

Wednesday, July 22, 2020

NOTICE: Public attendance at public meetings is restricted due to COVID-19 concerns. To access and participate in the meetings remotely, please call (641) 939-8108 for meeting information.

- 9:00 A.M. Call To Order Courthouse Large Conference Room
- 2. Pledge Of Allegiance
- 3. Approval Of Agenda
- 4. Approval Of Minutes

Documents:

07-15-2020 MINUTES.PDF 07-20-2020 MINUTES.PDF

5. Approval Of Claims For Payment

Documents:

VENDOR PUBLICATION REPORT 7-22-20.PDF

- 6. Utility Permits & Secondary Roads Department
- 7. Approve Final Plans For BRS-SWAP-C042(63)—FF-42 Bridge 12015 Replacement, Co Hwy S27 over Tipton Creek

Documents:

42-C042-063 FINAL PLANS.PDF

8. Approve Final Plans For BROS-SWAP-C042(102)—SE-42 Bridge 11009 Replacement, M Avenue over South Fork

Documents:

42-CO42-102 FINAL PLANS.PDF

9. Tax Abatement: Ellsworth Neighborhood Investment Group

Documents:

TAX ABATEMENT.PDF

10. COVID-19 Update

- 11. Public Comments
- 12. Other Business
- 13. Adjournment/Recess
- 14. 9:30 A.M. Drainage Courthouse Large Conference Room
- 15. 11:30 A.M. Motion For Closed Session Meeting Under Iowa Code Sections 21.5(1)(A) And (C)

Courthouse Large Conference Room

HARDIN COUNTY BOARD OF SUPERVISORS MINUTES – JULY 15, 2020 WEDNESDAY - 9:00 A.M. COURTHOUSE LARGE CONFERENCE ROOM

Chair Lance Granzow called the meeting to order. The meeting was held electronically due to COVID-19 public health risks. Also in attendance were Supervisors BJ Hoffman and Reneé McClellan; and Justin Ites, Angela De La Riva, Dave Dunn, Becca Junker, JD Holmes, Megan Harrell, Curt Groen, Rocky Reents, Dave McDaniel, Tifani Eisentrager, Jessica Lara, Kerri Johannsen, Linn Adams, Julie Duhn, Bret Dublinske, Mariah Lynne, Josh Odom, Jake Ketzner, Abby Flatness, Megan Kirik, Pauline Lloyd, Darla Kalous, Bette Dossman, Tony Baranowski, Jessica Sheridan, Max Friedman, Donna Juber, Bob Juber, Micah Cutler, Floyd Hammer, Taylor Roll, Michael Pearce, Matt Jones, Thomas Craighton, Lori Kadner, Darrell Meyer, and Angela Silvey.

The Pledge of Allegiance was recited.

McClellan moved, Hoffman seconded to approve the agenda as posted. Motion carried.

Due to technical difficulties, Hoffman moved, McClellan seconded to recess until 9:20 a.m. to allow remote attendees time to log in with new Zoom meeting information. Motion carried.

At 9:20 a.m. the Chair reconvened the meeting.

Hoffman moved, McClellan seconded to approve the second consideration of the amendment to Article XXIII of Ordinance No. 29 as modified by the Board of Supervisors. Granzow asked if Hoffman or McClellan would be willing to revert to the 3 X Total Height dwelling unit setback for C-WECS as recommended by the Zoning Board. Hoffman stated he believed that setback was already in the amendment and reiterated there are two means of relief available to developers: 1) waiver from property owners and 2) contest to the Variance Board. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Motion carried.

Hoffman moved, McClellan seconded to set July 23, 2020, at 9:01 a.m., in the large conference room and via Zoom, for the final consideration and adoption of the amendment to Article XXIII of Ordinance No. 29 as modified by the Board of Supervisors. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Motion carried.

Hoffman moved, McClellan seconded to approve the minutes of July 8, 2020. Motion carried.

McClellan moved, Hoffman seconded to approve the July 15, 2020 claims for payment. Motion carried.

Utility Permits: None.

Secondary Roads: No report.

Hoffman moved, McClellan seconded that the following Resolution No. 2020-31, Resolution for Road Reclassification Public Hearing, be approved. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Resolution No. 2020-31 is hereby adopted as follows:

RESOLUTION FOR ROAD RECLASSIFICATION PUBLIC HEARING

Hardin County

Resolution No. 2020-31

WHEREAS, A petition has been filed with the Hardin County Engineer asking that action be taken to reclassify a section of Hardin County Secondary Road to Class C, described as follows:

A portion of GG Avenue, originally established on the 24th of June, 2020, lying in Section 12, T-88N, R-22W, Buckeye Township of Hardin County, Iowa. The extent of this road reclassification is the portion of the roadway commencing at the North Right-of-Way line of 180th Street, thence running in a northerly direction approximately one-quarter mile to the terminus.

NOW, THEREFORE BE IT RESOLVED that a hearing on the proposed reclassification will be held in the Conference Room, Hardin County Courthouse, Eldora, Iowa 50627 at 9:01 A.M. on the 5th Day of August, 2020 in accordance with Iowa Code Chapter 306.

/s/ Lance Granzow
Lance Granzow, Chairperson
Hardin County Board of Supervisors

ATTEST: <u>/s/ Jessica Lara</u> DATE: <u>7/15/2020</u>

Jessica Lara, Hardin County Auditor

McClellan moved, Hoffman seconded to table the tax abatement for Ellsworth Neighborhood Investment Group until the July 22, 2020 meeting. Motion carried.

Hoffman moved, McClellan seconded to approve the discharge of Mindy McLeland from the role of County Safety Coordinator, effective 07/01/2020. Motion carried.

Hoffman moved, McClellan seconded to approve the hiring of Michael Pearce, IT Network Specialist, as County Safety Coordinator, at a rate to be determined, effective 07/01/2020. The role will be added to Pearce's current job responsibilities. Motion carried.

McClellan moved, Hoffman seconded to approve the pay increase of Angela De La Riva, Economic Development Director, to \$60,650/year, effective 07/15/2020. Hoffman stated the increase is a result of De La Riva's performance review and salary surveys. Motion carried.

Hoffman moved, McClellan seconded to approve the pay increase of Jessica Sheridan, Environmental Health Specialist and Zoning Administrator, to \$45,000/year, effective 07/15/2020. Hoffman stated the increase is a result of Sheridan's performance review and salary surveys, and he would like to reevaluate in six months. Motion carried.

McClellan moved, Hoffman seconded to approve the pay increase of Jody Mesch, Property Manager, to \$73,000/year, effective 07/15/2020. Hoffman stated the increase is a result of Mesch's performance review, and Granzow noted that the pandemic has added to Mesch's duties. Motion carried.

Hoffman moved, McClellan seconded to approve the promotion of Sophia Lupkes, Dispatcher, at a rate of \$17.26/hour, effective 07/25/2020. Motion carried.

McClellan moved, Hoffman seconded to approve the hiring of Emma Lee Inks, part-time Correctional Officer, at a rate of \$16.48/hour, effective 07/15/2020. Motion carried.

COVID-19 Update:

Emergency Management Coordinator Thomas Craighton spoke about PPE supply chain, event accommodations, and grants. Rocky Reents is working with schools on Return to Learn plans.

Matt Jones, IT Director, presented on the Alibi fever detection module and, after discussion, the following action was taken:

McClellan moved, Hoffman seconded to approve the purchase of three Alibi fever detection modules, one each for the Courthouse, County Office Building, and Sheriff's Office. Granzow advised a policy needed to be put into place before the modules are deployed. Motion carried.

Public Comments:

Floyd Hammer lodged a complaint about the quality of gravel applied to his road.

Other Business:

Hoffman relayed concerns about individuals' use of Courthouse grounds without a permit. McClellan remarked there's a fine line between requiring a permit and allowing assembly on publicly-owned ground. County Attorney Darrell Meyer will examine the existing policy and permit for possible amendments.

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Lance Granzow, Chair	Jessica Lara

HARDIN COUNTY BOARD OF SUPERVISORS MINUTES – JULY 20, 2020 MONDAY - 9:00 A.M. COURTHOUSE LARGE CONFERENCE ROOM

Chair Lance Granzow called the meeting to order. Also present were Supervisors BJ Hoffman and Reneé McClellan; and Angela De La Riva, Darrell Meyer, Jessica Sheridan, and Angela Silvey.

Hoffman moved, McClellan seconded to go into closed session pursuant to Iowa Code 21.5(1)(c) for pending litigation. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Motion carried.

Following discussion, Hoffman moved, McClellan seconded to return to open session. Roll Call Vote: "Ayes" Hoffman, McClellan, and Granzow. "Nays" None. Motion carried.

At 10:02 a.m., McClellan moved, Hoffman seconded to adjourn. Motion carried.

Lance Granzow, Chair	Jessica Lara
Board of Supervisors	Hardin County Auditor

Ag Machinery Service LLC	\$120.00
Agri-Pro Enterprises of Iowa Inc	\$729.60
AgVantage FS	\$26,000.45
Airgas North Central	\$734.82
Alliant Energy	\$10,847.98
Angela De La Riva	\$260.10
Black Hills Energy	\$32.08
Casey's General Store	\$27.28 \$40.00
Casey's General Store Cedar Valley Medical Specialists, PC	\$40.00 \$48.00
CenturyLink	\$48.00 \$17.43
CenturyLink	\$371.44
Cintas	\$710.95
Cintas Corporation	\$81.67
City of Iowa Falls	\$181.43
City of New Providence	\$4,946.15
City of Radcliffe	\$68.86
City of Steamboat Rock	\$4,841.00
City of Union	\$2,816.94
City of Whitten	\$1,109.38
CivicPlus LLC	\$5,059.76
Clapsaddle-Garber Assoc	\$460.00
Coleman Moore Co.	\$7,718.00
Concrete Inc	\$1,270.00
Cooley Pumping LLC	\$405.00
Craig Babcock	\$413.04
Denco Corp	\$34,023.50 \$32.40
Des Moines Stamp Mfg Co Donnlee Jackson	\$32.40 \$390.00
Franklin Rural Elec Co-Op	\$30.00
Galls Incorporated	\$82.92
Gary McEwen	\$375.00
Hardin Co Firemans Assoc.	\$1,000.00
Honey Creek Cemetery	\$104.00
Iowa Law Enforcement Academy	\$1,250.00
ISAC	\$375.00
Jeff Fiscus	\$102.67
John Deere Financial	\$879.42
Larry's Upholstery	\$396.00
Mail Services LLC	\$568.30 \$4,541.81
Martin Marietta Aggregate McKesson Medical Surgical	\$4,541.61 \$130.46
Mend Correctional Care PLLC	\$95.00
Mid American Energy	\$45.87
Mid-America Publishing Corp	\$1,037.34
Mike Murphy	\$250.00
Miller Cemetery	\$52.00
Murphy Tractor & Equipment	\$2,156.28
New Providence Hardware	\$38.97
PegEx Inc Hazardous Waste Experts	\$141.00
Premier Office Equipment	\$869.79
Public Employee Health Fund	\$1,511.76
Quaker Security LLC	\$2,295.00
Renee Springston Reserve Account	\$8.30
Ryan McEwen	\$10,000.00 \$230.00
Sadler Power Train Inc	\$2,407.08
Shield Pest Control	\$135.00
Speck Electric	\$281.38
Storey Kenworthy	\$43.26
Summit Food Service LLC	\$3,821.36
Superior Welding Supply	\$45.00
Tele-Difference LLC	\$160.00
The Davis Brown Law Firm	\$550.00
Theisens	\$166.24
Thomas Craighton	\$618.00
Titan Machinery	\$281.55 \$275.00
Tyler Technologies Inc Union Auto Inc.	\$275.00 \$291.34
Verizon Connect Nwf, Inc	\$18.19
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Wesley Wiese Wilcox Equipment	\$40.00 \$63.26	
Woodley Funeral Services LLC	\$325.00	
Grand Total	\$141,845.81	
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Lance Granzow, Chair	Jessica Lara	
Board of Supervisors	Hardin County Auditor	

4 FF-BRS-SWAP-CO42(63)

20,

OCTOBER

ETTING DATE

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SECTION 404 PERMIT AND CONDITIONS

CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 14, PERMIT NO. CEMVR-OD-P-2020-0282. A COPY OF THIS PERMIT IS AVAILABLE FROM THE IOWA DOT WEBSITE (http://www.envpermits.iowadot.gov/). THE U.S. ARMY CORPS OF ENGINEERS RESERVES THE

RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE

AN IOWA DNR FLOODPLAIN CONSTRUCTION PERMIT IS NOT REQUIRED FOR THIS PROJECT.

UTILITY CONTACTS

NO KNOWN UTILITIES IN AREA

IOWA DEPARTMENT OF TRANSPORTATION

HIGHWAY DIVISION

PLANS OF PROPOSED IMPROVEMENT ON THE

FARM TO MARKET SYSTEM HARDIN COUNTY

BRIDGE REPLACEMENT-CCS

ON S27, OVER TIPTON CREEK, FROM D41 SOUTH 1.1 MILES IN SECTION 2-T87-R22

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS.

PROJECT TRAFFIC CONTROL PLAN

THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION. LOCAL TRAFFIC TO ADJACENT PROPERTIES WILL BE MAINTAINED. ALL BARICADES, SIGNS, AND SAFETY CLOSURES SHALL BE FURNISHED, PLACED, AND MAINTAINED BY THE CONTRACTOR. TRAFFIC WILL BE MAINTAINED ON A DETOUR ROUTE. HARDIN COUNTY WILL PROVIDE, MAINTAIN, AND REMOVE DETOUR ROUTE.

TRAFFIC CONTROL DEVICES, PROCEDURES, LAYOUTS, SIGNING, AND PAVEMENT MARKINGS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL CONFORM TO THE "MANUAL ON UNIFORM TAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 130.

DRAWING APPROVAL

ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE SUBMITTED TO AND SIGNED BY A LICENSED ENGINEER. THE APPROVED DRAWINGS SHALL THEN BE SUBMITTED TO HARDIN COUNT ENGINEERS OFFICE, FOR REVIEW AND APPROVAL.

ELDORA, IA 50627 TELEPHONE: 641.858.5058 FAX: 641.858.3182

SHOP DRAWINGS SHALL BE INDEPENDENT DRAWINGS WITH ADEQUATE DIMENSIONING FOR FABRICATION OF INDIVIDUAL PIECES OF EACH COMPONENT. PHOTOCOPIES OF PLAN DRAWINGS AND NON-CONTRACTOR APPROVED PLANS WILL BE REJECTED.

