DEPARTMENT OF TRANSPORTATION

Planning & Engineering
Office of Project Development
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May 1, 2025

ADDENDUM NO. 1

RE: Item #4, May 21, 2025 Letting - PH 0030(46), PCN 09FP, Bennett, Potter, Sully, Todd, Tripp County - Centerline Rumble Stripes

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

SDEBS BID PROPOSAL: *The electronic bid proposal for this contract has been revised to include the changes associated with this addendum. Bidders must log in to the SDEBS to retrieve and incorporate these changes into their bid.*

Bid Items were added:
Bid Item 633E5050 "Surface Preparation for Pavement Marking"

PLANS: Please destroy sheets 2, 5 and 6 and replace with the enclosed sheets, dated 4/30/25.

Sheet 2: Bid Item 633E5050 "Surface Preparation for Pavement Marking" was added.

Sheet 5: SURFACE PREPARATION FOR PAVEMENT MARKING note was added.

Sheet 6: Estimate of Quantities (For Information Only) was revised.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Jason Humphrey, Pierre Region Engineer
Dean VanDeWiele, Pierre Area Engineer

Revised 4/30/25 SML

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
380E6302	Reseal PCC Pavement Joint - Hot Pour	475,432	Ft
380E6450	Saw Joint in PCC Pavement	475,432.0	Ft
380E6548	Grind Sinusoidal Centerline Rumble Stripe in PCC Pavement	90.0	Mile
633E0010	Cold Applied Plastic Pavement Marking, 4"	12,357	Ft
633E0030	Cold Applied Plastic Pavement Marking, 24"	287	Ft
633E0040	Cold Applied Plastic Pavement Marking, Arrow	4	Each
633E1201	High Build Waterborne Pavement Marking Paint with Reflective Elements, White	5,012	Gal
633E1206	High Build Waterborne Pavement Marking Paint with Reflective Elements, Yellow	1,311	Gal
633E1262	High Build Waterborne Pavement Marking Paint, 24" Yellow	523	Ft
633E1272	High Build Waterborne Pavement Marking Paint, Arrow	4	Each
633E1286	High Build Waterborne Pavement Marking Paint, Message	1	Each
633E5050	Surface Preparation for Pavement Marking	951,955	Ft
634E0010	Flagging	1,800.0	Hour
634E0020	Pilot Car	800.0	Hour
634E0110	Traffic Control Signs	274.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0320	Temporary Flexible Vertical Markers (Tabs)	90.0	Mile

SPECIFICATIONS

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

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified 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. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/media/documents/EnvironmentalProceduresManual.pdf >

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion.

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 pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT B4: BALD EAGLE

Bald eagles are known to occur in this area.

Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

COMMITMENT C: WATER SOURCE

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (DANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:
< https://sdleastwanted.sd.gov/maps/default.aspx>

< South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species: https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >.

COMMITMENT H: WASTE DISPOSAL SITE

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

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will 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 Environmental Office and the Project Engineer.

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

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within

the Public ROW with 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 not to exceed the duration of the project. Prior to project completion, the waste will 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) will be incidental to the various contract items.

COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Revised 4/30/25 SML

PERMANENT PAVEMENT MARKINGS

The Contractor will be required to repaint all existing centerline markings and turn lane transitions, gore areas, and turn arrows. Additional quantities are included in the estimate of quantity to paint the additional pavement marking. The cost to duplicate the existing locations will be incidental the contract unit price for the various contract bid items.

The Contractor will advise the Engineer a minimum of 3 weeks prior to the application of the permanent pavement marking to allow the State to check and mark the location of no passing zones.

Application of permanent pavement marking paint will be completed within 14 calendar days following the completion of the rumble stripe installation.

The Contractor must clean the ground pavement surface prior to applying the permanent pavement marking paint using high pressure air blast.

SURFACE PREPARATION FOR PAVEMENT MARKING

The Contractor will prepare the pavement surface prior to applying the durable pavement marking in accordance with the following.

