DEPARTMENT OF TRANSPORTATION

Planning & Engineering
Office of Project Development
700 E Broadway Avenue
Pierre, South Dakota 57501-2586
O: 605.773.3275 | F: 605.773.2614
dot.sd.gov

May 28, 2025

ADDENDUM NO. 1

RE: Item #1, June 4, 2025 Letting - BRO-B 8062(10), PCN 08NA, Tripp County - Structure (3-9x6 CIP RCBC) & 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

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.*

Quantities for Bid Items were changed:
Bid Item 420E0200 "Structure Excavation, Box Culvert" changed from 123 to 67 CuYd
Bid Item 460E0120 "Class A45 Concrete, Box Culvert" changed from 196.1 to 140.1 CuYd

PLANS: Please destroy sheets 2, 17, and 25 and replace with the enclosed sheets, dated 5/16/25.

Sheet 2: **Quantities for Bid Items were changed:**
Bid Item 420E0200 "Structure Excavation, Box Culvert" changed from 123 to 67 CuYd
Bid Item 460E0120 "Class A45 Concrete, Box Culvert" changed from 196.1 to 140.1 CuYd

Sheets 17 & 25: ESTIMATED QUANTITIES was revised

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/gp

CC: Jason Humphrey, Pierre Region Engineer
Doug Sherman, Winner Area Engineer

ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

Revised 4/16/2025
Revised 5/16/2025

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	BRO-B 8062(10)	2	39

Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3200	Construction Staking	Lump Sum	LS
100E0100	Clearing	Lump Sum	LS
110E5010	Salvage Delineator	12	Each
110E5020	Salvage Traffic Sign	4	Each
120E0010	Unclassified Excavation	3,034	CuYd
230E0010	Placing Topsoil	961	CuYd
634E0110	Traffic Control Signs	109.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	8	Each
730E0210	Type F Permanent Seed Mixture	52	Lb
731E0200	Fertilizing	1.50	Ton
732E0100	Mulching	6.0	Ton
734E0102	Type 2 Erosion Control Blanket	2,989	SqYd
734E0154	12" Diameter Erosion Control Wattle	500	Ft
734E0510	Shaping for Erosion Control Blanket	1,400	Ft
734E0602	Low Flow Silt Fence	250	Ft
734E0610	Mucking Silt Fence	18	CuYd
734E0620	Repair Silt Fence	63	Ft

Structure
Structure No. 62-318-350

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
250E0030	Incidental Work, Structure	Lump Sum	LS
420E0200	Structure Excavation, Box Culvert	67	CuYd
421E0200	Box Culvert Undercut	188	CuYd
460E0120	Class A45 Concrete, Box Culvert	140.1	CuYd
462E0100	Class M6 Concrete	3.7	CuYd
480E0100	Reinforcing Steel	18,402	Lb
700E0210	Class B Riprap	63.3	Ton
831E0110	Type B Drainage Fabric	80	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

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 A: AQUATIC RESOURCES

COMMITMENT A1: WETLANDS

All efforts to avoid and minimize wetland impacts from the project have resulted in approximately 0.071 acres of wetlands (includes temporary and permanent) becoming impacted. Refer to plans for location and boundaries of the impacted wetlands.

Table of Impacted Wetlands

Wetland No.	Station	Perm. Impact Left (Acres)	Perm. Impact Right (Acres)	Temp. Impact Left (Acres)	Temp. Impact Right (Acres)	Total Impact (Acres)
1	5+50 to 9+00	0.000	0.003	0.000	0.069	0.071

Action Taken/Required:

Mitigation is required in accordance with the "*Statewide Finding Regarding Wetlands for South Dakota Federal-Aid Highway Projects (February 2018)*". Replacement of 0.003 acres of permanent wetland impacts will be completed through another wetland mitigation opportunity in a manner which considers FHWA's program-wide goal of 'net gain' of wetlands through enhancement, creation, and preservation.

Temporary impacts identified in the Table of Impacted Wetlands will not be mitigated as original contours and elevations will be re-established. Prior to initiating temporary work in wetlands, the Contractor will submit a plan to the Project Engineer in accordance with Section 7.21 D of the Specifications.