THESE DRAWINGS SHALL NOT BE SENT TO IOWA D.O.T. OFFICE OF BRIDGES AND STRUCTURES

27 T-88N Tipton 🕌 T-87N 250TH S 20 255TH S 260TH ST 25 R-22W R-21W

LOCATION MAP SCALE

0.5 1.0 1.5 2.

STA 358+01 PROPOSED 110'-0 x 30'-6 CONTINUOUS CONCRETE **SLAB BRIDGE** FHWA# 175790



PROJECT NUMBER:BRS-SWAP-CO42(63)--FF-42

	INDEX OF SHEETS
NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES AND REFERENCE NOTES
3	SITUATION PLAN AND LONGITUDINAL SECTION
4	GENERAL PLAN
5	PROFILE
6-8	SOUNDING DATA
9-10	TABULATIONS
11	SUPERSTRUCTURE DETAILS

	MILEAGE SUMMARY		
DIV.	LOCATION	LIN.FT.	MILES
	STA 356+04 - 359+94 BRIDGE AT STA. 358+01	390	0.074
	TOTAL PROJECT		0.074

	S	TANDARD RO	AD PLAN	S			
THE FOLLOWING STANDARD PLANS SHALL BE CONSIDERED APPLICABLE TO CONSTRUCTION WORK ON THIS PROJECT.							
IDENTIFICATION	DATE	IDENTIFICATION	DATE	IDENTIFICATION	DATE		
BA-200	04-16-19	DR-211	04-21-20	PV-101	04-21-20		
BA-202	10-20-15	EW-301	10-20-15	SI-172	04-19-16		
BA-221	04-18-17	EW-401	10-20-15	SI-173	04-19-16		
BA-225	10-17-17	EW-501	10-20-15	SI-211	10-18-16		
BR-102	10-17-17	LS-635	10-18-16	TC-252	04-21-20		
DR-104	04-19-16	PM-110	04-21-20				

	В	RIDGE ST	ANDARDS		
THE I	FOLLOWING BRIDGE STANDARDS	SHALL BE CONSIDERE	D APPLICABLE TO CON	TRUCTION WORK ON THIS PROJE	CT.
STANDARD	DATE ISSUED	LATEST REVISION	STANDARD	DATE ISSUED	LATEST REVISION
J30-01-06	NOVEMBER, 2006	06-13	J30-34-06	NOVEMBER, 2006	06-13
J30-01A-06	NOVEMBER, 2006	06-13	J30-39-06	NOVEMBER, 2006	07-09
J30-10E-06	NOVEMBER, 2006	07-2016	J30-43-06	NOVEMBER, 2006	12-08
J30-11E-06	NOVEMBER, 2006	07-09	J30-44-06	NOVEMBER, 2006	07-2016
J30-20-06	NOVEMBER, 2006	06-12	J30-45-06	NOVEMBER, 2006	12-08
J30-21-06	NOVEMBER, 2006	07-09	J30-46-06	NOVEMBER, 2006	09-14
J30-23-06	NOVEMBER, 2006	05-14	J30-47-06	NOVEMBER, 2006	07-2016
J30-24-06	NOVEMBER, 2006	07-09	P10L		07-2019

	Lance Granzow		Chairperson	
	Lance Granzow		Champerson	!
	BJ Hoffman] (
`	Renee McClellan]
<i>)</i> .		Approved Board of Supervisors		١L

TAYLOR CASEY ROLL 23210

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

Signature TAYLOR CASEY ROLL

My license renewal date is: December 31, 2021 Pages or sheets covered by this seal: Sheets 1 thru 11

2017 AADT 290 V.P.D

HARDIN COUNTY

FHWA NO. 175790

NORTH

PROJECT NUMBER: BRS-SWAP-CO42(63)--FF-42

SHEET 1 OF 11

		ESTIMATED QUANT	ITIES					
ITEM NO.	ITEM CODE	ITEM	UNIT	2 ABUTS.	2 PIERS	SUPER	TOTAL	AS BUILT
1	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY				667.0	
2	2104-2710020	EXCAVATION, CL 10, CHANNEL	CY				210.0	
3	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY				500.0	
4	2115-0100000	MODIFIED SUBBASE	CY				62.6	
5	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON				79.0	
6	2123-7450020	SHOULDER FINISHING, EARTH	STA				5.60	
7	2301-0690210	BRIDGE APPROACH, TWO LANE	SY				389.2	
8	2301-1033080	STANDARD OR SLIP FORM PORTLAND CEMENT CONCRETE PAVEMENT, CLASS C, CLASS 3 DURABILITY, 8 IN.	SY				317.8	
9	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS				1.00	
10	2402-2720000	EXCAVATION, CL 20	CY				111	
11	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	22.2		234.3	256.5	
12	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	3116		62,970	66,086	
13	2414-6424124	CONCRETE OPEN RAIL, TL-4	LF				242.0	
14	2422-0360018	APRON, UNCLASSIFIED, 18 IN., INSTALL ONLY	EACH				4	
15	2422-1722018	CULVERT, UNCLASSIFIED ENTRANCE PIPE, 18 IN., INSTALL ONLY	LF				80	
16	2501-0201042	PILE, STEEL, HP 10X42	LF	10 @ 50'	20 @ 60'		1700	
17	2501-5478042	CONCRETE ENCASEMENT STEEL H PILE, HP 10X42 (P10L TYPE 3)	LF		20 @ 19.2'		384.0	
18	2505-4008120	REMOVAL OF STEEL BEAM GUARDRAIL	LF				316.0	
19	2505-4008420	STEEL BEAM GUARDRAIL BARRIER TRANSITION SECTION, BA-221	EACH				4	
20	2505-4021010	STEEL BEAM GUARDRAIL END ANCHOR, BOLTED	EACH				4	
21	2505-4021722	STEEL BEAM GUARDRAIL TANGENT END TERMINAL, BA-225	EACH				4	
22	2507-3250005	ENGINEERING FABRIC	SY				500.0	
23	2507-6800061	REVETMENT, CLASS E	TON				515.0	
24	2510-6745850	REMOVAL OF PAVEMENT	SY				705.3	
25	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT- BASED	STA				12.68	
26	2528-2518000	SAFETY CLOSURE	EACH				4	
27	2528-8445110	TRAFFIC CONTROL	LS				1.00	
28	2533-4980005	MOBILIZATION	LS				1.00	

GENERAL NOTES

ACCESS SHALL BE MAINTAINED TO INDIVIDUAL PROPERTIES DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

THE ENGINEER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING AN INDEPENDENT CHECK OF ALL CONSTRUCTION STAKES PLACED FOR THE PROJECT. THIS INDEPENDENT CHECK SHALL BE SUFFICIENT TO UNDERSTAND THE PLACEMENT AND INTENT OF THE STAKES.

EROSION CONTROL, RURAL GRASS SEEDING, FERTILIZING, AND MULCHING SHALL BE DONE BY HARDIN COUNTY IRVM DEPARTMENT.

THE CONTRACTOR IS ENCOURAGED TO TAKE FULL ADVANTAGE OF SPECIFICATION 1105.14 - VALUE ENGINEERING INCENTIVE PROPOSAL

COUNTY BRIDGE STANDARDS ARE AVAILABLE FROM THE IOWA DEPARTMENT OF TRANSPORTATION AT www.iowadot.gov/bridge/countybrgstd.htm.

ANY TEMPORARY STREAM CROSSINGS SHALL INCLUDE ENOUGH CULVERTS TO ACCOMMODATE LOW FLOWS AND MUST BE REMOVED AFTER COMPLETION OF WORK ON THIS PROJECT. TEMPORARY STREAM CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD ROAD PLAN EW-401. THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY CROSSINGS, INCLUDING CULVERTS, SHALL BE INCLUDED IN THE PRICE BID FOR "MOBILIZATION."

PILE NOTES

THIS PROJECT USES THE LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHODOLOGY FOR DETERMINING CONTRACT PILE LENGTH AND NOMINAL AXIAL BEARING RESISTANCE. NOMINAL AXIAL BEARING RESISTANCES WILL BE LARGER THAN BEARING VALUES IN THE PAST, BUT CONSTRUCTION CONTROL BLOW COUNTS WILL BE APPROXIMATELY THE SAME. A WEAP ANALYSIS AND BEARING GRAPH WILL BE PROVIDED BY THE COUNTY THAT GIVES THE RELATIONSHIP BETWEEN REQUIRED NOMINAL AXIAL BEARING RESISTANCE AND BLOW COUNT. FOR THE CONTRACTOR'S BIDDING PURPOSES, PARTICULARLY FOR THE SIZING OF THE PILE DRIVING HAMMER, THE APPROXIMATE PREVIOUS DESIGN METHODOLOGY BEARING VALUES AT END OF DRIVE (EOD) ARE GIVEN BELOW. THESE VALUES SHALL NOT BE USED FOR CONSTRUCTION CONTROL AND ARE GIVEN ONLY FOR COMPARATIVE PURPOSES.

THE PREVIOUS DESIGN BEARING FOR THE ABUTMENTS WOULD HAVE BEEN ABOUT 34 TONS. THE PREVIOUS BEARING FOR THE PIER PILES WOULD HAVE BEEN ABOUT 32 TONS.

THE CONTRACT LENGTH OF 45 FEET FOR THE NORTH AND SOUTH ABUTMENT PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD OF PER PILE (PU) OF 97 KIPS, AND A EOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING. THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF THE FOOTING. THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE NORTH ABUTMENT PILES IS 72 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

THE CONTRACT LENGTH OF 50 FEET FOR THE PIER PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 94 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING. THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF FOOTING. THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE PILE S IS 70 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

ESTIMATE REFERENCE INFORMATION

- 1 INCLUDES MATERIAL FOR BRIDGE APPROACHES, ABUTMENT BERMS, AND GUARDRAIL BLISTERS. TYPE "A" COMPACTION WILL BE REQUIRED. FILL QUANTITY INCLUDES AN ADDITIONAL 35% FOR SHRINKAGE.
- 2 INCLUDES THE COST TO CLEAR THE CHANNEL TO THE SHAPE, DEPTH AND EXTENT SHOWN ON THE SITUATION PLAN. SUITABLE CHANNEL EXCAVATION MATERIAL MAY BE USED FOR CONSTRUCTION OF ABUTMENT BERM AND SLOPES. UNSUITABLE OR EXCESS MATERIAL MAY BE WASTED ON SITE AS DIRECTED BY THE ENGINEER. IT IS ANTICIPATED THAT NO ADDITIONAL FILL WILL BE REQUIRED ON THIS PROJECT. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- 3 QUANTITY PERTAINS TO WORK WITHIN THE PROJECT LIMITS. PLAN QUANTITY ESTIMATED ON PLACEMENT OF 4 INCHES OVER DISTURBED AREAS NOT COVERED BY GRANULAR MATERIAL. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- 4 MODIFIED SUBBASE TO BE PLACED AT A 6 INCH DEPTH. SEE TYPICAL CROSS SECTION ON SHEET 10.
- 5 SEE TYPICAL SECTION ON SHEET 10.
- INCLUDES ALL WORK NECESSARY TO CONSTRUCT AND SHAPE SHOULDER AREAS.
- 7 SEE TABULATION ON SHEET 9. CERTIFIED PLANT INSPECTION IS REQUIRED.
- 8 SEE TYPICAL SECTION ON SHEET 10. CERTIFIED PLANT INSPECTION IS REQUIRED. ALL PAVEMENT JOINTS SHALL BE CLEANED AND SEALED.
- THE EXISTING BRIDGE AT STATION 358+08 IS A 100' x 24' CONTINUOUS CONCRETE SLAB BRIDGE BUILT IN 1959. THE STRUCTURE HAS A CONCRETE DECK AND ABUTMENTS WITH TIMBER PILING AND CONCRETE PIER PILING. ALL SALVAGEABLE AND UNSALVAGEABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM SITE BY THE CONTRACTOR. THE EXISTING STRUCTURE SHALL BE REMOVED TO AN ELEVATION AT LEAST 1' BELOW FINISHED GROUND LINE AND TO THE EXTENT THAT IT WILL NOT INTERFERE WITH THE NEW CONSTRUCTION. BROKEN CONCRETE FROM THE DECK WITH SIMILAR GRADATION TO CLASS 'E' REVETMENT MAY BE PLACED ON THE BANKS AS DIRECTED BY THE ENGINEER. ALL REINFORCING SHALL BE CUT OFF FLUSH WITH THE CONCRETE. ALTERNATELY, THE CONTRACTOR MAY DISPOSE OF THE BROKEN CONCRETE OFF SITE AT A LOCATION PROVIDED BY THE CONTRACTOR
- UNSUITABLE OR EXCESS MATERIAL MAY BE WASTED ON SITE AS DIRECTED BY THE ENGINEER. QUANTITY BASED ON ASSUMPTION THAT CHANNEL EXCAVATION AND BERM CONSTRUCTION HAVE BEEN COMPLETED. QUANTITY INCLUDES MATERIAL EXCAVATED DURING REMOVAL AND DISPOSAL OF EXISTING ENTRANCE PIPES. SEE ITEMS 14 AND 15 THIS SHEET AND SITUATION PLAN FOR LOCATIONS. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- ALL STRUCTURAL CONCRETE FOR THE BRIDGE DECK SHALL BE CLASS "C"; SUBSTITUTION OF CLASS "D" CONCRETE IS NOT ALLOWED. INCLUDES COST OF FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION) FLOODABLE BACKFILL, POROUS BACKFILL, SUBDRAIN OUTLET, AND GEOTEXTILE FABRIC AT ABUTMENTS AND SHALL INCLUDE COSTS OF ALL MATERIAL AND LABOR TO CONSTRUCT THE WING ARMORING AS DETAILED ON SHEET J30-46-06. WATER REQUIRED FOR FLOODING WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR HEATING AND PROTECTION OF CONCRETE, IF NECESSARY. THE DECK SHALL BE TINED AND SPRAYED WITH WHITE PIGMENTED CURING COMPOUND IMMEDIATELY AFTER FINISHING OPERATIONS ARE COMPLETED AND BURLAP PLACED WITHIN 30 MINUTES AFTER THE DECK HAS BEEN TINED AND SPRAYED. WATER SHALL BE APPLIED TO THE BURLAP COVERING FOR A PERIOD OF 4 CALENDAR DAYS. CERTIFIED PLANT INSPECTION IS REQUIRED. BRIDGE DECK SMOOTHNESS DOES NOT APPLY TO THIS PROJECT. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- 12 ALL REINFORCING STEEL SHALL BE GRADE 60.
- 13 ALL STRUCTURAL CONCRETE FOR THE RAIL SHALL BE CLASS "C"; SUBSTITUTION OF CLASS "D" CONCRETE IS NOT ALLOWED. CERTIFIED PLANT INSPECTION IS REQUIRED. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR HEATING AND PROTECTION OF CONCRETE. IF NECESSARY.
- 14-15 18" CMP ENTRANCE CULVERTS, BANDS, AND APRONS WILL BE FURNISHED BY THE CONTRACTING AUTHORITY. BID ITEMS INCLUDE ALL COSTS ASSOCIATED WITH THE REMOVAL AND DISPOSAL OF TWO EXISTING 24" RCP ENTRANCE CULVERTS AND THE INSTALLATION AND BACKFILLING OF 2 CMP ENTRANCE CULVERTS AND 6:1 SAFETY APRONS. SEE SITUATION PLAN FOR LOCATIONS
- 16 ALL PILING SHALL BE DRIVEN TO FULL PENETRATION IF PRACTICLE. SEE LONGITUDINAL SECTION ALONG & ROADWAY SHEET 3 AND PILE NOTES THIS SHEET FOR MORE INFORMATION.
- THE UNIT PRICE BID FOR ENCASEMENT SHALL BE FULL PAYMENT FOR FURNISHING AND PLACING MATERIAL AND, WHERE NECESSARY, EXCAVATION. SEE STANDARD P10L FOR DETAILS.

