

Department of Transportation

Rapid City Region Office

2300 Eglin Street

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May 25, 2012

ADDENDUM NO. 2

RE: May 31, 2012 Rapid City Region Office Informal Letting –
Project 036-491, Custer County, PCN i2j2
SD 36, West of Hermosa

TO WHOM IT MAY CONCERN:

The following addendum to the plans is hereby made:

PROPOSAL:

- No change.

PLANS:

- Replace plan sheets 2 thru 6, 20, and 21 with attached plan sheets with revised date 5/25/12. The plans were changed to remove all reference to "Super-Duty Silt Fence" and provide details for Temporary Waterway Diversion.

Sincerely,

John Rehorst
Region Design Engineer

ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
110E0600	Remove Fence	50	Ft
110E1700	Remove Silt Fence	200	Ft
110E6230	Remove W Beam Guardrail for Reset	50.0	Ft
110E7802	Remove Fence for Reset	50	Ft
620E0520	Type 2 Temporary Fence	220	Ft
620E4100	Reset Fence	50	Ft
630E5150	Reset Double W Beam Guardrail with Wood Posts	50.0	Ft
634E0010	Flagging	40	Hour
634E0100	Traffic Control	272	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0700	Traffic Control Movable Concrete Barrier	14	Each
700E0310	Class C Riprap	520.0	Ton
734E0010	Erosion Control	Lump Sum	LS
734E0602	Low Flow Silt Fence	200	Ft
734E0610	Mucking Silt Fence	5	CuYd
831E0110	Type B Drainage Fabric	410	SqYd

SPECIFICATIONS

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

IN-PLACE STABILIZED EARTH SLOPE

There shall be no excavation of the reinforced earth slope adjacent to the project permitted. Minor surface preparation (i.e. vegetation removal and fill operations prior to fabric and riprap placement) shall be permitted from station 0+20 to 0+60 of the Grace Coolidge Creek alignment.

Any damage to the in-place stabilized earth slope shall be the repaired by the Contractor. Any costs associated with repairing damage to the in-place stabilized earth slope shall be the responsibility of the Contractor with no additional cost to the State.

CURB & GUTTER AND DROP INLET

Care shall be taken not to damage the in-place curb and gutter or the in-place drop inlet located adjacent to the guardrail. Any damage to the in-place curb & gutter or the in-place drop inlet shall be repaired by the Contractor. Any cost associated with repairs to the in-place curb & gutter and/or the in-place drop inlet shall be the responsibility of the Contractor with no additional cost to the State.

UTILITIES

Other than noted below, utilities are not planned to be affected on this project. If utilities are identified near the improvement area through the SD One Call Process as required by South Dakota Codified Law 49-7A and Administrative Rule Article 20:25, the contractor shall contact the project engineer to determine modifications that will be necessary to avoid utility impacts.

A fiber optic line is located directly east of, and adjacent to, the work area. Care shall be taken to not damage this fiber optic line during construction. Any damage caused to this fiber optic line by the Contractor shall be repaired by the Contractor at no cost to the State.

SEQUENCE OF OPERATIONS

1. Set up traffic control.
2. Remove Guardrail.
3. Install Temporary Waterway Diversion.
4. Shape erosional areas.
5. Place Fabric and Riprap.
6. Remove Temporary Waterway Diversion.
7. Place erosion control.
8. Reset Guardrail.
9. Remove traffic control.

WATER SOURCE

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the DOT Environmental Office.

The DOT Environmental Office contact is the Environmental Project Scientist, 605-773-3268. The WATER SOURCE plan note does not relieve the Contractor of his/her responsibility to obtain the necessary permits from other agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE).

WORK AFFECTING WATERWAYS**A. WATER QUALITY****Surface Water Quality**

The Contractor is advised the South Dakota Surface Water Quality Standards, administered by the Department of Environment and Natural Resources (DENR), apply to this project.

Grace Coolidge Creek is classified as a cold water permanent fishery with a total suspended solids standard of 30 milligrams/liter.