The Contractor will notify the Project Engineer if additional easement is needed to complete work adjacent to any wetland. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any wetlands beyond the work limits and easements shown in the plans.

COMMITMENT A2: STREAMS

All efforts to avoid and minimize stream impacts from the project have resulted in approximately 0.04 acres of stream (includes temporary and permanent) becoming impacted. Refer to plans for location and boundaries of the impacted streams.

Table of Impacted Streams

Stream Name	Station	Perm. Impact (Acres)	Temp. Impact (Acres)	Total Impact (Acres)
West Branch Bull Creek	9+80 to 10+20	0.02	0.02	0.04

Action Taken/Required:

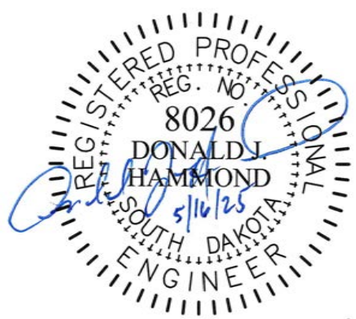
It has been determined that project impacts do not require mitigation. Temporary impacts identified in the Table of Impacted Streams will not be mitigated as the finished ground under the bridge will be shaped to match the upstream channel and flood plain and the existing low water channel will be maintained as near as practical to the existing location as designated.

The Contractor will notify the Project Engineer if additional easement is needed to complete work adjacent to any stream. The Project Engineer will obtain an appropriate course of action from the Environmental Office before proceeding with construction activities that affect any streams beyond the work limits and easements shown in the plans.

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B2: WHOOPING CRANE

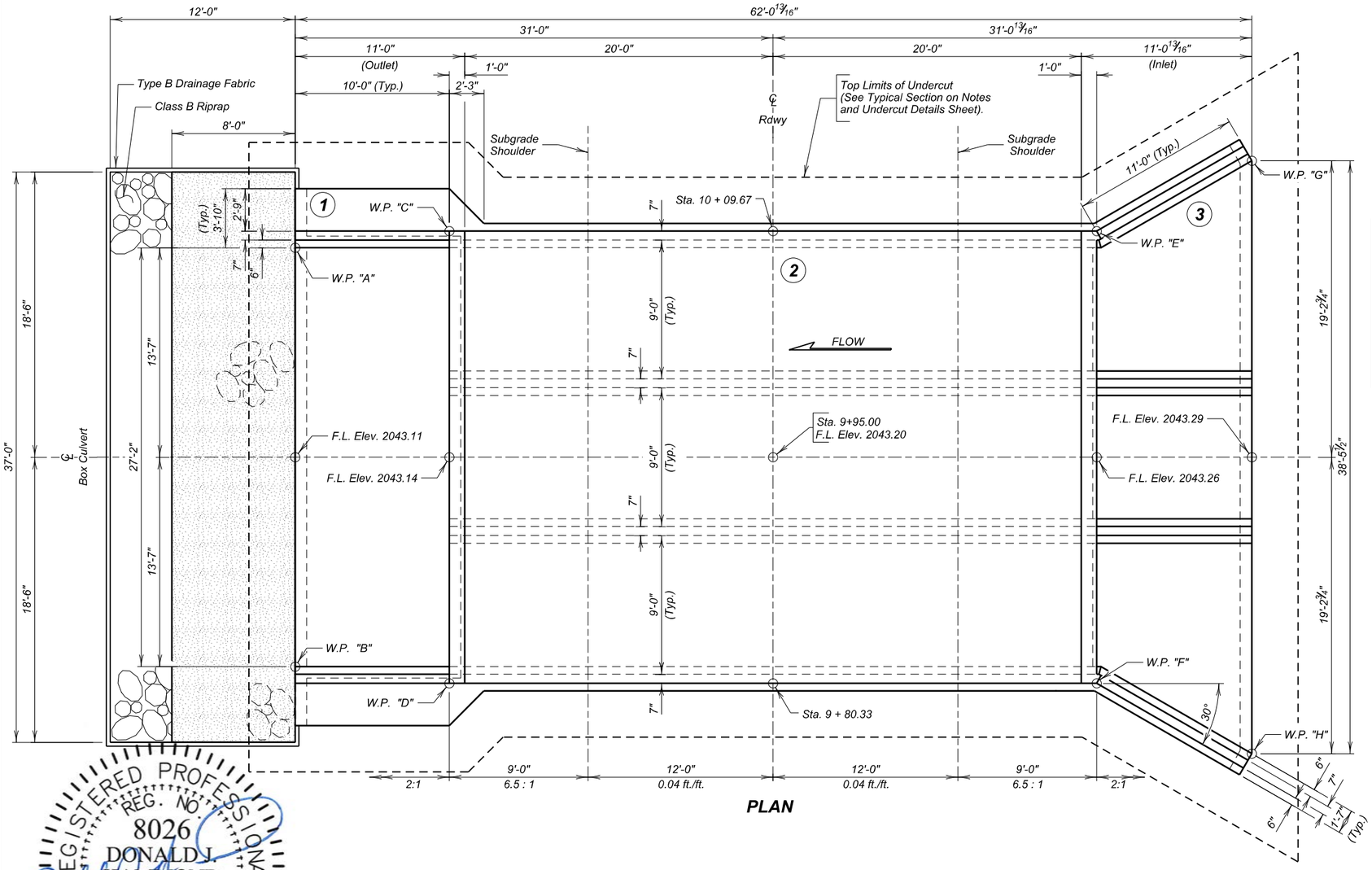
The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are 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.



