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PLOT NAME - 1

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STATE OF SOUTH DAKOTA  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED

**PROJECT NO. P 0018(00)447**  
**US HIGHWAY NO. 18**  
**LINCOLN COUNTY**

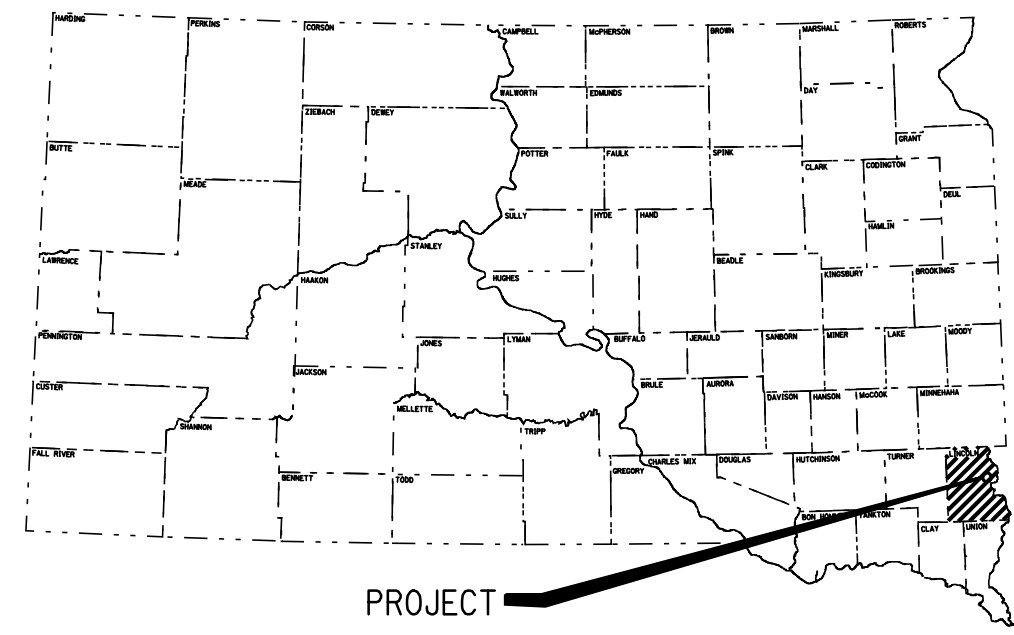
BANK STABILIZATION  
 PCN 00TV

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P0018(00)447	1	19

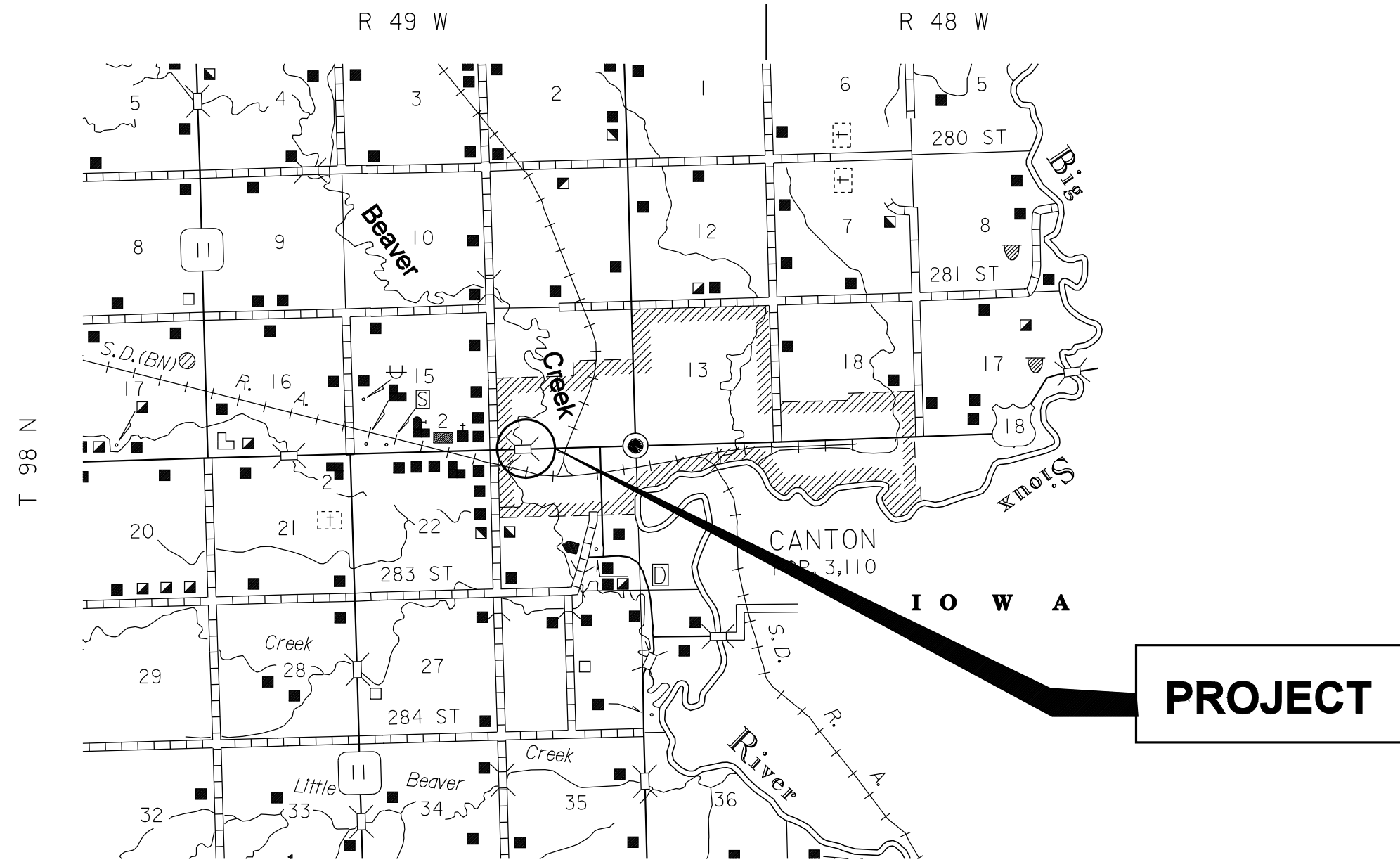
Plotting Date: 12-JUL-2006

**INDEX OF SHEETS**

Sheet 1	Layout Map & Index of Sheets
Sheets 2 to 4	Typical Rip Rap Section
Sheets 5 to 7	Estimate of Quantities and Plan Notes
Sheets 8 to 10	SWPPP
Sheet 11	Layout Sheet
Sheets 12 to 14	Traffic Control
Sheets 15 & 16	Standard Plates
Sheets 17 to 19	Cross Sections



PROJECT



**PROJECT**

**SCALES**

	RURAL	SUBURBAN	URBAN
PLAN	1"=200'	1"=100'	1"=40'
PROFILE	HORIZONTAL: 1"=200'	1"=100'	1"=40'
	VERTICAL: 1"=20'	1"=20'	1"=10'
CROSS SECTIONS	HORIZONTAL: 1"=40'	1"=20'	1"=20'
	VERTICAL: 1"=20'	1"=10'	1"=10'

**DESIGN DESIGNATION**

ADT (2005)	5760
ADT (2025)	10430
DHV	1775
D	50%
T DHV	3.6%
T ADT	7.9%

**STORM WATER PERMIT**  
 Major Stream: Beaver Creek  
 Area Disturbed: 0.21 Acres  
 Project Area: 0.12 Acres

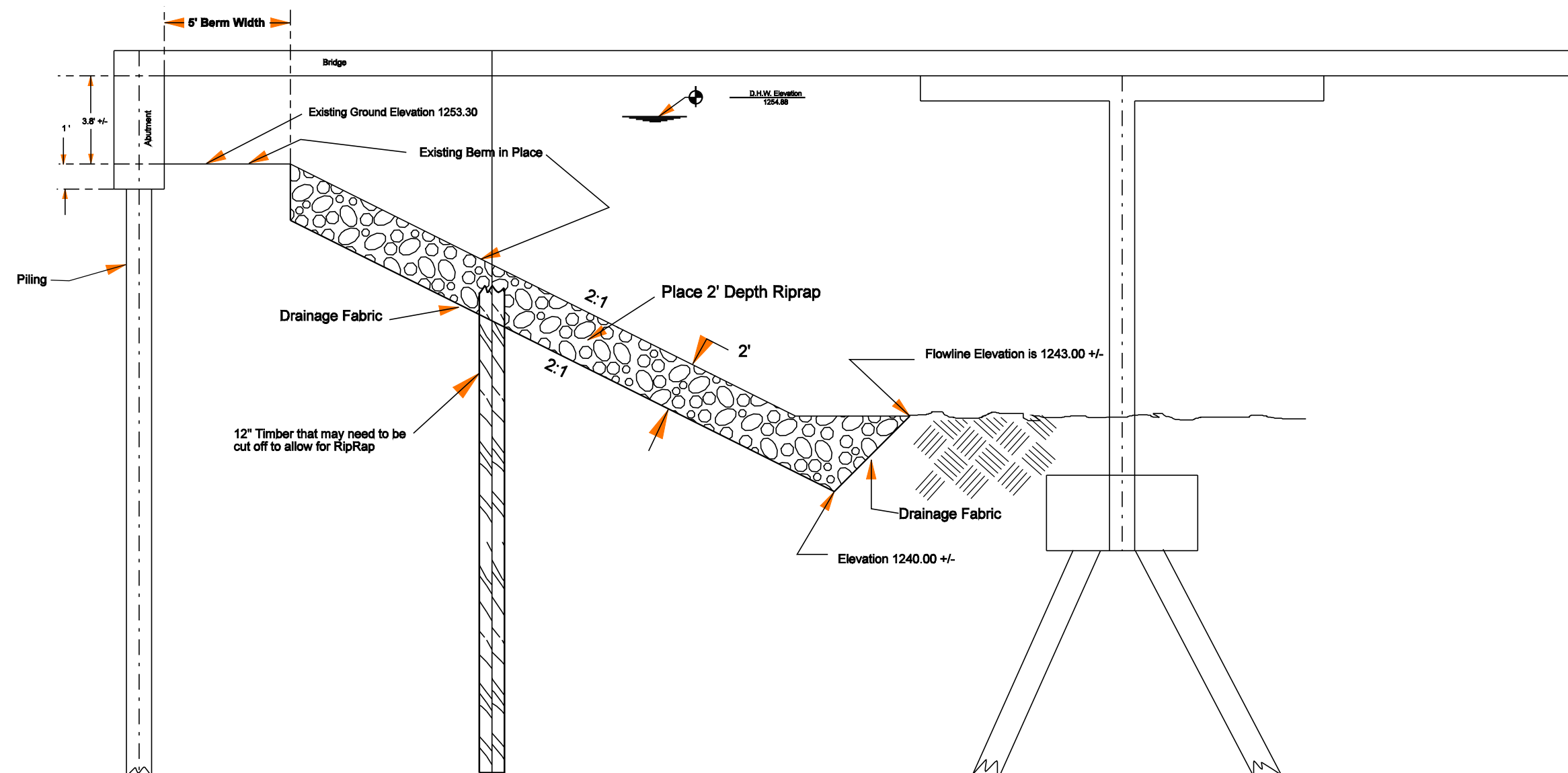
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P0018(00)447	2	19

