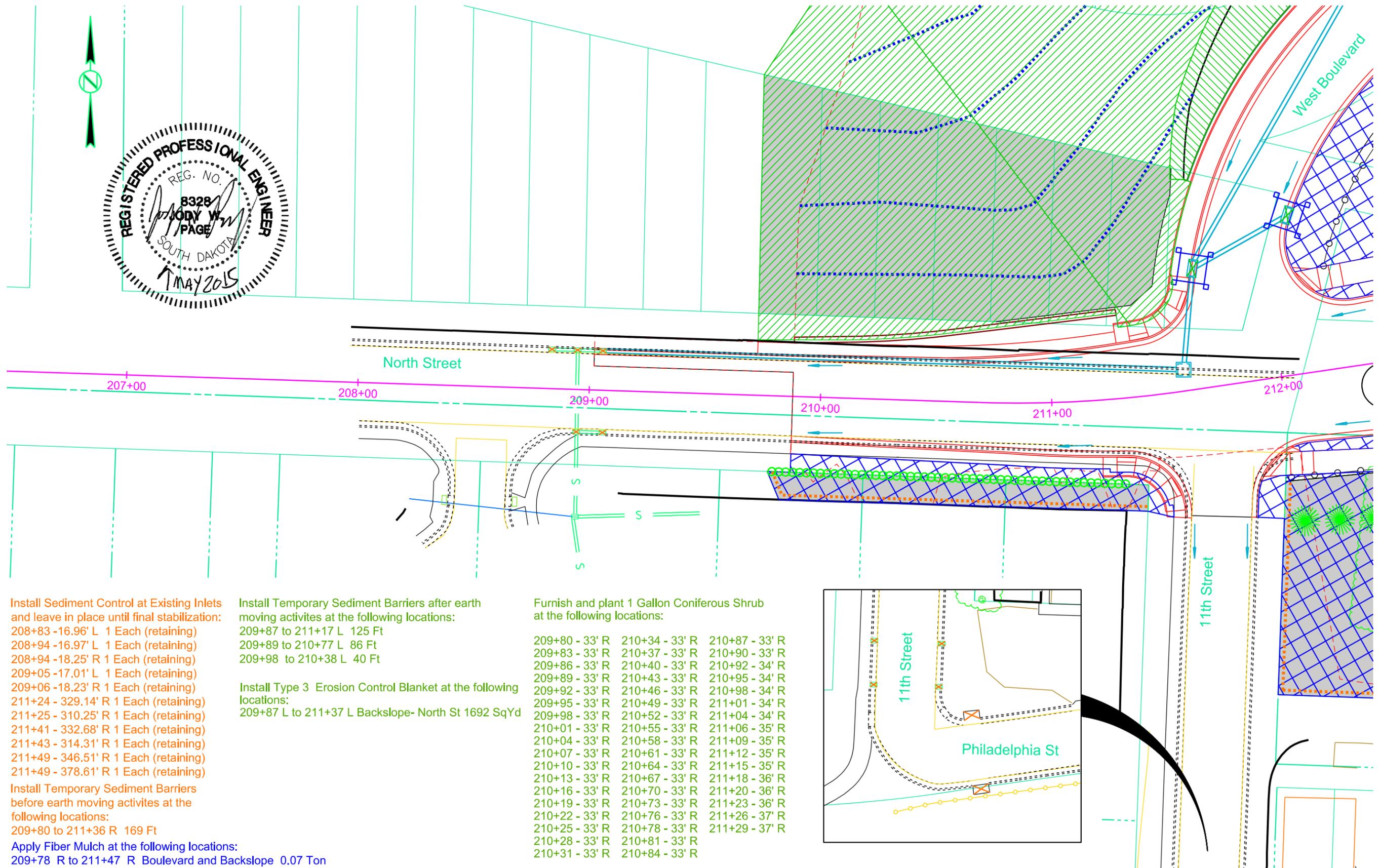
Erosion and Sediment Control Plan North St - Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D34	TOTAL SHEETS D47
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Plotting Date: 04-29-2015

Plot Scale - 1:40



Install Sediment Control at Existing Inlets and leave in place until final stabilization:

- 208+83 -16.96' L 1 Each (retaining)
- 208+94 -16.97' L 1 Each (retaining)
- 208+94 -18.25' R 1 Each (retaining)
- 209+05 -17.01' L 1 Each (retaining)
- 209+06 -18.23' R 1 Each (retaining)
- 211+24 - 329.14' R 1 Each (retaining)
- 211+25 - 310.25' R 1 Each (retaining)
- 211+41 - 332.68' R 1 Each (retaining)
- 211+43 - 314.31' R 1 Each (retaining)
- 211+49 - 346.51' R 1 Each (retaining)
- 211+49 - 378.61' R 1 Each (retaining)

Install Temporary Sediment Barriers before earth moving activities at the following locations:

- 209+80 to 211+36 R 169 Ft

Apply Fiber Mulch at the following locations:

- 209+78 R to 211+47 R Boulevard and Backslope 0.07 Ton

Install Temporary Sediment Barriers after earth moving activities at the following locations:

- 209+87 to 211+17 L 125 Ft
- 209+89 to 210+77 L 86 Ft
- 209+98 to 210+38 L 40 Ft

Install Type 3 Erosion Control Blanket at the following locations:

- 209+87 L to 211+37 L Backslope- North St 1692 SqYd

Furnish and plant 1 Gallon Coniferous Shrub at the following locations:

- | | | |
|----------------|----------------|----------------|
| 209+80 - 33' R | 210+34 - 33' R | 210+87 - 33' R |
| 209+83 - 33' R | 210+37 - 33' R | 210+90 - 33' R |
| 209+86 - 33' R | 210+40 - 33' R | 210+92 - 34' R |
| 209+89 - 33' R | 210+43 - 33' R | 210+95 - 34' R |
| 209+92 - 33' R | 210+46 - 33' R | 210+98 - 34' R |
| 209+95 - 33' R | 210+49 - 33' R | 211+01 - 34' R |
| 209+98 - 33' R | 210+52 - 33' R | 211+04 - 34' R |
| 210+01 - 33' R | 210+55 - 33' R | 211+06 - 35' R |
| 210+04 - 33' R | 210+58 - 33' R | 211+09 - 35' R |
| 210+07 - 33' R | 210+61 - 33' R | 211+12 - 35' R |
| 210+10 - 33' R | 210+64 - 33' R | 211+15 - 35' R |
| 210+13 - 33' R | 210+67 - 33' R | 211+18 - 36' R |
| 210+16 - 33' R | 210+70 - 33' R | 211+20 - 36' R |
| 210+19 - 33' R | 210+73 - 33' R | 211+23 - 36' R |
| 210+22 - 33' R | 210+76 - 33' R | 211+26 - 37' R |
| 210+25 - 33' R | 210+78 - 33' R | 211+29 - 37' R |
| 210+28 - 33' R | 210+81 - 33' R | |
| 210+31 - 33' R | 210+84 - 33' R | |



File - ...Section_D1207rec_North.dgn

Plotted From - sslowey



STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D35	TOTAL SHEETS D47
Plotting Date: 05-06-2015			

Erosion and Sediment Control Plan

North St - Phase 1

FOR BIDDING PURPOSES ONLY

Install Temporary Sediment Barriers before earth moving activities at the following locations:
211+97 to 214+65 R 443 Ft

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
216+62 - 43.64' L (IN #110) 26 Ft HFSF 38 Ft Sed. Filter Bags

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
214+40 - 43.84' R (IN #108) 22 Ft HFSF 32 Ft Sed. Filter Bags
214+84 - 39.84' L (IN #109) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
216+22 - 46.12' R (IN #40) 31 Ft HFSF 46 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
211+81 R to 214+81 R Boulevard and Backslope 0.48 Ton
212+19 L to 215+13 L Boulevard 0.05 Ton

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
216+62 - 43.64' L (IN #110) 1 each

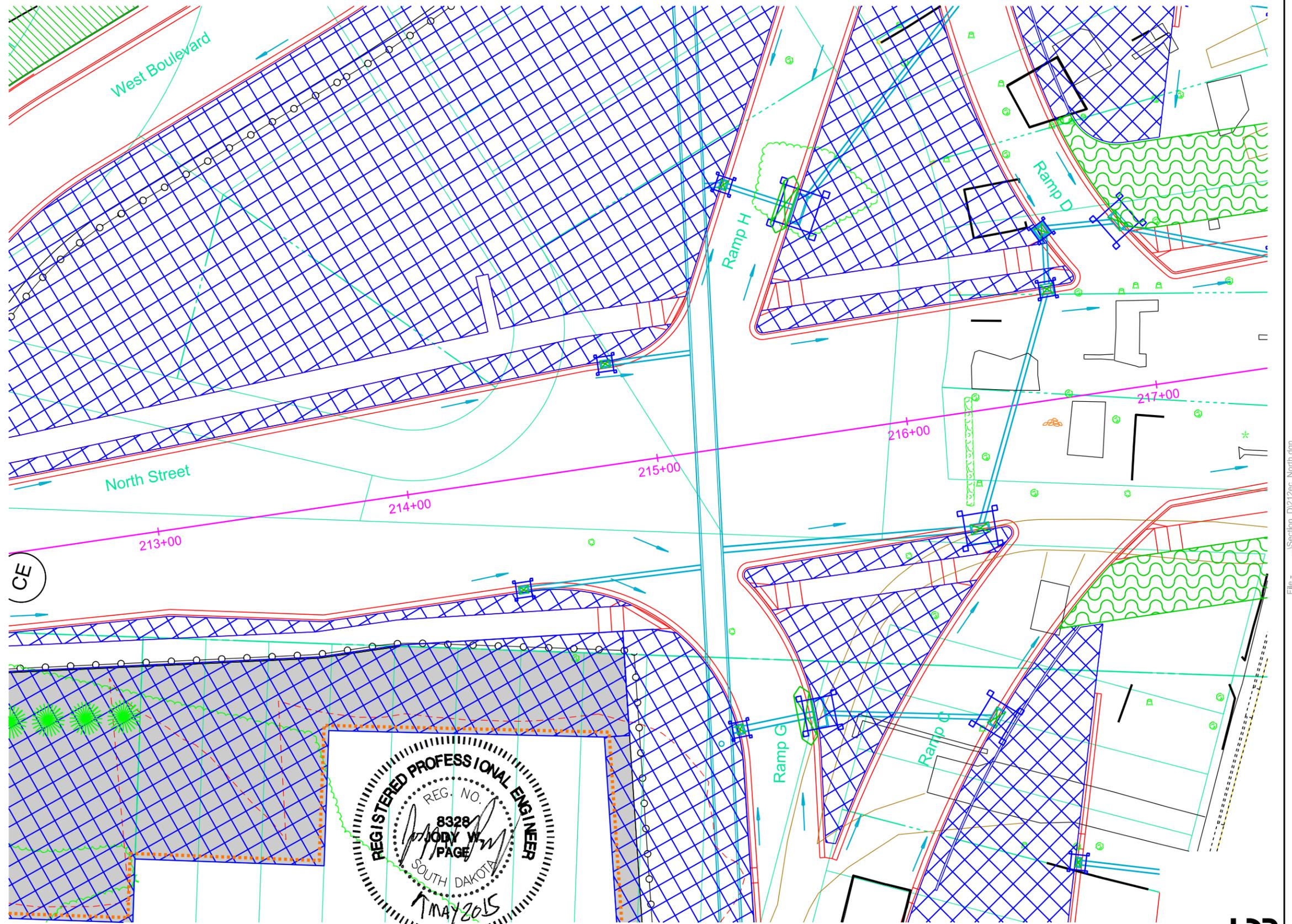
Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
214+40 - 43.84' R (IN #108) 1 each
214+84 - 39.84' L (IN #109) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
216+22 - 46.12' R (IN #40) 1 each