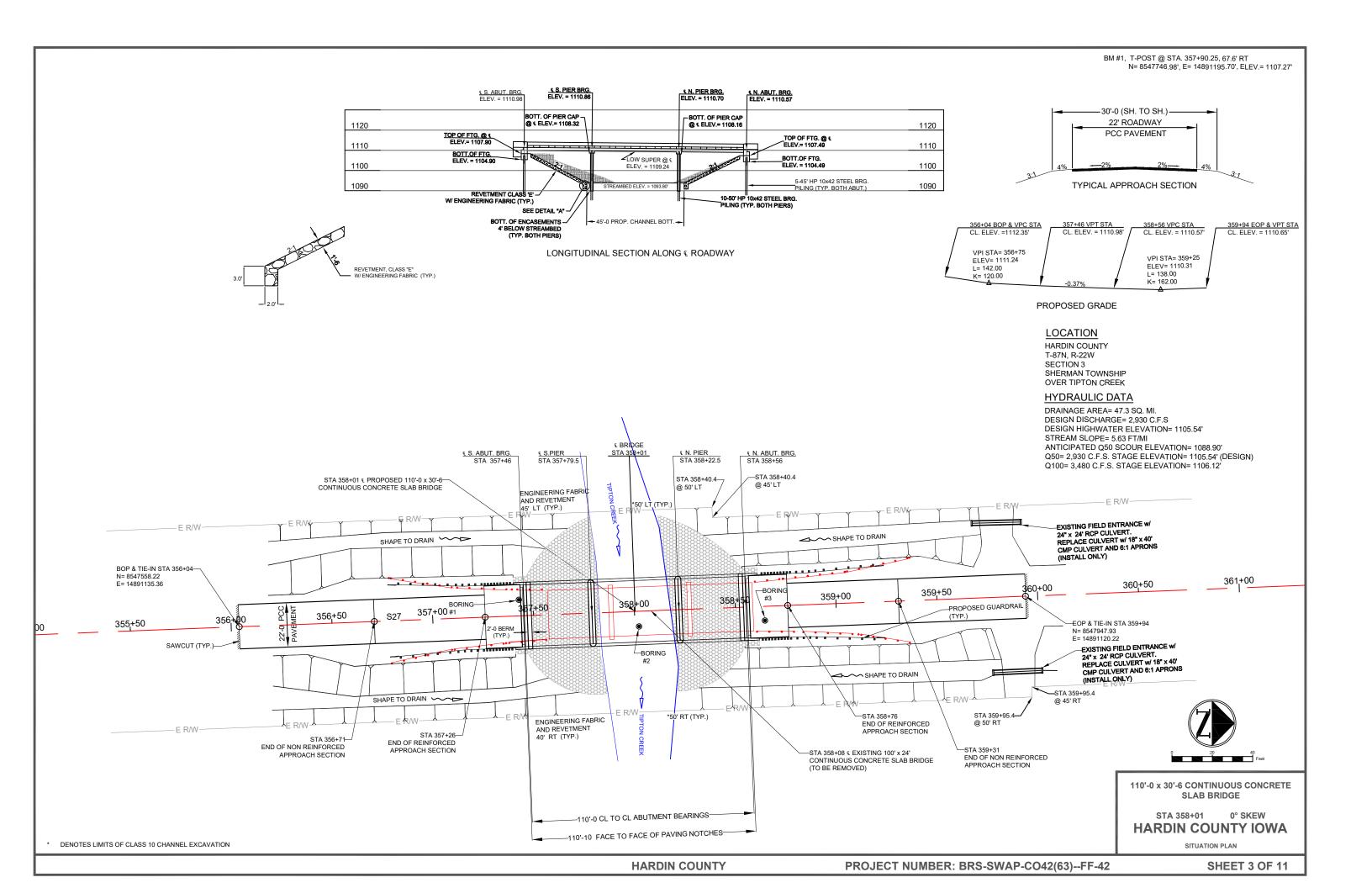
 NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR HEATING AND PROTECTION OF CONCRETE. IF NECESSARY, CERTIFIED PLANT INSPECTION IS REQUIRED.
- 18 SEE TABULATIONS, SHEET 10. ALL SALVAGEABLE AND UNSALVAGEABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- 19-21 SEE TABULATION ON SHEET 9.
- 22 ENGINEERING FABRIC TO BE PLACED UNDER ALL CLASS E REVETMENT.
- 23 REVETMENT IS TO BE PLACED AT A THICKNESS OF 1'-6". SEE SITUATION PLAN, SHEET 3 FOR LIMITS. THE UNIT PRICE BID FOR "REVETMENT, CLASS E" SHALL INCLUDE COST OF LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PLACE CLASS E REVETMENT ON CHANNEL BANKS IN ACCORDANCE WITH SECTION 2507 OF THE CURRENT STANDARD SPECIFICATIONS.
- 24 SEE TABULATIONS, SHEET 9. EXISTING PAVEMENT CONSISTS OF APPROXIMATELY 9 INCHES OF HMA. SAW CUTS ARE TO BE MADE AT THE STATION INDICATED OR AT THE NEAREST TRANSVERSE PAVEMENT JOINT, AS DIRECTED BY THE ENGINEER.
- 25 SEE TABULATIONS, SHEET 9. THE LOCATION OF "NO PASSING" ZONE LINES SHALL BE LOCATED IN THE FIELD
- 26 SEE TABULATIONS, SHEET 9 AND STANDARD ROAD PLAN TC-252
- 27 THE ROAD WILL BE CLOSED TO TRAFFIC. SEE SHEET 1 FOR TRAFFIC CONTROL PLAN.

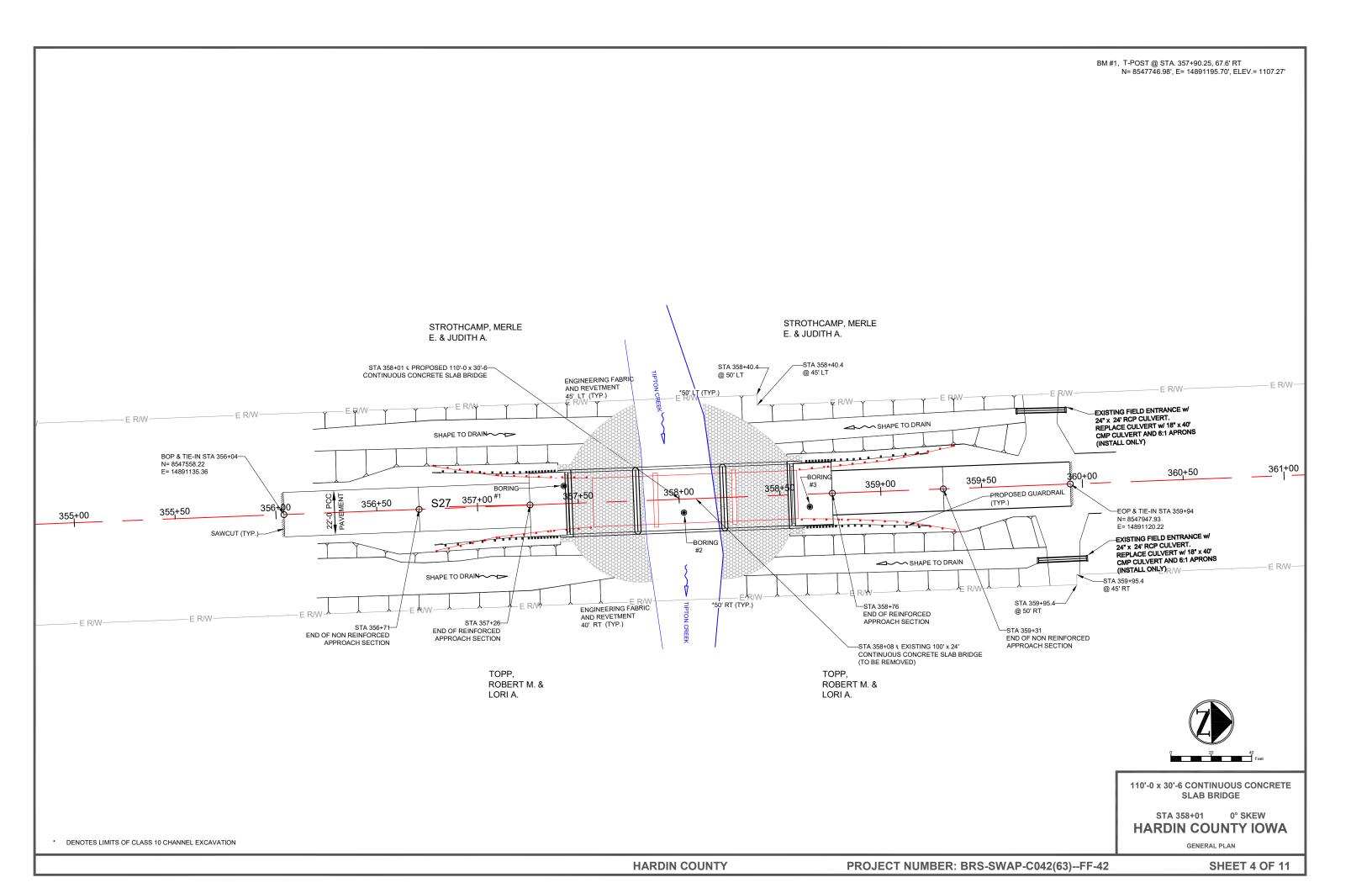
110'-0 x 30'-6 CONTINUOUS CONCRETE SLAB BRIDGE

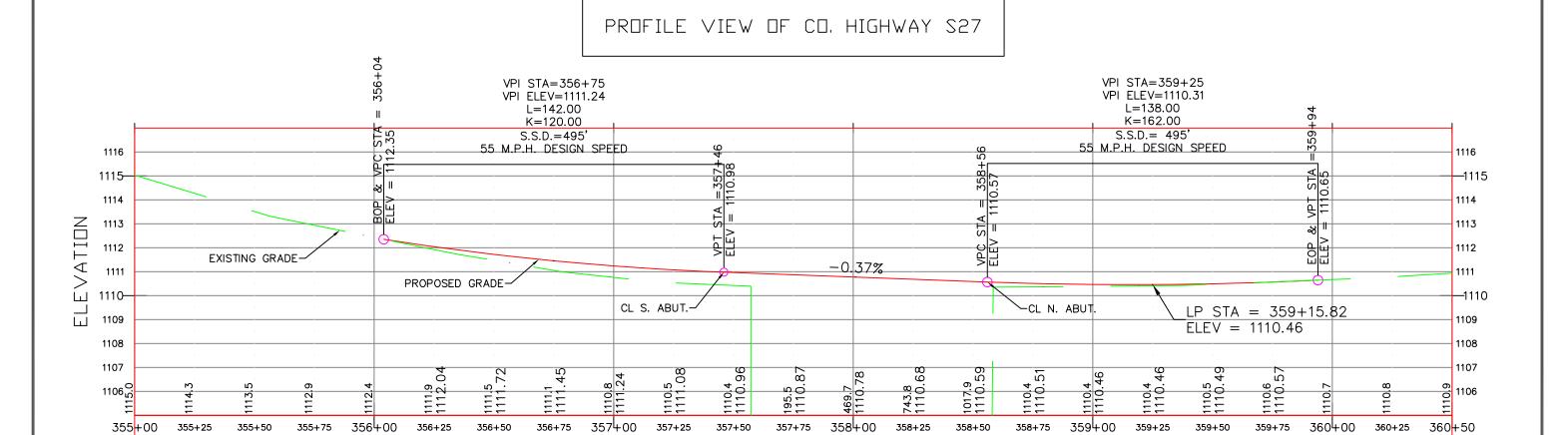
INTEGRAL ABUTMENTS MONOLITHIC P10L PIERS