Plotting Date: 12-JUL-2006

# TYPICAL GRADING & RIPRAP SECTION

## STATION 0+00± to 0+75±

### Bridge Slope Protection - WEST SIDE



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PLOT NAME - 2

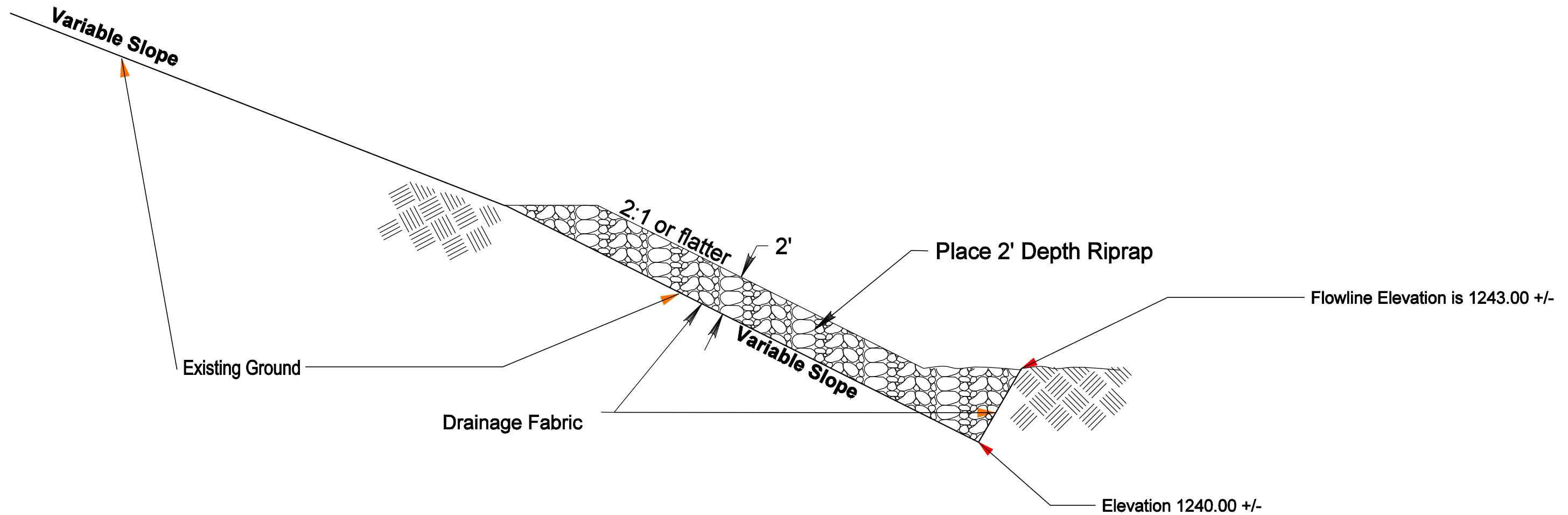
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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P0018(00)447	3	19

Plotting Date: 12-JUL-2006

# TYPICAL GRADING & RIPRAP SECTION

STATION 0+75± to 1+40±  
Slope Protection - WEST SIDE



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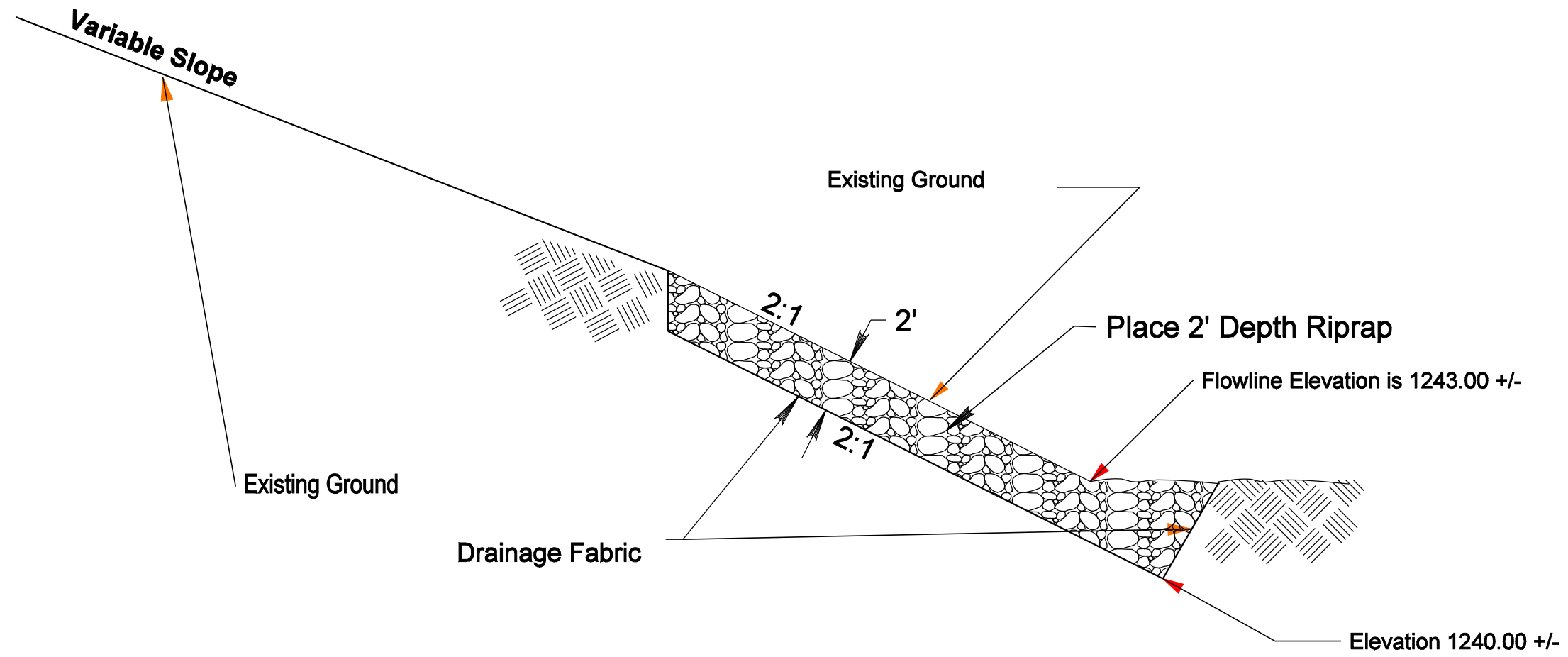
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P0018(00)447	4	19

Plotting Date: 12-JUL-2006

# TYPICAL GRADING & RIPRAP SECTION

## STATION 1+40± to 1+50

### Slope Protection - WEST SIDE



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## ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E1140	Remove Concrete Sidewalk	9.7	SqYd
110E1690	Remove Sediment	5	CuYd
110E1693	Remove Erosion Control Wattle	82	Ft
120E0010	Unclassified Excavation	278	CuYd
250E0020	Incidental Work, Grading	Lump Sum	LS
634E0010	Flagging	10	Hour
634E0100	Traffic Control	170	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0420	Type C Advance Warning Panel Arrow	1	Each
651E0040	4" Concrete Sidewalk	87	SqFt
700E0210	Class B Riprap	405	Ton
733E0100	Sodding	270	SqYd
734E0151	9" Diameter Erosion Control Wattle	82	Ft
734E0630	Floating Silt Curtain	225	Ft
734E0845	Sediment Control at Inlet "with frame and grate"	1	Each
831E0110	Type B Drainage Fabric	496.8	SqYd

### SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

### COMPLETION DATE

All work shall be completed on or before November 3, 2006.

### SCOPE OF WORK

Backfill\Excavate the cut bank.

Armor the cut bank with Class B Riprap.

### SEQUENCE OF OPERATIONS

Set up traffic control for the project.

Place erosion and sediment control measures.

Clear trees to facilitate the completion of the work.

Place fill and riprap to plans shown limits.

Shaping and sodding.

### UTILITIES

The Contractor shall contact the involved utility companies through South Dakota One Call (1-800-781-7474) prior to starting work. It shall be the responsibility of the Contractor to coordinate work with the utility owners to avoid damage to existing facilities.

### GENERAL MAINTENANCE OF TRAFFIC

Removing, relocating, covering, salvaging and resetting of permanent traffic control devices, including delineation, shall be the responsibility of the Contractor. Cost for this work shall be incidental to the contract unit prices for various items unless otherwise specified in the plans. Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.

Storage of vehicles and equipment shall be outside the clear zone and as near as possible to the right-of-way line. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work.

Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

The Contractor shall provide documentation that all breakaway sign supports comply with FHWA NCHRP 350 crashworthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.

### WASTE DISPOSAL SITE

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

Construction/demolition debris may not be disposed of within the State ROW.