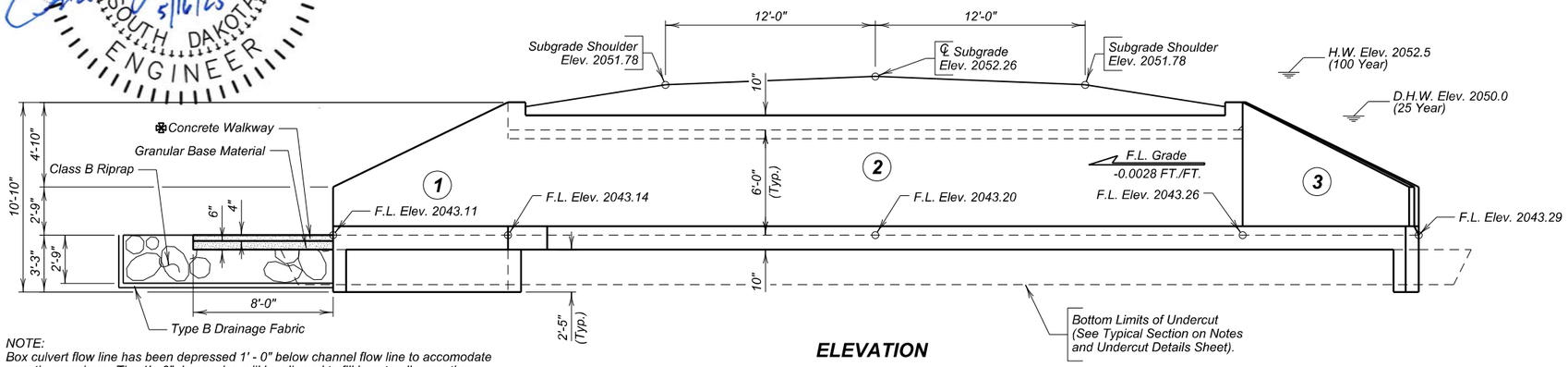
The elevations shown in these plans are based on the National Geodetic Survey (NGS) North American Vertical Datum of 1988 (NAVD88).

Revised 5/16/2025

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	BRO-B 8062(10)	17	39



PLAN



ELEVATION

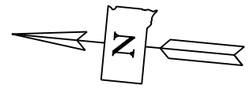
NOTE:
Box culvert flow line has been depressed 1' - 0" below channel flow line to accomodate aquatic organisms. The 1' - 0" depression will be allowed to fill in naturally over time.

