



# Department of Transportation

## Office of Project Development

700 E Broadway Avenue

Pierre, South Dakota 57501-2586 605/773-3268

FAX: 605/773-2614

February 12, 2016

### ADDENDUM NO. 1

**RE: Item #7, February 17, 2016 Letting - P 0034(150)272, PCN 02RW, Buffalo County - Structure and Approach Grading**

#### TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

**SPECIAL PROVISIONS:** NO CHANGE

**BID ITEM FILE:** *Bidders must log in to retrieve the addendum bid item file that must be loaded into the SDEBS to incorporate the revisions listed here.*

**Bid Items were added:**

Bid Item 004E0050 "Remove Traffic Diversion(s)"

**PLANS:** Please destroy sheets A1 and B2 and replace with the enclosed sheets, dated 2/12/16.

**Sheets A1 & B2:** Grading – Section B

Bid Item 004E0050 "Remove Traffic Diversion(s)" was added

**Sheet B2:** TRAFFIC DIVERSION note was revised.

Sincerely,

Sam Weisgram  
Engineering Supervisor

SW/cj

CC: Jeff Senst, Aberdeen Region Engineer  
Brad Letcher, Huron Area Engineer

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0034(150)272	A1	A4

Plotting Date: 02/12/2016

## Grading – Section B

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	0.104	Mile
009E3250	Miscellaneous Staking	0.104	Mile
009E3280	Slope Staking	0.104	Mile
009E3290	Structure Staking	1	Each
009E3300	Three Man Survey Crew	40.0	Hour
100E0100	Clearing	Lump Sum	LS
110E0600	Remove Fence	980	Ft
110E0730	Remove Beam Guardrail	374.0	Ft
120E0010	Unclassified Excavation	8,277	CuYd
120E0600	Contractor Furnished Borrow Excavation	6,856	CuYd
120E2000	Undercutting	3,724	CuYd
120E6100	Water for Embankment	125.0	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	1,984.2	Ton
450E0122	18" RCP Class 2, Furnish	50	Ft
450E0130	18" RCP, Install	50	Ft
450E2304	18" RCP Safety End, Furnish	1	Each
450E2307	18" RCP Safety End, Install	1	Each
462E0100	Class M6 Concrete	2.5	CuYd
480E0100	Reinforcing Steel	288	Lb
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	820	Ft
620E0510	Type 1 Temporary Fence	1,251	Ft
620E1020	2 Post Panel	3	Each
620E1030	3 Post Panel	8	Each
630E0010	Straight Class A Thrie Beam Guardrail with Wood Posts	50.0	Ft
630E1010	Straight Class A W Beam Guardrail with Wood Posts	250.0	Ft
630E2000	W Beam to Thrie Beam Guardrail Transition	4	Each
630E2015	W Beam Guardrail Flared End Terminal	4	Each
670E3200	Type D Frame and Grate	2	Each
670E5400	Precast Drop Inlet Collar	2	Each
670E5400	Precast Drop Inlet Collar	0	Each
670E5400	Precast Drop Inlet Collar	0	Each
670E5400	Precast Drop Inlet Collar	0	Each

## Traffic Control – Section C

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
632E2220	Guardrail Delineator	16	Each
633E1300	Pavement Marking Paint, White	4	Gal
633E1305	Pavement Marking Paint, Yellow	1	Gal
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	377	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0265	Type 3 Barricade, 6' Double Sided	3	Each
634E0280	Type 3 Barricade, 8' Single Sided	16	Each
634E1002	Detour Signing	785.7	SqFt

## Erosion and Sediment Control – Section D

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	1.8	CuYd
110E1693	Remove Erosion Control Wattle	200	Ft
110E1700	Remove Silt Fence	288	Ft
230E0010	Placing Topsoil	1,580	CuYd
730E0212	Type G Permanent Seed Mixture	78	Lb
731E0200	Fertilizing	1.50	Ton
732E0100	Mulching	6.0	Ton
734E0133	Type 3 Turf Reinforcement Mat	580.0	SqYd
734E0154	12" Diameter Erosion Control Wattle	800	Ft
734E0165	Remove and Reset Erosion Control Wattle	200	Ft
734E0602	Low Flow Silt Fence	450	Ft
734E0604	High Flow Silt Fence	125	Ft
734E0610	Mucking Silt Fence	40	CuYd
734E0620	Repair Silt Fence	144	Ft

## INDEX OF SHEETS

A1 to A2 Estimate of Quantities for Sections B,C,D,E and F  
A2 to A4 Environmental Commitments

