

BRIDGE REPLACEMENT - PPCB

LETTING DATE

NOV. 17, 2026

BROS-C049(102)--8J-49

JACKSON COUNTY

TRAFFIC CONTROL
THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION 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.

STORM WATER PERMIT

THIS PROJECT IS COVERED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2. THE CONTRACTOR SHALL CARRY OUT THE TERMS AND CONDITIONS OF GENERAL PERMIT NO. 2 AND THE STORM WATER POLLUTION PREVENTION PLAN WHICH IS A PART OF THESE CONTRACT DOCUMENTS. REFER TO SECTION 2602 OF THE STANDARD SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SECTION 404 PERMIT & CONDITIONS

CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 14. A COPY OF THIS PERMIT IS AVAILABLE FROM THE IOWA DOT WEBSITE (<http://www.enrpermits.iowadot.gov/>). THE U.S. ARMY CORPS OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.



PLANS OF PROPOSED IMPROVEMENT ON THE

SECONDARY ROAD SYSTEM JACKSON COUNTY, IOWA

BROS-C049(102)--8J-49

BRIDGE REPLACEMENT - PPCB

100' X 30'-6" PRETENSIONED PRESTRESSED
CONCRETE BEAM BRIDGE WITH 0° SKEW
ON 189TH ST, OVER BRUSH CREEK, S02 T85 R3E

SCALES: As Noted

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SECTIONS

SEE SHEET C.02 FOR STANDARD ROAD PLAN TABULATION
SEE SHEET C.02 FOR STANDARD BRIDGE PLAN TABULATION



UTILITIES

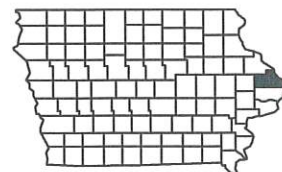
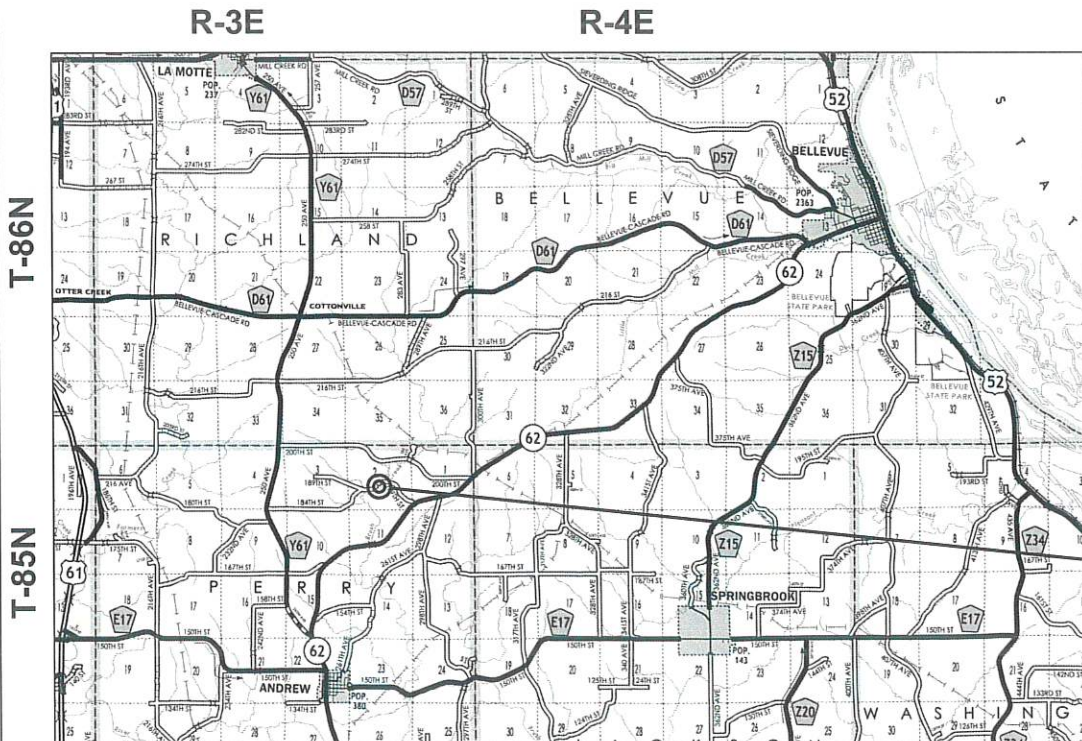
ELECTRIC:

MAQUOKETA VALLEY ELECTRIC
CONTACT: NIK SCHULTE
319-820-0266
nschulte@mvec.com

FIBER OPTIC:

LAMOTTE-ANDREW TELEPHONE
CONTACT: MILT CORNELIUS
563-672-3277
andrtel@netins.net

PROJECT LOCATION
FHWA #193431
B.O.P. STA. 11+80.00
E.O.P. STA. 14+75.00



LOCATION MAP



2017 AADT: 35 V.P.D.
2037 AADT: 60 V.P.D.



JACKSON COUNTY SECONDARY ROADS
201 West Platt Street, Maquoketa IA 52060
Phone: 563-652-4782
Email: jceng@jacksoncounty.iowa.gov
Web: <https://jacksoncounty.iowa.gov>

JACKSON COUNTY

PROJECT NUMBER

BROS-C049(102)--8J-49

SHEET NAME

TITLE SHEET

SHEET NO.

A.01

TOTAL SHEETS

15

PROJECT NUMBER

BROS-C049(102)--8J-49

INDEX OF SHEETS

NO.	DESCRIPTION
A.01	TITLE SHEET
B.01	TYPICAL SECTIONS
C.01	ESTIMATE OF QUANTITIES
C.02	GENERAL NOTES AND STANDARD PLANS
C.03	POLLUTION PREVENTION PLAN
C.04	TABULATIONS
D.01	PLAN AND PROFILE
D.02	PROPOSED GRADING PLAN
D.03	REMOVALS
Q.01-Q.02	SOIL BORINGS
V.01	SITUATION PLAN
V.02	DECK ELEVATIONS
W.01-W.02	CROSS SECTIONS

MILEAGE SUMMARY

DIV.	LOCATION	LIN. FT.	MILES
-	189TH STREET • STA 11+80.00 TO 12+64.00 • STA 13+64.00 TO 14+75.00	84.00 111.00	0.02 0.02
-	BRIDGE • STA 12+64.00 TO 13+64.00	100.00	0.02
TOTAL		295.00	0.06

APPROVED JACKSON COUNTY BOARD OF SUPERVISORS

DON SCHWENKER, CHAIR

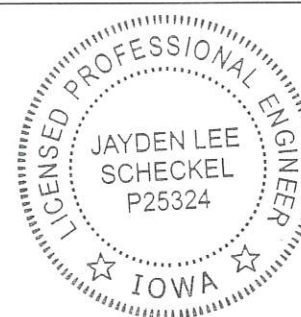
8/11/26
DATE:

NIN FLAGEL, MEMBER

8/11/26
DATE:

MIKE STEINES, MEMBER

8/11/26
DATE:



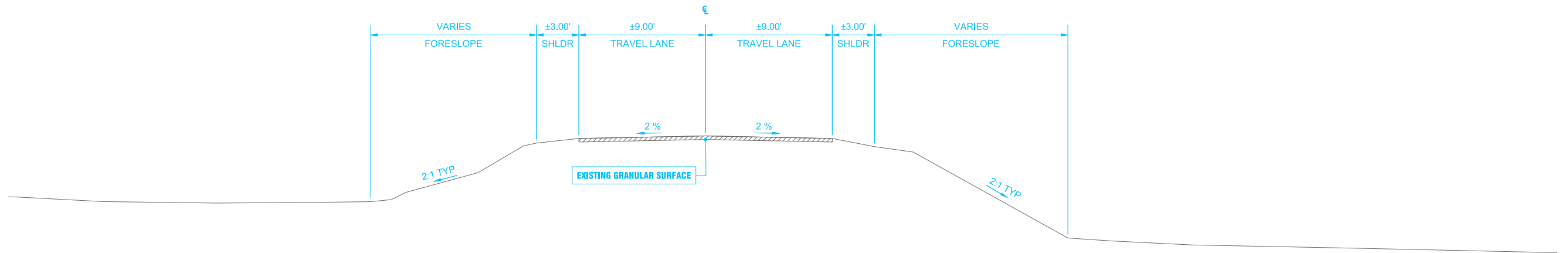
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

JAYDEN L SCHECKEL
DATE: 08/11/26

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2026

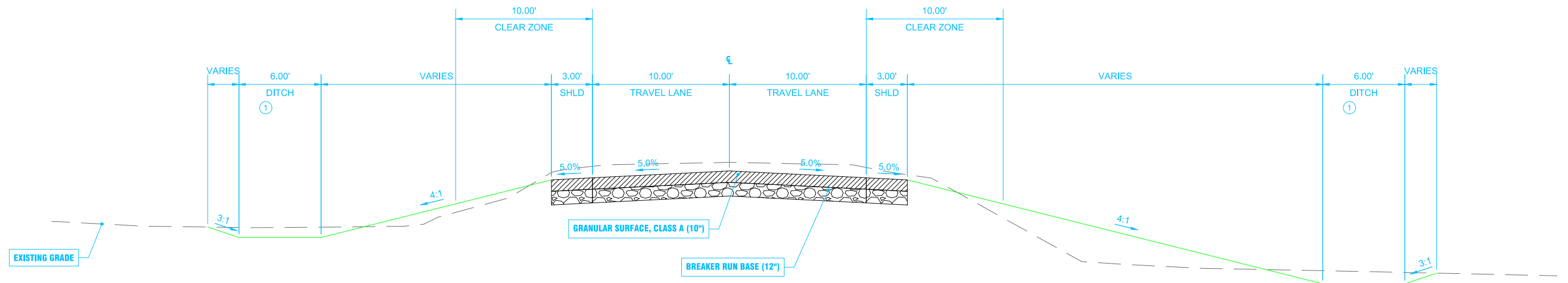
MY LICENSE NUMBER IS, P25324

PAGES OR SHEETS COVERED BY THIS SEAL: ALL



**189TH STREET
EXISTING TYPICAL SECTION**

STA 11+89 TO STA 12+64
STA 13+64 TO STA 14+75



**189TH STREET
PROPOSED TYPICAL SECTION**

STA 11+89 TO STA 12+64
STA 13+64 TO STA 14+75

① SEE SHEET D.01 FOR PROPOSED DITCH PROFILE

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

TYPICAL SECTIONS

STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

		NO.	DATE	REVISION	BY
FISCAL YEAR: 2027	DRAWN BY: JLS	.	.	.	.
	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.
PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\B Sheets.dwg					



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201 West Platt Street, Maquoketa IA 52060
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JACKSON COUNTY

