

November 25, 2024

ADDENDUM NO. 1

**RE: Item #8, December 4, 2024 Letting - IM 0909(98)396, PCN 091T, Minnehaha County - LSDC
Overlay, Approach Slabs, Pavement, Rails, Joints**

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 633E3020 "Durable Pavement Marking, 12" White"

Bid Item 634E0640 "Temporary Pavement Marking"

Quantities for Bid Items were changed:

Bid Item 633E3005 "Durable Pavement Marking, 4" Yellow" changed from 5,698 to 23,698 Ft

Bid Item 633E5100 "Grooving for Durable Pavement Marking, 4"" changed from 13,208 to 31,208 Ft

Bid Items were removed:

Bid Item 633E3025 "Durable Pavement Marking, 12" Yellow"

PLANS: Please destroy sheets 2, 3, 32, 66, 86, & 106 and replace with the enclosed sheets, dated 11/18/24 and 11/22/24.

Sheet 2: **Bid Items were added:**

Bid Item 633E3020 "Durable Pavement Marking, 12" White"

Bid Item 634E0640 "Temporary Pavement Marking"

Quantities for Bid Items were changed:

Bid Item 633E3005 "Durable Pavement Marking, 4" Yellow" changed from 5,698 to 23,698 Ft

Bid Item 633E5100 "Grooving for Durable Pavement Marking, 4"" changed from 13,208 to 31,208 Ft

Bid Items were removed:

Bid Item 633E3025 "Durable Pavement Marking, 12" Yellow"

Sheet 3: ESTIMATE OF QUANTITIES was revised.

Sheet 32: TEMPORARY PAVEMENT MARKING note was added.

Sheets 66, 86, & 106: GALVANIC ANODE note was added.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Travis Dressen, Mitchell Region Engineer
Harry Johnston, Sioux Falls Area Engineer

ESTIMATE OF QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT IM 0909(98)396	SHEET 2	TOTAL SHEETS 211
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Rev. 9/18 & 11/18/24 MR

PCN 091T

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
110E0130	Remove Traffic Sign	4	Each
110E0420	Remove Drop Inlet Frame and Grate Assembly	12	Each
110E0650	Remove Crossover Closure	600	Ft
110E0700	Remove 3 Cable Guardrail	1,798	Ft
110E0730	Remove Beam Guardrail	749.0	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	11	Each
110E0745	Remove 3 Cable Guardrail Slip Base Anchor Assembly	2	Each
110E0770	Remove W Beam Guardrail Breakaway Cable Terminal	4	Each
110E0800	Remove W Beam Guardrail End Terminal	2	Each
110E1010	Remove Asphalt Concrete Pavement	1,164.0	SqYd
110E1100	Remove Concrete Pavement	1,637.0	SqYd
110E1700	Remove Silt Fence	20	Ft
110E6410	Remove Type 1 MGS for Reset	150.0	Ft
110E6501	Remove Type 1 Retrofit Guardrail Transition for Reset	2	Each
120E0010	Unclassified Excavation	46	CuYd
120E0600	Contractor Furnished Borrow Excavation	387	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	LS
260E2030	Gravel Cushion, Salvaged	1,290.0	Ton
270E0112	Salvage Granular Material	1,469.0	Ton
320E1200	Asphalt Concrete Composite	524.0	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	0.1	Mile
380E0130	12" Nonreinforced PCC Pavement	1,788.0	SqYd
380E6000	Dowel Bar	614	Each
380E6110	Insert Steel Bar in PCC Pavement	230	Each
410E2600	Membrane Sealant Expansion Joint	280.0	Ft
629E0110	High Tension 4 Cable Guardrail	261	Ft
629E0290	High Tension Cable Guardrail Anchor Assembly	4	Each
629E9000	Crossover Closure	600	Ft
630E0500	Type 1 MGS	1,162.5	Ft
630E1501	Type 1 Retrofit Guardrail Transition	9	Each
630E2017	MGS MASH Flared End Terminal	2	Each
630E2018	MGS MASH Tangent End Terminal	7	Each
630E2110	Beam Guardrail Post and Block	49	Each
630E5010	Reset Type 1 MGS	150.0	Ft
630E5301	Reset Type 1 Retrofit Guardrail Transition	2	Each
632E1340	2.5"x2.5" Perforated Tube Post	57.5	Ft
632E2220	Guardrail Delineator	68	Each
632E2520	Type 2 Object Marker	4	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	37.3	SqFt
633E3000	Durable Pavement Marking, 4" White	7,510	Ft