Surface Water Discharge

If construction dewatering is required, the Contractor is required to obtain a Surface Water Discharge Permit from the DENR. Contact the DENR Surface Water Program at 605-773-3351 to apply for a permit.

Grace Coolidge Creek is classified as a cold water permanent fishery with a Surface Water Discharge standard of 30 milligrams/liter total suspended solids.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	036-491	2	31

Rev. 5/25/12 jpr

WORK AFFECTING WATERWAYS (CONTINUED)**Storm Water**

The Contractor is advised this project is regulated under the Phase II Storm Water Regulations and must receive coverage under the DENR General Permit for Construction Activities. A Notice of Intent (NOI) will be submitted to DENR a minimum of 15 days prior to project start by the DOT Environmental Office. A letter must be received from DENR that acknowledges project coverage under this general permit before project start. The Contractor is advised that permit coverage may also be required by offsite activities, such as borrow and staging areas, which are the responsibility of the Contractor.

A major component of the storm water construction permit is development and implementation of a storm water pollution prevention plan (SWPPP). This plan is a joint effort and responsibility of the DOT and the Contractor. The SWPPP is a dynamic document and is to be available on-site at all times. Information on storm water requirements and SWPPP are available on the following websites:

DOT: http://www.sddot.com/pe/projdev/environment_stormwater.asp

DENR: <http://www.denr.sd.gov/des/sw/stormwater.aspx>

B. SEASONAL WORK RESTRICTIONS

The State of South Dakota has designated a cold water fishery associated with this project. Placement of fill and/or in-stream work should not take place during the Seasonal Work Restriction to avoid conflicts with spawning fish. If flows during this time are nonexistent or extremely low, the seasonal use restriction may not be applicable. The Contractor shall not conduct in-stream work during the Seasonal Work Restriction without prior approval from the Environmental Project Scientist of the DOT Environmental Office, 605-773-3268.

TABLE OF COLD WATER FISHERY

Stream Name	Stream Classification	Seasonal Work Restriction
Grace Coolidge Creek	Cold Water	October 1 to April 1

WORK AFFECTING WATERWAYS (CONTINUED)

C. CONSTRUCTION PRACTICES FOR TEMPORARY WORKS IN PROTECTED WATERWAYS

No excavation shall be made below the ordinary high water elevation in protected waterways outside the concrete barriers; and the natural streambed shall not be disturbed without permission from the Engineer..

All dredged or excavated materials shall be placed at a site above the ordinary high water elevation in a confined area (not classified as a wetland) to prevent return of such material to the waterway.

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

All concrete barriers shall be removed with minimal disturbance to the streambed. Proper construction practices shall be used to minimize increases in suspended solids and turbidity in the waterway.

The Contractor shall install temporary works for the waterway diversion in accordance with Section 423 of the Standard Specifications.

Cofferdams, Cribs and Shoring shall be used if the height of the concrete barriers is insufficient to divert the waterway away from the work area.

Class C Riprap placement shall be constructed in close conformity with the plans to ensure that the hydraulic capacity of the waterway is not changed.

ACCESS TO THE PROJECT WORK LIMITS

The Contractor shall access the project work limits from the highway right of way. The Contractor will not be allowed to go outside the limits of the temporary easement without gaining permission from the adjacent landowner.

HISTORICAL PRESERVATION OFFICE CLEARANCES

To obtain State Historical Preservation Office (SHPO) clearance, a cultural resources survey may need to be conducted by a qualified archaeologist. In lieu of a cultural resources survey, the Contractor could request a records search from Jim Donohue, State Archaeological Research Center (SARC). Provide SARC with the following: a topographical map or aerial view on which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that no artifacts have been found on the site. The Contractor shall arrange and pay for the cultural resource survey and/or records search.

If any earth disturbing activities occur within the current geographical or historic boundaries of any South Dakota reservation, the Contractor shall obtain Tribal Historical Preservation Office (THPO) clearance. If no THPO exists, the required SHPO clearance shall suffice, with documentation of Tribal contact efforts provided to SHPO.

