

SECTION 404 PERMIT AND CONDITIONS

CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 3.
A COPY OF THIS PERMIT IS AVAILABLE FROM THE IOWA DOT WEBSITE (<http://www.envpermits.iowadot.gov/>). THE U.S. ARMY CORP OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.

281-1
00-28-22

NOT TO SCALE



Sta. 04+28.13
Proposed Twin 12' x 7'
Reinforced Concrete Box Culvert, 0° Skew
FHWA# 303620

04-30-02	101-4
DESIGN DATA RURAL	
2022 AADT	870 V.P.D.
2072 AADT	1218 V.P.D.
20 DHV	NA V.P.H.
TRUCKS	10 %
Total Design ESALs	313,200



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

FARM-TO-MARKET SYSTEM
SCOTT COUNTY

BRS-C082(74)--60-82

RCB CULVERT REPLACEMENT - TWIN BOX
2026

On Z30, Over Trib to Wapsipinicon River
S13-T80-R04E

Scales: As Noted

Refer to the Proposal Form for list of applicable specifications.

PROJECT TRAFFIC CONTROL

This road will be closed to through traffic during construction. Local traffic to adjacent properties will be maintained as provided for in Article 1107.08, 2023 Standard Specifications plus current Supplemental Specifications.

Traffic control devices, procedures, layouts, signing, and pavement markings installed within the limits of this project shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways, as adopted by the Department per 761 of the Iowa Administrative Code (IAC), Chapter 130."

STANDARD ROAD PLANS

STANDARD ROAD PLANS ARE LISTED ON SHEET C.02

STANDARD CULVERT PLANS - LRFD

STANDARD CULVERT PLANS ARE LISTED ON SHEET C.02

UTILITIES

UTILITY CONTACTS ARE LISTED ON SHEET C.02

FHWA# 303620

Project Number: BRS-C082(74)--60-82

INDEX OF SHEETS

No.	Description
A.01	Title Sheet
B.01-B.02	Typical Cross Sections
C.01-C.03	Estimate of Quantities & General Information
D.01	Plan and Profile Sheet
V.01	Situation Plan
TOTAL	8 Sheets

MILEAGE SUMMARY

Div.	Location	Lin. Ft.	Miles
1.	Sta. 03+28.13 to Sta. 05+28.13 Culvert at Sta. 04+28.13	200.00	0.038
TOTAL		200.00	0.038



1-800-292-8989
www.iowaonecall.com



Ken Beck

Maria Bribresco

Ross Paustian

Jean Dickson, Vice-Chair

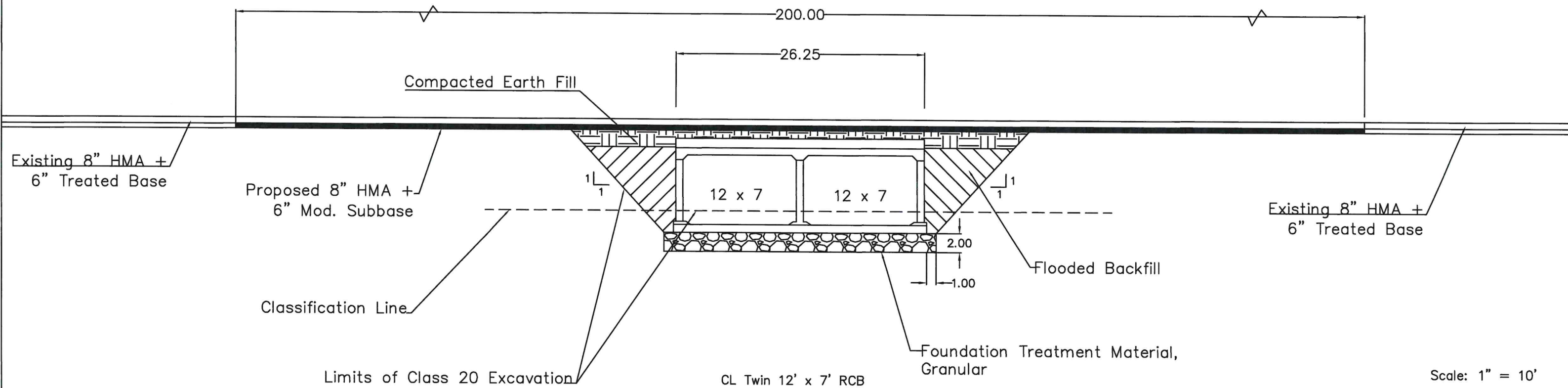
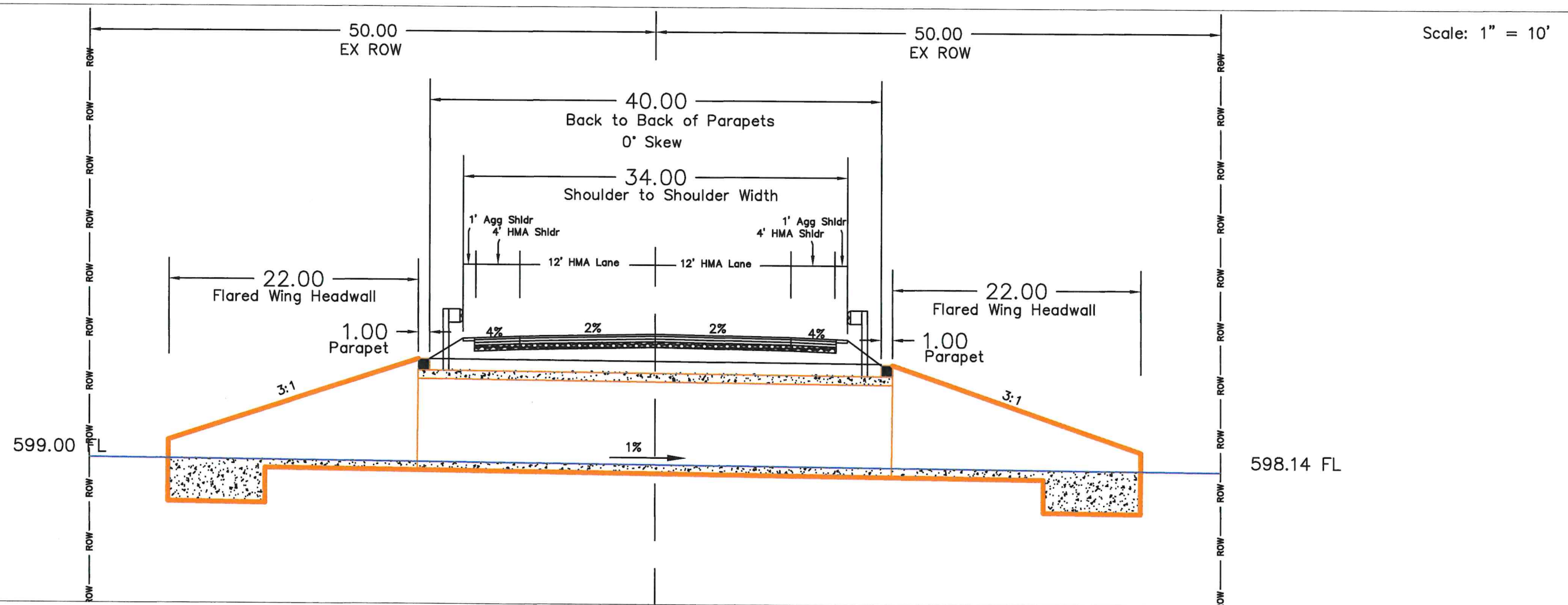
John Maxwell, Chair