REGISTERED PROFESSIONAL ENGINEER
REG. NO. 8026
DONALD J. HAMMOND
SOUTH DAKOTA
5/16/25

- X028 -

INDEX OF CULVERT SHEETS

Sheet No. 1 - General Drawing and Quantities
Sheet No. 2 - Notes and Undercut Details
Sheet No. 3, 4, & 5 - Inlet Details
Sheet No. 6 & 7 - Outlet Details
Sheet No. 8 & 9 - F5 Barrel Details
Sheet No. 10 - Details of Standard Plate No's. 460.02 & 620.16



HYDRAULIC DATA

Q_d	719 cfs
A_d	139 sq ft
V_d	5.2 fps
Q_F	719 cfs
Q_{100}	1300 cfs
Q_{OT}	1360 cfs
V_{Max}	9.3 fps

TABLE OF WORKING POINTS

W.P.	STATION	OFFSET
"A"	10 + 08.31	31.02' L
"B"	9 + 81.39	30.99' L
"C"	10 + 09.37	21.03' L
"D"	9 + 80.32	20.99' L
"E"	10 + 10.03	20.96' R
"F"	9 + 80.35	21.01' R
"G"	10 + 15.58	30.89' R
"H"	9 + 75.80	31.08' R

Q_d = *Design discharge for the proposed culvert based on 25 year frequency. El. 2050.0.*

Q_{OT} = *Overtopping discharge and frequency >100 year recurrence interval. El. 2052.8 at Station 10+10.*

Q_F = *Designated peak discharge for the basin approaching proposed project based on 25 year frequency.*

Q_{100} = *Computed discharge for the basin approaching proposed project based on 100 year frequency. El. 2052.5.*

V_{Max} = *Maximum computed outlet velocity for the proposed culvert based on 100 year frequency.*

Note: The hydraulic data contained in these plans is valid only if the overflow section is maintained. Alteration of the overflow section will require re-analysis of the hydraulics at the site to determine its effect on public safety.

ESTIMATED QUANTITIES

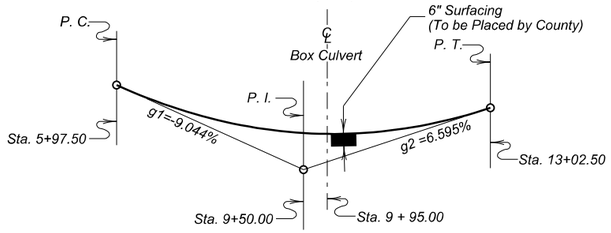
	ITEM	UNIT	QUANTITY
	Incidental Work, Structure	L.S.	L.S.
	Structure Excavation, Box Culvert	Cu. Yd.	67
	Box Culvert Undercut	Cu. Yd.	188
	Class A45 Concrete, Box Culvert	Cu. Yd.	140.1
❁	Class M6 Concrete	Cu. Yd.	3.7
	Reinforcing Steel	Lb.	18402
≠	Class B Riprap	Ton	63.3
	Type B Drainage Fabric	Sq. Yd.	80

1. 35.0 Ft. Expansion Joint Filler
2. 5.5 Cu. Yd. Granular Base Material

Items 1 and 2 are approximate quantities contained in Class M6 Concrete and are for information only.

≠ *For estimating purposes only, a factor of 1.4 tons/cu. yd. was used to convert Cu. Yd. to Tons*

❁ *Quantity is based on 4" thickness for concrete walkway. All costs associated with supplying Granular Base Material and Expansion Joint Filler will be incidental to the contract unit price per Cu. Yd. for Class M6 Concrete.*