In areas where the existing groove meets the required depth and existing markings are still in place, the Contractor will clean the existing groove without adding additional depth beyond the required depth for the new pavement marking, including reflective media as noted below.

Description	Specification	Tolerance
Depth of Groove	Marking Thickness[1] + 15 mils	+ 5 mils

[1] Marking thickness will include the thickness of marking material and reflective media.

The cleaning will result in the existing pavement marking being adequately scuffed, abraded, and removed by light grinding or abrasive blasting or both to allow proper adhesion of the new durable pavement marking as per the manufacturer's recommendations to comply with product warranties.

Existing grooves not meeting the required depth will be re-grooved to the required depth for the new pavement marking, including reflective media. Equipment for grooving will be capable of the following:

- Grooving the total width of the groove in one pass or uniform depths with multiple passes.
- Grooving without causing damage to the pavement joints or joint sealant material.
- Provide uniform alignment and depth.
- Moving continuously to permit a mobile traffic work operation.

All costs associated with cleaning of the existing groove, including re-grooving, if needed, will be included in the contract unit price per foot for "Surface Preparation for Pavement Marking". Surface preparation will be measured as 4" equivalent.

COLD APPLIED PLASTIC PAVEMENT MARKING

All materials will be applied as per the manufacturer's recommendations.

Cold Applied Plastic Pavement Markings will be 3M Series 380 AW or an approved equal.

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

All materials will be applied as per manufacturer's recommendations. High build waterborne pavement marking paint will conform to the supplemental specifications for Section 980.1 B.

Reflective media consisting of glass beads as well as wet-reflective optics will be adhered to the paint.

The wet-reflective optics will contain either clear, white, amber, or yellow tinted beads composed of glass or a composite consisting of a core made from ceramic or glass with an outer layer of microcrystalline ceramic or glass beads. The wet-reflective optics will provide a 50/50 blend of dry to wet ratio of optics. All beads bonded to wet-reflective optics will have a minimum index of refraction of 1.8 for dry retroreflectivity and 2.4 for wet retroreflectivity when tested using the liquid oil immersion method.

Reflective media will require a Certificate of Compliance for Certification for each type, source, and lot. Acceptance sampling will not be required.

The Department will take retroreflectivity readings on the pavement marking lines no sooner than 3 days and no later than 30 days after the completion of all line applications required for an individual highway route using a portable retroreflectometer conforming to 30-meter geometry. Retroreflectivity readings will be taken on a test location with cleaning being limited to light hand brooming.

Pavement markings not conforming to the retroreflectivity requirements will be removed and replaced. If replacement of markings cannot be applied within the same year, the Contractor will schedule subject work to be completed no later than June 15th in the following year. Upon replacement, the retroreflectivity testing process will be done again requiring new readings.

The Department will randomly select one test location per mile of each edge line including ramps and one test location per mile of centerline (solid and/or skip line will be considered as one centerline). Three retroreflectivity readings will be taken at each test location. The three readings will be averaged and become the reading for that test location.

Initial readings:

Pavement Marking Color	Minimum Value
White	350 mc/m^2/lux
Yellow	275 mc/m^2/lux

All pavement markings not conforming to the requirements provided in these plans will be considered deficient and will be removed and replaced. Additional retroreflectivity readings will be taken by the Department to determine the limits of removal. The removal will be accomplished using suitable sand blasting or grinding equipment unless the Engineer authorizes other means. The removal process will remove at least 90% of the deficient line, with no excessive scarring of the existing pavement. The removal width will be one inch wider all around the nominal width of the pavement marking to be removed. Removal and replacement of the pavement markings will be at the Contractor's expense, with no cost incurred by the State.

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

Solid 4" line = 27.8 Gals/Mile
Dashed 4" line = 7.6 Gal/Mile
Glass Beads = 5.3 Lbs/Gal.
Composite Reflective Elements = 2.1 Lbs/Gal.