Approved
Board of Supervisors

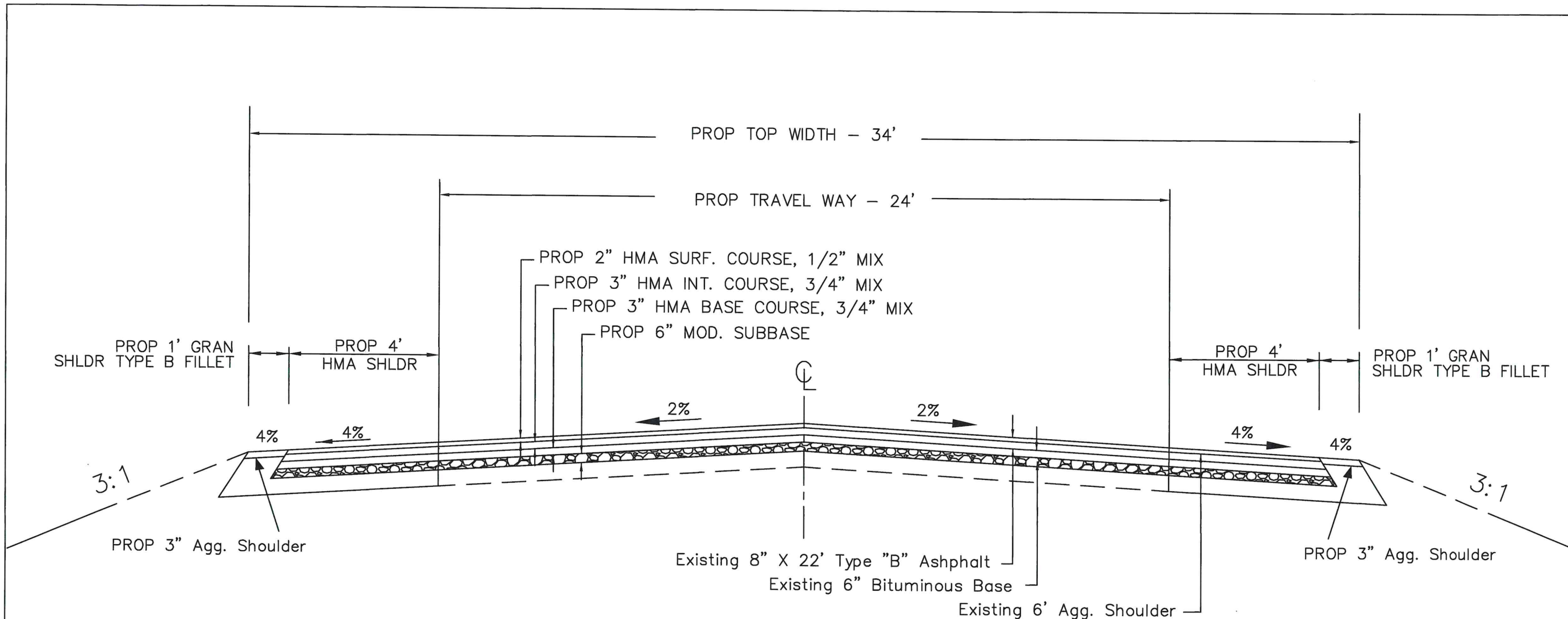


I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Angela K. Kersten
My license renewal date is December 31, 2027
Pages or sheets covered by this seal:
A.01, B.01-B.02, C.01-C.03, D.01, V.01



		REVISIONS	SHEET TITLE			DWG FILE	DATE
		DATE	Typical Cross Sections			13K CHECK.dwg	Sep 2026
DRAWN BY ERP 01/01/2026	G: SECONDARY ROADS\CONSTRUCTION\2026\BRIDGES\13K BUTLER\DWG	SCOTT COUNTY	PROJECT NUMBER	BRS-C082(74)--60-82	STATE	FHWA REGION	FISCAL YEAR
				IOWA	7	2026	SHEET NO. B.01



PROPOSED CROSS SECTION
8" HMA PAVEMENT

STA 3+28.13 to STA 5+28.13

NOTE: HMA Shoulder shall be constructed at the same time as the HMA Overlay for each course.

DRAWN BY ERP 01/01/2026	G: SECONDARY ROADS\CONSTRUCTION\2026\BRIDGES\13K BUTLER\DWG	REVISIONS	SHEET TITLE	Typical Cross Sections			DWG FILE	DATE
		DATE					13K CHECK.dwg	Sep 2026
		SCOTT COUNTY	PROJECT NUMBER	BRS-C082(74)--60-82	STATE	FHWA REGION	FISCAL YEAR	SHEET N
			IOWA	7	2026	B.0		