PROJECT NUMBER
BROS-C049(102)--8J-49

SHEET NO.
B.01

ESTIMATE REFERENCE INFORMATION					
ITEM NO.	ITEM CODE	DESCRIPTION			
3	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW SEE EARTHWORK SUMMARY TABULATION ON SHEET C.02 FOR DETAILED BREAKDOWN. PLAN QUANTITY REFLECTS THE TOTAL ROADWAY CUT VOLUME FOR THE PROJECT. WHEN COMBINED WITH THE CLASS 13 CHANNEL CUT, THE TOTAL CUT ADJUSTED FOR SHRINKAGE, IS ANTICIPATED TO BE GREATER THAN THE TOTAL NEEDED FILL. THE QUANTITY INDICATED IN THE PLANS FOR THIS ITEM IS THE TOTAL UNADJUSTED CUT VOLUME (0% SHRINKAGE) FOR THE ROADWAY GRADING BEYOND THE END OF THE BRIDGE WINGS. QUANTITIES ARE ADJUSTED FOR EMBEDMENT OF REVETMENT, CLASS E WITHIN THESE AREAS. THE QUANTITY OF TOPSOIL TO BE REMOVED IS ASSUMED TO BE THE SAME QUANTITY REPLACED, THEREFORE THE EARTHWORK QUANTITIES HAVE NOT BEEN ADJUSTED FOR TOPSOIL. THE CONTRACTOR IS RESPONSIBLE FOR WASTING ANY SUITABLE OR EXCESS MATERIAL.			
4	2102-2713090	EXCAVATION, CLASS 13, WASTE ITEM INCLUDES ALSO INCLUDES ANY WASTE CLASSIFIED AS CLASS 10. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING MATERIAL OFF-SITE.			
5	2104-2713020	EXCAVATION, CLASS 13, CHANNEL SEE EARTHWORK SUMMARY TABULATION ON SHEET C.02 FOR DETAILED BREAKDOWN. QUANTITIES NOT ADJUSTED FOR TOPSOIL. QUANTITIES ARE ADJUSTED FOR EMBEDMENT OF REVETMENT, CLASS E THAT IS WITHIN THE LIMITS OF CLASS 13 CHANNEL EXCAVATION. CLASS 13 CHANNEL EXCAVATION AND FILL VOLUMES INCLUDE THE AREA BETWEEN THE PROPOSED BRIDGE ABUTMENTS. THIS ALSO INCLUDES THE AREA LEFT AND RIGHT OF THE BRIDGE WINGS THAT HAVE REVETMENT. BECAUSE THE NET CUT WITHIN THIS ITEM IS GREATER THAN THE TOTAL FILL, THE QUANTITY INDICATED IN THE PLANS IS THE TOTAL UNADJUSTED CUT VOLUME (0% SHRINKAGE). NO OVERHAUL WILL BE PAID AND NO FUEL ADJUSTMENT WILL APPLY. THE CONTRACTOR IS RESPONSIBLE FOR WASTING ANY UNSUITABLE OR EXCESS MATERIAL. MATERIAL IS ASSUMED TO BE SUITABLE BY ENGINEER AND MAY BE USED FOR EMBANKMENT CONSTRUCTION.			
6	2105-8425015	TOPSOIL, STRIP, SALVAGE, AND SPREAD REPLACE TO A DEPTH OF 6-INCHES AFTER REMOVAL OF THE EXISTING ROADWAY. QUANTITY IS BASED ON AREA WHERE TOPSOIL IS TO BE PLACED WITHIN THE AREAS TO BE SEEDED.			
8	2401-6745625	REMOVAL OF EXISTING BRIDGE EXISTING BRIDGE IS A 76'X21' STEEL STRINGER BRIDGE WITH WOOD DECK, WOOD ABUTMENTS, AND STEEL H PILE BENT PIERS. CONTRACTOR TO REMOVE ALL SUBSTRUCTURE TO 3-FEET BELOW FINISHED GRADE. STRUCTURE BECOMES THE PROPERTY OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF THE STRUCTURE OFF-SITE.			
9	2402-2720000	EXCAVATION, CLASS 20 AT BRIDGE ABUTMENTS. EARTHWORK CALCULATIONS ASSUME MATERIAL MAY BE USED FOR FILL IF MATERIAL IS SUITABLE			
10	2403-0100010	STRUCTURAL CONCRETE (BRIDGE) ITEM TO INCLUDE CERTIFIED PLANT INSPECTION			
14	2414-6424124	CONCRETE OPEN RAILING, TL-4 ITEM TO INCLUDE CERTIFIED PLANT INSPECTION			
15	2501-0201057	PILES, STEEL, HP 10X57 (11) 25' PILING PER ABUTMENT. PILE POINTS WILL BE REQUIRED.			
16	2507-3250005	ENGINEERING FABRIC FABRIC TO BE PLACED ONLY UNDER REVETMENT STONE DIRECTLY UNDER THE PROPOSED BRIDGE DECK BETWEEN THE ABUTMENTS.			
18	2519-4200110	REMOVAL OF FENCE, BARBED WIRE ITEM IS FOR THE REMOVAL OF THE EXISTING BARBED WIRE FENCE WITHIN THE PROJECT LIMITS AS SHOWN ON SHEET D.03. ITEM TO INCLUDE THE DISPOSAL OF THE REMOVED MATERIAL TO A LOCATION OFF-SITE.			
22	2599-9999020	BREAKER RUN * <u>DESCRIPTION</u>: PROVIDING BREAKER RUN USED PRIMARILY FOR SUBGRADE CORRECTION AND IMPROVEMENT * <u>MATERIALS</u>: FURNISH STONE OR CONCRETE PROCESSED THROUGH A PRIMARY CRUSHER SET TO PRODUCE MATERIAL PREDOMINANTLY 6 INCHES OR LESS IN AT LEAST ONE DIMENSION, AND WHICH IS NOT FURTHER SCREENED OR CRUSHED. OBTAIN MATERIAL FROM AN APPROVED SOURCE FREE OF UNCONSOLIDATED OVERBURDEN MATERIALS, TOPSOIL, ORGANIC MATERIALS, STEEL, AND OTHER DELETERIOUS MATERIALS. BREAKER RUN ACCEPTABILITY WILL BE SUBJECT TO ENGINEERS VISUAL INSPECTION. * <u>CONSTRUCTION</u>: PLACE BREAKER RUN WHERE THE PLANS SHOW OR AS ENGINEER DIRECTS. ENSURE THAT THERE IS ADEQUATE MOISTURE IN THE AGGREGATE DURING PLACING, SHAPING, AND COMPACTING TO PREVENT SEGREGATION AND ACHIEVE ADEQUATE COMPACTION. SPREAD AND COMPACT BREAKER RUN IN COMPACTED LAYERS OF 16-INCHES OR LESS. THE ENGINEER MA ALLOW THICKER LAYERS TO ADDRESS SOFT FOUNDATION CONDITIONS. COMPACT BREAKER RUN USING STANDARD COMPACTION EQUIPMENT IN ACCORDANCE WITH ARTICLE 2001.05, F. THOROUGHLY AND UNIFORMLY COMPACT THE BASE MATERIAL IMMEDIATELY AFTER IT HAS BEEN SPREAD. CONTINUE COMPACTING UNTIL BASE MATERIAL IS WELL SEATED AND NO APPRECIABLE DISPLACEMENT OCCURS WHEN ROLLING. * <u>METHOD OF MEASUREMENT</u>: COMPUTED IN TONS FROM WEIGHTS OF INDIVIDUAL TRUCK LOADS. * <u>BASIS OF PAYMENT</u>: PAYMENT WILL BE THE CONTRACT PRICE PER TON. PAYMENT IS FULL COMPENSATION FOR FURNISHING ALL MATERIALS, WATER, PREPARATION OF SUBGRADE, AND FOR ALL WORK NECESSARY TO COMPLETE THE BREAKER RUN IN COMPLIANCE WITH CONTRACT DOCUMENTS.			

		NO.	DATE	REVISION	BY
FISCAL YEAR: 2027	DRAWN BY: JLS	-	-	-	-
	DESIGNED BY: JLS	-	-	-	-
	CHECKED BY: JLS	-	-	-	-
PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\IC Sheets.dwg					



JACKSON COUNTY SECONDARY ROADS
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JACKSON COUNTY

PROJECT NUMBER

BROS-C049(102)--8J-49

SHEET NO.

C.01

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

ESTIMATE OF QUANTITIES

STATION: 13+14.00
JACKSON COUNTY, IOWA

SKEW: 0° AHEAD
FHWA #193431

ESTIMATED PROJECT QUANTITIES (UP TO A 5 DIVISION PROJECT)					
Line No.	Item No.	Item Code	Item	Unit	Total
1.0	1	2101-0850001	CLEAR+GRUBB	ACRE	0.23
2.0	2	2101-0850002	CLEAR+GRUBB	UNIT	169.20
3.0	3	2102-2710070	EXCAVATION, CL 10, RDWY+BORROW	CY	280.00
4.0	4	2102-2713090	EXCAVATION, CL 13, WASTE	CY	1140.00
5.0	5	2104-2713020	EXCAVATION, CL 13, CHANNEL	CY	1205.00
6.0	6	2105-8425015	TOPSOIL, STRIP, SALVAGE+SPREAD	CY	402.00
7.0	7	2312-8260051	GRANULAR SURF ON RD, CL A CR STONE	TON	344.00
8.0	8	2401-6745625	RMVL OF EXISTING BRIDGE	LS	1.00
9.0	9	2402-2720000	EXCAVATION, CL 20	CY	84.00
10.0	10	2403-0100010	STRUCT CONC (BRIDGE)	CY	185.10
11.0	11	2404-7775005	REINFORC STEEL, EPOXY COATED	LB	44698.00
12.0	12	2407-0551500	BEAM, PPC, D100	EACH	5.00
13.0	13	2408-7800000	STRUCTURAL STEEL	LB	1212.00
14.0	14	2414-6424124	CONC OPEN RAIL, TL-4	LF	254.00
15.0	15	2501-0201057	PILE, STEEL, HP 10X57	LF	550.00
16.0	16	2507-3250005	ENGINEER FABRIC	SY	260.00
17.0	17	2507-6800061	REVETMENT, CLASS E	TON	910.00
18.0	18	2519-4200110	RMVL OF FENCE, BARBED WIRE	LF	326.00
19.0	19	2528-2518000	SAFETY CLOSURE	EACH	2.00
20.0	20	2528-8445110	TRAFFIC CONTROL	LS	1.00
21.0	21	2533-4980005	MOBILIZATION	LS	1.00
22.0	22	2599-9999020	BREAKER RUN	TON	403.00
23.0	23	2601-2634100	MULCH	ACRE	0.75
24.0	24	2601-2636043	SEED+FERTILIZE (RURAL)	ACRE	0.75
25.0	25	2601-2642100	STABILIZE CROP - SEED+FERTILIZE	ACRE	0.75
26.0	26	2602-0000309	PERIMETER+SLOPE SEDIMENT CNTL DEVICE, 9	LF	360.00
27.0	27	2602-0000362	DITCH CHECK SEDIMENT CNTL DEVICE,12	LF	48.00
28.0	28	2602-0010010	MOBILIZATION, EROSION CONTROL	EACH	3.00
29.0	29	2602-0010020	MOBILIZATION, EMERGENCY EROSION CONTROL	EACH	1.00

100_01C
4/30/25

GENERAL NOTES & INFORMATION
A PRECONSTRUCTION CONFERENCE WITH THE SUCCESSFUL BIDDER WILL BE HELD NO LESS THAN TWO WEEKS BEFORE STARTING THE PROJECT AND SHALL INCLUDE THE CONTRACTOR'S JOB SUPERINTENDENT.
CONTRACTOR IS TO FURNISH, ERECT, AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL DEVICES ON A 24-HOUR PER DAY, 7-DAY A WEEK BASIS DURING THE CONSTRUCTION PERIOD FOR THE SAFETY CLOSURES. CONTRACTOR TO PROVIDE A 24-HOUR CALL NUMBER FOR REPAIR OF DEFICIENCIES AFTER HOURS FOR THE SAFETY CLOSURES. CONSTRUCTION WILL BE SUSPENDED IN THE EVENT THAT ANY OF THE REQUIRED TRAFFIC CONTROL DEVICES ARE NOT LEGIBLE AND OPERATIONAL AND SHALL REMAIN SUSPENDED UNTIL SUCH DEFICIENCY IS CORRECTED FOR THE SAFETY CLOSURES.
CONTRACTOR IS TO RESPECT PRIVATE PROPERTY. JACKSON COUNTY WILL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO PRIVATE PROPERTY CAUSED BY THE CONTRACTOR. ANY DAMAGE TO PRIVATE PROPERTY CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE LANDOWNER WITH NO COST TO JACKSON COUNTY.
ALL UNSALVAGEABLE MATERIAL AND RUBBLE GENERATED DURING THIS PROJECT SHALL BE DISPOSED OF OFF THE HIGHWAY RIGHT-OF-WAY IN A WASTE AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE COUNTY ENGINEER. THE WASTED MATERIAL MUST NOT CREATE AN UNSIGHTLY CONDITION WHEN VIEWED FROM THE PUBLIC HIGHWAY. REMOVALS AND DISPOSALS SHALL BE IN ACCORDANCE WITH SECTION 2401 OF THE STANDARD SPECIFICATIONS. ALSO, EXCESSIVE EXCAVATED MATERIAL AND UNSUITABLE MATERIAL FOR BACKFILL WILL BECOME PROPERTY OF THE CONTRACTOR AND WILL BE DISPOSED OF OFF-SITE.
AN INSPECTION WAS COMPLETED AND THERE WAS NO ASBESTOS DETECTED ON THE STRUCTURE. IF ASBESTOS MATERIALS ARE DISCOVERED DURING CONSTRUCTION, CEASE WORK AND NOTIFY THE CONTRACTING AUTHORITY.
SCRAPE SAMPLES OF THIS BRIDGE WERE TAKEN TO GET AN INDICATION OF THE EXISTENCE OF AND LEVEL OF TOTAL CHROMIUM AND TOTAL LEAD. THE ANALYSIS OF TOTAL CHROMIUM IN THE SAMPLES WAS 28.3 ppm. THE ANALYSIS OF TOTAL LEAD IN THE SAMPLE WAS 246 ppm. THE ANALYSIS SHOWS THE EXISTENCE OF THESE TWO TOXIC CONSTITUENTS. THE LEVELS INDICATED BY THESE TESTS COULD CREATE CONDITIONS ABOVE REGULATORY LIMITS FOR HEALTH SAFETY REQUIREMENTS. NO OTHER SUBSTANCES WERE ANALYZED. THE BIDDER SHOULD NOT RELY ON THE LPA'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AN INDICATION OF THE EXISTENCE OF THESE TWO CONSTITUENTS.
CONTRACTOR IS TO USE DUE CAUTION IN WORKING OVER AND AROUND ALL TILE LINES. BREAKS IN THE TILE LINE DUE TO THE CONTRACTOR'S CARELESSNESS ARE TO BE REPLACED AT THE CONTRACTOR'S EXPENSE WITHOUT COST TO JACKSON COUNTY. ANY TILE LINES BROKEN OR DISTURBED BY DESIGNATED CUT LINES WILL BE REPLACED AS DIRECTED BY THE COUNTY ENGINEER AND AT THE COUNTY'S EXPENSE.

GENERAL BRIDGE NOTES

SOUNDING AND TEST BORING DATA SHOWN ON THE PLANS WERE ACCUMULATED FOR DESIGNING AND ESTIMATING PURPOSES ONLY. THEIR APPEARANCE ON THE PLAN DOES NOT CONSTITUTE A GUARANTEE THAT CONDITIONS OTHER THAN THOSE INDICATED WILL NOT BE ENCOUNTERED.

ABUTMENT PILE DESIGN NOTES:

THE CONTRACT LENGTH OF 25 FEET FOR THE ABUTMENT PILES IS BASED ON A MIXED SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 126 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.60 FOR SOIL AND 0.70 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A MIXED SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.55 FOR SOIL AND 0.70 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF FOOTING.