STA 358+01 0° SKEW
HARDIN COUNTY IOWA

ESTIMATED QUANTITIES, ESTIMATE REFERENCE INFORMATION AND GENERAL NOTES







STATION

HARDIN COUNTY

110'-0 x 30'-6 CONTINUOUS CONCRETE SLAB BRIDGE STA 358+01 0° SKEW HARDIN COUNTY IOWA

PROJECT NUMBER: BRS-SWAP-CO42(63)--FF-42

SHEET 5 OF 11

			BORING	LOG NO. 1					Р	age 1 of 2
PR	OJEC	T: Hardin County Bridge 12015 R	eplacement	CLIENT: Hard Eldoi	in County IA ra, IA					<u> </u>
SIT	ГЕ:	Sherman Township; County Ro feet south of 220th Street, Hard	d S27; ~1,000 din County, IA							
GRAPHIC LOG		FION N. abutment; 7.5' E of CL; Sta. 358+64.5 s: 42.381° Longitude: -93.3858°		Surfa	ce Elev.: 1110.5 (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
	0.8 A	SPHALT			ELEVATION (Ft.) 1109.5		 	.,		
$\otimes\!\!\!\otimes$	FI	LL - SAND AND GRAVEL, brown, moist				-	-			
		OOT - STIFF SANDY CLAY FILL LL - LEAN CLAY, with sand, trace organics	s, with zones of san	d, dark brown, moist	1108.5	-				
						5 -		X	18	2-4-3 N=7
	9.5				1101	-				3-2-2
		OOT - STIFF SILTY CLAY IL <mark>TY CLAY (CL-ML)</mark> , trace sand and organio	cs, gray, moist			10- -	-	X	18	N=4 2000 (HP
						- -				2-3-4
						15- - -	-	X	18	2-3-4 N=7 3000 (HP
						20-		X	18	3-4-5 N=9 5000 (HP
		OOT - FIRM SANDY GLACIAL CLAY			1087.5	- -				
	<u>S</u>	ANDY LEAN CLAY (CL), trace gravel, with c	occasional sand lay	ers, brown gray, moi	st	25- -		X	18	5-5-8 N=13 9000 (HP
						-		X	18	4-5-9 N=14
						30-				9000 (HP
	Stratifi	ication lines are approximate. In-situ, the transition ma	y be gradual.		Hammer Type: Au	tomatic				
Soli	ncement it id stem a nination.	Method: uger to 9 feet then mud rotary to boring			Notes:			-		
Bor	ched with	filled with soil cuttings, bentonite chips, and asphalt upon completion.								
		ATER LEVEL OBSERVATIONS observed prior to mud rotary	76		Boring Started: 04-07	7-2020	E	Boring	Comp	oleted: 04-07-20
	INOTIE	observed prior to mud foldry		SCOU	Drill Rig: # 589			Driller	: RF	
			3105 Capita Cedar	al Way Ste 5	1			Exhibi		A-1

		BORING	LOG NO. 1					Р	age 2 of 2
PROJE	CT: Hardin County Bridge 12015 R	eplacement	CLIENT: Hard Eldo	in County IA a, IA					
SITE:	Sherman Township; County R feet south of 220th Street, Har	d S27; ~1,000 din County, IA							
GRAPHIC LO GRAPHIC LO			Surfa	ce Elev.: 1110.5 (Ft.) ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
	DOT - FIRM SANDY GLACIAL CLAY (continued in the sandy LEAN CLAY (CL), trace gravel, with the sandy LEAN (CL).		ers, brown gray, moi	st	_				
					35— -		X	18	4-5-9 N=14 9000+ (HF
40.5	LIMESTONE, highly weathered and broken, I	ight brown		1070	1 _		X	17	4-5-7 N=12 8500 (HP
41.5	LIMESTONE, with highly weathered layers, li			1069	-	-			
43.6	Boring Terminated at 43.6 Feet			1067				0 1	50/1"
					1				
Advancemen	auger to 9 feet then mud rotary to boring	ay be gradual.		Hammer Type: A	utomatic				
Advancemen Solid stem termination Abandonmen Boring bac	t Method: auger to 9 feet then mud rotary to boring 	ay be gradual.			utomatic				
Advancemen Solid stem termination Abandonmer Boring bac patched wi	t Method: auger to 9 feet then mud rotary to boring t Method: kfilled with soil cuttings, bentonite chips, and	75	əcon			E	Soring	Сотр	leted: 04-07-20

STA 358+01 0° SKEW HARDIN COUNTY IOWA

		DUKING	LOG NO. 2				P	Page 1 of 2
PR	OJECT: Hardin County Bridge 12015 Re	eplacement	CLIENT: Hardin County IA Eldora, IA					
SIT	TE: Sherman Township; County Rd feet south of 220th Street, Hard	S27; ~1,000 in County, IA						
GRAPHIC LOG	LOCATION Bridge deck; 8' E of CL; Sta. 358+02.5 Latitude: 42.3808° Longitude: -93.3857°		Surface Elev.: 1110.5 (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
	DEPTH		ELEVATION (Ft.)		W OBS	SA	Ä	L
g A	CONCRETE, (bridge deck)		1109.	5 _				
	bottom of bridge deck to water surface 14.0 WATER		1096.	5 — 5 — — — — — — — — — — — — — — — — —				
	16.0 IDOT - SILTY SAND SAND (SP), trace gravel, fine to coarse graine 19.0 IDOT - STIFF SILTY CLAY	d, brown, wet	1094.	-	-			8-4-4
	22.0 IDOT - FIRM SANDY GLACIAL CLAY SANDY LEAN (CL.), trace gravel, brown	gray, wet	1088.	20- - - -	-	X	7	N=8 \ 6000 (HF
				25-	-	X	17	4-5-5 N=10 9000 (HF
				30-	-	X	18	3-4-5 N=9 8500 (HF
	Stratification lines are approximate. In-situ, the transition may	be gradual.	Hammer Type: /	utomatic			Ш	
Solid term	cement Method: d stem auger to 2 feet then mud rotary to boring innation. Ionment Method: Ige deck patched with concrete upon completion.		Notes:					
	WATER LEVEL OBSERVATIONS		2	7 0000	T.	Davin		-1-1-1-01-07-0
		lerr	Boring Started: 04- Drill Rig: # 589	or-2020	\dashv			pleted: 04-07-20
			Drill Rig: # 589		- [1	Driller	. RF	

PROJEC	T: Hardin County Bridge 12015	Replacement	CLIENT: Hardin County IA Eldora, IA			•		age 2 of 2
SITE:	Sherman Township; County feet south of 220th Street, Ha	Rd S27; ~1,000 ardin County, IA	Eldora, IA					
의	ION Bridge deck; 8' E of CL; Sta. 358+02.5 42.3808° Longitude: -93.3857°		Surface Elev.: 1110.5 (FL) ELEVATION (FL)	DЕРТН (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
///// ID	OT - FIRM SANDY GLACIAL CLAY <i>(co.</i> N DY LEAN CLAY (CL) , trace gravel, bro			- 35— - -		X	18	3-5-8 N=13 7500 (HP
39.0 S A	NDSTONE, poorly cemented, light brow	n white	1071.5	40 -		X	15	5-13-23 N=36 3000 (HP
43.0	MESTONE, with occasional highly weath	ered layers, light brow		- - 45- -			0	50/0.5"
	ring Terminated at 48.5 Feet							25/0"
Advancement M Solid stem au termination.	ger to 2 feet then mud rotary to boring	may be gradual.	Hammer Type: At	utomatic				
- '	TER LEVEL OBSERVATIONS	1		7-2020				

STA 358+01 0° SKEW
HARDIN COUNTY IOWA

BORING	LOG NO. 3				Р	age 1 of
PROJECT: Hardin County Bridge 12015 Replacement	CLIENT: Hardin County IA Eldora, IA					<u> </u>
SITE: Sherman Township; County Rd S27; ~1,000 feet south of 220th Street, Hardin County, IA						
U LOCATION S. abutment; 6' W of CL; Sta. 357+42.5		(;	JEL SNS	PE	(ln.)	E.,
LOCATIONS: abutment; 6' W of CL; Sta. 357+42.5 Latitude: 42.3807° Longitude: -93.3858°		DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
IRAP	Surface Elev.: 1110.5 (Ft.)	DEPT	ATE	MPL	CO	JER RES
DEPTH	ELEVATION (Ft.)		>8	8	器	
0.7 ASPHALT FILL - SAND AND GRAVEL	1110	_				
XXX	1108	_				
IDOT - STIFF SILTY CLAY FILL		_				
FILL - SANDY LEAN CLAY, trace organics, with sand layers, da	rk brown, moist to wet	_				0.01
		5 —	∇	X	9	2-2-3 N=5
		_				
		-	∇			
		-				
		_			16	2-2-2
		10-	1	\triangle	10	N=4
11.5 IDOT - STIFF SILTY CLAY	1099	_				
SILTY CLAY (CL-ML), trace organics and sand, gray, wet		_				
cobbles at about 12.5 feet						
		15-		X	18	2-4-4 N=8
		.5			\vdash	4500 (I
		_				
		_				
		_		\bigvee	15	2-3-3
		20-			<u> </u>	N=6 5000 (I
		-				
22.0	4007 F	-				
IDOT - FIRM SANDY GLACIAL CLAY	1087.5	-				
SANDY LEAN CLAY (CL/SC), trace gravel, with occasional sand	layers, brown gray, wet	25		X	16	3-4-9 N=9
		25-				8500 (I
		_				
		_		∇	18	3-4-
		30-			"	N=8 6000 (I
		_				
7743		_				
Stratification lines are approximate. In-situ, the transition may be gradual.	Hammer Type: Au	itomatic				
Advancement Method:	Notes:					
Solid stem auger to 9 feet then mud rotary to boring termination.	110100.					
Abandonment Method: Boring backfilled with soil cuttings, bentonite chips, and						
patched with asphalt upon completion.						
WATER LEVEL OBSERVATIONS ✓ 7.5' observed while drilling	Boring Started: 04-08	3-2020	ļ	Boring	g Comp	leted: 04-08
✓ 7.5 observed while drilling ✓ 5' observed after drilling	Drill Rig: # 589			Driller	r: RF	
	al Way, Ste 5					

			LOG NO. 3				Р	age 2 of 2
	OJECT: Hardin County Bridge 12015 R		CLIENT: Hardin County IA Eldora, IA					
SITE	E: Sherman Township; County Ro feet south of 220th Street, Hard	d S27; ∼1,000 lin County, IA						
GRAPHIC LO	LOCATION S. abutment; 6° W of CL; Sta. 357+42.5 Latitude: 42.3807° Longitude: -93.3858°		Surface Elev.: 1110.5 (Ft.) ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
	IDOT - FIRM SANDY GLACIAL CLAY (contint SANDY LEAN CLAY (CL/SC), trace gravel, wi	<i>ued)</i> th occasional sand		_				
				35- -		X	18	2-4-7 N=11 5000 (HP)
				-		X	15	3-5-11 N=16
4	12.0 LIMESTONE, highly weathered and broken, li	aht brown	1068.5	40- - -				8000 (HP)
# **	43.5 Boring Terminated at 43.5 Feet	gnt brown	1067	_			0	35/0"
Solid	Stratification lines are approximate. In-situ, the transition ma ement Method: stem auger to 9 feet then mud rotary to boring nation.	y be gradual.	Hammer Type: Au Notes:	itomatic				
Borin	nment Method: g backfilled with soil cuttings, bentonite chips, and led with asphalt upon completion.							
— —	WATER LEVEL OBSERVATIONS 7.5' observed while drilling		Boring Started: 04-08 Drill Rig: # 589	3-2020	\rightarrow			leted: 04-08-2020
						Driller:		

STA 358+01 0° SKEW
HARDIN COUNTY IOWA

Totals

PAVEMENT MARKING LINE TYPES

*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.

See PM-110
***MNY4 - Factor of 1.00 as value includes number of 4-inch passes to cover median nose area.

BCY4: Broken Centerline (Yellow) @ 0.25 ELY4: Edge Line Left (Yellow) @ 1.00

DCY4: Double Centerline (Yellow) @ 2.00

This Data Entry Sheet fills Tab 108-22 effective 04-16-13

NPY4: No Passing Zone Line (Yellow) @ 1.25

BLW4: Broken Lane Line (White) @ 0.25

ELW4: Edge Line Right (White) @ 1.00

				Location									Ler	ngth by L	ine Type ((Unfactore	d)						
Road ID	Station to	Station	Length	Dir. of	Marking Type	Side	ВС	CY4* D	Y4 NPY	** BL	W4 ELW	4	ELY4										Remarks
			(STA)	Iravel		L C	R S	STA S	TA ST	X S1	ΓA ST <i>A</i>	١ .	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	
S27	356+04.00	359+94.00	3.90	BOTH	Waterborne/Solvent Paint	X			3.	90													
S27	356+04.00	359+94.00	3.90	BOTH	Waterborne/Solvent Paint		X				7.	80											
			0.00																				
			0.00			FACT	OR:		1.	25	1.	99											
			0.00																				
			0.00			TO	AL:		4.	88	7.	80											GRAND TOTAL = 12.68 STA

STEEL BEAM GUARDRAIL AT CONCRETE BARRIER OR BRIDGE RAIL END SECTION

Possible Standards: BA-200, BA-201, BA-202, BA-205, BA-206, BA-210, BA-211, BA-221, BA-225, BA-250, BA-260, LS-625, LS-626, LS-630, LS-635, SI-172, SI-173 and SI-211.

1) Lane(s) to which the obstacle is adjacent.
2) Not a bid item. Incidental to guardrail installation.

											1112	S Data Elltry Sil	1111	100 100	OA CITCCE	. VC 10 10	10												
	1	Side	ocation		Barrier	End Terminal	La	yout Lengtl	ns					De	elineators	and Obje	ct Marker	's 2					Bid It	ems					
	4				Transition	Section	BA-250, BA-	260, LS-630	, or LS-635	i					Delineator	Oh	ject Mark	/or					BA	-250 or LS-	530		BA-260 o	r LS-635	
	_ 0	n de			Section		VT1 min = 40.625 for BA-201					Long-Span Sy	stem			00	•	(e)	Bolted End	Post	Steel Beam	Barrier					Barrier	End	
No	ion ffi	tsid	Station	Offset	DA 201	BA-205, BA-206	VT1 min = 25.0 for BA-221	VT1	(VE)	(VT2)	(FT)			SI-211	SI-172		SI-173		Anchor			Transition		End Te	erminal		Transition		Remarks
	ra	Ou			DA-201 - 2	LS-625, LS-626	If VF > 0, then:	VII	VF	VIZ					Type 1	Type 2	Тур	e 3				Section	Tangent	Flared	Tangent	Flared	Section	Tangent	
	t ire	11 11			DA 224	DA 225	VT1 min = 53.125 for BA-201					BA-211		İ	White	OM2-2	OM3-L	OM3-R	BA-202	BA-210	BA-200	BA-201	BA-205	BA-206	LS-625	LS-626	BA-221	BA-225	
	0 0	ΟΣ		FT	BA-221 ->	BA-225	VT1 min = 37.5 for BA-221	LF	LF	LF	LF	STATION	TYPE	TYPE	EACH	EACH	EACH	EACH	TYPE EACH	EACH	LF	EACH	EACH	EACH	EACH	EACH	EACH	EACH	
	. NB	0	357+43	15.8				25.0	-	-	35.2	-	-	2		2	-	1	A 1		-	-	-	-	-	-	1	1	SE CORNER
	SB	0	357+43					25.0	-	-	35.2	-	-	2		2	1	-	A 1		-	-	-	-	-	-	1	1	SW CORNER
	NB	0	358+58					25.0	-	-	35.2	-	-	2		2	1	-	A 1		-	-	-	-	-	-	1	1	NE CORNER
	SB	0	358+58	15.8				25.0	-	-	35.2	-	-	2		2	-	1	A 1		-	-	-	-	-	-	1	1	NW CORNER

BRIDGE APPROACH SECTION

Refer to the BR Series.