ESTIMATED QUANTITIES – TWIN RCB 12 x 7 x 40				
Project Number BRS-C082(74)–60-82				
Line No.	Item No.	Item Description	Unit	No. Units
1	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	569.00
2	2104-2710020	EXCAVATION, CLASS 10, CHANNEL	CY	280.00
3	2107-0425020	COMPACTING BACKFILL ADJACENT TO BRIDGES, CULVERTS OR STRUCTURES	CY	18.00
4	2115-0100000	MODIFIED SUBBASE	CY	83.95
5	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	18.48
6	2303-1031750	HOT MIX ASPHALT STANDARD TRAFFIC, BASE COURSE, 3/4 IN. MIX	TON	127.74
7	2303-1032750	HOT MIX ASPHALT STANDARD TRAFFIC, INTERMEDIATE COURSE, 3/4 IN. MIX	TON	127.74
8	2303-1033500	HOT MIX ASPHALT STANDARD TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, (N.S.F.)	TON	88.13
9	2303-1258283	ASPHALT BINDER, PG 58-28S, STANDARD TRAFFIC	TON	21.00
10	2401-6745650	REMOVAL OF EXISTING STRUCTURES	LS	1.00
11	2402-0425040	FLOODED BACKFILL	CY	107.00
12	2402-2720000	EXCAVATION, CLASS 20	CY	435.56
13	2402-2725005	FOUNDATION TREATMENT MATERIAL, GRANULAR	TON	396.00
14	2403-0100020	STRUCTURAL CONCRETE (RCB CULVERT)	CY	169.00
15	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	26,544.00
16	2418-0000010	TEMPORARY STREAM DIVERSION	EACH	1.00
17	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF	332.00
18	2505-4008300	STEEL BEAM GUARDRAIL	LF	75.00
19	2505-4021710	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, LS-625	EACH	4.00
20	2505-4502100	STEEL BEAM GUARDRAIL, POST ADAPTER UNIT, BA-210	EACH	10.00
21	2507-3250005	ENGINEERING FABRIC	SY	105.11
22	2507-6800061	REVTMENT, CLASS E	TON	74.50
23	2510-6745850	REMOVAL OF PAVEMENT	SY	488.89
24	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1.00
25	2527-9263209	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	3.02
26	2528-2518000	SAFETY CLOSURE	EACH	2.00
27	2528-8445110	TRAFFIC CONTROL	LS	1.00
28	2533-4980005	MOBILIZATION	LS	1.00
29	2601-2634100	MULCHING	ACRE	0.25
30	2601-2636015	NATIVE GRASS SEEDING	ACRE	0.25
31	2602-0000020	SILT FENCE	LF	300.00
32	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	60.00
33	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	150.00

ESTIMATE REFERENCE INFORMATION	
REF. NUMBER	DESCRIPTION OF UNIT QUANTITIES
1	<u>EXCAVATION, CLASS 10, ROADWAY AND BORROW</u> TOTAL EXCAVATION, CLASS 10, ROADWAY AND BORROW VOLUME INCLUDES 120 CY OF CUT AND 449 C.Y. OF FILL (35% SHRINKAGE). SEE TABULATION ON SHEET C.02. FILL VOLUME INCLUDES THE FILL FOR SOIL PLUGS AT THE CULVERT INLET AND OUTLET PER DR-111. IT IS ESTIMATED ALL CLASS 20 EXCAVATION WILL BE REQUIRED TO SUPPLEMENT ALL CLASS 10 ROADWAY AND BORROW FILL. EXCAVATED MATERIAL SHALL NOT BE HAULED ACROSS THE NEW STRUCTURE. TYPE "A" COMPACTION WILL BE REQUIRED. FILL USED FOR ROADBED CONSTRUCTION SHALL BE APPROVED BY THE ENGINEER, IF EXCAVATED MATERIAL IS FOUND TO BE UNSUITABLE FOR ROADBED CONSTRUCTION THE CONTRACTING AUTHORITY SHALL PROVIDE ON SITE THE REQUIRED MATERIAL. BID ITEM SHALL BE FULL COMPENSATION FOR MOVING AND PLACING ALL BORROW MATERIAL. SEE TABULATION ON SHEET C.02.
2	<u>EXCAVATION, CLASS 10, CHANNEL</u> THE CONTRACTOR SHALL NOT PLACE CLASS 10 CHANNEL EXCAVATED MATERIAL IN THE ROADBED AS FILL. EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE (QUANTITY ESTIMATED AT 280 C.Y.). SEE TABULATION ON SHEET C.02.
3	<u>COMPACTING BACKFILL ADJACENT TO BRIDGES, CULVERTS, OR STRUCTURES</u> FOR EFFORT TO COMPACT MATERIAL ADJACENT TO THE PROPOSED CULVERT AS PER THE DETAILS ON DR-111.