ABUTMENT PILE DRIVING NOTE:

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR ABUTMENT PILES IS 92 TONS AT THE END OF DRIVING OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL REQUIRES A MODIFIED IOWA DOT ENR FORMULA.

STANDARD BRIDGE PLANS		
The following Standard Road Plans apply to construction work on this project		
NUMBER	REVISION DATE	TITLE
H30SI-01-12	May 2013	INDEX SHEET
H30SI-01A-12	May 2013	GENERAL NOTES & GENERAL INFORMATION
H30SI-02-12	June 2012	SUPERSTRUCTURE DETAILS
H30SI-04-12	May 2013	ABUTMENT DETAILS (0 SKEW C & D BEAMS)
H30SI-06-12		LONGITUDINAL SECTION (0 SKEW C & D BEAMS)
H30SI-07-12	May 2013	SUPERSTRUCTURE (0 SKEW)
H30SI-08-12	May 2015	DECK & ABUTMENT REINF. (0 SKEW)
H30SI-27-12		D BEAM DETAILS
H30SI-28-12		D90-D100 BEAM DETAILS
H30SI-30-12		INTERMEDIATE STEEL DIAPHRAGMS
H30SI-34-12		OPEN RAIL, TL-4 DETAILS
H30SI-35-12		OPEN RAIL, TL-4 DETAILS
H30SI-39-12		WING DETAILS (D BEAM)
H30SI-40-12		SUBDRAIN DETAILS
H30SI-45-12	September 2014	ABUTMENT BACKFILL DETAILS (0-DEG SKEW W/ WING EXTENSIONS)

		NO.	DATE	REVISION	BY
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	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.

PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\C Sheets.dwg



JACKSON COUNTY

PROJECT NUMBER

C.02

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E

ABUTMENTS: INTEGRAL PIERS: NONE

GENERAL NOTES AND STANDARD PLANS

STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

ABUTMENTS: INTEGRAL

STATION: 13+14.00
JACKSON COUNTY, IOWA

SKEW: 0° AHEAD
FHWA #193431

111 25 10/20/26 INDEX OF TABULATIONS		
Tabulation	Tabulation Title	Sheet No.
100_01C	ESTIMATED PROJECT QUANTITIES	C.02
105_04	STANDARD ROAD PLANS	C.02
110_02	REMOVAL OF EXISTING STRUCTURES	C.04
100_08	REMOVAL OF FENCE	C.04
108_13A	SAFETY CLOSURES	C.04
110_17	CLEARING AND GRUBBING	C.04
100_19	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	C.04

105.04 10/20/26 STANDARDS The following Standards apply to construction work on this project.		
Number	Date	Title
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
TC-252	10-20-26	Routes Closed to Traffic

EARTHWORK SUMMARY					
LOCATION	A	B	C	D	E
	TOTAL ROADWAY CUT UNADJUSTED (EXCAVATION, CLASS 10, ROADWAY & BORROW)	TOTAL ROADWAY FILL, ADJUSTED (1.25 SHRINK FACTOR)	CHANNEL AREA CUT, UNADJUSTED (EXCAVATION, CLASS 13, CHANNEL)	CHANNEL AREA FILL, ADJUSTED (1.25 SHRINK FACTOR)	CLASS 20 EXCAVATION
WEST OF BRIDGE	105	85	-	-	-
WEST BRIDGE BERM	-	-	615	-	-
EAST OF BRIDGE	175	260	-	-	-
EAST BRIDGE BERM	-	-	590	-	-
WEST ABUTMENT	-	-	-	-	42
EAST ABUTMENT	-	-	-	-	42
TOTALS	280	345	1205	0	84
NOTES:					
1. ALL VALUES IN CUBIC YARDS					
2. HIGHLIGHTED TITLES/VALUES INDICATE PAY ITEMS AND QUANTITIES					
3. ALL QUANTITIES INCLUDE EXCAVATION FOR EMBEDMENT OF CLASS E REVETMENT AS APPROPRIATE					
4. QUANTITIES NOT ADJUSTED FOR TOPSOIL					

POLLUTION PREVENTION PLAN

This project is regulated by the requirements of the Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 OR an Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) individual storm water permit. The Contractor shall carry out the terms and conditions of this permit and the Pollution Prevention Plan (PPP).

This Base PPP includes information on Roles and Responsibilities, Project Site Description, Controls, Maintenance Procedures, Inspection Requirements, Non-Storm Water Controls, Potential Sources of Off Right-of-Way Pollution, and Definitions. This plan references other documents rather than repeating the information contained in the documents. A copy of this Base Pollution Prevention Plan, amended as needed during construction, will be readily available for review.

All contractors shall conduct their operations in a manner that controls pollutants, minimizes erosion, and prevents sediments from entering waters of the state and leaving the highway right-of-way. The Contractor shall be responsible for compliance and implementation of the PPP for their entire contract. This responsibility shall be further shared with subcontractors whose work is a source of potential pollution as defined in this PPP.

- I. ROLES AND RESPONSIBILITIES
- A. Designer:
1. Prepares Base PPP included in the project plan.

2. Prepares Notice of Intent (NOI) submitted to Iowa DNR.

3. Is signature authority on the Base PPP. If consultant designed, signature from Contracting Authority is also required.
- B. Contractor:
1. Signs a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP. All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.

2. Designates a Water Pollution Control Manager (WPCM), who has the duties and responsibilities as defined in Section 2602 of the Standard Specifications.

3. Submits an Erosion Control Implementation Plan (ECIP) and ECIP updates according to Section 2602 of the Standard Specifications.

4. Installs and maintains appropriate controls. This work may be subcontracted as documented through Subcontractor Request Forms (Form 830231).

5. Supervises and implements good housekeeping practices according to Paragraph III, C, 2.

6. Conducts joint required inspections of the site with inspection staff. When Contractor is not mobilized on site, Contractor may delegate this responsibility to a trained or certified subcontractor. Contracting Authority also may waive joint inspection requirement during winter shutdown. In both circumstances, WPCM (or trained or certified delegate from the Contractor) is still responsible to review and sign inspection reports.

7. Complies with training and certification requirements of Section 2602 of the Standard Specifications.

8. Submits amended PPP site map according to Section 2602 of the Standard Specifications.
- C. Subcontractors:
1. Sign a co-permittee certification statement adhering to the requirements of the NPDES permit and this PPP if: responsible for sediment or erosion controls; involved in land disturbing activities; or performing work that is a source of potential pollution as defined in this PPP. Subcontracted work items are identified in Subcontractor Request Forms (Form 830231). All co-permittees are legally required under the Clean Water Act and the Iowa Administrative Code to ensure compliance with the terms and conditions of this PPP.

2. Implement good housekeeping practices according to Paragraph III, C, 2.
- D. RCE/Project Engineer:
1. Is Project Storm Water Manager.

2. Takes actions necessary to ensure compliance with storm water requirements including, where appropriate, issuing stop work orders, and directing additional inspections at construction project sites that are experiencing problems with achieving permit compliance.

3. Orders the taking of measures to cease, correct, prevent, or minimize the consequences of non-compliance with the storm water requirements of the Applicable Permit.

4. Supervises all work necessary to meet storm water requirements at the Project, including work performed by contractors and subcontractors.

5. Requires employees, contractors, and subcontractors to take appropriate responsive action to comply with storm water requirements, including requiring any such person to cease or correct a violation of storm water requirements, and to order or recommend such other actions as necessary to meet storm water requirements.

6. Is familiar with the Project PPP and storm water site map.

7. Is the point of contact for the Project for regulatory officials, Inspector, contractors, and subcontractors regarding storm water requirements.

8. Is signature authority on Notice of Discontinuation.

9. Maintains an up-to-date record of contractors, subcontractors, and subcontracted work items through Subcontractor Request Forms (Form 830231).

10. Makes information to determine permit compliance available to the DNR upon their request.
- E. Inspector:
1. Updates PPP through fieldbook entries and storm water site inspection reports if there is a change in design, construction, operation, or maintenance which has a significant effect on the discharge of pollutants from the project.

2. Makes information to determine permit compliance available to the DNR upon their request.

3. Conducts joint required inspections of the site with the contractor/subcontractor.

4. Completes an inspection report after each inspection.

5. Is signature authority on storm water inspection reports.

- II. PROJECT SITE DESCRIPTION
- A. This Pollution Prevention Plan (PPP) is for the construction of a 100'x30' wide concrete beam bridge with minor grading.
- B. This PPP covers approximately 1.00 acres with an estimated 1.00 acres being disturbed. The portion of the PPP covered by this contract has 1.00 acres disturbed.
- C. The PPP is located in an area of silty loam soil association composed of granular road beds and ditch bottoms. The estimated weighted average runoff coefficient number for this PPP after completion will be 0.73.
- D. Storm Water Site Map - Multiple sources of information comprise the base storm water site map including:
1. Drainage Patterns – Plan and Profile sheets and Situation plans.

2. Proposed Slopes – Cross Sections.

3. Areas of Soil Disturbance – Construction limits shown on Plan and Profile sheets.

4. Location of Structural Controls – Tabulations in C sheets.

5. Locations of Non-structural Controls – Tabulations in C sheets.

6. Locations of Stabilization Practices – Generally within construction limits shown on Plan and Profile sheets.

7. Surface Waters (including wetlands) – Project Location Map and Plan and Profile sheets.
8. Locations where Storm Water is Discharged – Plan and Profile sheets.
- E. The base storm water site map is amended by contract modifications and progress payments (fieldbook entries) of completed erosion control work. Also, due to project phasing, erosion and sediment controls shown on project plans may not be installed until needed, based on site conditions. For example, silt fence ditch checks will typically not be installed until the ditch has been installed. Installed locations may also be modified from tabulation locations by field staff. Installed locations will be documented by fieldbook entries and amended PPP site map.
- F. Runoff from this work will flow into Brush Creek to Maquoketa River to Mississippi River.

- III. CONTROLS
- A. The Contractor's ECIP specified in Article 2602.03 of the Standard Specifications for accomplishment of storm water controls should clearly describe the intended sequence of major activities, and for each activity define the control measure and the timing during the construction process that the measure will be implemented.
- B. Preserve vegetation in areas not needed for construction.
- C. Sections 2601 and 2602 of the Standard Specifications define requirements to implement erosion and sediment control measures. Actual quantities used and installed locations may vary from the Base PPP and amendment of the plan will be documented via fieldbook entries, amended PPP site map, or by contract modification. Additional erosion and sediment control items may be required as determined by the inspector and/or contractor during storm water site inspections. If the work involved is not applicable to any contract items, the work will be paid for according to Article 1109.03 paragraph B of the Standard Specifications.
1. EROSION AND SEDIMENT CONTROLS
- a. Stabilization Practices
- 1) Site plans will ensure that existing vegetation or natural buffers are preserved where attainable and disturbed portions of the site will be stabilized.

2) Initialize stabilization of disturbed areas immediately after clearing, grading, excavating, or other earth disturbing activities have:

a) Permanently ceased on any portion of the site, or

b) Temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.

3) Staged permanent and/or temporary stabilizing seeding and mulching shall be completed as the disturbed areas are completed. Incomplete areas shall be stabilized according to paragraph III, C, 1, a, 2, b above.

4) Permanent and Temporary Stabilization practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets.
- 5) Preservation of existing vegetation within right-of-way or easements will act as vegetative buffer strips.
- 6) Preservation of topsoil: Bid items to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets. Additional information may be found in Tabulations in the C or T sheets or is referenced in Section 2105 of Standard Specifications.
- b. Structural Practices
- 1) Structural practices will be implemented to divert flows from exposed soils and detain or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Additionally, structural practices may include: silt basins that provide 3600 cubic feet of storage per acre drained or equivalent sediment controls, outlet structures that withdraw water from surface when discharging basins, and controls to direct storm water to vegetated areas.

2) Structural practices to be used for this project are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the devices to be used on this project can be found in the B sheets or are referenced in the Standard Road Plans Tabulation (105-4) located in the C sheets.
- c. Storm Water Management
- Measures shall be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This may include velocity dissipation devices at discharge locations and along length of outfall channel as necessary to provide a non-erosion velocity flow from structure to water course. If included with this project, these items are located in the Estimated Project Quantities (100-0A, 100-1A, or 100-1C) and Estimate Reference Information (100-4A) located in the C sheets, as well as all other item specific Tabulations. Typical drawings detailing construction of the practices to be used on this project are referenced in the Standard Road Plans Tabulation (105-4) in the C sheets. The installation of these devices may be subject to Section 404 of the Clean Water Act.
2. OTHER CONTROLS
- Contractor disposal of unused construction materials and construction material wastes shall comply with applicable state and local waste disposal, sanitary sewer, or septic system regulations. In the event of a conflict with other governmental laws, rules and regulations, the more restrictive applicable laws, rules or regulations shall apply.
- a. Vehicle Entrances and Exits - Construct and maintain entrances and exits to prevent tracking of sediments onto roadways.
- b. Material Delivery, Storage and Use - Implement practices to prevent discharge of construction materials during delivery, storage, and use.
- c. Stockpile Management - Install controls to reduce or eliminate pollution of storm water from stockpiles of soil and paving.
- d. Waste Disposal - Do not discharge any materials, including building materials, into waters of the state, except as authorized by a Section 404 permit.
- e. Spill Prevention and Control - Implement chemical spill and leak prevention and response procedures to contain and clean up spills and prevent material discharges to the storm drain system and waters of the state.
- f. Concrete Residuals and Washout Wastes - Waste shall not be discharged to a surface water and is not allowed to adversely affect a water of the state. Designate temporary concrete washout facilities for rinsing out concrete trucks. Provide directions to truck drivers where designated washout facilities are located. Designated washout areas should be located at least 50 feet away from storm drains, streams or other water bodies. Care should be taken to ensure these facilities do not overflow during storm events.
- g. Concrete Grooving/Grinding Slurry – Do not discharge slurry to a waterbody or storm drain. Slurry may be applied on foreslopes or removed from the project.
- h. Vehicle and Equipment Storage and Maintenance Areas - Perform on site fueling and maintenance in accordance with all environment laws such as proper storage of onsite fuels and proper disposal of used engine oil or other fluids on site. Employ washing practices that prevent contamination of surface and ground water from wash water. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.
- i. Litter Management - Ensure employees properly dispose of litter. Minimize exposure of trash if exposure to precipitation or storm water would result in a discharge of pollutants.
- j. Dewatering – Properly treat water to remove suspended sediment before it re-enters a waterbody or discharges off-site.

