



HARDIN COUNTY
Board of Supervisors

August 16, 2022

NOTICE: Public meetings will be held in-person and also livestreamed for viewing only, as possible. To view meetings remotely, please use the Zoom information listed below.

1. 9:00 A.M. Call To Order
Courthouse Large Conference Room

2. Pledge Of Allegiance

3. Approval Of Agenda

4. Approval Of Minutes – 08/10/22

Documents:

[08-10-22 MINUTES.PDF](#)

5. Approval Of Claims For Payment – 08/17/22

Documents:

[VENDOR PUBLICATION REPORT 8-17-22.PDF](#)

6. Consideration To Approve Consulting Engineering Contract For Bridge Deck Overlay-Bridge 6439, D41 Over South Fork; Bridge 14222, D65 Over Minerva Creek; Bridge 15310, D64 Over Honey Creek

Documents:

[ENGINEERING CONTRACT FOR BRIDGE DECK OVERLAY.PDF](#)

7. Consideration To Approve Final Plans For BROS-SWAP-C042(110)—FE-42 Bridge 15301, T Avenue Over Honey Creek

Documents:

[42-C042-110 FINAL PLANS.PDF](#)

8. Consideration To Approve Interstate Power And Light Utility Permit UT-22-019

Documents:

[UT-22-019 INTERSTATE POWER AND LIGHT.PDF](#)

9. Consideration To Approve Corn Belt Power Cooperative Utility Permit UT-22-020

Documents:

[UT-22-020 CORN BELT POWER COOPERATIVE.PDF](#)

10. Economic Development Presentation – Jim Bowman, Alliant Energy
11. Other Business
12. Adjournment/Recess
13. 9:30 A.M. Drainage
Courthouse Large Conference Room

HARDIN COUNTY BOARD OF SUPERVISORS
MINUTES – AUGUST 10, 2022
WEDNESDAY – 9:00 A.M.
COURTHOUSE LARGE CONFERENCE ROOM

Board Chair BJ Hoffman called the meeting to order. Supervisor Lance Granzow was present. Supervisor Renee McClellan was absent. Also attending: Thomas Craighton, Machel Eichmeier, Darrell Meyer, JD Holmes, Michael Pearce, Jolene Pieters, Dave Dunn, and Aaron Budweg. Attending via Zoom: Connie Mesch, Curt Groen, Jerry Kramer, Elaine Loring, John Jensen, Allison Munro, Pauline Lloyd, Donna Juber, and Julie Duhn.

The Pledge of Allegiance was recited.

Granzow moved, Hoffman seconded to approve the agenda. Motion carried.

Granzow moved, Hoffman seconded to approve the minutes from August 3, 2022. Motion carried.

Granzow moved, Hoffman seconded to approve the claims for payment for August 10, 2022. Motion carried.

Granzow moved, Hoffman seconded to approve Resolution 2022-33 – Resolution to Approve the Region 6 Housing Trust Fund Hardin County Cash Contribution. Roll Call Vote: “Ayes” Granzow, Hoffman. “Nays” none. Absent: McClellan. Motion carried. Resolution No. 2022-33 is hereby adopted as follows:

Where upon Board Member Granzow moved that the following resolution be adopted:

RESOLUTION NO. 2022-33

**A RESOLUTION TO APPROVE THE REGION 6 HOUSING TRUST FUND
HARDIN COUNTY CASH CONTRIBUTION**

WHEREAS, the Region 6 Housing Trust Fund can annually apply for approximately \$414,009 of Iowa Finance Authority State Housing Trust Funds if the trust fund secures \$86,942 of local contributions, and

WHEREAS, the per capita state share for Hardin County is \$75,314 if \$15,816 of local assistance is secured, and

WHEREAS, the housing trust fund continues to seek applications for owner occupied housing improvements across the region which will be prioritized based upon housing needs and we currently have 6 applicants from Hardin County, and

WHEREAS, the Housing Trust Fund has expended \$376,012 of funds in Hardin County from 2015 to 2021 which is slightly under the per capita level of \$359,156, and

WHEREAS, all the applicants must have annual incomes under 80% of the county median as determined by HUD.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF HARDIN COUNTY:

Section 1: Hardin County will provide \$15,816 of cash assistance for the 2023 Region 6 Housing Trust Fund application. This assistance will be provided in FY 23/24.

The motion was seconded by Board Member Hoffman and after due consideration thereof, the roll was called, and the following Board Members voted:

Ayes: Granzow, Hoffman

Nays: None

Absent: McClellan

Abstain: None

Whereupon, the Chair of the Board of Supervisors declared said Resolution duly passed and adopted this 10th day of August, 2022.

/s/ BJ Hoffman

BJ Hoffman, Chair
Board of Supervisors

Attest:

/s/ Jolene Pieters

Jolene Pieters
Hardin County Auditor

Granzow moved, Hoffman seconded to approve the Add Orders provided by Assessor Mesch. Motion carried.

City Administrator Aaron Budweg discussed the City of Eldora's properties that the City is requesting the Compromise Tax Certificates for.

Granzow moved, Hoffman seconded to approve the City of Eldora request for Compromise of Tax Certificates with corrections suggested by County Attorney Meyer. Motion carried.

Other business: County Attorney Meyer stated that the auction for the Round Barn property near Iowa Falls will be August 31, 2022 at 9:00 a.m. in the large conference room of the Hardin County Courthouse.

Granzow moved, Hoffman seconded to adjourn the meeting. Motion carried.

Meeting was adjourned at 9:15 a.m.



Vendor Publication Report

Payment Date Range: 08/17/2022 - 08/17/2022

Vendor Name	Vendor Number	Total Payments
AgSource Cooperative Services	6022V	105.25
Alliant Energy	4253V	3,880.18
Amazon Business	101043	909.12
Angela De La Riva	100411	361.53
Bauer Built Tire, Inc	1609V	14,486.28
Black Hills Energy	4450V	39.06
Builders FirstSource	677V	22.57
C.J. Cooper & Assoc Inc.	62770V	255.00
Center Associates	883V	273.00
CenturyLink 2956	4569V	33.95
Cintas-Chicago	2475V	192.47
Clarion Distributing	227V	384.00
Cooley Pumping LLC	61963V	310.00
David A Kuehner	101116	800.00
Franklin Rural Elec Co-Op	1128V	30.00
Gehrke Quarries, Inc.	145V	1,671.79
Grass Masters Lawn & Landscaping Service	100587	1,740.00
Greenbelt Home Care	61807V	3,071.67
Hawkeye West Pest Control	2637V	64.00
Heart of Iowa	6335V	354.28
Henderson Products Inc	2780V	8,064.14
Interstate Batteries	880V	42.80
ISAA	4674V	325.00
Kit Paper	100328	40.00
Kristine Penning	100177	146.58
Martin Marietta Aggregate	4141V	6,407.46
Medicap Pharmacy #8095	5729V	1,933.72
Mid-America Publishing Corp	62056V	522.24
Moler Sanitation	100385	59.95
Murphy Tractor & Equipment Co., Inc	2286V	7,853.08
NAPA Auto Parts	4290V	32.45
NAPA Auto Parts Eldora	617V	2,849.17
Pitney Bowes Inc-Reserve	773V	5,000.00
Premier Office Equipment, Inc.	62320V	132.07
Quaker Security LLC	100507	1,275.00
Ray O'Herron Co. Inc.	100539	182.60
RC Systems- Waterloo Office	2077V	457.94
Scenic Living Communities Inc. / Scenic Manor	100941	200.00
Schumacher Elevator Co.	2130V	545.92
Shield Pest Control LLC	63086V	260.00
Stantec Consulting Services Inc.	101102	10,705.00
Summit Food Service LLC	2332V	4,906.93
Tanner Lascheid	101039	52.50
Theisens	6220V	61.63
Thomas Craighton	100361	300.00
Truck Center Companies East LLC	100823	317.36
US Bank Equipment Finance	954V	1,260.84
Van Wall Equipment, Inc.	2924V	16,000.00
Veridian Credit Union	63561V	284.85
Verlyn Mensing	100703	580.00
Wesley Wiese	522E	80.00
Yulisa Garibay	100887	340.00
Ziegler Incorporated	1463V	756.78
Grand Total:	100,960.16	



CALHOUN-BURNS AND ASSOCIATES, INC.
BRIDGES ♦ STRUCTURES ♦ TRANSPORTATION

August 11, 2022

Taylor Roll, P.E.
Hardin County Engineer
708 16th Street
Eldora, IA 50627-0534

RE: PROPOSAL FOR DESIGN SERVICES
BRIDGE NO. 06439/FHWA No. 176330, SECTION 34, T-88N, R-21W
BRIDGE NO. 14222/FHWA No. 175091, SECTION 30, T-86N, R-21W
BRIDGE NO. 15310/FHWA No. 174850, SECTION 24, T-86N, R-20W
HARDIN COUNTY

Dear Mr. Roll:

This proposal is submitted in accordance with your request for professional structural design services to perform bridge rehabilitation design for Hardin County Bridges 06439, 14222, and 15310.

Bridge 06439 is a Continuous Concrete Slab (CCS) bridge with concrete foundations. Bridge 14222 is a Pretensioned Prestressed Concrete Beam (PPCB) bridge with concrete foundations. Bridge 15310 is a steel I-beam bridge with concrete foundations. The rehabilitation of these structures will include deck repairs, overlay, end posts removal and replacement, thrie-beam block out, guardrail installation and blister shaping, and drain extensions. Approach pavement at each end will be modified/replaced to provide a smooth transition to the new deck overlay. It is our understanding that this will be one plan set incorporating all three bridges that you will let locally.