Furnish and plant 6' Coniferous Evergreen at the following locations:
212+01 - 63' RT
212+16 - 64' RT
212+31 - 66' RT
212+46 - 67' RT
212+61 - 69' RT
212+76 - 70' RT

Furnish and place 4" Shredded Bark Mulch at the following locations:
216+47 - 90' R to 217+00 - 66' R 104 SqYd
216+76 - 109' L to 217+00 - 63' L 57 SqYd

Furnish and place Weed Barrier Fabric at the following locations:
216+47 - 90' R to 217+00 - 66' R 104 SqYd
216+76 - 109' L to 217+00 - 63' L 57 SqYd



Plot Scale - 1"=40'

Plotted From - sslowey

File - ...Section_D1212ec_North.dgn



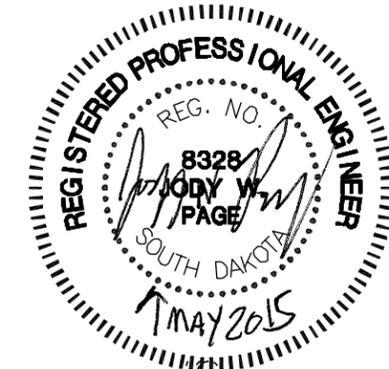
Erosion and Sediment Control Plan

North St - Phase 2 & 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D36	TOTAL SHEETS D47
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Plotting Date: 05-06-2015



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:

219+96 -50.56' L 1 Each (removing)
Install Temporary Sediment Barriers before earth moving activities at the following locations:
219+66 to 222+00 R 189 Ft

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
217+54 - 43.73' L (IN #44) 22 Ft HFSF
32 Ft Sed. Filter Bags
220+52 - 10.49' R (IN #54) 22 Ft HFSF
32 Ft Sed. Filter Bags
221+69 - 11.40' R (IN #149) 22 Ft HFSF
32 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
217+53 - 46.00' R (IN #46) 31 Ft HFSF
46 Ft Sed. Filter Bags
218+73 - 46.11' R (IN #47) 31 Ft HFSF
46 Ft Sed. Filter Bags
219+99 - 54.64' L (IN #145) 31 Ft HFSF
46 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:
221+68 - 8.05' L (IN #80) 26 Ft HFSF
38 Ft Sed. Filter Bags

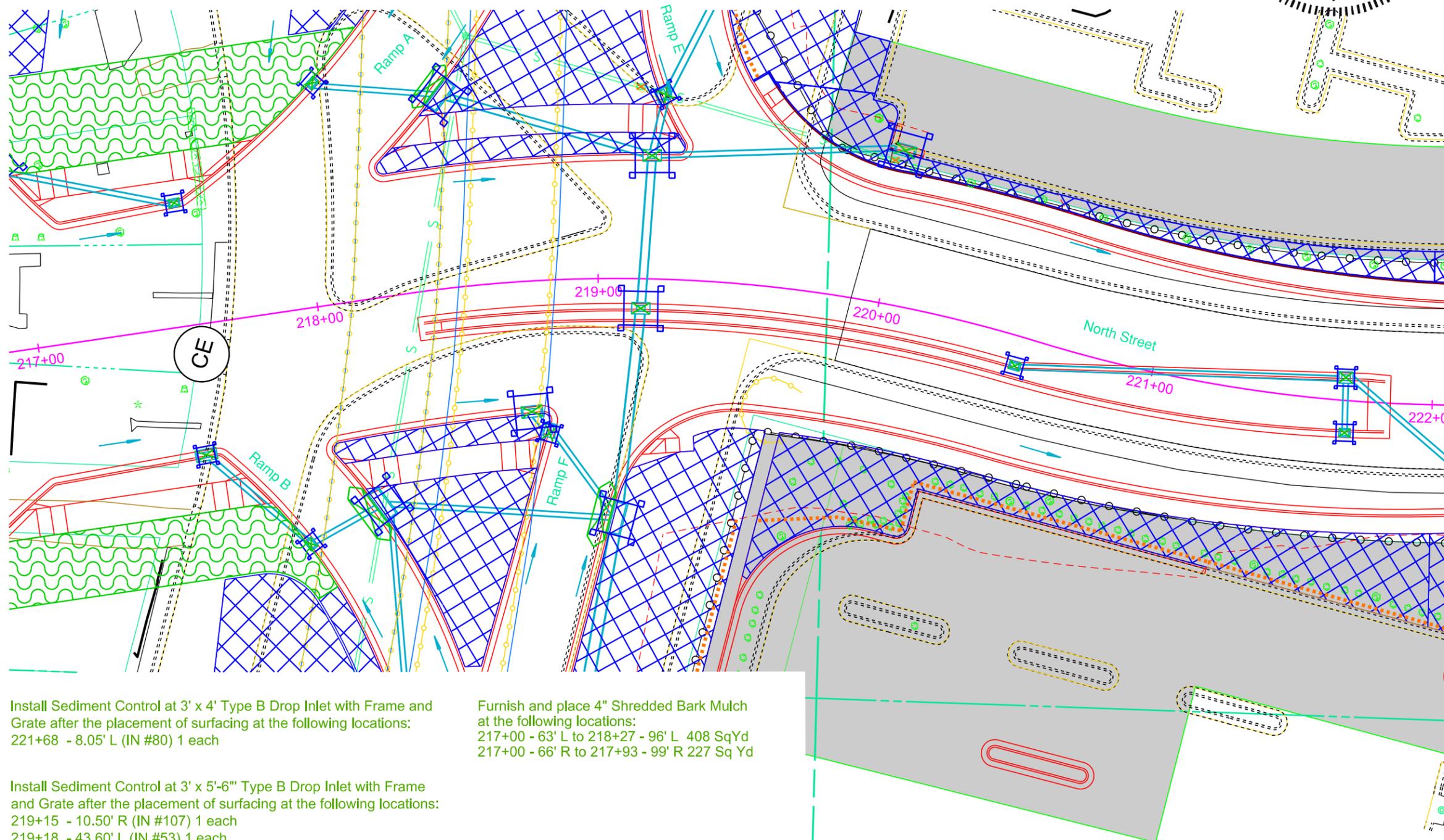
Install Interim Sediment Control at 3' x 5'-6" Type B Drop Inlet before the placement of surfacing at the following locations:
219+15 - 10.50' R (IN #107) 28 Ft HFSF
42 Ft Sed. Filter Bags
219+18 - 43.60' L (IN #53) 28 Ft HFSF
42 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
219+55 L to 222+00 L 0.05 Ton
219+62 R to 222+00 R 0.11 Ton

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
217+54 - 43.73' L (IN #44) 1 each
220+52 - 10.49' R (IN #54) 1 each
221+69 - 11.40' R (IN #149) 1 each

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
217+53 - 46.00' R (IN #46) 1 each
218+73 - 46.11' R (IN #47) 1 each
219+99 - 54.64' L (IN #145) 1 each

Furnish and place Weed Barrier Fabric at the following locations:
217+00 - 63' L to 218+27 - 96' L 408 SqYd
217+00 - 66' R to 217+93 - 99' R 227 Sq Yd



Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
221+68 - 8.05' L (IN #80) 1 each

Furnish and place 4" Shredded Bark Mulch at the following locations:
217+00 - 63' L to 218+27 - 96' L 408 SqYd
217+00 - 66' R to 217+93 - 99' R 227 Sq Yd

Install Sediment Control at 3' x 5'-6" Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
219+15 - 10.50' R (IN #107) 1 each
219+18 - 43.60' L (IN #53) 1 each

Plot Scale - 1"=40'