VERTICAL DATA

GENERAL DRAWING AND QUANTITIES

FOR

3 - 9' X 6' BOX CULVERT

WEST BULL CREEK — 0° SKEW
STA 9+95.00 — SEC. 29, T098N, R74W
STR. NO. 62-318-350 — BRO-B 8062(10)
PCN 08NA — HL-93

TRIPP COUNTY

S. D. DEPT. OF TRANSPORTATION

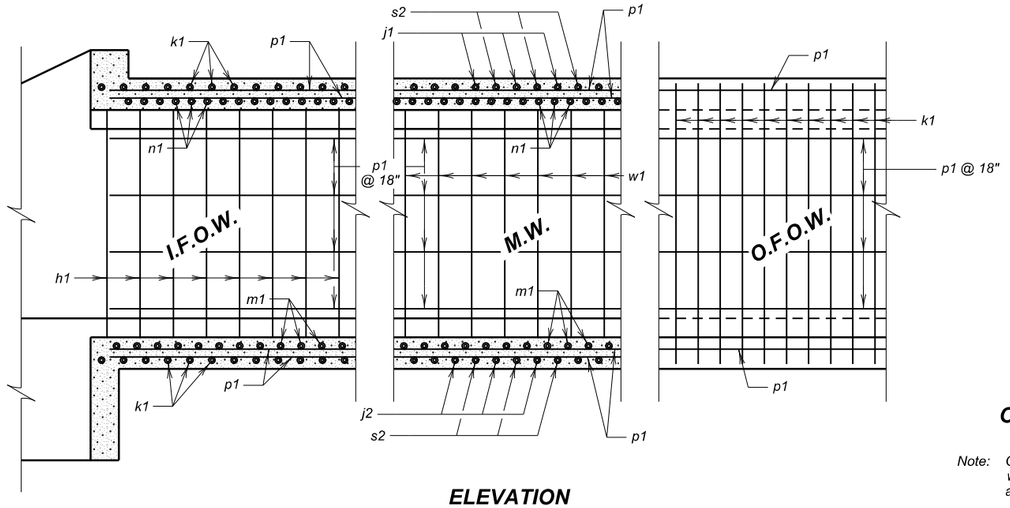
- X028 - JULY 2024 (1) OF (10)

Plans By:
Brosz Engineering, Inc.
Consulting Engineers

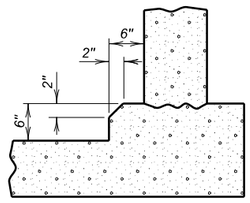
DESIGNED BY	CK. DES. BY	DRAFTED BY	
CSH	DH	CSH	BRIDGE ENGINEER

Revised 5/16/2025

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	BRO-B 8062(10)	25	39



ELEVATION



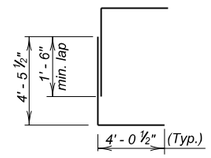
OPTIONAL FILLET DETAIL

(At Bottom Slab)

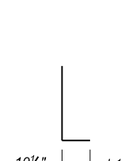
Note: Contractor may form the optional full fillet, with 2" Chamfer, as detailed. The cost of the additional concrete will be borne by the Contractor.

REINFORCING SCHEDULE

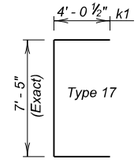
Mk.	No.	Size	Length	Type	Bending Details
h1	96	4	8'-0"	17A	
j1	76	4	28'-3"	Str.	
k1	144	4	15'-6"	17	
m1	76	4	30'-0"	Str.	
n1	95	4	29'-0"	Str.	
p1	148	4	41'-0"	Str.	
s1	76	4	4'-6"	Str.	
s2	76	4	5'-6"	Str.	
w1	96	4	17'-0"	S11A	



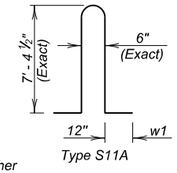
OPTIONAL k1 SPLICE DETAIL



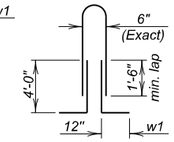
Type 17A



Type 17



Type S11A



OPTIONAL w1 SPLICE DETAIL

NOTES:

All dimensions are out to out of bars.

Request for additional reinforcing steel splices at points other than those shown, must be submitted to the Engineer for prior approval. If additional splices are approved, no payment will be allowed for the added quantity of reinforcing steel.

