

**BRIDGE TR 30-0.80 REPLACEMENT**  
**NOTICE FOR BIDS**

Notice is hereby given that bids will be received at the office of the Logan County Commissioners, 117 E. Columbus Avenue, Suite 100, Bellefontaine, Ohio on this Day, October 31, 2024, at 11:00 A.M., Ohio Standard Time for the purpose of furnishing and installing a BRIDGE SUPERSTRUCTURE AND RELATED MATERIAL according to specifications on file in the Logan County Commissioners Office.

Bids shall be submitted on forms furnished by the Logan County Engineer's Office in a sealed envelope marked "**Bridge Superstructure Bid for Bridge T 30-0.80**" on the outside.

Bids will be for furnishing labor, equipment, and materials for construction of a bridge superstructure on newly constructed abutments, and related materials. No other labor or installation is involved in this request for bids.

As specified in R.C. 153.54, a bidder must submit a bid guaranty in the form of either:

- (1) a bond for the full amount of the bid, or
- (2) a certified check, cashier's check, or letter of credit in the amount of 10% of the bid.

Bidders shall comply with the provisions of the Americans with Disabilities Act of 1990.

**"Domestic steel use requirements as specified in section 153.011 of the Revised Code apply to this project. Copies of section 153.011 of the Revised Code can be obtained from any of the offices of the department of administrative services."**

Base Bids will be accepted only from fabricators who are pre-qualified with ODOT at the time of award as producers of Item 515, Prestressed Concrete Bridge Members.

Alternate #1 Bids will be accepted only from contractors who are pre-qualified with ODOT at the time of award in the following Work Types: 21-Level 2 Bridge, 24-Structural Steel Erection.

Bids will be awarded to the lowest and best bidder.

The Board of Commissioners reserves the right to reject any or all bids and to waive any defects in the bids.

The Notice to Bidders is posted on the Internet and may be viewed on the Logan County Engineer's web page at: [http://lceo.us/Bid\\_Documents/index.html](http://lceo.us/Bid_Documents/index.html)

By Order of the Board of  
Logan County Commissioners

De De Doss, Clerk/Administrator

Posted: October 17, 2024  
Advertised: October 17, 2024  
October 24, 2024

**LOGAN COUNTY COMMISSIONERS  
BRIDGE SUPERSTRUCTURE AND RELATED MATERIAL**

**BASE BID FORM  
ULTRA-HIGH PERFORMANCE CONCRETE PRESTRESSED BEAM  
SUPERSTRUCTURE**

Gentlemen:

The undersigned, having full knowledge of the site, plans and specifications for the following structure(s), and the conditions of the bid, hereby agrees to furnish to the Commissioners of Logan County all services, labor, materials and equipment necessary to provide and install the bridge superstructure (Contractor shall be responsible for design of the superstructure but preliminary engineering performed by the County has shown that the precast beams must be fabricated with minimum concrete strength at release of strand = 5,000 P.S.I. and minimum concrete strength at 28-days = 7,000 P.S.I.) and related material in place, according to the plans and specifications, and to accept the total price specified below as full compensation for the work on this project.

Installation shall include placement of bearing pads and PEJF, erection of beams with the proper crane, and placement/tensioning of tie rods. Dowel pins, jute packing and grouting will be by others.

Related material is to include 1" tie bars, dowel pins, tie rod studs installed with nuts and washers, Type 2 galvanized guardrail posts, deep beam guardrail with tubular backup, bearing pads, 1/8" shims, non-shrink grout additive, jute packing, and 6"x6" PEJF (around dowels). Type 2 posts and tubular backup shall not be attached to beams. Also include non-epoxy sealer (silane) according to 512.03 on outside of fascia beams, and Ipanex (or approved equal) in the concrete at the rate of 13.8 oz. per 100 lb. of cement as a concrete densifier. The addition of calcium nitrite (D.C.I.) to the concrete shall not be required.

Guardrail system with tubular backup shall consist of 68.75 linear feet of deep beam rail with tubular backup on each side of structure (137.50 linear feet total). Eight (8) galvanized W6x25 posts shall be provided for the ends of rail off of the bridge.

<i><b>BRIDGE NUMBER</b></i>	<i><b>BID</b></i>	<i><b>DELIVERY DATE</b></i>
<b>LOG BR T 30-0.80</b>	\$	

Grand Total Bid (written): \_\_\_\_\_  
\_\_\_\_\_

Respectfully submitted,

\_\_\_\_\_  
Company or Individual

\_\_\_\_\_  
Address

By \_\_\_\_\_  
Title \_\_\_\_\_  
Phone No. \_\_\_\_\_

Federal Tax ID # \_\_\_\_\_

**LOGAN COUNTY COMMISSIONERS  
BRIDGE SUPERSTRUCTURE AND RELATED MATERIAL**

**ALTERNATE #1 BID FORM  
GALVANIZED STEEL BEAM SUPERSTRUCTURE**

Gentlemen:

The undersigned, having full knowledge of the site, plans and specifications for the following structure(s), and the conditions of the bid, hereby agrees to furnish to the Commissioners of Logan County all services, labor, materials and equipment necessary to provide and install the bridge superstructure and related material in place, according to the plans and specifications, and to accept the total price specified below as full compensation for the work on this project.