All cost for materials, labor, and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.

ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W3-4	BE PREPARED TO STOP	4	48" x 48"	16.0	64.0
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	4	48" x 48"	16.0	64.0
G20-2	END ROAD WORK	4	36" x 18"	4.5	18.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			274.0

COLD APPLIED PLASTIC PAVEMENT MARKING TABLE

ITEM	LOCATION	QUANTITY
Cold Applied Plastic Pavement Marking, 4" Yellow	Segment 5- US18 & SD53S Jct.	6202 Ft
Cold Applied Plastic Pavement Marking, 24" Yellow	Segment 5- US18 & SD53S Jct.	269 Ft
Cold Applied Plastic Pavement Marking, 4" White	Segment 5- US18 & SD53S Jct.	4175 Ft
Arrows	Segment 5- US18 & SD53S Jct.	4 Each
Cold Applied Plastic Pavement Marking, 4" Yellow	Segment 6- US 18 & US 183	1320 Ft
Cold Applied Plastic Pavement Marking, 24" Yellow	Segment 6- US 18 & US 183	18 Ft
Cold Applied Plastic Pavement Marking, 4" White	Segment 6- US 18 & US 183	660 Ft

Breakdown of Segments (For Information Only)

Segment	Hwy	Begin MRM	Begin Disp.	Begin Mileage	End MRM	End Disp.	End Mileage	Exceptions (Mile)	Gross Length (Mile)	Net Miles
1	212	218.00	0.961	218.033	224.00	0.244	223.430	0.000	5.397	5.397
2	83	154.00	0.988	84.657	174.00	0.020	103.597	0.000	18.940	18.940
3	18	141.00	0.833	121.248	148.00	0.169	127.586	0.000	6.338	6.338
4	18	182.00	0.495	161.312	196.00	0.370	175.177	0.000	13.865	13.865
5	18	211.00	0.885	190.316	242.00	0.810	221.242	0.000	30.926	30.926
6	18	243.00	0.630	222.053	249.00	0.336	227.753	0.000	5.700	5.700
7	18	254.00	0.067	231.070	262.00	0.934	239.948	0.000	8.878	8.878
								Total Project Less Exceptions:		**90.044**

Estimate of Quantites (For Information Only)

Segment	Hwy	Length (Miles)	Grind Sinusoidal Centerline Rumble Stripe in PCC (Miles)	High Build Waterborne Pavement Marking Paint w/ Reflective Elements, Yellow (Gal)	High Build Waterborne Pavement Marking Paint w/ Reflective Elements, White (Gal)	High Build Waterborne Pavement Marking Paint, 24" Yellow (Ft)	High Build Waterborne Pavement Marking Paint, Arrow (Each)	High Build Waterborne Pavement Marking Paint, Message (Each)	Cold Applied Plastic Pavement Marking, 4" (Ft)	Cold Applied Plastic Pavement Marking, 24" (Ft)	Cold Applied Plastic Pavement Marking, Arrow (Each)	Surface Preparation for Pavement Marking (Ft)	Saw Joint/Reseal in PCC (Ft)	Comments
1	US 212	5.397	5.397	112	306	421	2	1	-	-	-	58,082	28,496	Message ="ONLY"
2	US 83	18.940	18.940	169	1,053	102	2	-	-	-	-	200,006	100,003	
3	US 18	6.338	6.338	63	352	-	-	-	-	-	-	66,929	33,465	
4	US 18	13.865	13.865	259	771	-	-	-	-	-	-	146,414	73,207	
5	US 18	30.926	30.926	504	1,719		-	-	10,377	269	4	326,579	163,289	
6	US 18	5.700	5.700	110	317	-	-	-	1,980	18	-	60,192	30,096	
7	US 18	8.878	8.878	94	494	-	-	-	-	-	-	93,752	46,876	
		Total:	90.0	1,311	5,012	523	4	1	12,357	287	4	951,955	475,432	