- Measures are also to be taken to prevent scour erosion at dewatering discharge point.
3. APPROVED STATE OR LOCAL PLANS
- During the course of this construction, it is possible that situations will arise where unknown materials will be encountered. When such situations are encountered, they will be handled according to all federal, state, and local regulations in effect at the time.
- IV. MAINTENANCE PROCEDURES
- The Contractor is required to maintain all temporary erosion and sediment control measures in proper working order, including cleaning, repairing, or replacing them throughout the contract period. This shall begin when the features have lost 50% of their capacity.
- V. INSPECTION REQUIREMENTS
- A. Inspections shall be made jointly by the Contractor and the Contracting Authority's inspector at least once every seven calendar days. Storm water site inspections will include:
1. Date of the inspection.

2. Summary of the scope of the inspection.

3. Name and qualifications of the personnel making the inspection.

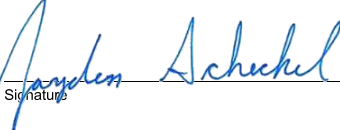
5. Review of erosion and sediment control measures within disturbed areas for the effectiveness in preventing impacts to receiving waters.

6. Major observations related to the implementation of the PPP.

7. Identification of corrective actions required to maintain or modify erosion and sediment control measures.
- B. Include storm water site inspection reports in the amended PPP. Incorporate any additional erosion and sediment control measures determined as a result of the inspection. Immediately begin corrective actions on all deficiencies found within 3 calendar days of the inspection and complete within 7 calendar days following the inspection. If it is determined that making the corrections less than 72 hours after the inspection is impracticable, it should be documented why it is impracticable and indicate an estimated date by which the corrections will be made.
- VI. NON-STORM WATER DISCHARGES
- This includes subsurface drains (i.e. longitudinal and standard subdrains) and slope drains. The velocity of the discharge from these features may be controlled by the use of headwalls or blocks, Class A stone, erosion stone or other appropriate materials. This also includes uncontaminated groundwater from dewatering operations, which will be controlled as discussed in Section III of the PPP.
- VII. POTENTIAL SOURCES OF OFF RIGHT-OF-WAY (ROW) POLLUTION
- Silts, sediment, and other forms of pollution may be transported onto highway right-of-way (ROW) as a result of a storm event. Potential sources of pollution located outside highway ROW are beyond the control of this PPP. Pollution within highway ROW will be conveyed and controlled per this PPP.
- VIII. DEFINITIONS
- A. Base PPP - Initial Pollution Prevention Plan.
- B. Amended PPP - Base PPP amended during construcion. May include Plan Revisions or Contract Modifications for new items, storm water site inspection reports, fieldbook entries made by the inspector, amended PPP site map by the Contractor, ECIP, NOI, co-permittee certifications, and Subcontractor Request Forms. Items amending the PPP are stored electronically and are readily available upon request.
- C. Fieldbook Entries – This contains the inspector's daily diary and bid item postings.
- D. Controls - Methods, practices, or measures to minimize or prevent erosion, control sedimentation, control storm water, or minimize contaminants from other types of waste or materials. Also called Best Management Practices (BMPs).
- E. Signature Authority - Representative authorized to sign various storm water documents.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Signature

JAYDEN SCHECKEL
Printed or Typed Name

Signature

Printed or Typed Name

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE

ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E

ABUTMENTS: INTEGRALPIERS: NONE

POLLUTION PREVENTION PLAN

STATION: 13+14.00
JACKSON COUNTY, IOWA

SKEW: 0° AHEAD
FHWA #193431

		NO.	DATE	REVISION	BY
FISCAL YEAR: 2027	DRAWN BY: JLS	.	.	.	.
	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.
PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\C Sheets.dwg					



JACKSON COUNTY SECONDARY ROADS
201 West Platt Street, Maquoketa IA 52060
Phone: 563-652-4782
Email: jceng@jacksoncounty.iowa.gov
Web: https://jacksoncounty.iowa.gov

JACKSON COUNTY

PROJECT NUMBER

BROS-C049(102)--8J-49

SHEET NO.

C.03

110_02 8/15/22			
REMOVAL OF EXISTING STRUCTURES			
Line No.	Location	Description	Remarks
1.0	13+14	76' x 21' bridge	Steel beam girder with wood deck

110_17 1/27/25																			
CLEARING AND GRUBBING																			
Line No.	Station From	Station To	Work and Material Type	>3"-6"	>6"-9"	>9"-12"	>12"-15"	>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	Estimated Units	Estimated Area (Acres)	Remarks
1.0	11+80.00	13+14.00	Trees - Clearing and Grubbing															0.110	
2.0	13+14.00	14+75.00	Trees - Clearing and Grubbing															0.120	
3.0	13+14.00	14+75.00	Trees - Clearing and Grubbing				18										169.2		

100_19 10/15/24							
PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE							
Possible Standards: EC-204							
Line No.	Station From	Station To	Side	Sediment Control Device Type	Diameter Size	Length (LF)	Remarks
1.0	11+80.00	12+51.50	Left	Perimeter and Slope	9 inch	80.00	
2.0	11+80.00	12+51.50	Right	Perimeter and Slope	9 inch	80.00	
3.0	13+76.50	14+75.00	Left	Perimeter and Slope	9 inch	100.00	
4.0	13+76.50	14+75.00	Right	Perimeter and Slope	9 inch	100.00	
5.0	12+51.50		Left	Ditch Check	12 inch	12.00	
6.0	12+51.50		Right	Ditch Check	12 inch	12.00	
7.0	13+76.50		Left	Ditch Check	12 inch	12.00	
8.0	13+76.50		Right	Ditch Check	12 inch	12.00	

100_08 8/15/22								
REMOVAL OF FENCE								
Line No.	Station From	Offset	Station To	Offset	Side	Type	Length (LF)	Remarks
1.0	11+80.00	30.1	12+72.00	15.5	Left	Barbed Wire	96.0	
2.0	13+56.00	14.7	14+75.00	25.5	Left	Barbed Wire	122.0	
3.0	13+64.00	26.7	14+75.00	23.5	Right	Barbed Wire	108.0	

108_13A 3/27/25			
SAFETY CLOSURES			
Refer to Section 2528 of the Standard Specifications			
Station	Road Closure Qty.	Hazard Closure Qty.	Remarks
11+00.00	1		BEGINNING OF PROJECT
15+00.00	1		END OF PROJECT

		NO.	DATE	REVISION	BY
FISCAL YEAR: 2027	DRAWN BY: JLS	.	.	.	.
	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.
PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\I Sheets.dwg					



JACKSON COUNTY SECONDARY ROADS
201 West Platt Street, Maquoketa IA 52060
Phone: 563-652-4782
Email: jceng@jacksoncounty.iowa.gov
Web: https://jacksoncounty.iowa.gov

JACKSON COUNTY

PROJECT NUMBER
BROS-C049(102)--8J-49

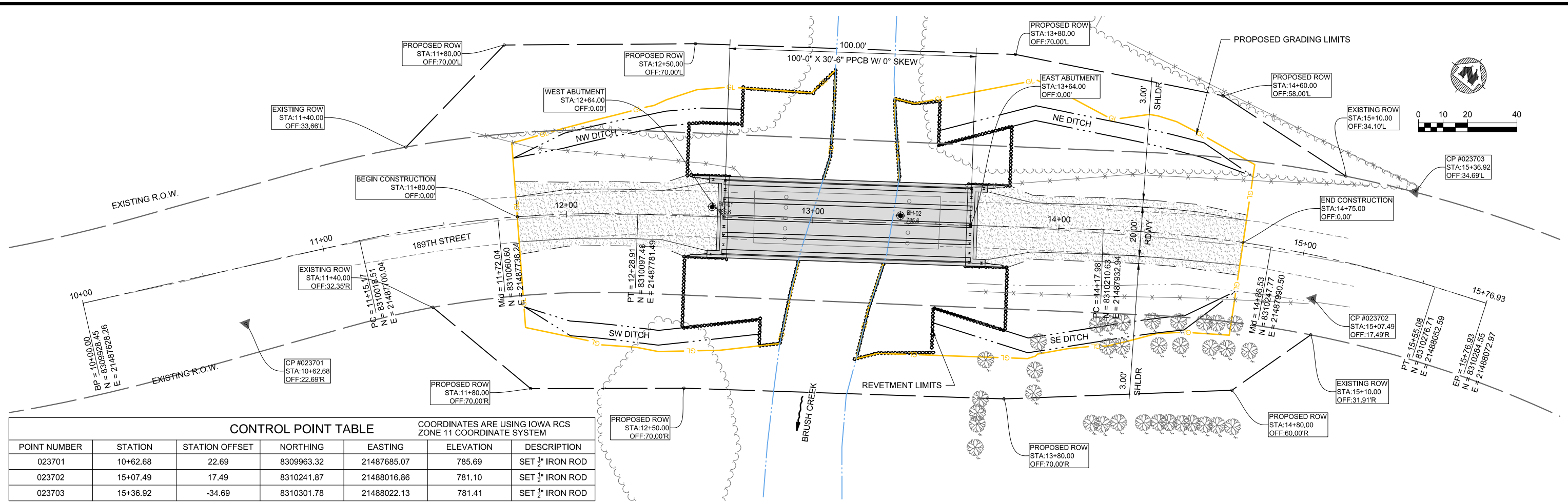
SHEET NO.
C.04

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

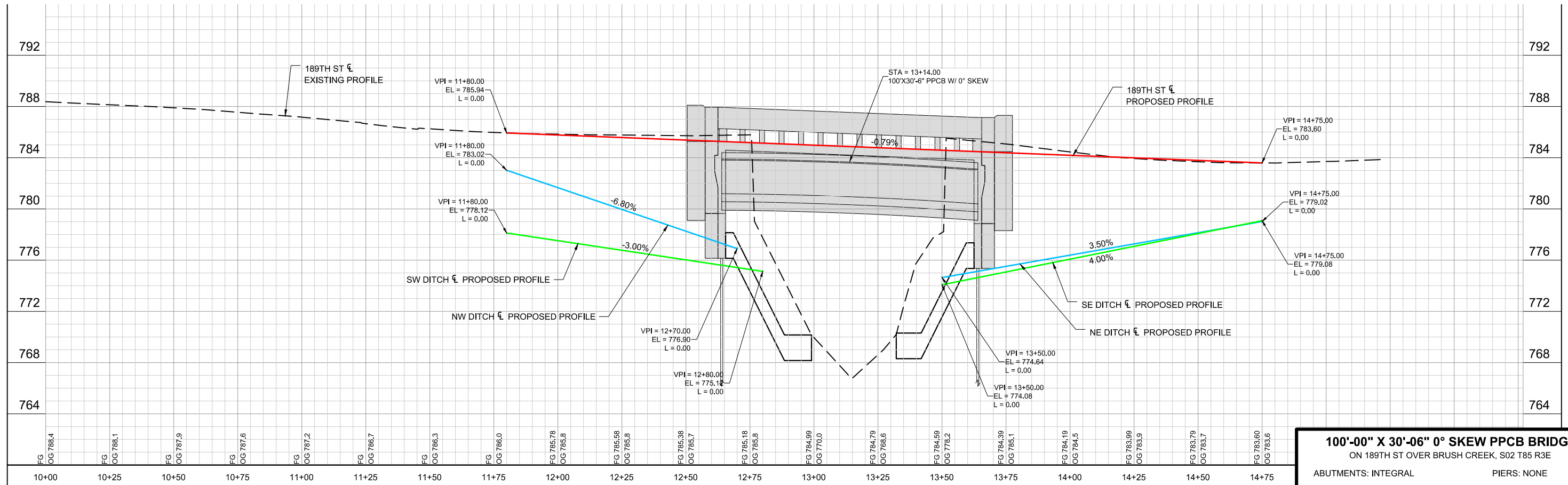
TABULATIONS

STATION: 13+14.00
JACKSON COUNTY, IOWA

SKEW: 0° AHEAD
FHWA #193431



CONTROL POINT TABLE			COORDINATES ARE USING IOWA RCS ZONE 11 COORDINATE SYSTEM			
POINT NUMBER	STATION	STATION OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
023701	10+62.68	22.69	8309963.32	21487685.07	785.69	SET 1/2" IRON ROD
023702	15+07.49	17.49	8310241.87	21488016.86	781.10	SET 1/2" IRON ROD
023703	15+36.92	-34.69	8310301.78	21488022.13	781.41	SET 1/2" IRON ROD



FISCAL YEAR: 2027	DRAWN BY: JLS	NO.	DATE	REVISION	BY
	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.

PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\ID Sheets.dwg

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JACKSON COUNTY

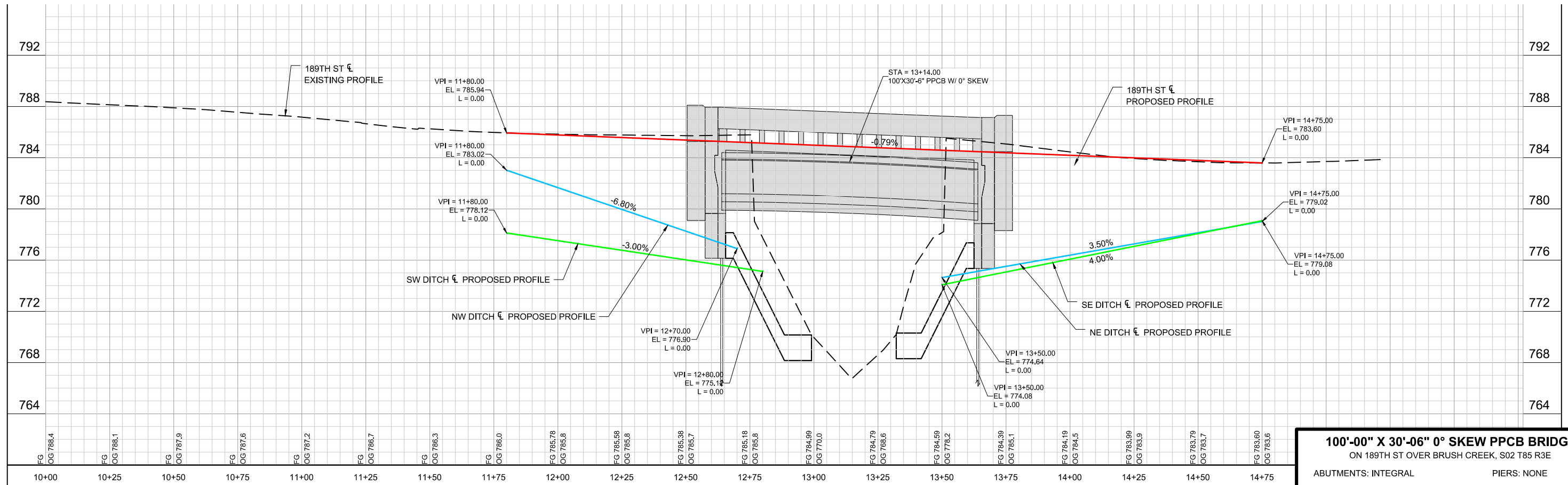
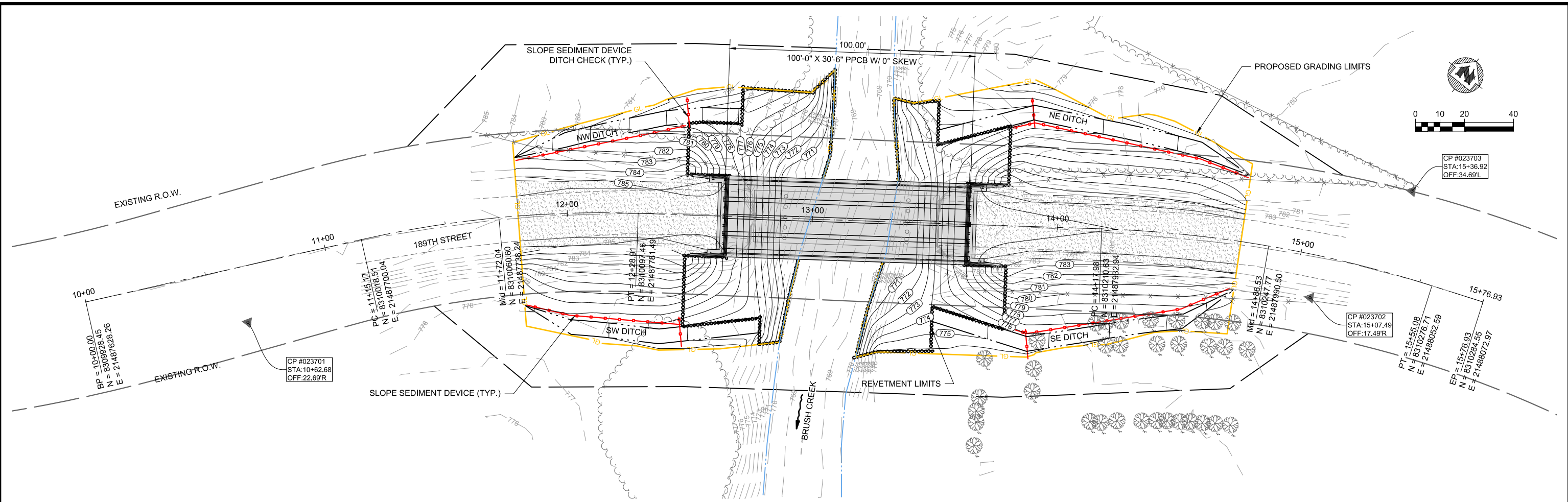
PROJECT NUMBER
BROS-C049(102)--8J-49

SHEET NO.
D.01

PLAN AND PROFILE

STATION: 13+14.00
JACKSON COUNTY, IOWA

SKEW: 0° AHEAD
FHWA #193431



100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

PROPOSED GRADING PLAN

STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

FISCAL YEAR: 2027		NO.	DATE	REVISION	BY
DRAWN BY: JLS		.	.	.	.
DESIGNED BY: JLS		.	.	.	.
CHECKED BY: JLS		.	.	.	.

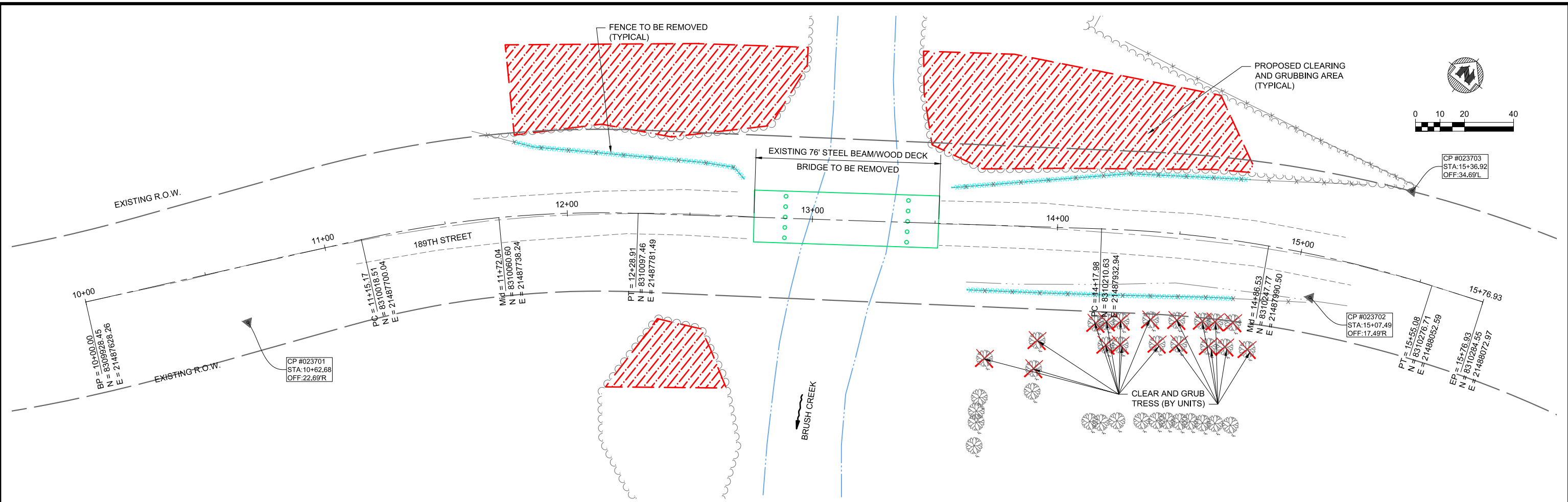
JACKSON COUNTY SECONDARY ROADS
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JACKSON COUNTY

PROJECT NUMBER
BROS-C049(102)--8J-49

SHEET NO.
D.02

PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\ID Sheets.dwg



100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

REMOVALS
STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

		NO.	DATE	REVISION	BY
FISCAL YEAR: 2027	DRAWN BY: JLS	.	.	.	.
	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.
PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\I D Sheets.dwg					



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JACKSON COUNTY

PROJECT NUMBER
BROS-C049(102)--8J-49

SHEET NO.
D.03



LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10010281_001 Geotechnical Evaluation PE 0237- 189th Street Bridge Replacement 27705 189th Street Maquoketa, Iowa						BORING: BH-1							
						LOCATION: See attached sketch.							
						DATUM: NAD 1983 StatePlane Iowa South FIPS 1402 Feet							
						NORTHING: 8310119			EASTING: 21487803				
DRILLER: DM/HS			LOGGED BY: N. Techau			START DATE: 05/12/26			END DATE: 05/12/26				
SURFACE ELEVATION: 785.6 ft		RIG: 8504		METHOD: 3 1/4" HSA		SURFACING: Road gravel			WEATHER: Sunny & 55				
Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)				Sample	Blows (N-Value) Recovery		q _p tsf	MC %	Tests or Remarks		
784.6		GRAVEL, 12 inches											
1.0		FILL: POORLY GRADED GRAVEL (GP), fine to coarse-grained, with organic, brown, dry				X	7-4-6 (10) 5"			14			
781.6		FILL: LEAN CLAY (CL), trace Sand, dark gray, moist				X	4-4-5 (9) 6"			21			
4.0													
779.6		LEAN CLAY (CL), trace roots, trace Sand, dark gray to dark brown, moist to wet, medium to stiff (ALLUVIUM)				X	4-5-5 (10) 9"			25			
6.0						X	4-3-3 (6) 10"			27	LL=35, PL=19, PI=16		
							TW			30	DD=90 pcf		
						X	3-2-3 (5) 11"				Mud rotary drilling started at 20 feet.		
766.6													
19.0		SILTY SAND (SM), fine to coarse-grained, with Gravel, brown, wet, medium dense (ALLUVIUM)				X	6-8-11 (19) 8"				Gravel=26% Sand=40% Silt=23% Clay=11%		
761.6													
24.0		LIMESTONE, highly weathered <i>Sand seam at 24 feet</i>				X	8-19-46 (65) 10"			17	Auger refusal at 28.6 feet. Boring cored from 28.6 to 33.6 feet.		
757.0		LIMESTONE, light gray, highly weathered, moderately hard, very fine-grained, highly fractured, vuggy					50/1" (REF) 0"						
28.6							14	90	5	3720	80		
752.0		END OF CORING											
33.6		Boring then backfilled with auger cuttings										Water observed at 20.0 feet while drilling.	
							RQD %	Recovery %	Drilling Rate (min/ft)	Bit Pressure (lbf/in²)	Water Pressure (psf)	Water Return (%)	Remarks

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE

ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E

ABUTMENTS: INTEGRAL PIERS: NONE

SOIL BORINGS

STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

		NO.	DATE	REVISION	BY	 JACKSON COUNTY SECONDARY ROADS 201 West Platt Street, Maquoketa IA 52060 Phone: 563-652-4782 Email: jceng@jacksoncounty.iowa.gov Web: https://jacksoncounty.iowa.gov	JACKSON COUNTY	PROJECT NUMBER		SHEET NO.
FISCAL YEAR: 2027	DRAWN BY: JLS	-	-	-	-			BROS-C049(102)--8J-49	Q.01	
	DESIGNED BY: JLS	-	-	-	-					
	CHECKED BY: JLS	-	-	-	-					
PLOT DATE: ----, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\Q Sheets.dwg										



LOG OF BORING

See Descriptive Terminology sheet for explanation of abbreviations

Project Number 10010281_001 Geotechnical Evaluation PE 0237- 189th Street Bridge Replacement 27705 189th Street Maquoketa, Iowa					BORING: BH-2		
					LOCATION: See attached sketch.		
					DATUM: NAD 1983 StatePlane Iowa South FIPS 1402 Feet		
					NORTHING: 8310164	EASTING: 21528135	
DRILLER: DM/HS		LOGGED BY: N. Techau		START DATE: 05/11/26	END DATE: 05/11/26		
SURFACE ELEVATION: 785.6 ft		RIG: 8504	METHOD: 3 1/4" HSA	SURFACING: Bridge Deck	WEATHER: Sunny & 55		
Elev./ Depth ft	Water Level	Description of Materials (Soil-ASTM D2488 or 2487; Rock-USACE EM 1110-1-2908)	Sample	Blows (N-Value) Recovery	q _p tsf	MC %	Tests or Remarks
784.9 0.7		Wood Bridge Deck, 8 inches AIR					
772.5 13.1		POORLY GRADED GRAVEL with CLAY (GP-GC), fine to coarse-grained, dark gray, moist to wet, medium dense (ALLUVIUM)				11	
762.6 23.0	⊗	LIMESTONE, highly weathered		4-8-6 (14) 6"		13	
752.1 33.5		END OF BORING		6-35-36 (71) 10"			
		Boring then backfilled with auger cuttings		50/0" (REF) 0"			
				50/0" (REF) 0"			Water observed at 23.0 feet while drilling.