All terms of the Base Bid shall apply except that the superstructure type shall be an all galvanized structure consisting of steel beams with galvanized stay in place (SIP) deck forms installed, and according to a proposal subject to approval by the Logan County Engineer's Office. The proposal shall be submitted with the bid documents. See Alternate Bid #1 Specifications page for more details.

Guardrail system with tubular backup shall consist of 68.75 linear feet of deep beam rail with tubular backup on each side of structure (137.50 linear feet total). Eight (8) galvanized W6x25 posts shall be provided for ends of rail off of the bridge.

<i>BRIDGE NUMBER</i>	<i>BID</i>	<i>DELIVERY DATE</i>
<b>LOG BR T 30-0.80</b>	\$	

Grand Total Bid (written): \_\_\_\_\_

Respectfully submitted,

\_\_\_\_\_  
Company or Individual

\_\_\_\_\_  
Address

By \_\_\_\_\_

Title \_\_\_\_\_

Phone No. \_\_\_\_\_

Federal Tax ID # \_\_\_\_\_

**ALTERNATE #1 BID SPECIFICATIONS**  
**GALVANIZED STEEL BEAM SUPERSTRUCTURE**

1. TYPE STRUCTURE: Bridge shall be a single span, all galvanized steel beam structure with galvanized stay in place (SIP) deck forms installed. It shall be erected in place on newly constructed abutments. Bridge shall have a guardrail system consisting of galvanized deep beam rail with tubular back-up. Bearing plates, anchors, and compression seal expansion joint system shall be included. The superstructure shall not exceed the superstructure depth shown in the plans.
2. DESIGN SPECIFICATION: AASHTO Standard Specification for Highway Bridges, current edition.
3. MATERIAL: All superstructure steel shall be Grade 50 (A709). All steel shall be hot-dipped galvanized after fabrication. All fasteners shall be high strength bolts, ASTM A325 Type 1 (Galv.) with ASTM A563 Grade DH or DH3 nuts and ASTM F436 washers if applicable.
4. CONSTRUCTION/FABRICATION: AASHTO Standard Specification for Highway Bridges, current edition; ODOT Construction and Material Specifications dated January 1, 2019.
5. WELDING: All welding shall be in accordance with AASHTO/AWS D1.5 Bridge Welding Code and the AASHTO Fracture Control, where applicable.  
Non-destructive tests of all welds shall be performed as follows:
  - Fillet welds – Visual – 100%
  - MT. – 10% min. per AWS D1.5
6. DESIGN LOADING: HL-93 and 60 PSF future wearing surface.
7. STEEL FABRICATION: All steel furnished and fabricated shall be mechanically shot blasted and cleaned prior to any fabrication to specification SSPC-SP6 Commercial Blast Cleaning.
8. FINISH: All steel shall be hot-dipped galvanized. Galvanizing shall comply with ASTM A123-780. The galvanizer shall provide a 35 year written warranty against corrosion. Any field welding or other surface defects shall be repaired with an approved cold galvanizing paint compound.
15. FLOORING: The bridge flooring required shall be permanent stay-in-place steel forms. Any field welding shall be kept to a minimum and shall be repaired with a cold galvanizing paint compound.
16. CERTIFICATION: All bidders submitting proposals for the bridge replacement shall submit a current O.D.O.T. "Certification of Qualifications", that will show they are currently qualified to perform bridge work as required under Section 5525.02 to 5525.09 inclusive of Ohio Revised Code.
17. PLAN DRAWINGS: Three sets of detailed drawings of the proposed structure shall be submitted after the structure has been awarded. Designer of structure shall provide design reactions on abutments.
19. PRODUCT LIABILITY INSURANCE: Bidders shall attach a certificate of an insurance company licensed to do business in the bidder's state and acceptable to the Owner, demonstrating that the company that will fabricate the bridge to be erected has products/completed operations liability insurance coverage with limits of not less than \$3,000,000 per occurrence and \$4,000,000 in the aggregate.

20. HOT DIPPED GALVANIZED STEEL AESTHETIC COATING STANDARDS:
- a. Exposed structural members shall have an overall uniform and natural galvanized appearance. This would be the generally normal appearance that is achieved in hot dipped galvanizing of structural steel members
  - b. There shall be no unnecessary painting or grinding of exposed structural members (as determined by the Logan County Engineer). Grinding should be limited to only those areas requiring repair per ASTM A123/A780. Any areas requiring repair should be blended into the surrounding coating.
  - c. Progressive/double dipping shall only be performed when necessary.
  - d. The dipping process shall be planned to minimize striations and running/streaks on the finished surface.
  - e. There should be no drips or dross on finished members.
  - f. Galvanizing repairs shall be completed in a manner to minimize the appearance of the repair on exposed surfaces.
  - g. There shall be no cracking, flaking, or delamination on the finished product. These areas shall be repaired according to ASTM A780.