## Structure – Section E

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E5000	Concrete Penetrating Sealer	424.7	SqYd
250E0030	Incidental Work, Structure	Lump Sum	LS
410E2600	Membrane Sealant Expansion Joint	75.8	Ft
420E0100	Structure Excavation, Bridge	18	CuYd
430E0200	Bridge End Embankment	630	CuYd
430E0300	Granular Bridge End Backfill	48.7	CuYd
430E0510	Approach Slab Underdrain Excavation	2.6	CuYd
430E0700	Precast Concrete Headwall for Drain	4	Each
460E0030	Class A45 Concrete, Bridge Deck	247.3	CuYd
460E0050	Class A45 Concrete, Bridge	39.3	CuYd
460E0150	Concrete Approach Slab for Bridge	173.1	SqYd
460E0160	Concrete Approach Sleeper Slab for Bridge	37.9	SqYd
464E0100	Controlled Density Fill	7.4	CuYd
465E0100	Class A45 Concrete, Drilled Shaft	32.7	CuYd
465E0200	Drilled Shaft Excavation	32.0	CuYd
465E1038	38" Permanent Casing	39.0	Ft
480E0100	Reinforcing Steel	13,787	Lb
480E0200	Epoxy Coated Reinforcing Steel	69,373	Lb
480E0507	No. 7 Rebar Splice	96	Each
510E0300	Preboring Pile	100	Ft
510E3361	HP 10x42 Steel Test Pile, Furnish and Drive	285	Ft
510E3365	HP 10x42 Steel Bearing Pile, Furnish and Drive	400	Ft
510E4000	Dynamic Pile Test (during driving)	5	Each
510E4010	Dynamic Pile Test (during restrrike)	5	Each
510E4050	Static Pile Load Test	3	Each
680E0040	4" Underdrain Pipe	250	Ft
680E2500	Porous Backfill	24.7	Ton
700E0310	Class C Riprap	1,634.5	Ton
831E0110	Type B Drainage Fabric	1,406	SqYd

## SPECIFICATIONS

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

Plot Scale - 1:200

Plotted From - TRSF12144

File - ...:\p1\bur02\RW\Notes\SectionA.dgn

**SECTION B ESTIMATE OF QUANTITIES**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
004E0050	Remove Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
009E3230	Grade Staking	0.104	MIle
009E3250	Miscellaneous Staking	0.104	MIle
009E3280	Slope Staking	0.104	MIle
009E3290	Structure Staking	1	Each
009E3300	Three Man Survey Crew	40.0	Hour
100E0100	Clearing	Lump Sum	LS
110E0600	Remove Fence	980	Ft
110E0730	Remove Beam Guardrail	374.0	Ft
120E0010	Unclassified Excavation	8,277	CuYd
120E0600	Contractor Furnished Borrow Excavation	6,856	CuYd
120E2000	Undercutting	3,724	CuYd
120E6100	Water for Embankment	125.0	MGal
250E0020	Incidental Work, Grading	Lump Sum	LS
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	1,984.2	Ton
450E0122	18" RCP Class 2, Furnish	50	Ft
450E0130	18" RCP, Install	50	Ft
450E2304	18" RCP Safety End, Furnish	1	Each
450E2307	18" RCP Safety End, Install	1	Each
462E0100	Class M6 Concrete	2.5	CuYd
480E0100	Reinforcing Steel	288	Lb
600E0300	Type III Field Laboratory	1	Each
620E0020	Type 2 Right-of-Way Fence	820	Ft
620E0510	Type 1 Temporary Fence	1,251	Ft
620E1020	2 Post Panel	3	Each
620E1030	3 Post Panel	8	Each
630E0010	Straight Class A Thrie Beam Guardrail with Wood Posts	50.0	Ft
630E1010	Straight Class A W Beam Guardrail with Wood Posts	250.0	Ft
630E2000	W Beam to Thrie Beam Guardrail Transition	4	Each
630E2015	W Beam Guardrail Flared End Terminal	4	Each
670E3200	Type D Frame and Grate	2	Each
670E5400	Precast Drop Inlet Collar	2	Each
670E5400	Precast Drop Inlet Collar	0	Each
670E5400	Precast Drop Inlet Collar	0	Each
670E5400	Precast Drop Inlet Collar	0	Each

**GRADING OPERATIONS**

Water for Embankment is estimated at the rate of 10 gallons of water per cubic yard of Embankment.

The estimated cubic yards of excavation and/or embankment required to construct outlet ditches are included in the earthwork balance notes on the profile sheets.