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE
SOIL BORINGS
STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

		NO.	DATE	REVISION	BY
FISCAL YEAR: 2027	DRAWN BY: JLS	.	.	.	.
	DESIGNED BY: JLS	.	.	.	.
	CHECKED BY: JLS	.	.	.	.

PILOT DATE: ---- N/Construction Projects/EX-72/02/0217/C/1/D/Construction (Travellers)/O/ Streets/



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201 West Platt Street, Maquoketa IA 52060
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Email: jceng@jacksoncounty.iowa.gov
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JACKSON COUNTY

PROJECT NUMBER

BROS-C049(102)--8J-49

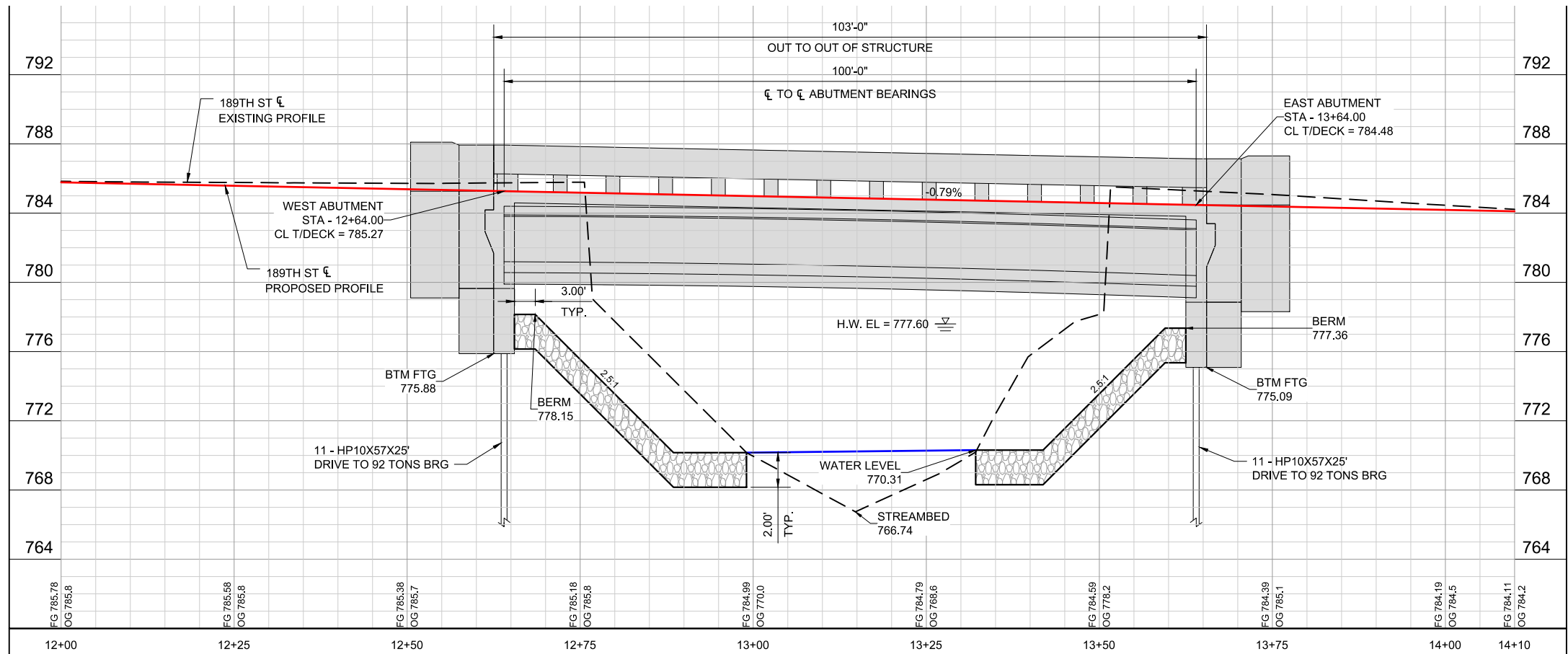
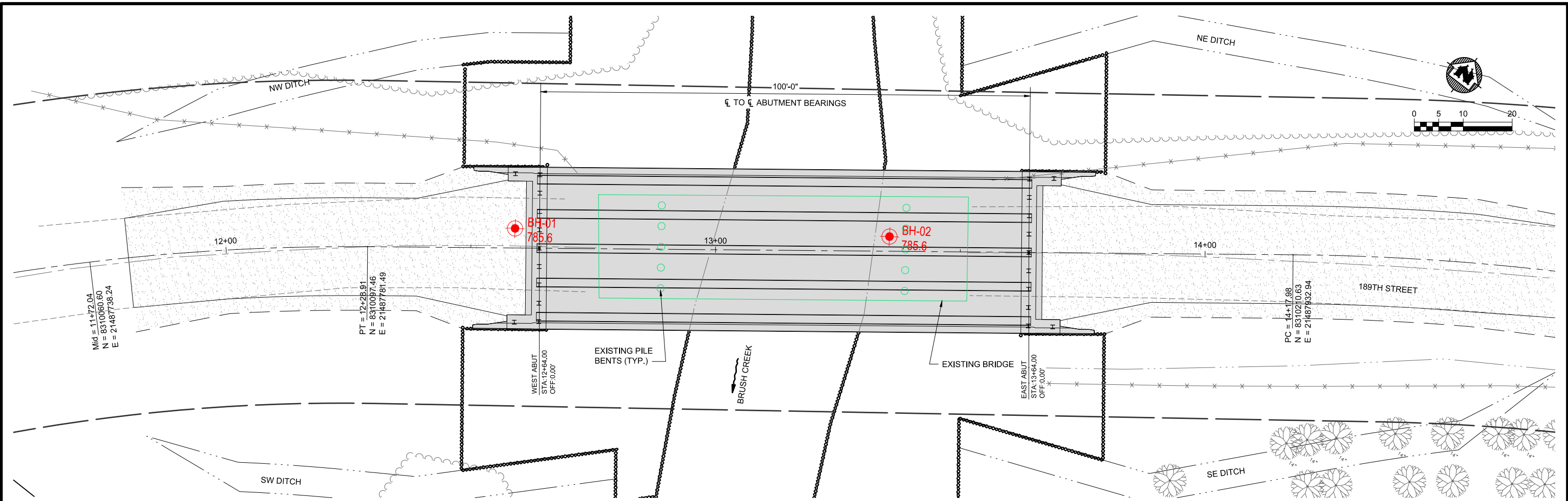
SHEET NO.

Q.02

SOIL BORINGS

STATION: 13+14.00
JACKSON COUNTY, IOWA

SKEW: 0° AHEAD
FHWA #193431



HYDRAULIC DATA	
* DRAINAGE AREA = 10.8 SQ. MI.	
* MAIN CHANNEL SLOPE = 31.5 FT/MI	
* DESIGN DISCHARGE = 4,300 CFS	
* ROAD GRADE OVERFLOW = N/A	
* DESIGN HIGH WATER ELEV = 777.60'	
* BRIDGE FLOW AREA = 577.3 SQ. FT	
* DESIGN VELOCITY = 7.45 FT/S	
* Q50 = 4,300 CFS	
* Q100 = 5,120 CFS	
* Q200 = 6,680 CFS	
* ANTICIPATED SCOUR ELEV = 763.3'	

LOCATION	
JACKSON COUNTY	
T85N, R3E, PERRY TOWNSHIP	
SECTION 02	
OVER BRUSH CREEK	
FHWA STRUCTURE NO. 193431	
TRAFFIC: 35 VPD (2017)	

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

SITUATION PLAN

STATION: 13+14.00
JACKSON COUNTY, IOWA
SKEW: 0° AHEAD
FHWA #193431

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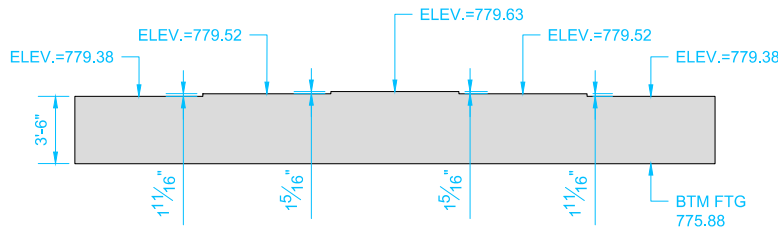
JACKSON COUNTY

PROJECT NUMBER

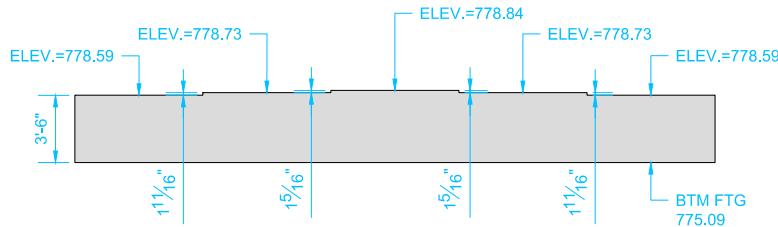
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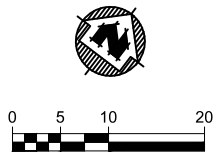
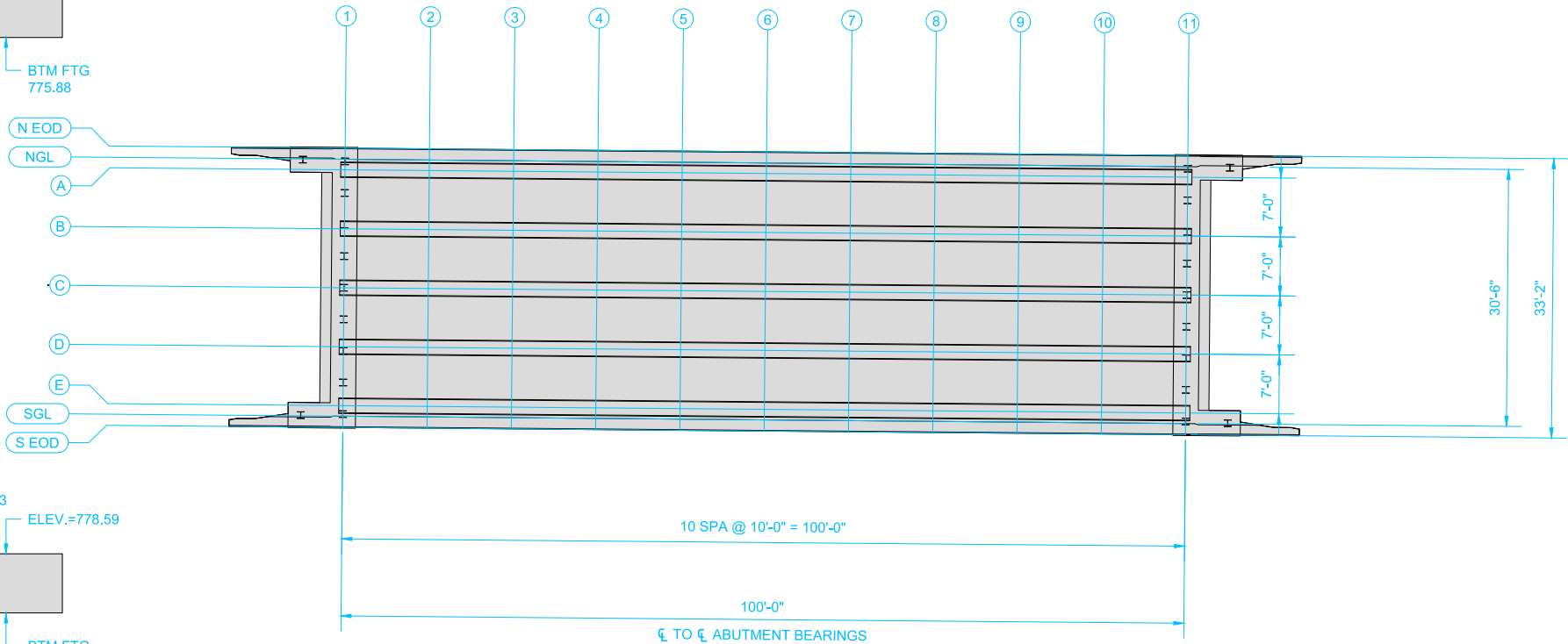
V.01