Following is a copy of the standard Consulting Engineering Contract for secondary road projects which have been filled out as described above. Please review this submittal and, if it is acceptable, fill in the date on page one and obtain the County signatures on page seven. Please send us one executed copy as our notice to proceed.

Thank you for the opportunity to design these important projects on the Hardin County Secondary Road System. We will do another good job for you and Hardin County.

Sincerely,



Jordan P. Denman, P.E.
Project Manager

CONSULTING ENGINEERING CONTRACT

COUNTY HARDIN
COUNTY BRIDGE NO. 06439, 14222 AND 15310
FHWA No. 176330, 175091 AND 174850
PROJECT NO. _____

I. GENERAL

This CONTRACT made and entered into this _____ day of _____, 2022, by and between the Board of Supervisors of HARDIN County, Iowa, Party of the First Part, hereinafter referred to as the "COUNTY" and Calhoun-Burns and Associates, Inc., West Des Moines, Iowa, doing business as a corporation incorporated under the laws of Iowa, Party of the Second Part, hereinafter referred to as the "CONSULTING ENGINEER". A member of the firm is a licensed professional engineer in Iowa, with registration in a field appropriate to the work involved in this CONTRACT.

II. SCOPE OF SERVICES

THE COUNTY PROPOSES TO IMPROVE THREE BRIDGES LOCATED AS FOLLOWS:

- 1. BRIDGE 06439 – LOCATED NEAR THE NORTHEAST CORNER OF SECTION 34, T-88N, R-21W,
- 2. BRIDGE 14222 – LOCATED NEAR THE NORTHEAST CORNER OF SECTION 30, T-86N, R-21W,
- 3. BRIDGE 15310 – LOCATED NEAR THE NORTH QUARTER CORNER OF THE SOUTHWEST QUARTER OF SECTION 24, T-86N, R-20W;

AND THE COUNTY desires to employ the CONSULTING ENGINEER in connection with the engineering work to be performed in accomplishing the objectives of the Farm to Market Road Laws (Current Code of Iowa) and other applicable laws and regulations of the State of Iowa and the United States, consisting of 0.1± miles of roadway and THREE major structures as follows:

REHABILITATION DESIGN FOR A CONTINUOUS CONCRETE SLAB BRIDGE (06439), A PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE (14222) AND A STEEL I-BEAM BRIDGE (15310), INCLUDING DECK REPAIR, OVERLAY, END POST REMOVAL AND REPLACEMENT AND GUARDRAIL INSTALLATION. THE PROJECT INCLUDES MINIMAL ROAD DESIGN AS NECESSARY TO REPLACE THE APPROACH PAVEMENT AND TO PROPERLY CONNECT TO THE COUNTY HIGHWAY SYSTEM AND INCLUDES SUBMITTALS TO HARDIN COUNTY FOR A LOCAL LETTING.

The authority of the COUNTY to enter into the CONTRACT is found in Chapter 310, current Code of Iowa.

III. TIME OF BEGINNING AND COMPLETION OF THE WORK

- A. If no specific time period is indicated, CONSULTING ENGINEER shall complete its services within a reasonable period of time. Upon execution of this CONTRACT, the CONSULTING ENGINEER and the COUNTY may establish a schedule of work completion. Failure of the CONSULTING ENGINEER to maintain progress in accordance with this schedule may be cause for termination of the CONTRACT.
- B. If, through no fault of CONSULTING ENGINEER, such periods of time or dates are changed, or the orderly and continuous progress of CONSULTING ENGINEER'S services are impaired, or CONSULTING ENGINEER'S services are delayed or suspended, then the time for completion of CONSULTING ENGINEER'S services and the rates and amounts of CONSULTING ENGINEER'S compensation shall be adjusted equitably.

- C. If COUNTY authorized changes in the scope, extent, or character of the Project, then the time for completion of CONSULTING ENGINEER'S services and the rates and amounts of CONSULTING ENGINEER'S compensation shall be adjusted equitably.
- D. COUNTY shall make decisions and carry out its other responsibilities in a timely manner so as not to delay the CONSULTING ENGINEER'S performance of its services.

IV. NUMBER OF COPIES

The CONSULTING ENGINEER shall furnish to the COUNTY:

- 0 electronic copy in PDF format of preliminary plan drawings.
- 0 electronic copy in PDF format of shop drawings for steel structures.
- 0 electronic copy in PDF format of road plans for reconnaissance and field exam.
- 0 electronic copy in PDF format of drainage plats.
- 0 electronic copy in PDF format of capacity analyses computations.
- 0 electronic copy in PDF format of road plans and cross sections after field exam corrections for soils recommendations.
- 1 electronic copy in PDF format of check plan drawings.

V. FEES

A. SURVEYS

NOT A PART OF THIS CONTRACT.

B. ROAD PLANS

COSTS TO BE INCLUDED IN BRIDGE PLANS.

C. BRIDGE PLANS

BRIDGE No. 06439

DECK OVERLAY AND REPAIRS DESIGN AND DETAILING: LUMP SUM = \$ 9,750.00

BRIDGE No. 14222

DECK OVERLAY AND REPAIRS DESIGN AND DETAILING: LUMP SUM = \$ 9,250.00

BRIDGE No. 15310

DECK OVERLAY AND REPAIRS DESIGN AND DETAILING: LUMP SUM = \$ 9,250.00

COORDINATION AND SUBMITTALS: AT HOURLY RATES
(ESTIMATED AT \$1,800.00)

D. CULTURAL, HISTORICAL, ARCHAEOLOGICAL INVESTIGATIONS

NOT A PART OF THIS CONTRACT.

E. WETLANDS, ENDANGERED SPECIES INVESTIGATIONS

NOT A PART OF THIS CONTRACT.

F. LEAD/ASBESTOS TESTING

NOT A PART OF THIS CONTRACT.

G. RIGHT-OF-WAY

NOT A PART OF THIS CONTRACT.

H. SUBSURFACE INVESTIGATIONS

NOT A PART OF THIS CONTRACT.

I. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) COORDINATION

NOT A PART OF THIS CONTRACT. TO BE PROVIDED BY THE COUNTY.

VI. PAYMENTS

Payments shall be made to the CONSULTING ENGINEER as follows:

- A. The CONSULTING ENGINEER may submit monthly statements with proof to the COUNTY for services rendered on the CONTRACT to date. Upon acceptance by the COUNTY, payment will be made promptly. Final payment will be made upon acceptance of the completed plans.
- B. If after the Effective Date of the CONTRACT any governmental entity takes a legislative action that imposes taxes, fees, or charges on CONSULTING ENGINEER'S services or compensation under this CONTRACT, then the CONSULTING ENGINEER shall invoice such new taxes, fees, or charges as a Reimbursable Expense. COUNTY shall pay such invoiced new taxes, fees, and charges; such payment shall be in addition to the compensation to which CONSULTING ENGINEER is entitled under the terms of this CONTRACT.

VII. MISCELLANEOUS PROVISIONS

A. OWNERSHIP OF ENGINEERING DOCUMENTS

- (1) All survey notes, sketches, tracings, plans, specifications, reports on special studies and other data prepared under this CONTRACT shall be delivered to the COUNTY upon request.
- (2) Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any transmittal errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files.
- (3) All work furnished by the CONSULTING ENGINEER, including data on electronic media, pursuant to this CONTRACT, are instruments of its Services toward the said Project. They are not intended or represented to be suitable for reuse by the COUNTY or others on extensions of the said Project or any other project. Any such reuse without written verification and adaptation by the CONSULTING ENGINEER for specific purposes intended will be at the user's sole risk and without liability or legal exposure to the CONSULTING ENGINEER. Any such verification and adaptation shall entitle the CONSULTING ENGINEER to further compensation at hourly billing rates plus expenses or a lump sum to be agreed upon at that time.

B. CHANGES OF WORK

If the CONSULTING ENGINEER is of the opinion that any work it has been directed to perform is beyond the scope of this CONTRACT and constitutes extra work, it shall promptly notify the COUNTY in writing of that fact. In the event the COUNTY determines that such work does constitute extra work, it shall provide extra compensation to the CONSULTING ENGINEER upon a basis of hourly billing rates, plus actual expenses or a negotiated lump sum. No claims for extra work can be made by the CONSULTING ENGINEER without receiving written agreement from the COUNTY in advance. Major changes in the scope of the anticipated work shall require negotiation of a supplemental CONTRACT.

C. DELAYS

The CONSULTING ENGINEER will notify the COUNTY of any unusual delay including the reasons therefore, to its normal progress in the preparation of plans, either actual or prospective, and request an appropriate extension of time. Action by the COUNTY on such requests may be subject to approval by the Iowa Department of Transportation and/or the Federal Highway Administration.

D. TERMINATION

If the COUNTY should desire to suspend or terminate the service to be rendered by the CONSULTING ENGINEER under this CONTRACT, such suspension or termination may be effected by the COUNTY giving the CONSULTING ENGINEER written notice 30 days in advance. Payment is to be made by the COUNTY for the CONSULTING ENGINEER'S services, based on hourly billing rates, plus actual expenses.

E. ARBITRATION

Any dispute between the COUNTY and the CONSULTING ENGINEER, not otherwise resolved by the parties pursuant to the provisions of this CONTRACT, including the documents incorporated herein by reference, shall be settled by filing a proper action in the proper District Court of the State of Iowa, and subsequent arbitration as provided in Current Code of Iowa. This section is the only section of this CONTRACT relating to "arbitration" and Article 1109.12 of the Current "Standard Specifications, etc.", is deleted from, and is not a part of this CONTRACT.