Special ditch grades and other sections of the roadway different than the typical section shall be constructed to the limits shown on the cross sections. If significant changes to the cross sections are necessary during construction, the Engineer shall contact the Designer for the proposed change.

Generally, all shallow inlet and outlet ditches as noted on the plan sheets shall be cut with a 10-foot wide bottom with 5:1 backslopes. However, the Engineer may direct the Contractor to adjust the ditch width for proper alignment with the drainage structure.

Temporary fence and/or permanent fence shall be placed ahead of the grading operation unless otherwise directed by the Engineer.

**TYPE II FIELD LABORATORY**

The lab shall be equipped with an internet connection such as DSL, cable modem, or other approved service. The internet connection shall be provided with a multi-port wireless router. The internet connection shall be a minimum speed of 512 Kb unless limited by job location and approved by the DOT. Prior to installing the wireless router the Contractor shall submit the wireless router's technical data to the Area Office to check for compatibility with the state's computer equipment. The internet connection is intended for state personnel usage only. The Contractor's personnel are prohibited from using the internet connection unless pre-approved by the Project Engineer.

The Contractor shall submit a copy of each monthly bill for calls charged to this phone at the end of each month. The Project Engineer will then audit the bills to ensure all calls are legitimate and then initiate a Construction Change Order (CCO) to reimburse the Contractor for the actual phone calls made, including local and long distance calls. Reimbursement will not be made for fees associated with the purchase, installation, disconnection, monthly line charges, and incidentals involved in the installation, maintenance, and disconnection of the phone (including attachments). These items shall be incidental to the contract unit price per each for "Type II Field Laboratory".

**UTILITIES**

The Contractor shall be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor shall contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 0034(150)272	B2	B28

Plotting Date: 02/12/2016

**TRAFFIC DIVERSION**

The traffic diversion is located at Sta. 0+94.00 to 9+93.23 (Diversion). The traffic diversion shall be constructed according to Section 4.5.A. of the Specifications. Installation and removal of the traffic diversion shall meet all requirements as set forth in the South Dakota Surface Water Quality Standards.

The traffic diversion located at Stations 0+94.00 to 9+93.23 (Diversion) shall be constructed according to the geometric layouts shown in the plans with the temporary drainage structure(s) provided in the following table. The temporary structure sizes are designed to pass the design flood frequency flows without overtopping the traffic diversion grade, to minimize potential upstream flooding, and are sized to meet FEMA (Federal Emergency Management Agency) requirements where applicable. The structure(s) shall be placed at the flowline elevation and location as stated in the "Table of Temporary Drainage Structures in Traffic Diversions". If the Contractor proposes to use a different size drainage structure and/or a different geometric layout for the temporary diversion, the proposal must be submitted to the Engineer during the project preconstruction meeting. This information shall be forwarded to the DOT Hydraulics Engineer for review. Construction of the traffic diversion(s) will not be allowed until approval of the proposal is obtained from the Hydraulics Engineer.

Table of Temporary Drainage Structure in Traffic Diversion(s)

Traffic Diversion Location	Design Flood Frequency	* Flowline Elevation	Temporary Drainage Structure
5+39 (Diversion)	2 year	1444.55	3-84" CMP

\* The flowline elevation is at the Inlet of the temporary drainage structure(s).

Costs to provide temporary drainage structures shall be incidental to the contract lump sum price for "Maintenance of Traffic Diversion(s)".

Traffic diversion in waterways shall be constructed such that any material placed below the ordinary high water elevation (estimated as elevation 1450.8 at Sta. 5+39 (Diversion) in the 404 application) shall conform to the requirements of Class C Riprap. The quantity of riprap used in the traffic diversion is included in the quantity for "Class C Riprap" in Section E-Structures estimate of quantities. The quantity of riprap used for the traffic diversion shall be reused as riprap for the structure and all costs incurred to place and remove the riprap at the traffic diversion and subsequently place the riprap at the structure shall be incidental to the contract unit price per ton for "Class C Riprap". The traffic diversions shall be built in close conformity to the plan gradeline. Unless otherwise shown in the plans, the traffic diversions shall be removed such that the original ground surface is restored and the hydraulic capacity of the waterway is maintained. The removal shall be done in such a manner that there is minimal disturbance to the riverbed.

The removed traffic diversion embankment shall be wasted in a manner approved by the Engineer. The excess material not required for the project shall become the property of the Contractor for his/her disposal off site.

1:200 Plot Scale -

Plotted From - TRSF12144

File - ...:\p1\hour02R\NotesSectionB.dgn