Plotted From - sslowey

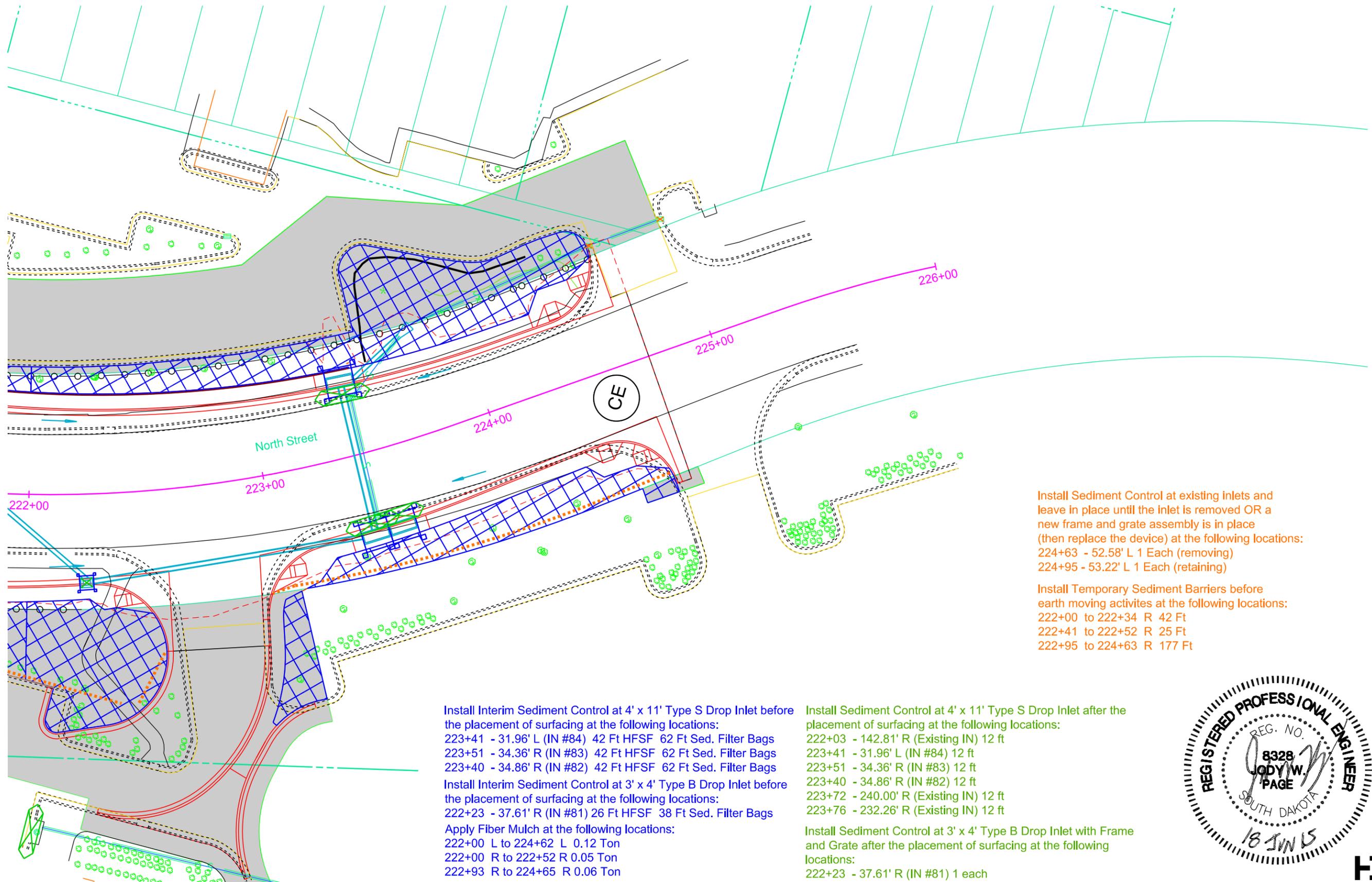
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Erosion and Sediment Control Plan North St - Phase 3

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D37	TOTAL SHEETS D47
Plotting Date: 06-15-2015		Rev. 06/18/2015 AJF	



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
 224+63 - 52.58' L 1 Each (removing)
 224+95 - 53.22' L 1 Each (retaining)

Install Temporary Sediment Barriers before earth moving activities at the following locations:
 222+00 to 222+34 R 42 Ft
 222+41 to 222+52 R 25 Ft
 222+95 to 224+63 R 177 Ft

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations:

- 223+41 - 31.96' L (IN #84) 42 Ft HFSF 62 Ft Sed. Filter Bags
- 223+51 - 34.36' R (IN #83) 42 Ft HFSF 62 Ft Sed. Filter Bags
- 223+40 - 34.86' R (IN #82) 42 Ft HFSF 62 Ft Sed. Filter Bags

Install Interim Sediment Control at 3' x 4' Type B Drop Inlet before the placement of surfacing at the following locations:

- 222+23 - 37.61' R (IN #81) 26 Ft HFSF 38 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:

- 222+00 L to 224+62 L 0.12 Ton
- 222+00 R to 222+52 R 0.05 Ton
- 222+93 R to 224+65 R 0.06 Ton

Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:

- 222+03 - 142.81' R (Existing IN) 12 ft
- 223+41 - 31.96' L (IN #84) 12 ft
- 223+51 - 34.36' R (IN #83) 12 ft
- 223+40 - 34.86' R (IN #82) 12 ft
- 223+72 - 240.00' R (Existing IN) 12 ft
- 223+76 - 232.26' R (Existing IN) 12 ft

Install Sediment Control at 3' x 4' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:

- 222+23 - 37.61' R (IN #81) 1 each



Plot Scale - 1:40

Plotted From - r:\project

File - ...Section_D1222ec_North.dgn

Erosion and Sediment Control Plan

West Blvd- Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D38	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 11+83 - 17.67' L (IN #37) 22 Ft HFSF 32 Ft Sed. Filter Bags
 15+46 - 17.67' R (IN #34) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet before the placement of surfacing at the following locations:
 10+47 - 17.67' L (IN #36) 31 Ft HFSF 46 Ft Sed. Filter Bags
 10+79 - 17.00' R (IN #38) 31 Ft HFSF 46 Ft Sed. Filter Bags
 15+46 - 17.67' L (IN #35) 31 Ft HFSF 46 Ft Sed. Filter Bags

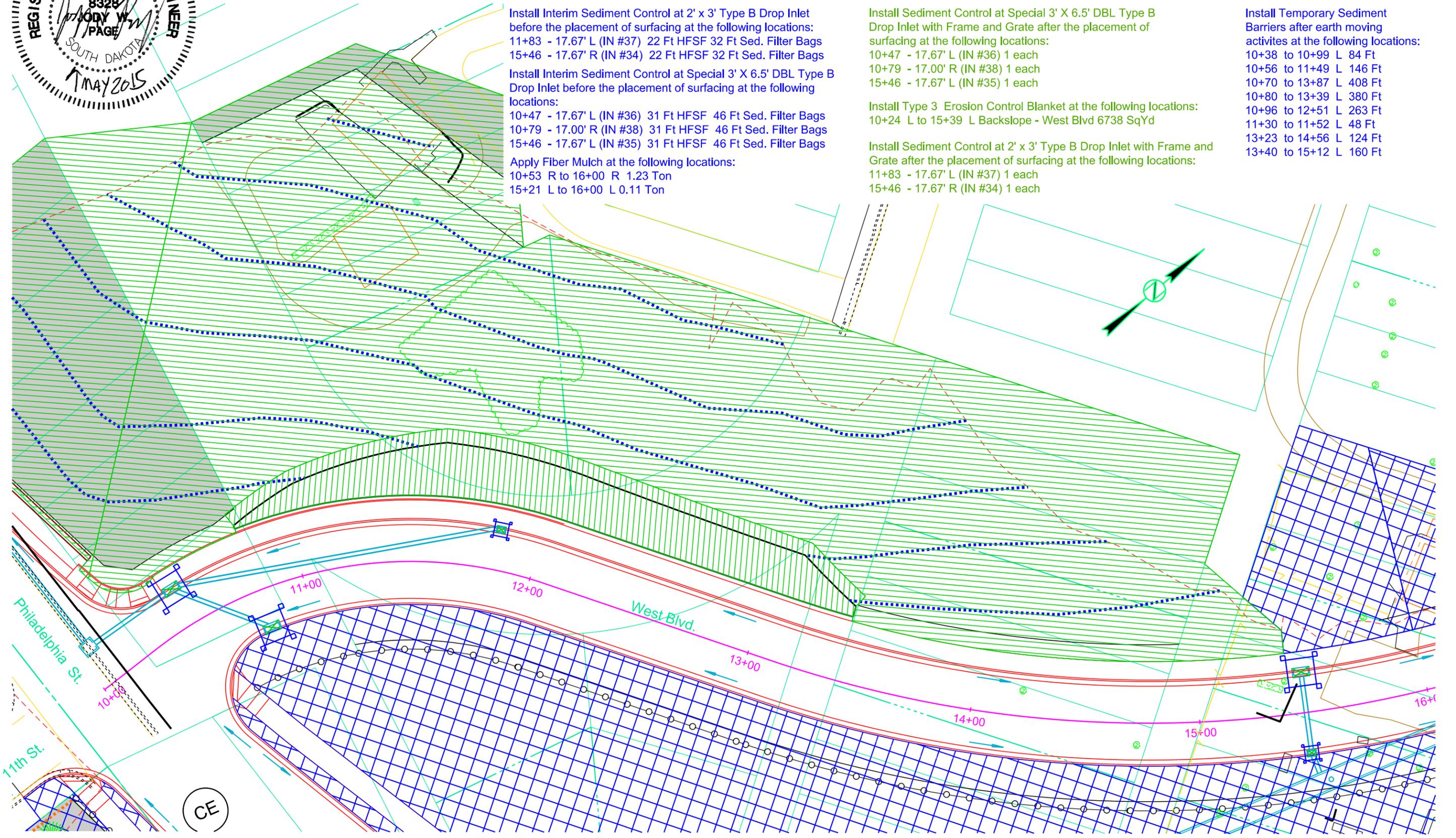
Apply Fiber Mulch at the following locations:
 10+53 R to 16+00 R 1.23 Ton
 15+21 L to 16+00 L 0.11 Ton

Install Sediment Control at Special 3' X 6.5' DBL Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 10+47 - 17.67' L (IN #36) 1 each
 10+79 - 17.00' R (IN #38) 1 each
 15+46 - 17.67' L (IN #35) 1 each

Install Type 3 Erosion Control Blanket at the following locations:
 10+24 L to 15+39 L Backslope - West Blvd 6738 SqYd

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 11+83 - 17.67' L (IN #37) 1 each
 15+46 - 17.67' R (IN #34) 1 each

Install Temporary Sediment Barriers after earth moving activities at the following locations:
 10+38 to 10+99 L 84 Ft
 10+56 to 11+49 L 146 Ft
 10+70 to 13+87 L 408 Ft
 10+80 to 13+39 L 380 Ft
 10+96 to 12+51 L 263 Ft
 11+30 to 11+52 L 48 Ft
 13+23 to 14+56 L 124 Ft
 13+40 to 15+12 L 160 Ft



CE



Plot Scale - 1"=40'