NOC U DIU IC	CIII																			
										This	Data Entry	Sheet fills Ta	b 112-6 effec	tive 04-	18-17					
	Loca	tion			F	Approach Pave	ement		Star	ndard Road P	lans		Si	ubdrain						
		Skew	Ahead	T	Pav	Non-Reinf.	Single- Reinf.	Double- Reinf.	Star	BR Series	14113	*		*	*	* Class 'A'	*	*	*	
Bridge Station	End	Skew	Aricud	Thickness	Length	Pavement Area	Pavement	Pavement	Approach	Fixed or Movable	able Abutting	Perforated Subdrain 4"	Subdrain Ou	tlet	Porous Backfill	Crushed Stone	Modified Subbase	Polymer Grid	Special Backfill	Remarks
		Deg	rees				Area	Area	Аррі басіі		Pavement					Backfill				
		LEFT	RIGHT	Inches	FT	SY	SY	SY		Abutment		LF	STA	Side	CY	CY	TON	SY	TON	
358+01.00	SOUTH			10.0	70	122.2	72.4	-	BR-102	Movable	PCC	40	356+86.00	RT	-	-	220	230	-	
358+01.00	NORTH			10.0	70	122.2	72.4	-	BR-102	Movable	PCC	40	359+16.00	RT	-	-	220	230	-	

1	Lane(s)	to which the in	nstalla	tion is adjace	nt.					R	efer to E	W-301	ATIONS		
							This Dat	a Entry S	Sheet fil	ls Tab 10	7-23 eff	ective 1	0-18-11		
		Location					Dime	nsions (I	Feet)				Eart	hwork	
No.	Direction (=) of Traffic	Station	Side	Foreslope at Guardrail	(X1)	(Y1)	 (Y2)	(X3)	(Y3)	X4	Y4	Z	Excavation Class 10	Embankment In Place CY	Remarks
1	N	357+43	R	3:1	25.0	5.0				59.5	6.0	43.0			SE APPROACH
2	S	357+43	L	3:1	25.0	5.0				59.5	6.0	43.0			SW APPROACH
3	N	358+58	R	3:1	25.0	5.0				59.5	6.0	43.0			NE APPROACH
4	S	358+58	L	3:1	25.0	5.0				59.5	6.0	43.0			NW APPROACH
1	1 1											1	1	1	

DEMOLITION (BRIDGE REMOVAL)

SCRAPE SAMPLES WERE TAKEN FROM THE WHITE PAINT LOCATED ON THE NORTHWEST RAILING OF THE BRIDGE TO GET AN INDICATION OF THE EXISTENCE OF THE LEVEL OF TOTAL CHROMIUM AND TOTAL LEAD. THE LABORATORY WAS UNABLE TO ANALYZE SAMPLE BUT IS ASSUMING THAT IT WAS LEAD AND CHROMIUM CONTAINING. NO OTHER SUBSTANCES WERE ANALYZED. THE BIDDER SHOULD NOT RELY ON THE LPA'S TESTING AND ANALYSIS FOR ANY PURPOSE OTHER THAN AS AN INDICATION OF THE EXISTENCE OF THESE TWO CONSTITUENTS.

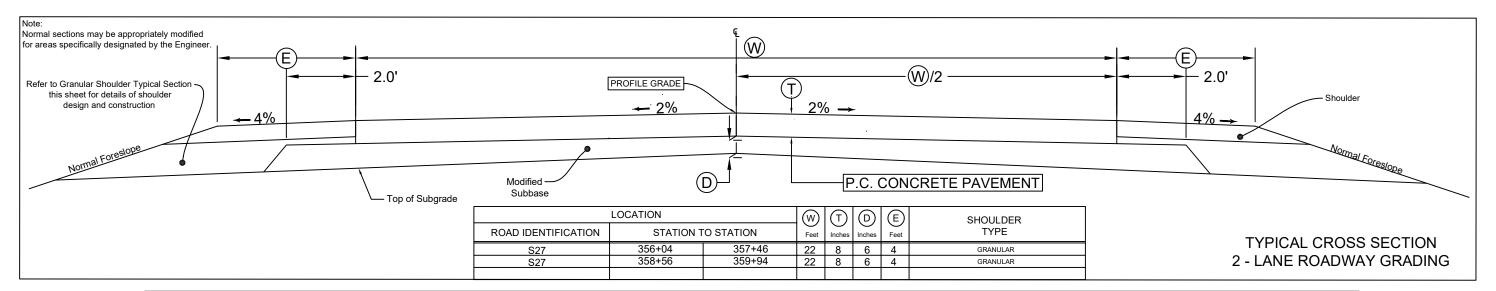
* Not a Bid It	en				Refer	AL OF P	on 102-5								
	This Data Entry Sheet fills Tab 110-1 effective 04-16-13														
Begin Station	End Station	Side	Pavement Type	Length	Width	Area	Area	Saw Cut*	Remarks						
				FT	FT	FT	SY	LF							
356+04.00	357+57.30	BOTH	**	153.3	22	3372.6	374.7	22.0	SOUTH END OF BRIDGE						
358+58.75	359+94.00	BOTH	**	135.25	22	2975.5	330.6	22.0	NORTH END OF BRIDGE						
						TOTAL:	705.3								

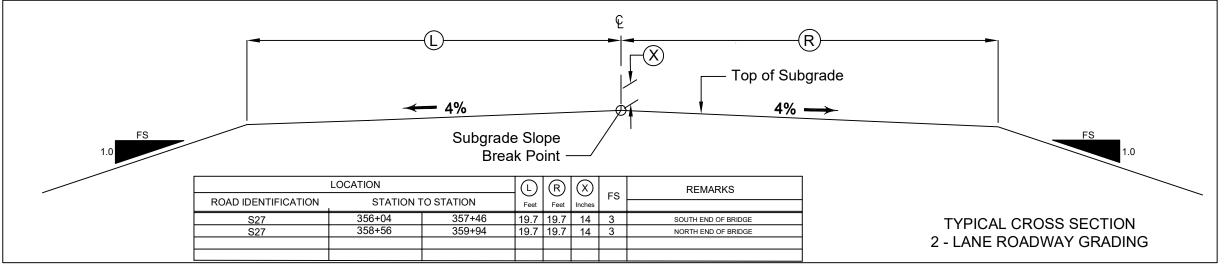
	SAFE	TY CLOS	URES											
Refer t	to Section 25	18 of the Sta	ndard Specifications											
This Data Entry Sheet fills Tab 108-13A effective 08-01-08														
Station	Closur	е Туре	Remarks											
Station	Road Qty.	Hazard Qty.	Kelliai KS											
355+50	-	1	BRIDGE											
360+50	-	1	BRIDGE											
220th St.	1	_	Per TC-252											
230th St.	1	-	Per TC-252											
	2	2	TOTALS											

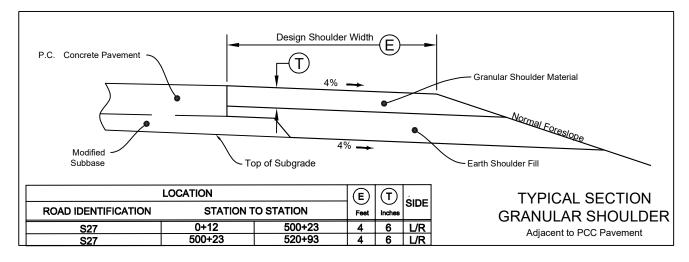
110'-0 x 30'-6 CONTINUOUS CONCRETE **SLAB BRIDGE**

STA 358+01 0° SKEW HARDIN COUNTY IOWA

TABULATIONS





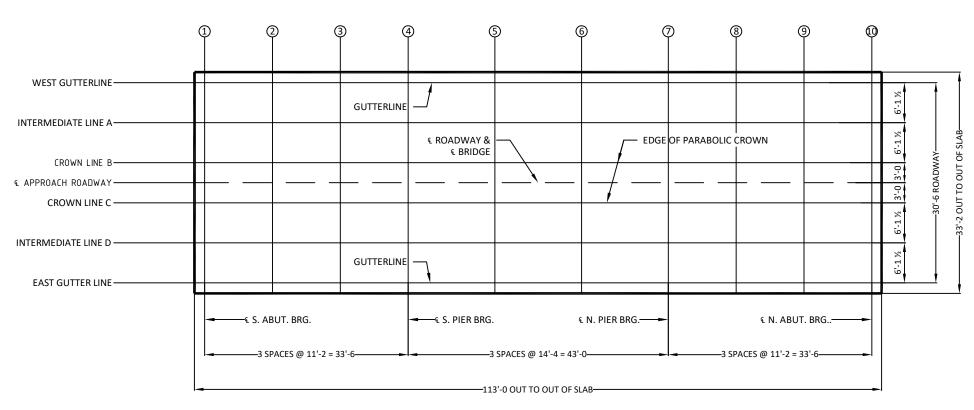


① Ir	ncludes	VAL OF S length of End ta Entry Sheet	Terminals and I	End Ancl	nors.
		Locatio	n		
No.	Direction— of Traffic	Station t	o Station	Side	Removal of Guardrail ① LF
1	SB	356+78.30	357+57.30	LT	79.0
2	NB	356+78.30	357+57.30	RT	79.0
3	SB	358+58.70	359+37.70	LT	79.0
4	NB	358+58.70	359+37.70	RT	79.0
				TOTAL:	316.0

STA 358+01 0° SKEW
HARDIN COUNTY IOWA

TABULATIONS AND TYPICALS





			TOP OF	SLAB ELE	EVATIONS					
	C.L. S.			C.L. S.			C.L. N.			C.L. N.
LOCATION	ABUT.			PIER			PIER			ABUT.
	BRG.			BRG.			BRG.			BRG.
	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10
WEST GUTTER LINE	1110.71	1110.67	1110.63	1110.59	1110.53	1110.48	1110.43	1110.39	1110.34	1110.30
INTERMEDIATE LINE A	1110.83	1110.79	1110.75	1110.71	1110.65	1110.60	1110.55	1110.51	1110.46	1110.42
CROWN LINE B	1110.95	1110.91	1110.87	1110.83	1110.77	1110.72	1110.67	1110.63	1110.58	1110.54
C.L. APPROACH ROADWAY	1110.98	1110.94	1110.90	1110.86	1110.80	1110.75	1110.70	1110.66	1110.61	1110.57
CROWN LINE C	1110.95	1110.91	1110.87	1110.83	1110.77	1110.72	1110.67	1110.63	1110.58	1110.54
INTERMEDIATE LINE D	1110.83	1110.79	1110.75	1110.71	1110.65	1110.60	1110.55	1110.51	1110.46	1110.42
EAST GUTTER LINE	1110.71	1110.67	1110.63	1110.59	1110.53	1110.48	1110.43	1110.39	1110.34	1110.30

INTEGRAL ABUTMENTS MONOLITHIC P10L PIERS STA 358+01 0° SKEW

HARDIN COUNTY IOWA

SUPERSTRUCTURE DETAILS

BROS-SWAP-CO42(102)--SE-42 LETTING DATE OCTOBER 20, 2020

EZ

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RE

9

HAR BRID

SECTION 404 PERMIT AND CONDITIONS CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS

OF ENGINEERS NATIONWIDE PERMIT NO. 14, PERMIT NO. <u>CEMVR-OD-P-2020-0550.</u> A COPY OF THIS PERMIT IS AVAILABLE FROM THE IOWA DOT WEBSITE (http://www.envpermits.iowadot.gov/). THE U.S. ARMY CORPS OF ENGINEERS RESERVES THE RIGHT TO VISIT THE SITE WITHOUT PRIOR NOTICE.

THIS PROJECT IS COVERED BY THE IOWA DNR FLOODPLAIN CONSTRUCTION PERMIT No. 89081FP-01.

UTILITY CONTACTS										
UTILITY	UTILITY CONTACT									
FIBER OPTIC	HUBBARD COOP TELEPHONE - KEN KISSINGER	515-864-2216								
OVERHEAD ELECTRIC	MIDLAND POWER COOPERATIVE - BRUCE KEENEY	515-386-4111								

IOWA ONE CALL 800 / 292-8989 TOLL FREE CALL - BEFORE - YOU - DIG

IOWA DEPARTMENT OF TRANSPORTATION

HIGHWAY DIVISION

PLANS OF PROPOSED IMPROVEMENT ON THE

FARM TO MARKET SYSTEM HARDIN COUNTY

BRIDGE REPLACEMENT-CCS

ON M AVE., OVER THE SOUTH FORK OF THE IOWA RIVER, W_4^1 SECTION 1-T87N-R21W

REFER TO THE PROPOSAL FORM FOR LIST OF APPLICABLE SPECIFICATIONS.

PROJECT TRAFFIC CONTROL PLAN

THIS ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION. LOCAL TRAFFIC TO ADJACENT PROPERTIES WILL BE MAINTAINED. ALL BARICADES, SIGNS, AND SAFETY CLOSURES SHALL BE FURNISHED, PLACED, AND MAINTAINED BY THE CONTRACTOR

TRAFFIC CONTROL DEVICES, PROCEDURES, LAYOUTS, SIGNING, AND PAVEMENT MARKINGS INSTALLED WITHIN THE LIMITS OF THIS PROJECT SHALL CONFORM TO THE "MANUAL ON UNIFORM TAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 130.