## GENERAL CONDITIONS

1. The **County** shall be responsible for providing abutments for the superstructure.
2. The **Contractor** shall be responsible for design of the superstructure, and shall supply the County with design calculations and shop drawings stamped by a Registered Engineer in the State of Ohio.
3. The **Contractor** shall be responsible for providing the proper size crane for the project. The Contractor is encouraged to visit the site prior to bidding to determine the size of crane due to field conditions.
4. The **Contractor** shall be responsible for installation of superstructure on existing abutments and related material, including installation of tie-rods, bearing pads, and 6" PEJF around dowels, if applicable.
5. The **Contractor** shall submit detailed bridge load rating calculations according to Section 900 of the current ODOT Bridge Design Manual, using load resistance factor rating. The load rating calculations shall be submitted with the shop drawings. The contractor shall provide the County with a printed report, stamped by a Registered Professional Engineer in the State of Ohio, as well as input and output files from the software used on cd/dvd and VIRTIS output files.
6. The **Contractor** shall submit the following documents prior to contract execution: (a) Ohio workers' compensation certificate of coverage and (b) Certificate of Compliance with Affirmative Action Program issued by the State EEO Coordinator.
7. Completion Date: April 1, 2025

## **OHIO REVISED CODE**

### **NON -COLLUSION AFFIDAVIT**

In accordance with Title 23 United States Code, Section 112 and Ohio Revised Code, Chapter 1331 et. seq. and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under other such penalties as the law provides, that he or his agents or employees have not entered either directly or indirectly into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall constitute also signature of this Non-Collusion Affidavit.

### **CAMPAIGN CONTRIBUTIONS AFFIDAVIT**

Ohio Revised Code Section 3517.13(I) requires that no agency or department of this state or any political subdivision shall award any contract, other than one let by competitive bidding or a contract incidental to such contract or which is by force account, for the purchase of goods costing more than five hundred dollars or services costing more than five hundred dollars to any individual, partnership, association, including, without limitation, a professional association organized under Chapter 1785 of the ORC, estate, or trust if the individual has made or the individual's spouse has made, or any partner, shareholder, administrator, executor, or trustee or the spouse of any of them has made, as an individual, within the two previous calendar years, one or more contributions totaling in excess of one thousand dollars to the holder of the public office having ultimate responsibility for the award of the contract or to the public officer's campaign committee. Furthermore, Ohio Revised Code Section 3517.13(J) requires that no agency or department of this state or any political subdivision shall award any contract, other than one let by competitive bidding or a contract incidental to such contract or which is by force account, for the purchase of goods costing more than five hundred dollars or services costing more than five hundred dollars to a corporation or business trust, except a professional association organized under Chapter 1785 of the ORC, if an owner of more than twenty per cent of the corporation or business trust or the spouse of that person has made, as an individual, within the two previous calendar years, taking into consideration only owners for all of that period, one or more contributions totaling in excess of one thousand dollars to the holder of a public office having ultimate responsibility for the award of the contract or to the public officer's campaign committee. Execution of this proposal on the signature portion thereof shall constitute also signature of this Campaign Contributions Affidavit.

**COMPETITIVE BIDDER'S  
PERSONAL PROPERTY TAX AFFIDAVIT  
LOGAN COUNTY, OHIO (R.C. 5719.042)**

STATE OF OHIO:

: ss:

LOGAN COUNTY :

The undersigned, being duly sworn, says that he is or represents a competitive bidder doing business in, or with Logan County, Ohio, and that: (Check appropriate lines)

\_\_\_\_\_ He is a sole proprietorship doing business under his own name.

\_\_\_\_\_ He is a sole proprietorship doing business under the name of \_\_\_\_\_

\_\_\_\_\_ He is a general partner of the partnership known as \_\_\_\_\_

\_\_\_\_\_ He is a duly authorized officer of the corporation named \_\_\_\_\_

The business address of the bidder is \_\_\_\_\_

\_\_\_\_\_ ; Telephone \_\_\_\_\_

The undersigned further says that the bidder at the time of submitting his or its bid:

\_\_\_\_\_ Was not charged with any delinquent personal taxes in Logan County, Ohio.

\_\_\_\_\_ Was charged with delinquent personal property taxes as follows:

YEAR	AMOUNT	PENALTY	INTEREST
20 _____	\$ _____	\$ _____	\$ _____
20 _____	\$ _____	\$ _____	\$ _____
20 _____	\$ _____	\$ _____	\$ _____

Signed: \_\_\_\_\_

Title: \_\_\_\_\_



STATE OF OHIO:  
: ss:  
LOGAN COUNTY :

Before me, a notary, in and for said county, personally appeared

\_\_\_\_\_ (sole proprietor doing business under his own name)  
(sole proprietor doing business under the name of \_\_\_\_\_)  
(general partner of the Partnership known as \_\_\_\_\_)  
(duly authorized officer of the Corporation name \_\_\_\_\_),

who acknowledged that he is authorized in the premises and that his signing of this instrument is the free act and deed of himself or the organization which he represents.

In testimony whereof, I have hereunto subscribed my name and affixed my official seal at \_\_\_\_\_, Ohio, this \_\_\_\_\_ day of \_\_\_\_\_, 2\_\_\_\_.

