



Department of Transportation

Rapid City Region Office

2300 Eglin Street

P.O. Box 1970

Rapid City, SD 57709-1970

Phone: 605/394-2244

FAX: 605/394-1904

August 19, 2016

ADDENDUM NO. 1

RE: August 23, 2016 Rapid City Region Office Informal Letting
P 0040(237)68, Custer County, PCN 05KH
Landslide Repair on Hwy 40

TO WHOM IT MAY CONCERN:

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

PROPOSAL:

- Please replace the DOT-123 with the attached DOT-123.

PLANS:

- Please replace sheets 2,4 and 7 with the attached. A bid item for a "Type II Field Laboratory" was added. A section was added to define the "Temporary Concrete Barrier End Protection". The concrete barrier end protection shall meet the requirements of TL3 for NCHRP 350 or MASH.

Sincerely,

John Rehorst
Region Design Engineer

**SOUTH DAKOTA DEPARTMENT OF TRANSPORTATION
CONTRACT PROPOSAL**

DOT-123
(5/05)

CODE	PRE	PROJECT ROUTE	AGR	MAINT UNIT	CONTROL REFERENCE	AFE	FUNCTION	BEGIN MRM	END MRM
	PS	0040	237		68	05kh			

CITY AND /OR COUNTY Custer BUDGET SOURCE FY16 Construction
 FINALS ENGINEER REVIEW REQUIRED YES NO
 REGION MATERIALS CERTIFICATION REQUIRED YES NO
 CERTIFIED INSPECTORS/TESTERS REQUIRED YES NO
 TO BE INSTALLED ON THE CM&P YES NO
 TYPE, PURPOSE AND LOCATION OF WORK Landslide Repair on Hwy 40

ESTIMATE OF QUANTITIES AND COST

BID ITEM NUMBER	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
004E0020	Maintenance of Traffic Diversion(s)	Lump Sum	LS		
009E0010	Mobilization	Lump Sum	LS		
110E7152	Remove Delineator for Reset	6	Each		
110E7802	Remove Fence for Reset	2580	Ft		
120E0010	Unclassified Excavation	73.815	CuYd		
120E0100	Unclassified Excavation, Digouts	10	CuYd	\$8.00	\$80.00
120E0500	Option Borrow Excavation	37.201	CuYd		
120E6000	Water for Dust Control	100	MGal		
120E6100	Water for Embankment	2220.3	MGal	\$15.00	\$33,304.50
210E3000	Ordinary Roadway Shaping	0.200	Mile		
230E0100	Remove and Replace Topsoil	*Lump Sum	LS		
260E1030	Base Course, Salvaged	2139.0	Ton		
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Mat.	2300.0	Ton		
320E1200	Asphalt Concrete Composite	692.0	Ton		
320E7008	Grind 8" Rumble Strip or Stripe in Asphalt Concrete	0.3	Mile		
600E0200	Type II Field Laboratory	1	Each		
620E0515	Type 1A Temporary Fence	3730	Ft		
620E1020	2 Post Panel	5	Each		
620E4100	Reset Fence	2580	Ft		
632E2100	Reset Delineator	6	Each		
633E1200	Waterborne Pavement Marking Paint with High Grade Polymer White	8	Gal		
633E1205	Waterborne Pavement Marking Paint with High Grade Polymer Yellow	6	Gal		
634E0010	Flagging	300	Hour	\$24.19	\$7257.00
634E0110	Traffic Control Signs	149.0	SqFt		
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS		
634E0285	Type 3 Barricade, 8' Double Sided	2	Each		
634E0525	Linear Delineation System Panel, Barrier Mounted	67	Each		
634E0600	4" Temporary Pavement Marking Tape, Type 1	144	Ft		
634E0640	Temporary Pavement Marking	2520	Ft		
634E0700	Traffic Control Movable Concrete Barrier	67	Each		
634E0750	Temporary Concrete Barrier End Protection	2	Each		
634E0900	Portable Temporary Traffic Control Signal	2	Unit		
680E0240	4" Corrugated Polyethylene Drainage Tubing	217	Ft		
680E0440	4" Slotted Corrugated Polyethylene Drainage Tubing	462	Ft		