WEST ABUTMENT STEP DIAGRAM



EAST ABUTMENT STEP DIAGRAM



DECK ELEVATION LAYOUT GRID												
LOCATION		C.L. W. ABUT. BRG.										C.L. E. ABUT. BRG.
		LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11
STATION		12+64.00	12+74.00	12+84.00	12+94.00	13+04.00	13+14.00	13+24.00	13+34.00	13+44.00	13+54.00	13+64.00
NORTH EDGE OF DECK	TOP OF DECK	784.94	784.86	784.79	784.71	784.63	784.55	784.47	784.39	784.31	784.23	784.15
	EDGE FORM ELEV	784.94	784.91	784.87	784.83	784.77	784.69	784.61	784.51	784.40	784.28	784.15
NORTH GUTTER LINE	TOP OF DECK	784.97	784.89	784.81	784.73	784.65	784.57	784.50	784.42	784.34	784.26	784.18
BEAM LINE A	TOP OF DECK	785.00	784.92	784.84	784.76	784.68	784.60	784.52	784.44	784.36	784.28	784.21
	BLH ELEV.	784.33	784.30	784.26	784.21	784.15	784.08	783.99	783.89	783.78	783.66	783.54
	HAUNCH, INCHES	2 7/16	1 11/16	1 1/8	13/16	9/16	8/16	9/16	13/16	1 1/8	1 11/16	2 7/16
	HAUNCH, FEET	0.20	0.14	0.09	0.07	0.05	0.04	0.05	0.07	0.09	0.14	0.20
BEAM LINE B	TOP OF DECK	785.14	785.06	784.98	784.90	784.82	784.74	784.66	784.58	784.50	784.42	784.35
	BLH ELEV.	784.47	784.44	784.40	784.35	784.29	784.22	784.13	784.03	783.92	783.80	783.68
	HAUNCH, INCHES	2 7/16	1 11/16	1 1/8	13/16	9/16	8/16	9/16	13/16	1 1/8	1 11/16	2 7/16
	HAUNCH, FEET	0.20	0.14	0.09	0.07	0.05	0.04	0.05	0.07	0.09	0.14	0.20
BEAM LINE C	TOP OF DECK	785.25	785.17	785.09	785.01	784.93	784.85	784.77	784.69	784.61	784.53	784.46
	BLH ELEV.	784.58	784.55	784.51	784.46	784.40	784.33	784.24	784.14	784.03	783.91	783.79
	HAUNCH, INCHES	2 7/16	1 11/16	1 1/8	13/16	9/16	8/16	9/16	13/16	1 1/8	1 11/16	2 7/16
	HAUNCH, FEET	0.20	0.14	0.09	0.07	0.05	0.04	0.05	0.07	0.09	0.14	0.20
BEAM LINE D	TOP OF DECK	785.14	785.06	784.98	784.90	784.82	784.74	784.66	784.58	784.50	784.42	784.35
	BLH ELEV.	784.47	784.44	784.40	784.35	784.29	784.22	784.13	784.03	783.92	783.80	783.68
	HAUNCH, INCHES	2 7/16	1 11/16	1 1/8	13/16	9/16	8/16	9/16	13/16	1 1/8	1 11/16	2 7/16
	HAUNCH, FEET	0.20	0.14	0.09	0.07	0.05	0.04	0.05	0.07	0.09	0.14	0.20
BEAM LINE E	TOP OF DECK	785.00	784.92	784.84	784.76	784.68	784.60	784.52	784.44	784.36	784.28	784.21
	BLH ELEV.	784.33	784.30	784.26	784.21	784.15	784.08	783.99	783.89	783.78	783.66	783.54
	HAUNCH, INCHES	2 7/16	1 11/16	1 1/8	13/16	9/16	8/16	9/16	13/16	1 1/8	1 11/16	2 7/16
	HAUNCH, FEET	0.20	0.14	0.09	0.07	0.05	0.04	0.05	0.07	0.09	0.14	0.20
SOUTH GUTTER LINE	TOP OF DECK	784.97	784.89	784.81	784.73	784.65	784.57	784.50	784.42	784.34	784.26	784.18
SOUTH EDGE OF DECK	TOP OF DECK	784.94	784.86	784.79	784.71	784.63	784.55	784.47	784.39	784.31	784.23	784.15
	EDGE FORM ELEV	784.94	784.91	784.87	784.83	784.77	784.69	784.61	784.51	784.40	784.28	784.15

100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

DECK ELEVATIONS

STATION: 13+14.00 SKEW: 0° AHEAD
JACKSON COUNTY, IOWA FHWA #193431

FISCAL YEAR: 2027	DRAWN BY: JLS	NO.	DATE	REVISION	BY
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PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\IV Sheets.dwg					



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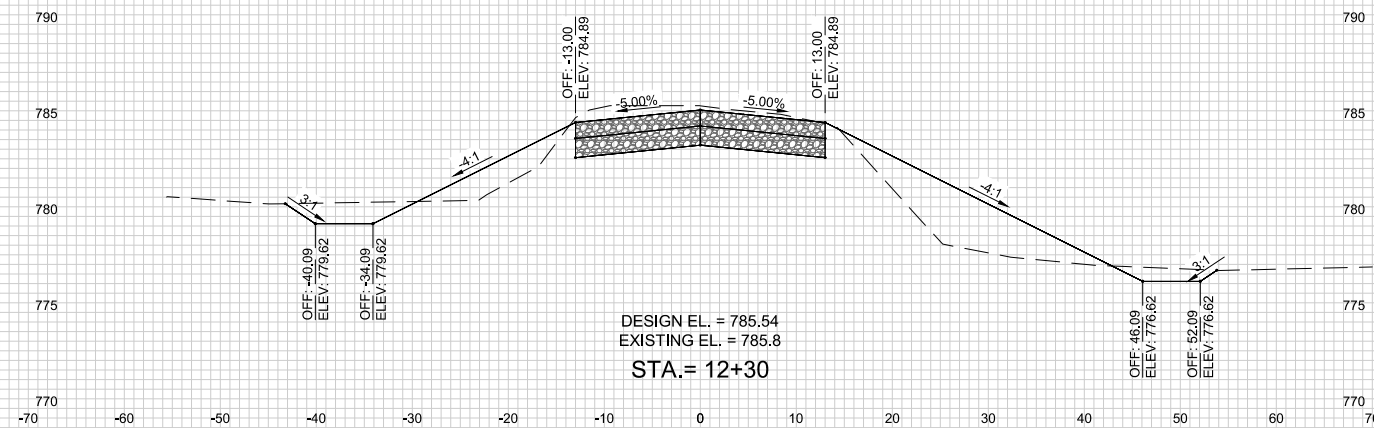
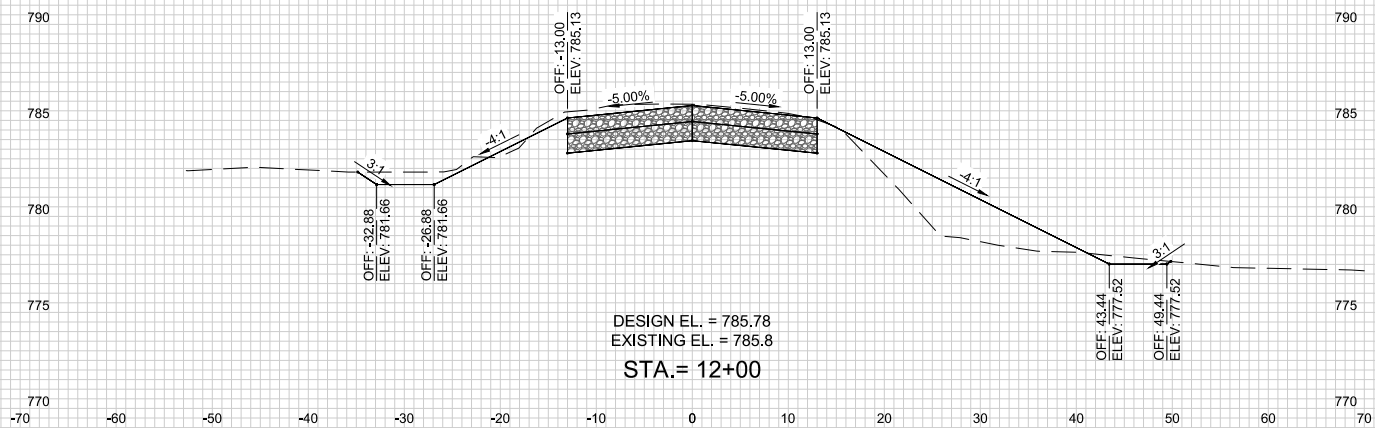
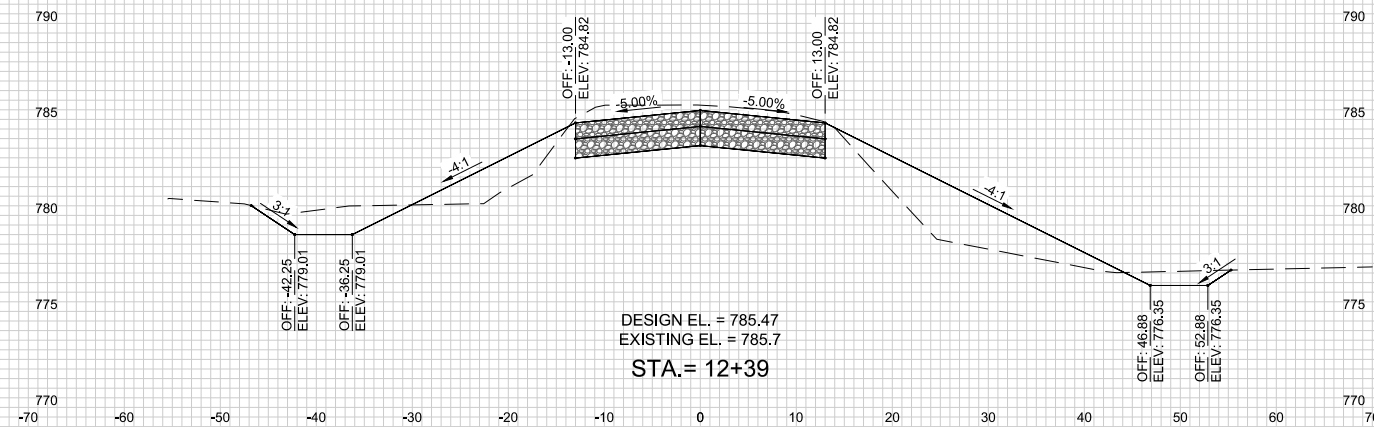
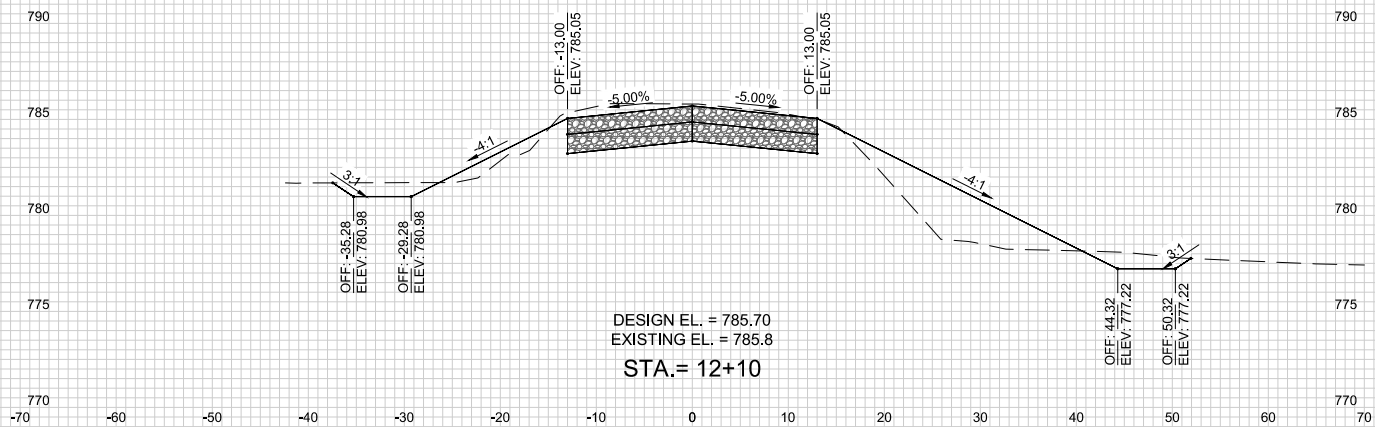
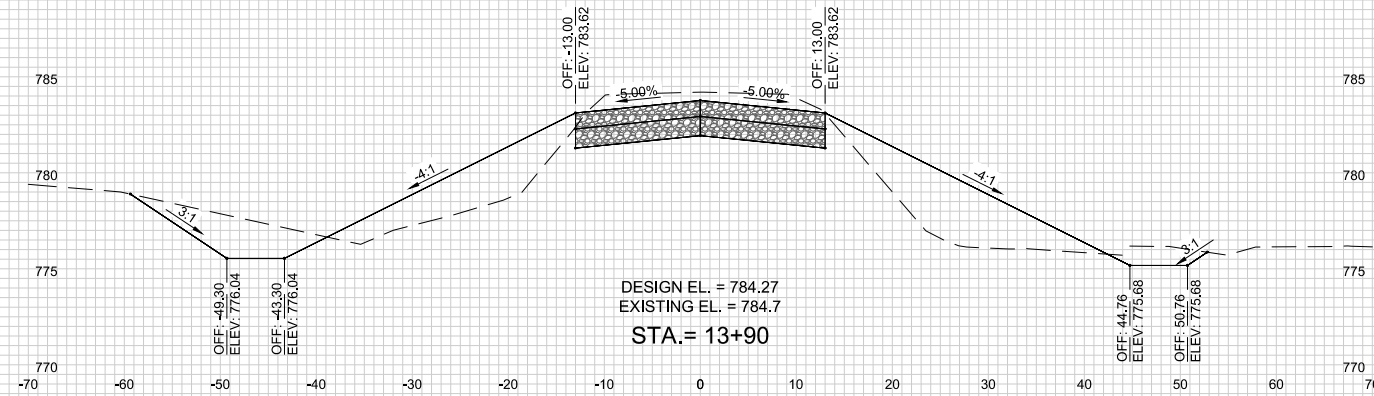
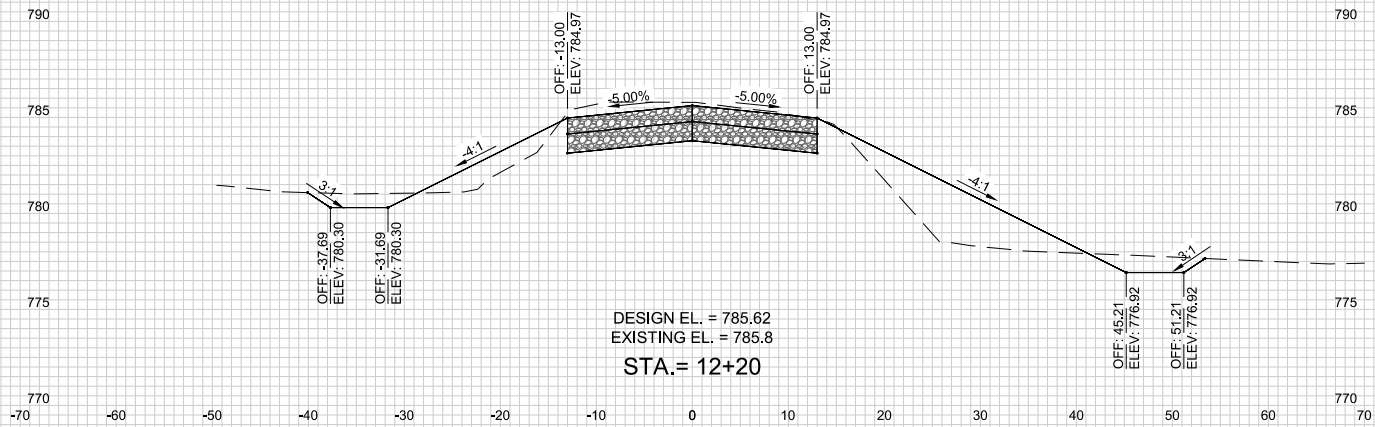
JACKSON COUNTY