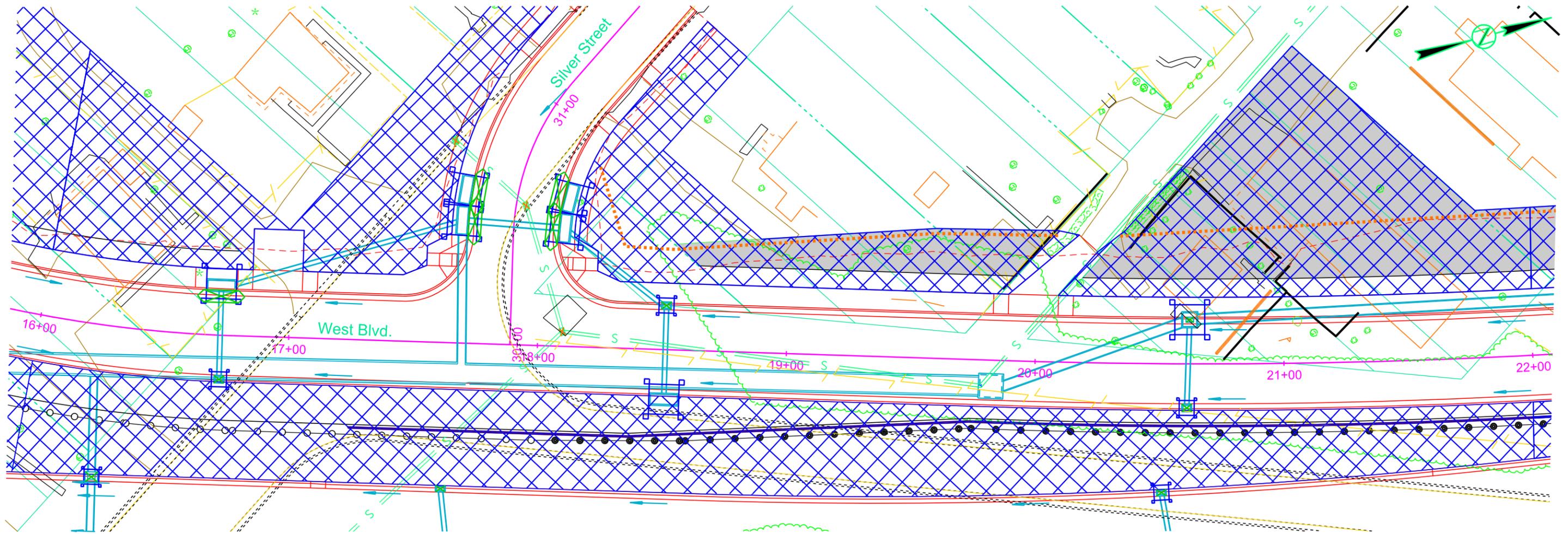
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Erosion and Sediment Control Plan West Blvd- Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D39	TOTAL SHEETS D47
Plotting Date: 06-15-2015		Rev. 06/18/2015 AJF	



Install Sediment Control at existing inlets and leave in place until the inlet is removed OR a new frame and grate assembly is in place (then replace the device) at the following locations:
 17+64 -80.97' L 1 Each (removing)
 17+93 -55.78' L 1 Each (removing)
 18+09 -5.88' L 1 Each (removing)

Install Temporary Sediment Barriers before earth moving activities at the following locations:
 18+22 to 20+07 L 208 Ft
 20+32 to 22+00 L 163 Ft

Apply Fiber Mulch at the following locations:
 16+00 R to 22+00 R 0.49 Ton
 16+00 L to 18+25 L 0.22 Ton
 18+13 L to 22+00 L 0.32 Ton

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 16+72 - 17.67' R (IN #97) 22 Ft HFSF 32 Ft Sed. Filter Bags
 18+51 - 17.67' L (IN #116) 22 Ft HFSF 32 Ft Sed. Filter Bags
 20+60 - 17.71' R (IN #121) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 11' Type S Drop Inlet before the placement of surfacing at the following locations:
 16+72 - 20.63' L (IN #98) 42 Ft HFSF 62 Ft Sed. Filter Bags
 17+68 - 49.16' L (IN #93) 42 Ft HFSF 62 Ft Sed. Filter Bags
 17+69 - 61.50' L (IN #94) 42 Ft HFSF 62 Ft Sed. Filter Bags
 18+51 - 19.96' R (IN #115) 42 Ft HFSF 62 Ft Sed. Filter Bags
 18+09 - 47.28' L (IN #91) 42 Ft HFSF 62 Ft Sed. Filter Bags
 18+11 - 59.88' L (IN #92) 42 Ft HFSF 62 Ft Sed. Filter Bags

Install Interim Sediment Control at 5.5' x 5.5' Type B Drop Inlet before the placement of surfacing at the following locations:
 20+62 - 17.63' L (IN #33) 34 Ft HFSF 50 Ft Sed. Filter Bags

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 16+72 - 17.67' R (IN #97) 1 each
 18+51 - 17.67' L (IN #116) 1 each
 20+60 - 17.71' R (IN #121) 1 each

Install Sediment Control at 4' x 11' Type S Drop Inlet after the placement of surfacing at the following locations:
 16+72 - 20.63' L (IN #98) 12 ft
 17+68 - 49.16' L (IN #93) 12 ft
 17+69 - 61.50' L (IN #94) 12 ft
 18+51 - 19.96' R (IN #115) 12 ft
 18+09 - 47.28' L (IN #91) 12 ft
 18+11 - 59.88' L (IN #92) 12 ft

Install Sediment Control at 5.5' x 5.5' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 20+62 - 17.63' L (IN #33) 1 each



Plot Scale - 1"=40'

Plotted From - rjg.dwg

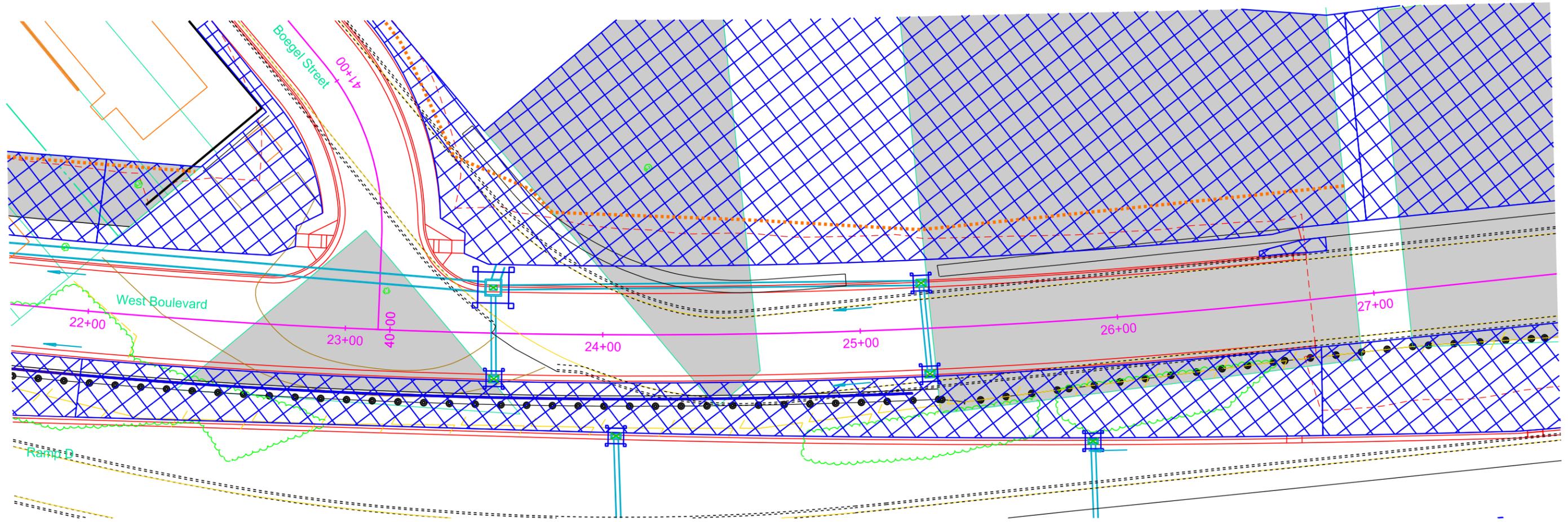
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Erosion and Sediment Control Plan West Blvd- Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D40	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Temporary Sediment Barriers before earth moving activities at the following locations:
 22+00 to 22+36 L 37 Ft
 23+08 to 26+94 L 310 Ft

Apply Fiber Mulch at the following locations:
 22+00 R to 26+75 R 0.25 Ton
 22+00 L to 22+89 L 0.08 Ton
 22+72 L to 27+00 L 0.80 Ton

Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
 23+58 - 17.76' R (IN #122) 22 Ft HFSF 32 Ft Sed. Filter Bags
 25+26 - 17.74' R (IN #30) 22 Ft HFSF 32 Ft Sed. Filter Bags
 25+24 - 17.60' L (IN #31) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 5.5' x 5.5' Type B Drop Inlet before the placement of surfacing at the following locations:
 23+57 - 17.58' L (IN #32) 34 Ft HFSF 50 Ft Sed. Filter Bags

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 23+58 - 17.76' R (IN #122) 1 each
 25+26 - 17.74' R (IN #30) 1 each
 25+24 - 17.60' L (IN #31) 1 each

Install Sediment Control at 5.5' x 5.5' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
 23+57 - 17.58' L (IN #32) 1 each