\_\_\_\_\_  
Notary Public

COMMISSIONERS:

\_\_\_\_\_ No delinquent taxes - file  
\_\_\_\_\_ Delinquent taxes - sent to County Engineer

\_\_\_\_\_  
Clerk

## PLAN HOLDERS LIST

### BR T 30-0.80

Prestress Services, Inc.  
Attn: Barry Barger  
P.O. Box 55436  
5501 Briar Hill Road  
Lexington, KY 40555  
859-299-0461  
info@prestressservices.com  
bbarger@prestressservices.com

Carr Concrete  
P.O. Box 265  
Waverly, WV 26184-0265  
800-837-8918  
carrinfo@lbfoster.com

U.S. Bridge  
201 Wheeling Avenue  
P.O. Box 757  
Cambridge, OH 43725  
888-872-7434 (Phone)  
gbickle@usbridge.com  
Attn: Greg Bickle

Builders Exchange-Dayton  
2077 Embury Park Road  
Dayton, OH 45414  
866-907-6300  
Info@BXdayton.org

McGraw-Hill/Dodge Reports  
950 Contract Street  
Suite 100-A  
Lexington, KY 40505  
859-425-6630  
construction\_cust\_svc@mcgraw-hill.com

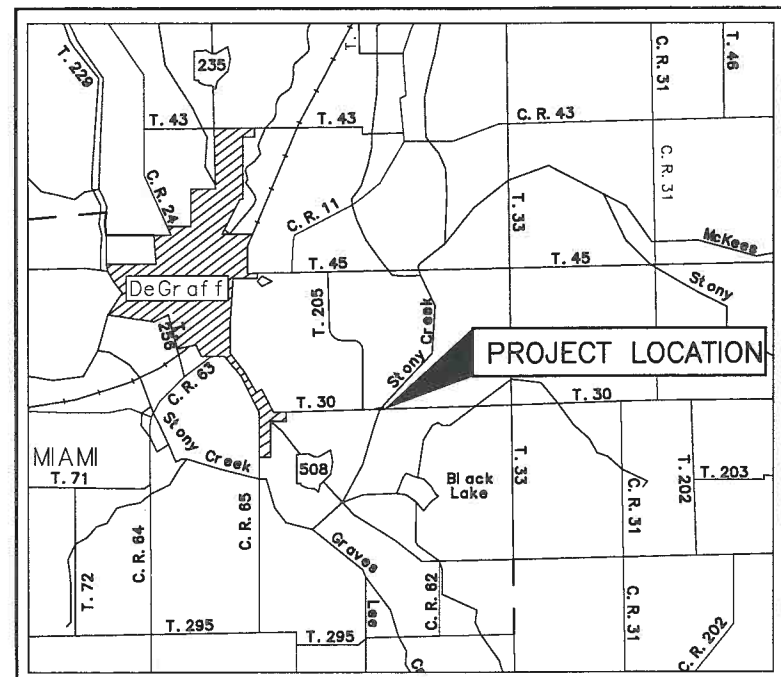
Ohio Construction News  
7261 Engle Road, Suite 304  
Cleveland, OH 44130  
800-969-4700  
customercare@cmdgroup.com

Laborers-Employers Cooperation and Education Trust  
P.O. Box 46217  
Cincinnati, OH 45246  
614-832-7134  
Attn: Carmen D. Henderson  
swo-lect@cinci.rr.com

Valmont Structures  
P.O. Box 358  
28800 Ida Street  
Valley, NE 68064  
Attn: Jeff Simkins  
jeff.simkins@valmont.com

Acrow  
181 New Road – Suite 202  
Parsippany, NJ 07054  
Attn: Abbey Smith  
asmith@acrow.com

ConTech Engineered Solutions LLC  
212 Norwegian Cove  
Eaton, OH 45320  
Attn: John V. Kanzleamar  
jkanzleamar@conteches.com



LOCATION MAP

BRIDGE COORDINATES: 40°17'47.6"N 83°53'34.7"W



LOGAN COUNTY  
ENGINEER'S OFFICE  
SCOTT C. COLEMAN, P.E., P.S.  
COUNTY ENGINEER  
BRIDGE TR 30-0.80  
REPLACEMENT  
MIAMI TOWNSHIP  
2025

DESIGN DESIGNATION

CURRENT A.D.T. (2022)	188
DESIGN YEAR A.D.T. (2045)	372
DIRECTIONAL DISTRIBUTION	50%
TRUCKS (24 HOUR B&C)	1%
DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION	LOCAL RURAL

INDEX OF SHEETS

TITLE SHEET	1
SITE PLAN & BRIDGE PROFILE	2
ABUTMENT DETAILS	3
SUPERSTRUCTURE DETAILS	4
GUARDRAIL & REINFORCING DETAILS	5
CROSS SECTIONS STA. 41+54.50 TO 42+54.50	6
CROSS SECTIONS STA. 43+19.50 TO 44+19.50	7

PROJECT DESCRIPTION

THE REPLACEMENT OF A SINGLE SPAN STEEL THRU TRUSS BRIDGE WITH UHPC PRESTRESSED COMPOSITE BOX BEAMS ON REINFORCED CONCRETE CAPPED PILE ABUTMENTS, MINOR EMBANKMENT WORK ALONG T.R. 30, AND MINOR ROAD WORK ON T.R. 30.