F. RESPONSIBILITY FOR CLAIMS AND LIABILITY

The CONSULTING ENGINEER shall indemnify and save harmless the COUNTY, the Iowa Department of Transportation, State of Iowa, and the Federal Government from all claims and liability due to negligence of members, agents or employees of only the CONSULTING ENGINEER.

G. GENERAL COMPLIANCE WITH LAWS

The CONSULTING ENGINEER shall comply with Federal, State and local laws and ordinances applicable to the work.

H. SUBLETTING, ASSIGNMENT OR TRANSFER

Subletting, assignment or transfer of all or part of the interest of the CONSULTING ENGINEER is prohibited unless written consent is obtained from the COUNTY.

I. DESIGN CRITERIA

Design criteria shall be the applicable Farm to Market Design Guides and the AASHTO Design Guides for Local Roads and Streets and shall also conform to local requirements if within an incorporated area.

J. FORBIDDING USE OF OUTSIDE AGENTS

The CONSULTING ENGINEER warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTING ENGINEER, to solicit or secure this CONTRACT, and that it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the CONSULTING ENGINEER, any fee, commissions, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this CONTRACT. For breach or violation of this warranty, the COUNTY shall have the right to annul this CONTRACT without liability, or, in its discretion to deduct from the CONTRACT price or consideration or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

K. EMPLOYMENT OF COUNTY WORKERS

The CONSULTING ENGINEER shall not engage, on a full or part-time basis during the period of the CONTRACT, any professional or technical personnel who are or have been at any time during the period of the CONTRACT in the employ of the COUNTY, except fully retired employees, without the written consent of the COUNTY.

L. ENGINEER'S CERTIFICATION OF PLANS

The CONSULTING ENGINEER shall place a licensed engineer's certification and seal on the title sheet of the completed plans, all in conformity with Chapter 542B, Code of Iowa.

M. COMPLIANCE WITH TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

During the performance of this CONTRACT, the CONSULTING ENGINEER, for itself, its assignees and successors in interest (herein referred to as the "Consultant"), agrees as follows:

(1) Compliance with Regulations

The Consultant will comply with the regulations of the U.S. Department of Transportation relative to non-discrimination in federally-assisted programs of the U.S. Department of Transportation (Title 49, Code of Federal Regulations, Part 21, hereafter referred to as the "regulations"), which are herein incorporated by reference and made a part of this CONTRACT.

(2) Nondiscrimination

The Consultant, with regard to the work performed by it will not discriminate on the grounds of race, color or national origin in the selection and retention of subcontractors, including procurement of materials and lease of equipment. The Consultant will not participate, either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the CONTRACT covers a program set forth in Appendix A-11 of the Regulations.

(3) Solicitations for subcontractors, Including Procurement of Materials and Equipment

In all solicitations, either by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurement of materials or equipment, each potential subcontract or supplier shall be notified by the Consultant of the Consultant's obligations under this subcontract and the regulations relative to nondiscrimination on the grounds of race, color or national origin.

(4) Information and Reports

The Consultant will provide all information and reports required by the regulations, orders and instruction issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the COUNTY, the Iowa Department of Transportation or the Federal Highway Administration, to be pertinent to ascertain compliance with such regulations, orders and instructions. Where any information required of a Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall so certify to the COUNTY, the Iowa Department of Transportation, or the Federal Highway Administration, as appropriate, and shall set forth what efforts it has made to obtain information.

(5) Sanctions for Noncompliance

In the event of the Consultant's noncompliance with the nondiscrimination provisions of this CONTRACT, the COUNTY shall impose such CONTRACT sanctions as it, the Iowa Department of Transportation, or the Federal Highway Administration, may determine to be appropriate, including, but not limited to:

- (a) Withholding of payments to the Consultant under the CONTRACT until the Consultant complies, and/or
- (b) Cancellation, termination or suspension of the CONTRACT, in whole or in part.

(6) Incorporation of Provisions

The Consultant will include the provisions of Paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the regulations, orders or instruction issued pursuant thereof.

The Consultant will take such action with respect to any subcontractor procurement as the COUNTY, the Iowa Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a Consultant becomes involved in, or is threatened with, litigation with a subcontract or supplier as a result of such direction, the Consultant may request the COUNTY and State to enter into such litigation to protect their interests and, in addition, the Consultant may request the United States to enter into such litigation to protect the interests of the United States.

N. ACCESS TO RECORDS

The CONSULTING ENGINEER and its subconsultants are to maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred and to make such materials available at their respective offices at all reasonable times during the CONTRACT period and for three years from the date of final payment under the CONTRACT, for inspection by the State, Federal Highway Administration, or any authorized representatives of the Federal Government and copies thereof shall be furnished if required.

O. THIRD PARTIES

Nothing expressed or referred to in this CONTRACT is intended or shall be construed to give any person, other than the parties hereto, any legal or equitable right, remedy or claim under this CONTRACT, it being the intention that this CONTRACT is for the sole and exclusive benefit of the parties hereto, and for the benefit of no other persons, corporations or other entities.

P. ATTORNEY

The COUNTY shall provide the services of a competent attorney, at no cost to the CONSULTING ENGINEER, who shall be experienced in legal matters pertaining to the type of work required by this project. The CONSULTING ENGINEER shall cooperate, and assist said attorney during the course of his/her duties as attorney for the COUNTY.

The CONSULTING ENGINEER acknowledges that it is fully acquainted with the concept of the project as presently developed by the COUNTY, and that it is the intention of this CONTRACT with the CONSULTING ENGINEER to do work necessary to bring the plans on this project to the letting stage. Engineering decisions on this project are the responsibility of the CONSULTING ENGINEER, who will be required to furnish, to the COUNTY, factual data supporting decisions.

This CONTRACT expresses the entire CONTRACT between the parties and no representations, promises or warranties have been made by either of the parties that are not fully expressed herein. This CONTRACT may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have executed this CONTRACT as of the day and year first above written.

**CONSULTING ENGINEER
CALHOUN-BURNS AND ASSOCIATES, INC.**



JEFF M. FADDEN, P.E.
VICE PRESIDENT

APPROVED FOR HARDIN COUNTY:

BOARD OF SUPERVISORS – CHAIR

ATTESTED BY:

TAYLOR ROLL, P.E.
HARDIN COUNTY ENGINEER

DATE:

BROS-SWAP-CO42(110)--FE-42

LETTING DATE NOVEMBER 15, 2022

HARDIN COUNTY
BRIDGE REPLACEMENT - CCS

SECTION 404 PERMIT AND CONDITIONS 281-1
10-18-16

CONSTRUCT THIS PROJECT ACCORDING TO THE REQUIREMENTS OF U.S. ARMY CORPS OF ENGINEERS NATIONWIDE PERMIT NO. 14, PERMIT NO. CEMVR-RD-2022-0807. 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 T AVENUE, OVER HONEY CREEK, S30 -T86-R19

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 TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AS ADOPTED BY THE DEPARTMENT PER 761 OF THE IOWA ADMINISTRATIVE CODE (IAC) CHAPTER 130.

DRAWING APPROVAL

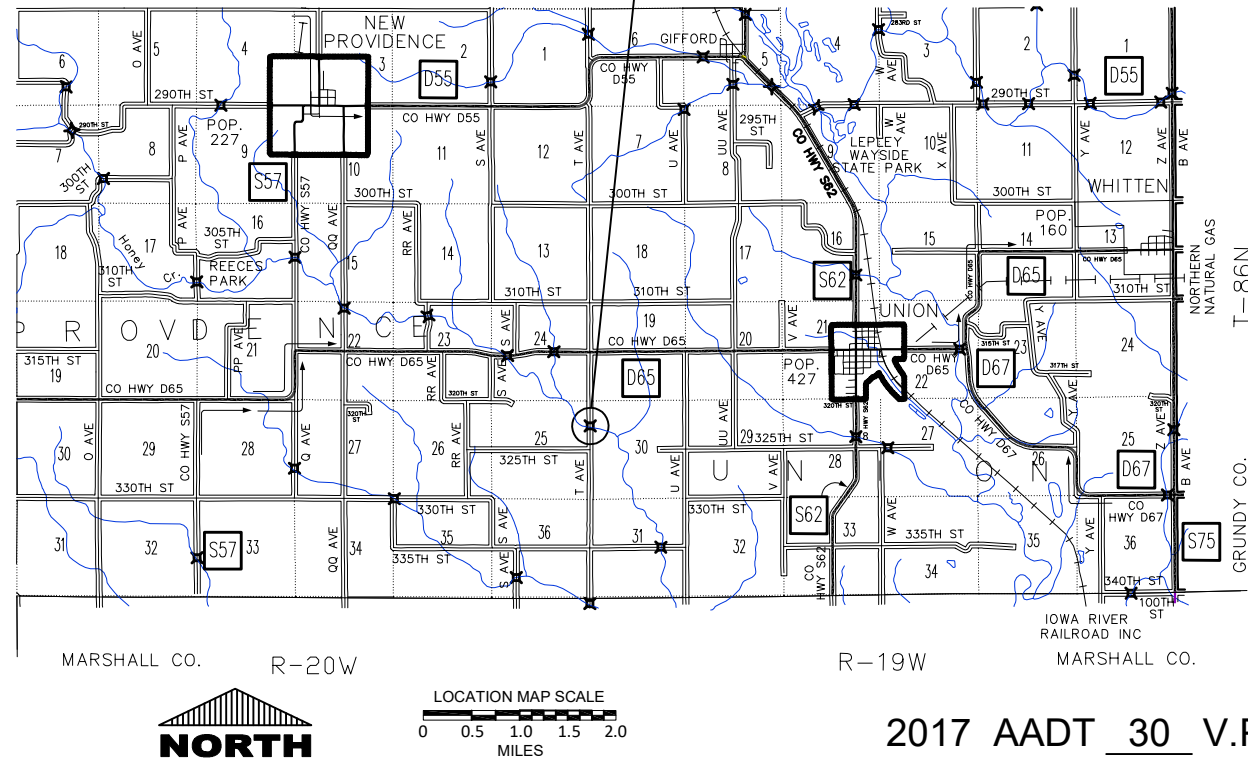
ALL SHOP DRAWINGS AND FALSEWORK DRAWINGS THAT REQUIRE APPROVAL SHALL BE SUBMITTED TO AND SIGNED BY A LICENSED ENGINEER. THE APPROVED DRAWINGS SHALL THEN BE SUBMITTED TO HARDIN COUNTY ENGINEERS OFFICE, FOR REVIEW AND APPROVAL.