The waste disposal site(s) shall be managed and reclaimed in accordance with the following from the General Permit for Highway, Road, and Railway Construction/Demolition Debris Disposal under the South Dakota Waste Management Program issued by the Department of Environment and Natural Resources.

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

### WASTE DISPOSAL SITE (CONTINUED)

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

- Construction/demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction/demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of fences, gates, and placement of a sign or signs at the entrance to the site stating "No Dumping Allowed".
- Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period of time not to exceed the duration of the project. Prior to project completion, the waste shall be removed from view of the ROW or buried and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10.06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

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

### WATER QUALITY

The Contractor is advised that the South Dakota Surface Water Quality Standards, administered by the Department of Environment and Natural Resources (DENR), apply to this project. If construction dewatering is required the Contractor is required to obtain a Surface Water Discharge Permit from DENR. Contact DENR (Surface Water Quality Program) at (605)-773-3351. The Big Sioux River is classified as a warm water permanent fishery with a total suspended solids standard of 90 milligrams/liter. The Surface Water Discharge standard is also 90 milligrams/liter total suspended solids for these waters.

**CHANNEL WORK**

See the Special Provision for "CONSTRUCTION PRACTICES FOR STREAMS INHABITED BY THE TOPEKA SHINER."

**CLEARING**

Clearing will be paid for at the contract lump sum price. Payment shall be full compensation for labor and equipment necessary to clear the trees that will allow the contractor to perform all necessary work. Contractor shall minimize clearing to only those areas necessary. It is estimated that approximately 40 trees (20 @ 6" – 12" and 20 @ 2" – 6") will need to be removed.

**UNCLASSIFIED EXCAVATION**

The plans quantity for "Unclassified Excavation" as shown in the Estimate of Quantities will be the basis of payment for this item.

**TABLE OF EXCAVATION QUANTITIES**

STATION	TO	STATION	EXC. (CuYd)	WASTE (CuYd)	TOTAL EXC. (CuYd)
0+00		1+83	59	219	278
30 % SHRINKAGE INCLUDED					

**INCIDENTAL WORK, (Grading)**

Incidental Work, Grading will be paid for at the contract lump sum price. Payment shall be full compensation for labor and equipment necessary to complete the following work:

Constructing a temporary haul road/roads that will allow the contractor to perform all the necessary work. The haul roads shall have topsoil removed and stockpiled.

Removing the temporary haul roads, shaping, and placing a minimum of 4" of topsoil on all areas that have been disturbed by construction.

**TABLE OF INCIDENTAL WORK, GRADING**

Station	L/R	Remarks
0+75 to 1+50	L	Repair any lawn sprinklers damaged during construction.
0+15 to 0+65	L	Saw off approximately 2' of 10 – 12" diameter wood piling from the remains of old structure

**SHAPING**

Disturbed areas will be topsoiled and leveled to promote vegetation growth and to remove obstructions of drainage.

**SODDING**

Sod shall be placed behind curb and gutter sections in residential areas at locations specified in the plans and at locations determined by the Engineer during construction. Peat sod is not permitted.

All costs involved for watering and fertilizing the sod shall be incidental to the contract unit price per SqYd for "Sodding".

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

The filter fabric used for constructing the sediment control at inlets with frames and grates is the same type of fabric that is used in 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://www.state.sd.us/Applications/HC54ApprovedProducts/main.asp>

Refer to Standard Plate 734.10 for details.

**EROSION CONTROL WATTLE**

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

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

The erosion control wattle provided shall be from the list shown below:

Product	Manufacturer
Curlex Sediment Log	American Excelsior Company Arlington, TX Phone: 1-800-777-7645 <a href="http://www.amerexcel.com">www.amerexcel.com</a>
Aspen Fiber Logs and Straw Logs	Western Excelsior Corporation Mancos, CO Phone: 1-800-833-8573 <a href="http://www.westernexcelsior.com">www.westernexcelsior.com</a>
Earth Saver Rice Straw Wattles	R.H. Dyck Inc. Winters, CA Phone: 1-530-795-4751 <a href="http://www.earth-savers.com">www.earth-savers.com</a>
Bio Logs	Flaxtech, LLC Rock Lake, ND Phone: 1-866-444-3529 <a href="http://www.flaxtech.com">www.flaxtech.com</a>

**TABLE OF EROSION CONTROL WATTLE**

Station	L/R	Diameter (Inch)	Quantity (Ft)
0+75 to 1+50	L	9	82
Total:			82

**STREET SWEEPING**

Vehicle tracking of sediment from the construction site shall be minimized. Street sweeping will be used if such BMPs are not adequate to prevent sediment from being tracked onto the street. All costs for street sweeping will be incidental to various bid items.

**FLOATING SILT CURTAIN**

An estimated 225 Ft of Floating silt curtain shall be installed as shown on Sheet No. 14 and at locations determined by the Engineer during construction. The Contractor shall determine the water depth and other waterway characteristics such as stream flow velocity before ordering the floating silt curtain so that the floating silt curtain installed is the correct type for the individual sites. The Contractor shall install the floating silt curtain according to the manufacturer's installation instructions or as directed by the Engineer. The Contractor shall maintain the floating silt curtains for the duration of the project to ensure continuous protection of the waterway.

Manufacturer and Supplier  
Elastec/American Marine, Inc.  
121 Council St.  
Carmi, IL 62821  
Phone: 1-618-382-2525  
[www.turbiditycurtains.com](http://www.turbiditycurtains.com)

Manufacturer and Supplier  
American Boom and Barrier Corp.  
7077 N. Atlantic Ave.  
Cape Canaveral, FL 32920  
Phone: 1-800-843-2110  
[www.abbcoboom.com](http://www.abbcoboom.com)

**WATER SOURCE**

The Contractor shall not withdraw water directly from streams in watersheds of the James, Vermillion, and Big Sioux Rivers without prior approval from the SDDOT Environmental Office, contact Dave Graves at (605) 773-5727. Water may be obtained from other sources not directly connected to these streams such as stock dams, wetlands, or wells. This note does not relieve the Contractor of his/her responsibility to obtain the necessary permits from other agencies such as South Dakota Department of Environment and Natural Resources and Corps of Engineers.

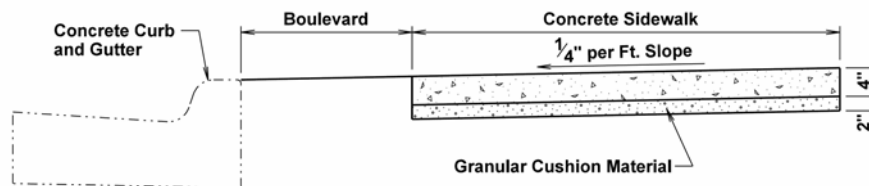
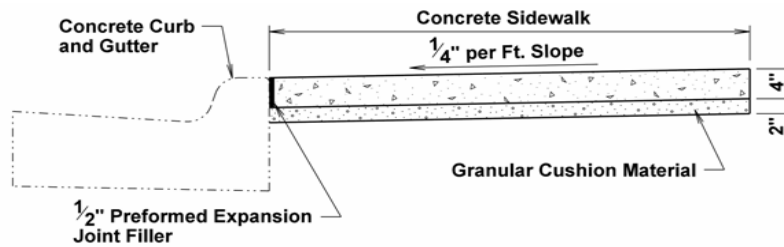


**CONCRETE SIDEWALK**

It is expected that some sidewalk will be damaged because of equipment that will need to travel over this area to do the work required on this project. Concrete sidewalk should only be removed and replaced if damaged during the project.

**TABLE OF SIDEWALK REMOVAL**

Station	to	Station	L/R	Quantity (SqYd)
0+68		0+79	L	9.7
Total:				9.7



The concrete sidewalk shall be constructed in accordance with Section 651 of the Standard Specifications. The sidewalk details shown above are typical of this project. The concrete used in the 4" Non –Metallic Fiber Reinforced Concrete Sidewalk shall comply with the requirements of the Standard Specifications for Class M6 Concrete. The non-metallic fiber shall be a macro fiber (W.R. Grace – STRUX 90/40 or approved equal) at an addition rate of 4lb/cubic yard. All costs for labor, materials, and placing the 4" granular material, and expansion fillers and incidentals necessary for construction of the 4" Non –Metallic Fiber Reinforced Concrete Sidewalk shall be incidental to the contract unit price per square foot for 4" Concrete Sidewalk.

**TABLE OF 4" CONCRETE SIDEWALK**

Station	to	Station	L/R	Quantity (SqFt)
0+68		0+79	L	87.0
Total:				87.0

**RIPRAP**

The Class B Riprap shall be constructed to the configuration, limits and elevations shown in the plans. The stream banks in the areas of riprap placement shall be reconstructed to their original alignment and elevations as approved by the Engineer. Cost of reconstructing the stream banks shall be incidental to the contract unit price per ton for Riprap Class B except as noted otherwise in these plans.

Drainage fabric will be placed underneath the Class B Riprap.

Vehicles and equipment shall not be operated directly on the fabric. The full depth of riprap shall be in place before any equipment is allowed on the area.

A factor of 1.4 tons/cu.yd. was used to convert Cu. Yds. to Tons.

Fabric, Type B Drainage will be measured and paid for by the square yard of surface area of fabric accepted complete in place on the project.

Riprap and fabric shall be placed so they tie into the existing riprap located at station 0+00.

## STORM WATER POLLUTION PREVENTION PLAN

(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 Erosion and Sediment Control Plans 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 0.21 Acre (4.2 1.b.)**
- **Total Area To Be Disturbed 0.21 Acre (4.2 1.b.)**
- **Existing Vegetative Cover (%) 60**
- **Soil Properties: AASHTO Soil Classification A-6, A-7 (4.2 1. d.)**
- **Name of Receiving Water Body/Bodies Beaver 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.)
- **Special sequencing requirements** (see topeka shiner special provision).
  - **Install perimeter protection where runoff sheets from the site.**
  - **Install channel and ditch bottom protection.**
  - **Clearing and grubbing.**
  - **Remove and store topsoil.**
  - **Stabilize disturbed areas.**
  - **Complete final grading.**
  - **Sod 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 or Permanent Seeding
    - Sodding
    - Planting
    - Mulching (Straw or Cellulose Fiber)
    - Erosion Control Blankets or Mats
    - Vegetation Buffer Strips
    - Roughened Surface (e.g. tracking)
    - Gabions-Gabion Mattress
    - Other

### ➤ **Structural Temporary Erosion and Sediment Controls**

- Silt Fence
- Straw Bale Check
- Temporary Berm
- Temporary Slope Drain
- Straw Wattles or Rolls
- Diversion Channels/Swales
- Channel Liners (TRM)
- Stone Rip Rap Sheet
- Rock Check Dams
- Sediment Traps/Basins
- Inlet Protection
- Outlet Protection
- Surface Inlet Protection
- Curb Inlet Protection
- Stabilized Construction Entrances
- Floating Silt Curtain

### ➤ **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 Section 3 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, 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.