ESTIMATE REFERENCE INFORMATION	
REF. NUMBER	DESCRIPTION OF UNIT QUANTITIES
4	<u>MODIFIED SUBBASE</u> MODIFIED SUBBASE SHALL BE PLACED AT A DEPTH OF 6 INCHES. SEE TYPICAL SECTION ON SHEET B.02. QUANTITY ESTIMATED AT 160 TONS (DESIGN WEIGHT = 140 LBS/CF).
5	<u>GRANULAR SHOULDERS, TYPE B</u> GRANULAR SHOULDER MATERIAL SHALL BE A MATERIAL LISTED IN STANDARD SPECIFICATION 2121.02 OR SCOTT COUNTY MODIFIED CLASS 'D' CRUSHED STONE. SCOTT COUNTY MODIFIED CLASS 'D' CRUSHED STONE IS DEFINED AS 100% PASSING THE 1½" SIEVE, 90-100% PASSING THE 1" SIEVE, 10-30% PASSING THE NO. 8 SIEVE, 5-12% PASSING THE NO. 200 SIEVE, THE ABRASION SHALL NOT BE MORE THAN 45%, THE MUDBALL MAXIMUM IS 4%, AND THE FREEZE/THAW LOSS SHALL NOT BE MORE THAN 10%. DENSITY USED IN COMPUTATION IS 140 LBS./CU. FT AND WIDTHS AS SHOWN ON TYPICAL SECTIONS ON SHEET B1. QUANTITY INCLUDES NOMINAL 1FT GRANULAR SHOULDER FILLET AND GRANULAR MATERIAL PLACED AT FIELD ENTRANCE TRANSITION. SHOULDER DEPTH SHALL BE 3 INCHES.
6-9	<u>HMA</u> SEE TYPICAL SECTION ON SHEET B.01 AND B.02. NO SMOOTHNESS SPECIFICATION SHALL APPLY. HMA MIXTURE BID ITEMS SHALL BE DEFINED AS SMALL QUANTITIES AND CERTIFIED PLANT INSPECTION IN ACCORDANCE WITH ARTICLE 2303.03, E, QUALITY CONTROL FOR SMALL PAVING QUANTITIES, SHALL BE REQUIRED AND CONSIDERED INCIDENTAL TO THESE BID ITEMS. INTERMEDIATE AND BASE COURSE MIX ITEMS ARE 3/4" STANDARD TRAFFIC MIX. MAXIMUM AGGREGATE SIZE: 3/4". DENSITY USED IN COMPUTATIONS OF INTERMEDIATE AND BASE QUANTITIES: 155 LBS/CU. FT. THE MIX DESIGN SHALL INCLUDE A MINIMUM OF 65% CRUSHED AGGREGATE. SURFACE COURSE MIX ITEM IS 1/2" STANDARD TRAFFIC NSF MIX. MAXIMUM AGGREGATE SIZE: 1/2". DENSITY USED IN COMPUTATIONS OF QUANTITIES: 160 LBS/CU. FT. THE MIX DESIGN SHALL INCLUDE A MINIMUM OF 65% CRUSHED AGGREGATE. PERFORMANCE GRADE ASPHALT BINDER : PG 58-28S. QUANTITY CALCULATED AS 6% OF TOTAL HMA QUANTITY FOR ITEMS 7-9.
10	<u>REMOVAL OF EXISTING STRUCTURE</u> EXISTING TWIN RCB 10FT X 5FT X 43FT TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR. REFER TO SHEET V.01. PROPERTY IS TO BE REMOVED FROM PROJECT SITE. EXISTING STRUCTURE SHALL BE REMOVED TO A DEPTH AT OR BELOW THE EXCAVATION LINE FOR THE GRANULAR FOUNDATION MATERIAL TREATMENT.
11	<u>FLOODED BACKFILL</u> THE QUANTITY ESTIMATED IS BASED ON DR-111 AND A FILL HEIGHT OF 9 FEET.
12	<u>EXCAVATION, CLASS 20</u> FOR EXCAVATION OF THE RCB IN ACCORDANCE WITH DR-111. INCLUDES EXCAVATION FOR CURTAIN WALLS. IT IS ESTIMATED ALL CLASS 20 EXCAVATION WILL BE REQUIRED TO SUPPLEMENT ALL CLASS 10 ROADWAY AND BORROW FILL (ESTIMATED AT 316 CY). HOWEVER, ANY EXCAVATED MATERIAL NOT USED FOR CONSTRUCTION OF THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. SEE SHEET B.01 FOR EXCAVATION LIMITS.
13	<u>FOUNDATION TREATMENT MATERIAL, GRANULAR</u> SEE SHEET B.01 FOR PLACEMENT LOCATION. PLACEMENT INCLUDES 2' BELOW THE BOX SECTION AS WELL AS BELOW BOTH WINGED HEADWALLS. CLASS 'A' OR SCOTT COUNTY MODIFIED CLASS 'D' MAY BE USED. MATERIAL SHALL MEET THE REQUIREMENTS OF SECTION 4120.
14	<u>STRUCTURAL CONCRETE (RCB CULVERT)</u> CERTIFIED PLANT INSPECTION SHALL BE REQUIRED AND CONSIDERED INCIDENTAL TO THIS BID ITEM. CONTRACTOR WILL BE ALLOWED ONE CONSTRUCTION JOINT TO CONSTRUCT BARREL SECTION. CONSTRUCTION JOINT LOCATIONS SHALL BE APPROVED BY CONTRACTING AUTHORITY PRIOR TO CONSTRUCTION.
15	<u>REINFORCING STEEL, EPOXY COATED</u> ALL REINFORCING STEEL SHALL BE GRADE 60.
17	<u>REMOVAL OF STEEL BEAM GUARDRAIL</u> SEE SHEET V.01 FOR LIMITS. EXISTING GUARDRAIL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.
18-20	<u>STEEL BEAM GUARDRAIL</u> SEE TABLE 108-8A ON SHEET C.03.
21	<u>ENGINEERING FABRIC</u> SEE SHEET V.01 FOR LIMITS. ENGINEERING FABRIC SHALL MEET THE REQUIREMENTS OF SECTION 4196 OF THE STANDARD SPECIFICATIONS.
22	<u>REVTMENT, CLASS E</u> RIP-RAP SHALL BE PLACED AT A THICKNESS OF 1'-6. SEE SHEET V.01 FOR PLACEMENT LOCATIONS.
23	<u>REMOVAL OF PAVEMENT</u> SEE TABLE 110-1 ON SHEET C.02. EXISTING MATERIAL ASSUMED TO BE 8" HMA. FIELD VERIFY REMOVAL LIMITS WITH CONTRACTING AUTHORITY.
25	<u>PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT BASED</u> SEE TABULATION ON SHEET C.03 FOR PLACEMENT LOCATIONS.
27	<u>TRAFFIC CONTROL</u> TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS FOR CLOSURE TO THROUGH TRAFFIC DURING CONSTRUCTION. DETOUR ROUTE AND SIGNAGE TO BE INSTALLED AND MAINTAINED BY SCOTT COUNTY.
29-30	<u>NATIVE SEEDING AND MULCHING</u> ALL DISTURBED AREAS OUTSIDE OF THE STREAMBED WITHOUT PAVEMENT OR STONE. SEE TABULATION 100-11 ON SHEET C.02.
31	<u>SILT FENCE</u> FOR DETAILS AND LOCATIONS SEE SHEET V.01 AND TABULATIONS ON SHEET C.02. SILT FENCE QUANTITY PROVIDED FOR EROSION CONTROL PER EW-402. PRIOR TO PLACEMENT, VERIFY LOCATIONS WITH ENGINEER. COUNTY WILL REMOVE DEVICES.
32	<u>MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK</u> THIS ITEM IS ESTIMATED AT 20% OF THE SILT FENCE QUANTITY. THIS ITEM IS INCLUDED FOR CLEANOUT AND REPAIR OF THE SILT FENCE DURING THE PROJECT.
33	<u>PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN DIAMETER</u> CAN BE INSTALLED INSTEAD OF SILT FENCE TO PREVENT EROSION INTO THE STREAM AND ALSO AS PERIMETER CONTROL PRIOR TO PLACEMENT, VERIFY LOCATIONS WITH ENGINEER. COUNTY WILL REMOVE DEVICES. BID QUANTITY ESTIMATED TO BE HALF OF SILT FENCE QUANTITY.

DRAWN BY ERP 01/01/2026	G: SECONDARY ROADS\CONSTRUCTION\2026\BRIDGES\13K BUTLER\DWG	REVISIONS	SHEET TITLE			DWG FILE	DATE	
		DATE	Estimate of Quantities and General Information		13K CHECK.dwg	Sep 2026		
		SCOTT COUNTY	PROJECT NUMBER	BRS-C082(74)--60-82	STATE	FHWA REGION	FISCAL YEAR	SHEET NO.
					IOWA	7	2026	C.01

EARTHWORK SUMMARY							
	A	B	C	D	E	F	
LOCATION	Total Roadway and Channel Cut, Adjusted	Total Roadway and Channel Fill, Adjusted (1.35 Fill Factor)	Roadway Cut, Adjusted (Excavation Class 10 Roadway & Borrow)*	Channel Area Cut, Adjusted (Excavation Class 10 Channel)	Channel Area Fill, Adjusted (No Fill Factor)	Excavation Class 20	REMARKS
CULVERT EXCAVATION	435.6	128				435.6	Fill (B) due to soil plugs per DR-111
ROADWAY EXCAVATION	120	320.7	120				
CHANNEL EXCAVATION	280			280	0		
TOTALS:	835.6	448.7	120	280	0	435.6	
NOTES: -All values in Cubic Yards (CY) - BOLD Titles/Values indicate pay items and quantities -*Pay quantity for Class 10 Roadway & Borrow is total roadway cut, adjusted for pavement removal							