ADDRESS: 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.

STA 12+96
PROPOSED 140'-0 x 30'-6
CONTINUOUS CONCRETE
SLAB BRIDGE
FHWA# 174670



FHWA NO. 174670

HARDIN COUNTY

PROJECT NUMBER: BROS-SWAP-CO42(110)--FE-42

SHEET 1 OF 6

INDEX OF SHEETS

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

MILEAGE SUMMARY

DIV.	LOCATION	LIN.FT.	MILES
	STA 10+50 - 15+50	500	0.094
	BRIDGE AT STA. 12+96		
TOTAL PROJECT			0.094

STANDARD ROAD PLANS

THE FOLLOWING STANDARD PLANS SHALL BE CONSIDERED APPLICABLE TO CONSTRUCTION WORK ON THIS PROJECT.

IDENTIFICATION	DATE	IDENTIFICATION	DATE	IDENTIFICATION	DATE
EC-204	10-19-21	SI-173	04-19-16		
EW-401	10-20-15	TC-252	04-21-20		

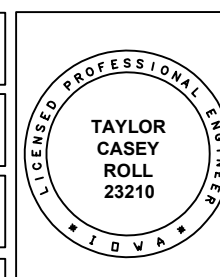
BRIDGE STANDARDS

THE FOLLOWING BRIDGE STANDARDS SHALL BE CONSIDERED APPLICABLE TO CONSTRUCTION WORK ON THIS PROJECT.

STANDARD	DATE ISSUED	LATEST REVISION	STANDARD	DATE ISSUED	LATEST REVISION
J30-01-06	NOVEMBER, 2006	09-2020	J30-34-06	NOVEMBER, 2006	09-2020
J30-01A-06	NOVEMBER, 2006	09-2020	J30-39-06	NOVEMBER, 2006	09-2020
J30-16B-06	NOVEMBER, 2006	09-2020	J30-43-06	NOVEMBER, 2006	09-2020
J30-17B-06	NOVEMBER, 2006	09-2020	J30-44-06	NOVEMBER, 2006	09-2020
J30-20-06	NOVEMBER, 2006	09-2020	J30-45-06	NOVEMBER, 2006	09-2020
J30-21-06	NOVEMBER, 2006	09-2020	J30-46-06	NOVEMBER, 2006	09-2020
J30-23-06	NOVEMBER, 2006	09-2020	J30-47-06	DECEMBER, 2008	09-2020
J30-24-06	NOVEMBER, 2006	09-2020	P10L		03-2022



BJ Hoffman	Chairperson
Lance Granzow	
Renee McClellan	Approved Board of Supervisors



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

Signature: _____ Date: _____
TAYLOR CASEY ROLL
 Printed or Typed Name
 My license renewal date is: December 31, 2023
 Pages or sheets covered by this seal: Sheets 1 thru 6

ESTIMATED QUANTITIES

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	2312-8260051	GRANULAR SURFACING ON ROAD, CLASS A CRUSHED STONE	TON				265.0	
3	2401-6745625	REMOVAL OF EXISTING BRIDGE	LS				1.00	
4	2402-2720000	EXCAVATION, CL 20	CY				88	
5	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	22.2		347.2	369.4	
6	2404-7775000	REINFORCING STEEL	LB	3158		80,399	83,557	
7	2414-6424124	CONCRETE OPEN RAIL, TL-4	LF				302.00	
8	2501-0201042	PILE, STEEL, HP 10X42	LF	14 @ 55'	24 @ 65'		2330	
9	2501-5478042	CONCRETE ENCASEMENT STEEL H PILE, HP 10X42 (P10L TYPE 3)	LF		24 @ 19.5'		468	
10	2501-6335010	PREBORED HOLES	LF	140			140	
11	2507-3250005	ENGINEERING FABRIC	SY				400.0	
12	2507-6800061	REVTMENT, CLASS E	TON				380.0	
13	2528-2518000	SAFETY CLOSURE	EACH				4	
14	2528-8445110	TRAFFIC CONTROL	LS				1.00	
15	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. EROSION CONTROL, RURAL GRASS SEEDING, FERTILIZING, AND MULCHING SHALL BE DONE BY HARDIN COUNTY IRVM DEPARTMENT.

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 55 FEET FOR THE SOUTH ABUTMENT PILES IS BASED ON A MIXED 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 MIXED SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. 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 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 55 FEET FOR THE NORTH ABUTMENT PILES IS BASED ON A MIXED SOIL CLASSIFICATION, A TOTAL FACTORED AXIAL LOAD OF 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 MIXED SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. 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 65 FEET FOR THE PIER PILES IS BASED ON A MIXED 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 MIXED SOIL CLASSIFICATION AND A GEOTECHNICAL RESISTANCE FACTOR (PHI) OF 0.65. PILES ARE ASSUMED TO BE DRIVEN FROM A START ELEVATION AT THE BOTTOM OF FOOTING.

THE REQUIRED NOMINAL AXIAL BEARING RESISTANCE FOR THE PIER PILES IS 73 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 6, 2020

PHONE: 319-277-4016
NO ASBESTOS MATERIALS WERE FOUND

ESTIMATE REFERENCE INFORMATION

- 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.
- SURFACING IS TO BE PLACED 10 INCHES THICK AT BRIDGE ABUTMENTS AND TAPER INTO EXISTING GRAVEL SURFACE. INCLUDES 12 TON FOR 1 DRIVEWAY SW OF BRIDGE.
- THE EXISTING BRIDGE AT STATION 13+00 IS A 80' x 18' STEEL I-BEAM BRIDGE WITH TIMBER DECK BUILT IN 1951. THE STRUCTURE HAS TIMBER 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. IN THE EVENT ASBESTOS IS ENCOUNTERED DURING CONSTRUCTION, CEASE WORK IMMEDIATELY AND NOTIFY THE ENGINEER.
- 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.
- 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 6 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.
- CONTRACTOR SHALL PREBORE HOLES FOR ABUTMENT PILES. HOLES SHALL BE BORED TO THE ELEVATIONS SHOWN ON THE SITUATION PLAN. STEEL PILES SHALL BE DRIVEN THROUGH THE HOLES TO AT LEAST THE SPECIFIED DESIGN BEARING.
- ENGINEERING FABRIC TO BE PLACED UNDER ALL CLASS E REVETMENT.
- REVTMENT IS TO BE PLACED AT A THICKNESS OF 1'-6". SEE SITUATION PLAN, SHEET 3 FOR LIMITS. THE UNIT PRICE BID FOR "REVTMENT, 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.
- SEE TABULATION 108-13A, THIS SHEET AND STANDARD ROAD PLAN TC-252.
- THE ROAD WILL BE CLOSED TO TRAFFIC. SEE SHEET 1 FOR TRAFFIC CONTROL PLAN.

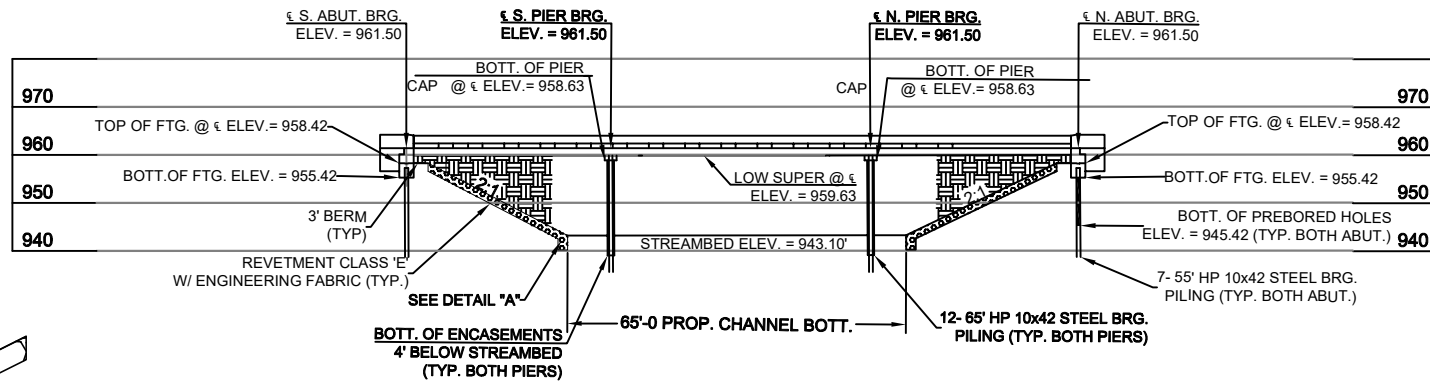
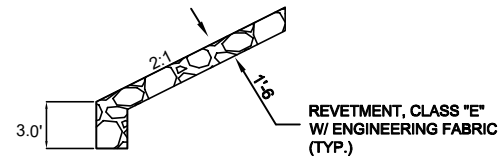
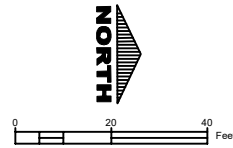
SAFETY CLOSURES			
Refer to Section 2528 of the Standard Specifications			108-13A 10-18-22
Station	Closure Type		Remarks
	Road Qty.	Hazard Qty.	
11+50	-	1	Allow access to field entrance
15+50	-	1	EOP
325th St.	1	-	Per TC-252
D65	1	-	Per TC 252
	2	2	Totals

DEMOLITION (BRIDGE REMOVAL)
THERE ARE NO PAINTED SURFACES ON THIS BRIDGE; THEREFORE, NO SCRAPE SAMPLES FOR THE PRESENCE OF LEAD OR CHROMIUM WERE TAKEN.