DRAWING APPROVAL

ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE SUBMITTED TO AND SIGNED BY A LICENSED ENGINEER. THE APPROVED DRAWINGS SHALL THEN BE SUBMITTED TO HARDIN COUNTY ENGINEERS OFFICE, FOR REVIEW AND APPROVAL

DDRESS: 708 16TH S ELDORA, I

708 16TH ST. ELDORA, IA 50627 TELEPHONE: 641.858.5058 FAX: 641.858.3182

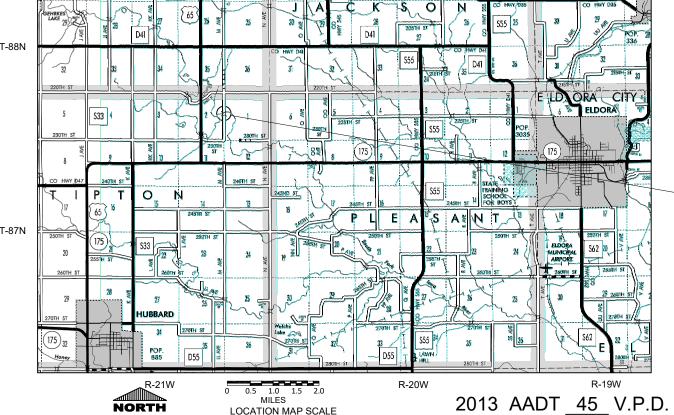
SHOP DRAWINGS SHALL BE INDEPENDENT DRAWINGS WITH ADEQUATE DIMENSIONING FOR FABRICATION OF INDIVIDUAL PIECES OF EACH COMPONENT. PHOTOCOPIES OF PLAN DRAWINGS AND NON-CONTRACTOR APPROVED PLANS WILL BE REJECTED.

THESE DRAWINGS SHALL NOT BE SENT TO IOWA D.O.T. OFFICE OF BRIDGES AND STRUCTURES.

	INDEX OF SHEETS
NO.	DESCRIPTION
1 2	TITLE SHEET ESTIMATE OF QUANTITIES AND REFERENCE NOTES
3 4-5 6	SITUATION PLAN AND LONGITUDINAL SECTION SOUNDING DATA SUPERSTRUCTURE DETAILS

	MILEAGE SUMMARY												
DIV.	LOCATION	LIN.FT.	MILES										
	STA 2+75 - 6+25 BRIDGE AT STA. 4+66	350	0.066										
	TOTAL PROJECT		0.066										

SEE SHEET 2 FOR TABULATION OF BRIDGE STANDARDS AND STANDARD ROAD PLANS



STA 4+66 PROPOSED 130'-0 x 30'-6 CONTINUOUS CONCRETE SLAB BRIDGE 30° SKEW RA FHWA# 175611

Lance Granzow Chairperson

BJ Hoffman

Renee McClellan

Approved Board of Supervisors

TAYLOR CASEY
ROLL
23210

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.

Signature TAYLOR CASEY ROLL

My license renewal date is: December 31, 2021

Pages or sheets covered by this seal: Sheets 1 thru 6

FHWA NO. 175611

HARDIN COUNTY

PROJECT NUMBER: BROS-SWAP-CO42(102)--SE-42

SHEET 1 OF 6

		ESTIMATED QUANT	ITIES					
ITEM NO.	ITEM CODE	ITEM	UNIT	2 ABUTS.	2 PIERS	SUPER	TOTAL	AS BUILT
1	2104-2710020	EXCAVATION, CL 10, CHANNEL	CY				180.0	
2	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY				230.0	
3	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS				1.00	
4	2402-2720000	EXCAVATION, CL 20	CY				80	
5	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	25.6		311.3	336.9	
6	2404-7775000	REINFORCING STEEL	LB	3,458		73,836	77,294	
7	2414-6424124	CONCRETE OPEN RAIL, TL-4	LF				282.92	
8	2501-0201042	PILE, STEEL, HP 10X42	LF	12 @ 45'	24 @ 55'		1860	
9	2501-5478042	CONCRETE ENCASEMENT STEEL H PILE, HP 10X42 (P10L TYPE 3)	LF		24 @ 17.5'		420.0	
10	2507-3250005	ENGINEERING FABRIC	SY				400.0	
11	2507-6800061	REVETMENT, CLASS E	TON				380.0	
12	2528-2518000	SAFETY CLOSURE	EACH				4	
13	2528-8445110	TRAFFIC CONTROL	LS				1.00	
14	2533-4980005	MOBILIZATION	LS				1.00	
15	2536-6745045	REMOVAL OF ASBESTOS	LS				1.00	

GENERAL NOTES

ACCESS SHALL BE MAINTAINED TO INDIVIDUAL PROPERTIES DURING CONSTRUCTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

EROSION CONTROL, RURAL GRASS SEEDING, FERTILIZING, AND MULCHING SHALL BE DONE BY HARDIN COUNTY IRVM DEPARTMENT

MINOR GRADING AND GRANULAR SURFACING ON ROAD SHALL BE DONE BY HARDIN COUNTY.

THE ENGINEER SHALL BE RESPONSIBLE FOR THE CONSTRUCTION SURVEY. THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING AN INDEPENDENT CHECK OF ALL CONSTRUCTION STAKES PLACED FOR THE PROJECT. THIS INDEPENDENT CHECK SHALL BE SUFFICIENT TO UNDERSTAND THE PLACEMENT AND INTENT OF THE STAKES.

THE CONTRACTOR IS ENCOURAGED TO TAKE FULL ADVANTAGE OF SPECIFICATION 1105.14 - VALUE ENGINEERING INCENTIVE PROPOSAL

COUNTY BRIDGE STANDARDS ARE AVAILABLE FROM THE IOWA DEPARTMENT OF TRANSPORTATION AT www.iowadot.gov/bridge/countybrgstd.htm

ANY TEMPORARY STREAM CROSSINGS SHALL INCLUDE ENOUGH CULVERTS TO ACCOMMODATE LOW FLOWS AND MUST BE REMOVED AFTER COMPLETION OF WORK ON THIS PROJECT. TEMPORARY STREAM CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD ROAD PLAN EW-401. THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY CROSSINGS, INCLUDING CULVERTS, SHALL BE INCLUDED IN THE PRICE BID FOR "MOBILIZATION."

OBJECT MARKERS ON ALL FOUR CORNERS OF BRIDGE SHALL BE PLACED BY HARDIN COUNTY.

PILE NOTES

THIS PROJECT USES THE LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHODOLOGY FOR DETERMINING CONTRACT PILE LENGTH AND NOMINAL AXIAL BEARING RESISTANCE. NOMINAL AXIAL BEARING RESISTANCES WILL BE LARGER THAN BEARING VALUES IN THE PAST, BUT CONSTRUCTION CONTROL BLOW COUNTS WILL BE APPROXIMATELY THE SAME. A WEAP ANALYSIS AND BEARING GRAPH WILL BE PROVIDED BY THE COUNTY THAT GIVES THE RELATIONSHIP BETWEEN REQUIRED NOMINAL AXIAL BEARING RESISTANCE AND BLOW COUNT.

FOR THE CONTRACTOR'S BIDDING PURPOSES, PARTICULARLY FOR THE SIZING OF THE PILE DRIVING HAMMER, THE APPROXIMATE PREVIOUS DESIGN METHODOLOGY BEARING VALUES AT END OF DRIVE (EOD) ARE GIVEN BELOW. THESE VALUES SHALL NOT BE USED FOR CONSTRUCTION CONTROL AND ARE GIVEN ONLY FOR COMPARATIVE PURPOSES.

THE PREVIOUS DESIGN BEARING FOR THE ABUTMENTS WOULD HAVE BEEN ABOUT 34 TONS.

THE PREVIOUS BEARING FOR THE PIER PILES WOULD HAVE BEEN ABOUT 32 TONS.

THE CONTRACT LENGTH OF 45 FEET FOR THE SOUTH ABUTMENT PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 96 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.78 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF THE FOOTING.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE SOUTH ABUTMENT PILES IS 65 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

THE CONTRACT LENGTH OF 45 FEET FOR THE NORTH ABUTMENT PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD OF PER PILE (PU) OF 98 KIPS. AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.78 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF THE FOOTING

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE WEST ABUTMENT PILES IS 68 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

THE CONTRACT LENGTH OF 55 FEET FOR THE PIER PILES IS BASED ON A COHESIVE SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD PER PILE (PU) OF 95 KIPS, AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65 FOR SOIL AND 0.7 FOR ROCK END BEARING.

THE NOMINAL AXIAL BEARING RESISTANCE FOR CONSTRUCTION CONTROL WAS DETERMINED FROM A COHESIVE SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.79 FOR SOIL AND 0.7 FOR ROCK END BEARING. PILES ARE ASSUMED TO BE DRIVEN FROM A START FIF FAVATION AT THE ROTTOM OF FOOTING

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE PIER PILES IS 63 TONS AT END OF DRIVE OR RETAP. THE PILE CONTRACT LENGTH SHALL BE DRIVEN AS PER PLAN UNLESS PILES REACH REFUSAL. CONSTRUCTION CONTROL REQUIRES A WEAP ANALYSIS WITH BEARING GRAPH.

HAZARDOUS MATERIALS NOTES

AN INSPECTION FOR THE PRESENCE OF ASBESTOS CONTAINING MATERIALS WAS COMPLETED BY:

WADE HAMMERSLEY OF TERRACON CONSULTANTS INC.

IA LICENSE NUMBER: 20-3919

DATE INSPECTED: MARCH 9, 2020 PHONE: 319-277-4016

ESTIMATE REFERENCE INFORMATION

- 1 INCLUDES THE COST TO CLEAR THE CHANNEL TO THE SHAPE, DEPTH AND EXTENT SHOWN ON THE SITUATION PLAN. SUITABLE CHANNEL EXCAVATION MATERIAL MAY BE USED FOR CONSTRUCTION OF ABUTMENT BERM AND SLOPES. UNSUITABLE OR EXCESS MATERIAL MAY BE WASTED ON SITE AS DIRECTED BY THE ENGINEER. IT IS ANTICIPATED THAT NO ADDITIONAL FILL WILL BE REQUIRED ON THIS PROJECT. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- 2 QUANTITY PERTAINS TO WORK WITHIN THE PROJECT LIMITS. PLAN QUANTITY ESTIMATED ON PLACEMENT OF 4 INCHES OVER DISTURBED AREAS NOT COVERED BY GRANULAR MATERIAL. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- THE EXISTING BRIDGE AT STATION 4+63 IS A 110' x 24' TIMBER SLAB BRIDGE BUILT IN 1984. THE STRUCTURE HAS LAMINATE DECKING, TIMBER PILING AND METAL HANDRAIL. ALL SALVAGEABLE AND UNSALVAGEABLE MATERIAL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM SITE BY THE CONTRACTOR. THE EXISTING STRUCTURE SHALL BE REMOVED TO AN ELEVATION AT LEAST 1' BELOW FINISHED GROUND LINE AND TO THE EXTENT THAT IT WILL NOT INTERFERE WITH THE NEW CONSTRUCTION. BROKEN CONCRETE FROM THE ABUTMENTS AND PIER CAPS WITH SIMILAR GRADATION TO CLASS 'E' REVETMENT MAY BE PLACED ON THE BANKS AS DIRECTED BY THE ENGINEER. ALL REINFORCING SHALL BE CUT OFF FLUSH WITH THE CONCRETE. ALTERNATELY, THE CONTRACTOR MAY DISPOSE OF THE BROKEN CONCRETE OFF SITE AT A LOCATION PROVIDED BY THE CONTRACTOR.
- 4 UNSUITABLE OR EXCESS MATERIAL MAY BE WASTED ON SITE AS DIRECTED BY THE ENGINEER. QUANTITY BASED ON ASSUMPTION THAT CHANNEL EXCAVATION AND BERM CONSTRUCTION HAVE BEEN COMPLETED. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- ALL STRUCTURAL CONCRETE FOR THE BRIDGE DECK SHALL BE CLASS "C"; SUBSTITUTION OF CLASS "D" CONCRETE IS NOT ALLOWED. INCLUDES COST OF FURNISHING AND PLACING SUBDRAIN (INCLUDING EXCAVATION) FLOODABLE BACKFILL, POROUS BACKFILL, SUBDRAIN OUTLET, AND GEOTEXTILE FABRIC AT ABUTMENTS AND SHALL INCLUDE COSTS OF ALL MATERIAL AND LABOR TO CONSTRUCT THE WING ARMORING AS DETAILED ON SHEET J30-46-06. WATER REQUIRED FOR FLOODING WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR HEATING AND PROTECTION OF CONCRETE, IF NECESSARY. THE DECK SHALL BE TINED AND SPRAYED WITH WHITE PIGMENTED CURING COMPOUND IMMEDIATELY AFTER FINISHING OPERATIONS ARE COMPLETED AND BURLAP PLACED WITHIN 30 MINUTES AFTER THE DECK HAS BEEN TINED AND SPRAYED. WATER SHALL BE APPLIED TO THE BURLAP COVERING FOR A PERIOD OF 4 CALENDAR DAYS. CERTIFIED PLANT INSPECTION IS REQUIRED. BRIDGE DECK SMOOTHNESS DOES NOT APPLY TO THIS PROJECT. PAY QUANTITY SHALL BE PLAN QUANTITY EXCEPT FOR OBVIOUS ERRORS OR OMISSIONS.
- 6 ALL REINFORCING STEEL SHALL BE GRADE 60.
- ALL STRUCTURAL CONCRETE FOR THE RAIL SHALL BE CLASS "C"; SUBSTITUTION OF CLASS "D" CONCRETE IS NOT ALLOWED. CERTIFIED PLANT INSPECTION IS REQUIRED. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR HEATING AND PROTECTION OF CONCRETE. IF NECESSARY.
- ALL PILING SHALL BE DRIVEN TO FULL PENETRATION IF PRACTICLE. SEE LONGITUDINAL SECTION ALONG & ROADWAY SHEET 3 AND PILE NOTES THIS SHEET FOR MORE INFORMATION.
- THE UNIT PRICE BID FOR ENCASEMENT SHALL BE FULL PAYMENT FOR FURNISHING AND PLACING MATERIAL AND, WHERE NECESSARY, EXCAVATION. SEE STANDARD P10L FOR DETAILS. NO ADDITIONAL PAYMENT WILL BE ALLOWED FOR HEATING AND PROTECTION OF CONCRETE, IF NECESSARY.
- 10 ENGINEERING FABRIC TO BE PLACED UNDER ALL CLASS E REVETMENT.
- 11 REVETMENT IS TO BE PLACED AT A THICKNESS OF 1'-6". SEE SITUATION PLAN, SHEET 3 FOR LIMITS. THE UNIT PRICE BID FOR "REVETMENT, CLASS E" SHALL INCLUDE COST OF LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PLACE CLASS E REVETMENT ON CHANNEL BANKS IN ACCORDANCE WITH SECTION 2507 OF THE CURRENT STANDARD SPECIFICATIONS.
- 2 SEE TABULATION 108-13A, THIS SHEET AND STANDARD ROAD PLAN TC-252.
- 3 THE ROAD WILL BE CLOSED TO TRAFFIC. SEE SHEET 1 FOR TRAFFIC CONTROL PLAN.
- AN INSPECTION FOR THE PRESENCE OF ASBESTOS CONTAINING MATERIALS WAS COMPLETED. THE BLACK TAR ON THE WOOD ABUTMENT CAPS WAS FOUND TO CONTAIN ASBESTOS. ASBESTOS MATERIAL SHALL BE REMOVED PRIOR TO BRIDGE DEMOLITION OPERATIONS. THE LUMP SUM BID FOR "REMOVAL OF ASBESTOS" SHALL INCLUDE REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL. A COMPLETE REPORT OF MATERIALS TESTED CAN BE OBTAINED FROM THE HARDIN COUNTY ENGINEER'S OFFICE. IF ADDITIONAL MATERIALS SUSPECTED OF CONTAINING ASBESTOS ARE DISCOVERED DURING DEMOLITION OF THE BRIDGE. WORK SHALL BE STOPPED IMMEDIATELY AND THE ENGINEER NOTIFIED.