PCN 091T (CONTINUED)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E3005	Durable Pavement Marking, 4" Yellow	23,698	Ft
633E3020	Durable Pavement Marking, 12" White	1,480	Ft
633E5100	Grooving for Durable Pavement Marking, 4"	31,208	Ft
633E5110	Grooving for Durable Pavement Marking, 12"	1,480	Ft
634E0010	Flagging	20.0	Hour
634E0110	Traffic Control Signs	783.5	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	12	Each
634E0330	Temporary Raised Pavement Markers	23,040	Ft
634E0380	Tubular Marker	160	Each
634E0390	Replace Tubular Marker	16	Each
634E0420	Type C Advance Warning Arrow Board	4	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	116	Each
634E0640	Temporary Pavement Marking	21,400	Ft
634E0700	Traffic Control Movable Concrete Barrier	101	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	133	Each
634E0750	Temporary Concrete Barrier End Protection	11	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	14	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	3	Each
634E1002	Detour and Restriction Signing	2,095.4	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	4	Each
670E0200	Type A Frame and Grate	12	Each
670E6000	Adjust Drop Inlet	10	Each
734E0010	Erosion Control	Lump Sum	LS
734E0602	Low Flow Silt Fence	72	Ft
734E0610	Mucking Silt Fence	4	CuYd
734E0620	Repair Silt Fence	20	Ft

STR. NO. 50-180-162 WBL

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
410E2600	Membrane Sealant Expansion Joint	91.8	Ft
460E0070	Class A45 Concrete, Bridge Repair	14.6	CuYd
460E0300	Breakout Structural Concrete	14.1	CuYd
460E0380	Install Dowel in Concrete	44	Each
480E0200	Epoxy Coated Reinforcing Steel	565	Lb
480E5000	Galvanic Anode	56	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	134	CuYd
550E0100	Concrete Removal Type 1A	1,767.9	SqYd
550E0110	Concrete Removal Type 1B	155.0	SqYd
550E0120	Concrete Removal Type 1C	77.5	SqYd
550E0130	Concrete Removal Type 1D	77.5	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	16.6	CuYd
550E0500	Finishing and Curing	1,767.9	SqYd

STR. NO. 50-180-163 EBL

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
410E2600	Membrane Sealant Expansion Joint	91.8	Ft
460E0070	Class A45 Concrete, Bridge Repair	14.6	CuYd
460E0300	Breakout Structural Concrete	14.1	CuYd
460E0380	Install Dowel in Concrete	44	Each
480E0200	Epoxy Coated Reinforcing Steel	565	Lb
480E5000	Galvanic Anode	56	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	133	CuYd
550E0100	Concrete Removal Type 1A	1,767.9	SqYd
550E0110	Concrete Removal Type 1B	155.0	SqYd
550E0120	Concrete Removal Type 1C	77.5	SqYd
550E0130	Concrete Removal Type 1D	77.5	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	16.6	CuYd
550E0500	Finishing and Curing	1,767.9	SqYd

STR. NO. 50-221-166 WBL

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3310	Bridge Elevation Survey	Lump Sum	LS
410E2600	Membrane Sealant Expansion Joint	95.8	Ft
460E0070	Class A45 Concrete, Bridge Repair	8.5	CuYd
460E0300	Breakout Structural Concrete	8.1	CuYd
460E0380	Install Dowel in Concrete	50	Each
480E0200	Epoxy Coated Reinforcing Steel	287	Lb
480E5000	Galvanic Anode	64	Each
550E0010	Low Slump Dense Concrete Bridge Deck Overlay	88	CuYd
550E0100	Concrete Removal Type 1A	1,164.3	SqYd
550E0110	Concrete Removal Type 1B	93.0	SqYd
550E0120	Concrete Removal Type 1C	46.5	SqYd
550E0130	Concrete Removal Type 1D	46.5	SqYd
550E0140	Concrete Removal Type B	20.0	Ft
550E0200	Class A45 Concrete Fill	12.1	CuYd
550E0500	Finishing and Curing	1,164.3	SqYd