To facilitate SHPO or THPO responses, the Contractor should submit a records search or cultural resources survey report to the DOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3268). Allow 30 days from the date this information is submitted to the Environmental Engineer for SHPO/THPO approval. The Contractor is responsible for obtaining all required permits and clearances for staging areas, borrow sites, waste disposal sites, and all material processing sites. The Contractor shall provide the required permits and clearances to the Engineer at the preconstruction meeting.

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.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	036-491	3	31

Rev. 5/25/12 jpr

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:

1. 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".
2. 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.

REMOVE AND RESET FENCE

All costs associated with the removal of the 100' of fence shall be incidental to the contract unit price per foot for Remove Fence for Reset.

All costs associated with resetting of the 100' of fence shall be incidental to the contract unit price per foot for Reset Fence.

GENERAL MAINTENANCE OF TRAFFIC

- Traffic control shall be in accordance with MUTCD Standards, the Standard Specifications and the layouts contained in these plans.
- The Contractor shall at all times, keep the portion of the project being used by public traffic in a condition that will adequately and safely accommodate traffic.
- Storage of vehicles, materials, and equipment shall be no closer than 30' from the edge of the driving lane. 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 or MASH crash-worthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.
- Non-applicable signing will be covered or removed and reset during periods of in-activity. All costs to do this work shall be incidental to Traffic Control, Miscellaneous.
- Construction signing that remains in the same location for more than 3 days shall be on fixed location, ground mounted, breakaway supports, unless approved by the Engineer.
- The Contractor or designated traffic control subcontractor shall make night (after dark) inspections at the initial set up of traffic control and every week thereafter to ensure the adequacy, legibility and reflectivity of each sign and device. A written summary of each inspection shall be given to the Engineer within 24 hours after completion of the inspection. The cost for the nighttime inspection work shall be incidental to the related contract items.
- The Contractor shall be required to have a person available 24 hour/day, 7 days/week to maintain traffic control devices. The name and cellular telephone number of this individual shall be given to the Engineer at the preconstruction meeting.
- The Contractor shall coordinate his operations such that during non-working hours the roadway shall be open to two-way traffic on a uniform driving surface for the entire width of the roadway.
- Work activities shall only be during daylight hours. Daylight hours are considered to be ½ hour before sunrise until ½ hour after sunset.

TRAFFIC CONTROL

- Removing, relocating, covering, salvaging and resetting of permanent traffic control devices, including delineation, shall be the responsibility of the Contractor. The cost of this work shall be incidental to the various contract bid 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.
- The Contractor shall remove the concrete barriers protecting the area absent of guardrail during operations and replace them as shown on the Traffic Control – Night-Time and Non-Working Hours sheet during non-work hours.
- During hours of operation Standard Plate 634.23 shall be used for Traffic Control as directed by the Engineer.

TRAFFIC CONTROL MOVABLE CONCRETE BARRIERS

Concrete barriers will be provided by the State and are available for pickup from the DOT South Maintenance Yard located south of Rapid City adjacent to Highway 79. Barriers to be adjusted or moved shall be disconnected from adjacent barriers to minimize damage to connecting pins. Pins damaged by the Contractor shall be replaced at no cost to the Department. All costs associated with picking up from the South Yard, transporting, setting, connecting, and hauling back to the South Yard shall be incidental to the contract unit price per each for Traffic Control Movable Concrete Barrier.

After the initial placement, concrete barriers for traffic control purposes may need to be adjusted on a daily basis. Daily removal and reset shall be incidental to the contract unit price per each Traffic Control Movable Concrete Barrier.

Concrete barrier sections shall be placed as depicted in the plans. The barriers shall be pinned and bolted together as directed by the Engineer.

The Contractor may use 10' barriers for traffic control purposes to accommodate the tapered ends.

INVENTORY OF TRAFFIC CONTROL DEVICES

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	2	34	68
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-7a	48" x 48"	FLAGGER	2	34	68
W21-5a	48" x 48"	RIGHT SHOULDER CLOSED	1	34	34
TOTAL UNITS					272

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	036-491	4	31

Rev. 5/25/12 jpr

CLASS C RIPRAP

Type B Drainage Fabric shall be placed underneath the Class C Riprap. The fabric shall conform to Section 831 of the Standard Specifications.