➤ **Product Specific Practices (6.8) (Continued)**

▪ **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 booms, 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 reportable spill is a quantity of 25 gallons or more or any spill of oil which: 1) violates water quality standards, 2) produces a "sheen" on a surface water, or 3) causes a sludge or emulsion must be reported immediately to the National Response Center .

Any spill of oil or hazardous substance to waters of the state must be reported immediately by telephone to the SD DENR.

❖ **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.

*Dave Graves*

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

➤ **SDDOT Project Engineer**

- Name: Craig Smith
- Business Address: 5316 West 60th St. N.
- Job Office Location Sioux Falls: SD Zip: 57107-6464
- Office Phone: (605)367-4970 Field:            Cell:            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

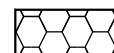
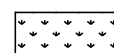



➤ **National Response Center Hotline**

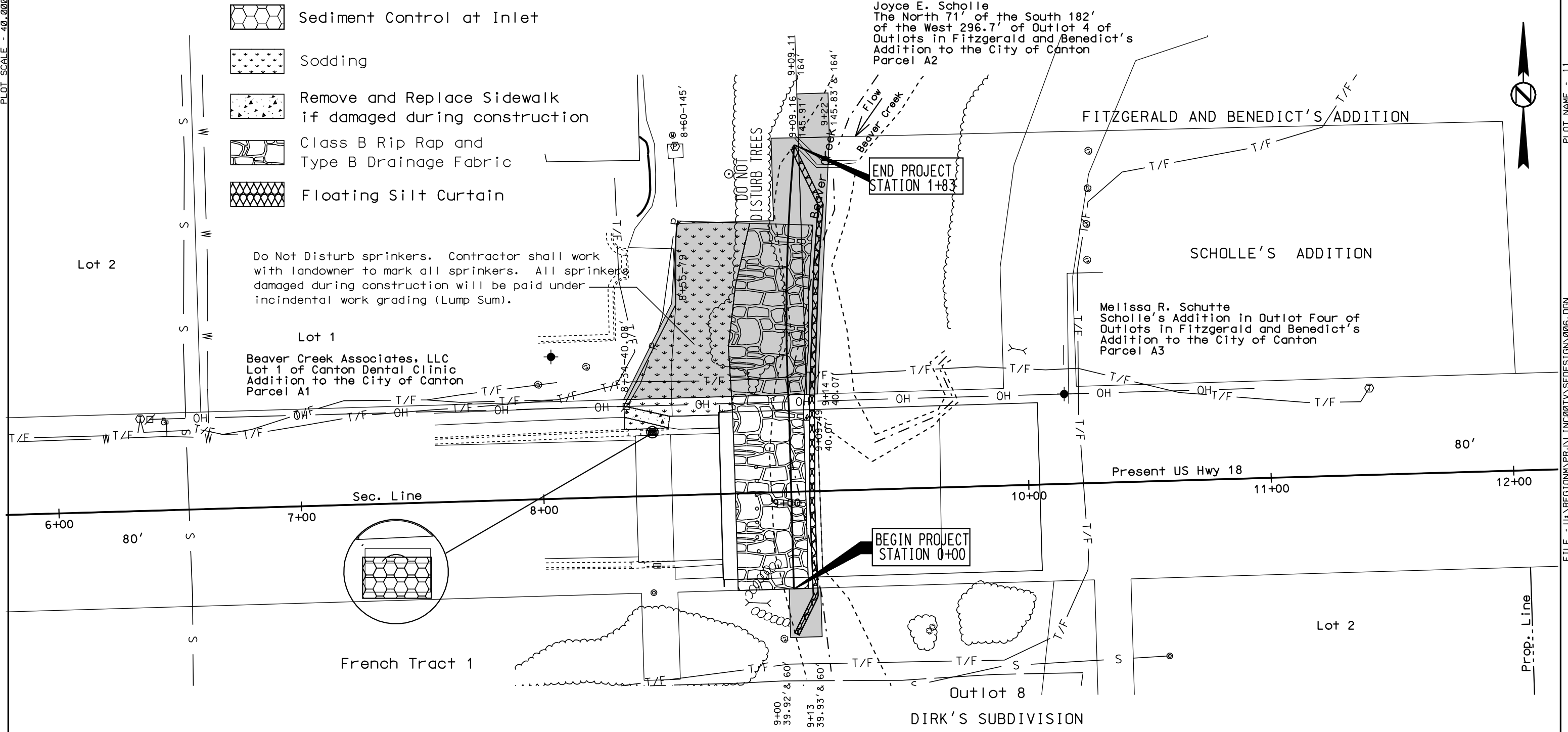
- (800) 424-8802.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P0018(00)447		

Plotting Date: 17-JUL-2006

Sec. 14 - T98N - R49W

-  Sediment Control at Inlet
-  Sodding
-  Remove and Replace Sidewalk if damaged during construction
-  Class B Rip Rap and Type B Drainage Fabric
-  Floating Silt Curtain



PLOT SCALE - 40.00000001.0000000

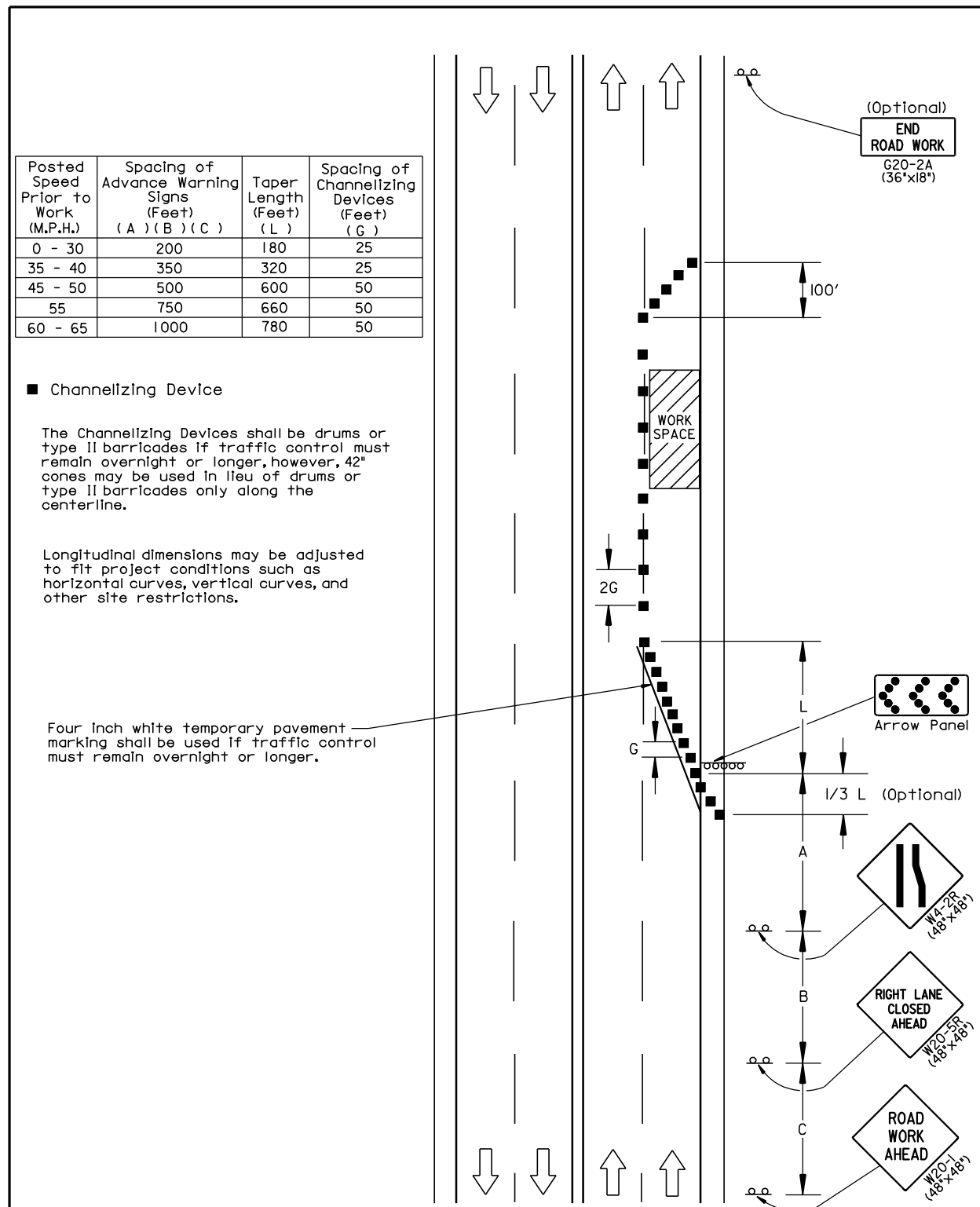
PLOT NAME - 11 FILE - U:\REGION\PRJ\LINC\08TV\SPDESIGN\006.DGN

8+34.00 to 9+09.49 L Parcel A1 Temporary easement for Cut containing 4270 sq ft, more or less	9+00.00 to 9+13.00 R Parcel A2 Temporary easement for Cut containing 233, more or less	9+09.16 to 9+22.00 L Parcel A3 Temporary easement for Cut containing 918 sq ft, more or less	9+00.00 to 9+13.00 R Parcel A4 Temporary easement for Cut containing 261 sq ft, more or less
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Sec. 23 - T98N - R49W

**ITEMIZED LIST FOR TRAFFIC CONTROL**

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS SIGN	PER	UNITS
G20-2a	36' ' x 18"	END ROAD WORK RIGHT LANE CLOSED	2	17		34
W4-2R	48' ' x 48"	AHEAD (SYMBOL)	1	34		34
W20-1	48' ' x 48"	ROAD WORK AHEAD RIGHT LANE CLOSED	2	34		68
W20-5R	48' ' x 48"	AHEAD	1	34		34
TOTAL UNITS						170



**Channelizing Device**

The Channelizing Devices shall be drums or type II barricades if traffic control must remain overnight or longer, however, 42" cones may be used in lieu of drums or type II barricades only along the centerline.