680E2000	Concrete Headwall for Underdrain	2	Each		
680E2500	Porous Backfill	194.0	Ton		
700E0210	Class B Riprap	1116.0	Ton		
730E0100	Cover Crop Seeding	11.0	Bu		
730E0208	Type E Permanent Seed Mixture	130	Lb		
731E0200	Fertilizing	4.90	Ton		
734E0102	Type 2 Erosion Control Blanket	19.309	SqYd		
734E0154	12" Diameter Erosion Control Wattle	880	Ft		
831E0110	Type B Drainage Fabric	1435	SqYd		
				TOTAL	

CONTRACTORS PROPOSAL STATEMENT

The undersigned does hereby agree to furnish the labor and/or material in the quantities, at the unit price, for the purpose and in the place all in accordance with attached provisions upon approval of this Proposal by the State Transportation Commission. This document becomes the contract when signed by the Contractor and a Department of Transportation Representative. The Contractor agrees to provide services in compliance with the Americans with Disabilities Act of 1990. The Contractor agrees to provide a certificate of insurance prior to commencing work, for liability coverage for the duration of the work as per the current edition of the SDDOT Standard Specifications for Roads and Bridges.

PROPOSED START DATE _____
 SUBSTANTIAL COMPLETION REQUIREMENT _____
 FIELD WORK COMPLETION REQUIREMENT June 30, 2017

SUBSCRIBED AND SWORN TO BEFORE ME THE _____ SIGNATURE _____
 DAY OF _____, 20____ COMPANY _____
 ADDRESS _____

NOTARY – My Commission Expires _____ FED. TAX ID NUMBER _____

RECOMMENDED FOR APPROVAL:
 _____ CONSTRUCTION/MAINTENANCE ENGR. DATE _____
 _____ REGION ENGINEER DATE _____ DIRECTOR OF OPERATIONS DATE _____

APPROVED FOR THE TRANSPORTATION COMMISSION
 NAME _____ TITLE _____ DATE _____

APPROVED as per Federal Highway Stewardship Provisions this _____ day of _____, 20____

PROJECT DEVELOPMENT ENGINEER _____

This document is for information only. Do not use for bidding purposes.

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
004E0030	Maintenance of Traffic Diversion(s)	Lump Sum	LS
009E0010	Mobilization	Lump Sum	LS
110E7152	Remove Delineator for Reset	6	Each
110E7802	Remove Fence for Reset	2,580	Ft
120E0010	Unclassified Excavation	73,815	CuYd
120E0100	Unclassified Excavation, Digouts	10	CuYd
120E0500	Option Borrow Excavation	37,201	CuYd
120E6000	Water for Dust Control	100.0	MGal
120E6100	Water for Embankment	2,220.3	MGal
210E3000	Ordinary Roadway Shaping	0.200	Mile
230E0100	Remove and Replace Topsoil	Lump Sum	LS
260E1030	Base Course, Salvaged	2,139.0	Ton
270E0040	Salvage and Stockpile Asphalt Mix and Granular Base Material	2,300.0	Ton
320E1200	Asphalt Concrete Composite	692.0	Ton
320E7008	Grind 8" Rumble Strip or Stripe in Asphalt Concrete	0.3	Mile
600E0200	Type II Field Laboratory	1	Each
620E0515	Type 1A Temporary Fence	3,730	Ft
620E1020	2 Post Panel	5	Each
620E4100	Reset Fence	2,580	Ft
632E2100	Reset Delineator	6	Each
633E1200	Waterborne Pavement Marking Paint with High Grade Polymer, White	8	Gal
633E1205	Waterborne Pavement Marking Paint with High Grade Polymer, Yellow	6	Gal
634E0010	Flagging	300.0	Hour
634E0110	Traffic Control Signs	149.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	2	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	67	Each
634E0600	4" Temporary Pavement Marking Tape Type I	144	Ft
634E0640	Temporary Pavement Marking	2,520	Ft
634E0700	Traffic Control Movable Concrete Barrier	67	Each
634E0750	Temporary Concrete Barrier End Protection	2	Each
634E0900	Portable Temporary Traffic Control Signal	2	Unit
680E0240	4" Corrugated Polyethylene Drainage Tubing	217	Ft
680E0440	4" Slotted Corrugated Polyethylene Drainage Tubing	462	Ft
680E2000	Concrete Headwall for Underdrain	2	Each
680E2500	Porous Backfill	194.0	Ton
700E0210	Class B Riprap	1,116.0	Ton
730E0100	Cover Crop Seeding	11.0	Bu
730E0208	Type E Permanent Seed Mixture	130	Lb
731E0200	Fertilizing	4.90	Ton
734E0102	Type 2 Erosion Control Blanket	19,309	SqYd
734E0154	12" Diameter Erosion Control Wattle	880	Ft
831E0110	Type B Drainage Fabric	1,435	SqYd