It is estimated that 600 tons of Class C Riprap and 410 SqYd of Type B Drainage Fabric will be required to build to the limits shown in these plans

Excess material generated from the shaping for placement of Class C Riprap shall be handled as waste and disposed of by the Contractor. All costs associated with this work shall be incidental to the contract unit price per ton for Class C Riprap.

A factor of 1.4 Tons/CuYd was used to convert CuYds of Class C Riprap to Tons.

LOW FLOW AND TEMPORARY WATERWAY DIVERSION

The Low Flow Silt Fence fabric provided shall be from the approved product list. The approved product list for Low Flow Silt fence may be viewed at the following internet site:

<http://apps.sd.gov/Applications/HC54ApprovedProducts/main.asp>

The temporary waterway diversion as detailed in these plans will utilize a watertight liner placed against Traffic Control Movable Concrete Barriers.

Payment for the Traffic Control Movable Concrete Barriers shall be paid per each for the amount used in the temporary waterway diversion.

Low Flow Silt Fence shall be placed at locations that will minimize siltation of adjacent streams, lakes, dams, or drainage areas as determined by the Engineer during construction.

An additional 100 feet of Low Flow Silt Fence has been added to the Estimate of Quantities for temporary sediment control and tying the ends of the Super Duty Silt Fence into the stream bank.

Cost for any sand bagging required to seal off the work area shall be incidental to the contract unit price per each for Traffic Control Movable Concrete Barriers.

TABLE OF LOW FLOW SILT FENCE

Station	L/R	Location	Quantity (Ft)
Mainline 312+80 to 314+00	R	Stream Bank	100
ADDITIONAL QUANTITY			100
Total:			200

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 the project has been completed. Some or all of the silt fence may be left on the project as directed by the Engineer.

EROSION CONTROL

Areas adjacent to the work area disturbed during installation of riprap shall be seeded, fertilized and mulched.

All permanent seed shall be planted in the topsoil at a depth of ¼" to ½".

All seed broadcast must be raked or dragged in (incorporated) within the top ¼" to ½" 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.

Type F Permanent Seed Mixture shall consist of the following:

Grass Species	Variety	Pure Live Seed (PLS) (Pounds/1000 SqFt)
Western Wheatgrass	Flintlock, Rodan, Rosana	1.3
Green Needlegrass	Lodorm	0.8
Sideoats Grama	Butte, Killdeer, Pierre, Trailway	0.6
Blue Grama	Bad River, Willis	0.4
Oats or Spring Wheat: April through July; Winter Wheat: August through November		1.9
Total:		5.0

A commercial fertilizer with a minimum guaranteed analysis of 13-13-13, 18-46-0, 11-52-0, or an approved alternate fertilizer sold for use as a lawn starter fertilizer shall be applied to all areas designated for permanent seeding. The application rate of fertilizer shall be 3 pounds per 1000 SqFt.

Fiber mulch shall be applied in a separate operation following permanent seeding.

EROSION CONTROL (CONTINUED)

An additional 2% by weight of tackifier shall be added to the fiber mulch product selected from the list below. 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.

All costs for the additional tackifier added to the fiber mulch including labor, equipment, and materials shall be incidental to the contract lump sum price for Erosion Control.

The fiber mulch used on this project shall be one from the list below:

Product	Manufacturer
Mat-Fiber Plus	Mat, Inc. Floodwood, MN Phone: 1-888-477-3028 www.matinc.biz
Conwed Hydro Mulch 2000	Profile Products LLC Buffalo Grove, IL Phone: 1-800-366-1180 www.conwedfibers.com
EcoFibre Plus Tackifier	Profile Products LLC Buffalo Grove, IL Phone: 1-800-366-1180 www.profile-eco.com
Terra Wood with Tacking Agent 3	Profile Products LLC Buffalo Grove, IL Phone: 1-800-726-6371 www.terra-mulch.com
Bindex Wood WT	American Excelsior Co. Arlington, TX Phone: 1-800-777-7645 www.curlex.com
Second Nature Wood Fiber Mulch Plus	Central Fiber LLC Canton, OH Phone: 1-888-452-2630 www.centralfiber.com

Approximately 1000 SqFt will require permanent seeding. All costs associated with permanent seeding, fertilizing, and fiber mulching shall be incidental to the contract lump sum for price for Erosion Control.