SPECIFICATIONS

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

ESTIMATE OF QUANTITIES

(FOR INFORMATION ONLY)

STATE OF SOUTH DAKOTA	PROJECT IM 0909(98)396	SHEET 3	TOTAL SHEETS 211
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BID ITEM NUMBER	ITEM	EXIT 396 WBL QUANTITY	EXIT 396 EBL QUANTITY	EXIT 400 WBL QUANTITY	EXIT 400 EBL QUANTITY	TOTAL QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
110E0130	Remove Traffic Sign	1	1	2	-	4	Each
110E0420	Remove Drop Inlet Frame and Grate Assembly	4	4	2	2	12	Each
110E0650	Remove Crossover Closure	160	140	150	150	600	Ft
110E0700	Remove 3 Cable Guardrail	208	107	978	505	1798	Ft
110E0730	Remove Beam Guardrail	194	231	162	162	749	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	2	1	5	3	11	Each
110E0745	Remove 3 Cable Guardrail Slip Base Anchor Assembly	-	-	1	1	2	Each
110E0770	Remove W Beam Guardrail Breakaway Cable Terminal	-	-	2	2	4	Each
110E0800	Remove W Beam Guardrail End Terminal	1	1	-	-	2	Each
110E1010	Remove Asphalt Concrete Pavement	381	382	226	175	1164	SqYd
110E1100	Remove Concrete Pavement	676	675	286	-	1637	SqYd
110E1700	Remove Silt Fence	5	5	5	5	20	Ft
110E6410	Remove Type 1 MGS for Reset	62.5	87.5	-	-	150	Ft
110E6501	Remove Type 1 Retrofit Guardrail Transition for Reset	1	1	-	-	2	Each
120E0010	Unclassified Excavation	-	-	32	14	46	CuYd
120E0600	Contractor Furnished Borrow Excavation	84	83	58	162	387	CuYd
230E0100	Remove and Replace Topsoil	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
260E2030	Gravel Cushion, Salvaged	299	267	486	238	1290	Ton
270E0112	Salvage Granular Material	346	288	534	301	1469	Ton
320E1200	Asphalt Concrete Composite	83	67	218	156	524	Ton
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	0.05	0.05	-	-	0.1	Mile
380E0130	12" Nonreinforced PCC Pavement	745	745	298	-	1788	SqYd
380E6000	Dowel Bar	254	288	72	-	614	Each
380E6110	Insert Steel Bar in PCC Pavement	78	80	72	-	230	Each
410E2600	Membrane Sealant Expansion Joint	92	92	96	-	280	Ft
629E0110	High Tension 4 Cable Guardrail	-	-	261	-	261	Ft
629E0290	High Tension Cable Guardrail Anchor Assembly	-	-	4	-	4	Each
629E9000	Crossover Closure	160	140	150	150	600	Ft
630E0500	Type 1 MGS	200	187.5	375	400	1162.5	Ft
630E1501	Type 1 Retrofit Guardrail Transition	3	2	2	2	9	Each
630E2017	MGS MASH Flared End Terminal	1	1	-	-	2	Each
630E2018	MGS MASH Tangent End Terminal	2	1	2	2	7	Each
630E2110	Beam Guardrail Post and Block	23	26	-	-	49	Each
630E5010	Reset Type 1 MGS	62.5	87.5	-	-	150	Ft
630E5301	Reset Type 1 Retrofit Guardrail Transition	1	1	-	-	2	Each
632E1340	2.5"x2.5" Perforated Tube Post	14	14	29.5	-	57.5	Ft
632E2220	Guardrail Delineator	17	13	26	12	68	Each
632E2520	Type 2 Object Marker	-	-	4	-	4	Each
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	6.9	6.9	23.5	-	37.3	SqFt
633E3000	Durable Pavement Marking, 4" White	1980	1900	2130	1500	7510	Ft
633E3005	Durable Pavement Marking, 4" Yellow	8482	8422	1594	5200	23698	Ft
633E3020	Durable Pavement Marking, 12" White	489	587	404	-	1480	Ft
633E5100	Grooving for Durable Pavement Marking, 4"	10462	10322	3724	6700	31208	Ft
633E5110	Grooving for Durable Pavement Marking, 12"	489	587	404	-	1480	Ft
634E0010	Flagging	5	5	5	5	20	Hour
634E0110	Traffic Control Signs	205.9	205.9	165.9	205.8	783.5	SqFt
634E0120	Traffic Control Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
634E0275	Type 3 Barricade	3	3	3	3	12	Each
634E0330	Temporary Raised Pavement Markers	7680	7680	-	7680	23040	Ft
634E0380	Tubular Marker	53	53	-	54	160	Each
634E0390	Replace Tubular Marker	5	5	-	6	16	Each
634E0420	Type C Advance Warning Arrow Board	1	1	1	1	4	Each
634E0525	Linear Delineation System Panel, Barrier Mounted	106	5	-	5	116	Each
634E0640	Temporary Pavement Marking	8100	8100	-	5200	21400	Ft
634E0700	Traffic Control Movable Concrete Barrier	101	-	-	-	101	Each
634E0705	Remove and Reset Traffic Control Movable Concrete Barrier	-	97	-	36	133	Each
634E0750	Temporary Concrete Barrier End Protection	11	-	-	-	11	Each
634E0755	Remove and Reset Temporary Concrete Barrier End Protection	-	10	-	4	14	Each
634E0760	Temporary Concrete Barrier End Protection Module Set or Repair Kit	1	1	-	1	3	Each
634E1002	Detour and Restriction Signing	528.9	528.9	528.9	508.7	2095.4	SqFt
634E1215	Contractor Furnished Portable Changeable Message Sign	1	1	1	1	4	Each
670E0200	Type A Frame and Grate	4	4	2	2	12	Each
670E6000	Adjust Drop Inlet	4	4	2	-	10	Each
734E0010	Erosion Control	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
734E0602	Low Flow Silt Fence	18	18	18	18	72	Ft
734E0610	Mucking Silt Fence	1	1	1	1	4	CuYd
734E0620	Repair Silt Fence	5	5	5	5	20	Ft