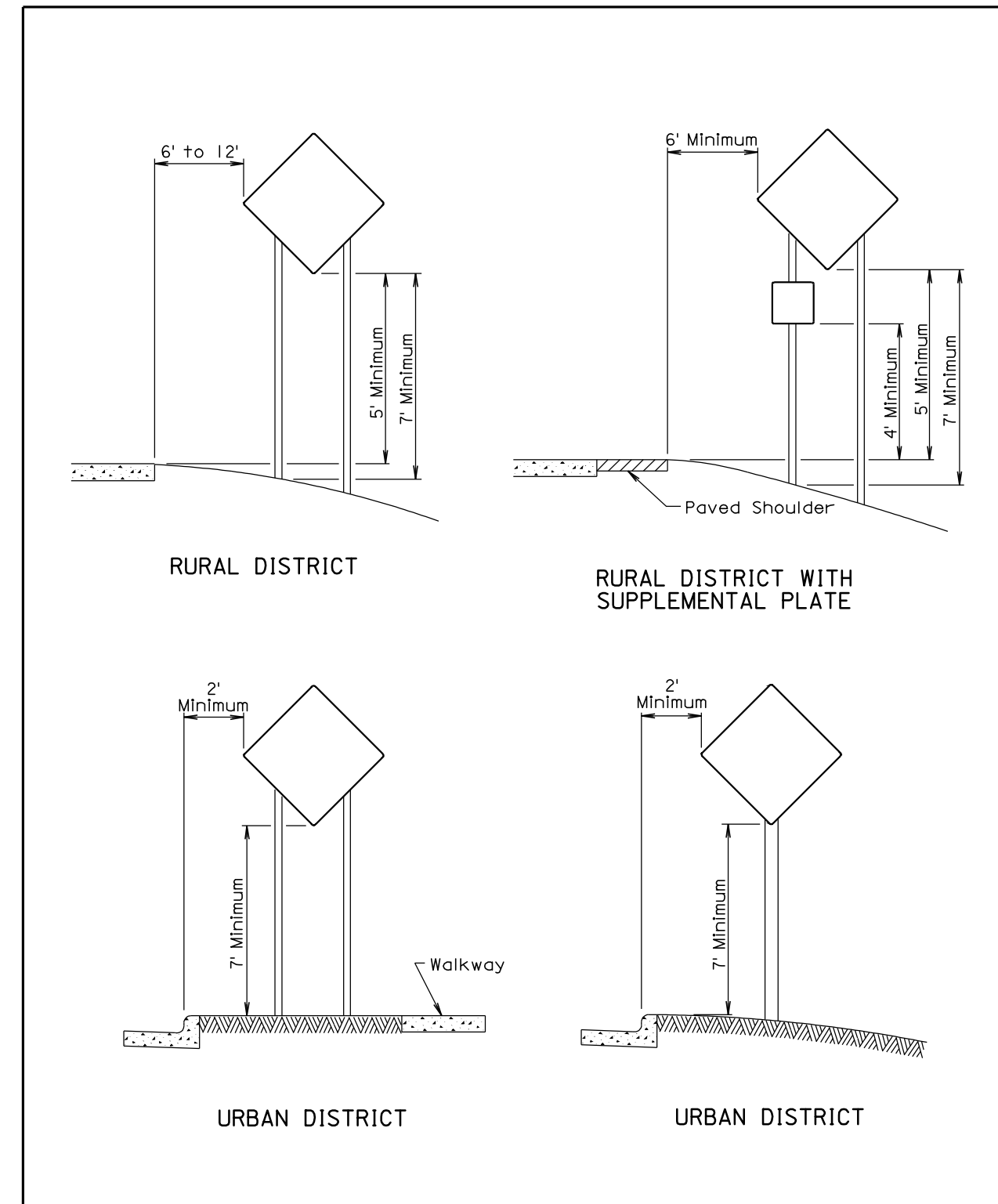
Longitudinal dimensions may be adjusted to fit project conditions such as horizontal curves, vertical curves, and other site restrictions.

Four inch white temporary pavement marking shall be used if traffic control must remain overnight or longer.

December 23, 2003

<b>S D D O T</b>	<b>GUIDES FOR TRAFFIC CONTROL DEVICES 4-LANE UNDIVIDED, RIGHT LANE CLOSED</b>	PLATE NUMBER 634.47
		Sheet 1 of 1

*Published Date: 2nd Qtr. 2006.*

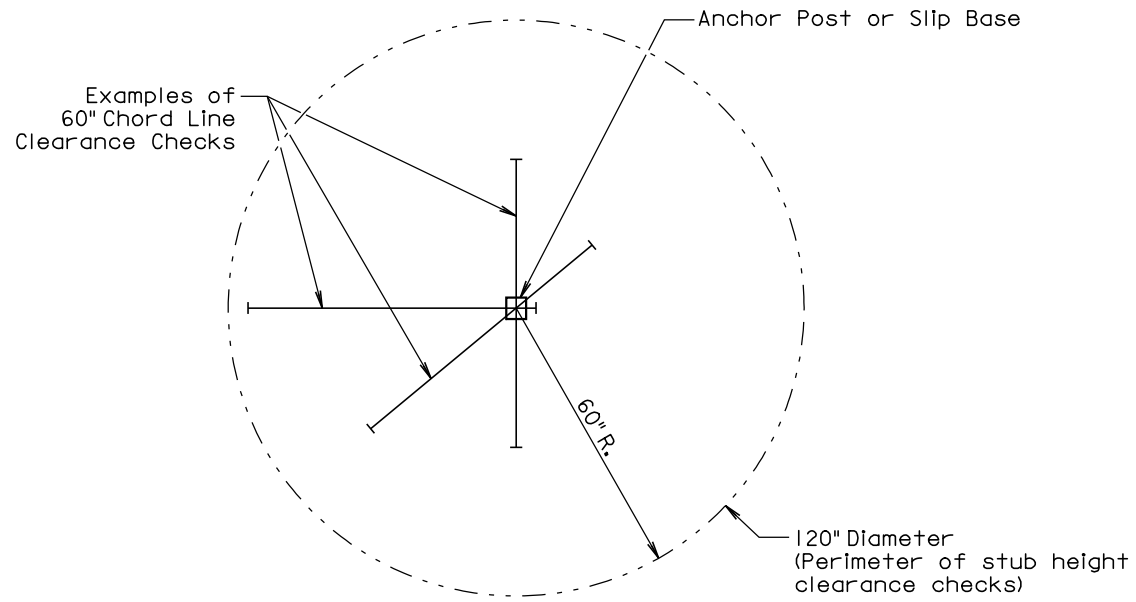


December 23, 2003

<b>S D D O T</b>	<b>BREAKAWAY SIGN SUPPORTS (Typical Construction Signing)</b>	PLATE NUMBER 634.85
		Sheet 1 of 1

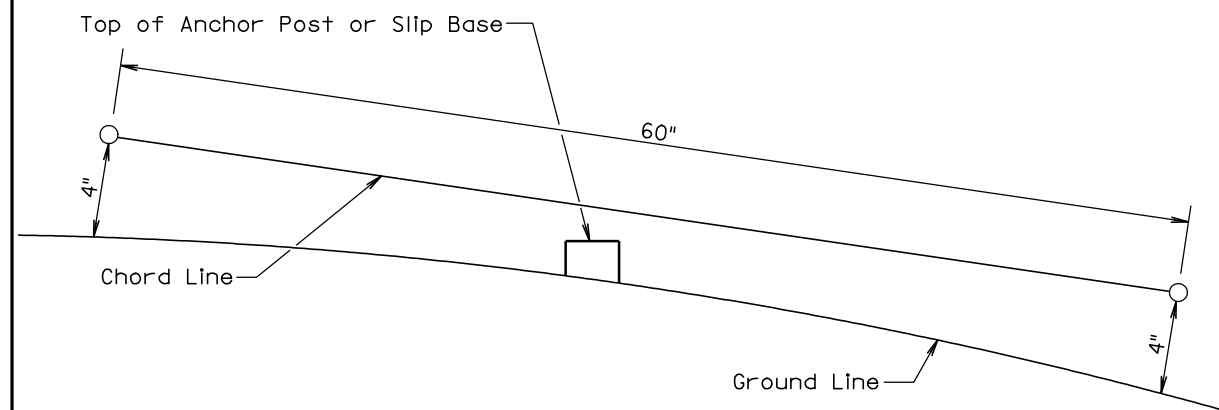
*Published Date: 2nd Qtr. 2006.*





**PLAN VIEW**

(Examples of stub height clearance checks)