REMOVAL OF PAVEMENT										110-1 04-18-13
* Not a Bid Item										
Begin Station	End Station	Side	Pavement Type	Length	Width	Area	Area	Saw Cut*	Remarks	
				FT	FT	SF	SY	LF		
3+28.13	4+00.00	South	HMA	71.87	22	1581.14	175.7	22.0	8 inches HMA + Seal Coat	
4+00.00	4+50.00	South	PCC	50	22	1100	122.2		8 inches HMA, Seal Coat, 6 inches bituminous base	
4+50.00	5+28.13	North	PCC	78.13	22	1718.86	191.0	22.0	8 inches HMA + Seal Coat	

REMOVAL OF STEEL BEAM GUARDRAIL						110-7A 04-17-12
① Lane(s) to which the installation is adjacent. ② Includes length of End Terminals and End Anchors.						
Location						
No.	Direction of Traffic	Station to Station		Side	Removal of Guardrail	
					②	
					LF	
	NB	3+45	5+11	RT	166.0	
	SB	3+42	5+08	LT	166.0	

BENCH MARKS						
NAME	DESCRIPTION	LOCATION	OFFSET	ELEVATION	NORTHING	EASTING
BM #1000	1/2" Rebar	02+70.80	17.20' RT	609.85	644841.83	2477199.31
BM #1001	1/2" Rebar	02+55.10	17.20' LT	608.79	644808.13	2477184.06
BM #1002	1/2" Rebar	06+05.90	17.86' RT	609.03	645072.73	2476953.85
BM #1003	1/2" Rebar	06+13.37	15.70' LT	608.97	645052.04	2476926.20
BM #1004	NAIL IN TELE POLE	01+55.80	57.72' LT	606.35	644710.94	2477219.22

SAFETY CLOSURES				108-13A 08-01-08
Refer to Section 2518 of the Standard Specifications				
STATION	CLOSURE TYPE		REMARKS	
	Road Qty.	Hazard Qty.		
1+50.00	1		Verify location with Prime Contractor	
6+50.00	1		Verify location with Prime Contractor	

UTILITIES:		
NATURAL GAS (BURIED)	MIDAMERICAN ENERGY CO.	309-236-7716
ELECTRIC (AERIAL)	EASTERN IOWA LIGHT AND POWER	563-732-7392

TABULATION OF EROSION CONTROL DETAILS											100-11 10-27-98
LOCATION		OVER-SEEDING and FERTILIZING Acres	NATIVE SEEDING Acres	MULCHING Acres	SPECIAL DITCH CONTROL		SOD Acres	CROWN-VETCH SEEDING Acres	SEEDING SPECIAL AREAS Acres	DITCH RESHAPING Station	MOWING Acres
					Wood Excelsior Mat Squares						
04+41	05+23	-	0.06	0.06	-	-	-	-	-	-	-
04+41	05+23	-	0.06	0.06	-	-	-	-	-	-	-
03+20	04+16	-	0.07	0.07	-	-	-	-	-	-	-
03+13	04+16	-	0.07	0.07	-	-	-	-	-	-	-

Contractor to furnish, erect, and maintain all necessary traffic control signs on a 24 hour, 7 day week basis during the construction of this project. Construction will be suspended in the event that any of the required legible traffic control signs are not in place and will remain suspended until such deficiency is corrected.

It shall be the Contractor's responsibility to be familiar with the project for location of utilities, drainage or other facilities in the construction area. Any damage to such facilities due to the Contractor's carelessness shall be corrected at his expense without cost to Clinton County.

A Pre-Construction Conference with the successful bidder will be held, not less than two weeks before starting the project and shall include the Contractor's Job Superintendent.

The Contracting Authority will coordinate relocation of affected utility lines within the construction area, prior to the beginning of construction.

TABULATION OF SILT FENCES			
LOCATION STATION	SIDE	LIN. FT.	REMARKS
04+45	RT	20	NE
05+17	RT	20	NE
04+45	LT	20	NW
05+17	LT	20	NW
04+05	LT	20	SW
03+38	LT	20	SW
04+05	RT	20	SE
03+45	RT	20	SE

WASTE (NON-DESIRABLE MATERIAL)	213-1 04-15-08
It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project.	
It shall be the contractor's responsibility to ensure that areas (including haul roads) selected for waste or disposal not impact 1) culturally sensitive sites or graves or 2) wetlands or "Waters of the U.S.", including streams or stream banks below the "ordinary high water mark", without an approved U.S. Army Corps of Engineers Section 404 Permit.	
No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans.	

STANDARD ROAD PLANS			105-4 10-18-11
The following Standard Road Plans apply to construction work on this project.			
Number	Date	Title	
BA-200	04-21-26	Steel Beam Guardrail Components	
BA-210	10-19-21	Guardrail Post Adapter Unit	
DR-111	04-17-18	Box Culvert (Backfill)	
EC-201	04-20-21	Silt Fence	
EW-301	04-16-24	Guardrail Grading	
EW-402	04-18-17	Temporary Stream Diversion	
LS-625	10-19-21	Steel Beam Guardrail Tangent End Terminal (NCHRP 350 TL-3)	
LS-631	04-20-21	Steel Beam Guardrail Installation at Side Object (Two-Way Protection)	
PM-110	04-16-24	Line Types	
SI-211	10-18-22	Object Marker and Delineator Placement with Guardrail	
TC-252	10-21-25	Routes Closed to Traffic	

LRFD CULVERT STANDARDS		
The following LRFD Culvert Standards apply to construction work on this project.		
Number	Date	Title
TWFWH G1-21	02-21	Index of Sheets, General Notes & Specifications
TWFWH 0-1-21	02-21	Dimension Plan & Table 0° Skew
TWFWH 0-2-21	02-21	Apron & Curtain Wall Details, 0° Skew
TWFWH 0-3-21	02-21	Wingwall & Parapet Details, 0° Skew
TWFWH 0-4-21	02-21	Quantity Tabulation 12'-0" Span, 0° Skew
TWRCB G1-20	07-20	Index of Sheets
TWRCB G2-20	07-20	General Notes & Specifications
TWRCB G3-20	07-20	Typical Culvert Barrel Details
TWRCB 12-7-20	07-20	Culvert Barrel Details, 12' x 7' Barrel Sections

GENERAL NOTES:

CONTRACTOR TO INFORM UTILITIES AS TO THE CONSTRUCTION STARTING DATE.