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the 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.

For work on structure 50-180-163 (eastbound I90 over I29) traffic will be crossed over to the westbound lanes to allow the Contractor to work on a closed structure.

For work on structure 50-180-162 (westbound I90 over I29) traffic will be crossed over to the eastbound lanes to allow the Contractor to work on a closed structure.

For work on structure 50-221-166 (westbound I90 over I229) traffic will be crossed over to the eastbound lanes to allow the Contractor to work on a closed structure.

All other work will be accomplish using lane closures.

GENERAL TRAFFIC CONTROL

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

All temporary traffic control sign locations will be set in the field by the Contractor and verified by the Engineer prior to installation.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

All construction operations will be conducted in the general direction of traffic movement.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. Cost for material, labor and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made.

All fixed location signs, signposts, and breakaway bases will be removed within 7 calendar days following pavement marking.

All haul trucks will be equipped with an additional flashing amber light that is visible from the backside of the haul truck. Cost for the flashing amber lights will be incidental to the various related contract items.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

GENERAL TRAFFIC CONTROL (CONTINUED)

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

A Type 3 Barricade will be installed at the end of a lane closure taper as detailed in these plans. Additional Type 3 Barricades will be installed facing traffic within the closed lane at a spacing of ¼ mile.

Lane closures will be limited to 5 miles in length. The distance between the closest points of any two-lane closures will be at least 3 miles, excluding tapers.