CONTRACTED WORK WILL INCLUDE THE DESIGN, MANUFACTURE, AND INSTALLATION OF THE BRIDGE SUPERSTRUCTURE AND THE FURNISHING OF RELATED SUPERSTRUCTURE MATERIAL.

COUNTY FORCES WILL PERFORM ALL SITE WORK, INSTALL SUPERSTRUCTURE DOWEL PINS, JUTE PACKING AND GROUTING, POUR CAST-IN-PLACE CONCRETE DECK, INSTALL GUARDRAIL, PERFORM EMBANKMENT WORK ALONG T.R. 30, AND PERFORM MINOR ROAD WORK ON T.R. 30.

2023 SPECIFICATIONS

EXCEPT WHERE OTHERWISE NOTED, THE CONSTRUCTION AND MATERIAL SPECIFICATIONS OF THE STATE OF OHIO, DATED JANUARY 1, 2023, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED HEREON, SHALL GOVERN THIS IMPROVEMENT.

DOMESTIC STEEL

DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN SECTION 153.011 OF THE OHIO REVISED CODE APPLY TO THIS PROJECT. COPIES OF SECTION 153.011 OF THE OHIO REVISED CODE CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES.

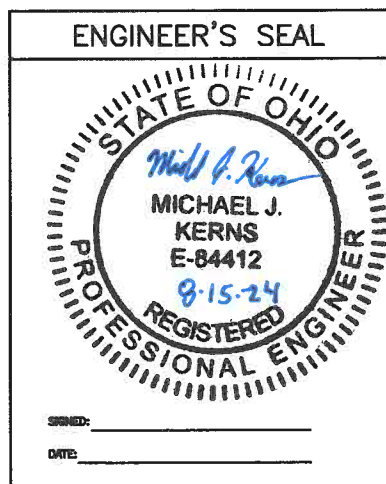
APPROVAL

I HEREBY APPROVE THIS PLAN AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING OF THE HIGHWAY TO THROUGH TRAFFIC, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THESE PLANS.