A PRE-CONSTRUCTION CONFERENCE WITH THE SUCCESSFUL BIDDER WILL BE HELD, NOT LESS THAN TWO WEEKS BEFORE STARTING THE PROJECT AND SHALL INCLUDE THE CONTRACTOR'S JOB SUPERINTENDENT.

CONTRACTOR TO FURNISH, ERECT, AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL SIGNS ON A 24 HOUR, 7 DAY WEEK BASIS DURING THE CONSTRUCTION OF THIS PROJECT. CONSTRUCTION WILL BE SUSPENDED IN THE EVENT THAT ANY OF THE REQUIRED LEGIBLE TRAFFIC CONTROL SIGNS ARE NOT IN PLACE AND WILL REMAIN SUSPENDED UNTIL SUCH DEFICIENCY IS CORRECTED.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE PROJECT FOR LOCATION OF UTILITIES, DRAINAGE OR OTHER FACILITIES IN THE CONSTRUCTION AREA. ANY DAMAGE TO SUCH FACILITIES DUE TO THE CONTRACTOR'S CARELESSNESS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE WITHOUT COST TO CLINTON COUNTY.

ONLY PAVED ROADS SHALL BE CONSIDERED AS HAUL ROADS. TRUCKS WILL NOT BE PERMITTED TO HAUL THROUGH CITY CORPORATION LIMITS, UNLESS TRAVELING ON STATE HIGHWAYS MAINTAINED BY THE IOWA DEPARTMENT OF TRANSPORTATION.

TWIN 12' x 7' x 40-0' REINFORCED
CONCRETE BOX CULVERT

Sta. 04+28.13

SCOTT COUNTY,

0° Skew

IOWA

REVISIONS	SHEET TITLE	Estimate of Quantities and General Information		DWG FILE	DATE
DATE				13K CHECK.dwg	Sep 2026
SCOTT COUNTY		PROJECT NUMBER	BRS-C082(74)--60-82	STATE	IOWA
				FHWA REGION	7
				FISCAL YEAR	2026
				SHEET NO.	C.02

STEEL BEAM GUARDRAIL FOR SIDE OBSTACLE (TWO-WAY PROTECTION)

Possible Standards: BA-200, BA-205, BA-206, BA-210, BA-211, BA-251, LS-625, LS-626, LS-631, SI-172, SI-173, and SI-211.

108-8B
04-19-16

① Lane(s) to which the obstacle is adjacent.

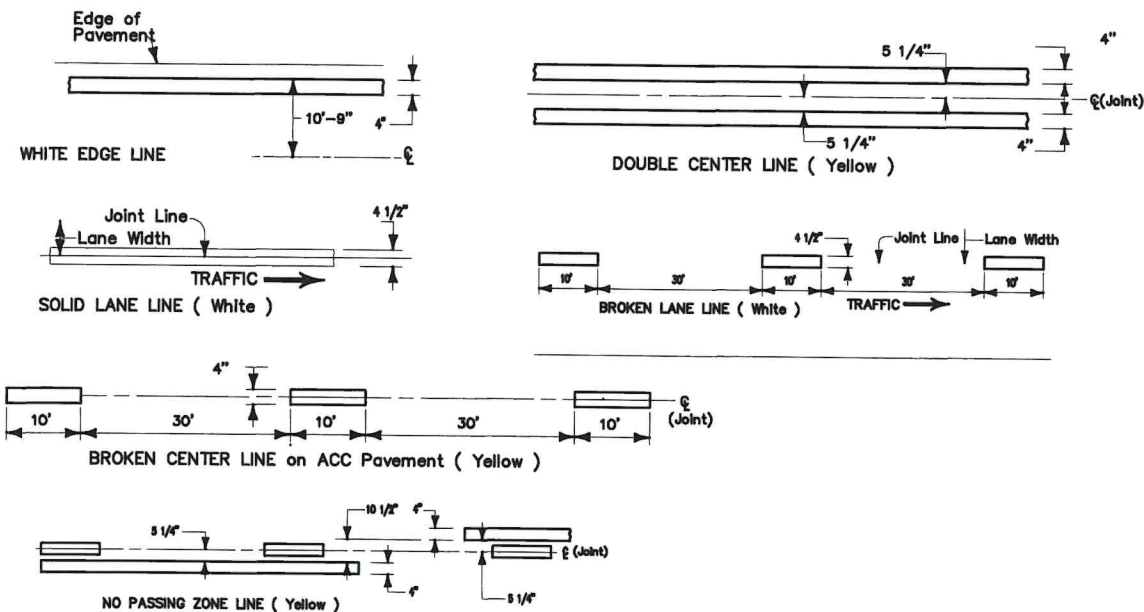
No.	Direction of Traffic	Location		Station	O _L	D _O	Layout Lengths BA-251 or LS-631								Long-Span System BA-211		Delineators and Object Markers				Bid Items			Remarks				
		① Side O= Outside M= Median	Approach Side (A)				Trailing Side (T)				SI-211	Delineator SI-172	Object Marker				Steel Beam Guardrail	End Terminal		Post Adapter								
							ET	VT _{2A}	VF _A	VT _{1A}			VT _{1T}	VF _T				VT _{2T}	ET		SI-173	Type 1	Type 2		Type 3	Standard	Count	BA-210
FT	FT	LF	LF	LF	LF	LF	LF	LF	LF	STATION	TYPE	TYPE	EACH	EACH	EACH	EACH	LF	LS-625	2	5								
1	N	O	03+51.00	26.25	8	50				12.5	31.25			50														
2	S	O	05+05.00	26.25	8	50				12.5	31.25			50														

PAVEMENT MARKING NOTES

Three gun system shall be used to place painted pavement markings.

Painted pavement markings damaged while wet due to insufficient or deficient traffic control measures or contractor's operations shall be removed and replaced at the contractor's expense at the direction of the engineer.

Traffic paint shall meet requirements of Section 4183 for fast dry paint and be applied in compliance with Section 2527 of Standard Specifications.

STANDARD TYPES
OF PAVEMENT MARKINGS
THREE GUN SYSTEM

GRADING FOR GUARDRAIL INSTALLATIONS

Refer to EW-301

107-23
04-19-11

① Lane(s) to which the installation is adjacent.