Construction vehicles will exit or enter the construction work zone at locations identified by the Engineer. At no time will construction vehicles utilize the maintenance crossovers or the Interstate median to exit or enter Interstate traffic.

Interstate lane closures will be removed when work will not be occurring for a period of 3 or more calendar days. Activities that do not involve workers being present, such as curing time for concrete, constitute work. Lane closures will not be set up on a Friday if no work will be occurring on Saturday or Sunday. In these cases, the lane closure will be installed on Monday.

LANE CLOSURES

Interstate lane closures shorter than 5 miles will be used if 5 miles is greater than the length of work that can be accomplished in one day's production. More than one lane closure may be permitted; however, there will be a minimum of a three-mile section between lane closures, excluding the tapers.

The length of lane closures for structure work on interstate should be limited to one structure or 1 mile. Structures should be done separately unless they are within 2 miles of another structure.

Interstate lane closures will be removed when work will not be occurring for a period of 3 or more calendar days. Activities that do not involve workers being present, such as curing time for concrete, constitute work. Lane closures will not be set up on a Friday if no work will be occurring Saturday or Sunday. In these cases, the lane closure will be installed on Monday.

MEDIAN CROSSOVERS

The following median crossovers will be used for the project:

- I-90 MRM 396.00
- I-90 MRM 397.75
- I-90 MRM 400.10
- I-90 MRM 401.40

TRAFFIC CONTROL SIGNS

Traffic control signs have been included in a table for each site. Payment will only be for those signs used on each site.

OVERWIDTH RESTRICTION AND DETOUR SIGNING

The Contractor will furnish and install the overwidth restriction and detour signs as shown in these plans. Prior to installing the signs, the Contractor will mark the sign locations and review them with the Engineer. Overwidth restriction and detour signs will be installed on fixed location, ground mounted, breakaway supports. It will be the responsibility of the Contractor to maintain and reinstall these signs during the project as required by the construction progress. Upon completion of the project, the Contractor will remove the overwidth restriction and detour signs.

Cost for furnishing the signs, posts, and mounting hardware, and for installing, maintaining, covering, and removing the overwidth restriction and detour signs will be incidental to the contract unit price per square foot for Detour and Restriction Signing.

WORK ZONE SPEED REDUCTION

The Department is required to obtain a speed reduction resolution prior to the installation of any SPEED LIMIT (R2-1) signs shown on standard plate 634.63 or as shown in the plans. To provide adequate time for the resolution to be enacted, the Contractor will inform the Engineer a minimum of 3 weeks prior to the scheduled installation of any work zone speed reduction signs on the project. The information provided by the Contractor will include the anticipated date of sign installation, the newly reduced speed limit, the location of the work zone, and the anticipated completion date of work requiring the speed reduction.

TEMPORARY RAISED PAVEMENT MARKERS

Temporary raised pavement markers will be used for marking edge lines, lane lines, and centerlines. Temporary raised pavement markers will be used on all new permanent surfacing sections of roadway and on existing surfacing where temporary marking locations are different than existing marking locations, unless noted or as directed by the Engineer.

Temporary raised pavement markers will be attached to the roadway surface with a flexible non-permanent bituminous adhesive capable of being removed from the roadway surface or with an adhesive approved by the Engineer.

Cost for furnishing, installing, replacing if necessary, and removing the markers will be incidental to the contract unit price per foot or mile for Temporary Raised Pavement Markers.

PERMANENT PAVEMENT MARKING

The Contractor will be required to repaint all existing pavement marking including centerline, edge line, and lane lines. This list is approximate. The Contractor will be required to document and be able to relocate for replacement of the existing pavement markings before the markings are obliterated. Cost to duplicate the existing marking locations will be incidental to the contract unit prices for the various contract items.

TEMPORAY PAVEMENT MARKING

Temporary Pavement Marking (white paint) will be used for the edgeline adjacent to the median shoulder during crossed-over traffic operations. The Contractor will paint a 4" white edgeline over the existing 4" yellow edgeline prior to installation of two-way traffic control.