Plot Scale - 1:40

Plotted From - sslowey

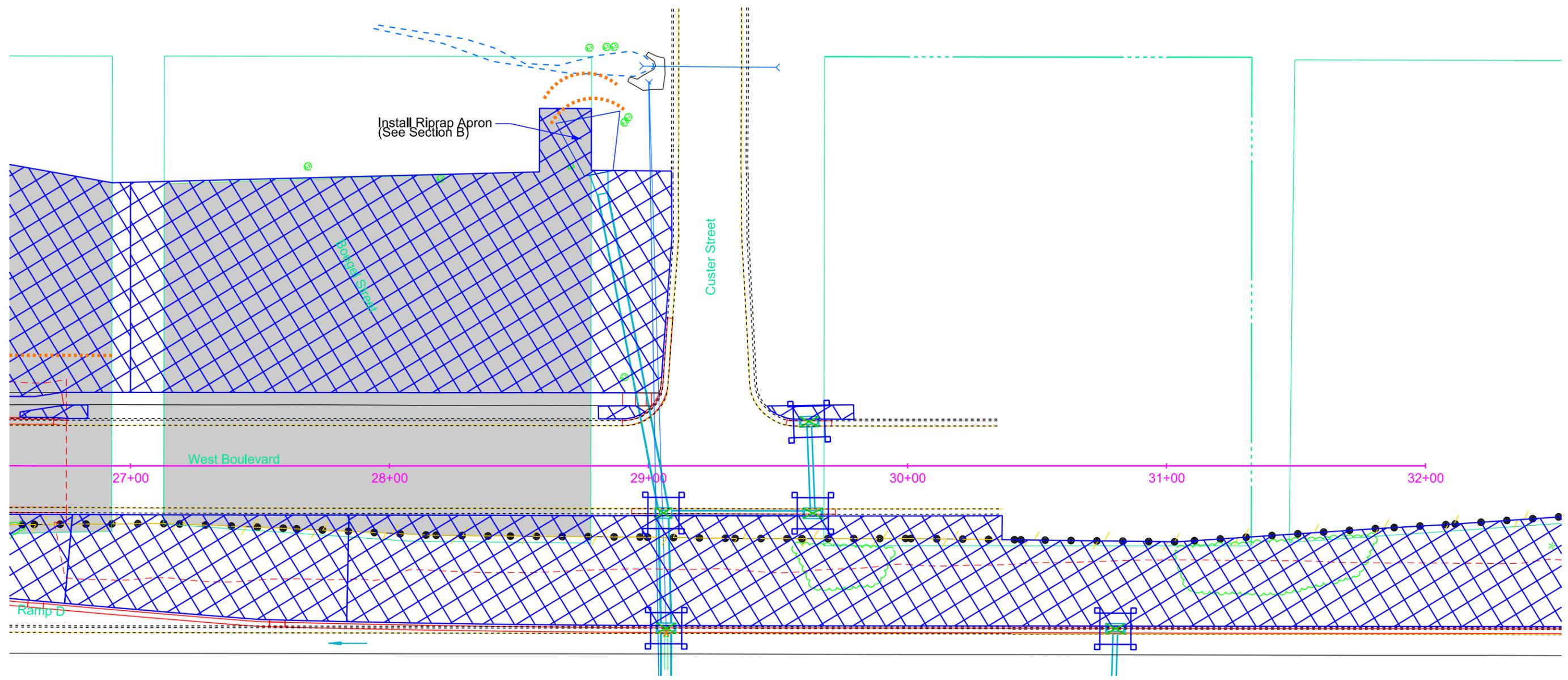
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Erosion and Sediment Control Plan West Blvd- Phase 1

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D41	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Temporary Sediment Barriers before earth moving activities at the following locations:
28+61 L to 28+90 L 64 Ft

Apply Fiber Mulch at the following locations:
27+00 L to 29+09 L 0.41 Ton
29+46 L to 29+79 L 0.01 Ton



Plot Scale - 1:40

Plotted From - sslowey

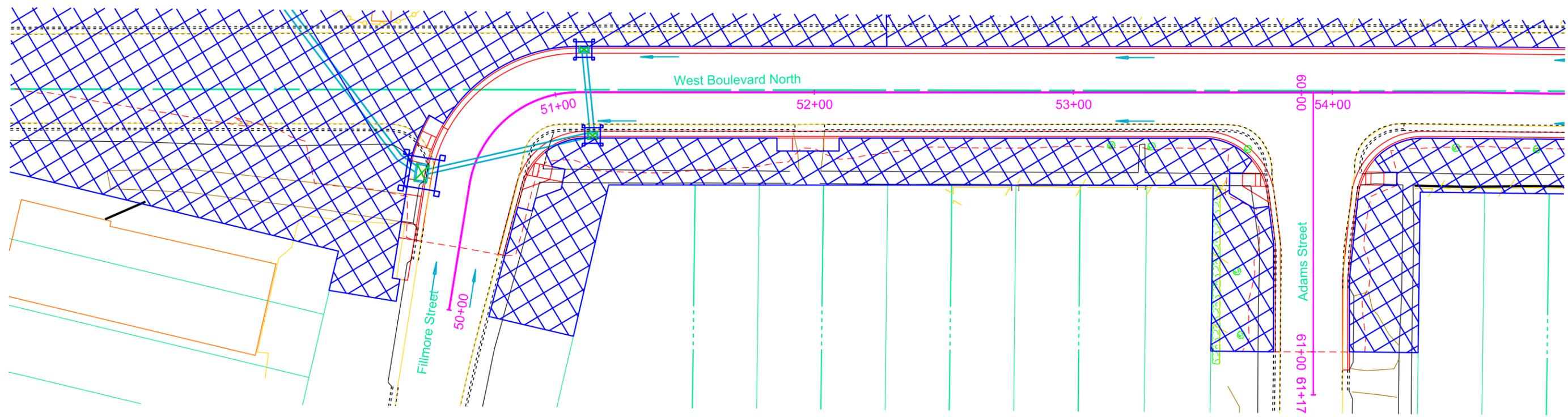
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Erosion and Sediment Control Plan West Blvd N - Phase 4

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D42	TOTAL SHEETS D47
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Plotting Date: 04-29-2015



Install Interim Sediment Control at 2' x 3' Type B Drop Inlet before the placement of surfacing at the following locations:
51+14 - 16.67' R (IN #112) 22 Ft HFSF 32 Ft Sed. Filter Bags

Install Interim Sediment Control at 1.5' x 3' Type D Drop Inlet before the placement of surfacing at the following locations:
51+11 - 16.42' L (IN #113) 21 Ft HFSF 31 Ft Sed. Filter Bags

Install Interim Sediment Control at 4' x 6' Type S Drop Inlet before the placement of surfacing at the following locations:
50+49 - 18.98' L (IN #95) 32 Ft HFSF 47 Ft Sed. Filter Bags

Apply Fiber Mulch at the following locations:
50+00 R to 53+77 R 0.18 Ton
54+06 R to 55+00 R 0.07 Ton

Install Sediment Control at 2' x 3' Type B Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
51+14 - 16.67' R (IN #112) 1 each

Install Sediment Control at 1.5' x 3' Type D Drop Inlet with Frame and Grate after the placement of surfacing at the following locations:
51+11 - 16.42' L (IN #113) 1 each

Install Sediment Control at 4' x 6' Type S Drop Inlet after the placement of surfacing at the following locations:
50+49 - 18.98' L (IN #95) 7 ft



Plot Scale - 1:40

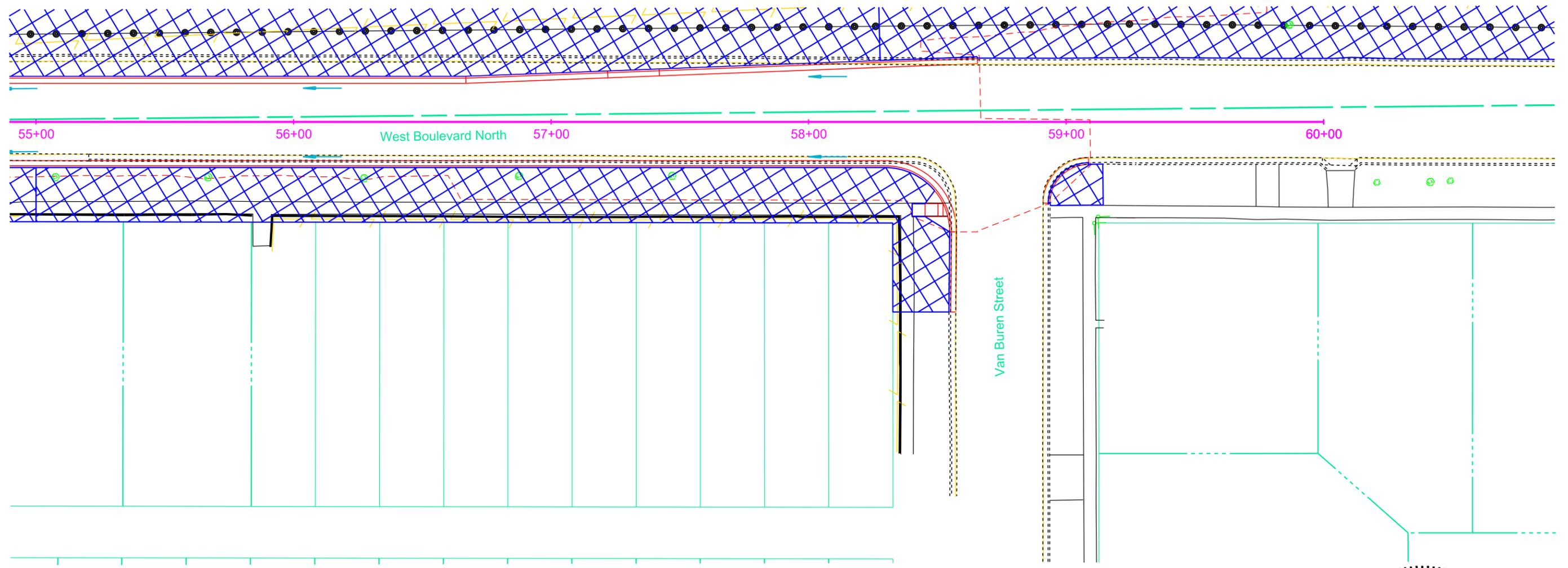
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Erosion and Sediment Control Plan West Blvd N - Phase 4

FOR BIDDING PURPOSES ONLY

STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D43	TOTAL SHEETS D47
Plotting Date: 04-29-2015			



Apply Fiber Mulch at the following locations:
55+00 R to 58+54 R 0.18 Ton



Plot Scale - 1:40

Plotted From - sslowey

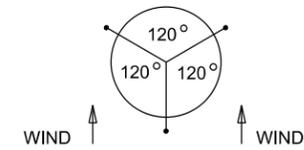
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Tree and Shrub Planting