9-11-24  
DATE

*Scott C. Coleman*  
LOGAN COUNTY, OHIO, ENGINEER

PLANS PREPARED BY:  
LOGAN COUNTY ENGINEER'S OFFICE  
1991 C.R. 13, P.O. BOX 427  
BELLEFONTAINE, OHIO 43311

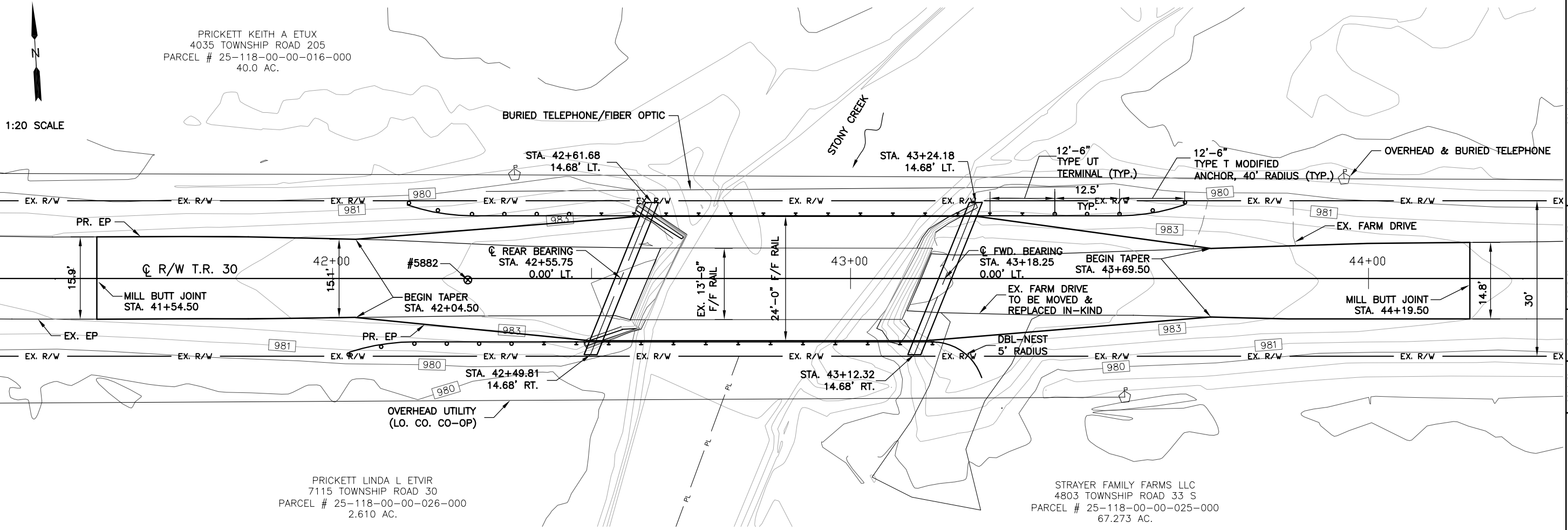


STANDARD CONSTRUCTION DRAWINGS	
DBR-2-73	7-19-02
DS-1-92	7-18-03
PSBD-2-07	7-20-18

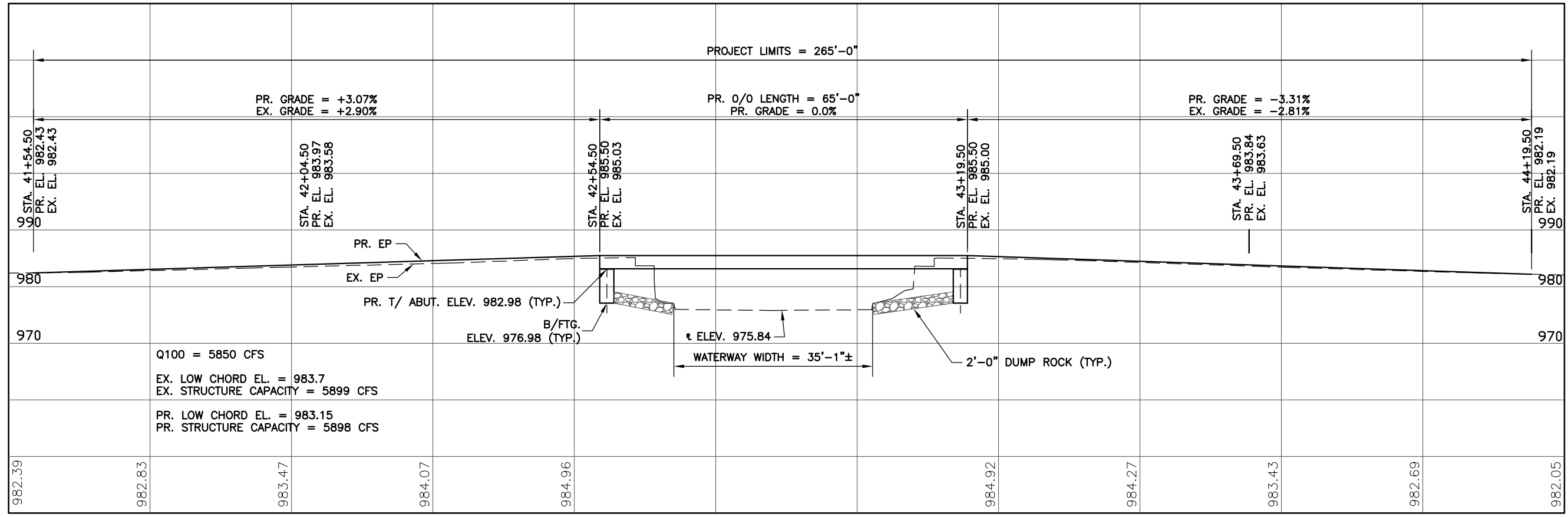


SURVEY CONTROL	
PT. #5876, RRSF 0.00' OFFSET 37+30.00 ELEV. = 987.82	PT. #5882, RRSF 0.28' RT. OFFSET 64+02.95 ELEV. = 983.91
EXISTING STRUCTURE	
TYPE: SINGLE SPAN STEEL THRU TRUSS SPAN: 49'-2" C/C BEARINGS ROADWAY: 13'-9"± LOADING: POSTED FOR 30% OHIO LEGAL LOADS SKEW: 22' LEFT FORWARD WEARING SURFACE: ASPHALT CONCRETE APPROACH SLAB: NONE DATE BUILT: 1922 STRUCTURAL FILE NUMBER: 4632613	
PROPOSED STRUCTURE	
TYPE: UHPC CB 21x48 PRECAST BEAMS SPAN: 62'-6" C/C BEARINGS ROADWAY: 24'-0" F/F GUARDRAIL LOADING: HL-93 SKEW: 22' LEFT FORWARD WEARING SURFACE: REINFORCED CONCRETE ALIGNMENT: TANGENT SUPERELEVATION: NONE APPROACH SLAB: NONE CROWN: 0.016	

FEDERAL PROJECT NO. NON-FEDERAL  
PID NO. NONE  
WORK ORDER NO. 11420  
RAILROAD INVOLVEMENT NONE  
BRIDGE T 30-0.80  
1/7



SITE PLAN



PROFILE ALONG C BRIDGE

PRICKETT KEITH A ETUX  
4035 TOWNSHIP ROAD 205  
PARCEL # 25-118-00-00-016-000  
40.0 AC.

1:20 SCALE

PRICKETT LINDA L ETVIR  
7115 TOWNSHIP ROAD 30  
PARCEL # 25-118-00-00-026-000  
2.610 AC.

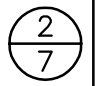
STRAYER FAMILY FARMS LLC  
4803 TOWNSHIP ROAD 33 S  
PARCEL # 25-118-00-00-025-000  
67.273 AC.