Cost for material, labor and equipment necessary to furnish and install the pavement marking paint will be included in the contract unit price per foot for Temporary Pavement Marking.

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S.D.	IM 0909(98)396	66	211

Revised 11/22/2024 JRB

LOW SLUMP DENSE CONCRETE OVERLAY (CONTINUED)

6. No traffic will be allowed to operate on the scarified portion of the bridge deck. If it appears that the entire Low Slump Dense Concrete Bridge Deck Overlay cannot be completed prior to winter, the Type 1A, 1B, 1C, 1D and Type B removal will not be done until work resumes in the spring. In the event that scarification has been started and due to unforeseen circumstances it becomes impossible to complete the placement of the Low Slump Dense Concrete Bridge Deck Overlay on the entire surface of the structure prior to winter, the Office of Bridge Design will be notified. Recommendations for handling winter traffic will then be made. These recommendations may include, but are not limited to: filling extra depth removal areas with Class A45 Concrete, placing an asphalt overlay on the uncompleted area so that the entire roadway width may be opened to traffic, removal of the asphalt overlay when work is resumed, and scarifying an additional 1/4" of depth on the bridge deck. The cost of this work including: asphalt overlay, scarification, Class A45 Concrete, extra Low Slump Dense Concrete, and all other items incidental to this work, will be at the expense of the Contractor.

GALVANIC ANODE

1. The Contractor will furnish and place galvanic anodes in the drop inlet and approach slab breakout areas specified in this plan set. Anodes are not required in the curb or sleeper breakout areas.
2. The galvanic anodes will be supplied as one of the following:
 - a. Galvashield XP2
Vector Corrosion Technologies
65114 140th Ave.
Wabasha, MN 55981
Phone: (507) 259-2481
Website: www.vector-corrosion.com
 - b. Sentinel Silver
Euclid Chemical Company
19218 Redwood Road
Cleveland, OH 44110
Phone: (800) 321-7628
Website: www.euclidchemical.com
 - c. Sika FerroGard 670
Sika Corporation US
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: (800) 933-7452
Website: <http://usa.sika.com>
3. The anodes will be placed in accordance with manufacturer's recommendations and as approved by the Engineer. The anodes have not been shown on the drawings. The Contractor will provide shop drawings of the galvanic anode installation including locations of the individual anodes to the Office of Bridge Design.

4. The anodes will be placed with a minimum 3/4" cover and will be set in embedding mortar per the manufacturer's recommendations. The anodes will be fully encased in the concrete repair material. Where adequate cover does not exist, a concrete pocket will be chipped out behind the anode to provide minimum cover. The Contractor may need to chip around the reinforcing bar locally at the anode installation to make the electrical connection. The reinforcing steel at the connection location will be cleaned per the manufacturer's recommendations to provide electrical connection and mechanical bond.
5. The electrical continuity of the connections and reinforcing steel will be confirmed per the manufacturer's recommendations.
6. In area of concrete repair where anodes are placed, the epoxy coating on the reinforcing steel will not require touch up.
7. The Contractor will provide manufacturer's product literature and installation instructions to the Engineer 10 days prior to installation.
8. All costs associated with placing anodes including labor, equipment, materials and incidentals will be included in the contract unit price per each for Galvanic Anode.

AS-BUILT ELEVATION SURVEY

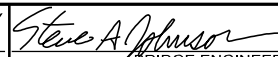
The Contractor will be responsible for producing an as-built elevation survey soon after construction is complete and before the bridge is completely opened to traffic. The Contractor will be responsible for recording the as-built elevations at the locations shown by the table of as-built elevations shown in the plans. The completed table will be given to the Engineer who will forward a copy to the Bridge Maintenance Engineer in the Office of Bridge Design and the Senior Region Bridge Engineer. The elevations will be based on the control points provided in the plans. The Contractor will be responsible for verifying the control points provided in the plans. All costs associated with obtaining the elevations at the locations shown in the table and for the benchmark shown in the plans, including all equipment, labor and any incidentals required will be incidental to the contract lump sum price for Bridge Elevation Survey.