						_
	BF	RIDGE ST	TANDARD:	S		
THE FOLL	OWING BRIDGE STANDARDS SI	HALL BE CONSIDER	ED APPLICABLE TO CO	ONSTRUCTION WORK ON THIS PR	ROJECT.	lГ
STANDARD	DATE ISSUED	LATEST REVISION	STANDARD	DATE ISSUED	LATEST REVISION	
J30-01-06	NOVEMBER, 2006	06-13	J30-36-06	NOVEMBER, 2006	06-13	
J30-01A-06	NOVEMBER, 2006	06-13	J30-39-06	NOVEMBER, 2006	07-09	
J30-14B-06	NOVEMBER, 2006	07-2016	J30-43-06	NOVEMBER, 2006	12-08	
J30-15B-06	NOVEMBER, 2006	07-09	J30-44-06	NOVEMBER, 2006	07-2016	
J30-20-06	NOVEMBER, 2006	06-12	J30-45-06	NOVEMBER, 2006	12-08	
J30-22-06	NOVEMBER, 2006	07-09	J30-46-06	NOVEMBER, 2006	09-14	╚
J30-23-06	NOVEMBER, 2006	05-14	J30-48-06	DECEMBER, 2008	07-2016	
J30-24-06	NOVEMBER, 2006	07-09	P10L		7-19	

SAFE Refer to Section	108-13A 08-01-08							
Station	Closur	Closure Type						
Station	Road Qty.	Hazard Qty.	Remarks					
2+50	-	1	ВОР					
6+50	_	1	EOP					
220th. St.	1	_	Per TC-252					
230th. St.	1	1	Per TC-252					
	2	Totals						

DEMOLITION (BRIDGE REMOVAL)

THERE IS NO PAINTED SURFACE ON THIS BRIDGE THEREFORE, NO SCRAPE SAMPLES WERE TAKEN. ASBESTOS WAS FOUND TO BE PRESENT, HOWEVER SEE NOTE 15 THIS SHEET FOR MORE INFORMATION.

STANDARD ROAD PLANS

THE FOLLOWING STANDARD PLANS SHALL BE CONSIDERED APPLICABLE TO CONSTRUCTION

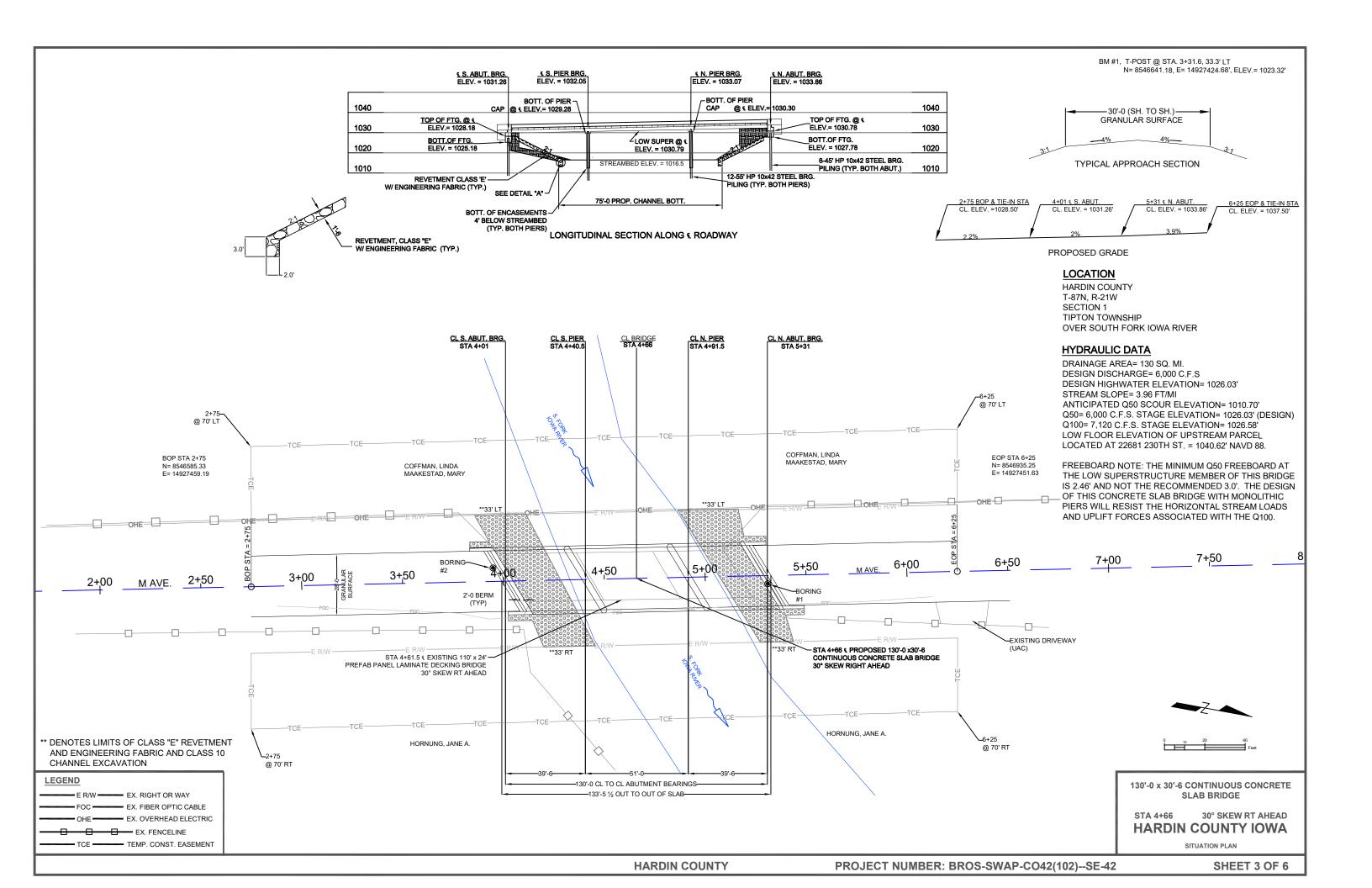
	WORK ON IT	IIS PROJECT.	
IDENTIFICATION	DATE	IDENTIFICATION	DATE
EC-204	04-21-20		
EW-401	10-20-15		
SI-173	04-19-16		
TC-252	04-21-20		

130'-0 x 30'-6 CONTINUOUS CONCRETE SLAB BRIDGE

INTEGRAL ABUTMENTS MONOLITHIC P10L PIERS STA 4+66 30° SKEW RT AHEAD

HARDIN COUNTY IOWA

ESTIMATED QUANTITIES, ESTIMATE REFERENCE INFORMATION AND GENERAL NOTES



		BORING	LOG NO. 1				P	age 1
PRO	JECT: Hardin County Bridge 11009 Re	placement	CLIENT: Hardin County IA Eldora, IA					ugo i
SITE	: Tipton Township; M Avenue; ab	out 2,400	Eldora, IA					
	feet south of 220th Street, Hard	in County, IA			1	_		
의	OCATION N. abutment; 3' E of CL; Sta. 5+30			E.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	L
윒	atilude: 42.3765° Longitude: -93.2514°			DEPTH (Ft.)	ERLI	E	OVER	1 1 1 1
					WAT	SAM	RECC	Ē
$\times\!\!\times\!\!\times$	FILL - CRUSHED STONE, with fines		ELEVATION (F	.)				
1.	IDOT - STIFF SANDY CLAY FILL				1			
\bowtie	FILL - SANDY LEAN CLAY, trace gravel, with brown, moist to wet	occasional sand s	eams, dark brown and					
\bowtie				-	-		\square	
	rubble observed at about 5 feet			5 -	1	X	9	8 1
	Tabble observed at about 5 leet			-	1			
\bowtie				-	1838			
9.0				-	1			
	IDOT - STIFF SILTY CLAY FILL - LEAN CLAY, trace sand and organics,	dark brown wet	· ·	10-]	X	12	3
	TILL TELENT VENT, HAGE SAIN AND ORGANICS,	uain Diowii, Wel		10-	1		\vdash	
12	.0 IDOT - STIFF SANDY CLAY	9			-			
	SANDY LEAN CLAY (CL/SC), trace gravel, bro	own and gray, wet		-	1		$\vdash \vdash$	1
				-	1	X	18	
16	. 0			15-	1			700
	IDOT - STIFF SANDY CLAY SANDY LEAN CLAY (CL/SC), trace gravel, gravel	av wot		7 -	1			
	SANDI ELAN SEAT (SESS), Hace graver, gra	ay, WGC			1		Ш	
				-	-	X	16	3
				20-	-		\Box	650
				-	1			
				-	1			
				-	1	X	14	2
				25		M	\vdash	600
				25	1			
				-	-			
				-	1	7	\vdash	2
				-	1	X	18	400
				30-	1			400
				-]			
;	Stratification lines are approximate. In-situ, the transition may	be gradual.	Hammer Type:	Automatic			Ш	
Advancer	ment Method:	:	Notes:					
Solid s	tem auger to 9 feet then mud rotary to boring		1,000					
Boring	ment Method: backfilled with soil cuttings and bentonite chips							
upon c	ompletion. WATER LEVEL OBSERVATIONS							
1	None observed prior to mud rotary		Boring Started: 04 Drill Rig: # 589	-13-2020	\dashv			oleted: 04
			Drill Rig: # 589			Drille	:: RF	
2532 V	Vet cave-in at 7.5'		Falls, IA Project No.: 1320	5065 02	- 1	Exhib	it: /	A-1

	В	ORING	LOG NO. 1		Page 2 of 2						
PRC	OJECT: Hardin County Bridge 11009 Repl	acement	CLIENT: Hardi Eldor	in County IA a, IA							
SITE	E: Tipton Township; M Avenue; aboutet south of 220th Street, Hardin	ut 2,400 County, IA									
. L	LOCATION N. abutment; 3' E of CL; Sta. 5+30				t.)	VEL	YPE	(In.)	S		
GRAPHIC LOG	Latitude: 42.3765° Longitude: -93.2514°				DEРТН (Ft.)	R LE	삗	VERY	FIELD TEST RESULTS		
					DEF	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	ᇤ뾦		
	IDOT - STIFF SANDY CLAY (continued)			ELEVATION (Ft.)		Ť	Н				
	SANDY LEAN CLAY (CL/SC), trace gravel, gray,	wet			_		X	18	0-1-2 N=3		
					35-	-			3000 (HP		
	cobbles observed at about 36 feet				-	-					
					-						
					_	-	X	16	2-2-3 N=5		
					40-	-			4500 (HP)		
					-	-					
4	<u>LIMESTONE</u> , highly weathered and broken, with	occasional clay	layers, light brown		_		\forall		33-33-7		
		·	-		_	-	A	8	N=40		
					45-	-					
X					-						
4	LIMESTONE, with occasional highly weathered a	nd broken layer	s, light brown		_		><	2	50/2"		
\exists					-	-					
丑					50-	-					
#					_						
1 5	Boring Terminated at 52.5 Feet						\forall	0	50/0.5"		
	Stratification lines are approximate. In-situ, the transition may be	gradual.		Hammer Type: Au	ıtomatic	<u> </u>					
	-	g. 2000.									
Solid	ement Method: stem auger to 9 feet then mud rotary to boring nation.			Notes: 50% fluid loss at ab	oout 42.	5 feet					
Boring	nment Method: g backfilled with soil cuttings and bentonite chips completion.										
	WATER LEVEL OBSERVATIONS Nane observed prior to mud rotary			Boring Started: 04-13	3-2020	E	Boring	Comp	leted: 04-13-20		
				Drill Rig: # 589			Driller	Oriller: RF			
1994	Wet cave-in at 7.5'	3105 Capita Cedar	al Way, Ste 5	Project No.: 1320506	SE 02	- 1.	Exhibi	it- Δ	\-1		