FOR BIDDING PURPOSES ONLY

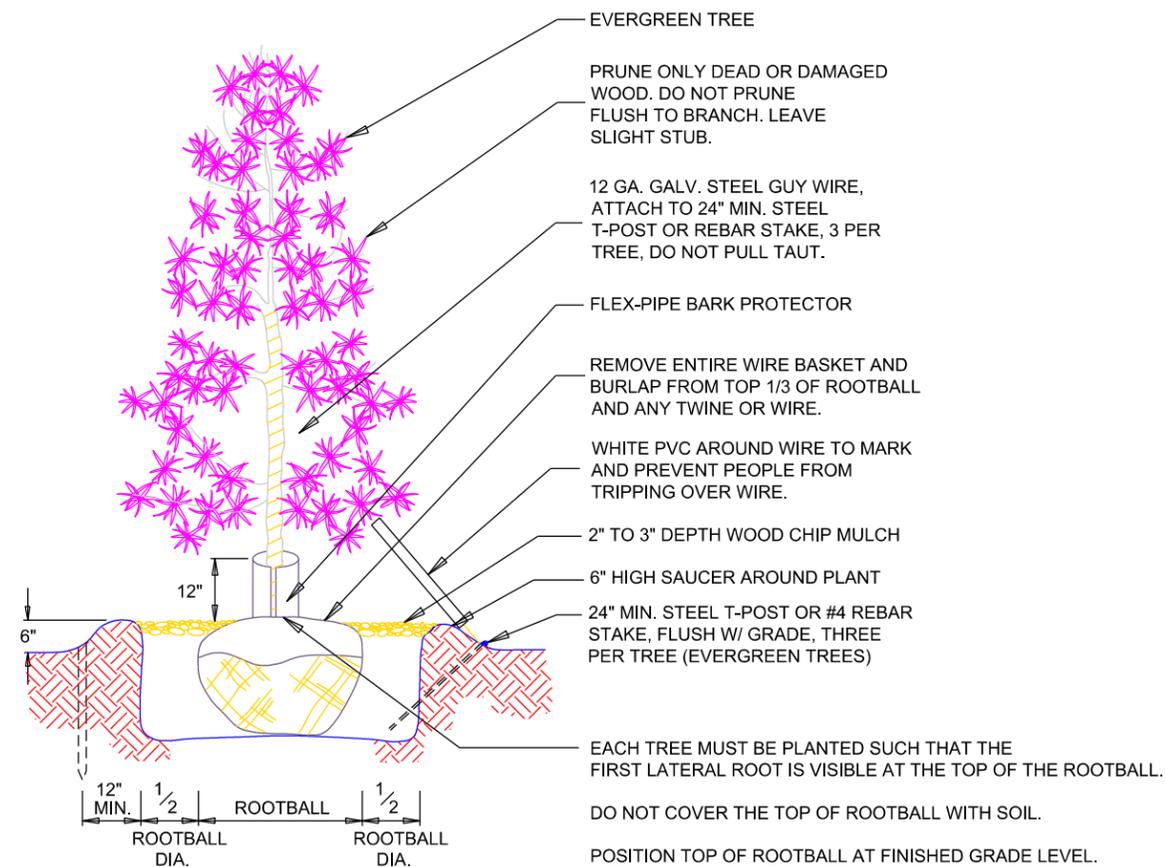
STATE OF SOUTH DAKOTA	PROJECT IM 1902(61)0	SHEET D44	TOTAL SHEETS D47
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Plotting Date: 04-29-2015

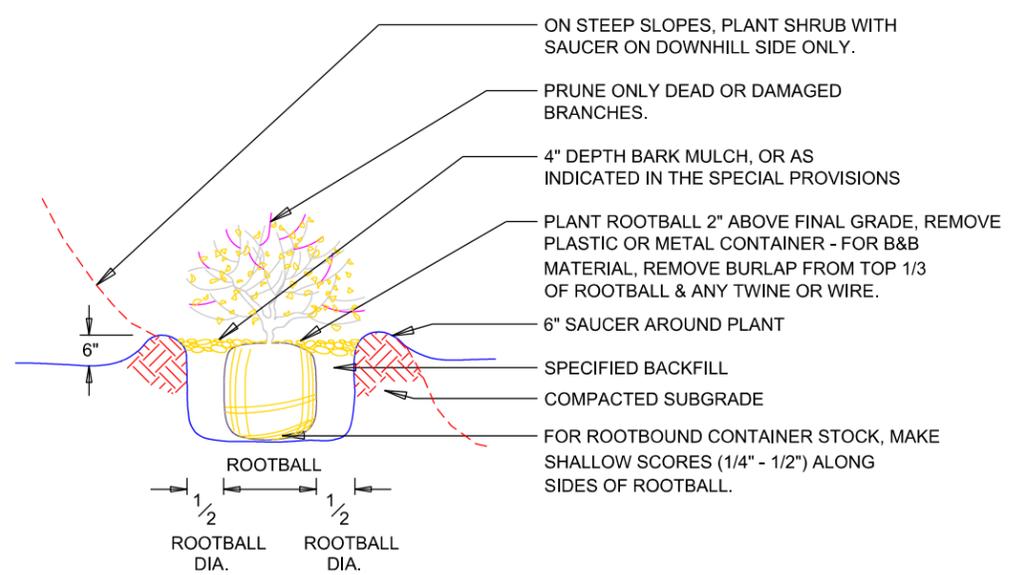


FOR TREES ON 4:1 OR STEEPER SLOPES, PLACE 2 GUYS UPSLOPE, ONE DOWNSLOPE; OTHERWISE PLACE FOR PREVAILING WIND.

GUYING PATTERN FOR EVERGREEN TREE PLANTING



DECIDUOUS AND EVERGREEN TREE PLANTING AND GUYING DETAIL
 (GUY AND STAKE DECIDUOUS TREES 2" AND LARGER CALIPER AND CONIFEROUS TREES OVER 4' HT.)
 NOT TO SCALE



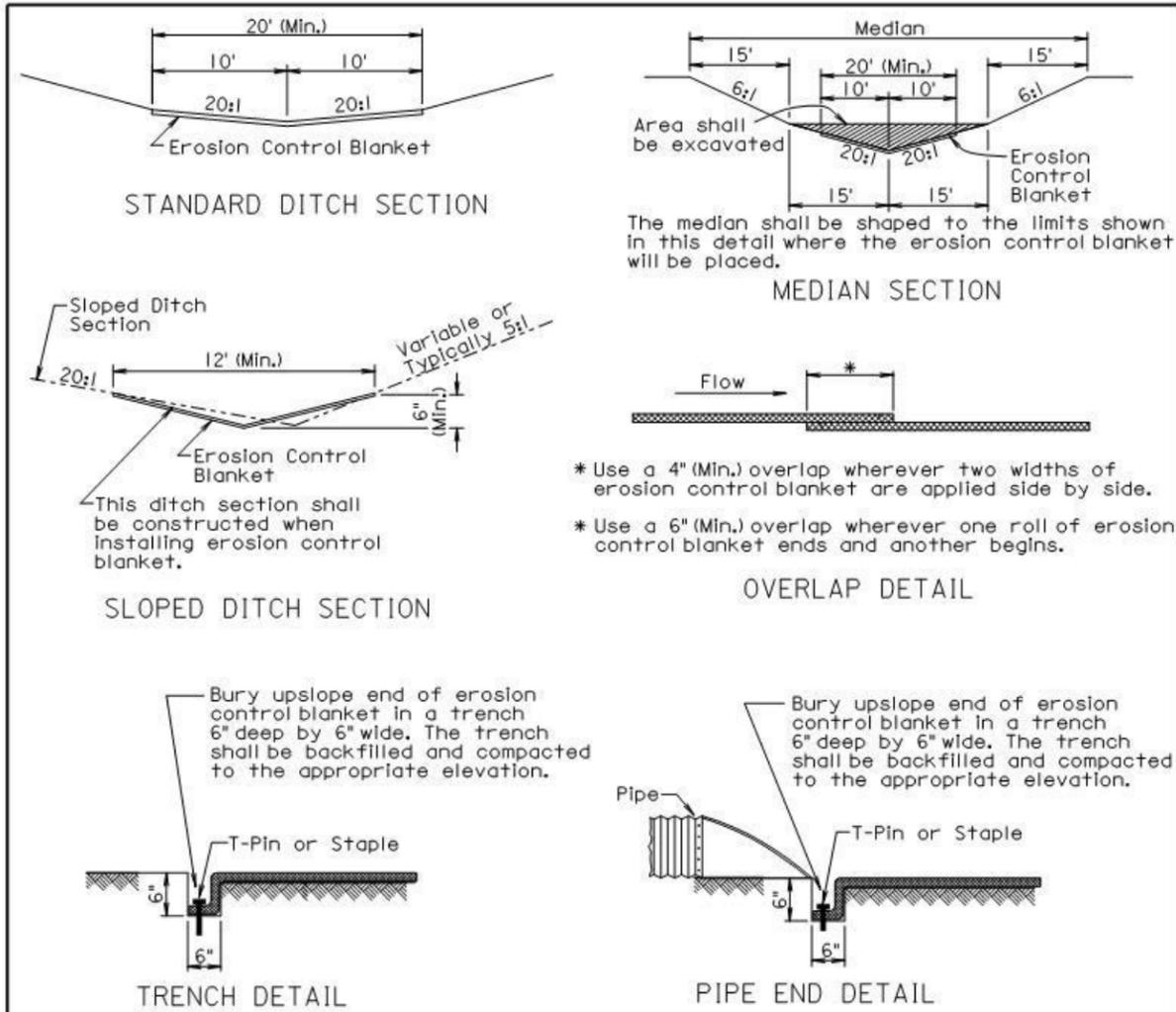
SHRUB PLANTING DETAIL
 NOT TO SCALE



Plot Scale - 1:1

Plotted From - sslowey

File - ... \Section_D11100-01 SP.dgn



* 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.