(WEST BOUND LANES)
NOTES (CONTINUED)
FOR
318' - 0" CONT. COMPOSITE GIRDER BRIDGE

STR. NO. 50-180-162

JUNE 2024

3 OF 20

DESIGNED BY JH MINN091T	CK. DES. BY JRB 091THA03	DRAFTED BY JH	 BRIDGE ENGINEER
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STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	IM 0909(98)396	86	211

Revised 11/22/2024 JRB

LOW SLUMP DENSE CONCRETE OVERLAY (CONTINUED)

6. No traffic will be allowed to operate on the scarified portion of the bridge deck. If it appears that the entire Low Slump Dense Concrete Bridge Deck Overlay cannot be completed prior to winter, the Type 1A, 1B, 1C, 1D and Type B removal will not be done until work resumes in the spring. In the event that scarification has been started and due to unforeseen circumstances it becomes impossible to complete the placement of the Low Slump Dense Concrete Bridge Deck Overlay on the entire surface of the structure prior to winter, the Office of Bridge Design will be notified. Recommendations for handling winter traffic will then be made. These recommendations may include, but are not limited to: filling extra depth removal areas with Class A45 Concrete, placing an asphalt overlay on the uncompleted area so that the entire roadway width may be opened to traffic, removal of the asphalt overlay when work is resumed, and scarifying an additional 1/4" of depth on the bridge deck. The cost of this work including: asphalt overlay, scarification, Class A45 Concrete, extra Low Slump Dense Concrete, and all other items incidental to this work, will be at the expense of the Contractor.

GALVANIC ANODE

1. The Contractor will furnish and place galvanic anodes in the drop inlet and approach slab breakout areas specified in this plan set. Anodes are not required in the curb or sleeper breakout areas.
2. The galvanic anodes will be supplied as one of the following:
 - a. Galvashield XP2
Vector Corrosion Technologies
65114 140th Ave.
Wabasha, MN 55981
Phone: (507) 259-2481
Website: www.vector-corrosion.com
 - b. Sentinel Silver
Euclid Chemical Company
19218 Redwood Road
Cleveland, OH 44110
Phone: (800) 321-7628
Website: www.euclidchemical.com
 - c. Sika FerroGard 670
Sika Corporation US
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: (800) 933-7452
Website: <http://usa.sika.com>
3. The anodes will be placed in accordance with manufacturer's recommendations and as approved by the Engineer. The anodes have not been shown on the drawings. The Contractor will provide shop drawings of the galvanic anode installation including locations of the individual anodes to the Office of Bridge Design.

4. The anodes will be placed with a minimum 3/4" cover and will be set in embedding mortar per the manufacturer's recommendations. The anodes will be fully encased in the concrete repair material. Where adequate cover does not exist, a concrete pocket will be chipped out behind the anode to provide minimum cover. The Contractor may need to chip around the reinforcing bar locally at the anode installation to make the electrical connection. The reinforcing steel at the connection location will be cleaned per the manufacturer's recommendations to provide electrical connection and mechanical bond.
5. The electrical continuity of the connections and reinforcing steel will be confirmed per the manufacturer's recommendations.
6. In area of concrete repair where anodes are placed, the epoxy coating on the reinforcing steel will not require touch up.
7. The Contractor will provide manufacturer's product literature and installation instructions to the Engineer 10 days prior to installation.
8. All costs associated with placing anodes including labor, equipment, materials and incidentals will be included in the contract unit price per each for Galvanic Anode.

AS-BUILT ELEVATION SURVEY

The Contractor will be responsible for producing an as-built elevation survey soon after construction is complete and before the bridge is completely opened to traffic. The Contractor will be responsible for recording the as-built elevations at the locations shown by the table of as-built elevations shown in the plans. The completed table will be given to the Engineer who will forward a copy to the Bridge Maintenance Engineer in the Office of Bridge Design and the Senior Region Bridge Engineer. The elevations will be based on the control points provided in the plans. The Contractor will be responsible for verifying the control points provided in the plans. All costs associated with obtaining the elevations at the locations shown in the table and for the benchmark shown in the plans, including all equipment, labor and any incidentals required will be incidental to the contract lump sum price for Bridge Elevation Survey.