**ELEVATION VIEW**

**GENERAL NOTES:**

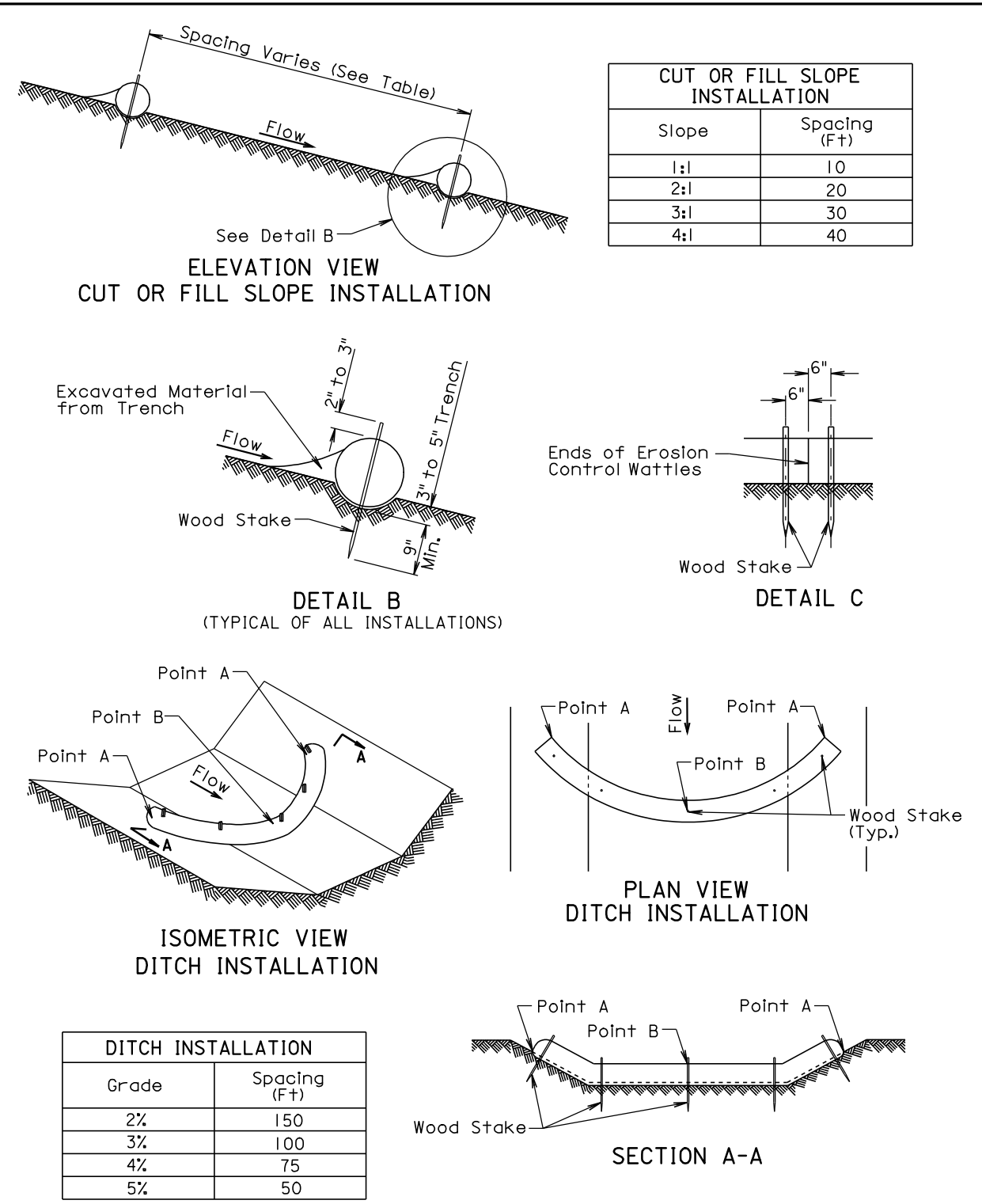
The top of anchor posts and slip bases SHALL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

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

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

July 1, 2005

<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER 634.99
	<i>Published Date: 2nd Qtr. 2006.</i>	Sheet 1 of 1



December 23, 2004

**GENERAL NOTES:**

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

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

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

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

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

The Contractor and Engineer shall inspect the erosion control wattles once every week and within 24 hours after every rainfall event greater than 1/2". The Contractor shall remove, dispose, or reshape the accumulated sediment when necessary as determined by the Engineer.

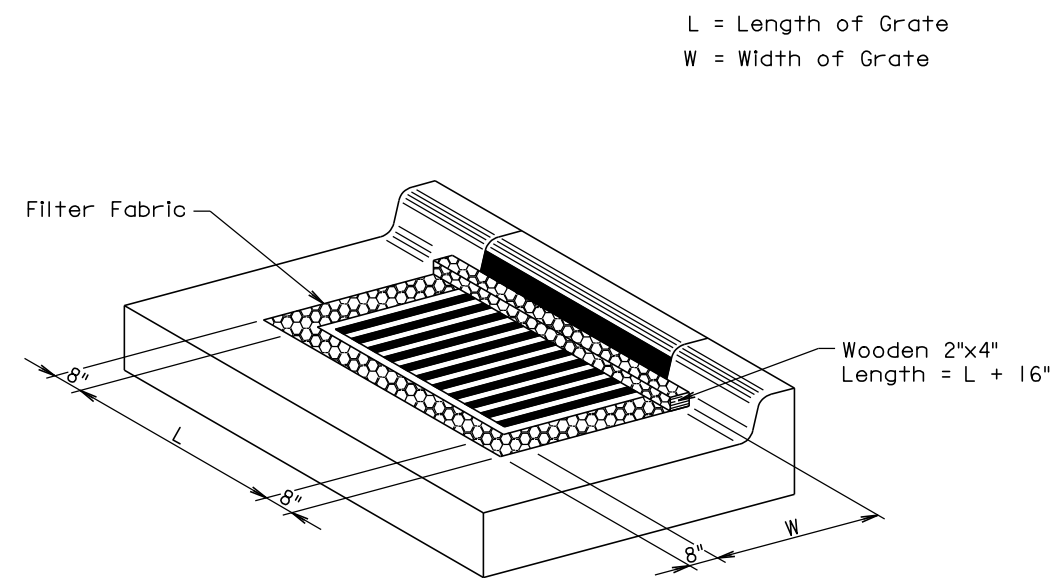
Sediment removal, disposal, or necessary shaping shall be as directed by the Engineer. All costs for removing accumulated sediment, disposal of sediment, and necessary shaping shall be incidental to the contract unit price per cubic yard for "Remove Sediment".

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

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

December 23, 2004

Username - trsf12115



**GENERAL NOTES:**

The grate and curb and gutter shown are for illustrative purposes only.

The sediment control at Inlet with frame and grate shall be placed at locations stated in the plans or at locations determined by the Engineer.

The filter fabric shall be the type specified in the plans.

The filter fabric shall be placed in the inlet opening prior to placing the grate. Approximately 18 inches of excess filter fabric shall be wrapped around the 2"x4" and stapled securely to the 2"x4" after the grate has been placed.

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 accumulated sediment and replacing torn filter fabric with new filter fabric.

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.

All costs for furnishing, installing, inspecting, maintaining, removing, and replacing the sediment control device at the inlet including labor, equipment, and materials shall be incidental to the contract unit price per each for "Sediment Control at Inlet with Frame and Grate".