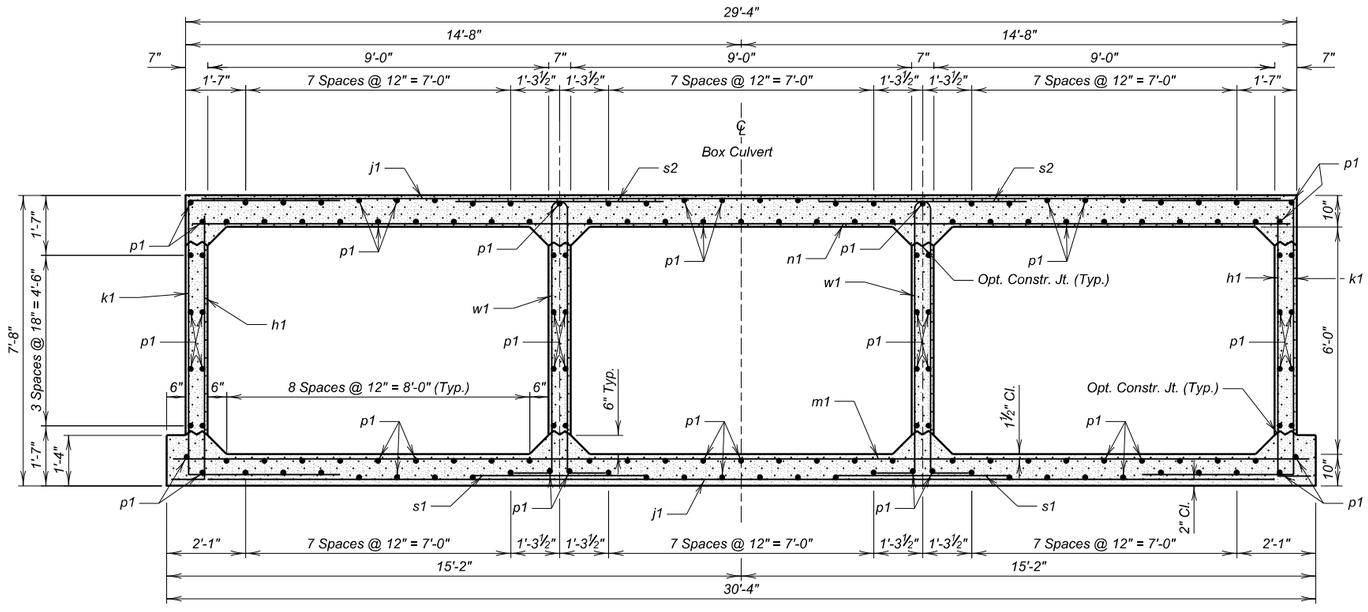
Contractor may use optional reinforcing steel splice, as shown. The cost of the additional reinforcing steel will be borne by the Contractor.

ESTIMATED QUANTITIES

ITEM	Class A45 Concrete, Box Culvert	Reinforcing Steel	Structure Excavation, Box Culvert
Unit	Cu. Yd.	Lb.	Cu.Yd.
1 - F5 Barrel Section	97.3	12453	37.4

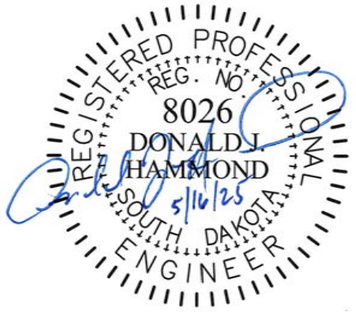
LEGEND FOR PLACING RE-STEEL

I.F.O.W. - Inside Face of Outside Wall
O.F.O.W. - Outside Face of Outside Wall
M.W. - Middle Wall



F5 BARREL SECTION

(5'-0" Maximum Fill)



F5 BARREL DETAILS (B)

FOR

3 - 9' X 6' BOX CULVERT

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STA 9+95.00 — SEC. 29, T098N, R74W
STR. NO. 62-318-350 — BRO-B 8062(10)
PCN 08NA — HL-93

TRIPP COUNTY

S. D. DEPT. OF TRANSPORTATION

JULY 2024

DESIGNED BY	CK. DES. BY	DRAFTED BY	
CSH	DH	CSH	BRIDGE ENGINEER