GENERAL NOTES:

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

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

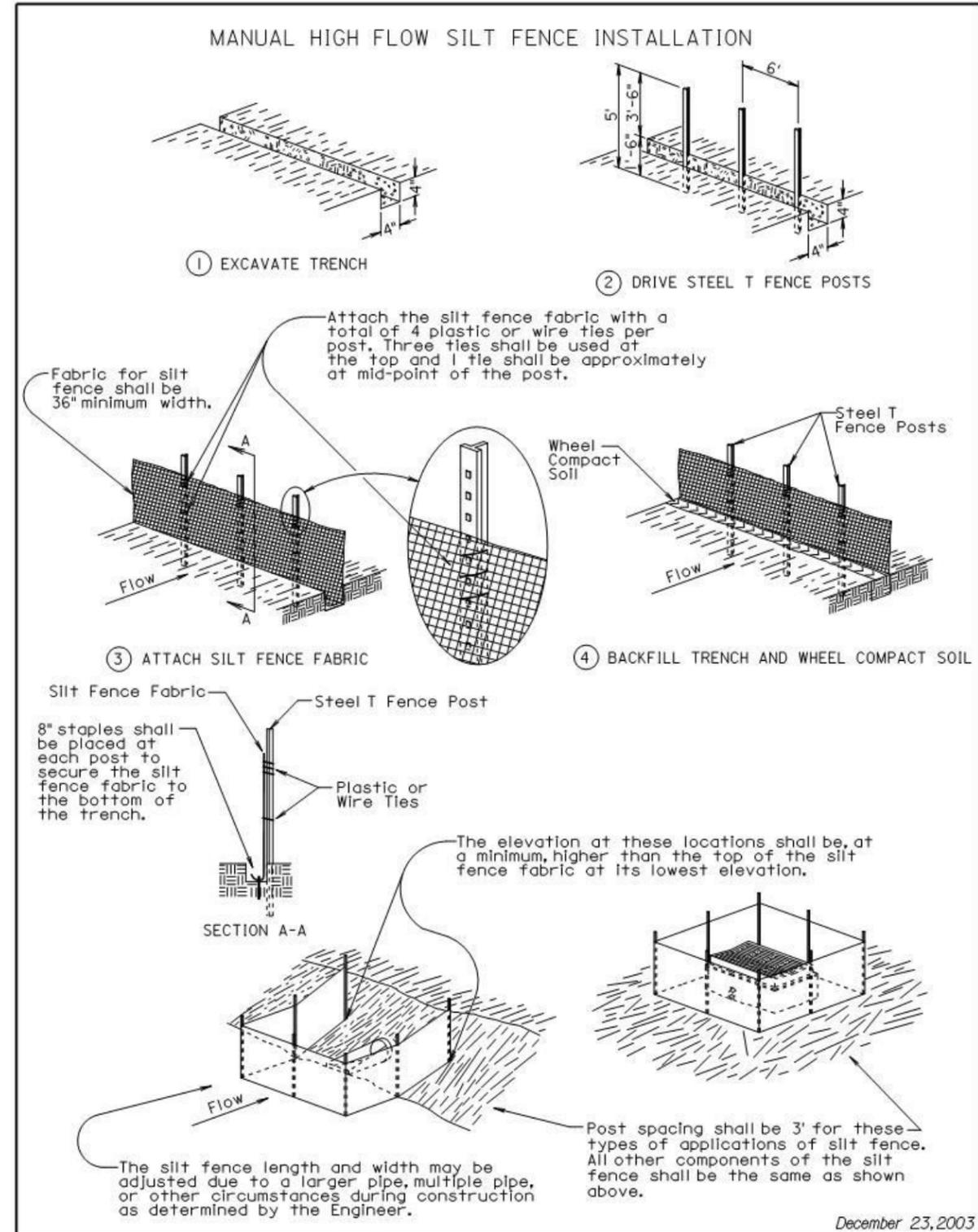
The erosion control blanket shall be pinned to the ground according to the manufacturer's installation recommendations.

After the placement of the erosion control blanket, the Contractor shall 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 shall be shaped when installing the erosion control blanket. All costs for shaping the ditches shall be incidental to the contract unit price per foot for "Shaping for Erosion Control Blanket".

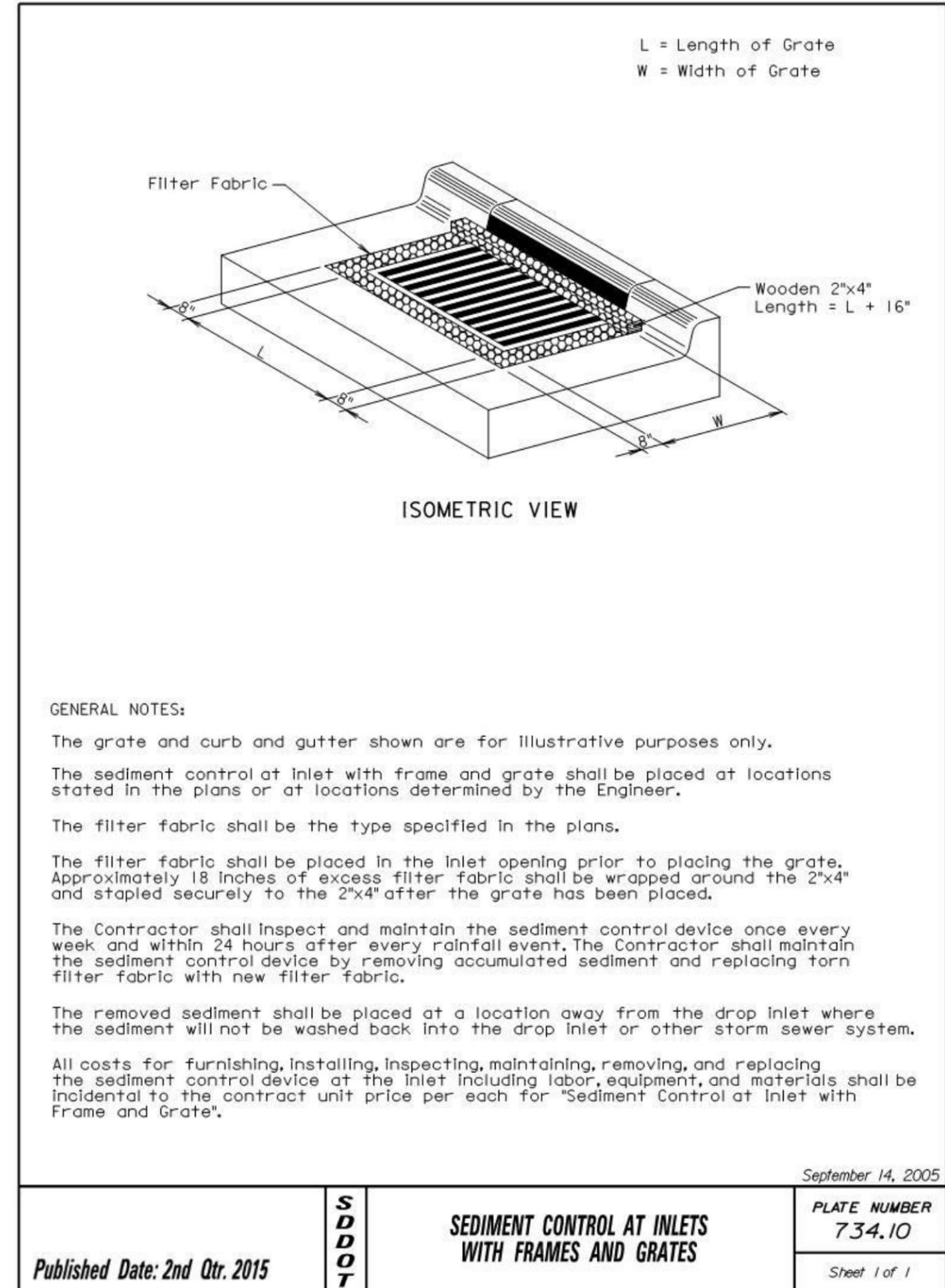
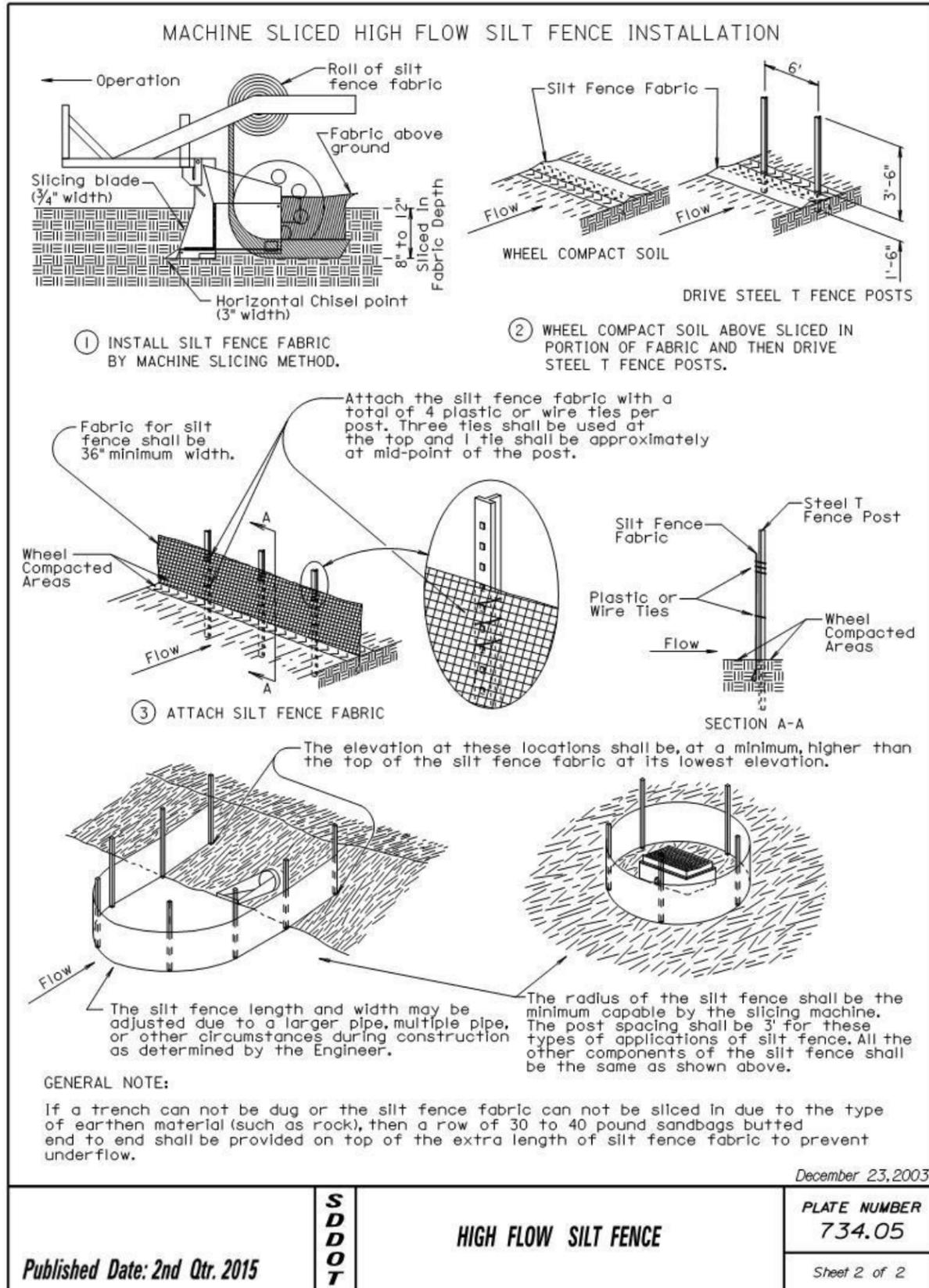
December 23, 2004