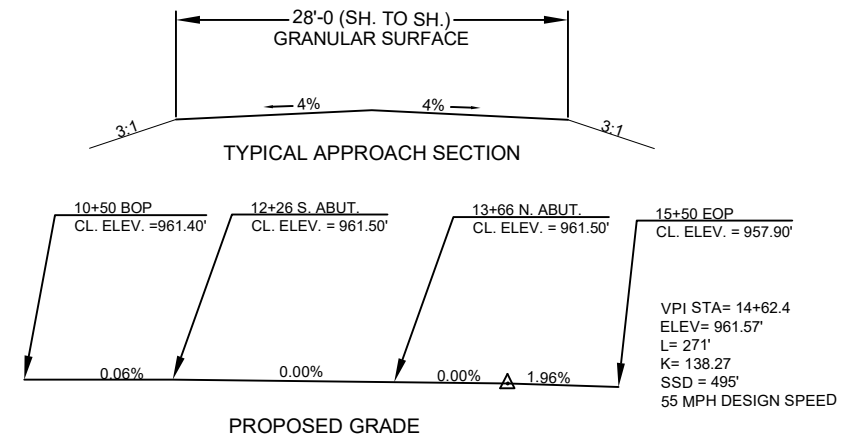
**140'-0 x 30'-6 CONTINUOUS CONCRETE
SLAB BRIDGE**

STA 12+96 NO SKEW
HARDIN COUNTY IOWA
ESTIMATED QUANTITIES, ESTIMATE REFERENCE INFORMATION,
AND GENERAL NOTES

BM #1, T-POST @ STA. 12+23.5, 67.7' RT
 N= 8495538.92', E= 14964662.41', ELEV.= 956.05'



LONGITUDINAL SECTION ALONG ϵ ROADWAY



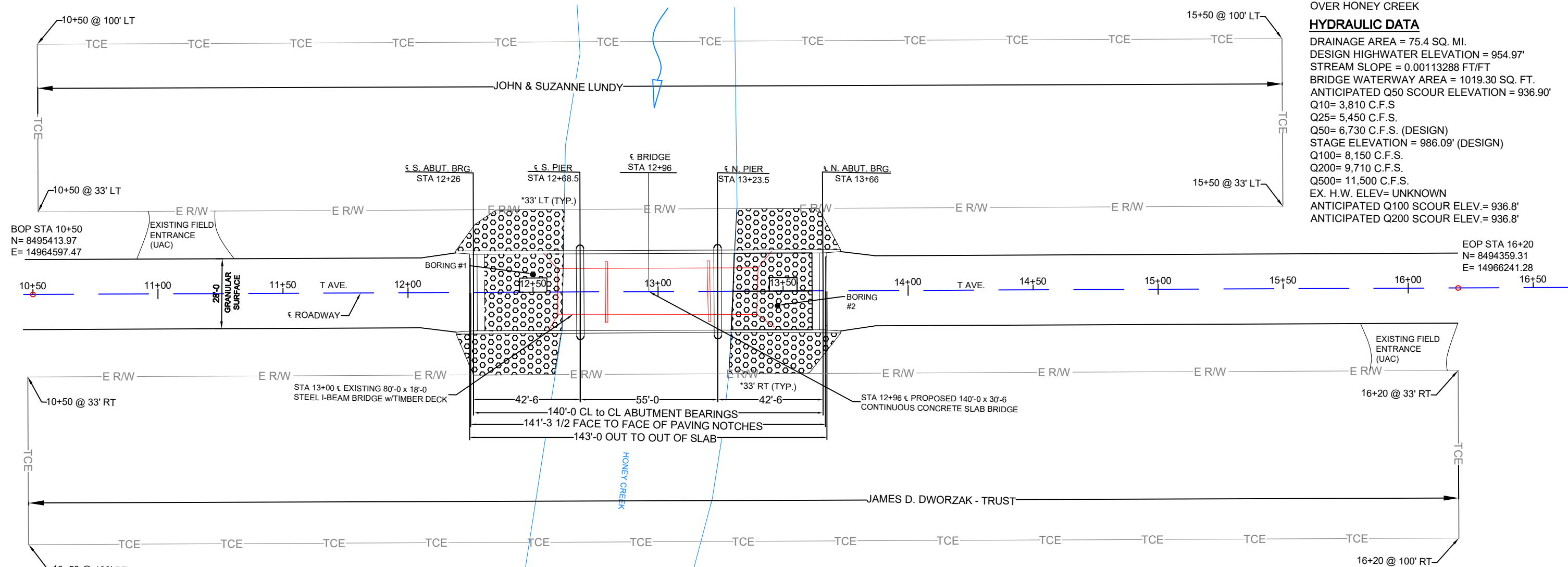
PROPOSED GRADE

LOCATION

HARDIN COUNTY
 T-86N, R-19W
 SECTION 30
 UNION TOWNSHIP
 OVER HONEY CREEK

HYDRAULIC DATA

DRAINAGE AREA = 75.4 SQ. MI.
 DESIGN HIGHWATER ELEVATION = 954.97'
 STREAM SLOPE = 0.00113288 FT/FT
 BRIDGE WATERWAY AREA = 1019.30 SQ. FT.
 ANTICIPATED Q50 SCOUR ELEVATION = 936.90'
 Q10= 3,810 C.F.S.
 Q25= 5,450 C.F.S.
 Q50= 6,730 C.F.S. (DESIGN)
 STAGE ELEVATION = 986.09' (DESIGN)
 Q100= 8,150 C.F.S.
 Q200= 9,710 C.F.S.
 Q500= 11,500 C.F.S.
 EX. H.W. ELEV.= UNKNOWN
 ANTICIPATED Q100 SCOUR ELEV.= 936.8'
 ANTICIPATED Q200 SCOUR ELEV.= 936.8'



* DENOTES LIMITS OF CLASS 10 CHANNEL EXCAVATION, CLASS "E" REVETMENT, AND ENGINEERING FABRIC

LEGEND

- EX. RIGHT OR WAY
- TEMP. CONST. EASEMENT

140'-0" x 30'-6" CONTINUOUS CONCRETE SLAB BRIDGE

STA 12+96 NO SKEW
HARDIN COUNTY IOWA

SITUATION PLAN

BORING LOG NO. 1		Page 1 of 3	
PROJECT: Hardin County Bridge 15301 Replacement		CLIENT: Hardin County IA Eldora, IA	
SITE: Providence & Union Townships; T Ave; about 1,300 ft. N of 325th Street, Hardin County, IA			
GRAPHIC LOG	LOCATION S. about 7' W of CL; Sta. 12+50 Latitude: 42.2339° Longitude: -93.1179° Surface Elev.: 961.5 (FL) ELEVATION (FL)	DEPTH (FL)	WATER LEVEL OBSERVATIONS
			SAMPLE TYPE
			RECOVERY (in.)
			FIELD TEST RESULTS
DEPTH			
0	FILL - SAND AND GRAVEL, with cobbles		
2.5			
5	IDOT - STIFF SILTY CLAY SANDY LEAN CLAY, trace gravel and organics, gray and dark brown, moist to wet	4	2-2-3 N=5
10		9	2-2-3 N=5
12.0	IDOT - COARSE SAND SAND (SP-SC), with clay, trace gravel, brown to gray, wet	11	6-8-9 N=17
15		10	15-11-11 N=22
20		9	8-8-9 N=17
25		0	6-5-6 N=11
30			
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic			
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination.		Notes:	
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.		Boring Started: 04-06-2020 Boring Completed: 04-06-2020	
WATER LEVEL OBSERVATIONS None observed prior to mud rotary 9' observed after casing removal		Drill Rig: # 589 Driller: RF	
Terracon 3105 Capital Way, Ste 5 Cedar Falls, IA		Project No.: 1320065.04 Exhibit: A-1	