September 14, 2005

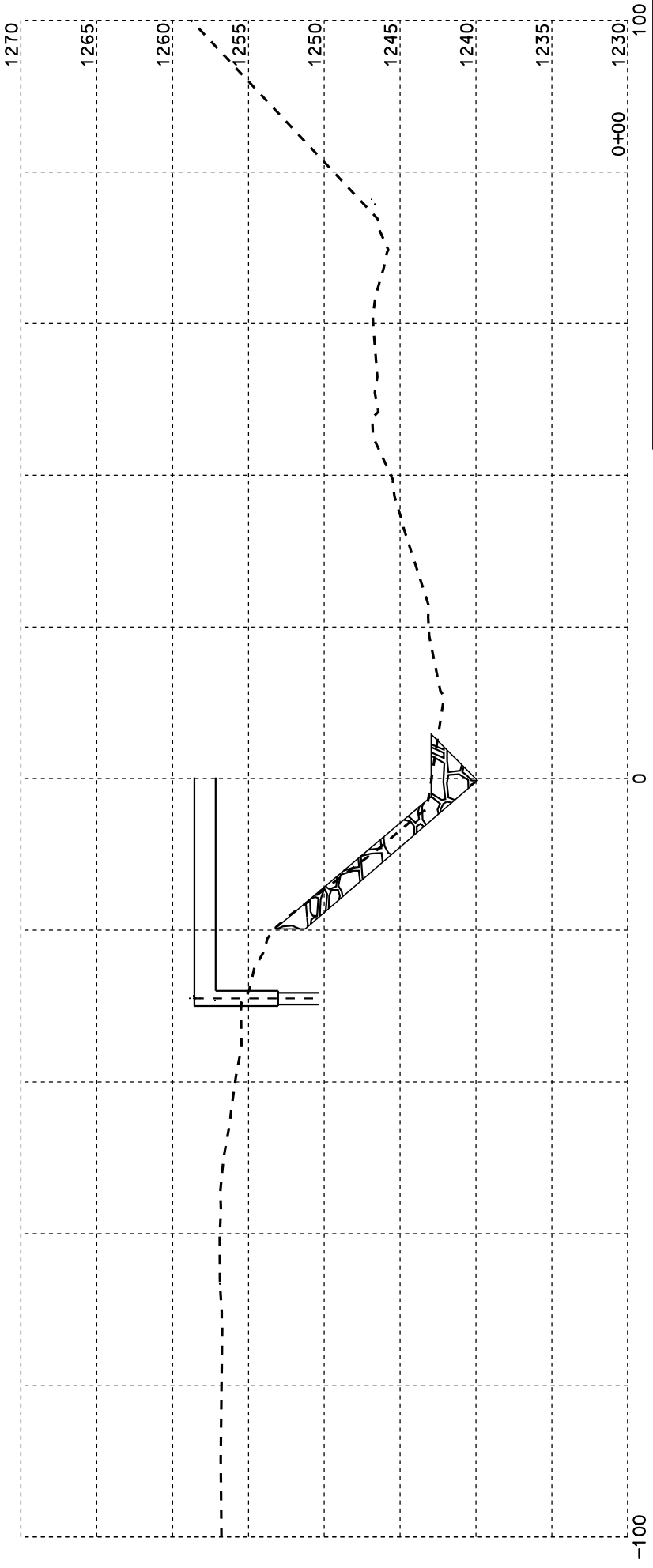
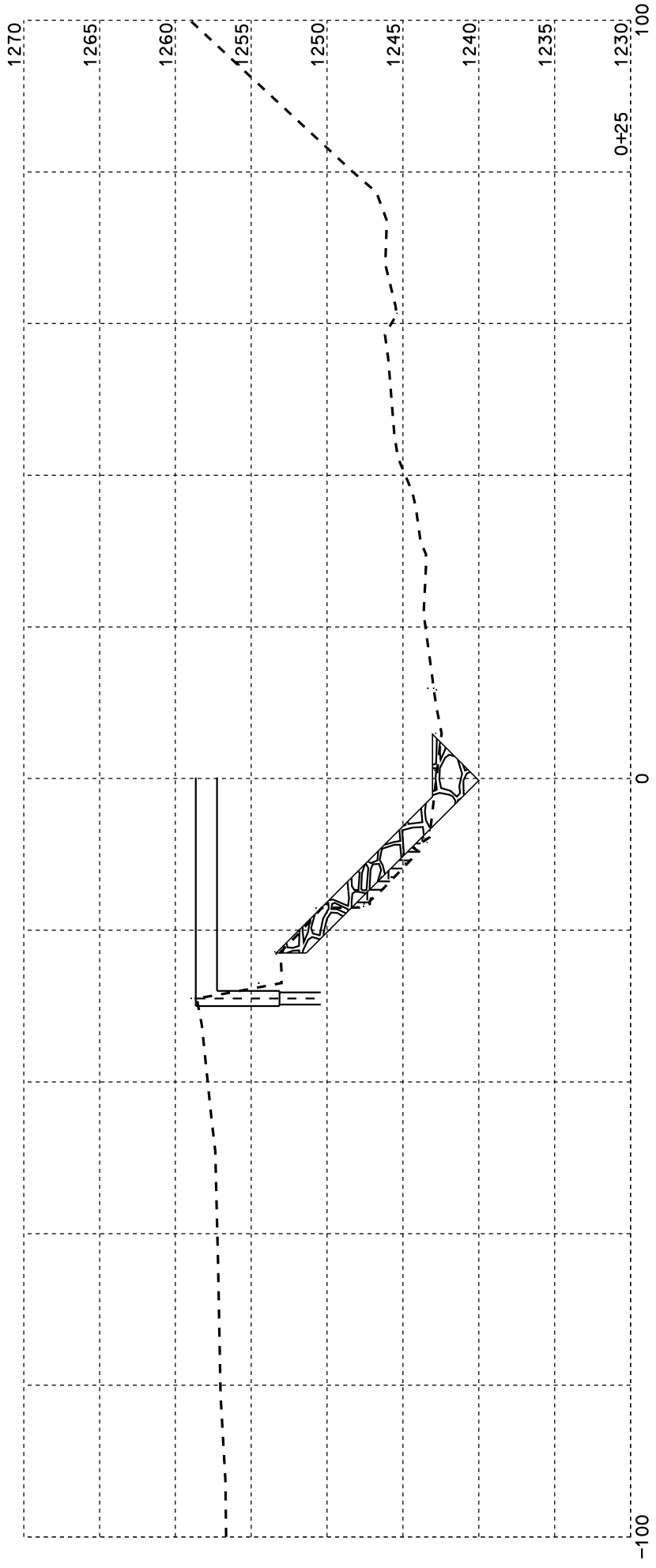
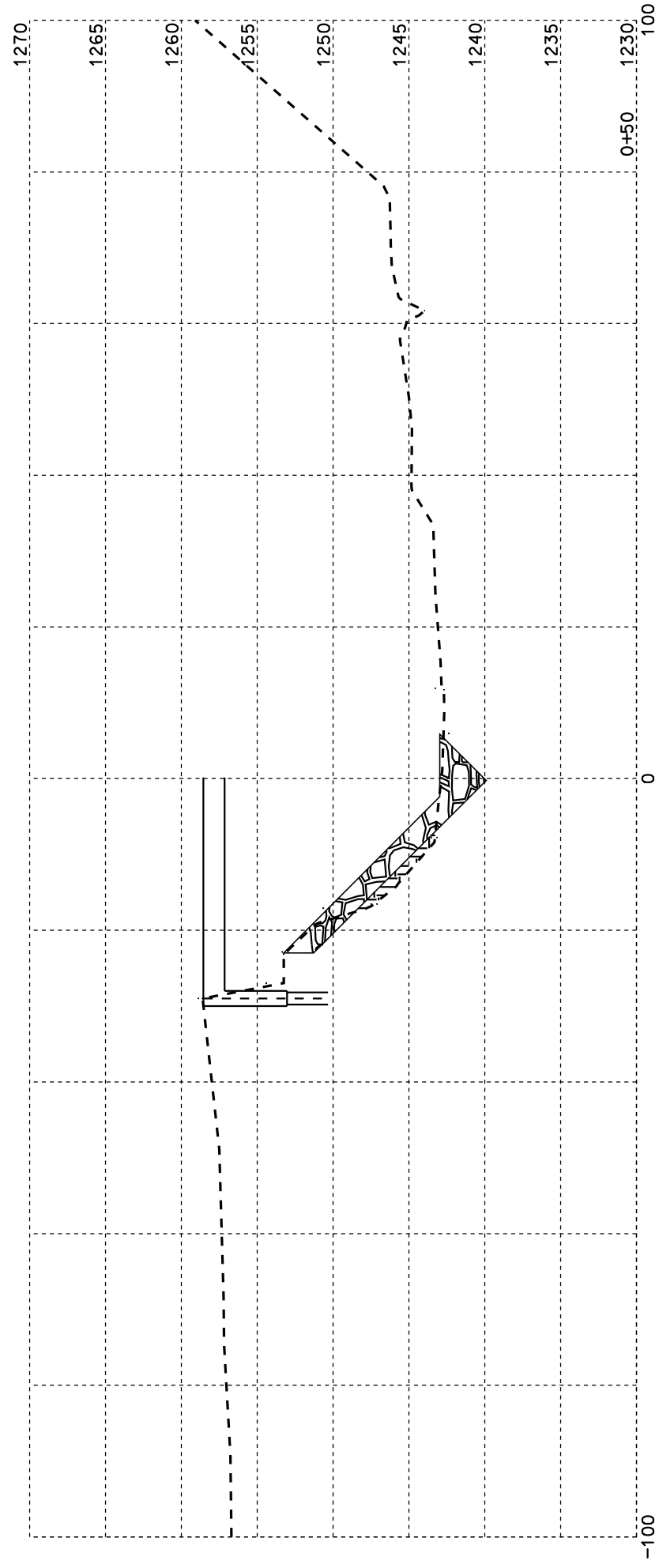
*Published Date: 2nd Qtr. 2006.*