It is the Contractor's responsibility to verify estimated acreage. No adjustment in quantity will be allowed unless additional work is ordered by the Engineer.

Rev. 5/25/12 jpr

HORIZONTAL ALIGNMENT

Mainline

Type	Station	Northing	Easting
POB	302+13.64		114830.629 121723.978
	TL= 844.45	N 67°10'09" E	
PC	310+58.09		115158.283 122502.266
PI	312+99.03 R = 296.36	Delta 78°13'22" R =	115251.770 122724.330
PT	314+62.69		115053.462 122861.175
	TL= 651.68	S 34°36'29" E	
POE	321+14.36		114517.096 123231.300

Grace Coolidge Creek

Type	Station	Northing	Easting
POB	0+00.00		115118.787 122695.182
	TL= 4.46	S 68°56'24" E	
PC	0+04.46		115117.185 122699.342
PI	0+50.58 R = 75.00	Delta 63°10'36" R =	115100.612 122742.381
PT	0+87.16		115054.726 122747.012
	TL= 9.71	S 05°45'48" E	
POE	0+96.87		115045.060 122747.988

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 0.1 acre (4.2 1.b.)**
- **Total Area To Be Disturbed 0.1 acre (4.2 1.b.)**
- **Existing Vegetative Cover (%)**
- **Soil Properties: AASHTO Soil or USDA-NRCS Soil Series Classification (4.2 1. d.)**
- **Name of Receiving Water Body/Bodies** Grace Coolidge 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 sheet).
- **Install stabilized construction entrance(s).**
- **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.**
- **Install utilities, storm sewers, 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: Concrete Barriers and Watertight Liner

➤ 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.

Rev. 5/25/12 jpr

❖ 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:

EROSION CONTROL

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	036-491	20	31

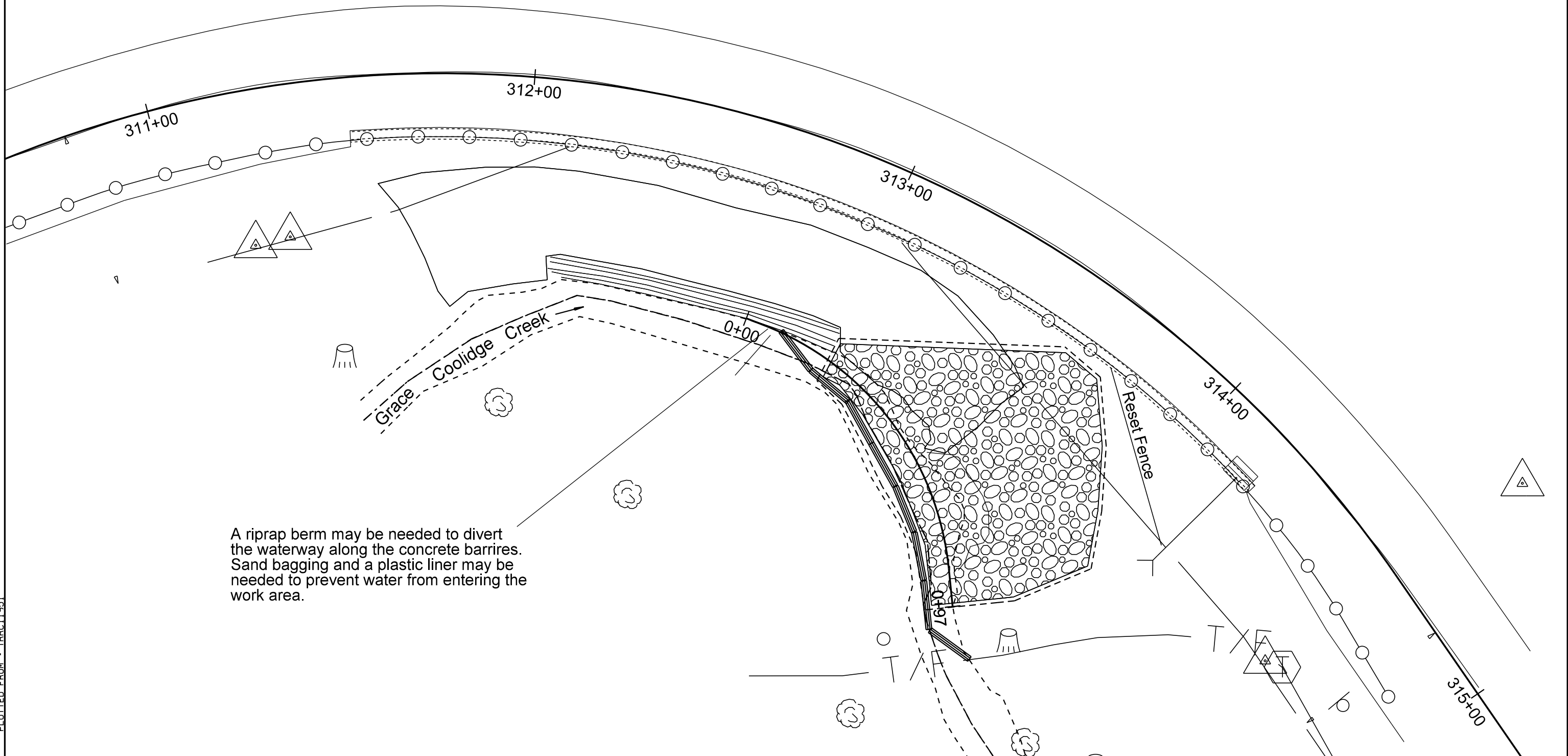
Plotting Date: 05/25/2012
Rev. Date: 5/25/12