BORING LOG NO. 1		Page 2 of 3	
PROJECT: Hardin County Bridge 15301 Replacement		CLIENT: Hardin County IA Eldora, IA	
SITE: Providence & Union Townships; T Ave; about 1,300 ft. N of 325th Street, Hardin County, IA			
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			SAMPLE TYPE
			RECOVERY (in.)
			FIELD TEST RESULTS
DEPTH			
35	IDOT - COARSE SAND (continued) SAND (SP-SC), with clay, trace gravel, brown to gray, wet	9	7-9-9 N=18
40	IDOT - FIRM TO VERY FIRM GLACIAL CLAY SANDY LEAN CLAY (CL/SC), trace gravel, with sand and silt layers, gray	9	18-8-4 N=12 6000 (HP)
45		16	3-5-8 N=13 9000 (HP)
50		18	4-6-9 N=15 7500 (HP)
55		18	5-8-11 N=19 9000+ (HP)
60		18	5-8-13 N=21 9000+ (HP)
63.5			
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic			
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination.		Notes:	
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.		Boring Started: 04-06-2020 Boring Completed: 04-06-2020	
WATER LEVEL OBSERVATIONS None observed prior to mud rotary 9' observed after casing removal		Drill Rig: # 589 Driller: RF	
Terracon 3105 Capital Way, Ste 5 Cedar Falls, IA		Project No.: 1320065.04 Exhibit: A-1	

BORING LOG NO. 1		Page 3 of 3	
PROJECT: Hardin County Bridge 15301 Replacement		CLIENT: Hardin County IA Eldora, IA	
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GRAPHIC LOG	LOCATION S. about 7' W of CL; Sta. 12+50 Latitude: 42.2339° Longitude: -93.1179° Surface Elev.: 961.5 (FL) ELEVATION (FL)	DEPTH (FL)	WATER LEVEL OBSERVATIONS
			SAMPLE TYPE
			RECOVERY (in.)
			FIELD TEST RESULTS
DEPTH			
65	IDOT - GLACIAL MATERIAL (continued) SANDY LEAN CLAY (CL/SC), trace gravel, with sand and silt layers, gray	16	24-48-65/3"
70		18	13-20-33 N=53 9000+ (HP)
75		18	18-31-51 N=82 9000+ (HP)
79.5	Boring Terminated at 79.5 Feet	12	25-85 9000+ (HP)
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic			
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination.		Notes:	
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.		Boring Started: 04-06-2020 Boring Completed: 04-06-2020	
WATER LEVEL OBSERVATIONS None observed prior to mud rotary 9' observed after casing removal		Drill Rig: # 589 Driller: RF	
Terracon 3105 Capital Way, Ste 5 Cedar Falls, IA		Project No.: 1320065.04 Exhibit: A-1	

140'-0 x 30'-6 CONTINUOUS CONCRETE
SLAB BRIDGE

STA 12+96 NO SKEW
HARDIN COUNTY IOWA

SOUNDING DATA

BORING LOG NO. 2				Page 1 of 3	
PROJECT: Hardin County Bridge 15301 Replacement		CLIENT: Hardin County IA Eldora, IA			
SITE: Providence & Union Townships; T Ave; about 1,300 ft. N of 325th Street, Hardin County, IA					
GRAPHIC LOG	LOCATION N. abut: 6° E of CL; Sta. 13+50 Latitude: 42.2342° Longitude: -93.1178°	DEPTH (FL)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS
	Surface Elev.: 961.0 (FL) ELEVATION (FL)				
DEPTH					
FILL - SAND AND GRAVEL, with cobbles					
2.5					
IDOT - SOFT SILTY CLAY FILL FILL - LEAN CLAY, with sand, trace gravel and organics, dark brown, moist					
5					
10					
12.0					
IDOT - COARSE SAND SAND (SP), trace clay, with gravel, gray, moist					
15					
20					
25					
30					
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic					
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination.		Notes:			
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.					
WATER LEVEL OBSERVATIONS None observed prior to mud rotary		Boring Started: 04-06-2020		Boring Completed: 04-06-2020	
Terracon 3105 Capital Way, Ste 5 Cedar Falls, IA		Drill Rig: # 589		Driller: RF	
		Project No.: 13205065.04		Exhibit: A-2	

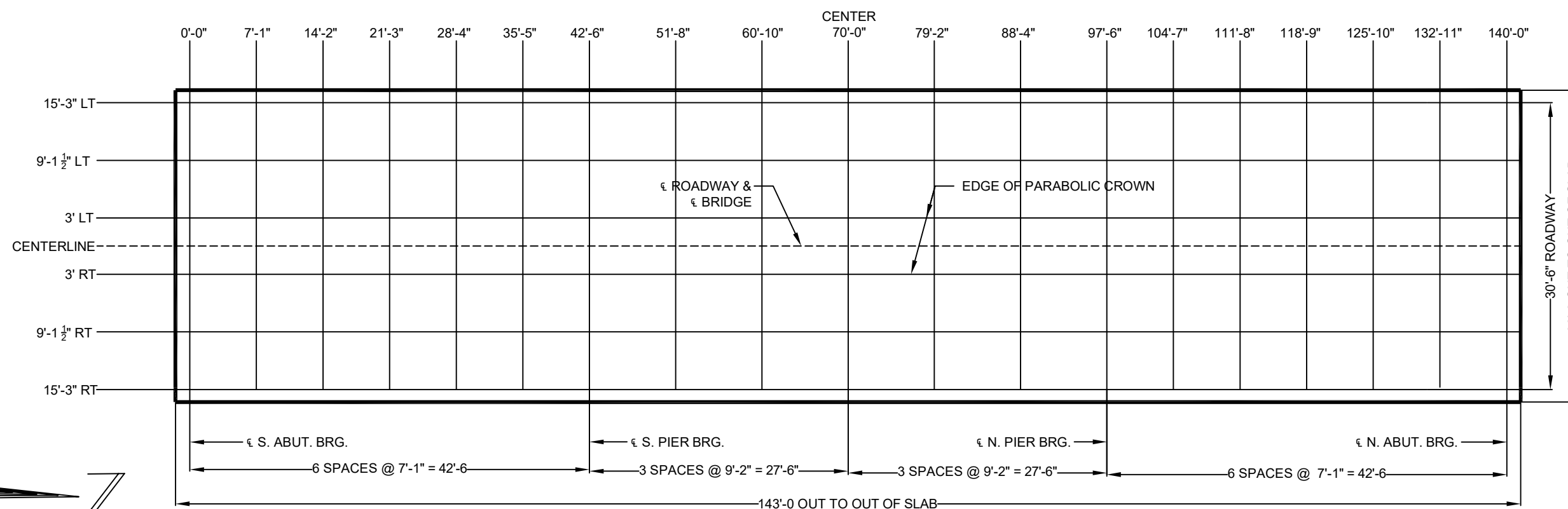
BORING LOG NO. 1				Page 2 of 3	
PROJECT: Hardin County Bridge 15301 Replacement		CLIENT: Hardin County IA Eldora, IA			
SITE: Providence & Union Townships; T Ave; about 1,300 ft. N of 325th Street, Hardin County, IA					
GRAPHIC LOG	LOCATION S. abut: 7° W of CL; Sta. 12+50 Latitude: 42.2339° Longitude: -93.1179°	DEPTH (FL)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS
	Surface Elev.: 961.5 (FL) ELEVATION (FL)				
DEPTH					
IDOT - COARSE SAND (continued) SAND (SP-SC), with clay, trace gravel, brown to gray, wet					
35					
39.5					
IDOT - FIRM TO VERY FIRM GLACIAL CLAY SANDY LEAN CLAY (CL/SC), trace gravel, with sand and silt layers, gray					
40					
45					
50					
55					
60					
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic					
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination.		Notes:			
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.					
WATER LEVEL OBSERVATIONS None observed prior to mud rotary 9' observed after casing removal		Boring Started: 04-06-2020		Boring Completed: 04-06-2020	
Terracon 3105 Capital Way, Ste 5 Cedar Falls, IA		Drill Rig: # 589		Driller: RF	
		Project No.: 13205065.04		Exhibit: A-1	

BORING LOG NO. 1				Page 3 of 3	
PROJECT: Hardin County Bridge 15301 Replacement		CLIENT: Hardin County IA Eldora, IA			
SITE: Providence & Union Townships; T Ave; about 1,300 ft. N of 325th Street, Hardin County, IA					
GRAPHIC LOG	LOCATION S. abut: 7° W of CL; Sta. 12+50 Latitude: 42.2339° Longitude: -93.1179°	DEPTH (FL)	WATER LEVEL OBSERVATIONS	SAMPLE TYPE	FIELD TEST RESULTS
	Surface Elev.: 961.5 (FL) ELEVATION (FL)				
DEPTH					
SANDY LEAN CLAY (CL/SC), trace gravel, with sand and silt layers, gray IDOT - GLACIAL MATERIAL (continued)					
65					
70					
75					
79.5					
Boring Terminated at 79.5 Feet					
Stratification lines are approximate. In-situ, the transition may be gradual. Hammer Type: Automatic					
Advancement Method: Solid stem auger to 9 feet then mud rotary to boring termination.		Notes:			
Abandonment Method: Boring backfilled with soil cuttings and bentonite chips upon completion.					
WATER LEVEL OBSERVATIONS None observed prior to mud rotary 9' observed after casing removal		Boring Started: 04-06-2020		Boring Completed: 04-06-2020	
Terracon 3105 Capital Way, Ste 5 Cedar Falls, IA		Drill Rig: # 589		Driller: RF	
		Project No.: 13205065.04		Exhibit: A-1	