PROJECT NUMBER

BROS-C049(102)--8J-49

SHEET NO.

V.02



100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

CROSS SECTIONS

STATION: 13+14.00
JACKSON COUNTY, IOWA
SKEW: 0° AHEAD
FHWA #193431

	NO.	DATE	REVISION	BY
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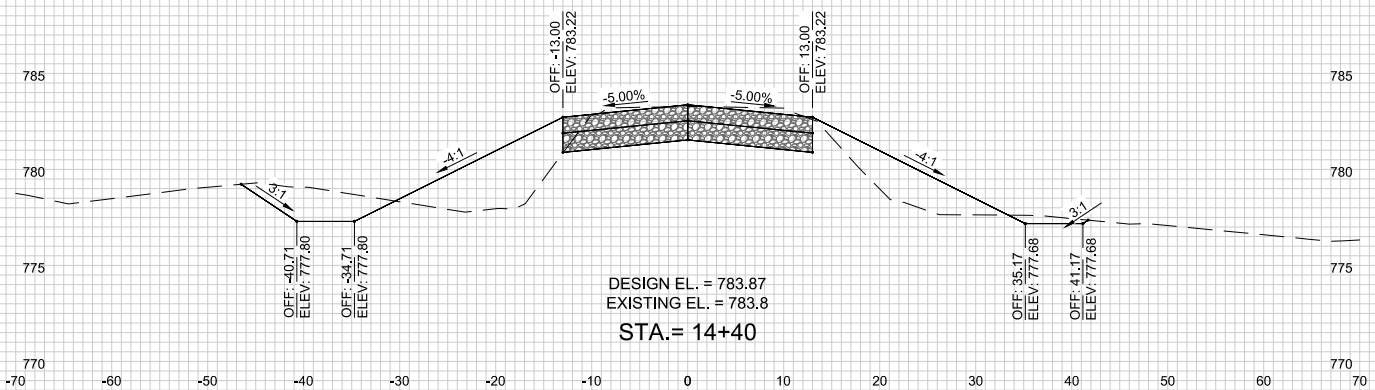
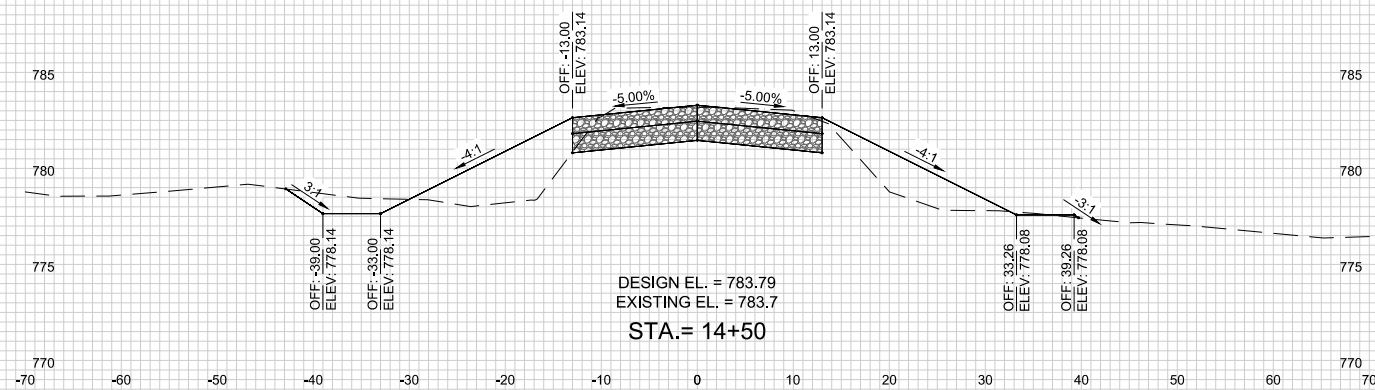
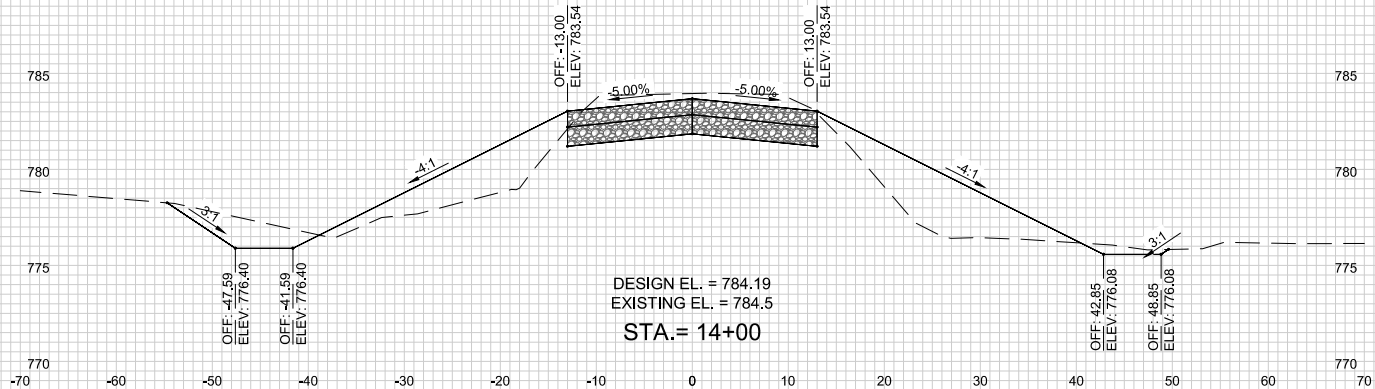
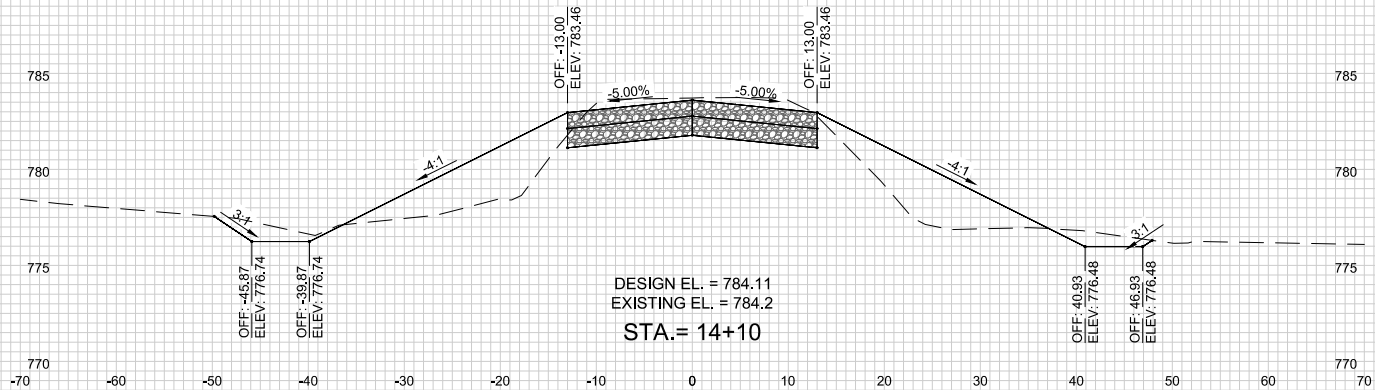
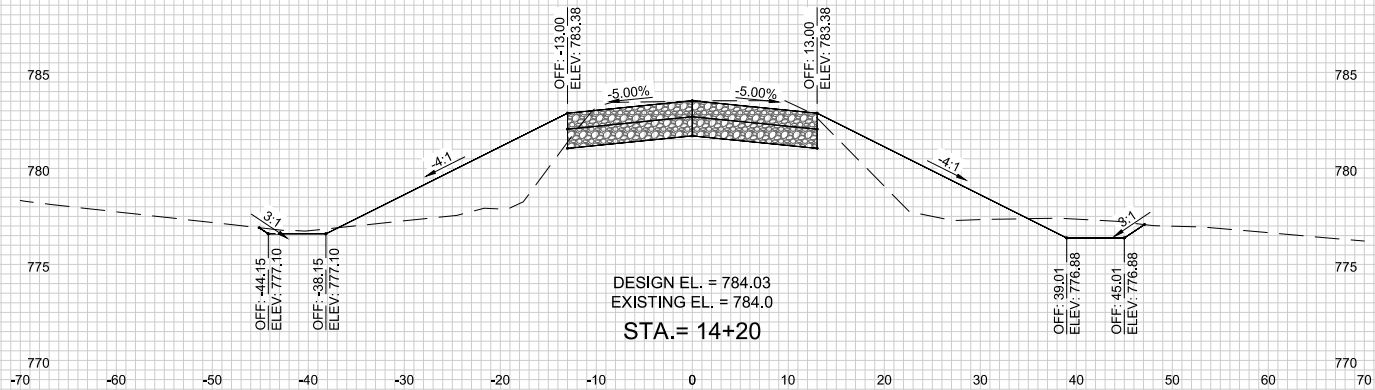
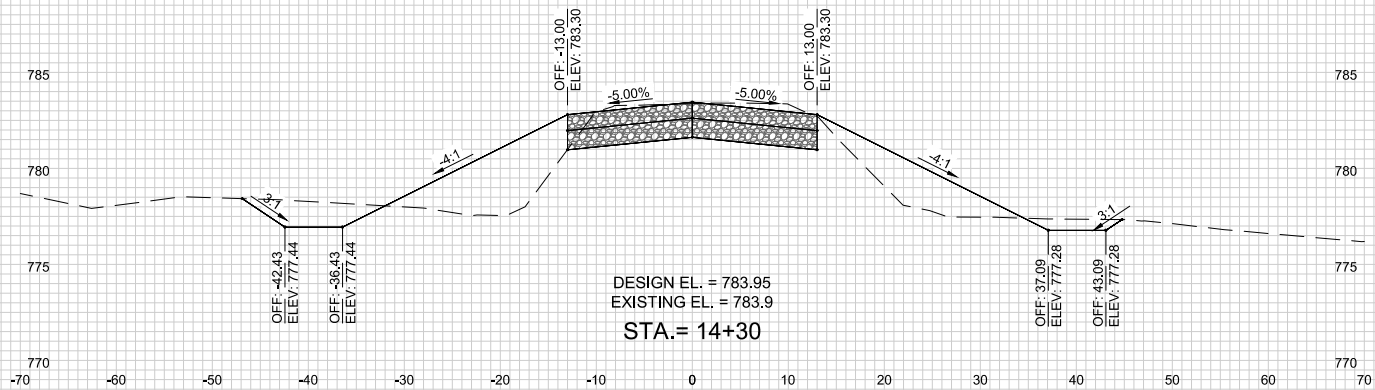
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JACKSON COUNTY

PROJECT NUMBER
BROS-C049(102)--8J-49

SHEET NO.
W.01

PLOT DATE: ---, N:\Construction Projects\FY 27\PE 0237\C3D\Construction Drawings\W Sheets.dwg



100'-00" X 30'-06" 0° SKEW PPCB BRIDGE
ON 189TH ST OVER BRUSH CREEK, S02 T85 R3E
ABUTMENTS: INTEGRAL PIERS: NONE

CROSS SECTIONS

STATION: 13+14.00
JACKSON COUNTY, IOWA
SKEW: 0° AHEAD
FHWA #193431

FISCAL YEAR: 2027	DRAWN BY: JLS	NO.	DATE	REVISION	BY:
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PROJECT NUMBER

BROS-C049(102)--8J-49

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