SPECIFICATIONS

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

ENVIRONMENTAL COMMITMENTS

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

COMMITMENT A: WETLANDS

Approximately 0.08 acres of wetlands will be impacted by the project. Refer to Section B – Grading Plans for location and boundaries of the impacted wetlands.

Table of Impacted Wetlands

Wetland No.	Type	Station	Impact Left (Acres)	Impact Right (Acres)	Temporary Impact (Acres)	Total Impact (Acres)
1	PEM	172+00 to 175+00	0	0.08	0	0.08

Action Taken/Required:

Mitigation is not required in accordance with Section 404 of the Clean Water Act.

Temporary impacts will not be mitigated as original grades will be re-established

The Contractor shall notify the Project Engineer if additional easement is needed to complete the work adjacent to any wetlands. The Project Engineer shall obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any additional wetlands. The contact person is the Environmental Project Scientist of the SDDOT Environmental Office at 605-773-3268.

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pit, or staging site associated with the project, cease construction activities in the affected area until the Whooping Crane departs and contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT D: WATER QUALITY STANDARDS

COMMITMENT D2: SURFACE WATER DISCHARGE

This segment of Cheyenne River is classified as a warm water semi-permanent fishery with a total suspended solids standard of 90 milligrams/liter.

Action Taken/Required:

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

COMMITMENT R: FIRE PREVENTION

This project is located within the confines of the Buffalo Gap National Grassland.

Action Taken/Required:

The Contractor shall adhere to the "Special Provision for Fire Plan".

UTILITIES

The Contractor shall be responsible for locating and protecting any utility that would conflict with any work. Utilities are not planned to be affected on this project. If utilities are identified to be affected 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.

SEQUENCE OF OPERATIONS

The intent of the plan sequence of operations is to have the least amount of impact on the traveling public and adjacent landowners. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence shall be submitted for review a minimum of two weeks prior to potential implementation. Work shall proceed according to the following sequence or as approved by the Engineer:

1. Set up traffic control.
2. Place temporary fence.
3. Remove existing fence for reset.
4. Place wattles.
5. Complete roadway shaping on diversion.
6. Excavate slope.
7. Place underdrain tubing, porous backfill, and underdrain headwalls and backfill trench.
8. Place embankment.
9. Place stream bank armoring.
10. Place surfacing on roadway.
11. Place permanent pavement marking.
12. Remove roadway diversion.
13. Place erosion control measures.
14. Reset fence.
15. Remove temporary fence.
16. Remove traffic control.

HORIZONTAL ALIGNMENT DATA

Type	Station			Northing	Easting
POB	162+68.11			504636.678	1291549.869
		TL= 181.68	S 20°16'17" E		
PC	164+49.79			504466.255	1291612.814
PI	166+06.56	R = 3000.00	Delta = 05°58'58" R	504319.195	1291667.13
PT	167+63.04			504167.276	1291705.822
		TL=1349.41	S 14°17'20" E		
POE	181+12.45			502859.607	1292038.87

TYPE II FIELD LABORATORY

Substitution of a cellular telephone for the hard-wired touch-tone telephone is not allowed, as state personnel need the ability to download information over direct phone lines. The phone is intended for state personnel usage only. Contractor personnel are prohibited from using this phone 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 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.