PLOT SCALE : 1:25:1

PLOT NAME - 13

FILE - ... \DESIGN\CONNECT1.DWG

Concrete Barriers for Temporary Waterway Diversion



A riprap berm may be needed to divert the waterway along the concrete barriers. Sand bagging and a plastic liner may be needed to prevent water from entering the work area.

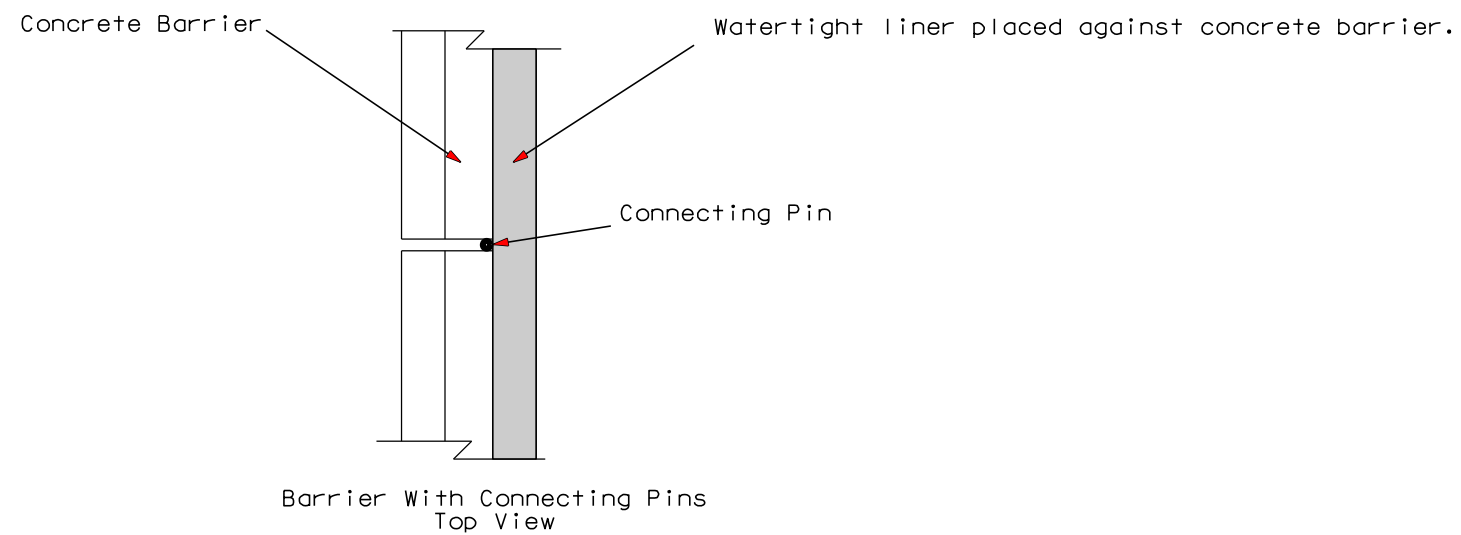
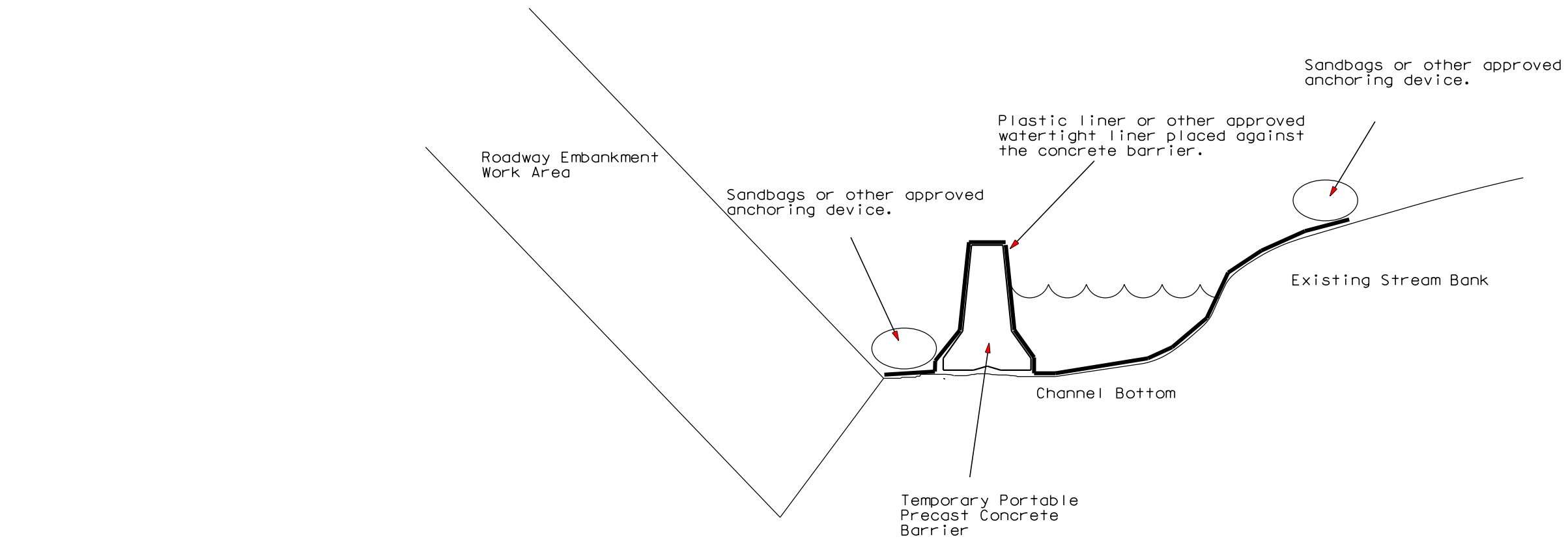
PLOTTED FROM: TFRAC11951

STATE OF SOUTH DAKOTA	PROJECT 036-491	SHEET 21	TOTAL SHEETS 31
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Plotting Date: 05/25/2012
Rev. Date: 5/25/12 jpr

TEMPORARY WATERWAY DIVERSION DETAILS

Typical Section



PLOT SCALE - 1:6.25

PLOTTED FROM - TRRC11951

PLOT NAME - 14

FILE - ... \DESIGN\SDS\ILTFENCE.DGN