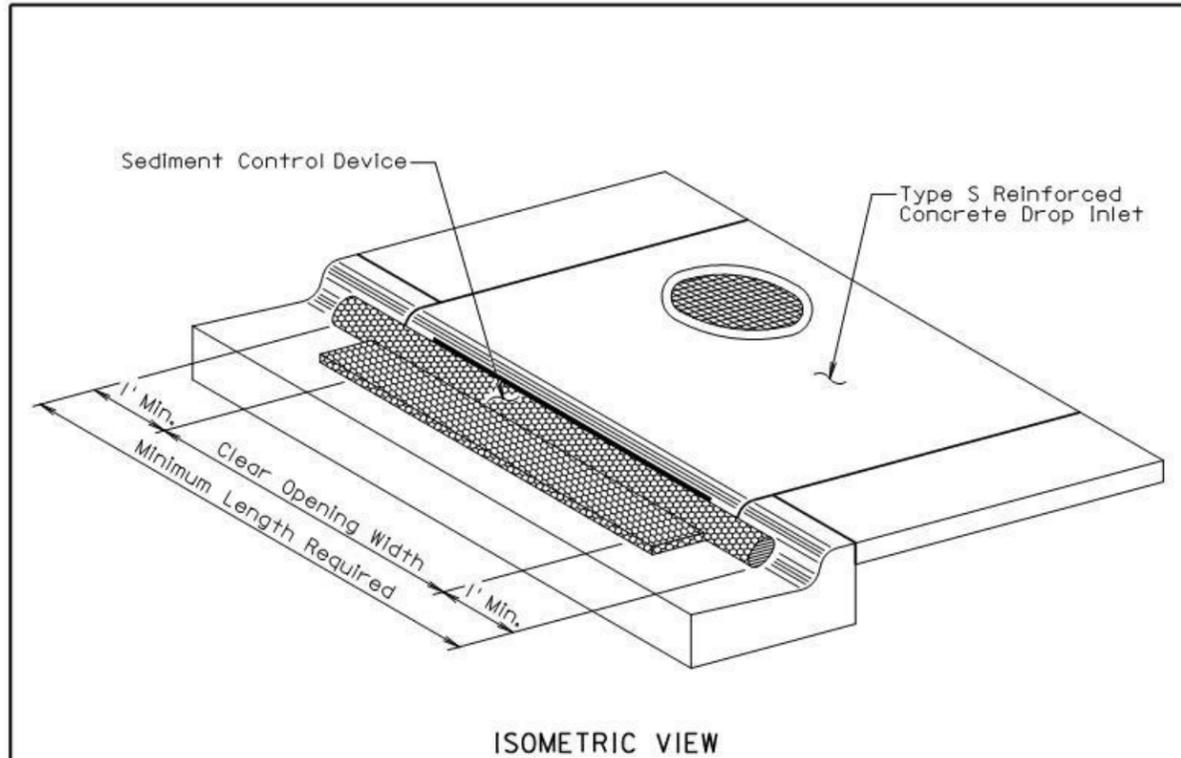
Published Date: 2nd Qtr. 2015	S D D O T	EROSION CONTROL BLANKET	PLATE NUMBER 734.01
			Sheet 1 of 1



December 23, 2003

Published Date: 2nd Qtr. 2015	S D D O T	HIGH FLOW SILT FENCE	PLATE NUMBER 734.05
			Sheet 1 of 2





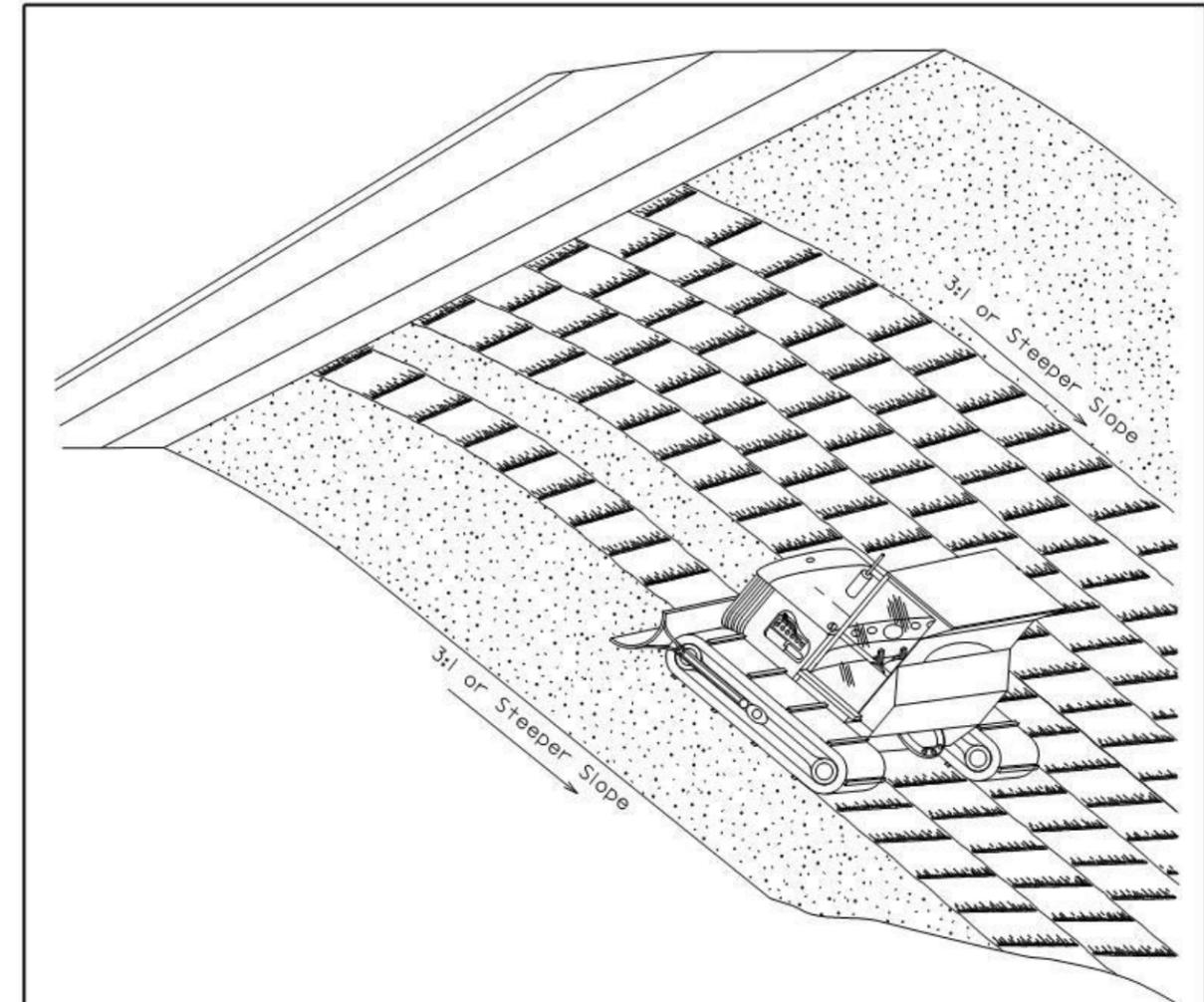
GENERAL NOTES:

- The type of sediment control device shown is for illustrative purposes only.
- The type of sediment control device used shall be one of the types as specified in the plans.
- The sediment control device shall be placed at the drop inlets according to the manufacturers' installation instructions.
- The sediment control at inlet for type S reinforced concrete drop inlet shall be placed at locations stated in the plans or at locations determined by the Engineer.
- The Contractor shall inspect and maintain the sediment control device once every week and within 24 hours after every rainfall event. The Contractor shall maintain the sediment control device by removing the device, removing accumulated sediment, and resetting the device.
- The removed sediment shall be placed at a location away from the drop inlet where the sediment will not be washed back into the drop inlet or other storm sewer system.
- Payment for the "Sediment Control at Type S Drop Inlet" shall be based on the minimum length required at the drop inlets. Some of the sediment control devices specified in the plans will have to be longer due to available length.
- All costs for furnishing, installing, inspecting, maintaining, removing, and resetting the sediment control device at the drop inlet including labor, equipment, and materials shall be incidental to the contract unit price per foot for "Sediment Control at Type S Reinforced Concrete Drop Inlet".

September 14, 2005

S D D O T	SEDIMENT CONTROL AT INLETS FOR TYPE S REINFORCED CONCRETE DROP INLETS	PLATE NUMBER 734.11
		Sheet 1 of 1

Published Date: 2nd Qtr. 2015



GENERAL NOTES:

- Where practical, surface roughening shall be done on slopes 3:1 and steeper and on slopes deemed necessary by the Engineer.
- The equipment used for surface roughening shall be equipped with tracks that are capable of creating ridges in the soil that are perpendicular to the slope. The final condition of the surface roughening shall be approved by the Engineer.
- Measurement for surface roughening shall be to the nearest tenth of an acre.
- All costs associated with surface roughening including labor, equipment, and materials shall be incidental to the contract unit price per acre for "Surface Roughening".

June 26, 2009

S D D O T	SURFACE ROUGHENING	PLATE NUMBER 734.25
		Sheet 1 of 1

Published Date: 2nd Qtr. 2015