UNCLASSIFIED EXCAVATION

Unclassified Excavation is provided on the project for removing slide material.

Unclassified Excavation shall be completed in such a manner so as to not undermine or destabilize the surrounding undisturbed slope

Plans quantity shall be the basis of payment for the Unclassified Excavation quantity. If changes are made in the field during construction, measurements shall be taken and the quantity shall be adjusted accordingly.

Excess material not needed on the project shall be handled as waste.

All materials encountered during the construction of this project, regardless of their nature or the manner in which they are excavated, will be considered Unclassified Excavation.

Most of the material encountered should be able to be excavated using conventional methods. Prospective bidders are encouraged to review the geology report compiled by the SDDOT Geotechnical Engineering Activity and observe the project conditions in the field. The geology report is available at the Custer Area Office.

OPTION BORROW EXCAVATION

A Borrow Pit is located in the NE ¼ of Sec. 10 - T4S - R10E.

Temporary fence shall be erected after completion of pit operation.

UNSTABLE EXCAVATION

Unstable Excavation will be required throughout the project limits to excavate saturated or weak compressible soils and other organic materials. A nominal 5 ft. depth of compressible material is anticipated to be removed from the fill footprint prior to construction of the embankment. The depth of unstable excavation may be adjusted by the Engineer to ensure a solid foundation free of organic, soft, unstable material is prepared. Unstable and/or highly organic material shall be stockpiled for use as topsoil or wasted at a site approved by the Engineer.

LANDSLIDE DEBRIS EXCAVATION

Landslide Debris Excavation will be required at the locations shown on the cross sections. It is anticipated that most of the excavated Landslide Debris can be used in the construction of the berm and mainline inslopes. Borrow will be required to construct the remaining embankment. The Landslide Debris Excavation limits shall not exceed those shown on the cross sections unless directed by the Engineer. The temporary backslope required to excavate Landslide Debris will become unstable over the long-term. However, the temporary 3:1 excavated backslope should remain globally stable over the short-term during construction provided that measures are taken to divert runoff away from the slope and regular monitoring of the slope is conducted. Construction activities shall be sequenced to minimize the amount of time the steep temporary backslopes are left exposed and unsupported. Landslide Debris Excavation shall be paid for as Unclassified Excavation.

EMBANKMENT CONSTRUCTION

Embankment construction shall not begin until all unstable compressible materials have been excavated from the embankment footprint to the satisfaction of the Engineer. A suitable embankment foundation consists of compacted soil which does not pump, rut, or otherwise displace when traveled over with construction equipment. Each embankment shall be benched into the existing slopes in accordance with Section 120.3 B.2 of the Specifications. Compaction of the embankment will be according to the Specified Density Method. Minimum density testing requirements shall be one test per zone. Each zone shall be 3 feet in depth. Moisture testing shall remain as per Minimum Sample Testing Requirements.

REMOVE EXISTING TRAFFIC DIVERSION

The existing traffic diversion shall be used in the embankment construction once embankment is placed to an elevation that will allow maintenance of traffic through the project. It is estimated that 2596 cu yds of excavation will be needed to remove the existing traffic diversion and place in the embankment. Plans quantity shall be the method of payment and field measurement will not be required.

WATER FOR EMBANKMENT

Water for Embankment is estimated at the rate of 20 gallons of water per cubic yard of Embankment minus Waste.