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

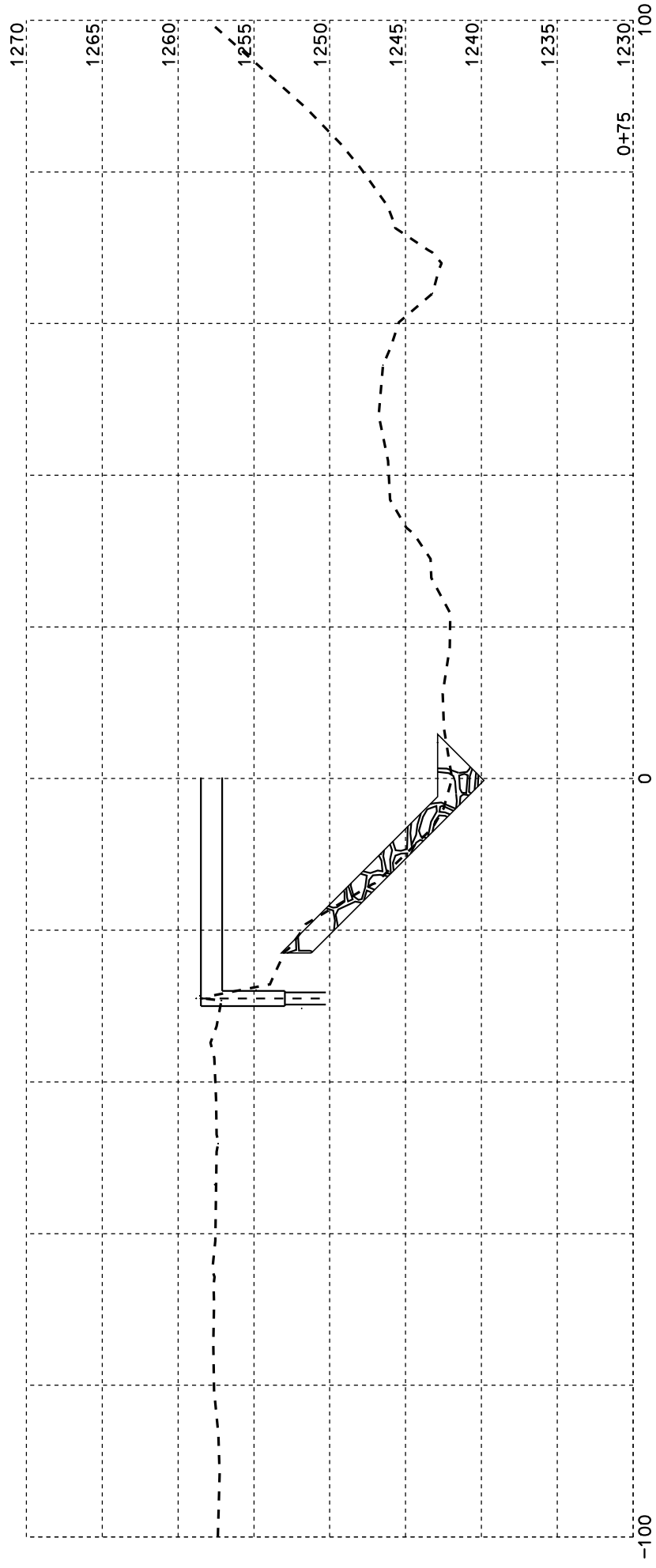
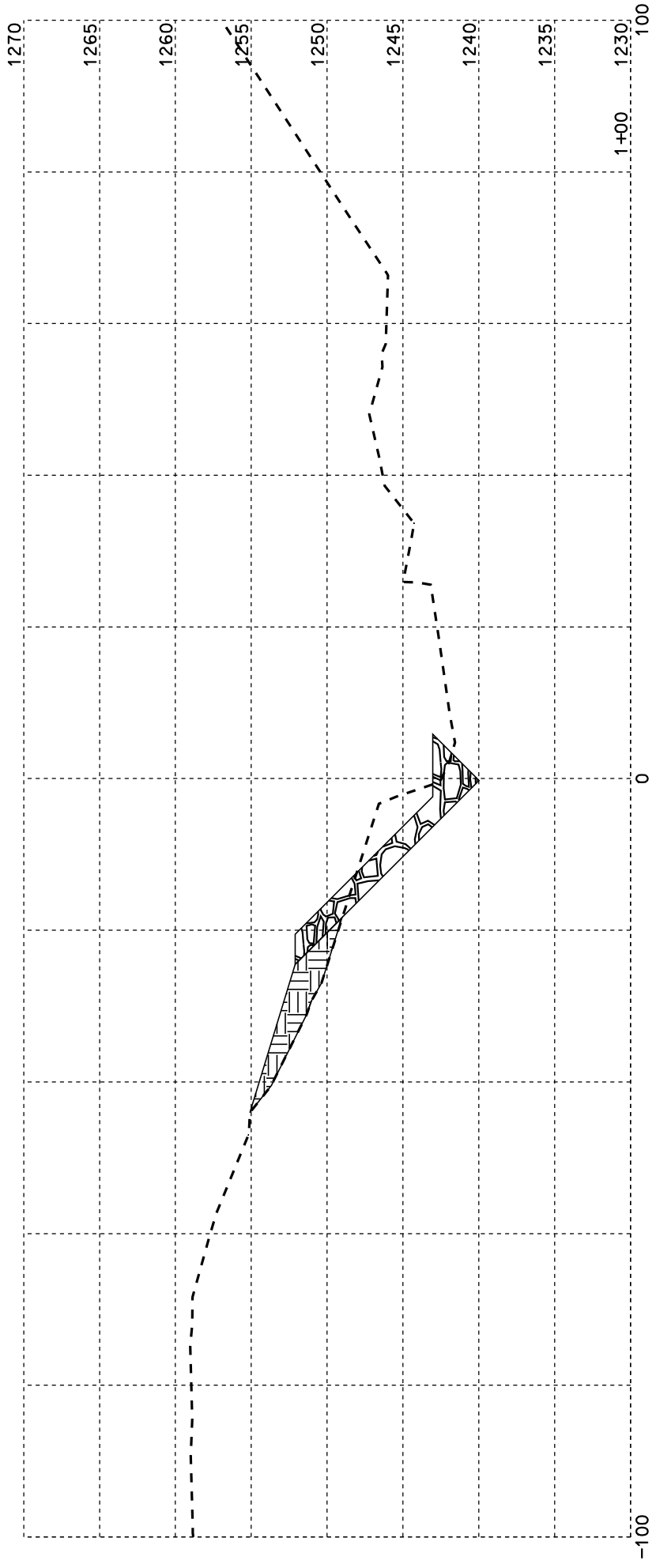
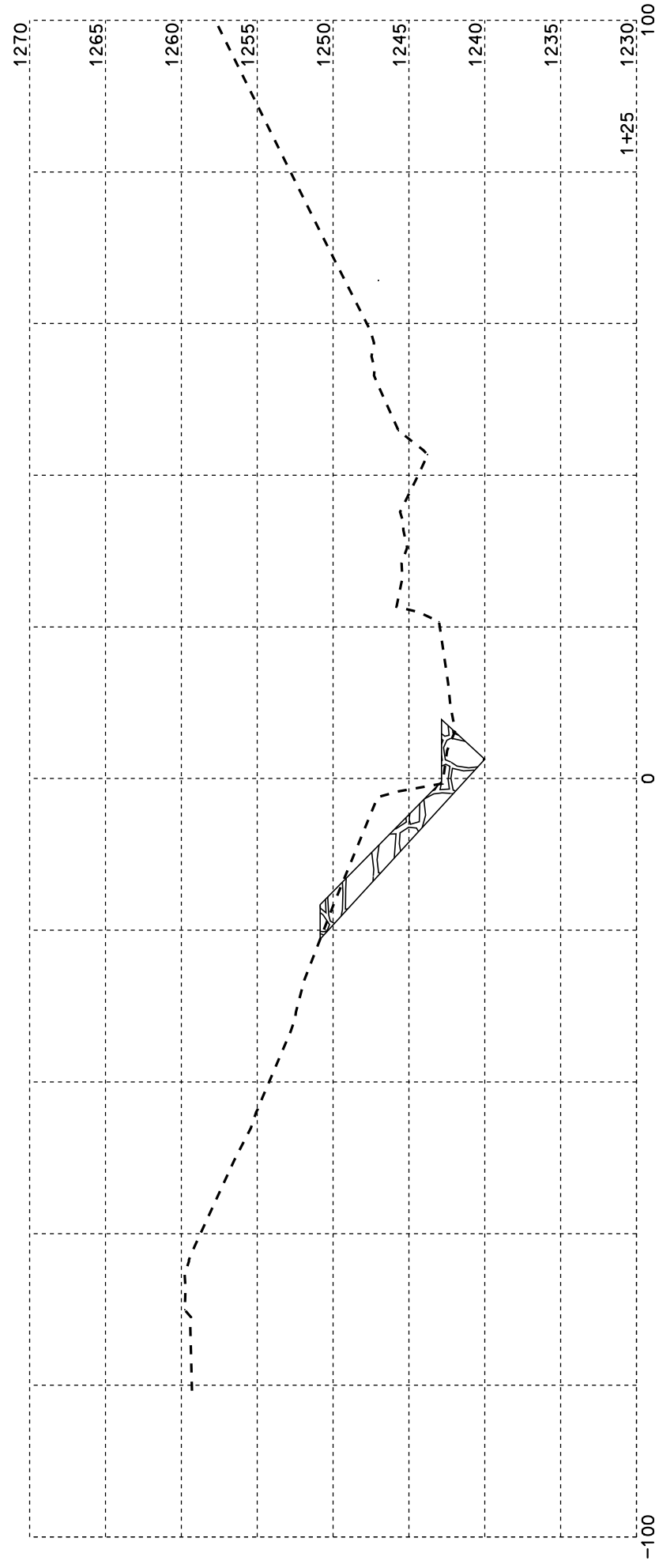
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Sheet 1 of 1



STATE OF SOUTH DAKOTA	PROJECT P0018(00)447	SHEET NO. 17	TOTAL SHEETS 19
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Plotting Date: 12-JUL-2006

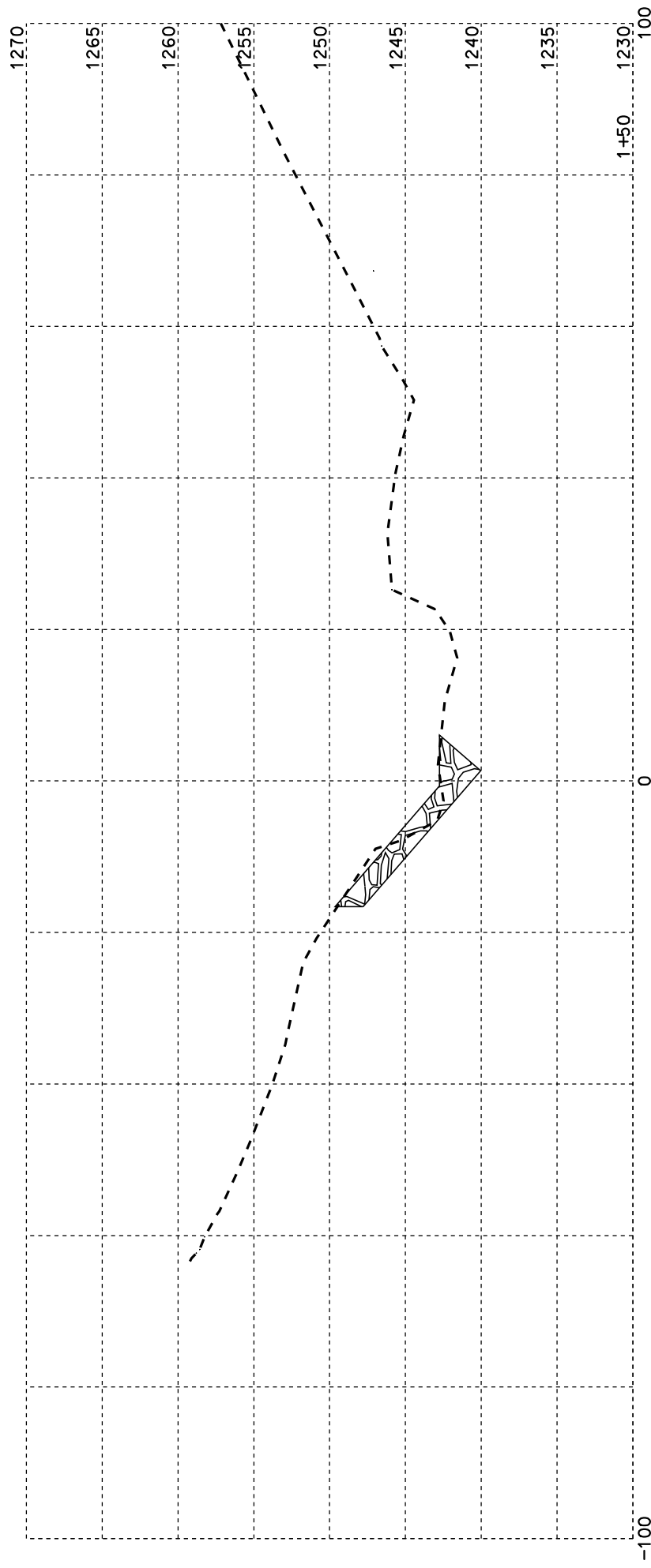


STATE OF SOUTH DAKOTA	PROJECT	TOTAL SHEETS
	P0018 (00) 447	18

Plotting Date: 12-JUL-2006

SHEET NO.	TOTAL SHEETS
18	19





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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P0018 (00) 447	19	19

Plotting Date: 12-JUL-2006