Location				Foreslope at Guardrail	Dimensions (Feet)									Earthwork		Remarks
No.	① Direction of Traffic	Station	Side		ⓧ1	ⓧ1	ⓧ2	ⓧ2	ⓧ3	ⓧ3	ⓧ4	ⓧ4	ⓧ	Excavation Class 10	Embankment In Place	
														CY	CY	
1	N	03+30.50	RT	3:1	12.5	5.0					62.5	7.0	47	See Remarks	—	FORESLOPE GRADING MATERIAL INCLUDED IN "EXCAVATION, CLASS 10, ROADWAY AND BORROW" QUANTITY
2	S	03+43.80	LT	3:1	5.0	5.0					55.0	7.0	47	See Remarks	—	
3	N	05+12.90	RT	3:1	5.0	5.0					55.0	7.0	47	See Remarks	—	
4	S	05+25.70	LT	3:1	12.5	5.0					62.5	7.0	47	See Remarks	—	

TABULATION OF PAVEMENT MARKINGS

See PM-110

**BCY4 - Place on the same side of the roadway to match existing markings near the project
**NPY4 - For estimating purposes only. No Passing Zone Lines will be located in the field.

***MNY4 - Factor of 1.00 as value number of 4-inch passes to cover median nose

** Three gun system will be used.

BCY4: Broken Centerline (Yellow) @ 0.17
ELY4: Edge Line Left (Yellow) @ 0.67

DCY4: Double Centerline (Yellow) @ 1.34
ELW4: Edge Line Right (White) @ 0.67

NPY4: No Passing Zone Line (Yellow) @ 0.84
SLW2: Stop Line (White) @ 6.00

BCY4: Broken Centerline (Yellow) @ 0.17

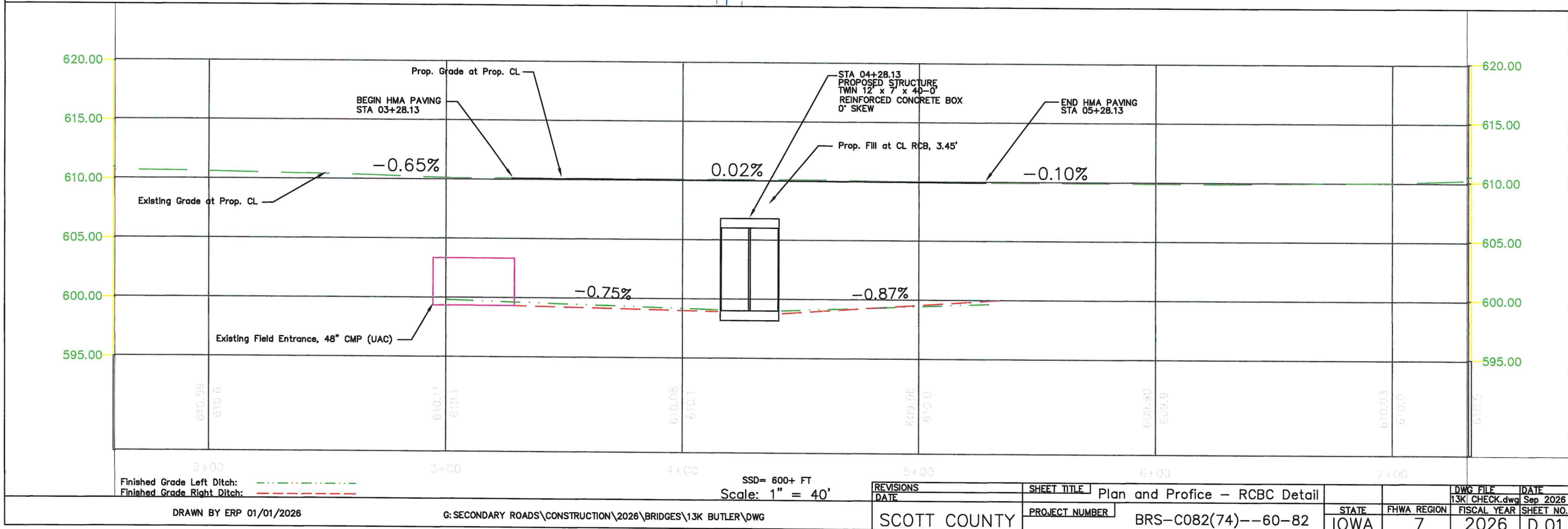
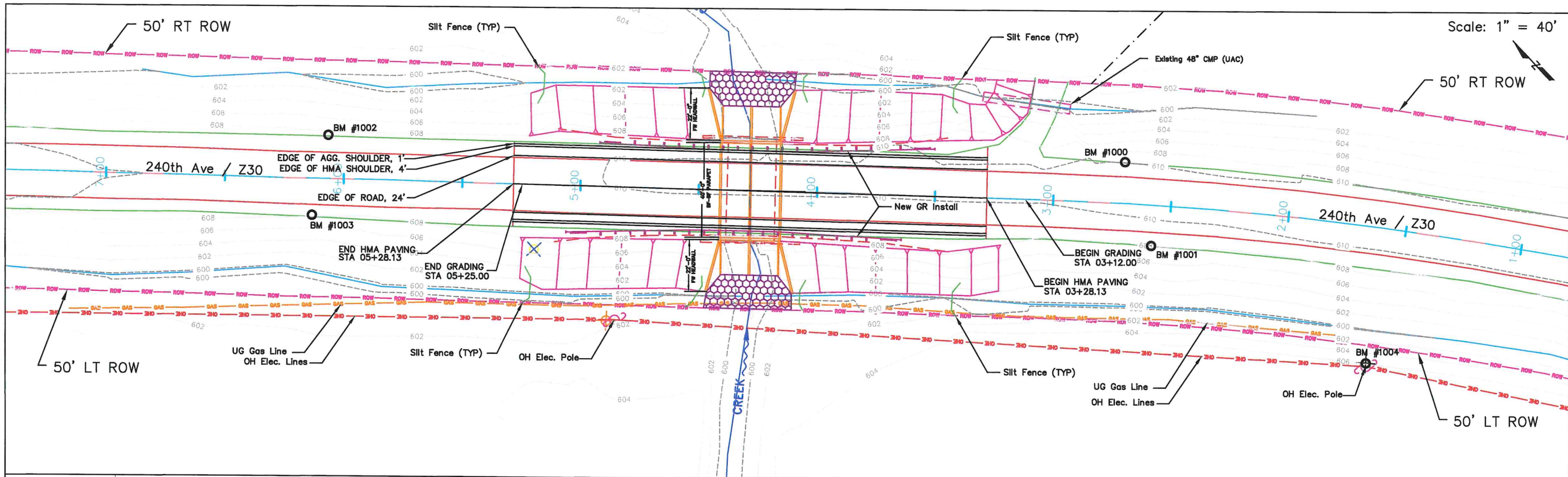
ROAD IDENT.	STATION TO STATION	LOCATION		LENGTH (IN STATIONS)										REMARKS
		SIDE	L R	BCY4*	DCY4	NPY4**	BLW4	ELW4	ELY4	SLW2				
				STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	
240TH AVE / Z30	3+28.13 - 5+28.13	X	X	2.00				4.00						
LENGTH SUBTOTALS				2.00				4.00						
QUANTITY FACTOR				0.17	1.34	0.84	0.25	0.67	1.00	6.00				
TOTALS				0.34				2.68						