130'-0 x 30'-6 PRETENSIONED CONTINUOUS CONCRETE SLAB BRIDGE

STA 4+66 30° SKEW RT AHEAD HARDIN COUNTY IOWA

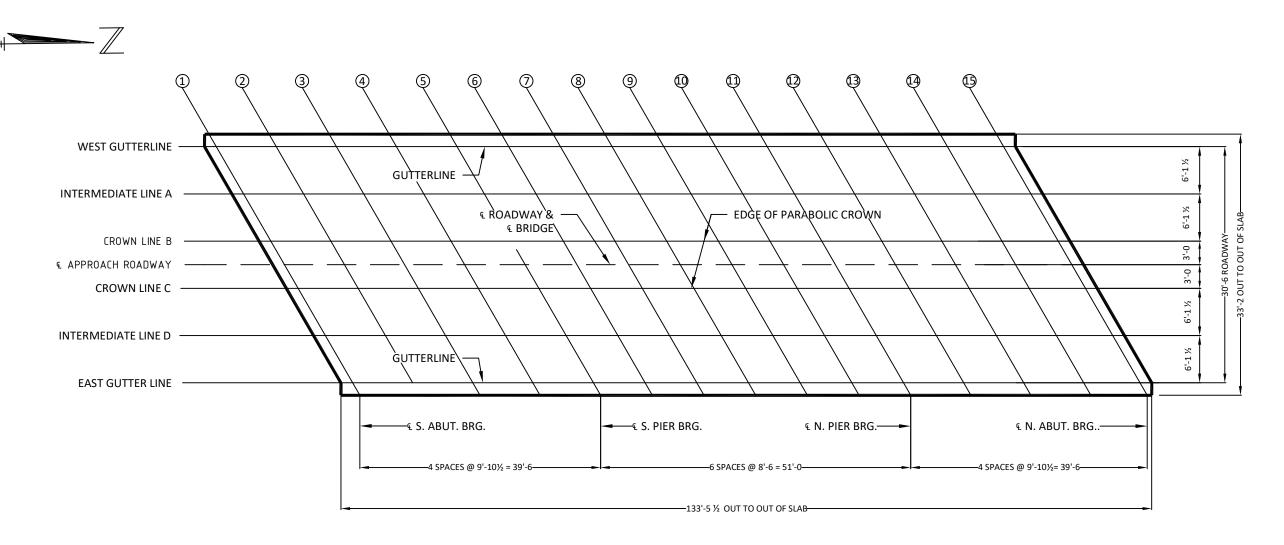
В	ORING I	LOG NO. 2					Page 1 of
PROJECT: Hardin County Bridge 11009 Repla	cement	CLIENT: Hardin County IA Eldora, IA					age i oi
SITE: Tipton Township; M Avenue; about feet south of 220th Street, Hardin C	t 2,400 County, IA	_ Lidora, IA					
			3	/EL	PE	(In.)	F. (0
O LOCATION S. abutment; 3.5'W of CL; Sta. 3+96 Latitude: 42.3762° Longitude: -93.2514°			DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
GRAF			ᆷ	VATE	AMP	ECO	트없
DEPTH		ELEVATION (Ft.)		-0	0,	œ	
IDOT - SOFT SILTY CLAY			† -	-			
FILL - LEAN CLAY, with sand, trace organics, dar	k brown and br	rown, moist	-	-			
			-	1			
			-	1	∇	9	3-2-2
			5-	1	\triangle	9	N=4
7.0			-	1			
IDOT - SOFT SILTY CLAY	arainad da-l-	brown and gray maint to	1 -				
CLAYEY SAND (SC), trace organics, fine to coarse wet	z granieu, dark	DIOWII AND GIAY, MOISE TO					
			10-		X	15	3-1-2 N=3
			'-	1~		\vdash	111-3
12.0			-	1			
IDOT - GRAVELY SAND CLAYEY SAND (SC), with gravel and occasional cl	lay layers, fine	to coarse grained, gray,	-	-			
wet			-	1	7		8-11-
15.5			15-	1	X	7	N=2
IDOT - STIFF SANDY CLAY SANDY LEAN CLAY (CL), trace gravel, with occas	ional sand lave	ers, grav, wet	-	1			
	zana idye	······································	-	1			
			-	1			0.0
			20]	X	3	2-3-4 N=7
			20-				2500 (H
			-	1			
			-	1	\bigvee	18	2-3-
			25-	-	\triangle	'0	N=7 5000 (H
			-	-			, 2300 (1
			-	1			
			-	1			
Stratification lines are approximate. In-situ, the transition may be g Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination. Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion. WATER LEVEL OBSERVATIONS 10.5' observed while drilling 7' observed before casing removal 7' observed after casing removal			-	1	X	18	1-1-2 N=3
			30-	1			1000 (F
			-	1			
Stratification lines are approximate. In-situ, the transition may be g	radual	Hammer Type: A	utomatic	1			
Cadimodion into are approximate, irroitu, tre transition may be g	, addai.	Hammer Type. A	acomanic				
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring		Notes:					
termination.							
Abandonment Method:							
Boring backfilled with soil cuttings and bentonite chips upon completion.							
WATER LEVEL OBSERVATIONS	i -	Boring Started: 04-1	4-2020	Ţ,	Borina	ı Comr	oleted: 04-14
√ 10.5' observed while drilling		Drill Rig: # 589	4-2020	-		: RF	леteu. 04-14
✓ 7' observed before casing removal		Drill Rig: # 589					

		BORING	LOG NO. 2				Pa	age 2 of 2
	ROJECT: Hardin County Bridge 11009 R	eplacement	CLIENT: Hardin County IA Eldora, IA					J. = 0. E
SI	TE: Tipton Township; M Avenue; al feet south of 220th Street, Hard							
GRAPHIC LOG	LOCATION S. abutment; 3.5' W of CL; Sta. 3+96 Latitude: 42.3762° Longitude: -93.2514° DEPTH		ELEVATION (Ft.)	DEPTH (Ft.)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	RECOVERY (In.)	FIELD TEST RESULTS
	IDOT - STIFF SANDY CLAY (continued) SANDY LEAN CLAY (CL), trace gravel, with o	ccasional sand lay		-			10	0-0-0
	cobbles from about 36 feet			35-			18	N=0
				40-		X	6	10-9-11 N=20
	42.0 LIMESTONE , highly weathered and broken, w	rith occasional clay	layers, light brown	-				
				45		X	10	38-23-17 N=40
1	46.5 LIMESTONE, weathered, with highly weathere	ed layers, light brov	vn	- -				
				50-		×	2	50/4"
+	53.5			-				
	Boring Terminated at 53.5 Feet						0	50/0.5"
	Stratification lines are approximate. In-situ, the transition ma	y be gradual.	Hammer Type: A	utomatic				
Sol	ncement Method: lid stem auger to 9 feet then mud rotary to boring mination.		Notes: 30% fluid loss at a	bout 42 f	eet			
Bor	donment Method: ring backfilled with soil cuttings and bentonite chips on completion.							
$\overline{\nabla}$	WATER LEVEL OBSERVATIONS 10.5' observed while drilling		Boring Started: 04-	14-2020	E	Boring	Compl	eted: 04-14-20
$\frac{\overline{\nabla}}{\nabla}$	7' observed while drilling 7' observed before casing removal		Drill Rig: # 589			Driller	: RF	
		3105 Capit	al Way, Ste 5	065.02	\neg			

130'-0 x 30'-6 PRETENSIONED CONTINUOUS CONCRETE SLAB BRIDGE

STA 19+02 0° SKEW
HARDIN COUNTY IOWA

BENCH MARKS: BM #1, T POST @ STA. 3+31.6, 33.3' LT N= 8546641.18, E= 14927424.68, ELEV.= 1023.32'



	TOP OF SLAB ELEVATIONS																		
LOCATION	C.L. S. LOCATION ABUT. BRG.						LOCATION ABUT. C.L. S. PIER										C.L. N. PIER		C.L. N. ABUT. BRG.
	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5	LINE 6	LINE 7	LINE 8	LINE 9	LINE 10	LINE 11	LINE 12	LINE 13	LINE 14	LINE 15				
WEST GUTTER LINE	1030.81	1031.01	1031.20	1031.40	1031.60	1031.77	1031.94	1032.11	1032.28	1032.45	1032.62	1032.82	1033.01	1033.21	1033.41				
INTERMEDIATE LINE A	1031.00	1031.20	1031.40	1031.59	1031.79	1031.96	1032.13	1032.30	1032.47	1032.64	1032.81	1033.01	1033.21	1033.40	1033.60				
CROWN LINE B	1031.19	1031.39	1031.59	1031.79	1031.98	1032.15	1032.32	1032.49	1032.66	1032.83	1033.00	1033.20	1033.40	1033.60	1033.79				
C.L. APPROACH ROADWAY	1031.26	1031.46	1031.66	1031.85	1032.05	1032.22	1032.39	1032.56	1032.73	1032.90	1033.07	1033.27	1033.47	1033.66	1033.86				
CROWN LINE C	1031.26	1031.46	1031.66	1031.86	1032.05	1032.22	1032.39	1032.56	1032.73	1032.90	1033.07	1033.27	1033.47	1033.67	1033.86				
INTERMEDIATE LINE D	1031.21	1031.41	1031.61	1031.81	1032.00	1032.17	1032.34	1032.51	1032.68	1032.85	1033.02	1033.22	1033.42	1033.62	1033.81				
EAST GUTTER LINE	1031.16	1031.36	1031.56	1031.75	1031.95	1032.12	1032.29	1032.46	1032.63	1032.80	1032.97	1033.17	1033.37	1033.56	1033.76				

130'-0 x 30'-6 CONTINUOUS CONCRETE SLAB BRIDGE

INTEGRAL ABUTMENTS MONOLITHIC P10L PIERS STA 4+66 30° SKEW RT AHEAD

HARDIN COUNTY IOWA

SUPERSTRUCTURE DETAILS

Order#	5907								
Date:6/	30/202	<u>/2020</u>							
To the Treasure	er of Ha	rdin County	lowa:						
You are hereby authorized to:			Abat (Add/Abate/		2018	_taxes of:			
Ellsworth Neighborhood Investment Group LLC					590	Iowa Falls City			
Owner's Name Tax District 89-20-18-159-026 Torn down building									
Parcel Number	20		Property Descript	Torn down building					
Tarcer Namber			Troperty Descript	lion					
Credits		Military Values	Homestead Credit	Ag Land Credit	Family Farm Credit	Elderly Credit	1	BPTC Credit	
Gross Value					2 6477				
% Funded				-					
Net					TATE OF THE				
Class R Levy Rate 0.03772316 Rollback 56.9180%									
				VALUES					
Old Bldg Value	\$		New 100% Blo		New `	\$			
Old Land Value	\$		New 100% Land Value \$		16,930 New	\$	9,636		
Old Dwelling	_\$_	-	New 100% Dwelling \$		New `	Taxable Dwell	\$	-	
Military Credit Total Old Value	\$	184 260	Total New Value \$		16,930 Total	New Taxable	\$ \$ \$	9,636	
Total Ola Value		104,200	-	<u> </u>	10,550	THEW TUNUDIC	-		
				TAX AMOUN	TS				
Old Tax Amour	it \$	6,256.00	Less A	mount Paid 💲	3,128.00				
New Gross Tax	\$	363.51	_	Less Credits \$		New Net Tax	\$	364	
Reason For Ch	ange	BOS tax	x compromise						
Amount Due	\$	2,764.00	Ta	x Receipt #	186884				
Net change	\$	(5,892.49)	-		· · · · · ·				

Machel Eichmeier Hardin County Treasurer P.O. Box 391 Eldora IA 50627

P.O. Box 391 Eldora, IA 50627 meichmeier@hardincountyia.gov Receipt# 186884 Parcel # 000892018159026 Machel Eichmeier Hardin County Treasurer

P.O. Box 391 Eldora, IA 50627 meichmeier@hardincountyia.gov Receipt# 186884 Parcel # 000892018159026

 TAX DUE: March 1, 2020 -\$2764.00

004472000

Delinquent: April 1, 2020

ELLSWORTH NEIGHBORHOOD INVESTMENT GROUP LLC 1611 West Lakes Pkwy West Des Moines, IA 50266 ELLSWORTH NEIGHBORHOOD INVESTMENT GROUP 1611 West Lakes Pkwy West Des Moines, IA 50266

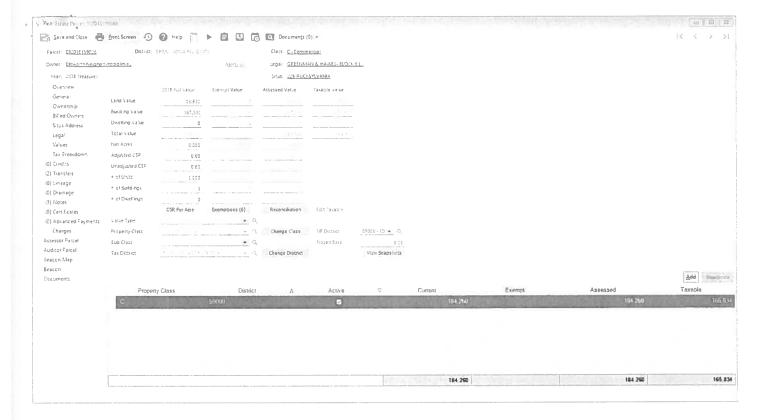
590 Iowa Falls City

590 Iowa Falls City

Hardin County Tax Bill for September 2019 and March 2020. Please keep in a safe place. Send the correct stubs along with your check for payment. If your taxes are paid by your Bank in Escrow, this is for your information only. SEE REVERSE SIDE. Based on January 1, 2018 Valuations. Taxes cover the period from July 1, 2018 to June 30, 2019. Payable September 2019

Parcel #: 00089201	18150026	Locations		,		
Parcel #: 000892018159026 Location:						Gross Acres
590 Iowa Falls Ci	ity					Exempt Acres -
LEGAL Description	n: Tom down buildin	g		Net Acres -		
VALUATIONS AN	D TAXES THIS YEA	AR .	LAST YEAR		TAX DUE	Delinquent Tax, Specials, Drainage, Tax Sale
R	Assessed	Taxable	Assessed	Taxable		
Land:	16,930	9,636	-	-		
Buildings:	-	-	-	-		
Dwelling:	-	-	-			
TOTAL VALUE:	16,930	9,636	~	-		
Less Military Exem	ption:					
NET TAXABLE VALUE:		\$9,636		\$0		
Value Times Levy per 1000 of:		37,7231600		38.9716000	(004472000
EQUALS GROSS TAX OF:		363,50		-		
Less Credits of:					E	ELLSWORTH NEIGHBORHOOD INVESTMENT GF
Homestead Credi	it:				•	I611 West Lakes Pkwy
Ag Land Credit:					1	West Des Moines, IA 50266
Family Farm Cred	dit:					
Business Prop Ta	ax Credit Fund:					
Low Income/Elde	rly Credit					
Prepaid Tax:						
NET ANNUAL TAXES:		\$364.00		\$0.00		

YOU MAY PAY ONLINE AT: WWW.IOWATREASURERS.ORG									
Machel Eichmeier		DUE Sept. 1, 201	9	\$3128.00	DUE March 1, 2020		-\$2764.00		
Hardin County Treasurer P.O. Box 391	Receipt# 186884	Date Paid:			Date Paid:				
Eldora, IA 50627 meichmeier@hardincountyia.gov		CHECK#			CHECK#				



2018 tay year \$ 6256pd \$3128- 9130/19