140'-0 x 30'-6 CONTINUOUS CONCRETE
SLAB BRIDGE

STA 12+96 NO SKEW
HARDIN COUNTY IOWA

SOUNDING DATA



TOP OF SLAB ELEVATIONS w/CAMBER CALCULATED

LOCATION	SOUTH ABUT. BRG.						SOUTH PIER			CENTERLINE BRIDGE			NORTH PIER						NORTH ABUT. BRG.
	0'-0"	7'-1"	14'-2"	21'-3"	28'-4"	35'-5"	42'-6"	51'-8"	60'-10"	70'-0"	79'-2"	88'-4"	97'-6"	104'-7"	111'-8"	118'-9"	125'-10"	132'-11"	140'-0"
15'-3" LT (WEST GUTTER LINE)	961.19	961.22	961.23	961.23	961.22	961.20	961.19	961.23	961.26	961.29	961.26	961.23	961.19	961.20	961.22	961.23	961.23	961.22	961.19
9'-1½" LT	961.35	961.37	961.39	961.39	961.37	961.36	961.35	961.38	961.41	961.45	961.41	961.38	961.35	961.36	961.37	961.39	961.39	961.37	961.35
3' LT	961.47	961.49	961.51	961.51	961.49	961.48	961.47	961.51	961.54	961.57	961.54	961.51	961.47	961.48	961.49	961.51	961.51	961.49	961.47
CENTERLINE	961.50	961.53	961.54	961.54	961.53	961.51	961.50	961.54	961.57	961.60	961.57	961.54	961.50	961.51	961.53	961.54	961.54	961.53	961.50
3' RT	961.47	961.49	961.51	961.51	961.49	961.48	961.47	961.51	961.54	961.57	961.54	961.51	961.47	961.48	961.49	961.51	961.51	961.49	961.47
9'-1½" RT	961.35	961.37	961.39	961.39	961.37	961.36	961.35	961.38	961.41	961.45	961.41	961.38	961.35	961.36	961.37	961.39	961.39	961.37	961.35
15'-3" RT (EAST GUTTER LINE)	961.19	961.22	961.23	961.23	961.22	961.20	961.19	961.23	961.26	961.29	961.26	961.23	961.19	961.20	961.22	961.23	961.23	961.22	961.19

140'-0" x 30'-6" CONTINUOUS CONCRETE
 SLAB BRIDGE
 STA 12+96 NO SKEW
HARDIN COUNTY IOWA
 SUPERSTRUCTURE DETAILS



HARDIN COUNTY UTILITY PERMIT APPLICATION

Permit No: UT-22-019

Underground
 Aerial

Permanent Installation
 Temporary Installation

This is a Utility Permit Application for telecommunications, electric, gas, water and sewer utilities. The applicant agrees to comply with the following permit requirements. Compliance shall be determined by the sole discretion of the County Engineer as deemed necessary to promote public health, safety, and general welfare. These requirements shall apply unless waived in writing by the County Engineer prior to installation.

APPLICANT NAME: INTERSTATE POWER AND LIGHT

STREET ADDRESS: 410 LAWLER STREET

CITY: IOWA FALLS STATE: IA ZIP: 50126

PHONE: 641-648-7611 FAX: _____ CONTACT PERSON: SERGIO MARIN

TYPE OF WORK: UNDERGROUND ELECTRICAL

1. LOCATION PLAN

An applicant shall file a completed location plan as an attachment to this Utility Permit Application. The location plan shall set forth the location of the proposed line on the secondary road system and include a description of the proposed installation.

2. WRITTEN NOTICE

At least five (5) working days prior to the proposed installation, an applicant shall file with the County Engineer a written notice stating the time, date, location, and nature of the proposed installation.

3. INSPECTION

The County Engineer may provide a full-time inspector during the installation of all lines to ensure compliance with this Utility Permit. The inspector shall have the right, during reasonable hours and after showing proper identification, to enter any installation site in the discharge of the inspector's official duties, and to make any inspection or test that is reasonably necessary to protect the public health, safety, and welfare.

4. INSPECTION FEES

The applicant shall pay actual costs directly attributable to the installation inspection conducted by the County Engineer. Within thirty (30) days after completion of the installation, the County Engineer shall submit a statement for inspection services rendered. The applicant agrees to reimburse the county within thirty (30) days of billing.

5. REQUIREMENTS

The installation inspector shall assure that the following requirements have been met:

- A. Construction signing shall comply with the Manual on Uniform Traffic Control Devices
- B. Depth – (Add additional depth if ditch has silted to the thickness of the deposited silt.) The minimum depth of cover shall be as follows:

Telecommunications....	36"	Electric.....	48"
Gas.....	48"	Water.....	60"
Sewer.....	60"		
- C. Minimum roadway overhead clearance for utility lines shall be 20 feet.
- D. The applicant shall use reference markers in the right-of-way (ROW) boundary to locate line and changes in alignment as required by the County Engineer. A permanent warning tape shall be placed one (1) foot above all underground utility lines.
- E. All tile line locations shall be marked with references located in the ROW line.
- F. No underground utility lines shall cross over a crossroad drainage structure without approval from the County Engineer.
- G. Residents along the utility route shall have uninterrupted access to the public roads. An all weather access shall be maintained for residents adjacent to the project.
- H. After construction, granular surfacing shall be added to the road by the applicant to restore the road to its original condition. After surfacing has been applied, the road surface shall be reviewed by the County Engineer once the road has been saturated, to determine if additional surfacing on the roadway by the applicant is necessary.

6. NON-CONFORMING WORK

The County Engineer may halt the installation at any time if the applicant's work does not meet the requirements set forth in this Utility Permit Application.

7. COUNTY INFRACTION

Violation of this permit is a county infraction under Iowa Code Section 331.307, punishable by a civil penalty of \$100 for each violation. Each day that a violation occurs or is permitted to exist by the applicant constitutes a separate offense.

8. HOLD HARMLESS

The utility company shall save this county harmless of any damages resulting from the applicant's operations. A copy of a certificate of insurance naming this county as an additional insured for the permit work shall be filed in the County Engineer's Office prior to installation. The minimum limits of liability under the insurance policy shall be \$1,000,000.

9. PERMIT REQUIRED

No applicant shall install any lines unless such applicant has obtained a Utility Permit from the County Engineer and has agreed in writing that said installation will comply with all ordinances and requirements of the county for such work. Applicants agree to hold the county free from liability for all damage to applicant's property which occurs proximately as a result of the applicant's failure to comply with said ordinances or requirements.

10. RELOCATION

The applicant shall, at any time subsequent to installation of utility lines, at the applicant's own expense, relocate or remove such lines as may become necessary to conform to new grades, alignment or widening of ROW resulting from maintenance or construction operations for highway improvements.

DATE: 8/15/2022 COMPANY: INTERSTATE POWER AND LIGHT

SIGNATURE: Sergio Marin

RECOMMENDED FOR APPROVAL:

DATE: 8-15-22

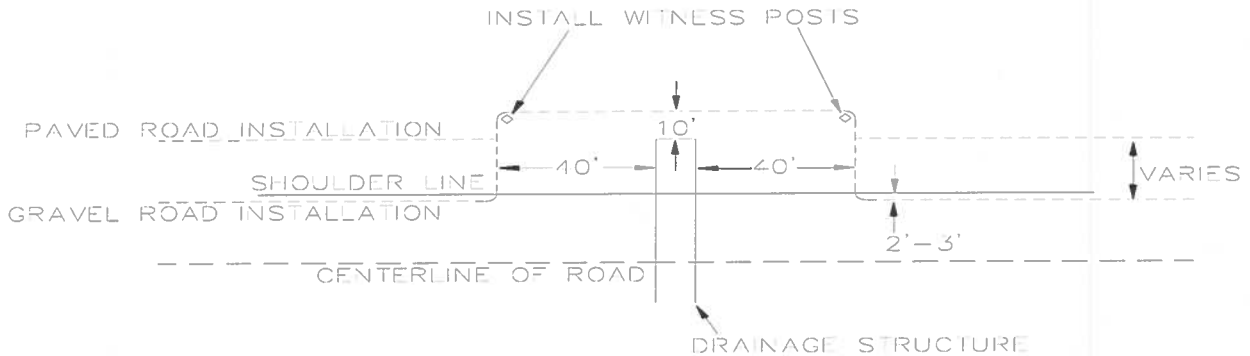
[Signature]
COUNTY ENGINEER

APPROVAL:

DATE: _____

CHAIRMAN, BOARD OF SUPERVISORS

NON-BORED INSTALLATION DETAIL

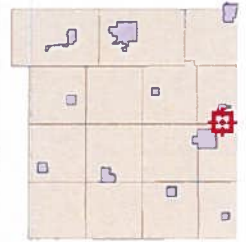


BORED INSTALLATION DETAIL

21984 CO HWY S56, ELDORA



Overview



Legend

- Corporate Limits
- Political Township
- Parcels

Parcel ID	881933400007	Alternate ID	1970100000	Owner Address	Midwest Liquid Systems, Inc
Sec/Twp/Rng	33-88-19	Class	A		1414 21st Ave
Property Address	21984 CO HWY S56	Acreeage	20.25		Eldora, IA 50627
	HARDIN				
District	24000				
Brief Tax Description	SW SE EX 3.5A TRACT & EX N15A SEC33-T88N-R19W <i>(Note: Not to be used on legal documents)</i>				

Disclaimer: The maps included in this website do not represent a survey and are compiled from official records, including plats, surveys, recorded deeds, and contracts, and only contain information required for government purposes. No warranties, expressed or implied, are provided for the data herein, its use or its interpretation. Hardin County assumes no responsibility for use or interpretation of the data. Any person that relies on any information obtained from this site does so at his or her own risk. All critical information should be independently verified.