TRAFFIC CONTROL – GENERAL NOTES

1. Unless otherwise stated in these plans, no work will be allowed during hours of darkness.
2. Existing guide, route, informational logo, regulatory, warning signs and delineation shall be temporarily reset and maintained during construction as directed by the Engineer. Removing, relocating, salvaging and resetting of the above items shall be the responsibility of the Contractor.
3. Non-applicable traffic control devices shall be completely covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 2 calendar days.
4. All regulatory signs shall have a minimum mounting height of 5' in rural locations, even when mounted on portable supports.
5. All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.
6. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.
7. All haul trucks shall be equipped with a second flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights shall be incidental to the various related contract bid items.
8. All construction operations shall be conducted in the general direction of traffic movement.
9. If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.
10. Temporary Flexible Vertical Markers (Tabs) shall be used for lane closure tapers or lane shift tapers and shall be installed at 5' spacing. Tabs used for tapers and shifts will not be measured for payment. All costs associated to furnish, install, maintain (including replacement as required by the Engineer at no added cost to the Department), and remove all markers will be incidental to the contract lump sum price for Traffic Control, Miscellaneous.

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, and installing shall be incidental to the contract unit price per each for 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.

BARRIER MOUNTED LINEAR DELINEATION SYSTEM PANELS

A linear delineation system panel shall be attached to each side of the barrier section. One panel shall be white and the other panel shall be yellow. The color shall be the same as the nearest pavement marking, white along outside edgelines or yellow for the left side on one way traffic sections. The linear delineation system shall be 34 inches long and 6 inches in height and be constructed of aluminum formed into a shape to provide retroreflective properties across a wide range of angles. It shall be sheeted with super high or very high intensity sheeting. The panels shall be installed at the center of the barrier when measured along the length, with the top of the panel 4 inches below the top of the barrier. Installation shall be as per the manufacturer's recommendation using stainless steel inserts and bolts. This will allow for easy removal for replacement of damaged panels or to replace with an alternate color. The Contractor shall furnish, and install one panel along each side of the barrier if any panels are missing from the barriers. Replacement of damaged linear delineation system panels shall be furnished and replaced by the Contractor. All costs associated with furnishing, and installing the linear delineation system shall be included in the contract unit price per each for Linear Delineation System Panel, Barrier Mounted.

All linear delineation system panels shall remain attached to the barrier sections and shall become the property of the State of South Dakota upon completion of the project.

The Contractor shall verify the number of LDS panels that will need to be installed or replaced on the Traffic Control Movable Concrete Barriers. The contract amount of LDS panels is an estimate and the full contract amount may not be required.

TEMPORARY CONCRETE BARRIER END PROTECTION

The Contractor shall furnish crash tested and approved end protection on movable concrete barrier installed on this project. End protection shall be installed parallel to the roadway and a minimum of two concrete barriers shall be installed in line with and behind the end protection. The end protection shall be attached to the concrete barrier as specified by the manufacturer.

Costs for furnishing, installing, maintaining, and removing the end protection will be paid for at the contract unit price per each for Temporary Concrete Barrier End Protection. The concrete barrier end protection shall meet the requirements of TL3 for NCHRP 350 or MASH.

As the temporary concrete barrier end protections will not be required to be moved from site to site, no payment will be made for movements or adjustments of the temporary concrete barrier end protections from phase to phase. All costs for this work shall be included in the contract unit price per each for Temporary Concrete Barrier End Protection.

Table of Traffic Control Movable Concrete Barriers				
Station	to Station	Traffic Control Movable Concrete Barrier (Each)	Linear Delineation System Panel, Barrier Mounted (Each)	Temporary Concrete Barrier End Protection (Each)
168+00	174+80	67	67	2

INVENTORY OF TRAFFIC CONTROL DEVICES

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R10-6	STOP HERE ON RED	2	24" x 36"	6.0	12.0
W3-3	SIGNAL AHEAD (symbol)	2	48" x 48"	16.0	32.0
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					149.0

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	2

FENCE

Temporary Fence shall be placed at the perimeter of the temporary easements and the borrow pit as directed by the Engineer.

Table of Fencing						
Station	to Station	Side (L/R)	Remove	Reset	Type 1A	2
			Fence	Fence	Temporary	Post
			(Ft)	(Ft)	(Ft)	(Each)
164+00	to 179+80	R	1580	1580	1970	3
Borrow Pit			1000	1000	1760	2
Total			2580	2580	3730	5

PERMANENT PAVEMENT MARKINGS

All materials shall be applied as per manufacturer's recommendations.