(EAST BOUND LANES)
NOTES (CONTINUED)
 FOR
318' - 0" CONT. COMPOSITE GIRDER BRIDGE

STR. NO. 50-180-163

JUNE 2024

3 OF 20

DESIGNED BY JH MINN091T	CK. DES. BY JRB 091THB03	DRAFTED BY JH	 BRIDGE ENGINEER
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STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	IM 0909(98)396	106	211

Revised 11/22/2024 JRB

DESIGN MIX OF CONCRETE

1. Class A45 Concrete will be used for Class A45 Concrete, Bridge Repair.
2. The type of cement, concrete strength requirements, aggregate requirements, slump, and air requirements for the contract items Class A45 Concrete, Bridge Repair will conform to the requirements of Section 460 of the Construction Specifications for bridge decks.

GALVANIC ANODE

1. The Contractor will furnish and place galvanic anodes in the drop inlet and sleeper breakout areas specified in this plan set. Anodes are not required in the curb.
2. The galvanic anodes will be supplied as one of the following:
 - a. Galvashield XP2
Vector Corrosion Technologies
65114 140th Ave.
Wabasha, MN 55981
Phone: (507) 259-2481
Website: www.vector-corrosion.com
 - b. Sentinel Silver
Euclid Chemical Company
19218 Redwood Road
Cleveland, OH 44110
Phone: (800) 321-7628
Website: www.euclidchemical.com
 - c. Sika FerroGard 670
Sika Corporation US
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: (800) 933-7452
Website: <http://usa.sika.com>
3. The anodes will be placed in accordance with manufacturer's recommendations and as approved by the Engineer. The anodes have not been shown on the drawings. The Contractor will provide shop drawings of the galvanic anode installation including locations of the individual anodes to the Office of Bridge Design.
4. The anodes will be placed with a minimum 3/4" cover and will be set in embedding mortar per the manufacturer's recommendations. The anodes will be fully encased in the concrete repair material. Where adequate cover does not exist, a concrete pocket will be chipped out behind the anode to provide minimum cover. The Contractor may need to chip around the reinforcing bar locally at the anode installation to make the electrical connection. The reinforcing steel at the connection location will be cleaned per the manufacturer's recommendations to provide electrical connection and mechanical bond.
5. The electrical continuity of the connections and reinforcing steel will be confirmed per the manufacturer's recommendations.
6. In area of concrete repair where anodes are placed, the epoxy coating on the reinforcing steel will not require touch up.

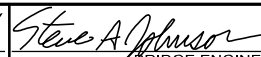
7. The Contractor will provide manufacturer's product literature and installation instructions to the Engineer 10 days prior to installation.
8. All costs associated with placing anodes including labor, equipment, materials and incidentals will be included in the contract unit price per each for Galvanic Anode.

AS-BUILT ELEVATION SURVEY

The Contractor will be responsible for producing an as-built elevation survey soon after construction is complete and before the bridge is completely opened to traffic. The Contractor will be responsible for recording the as-built elevations at the locations shown by the table of as-built elevations shown in the plans. The completed table will be given to the Engineer who will forward a copy to the Bridge Maintenance Engineer in the Office of Bridge Design and the Senior Region Bridge Engineer. The elevations will be based on the control points provided in the plans. The Contractor will be responsible for verifying the control points provided in the plans. All costs associated with obtaining the elevations at the locations shown in the table and for the benchmark shown in the plans, including all equipment, labor and any incidentals required will be incidental to the contract lump sum price for Bridge Elevation Survey.

(WEST BOUND LANES)
NOTES (CONTINUED)
 FOR
182' - 0 1/8" CONT. COMP. GIRDER BRIDGE

STR. NO. 50-221-166
 JUNE 2024

DESIGNED BY JH MINN091T	CK. DES. BY JRB 091THC03	DRAFTED BY JH	 BRIDGE ENGINEER
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