Date created: 8/15/2022
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HARDIN COUNTY UTILITY PERMIT APPLICATION

Permit No: UT-22-020

- Underground
- Aerial

- Permanent Installation
- Temporary Installation

This is a Utility Permit Application for telecommunications, electric, gas, water and sewer utilities. The applicant agrees to comply with the following permit requirements. Compliance shall be determined by the sole discretion of the County Engineer as deemed necessary to promote public health, safety, and general welfare. These requirements shall apply unless waived in writing by the County Engineer prior to installation.

APPLICANT NAME: Corn Belt Power Cooperative

STREET ADDRESS: 1300 13th Street North, P.O. Box 508

CITY: Humboldt STATE: IA ZIP: 50548-0508

PHONE: 515-332-7746 FAX: 515-332-1375 CONTACT PERSON: Dan Shiflett

TYPE OF WORK: Update and rebuild an existing overhead 69kV transmission line on the existing alignment line as shown on the attached map.

1. LOCATION PLAN

An applicant shall file a completed location plan as an attachment to this Utility Permit Application. The location plan shall set forth the location of the proposed line on the secondary road system and include a description of the proposed installation.

2. WRITTEN NOTICE

At least five (5) working days prior to the proposed installation, an applicant shall file with the County Engineer a written notice stating the time, date, location, and nature of the proposed installation.

3. INSPECTION

The County Engineer may provide a full-time inspector during the installation of all lines to ensure compliance with this Utility Permit. The inspector shall have the right, during reasonable hours and after showing proper identification, to enter any installation site in the discharge of the inspector's official duties, and to make any inspection or test that is reasonably necessary to protect the public health, safety, and welfare.

4. INSPECTION FEES

The applicant shall pay actual costs directly attributable to the installation inspection conducted by the County Engineer. Within thirty (30) days after completion of the installation, the County Engineer shall submit a statement for inspection services rendered. The applicant agrees to reimburse the county within thirty (30) days of billing.

5. REQUIREMENTS

The installation inspector shall assure that the following requirements have been met:

- A. Construction signing shall comply with the Manual on Uniform Traffic Control Devices
- B. Depth – (Add additional depth if ditch has silted to the thickness of the deposited silt.) The minimum depth of cover shall be as follows:

Telecommunications....	36"	Electric.....	48"
Gas.....	48"	Water.....	60"
Sewer.....	60"		
- C. Minimum roadway overhead clearance for utility lines shall be 20 feet.
- D. The applicant shall use reference markers in the right-of-way (ROW) boundary to locate line and changes in alignment as required by the County Engineer. A permanent warning tape shall be placed one (1) foot above all underground utility lines.
- E. All tile line locations shall be marked with references located in the ROW line.
- F. No underground utility lines shall cross over a crossroad drainage structure without approval from the County Engineer.
- G. Residents along the utility route shall have uninterrupted access to the public roads. An all weather access shall be maintained for residents adjacent to the project.
- H. After construction, granular surfacing shall be added to the road by the applicant to restore the road to its original condition. After surfacing has been applied, the road surface shall be reviewed by the County Engineer once the road has been saturated, to determine if additional surfacing on the roadway by the applicant is necessary.
- I. All damaged areas within the ROW shall be repaired and restored to at least their former condition by the applicant or the cost of any repair work caused to be performed by the county will be assessed against the applicant.
- J. Areas disturbed during construction which present an erosion problem shall be solved by the applicant in a manner approved by the County Engineer.
- K. All trenches, excavations, and utilities that are knifed shall be properly tamped.
- L. All utilities shall be located between the bottom of the backslope and the bottom of the foreslope, unless otherwise approved in writing by the County Engineer prior to installation.
- M. Road crossing shall be bored. The depth below the road surface shall match the minimum depth of cover for the respective utility.



6. NON-CONFORMING WORK

The County Engineer may halt the installation at any time if the applicant's work does not meet the requirements set forth in this Utility Permit Application.

7. COUNTY INFRACTION

Violation of this permit is a county infraction under Iowa Code Section 331.307, punishable by a civil penalty of \$100 for each violation. Each day that a violation occurs or is permitted to exist by the applicant constitutes a separate offense.

8. HOLD HARMLESS

The utility company shall save this county harmless of any damages resulting from the applicant's operations. A copy of a certificate of insurance naming this county as an additional insured for the permit work shall be filed in the County Engineer's Office prior to installation. The minimum limits of liability under the insurance policy shall be \$1,000,000.

9. PERMIT REQUIRED

No applicant shall install any lines unless such applicant has obtained a Utility Permit from the County Engineer and has agreed in writing that said installation will comply with all ordinances and requirements of the county for such work. Applicants agree to hold the county free from liability for all damage to applicant's property which occurs proximately as a result of the applicant's failure to comply with said ordinances or requirements.

10. RELOCATION

The applicant shall, at any time subsequent to installation of utility lines, at the applicant's own expense, relocate or remove such lines as may become necessary to conform to new grades, alignment or widening of ROW resulting from maintenance or construction operations for highway improvements.

DATE: 8/15/2022 COMPANY: Corn Belt Power Cooperative

SIGNATURE: Dan Shiflett

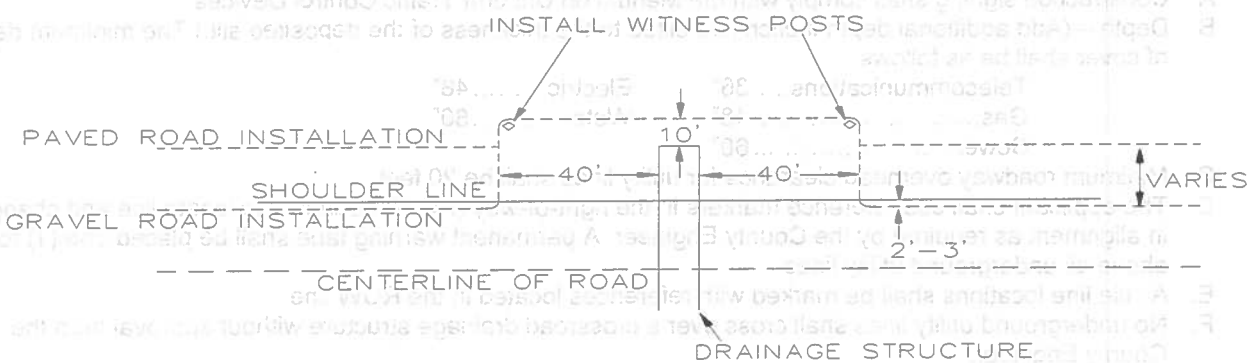
RECOMMENDED FOR APPROVAL:

DATE: 8-15-22 [Signature]
COUNTY ENGINEER

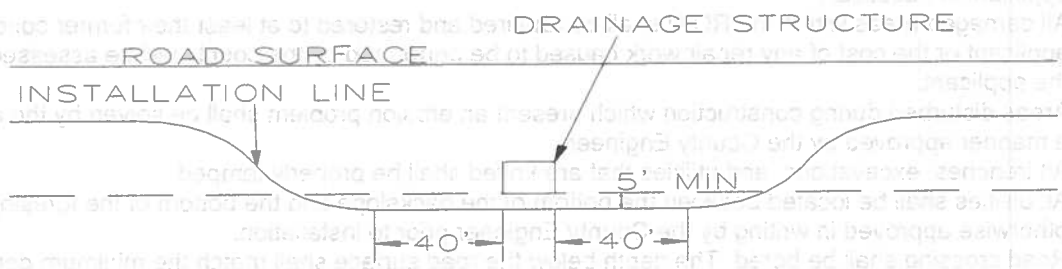
APPROVAL:

DATE: _____
CHAIRMAN, BOARD OF SUPERVISORS

NON-BORED INSTALLATION DETAIL



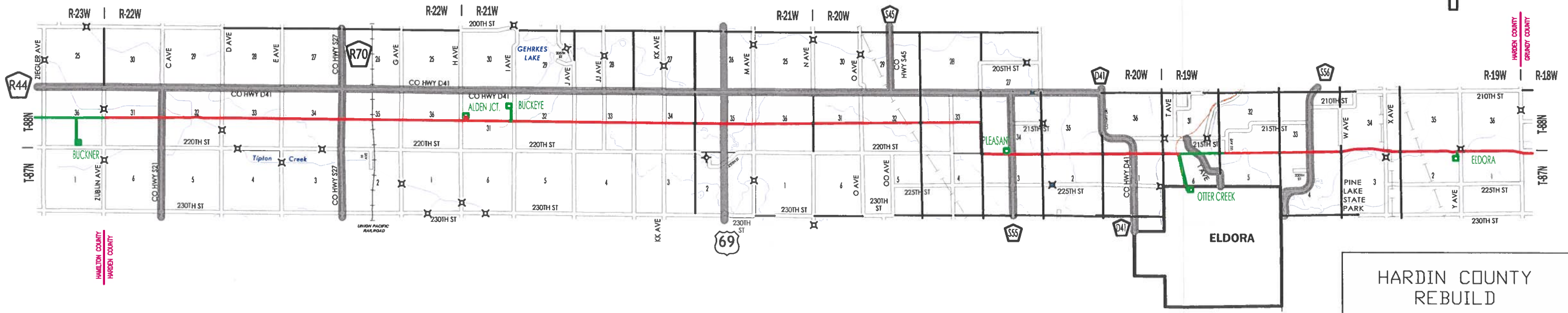
BORED INSTALLATION DETAIL






— 2022/2023 REBUILD
HARDIN COUNTY

Typical Structure
TP-69G
65' Ductile Iron
Steel Pole



HARDIN COUNTY REBUILD

 Corn Belt Power Cooperative

REVISIONS	DNV BY: DAS
	DATE: 8/18/2022