TWIN 12' x 7' x 40-0' REINFORCED
CONCRETE BOX CULVERT

Sta. 04+28.13

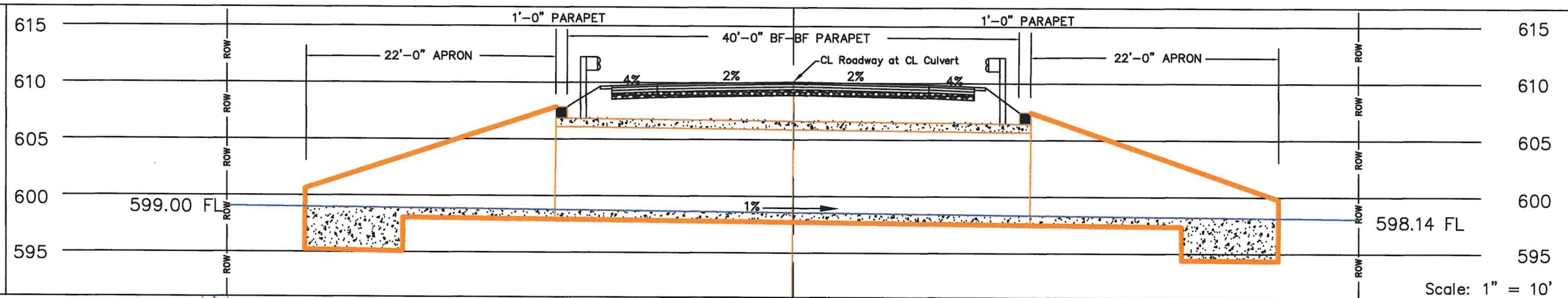
SCOTT COUNTY,

0' Skew
IOWA



DRAWN BY ERP 01/01/2026		G:SECONDARY ROADS\CONSTRUCTION\2026\BRIDGES\13K BUTLER\DWG		SSD= 600+ FT Scale: 1" = 40'		REVISIONS DATE	SHEET TITLE Plan and Profile - RCBC Detail	STATE IOWA	FHWA REGION 7	DWG FILE 13K CHECK.dwg	DATE Sep 2026
						SCOTT COUNTY	PROJECT NUMBER BRS-C082(74)--60-82			FISCAL YEAR 2026	SHEET NO. D.01

DRAINAGE AREA = 2.57 SQ. MI., 1,645 ACRES
DESIGN DISCHARGE = 1870 C.F.S.
DESIGN HIGHWATER = 607.84
MANNING SLOPE = 0.013 FT./FT.
CULVERT WATERWAY AREA = 168.0 SQ. FT.
DESIGN VELOCITY = 23.56 F.P.S.
Q25 = 1460 C.F.S. STAGE EL. = 606.52
Q50 = 1870 C.F.S. STAGE EL. = 607.84 (DESIGN)
Q100 = 2320 C.F.S. STAGE EL. = 609.50
Q500 = 3400 C.F.S. STAGE EL. = 614.95
EXT. H.W. EL. = 608.35



PROFILE

Donald McCollam
29221 240th Ave
T-80N R-4E Sec. 13

Timothy Baclet
23992 290th St
T-80N R-4E Sec. 13

Approx. Property Line.

EXISTING R.O.W. 50' RT

Silt Fence (TYP)

Revetment Stone Extend to ROW

STA 04+28.10
EXISTING STRUCTURE
TWN 10x5 RCB (REMOVE)

Silt Fence (TYP)

Existing Field Entrance

Existing 48" CMP (UAC)

EXISTING R.O.W. 50' RT

BM #1002

EDGE OF AGG. SHOULDER, 1'

EDGE OF HMA SHOULDER, 4'

EDGE OF ROAD, 24'

240TH AVE / Z30

BM #1003

END HMA PAVING
STA 05+28.13

END GRADING
STA 05+25.00

Existing GR (remove)

3:1

22'-0" PW REINFORCED

40'-10" BF-BF PARAPETS

New GR Install

Existing GR (remove)

BEGIN GRADING
STA 03+12.00

BEGIN HMA PAVING
STA 03+28.13

BM #1001

240TH AVE / Z30

BM #1004

Overhead Elec. Power Pole

UG Gas Line

Overhead Elec. Lines

EXISTING R.O.W. 50' LT

Silt Fence (TYP)

Overhead Elec. Power Pole

Revetment Stone Extend to ROW

Silt Fence (TYP)

Overhead Elec. Lines

UG Gas Line

EXISTING R.O.W. 50' LT

LOCATION

Scott County
T-80N R-4E
Sections 13
Butler Township
Over Tributary

David Curtis
27570 240th Ave
T-80N R-4E Sec. 13

STANDARD FLARED WING HEADWALLS
INLET and OUTLET
SEE SHEETS TWFWH G1-21
TO TWFWH 0-4-21

STA 04+28.13
PROPOSED STRUCTURE
TWIN 12' x 7' x 40'-0"
REINFORCED CONCRETE BOX
0° SKEW

SITUATION PLAN

Scale: 1" = 30'

PROPOSED VERTICAL ALIGNMENT DESIGN SPEED = 55 MPH

Scott County
T-80N R-4E
Sections 13
Butler Township
Over Tributary

David Curtis
27570 240th Ave
T-BON R-4E Sec. 13

STANDARD FLARED WING HEADWALLS
INLET and OUTLET
SEE SHEETS TFWWH G1-21
TO TFWWH 0-4-21

STA 04+28.13
PROPOSED STRUCTURE
TWIN 12' x 7' x 40'-0"
REINFORCED CONCRETE BOX
0° SKEW

David Curtis
27570 240th Ave
T-80N R-4E Sec. 13

Overhead Elec. Lines _____
UG Gas Line _____

EXISTING R.O.W. 50' LT —

Scale: 1" = 30'

Scale: 1" = 30'

REVISIONS	SHEET TITLE	Situation Plan		DWG FILE	DATE
DATE				13K CHECK.dwg	Sep 2026
SCOTT COUNTY	PROJECT NUMBER	BRS-C082(74)--60-82	STATE	FHWA REGION	FISCAL YEAR
			IOWA	7	2026
					SHEET NO.
					V 01