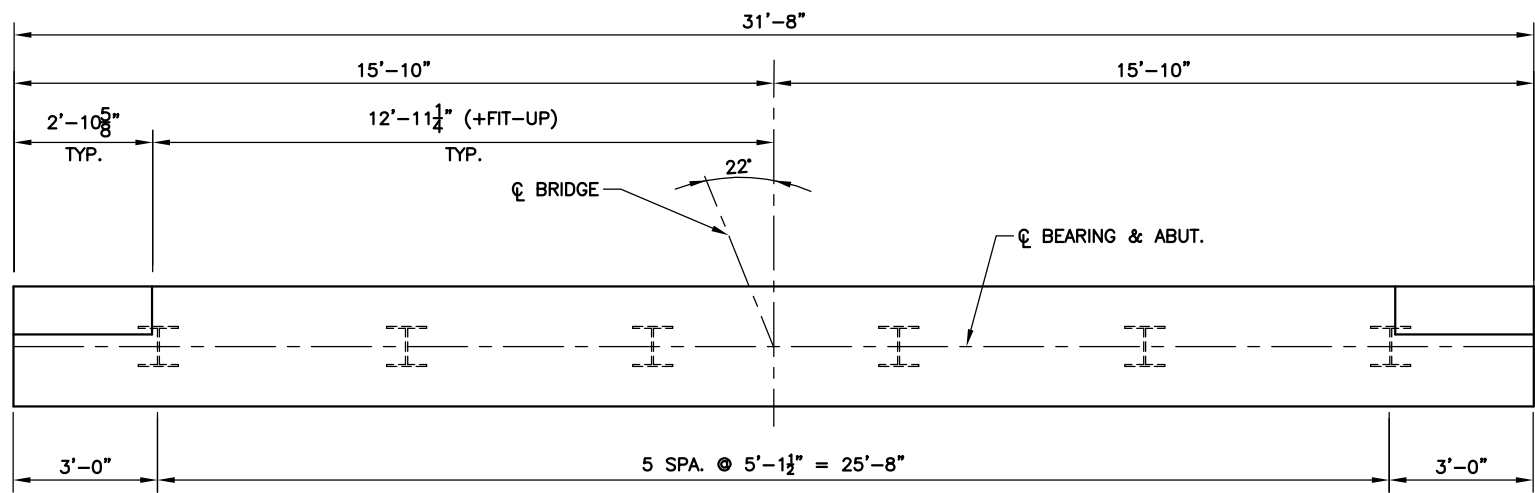
LOGAN COUNTY ENGINEER'S OFFICE  
1991 C.R. 13, P.O. BOX 427  
BELLEFONTAINE, OHIO 43311

DESIGNED: MJK  
CHECKED: SCC  
DRAWN: MJK  
REVIEWED: SCC  
DATE: 8/15/2024  
STRUCTURAL FILE NUMBER: 4632614

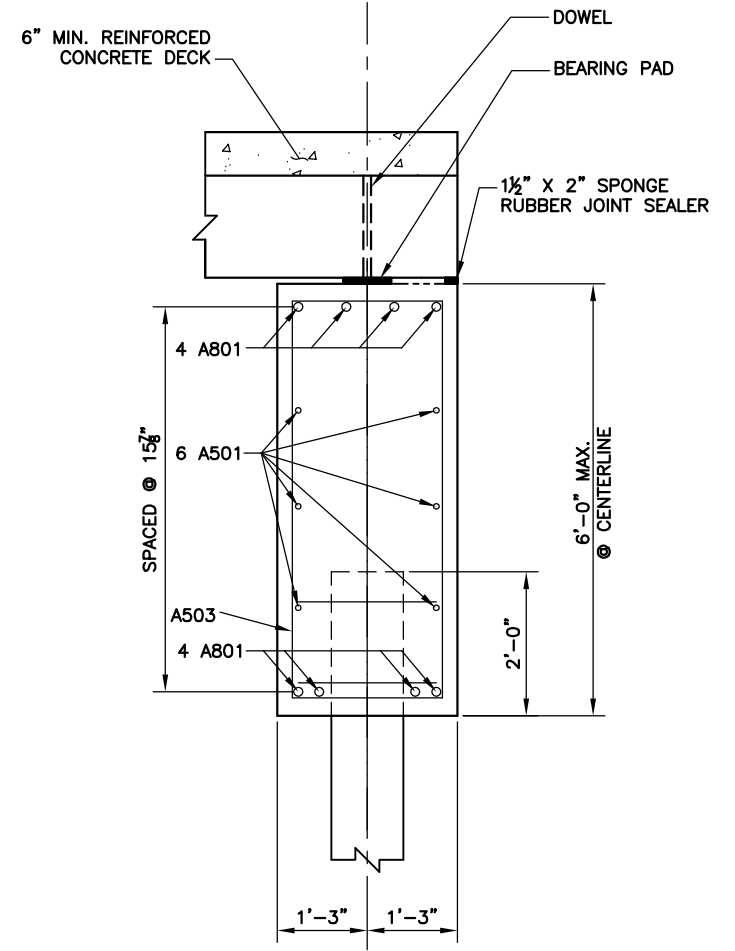
SITE PLAN & BRIDGE PROFILE  
BRIDGE T 30-0.80 OVER STONY CREEK

BRIDGE T 30-0.80

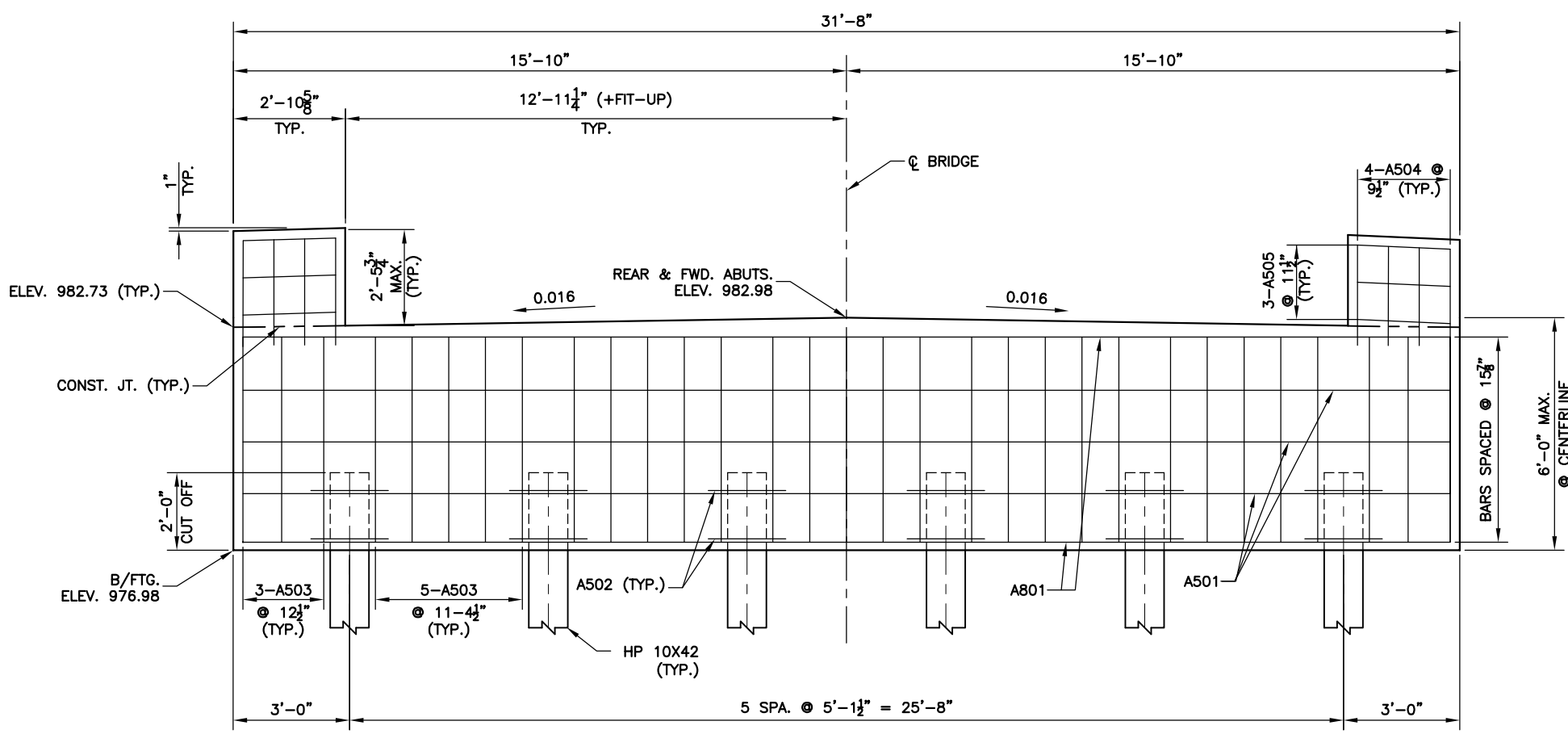




**PLAN**  
LOOKING AT FRONT FACE  
OF REAR & FORWARD ABUTMENTS

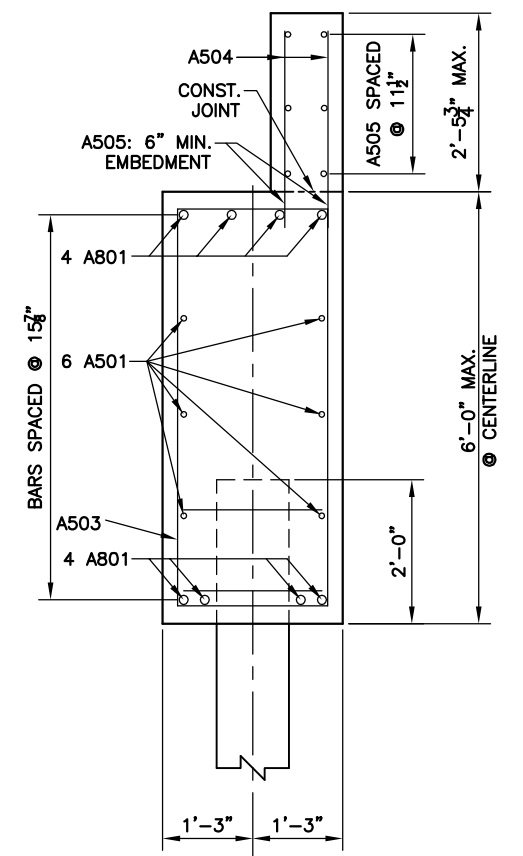


**SECTION @ ABUTMENT**



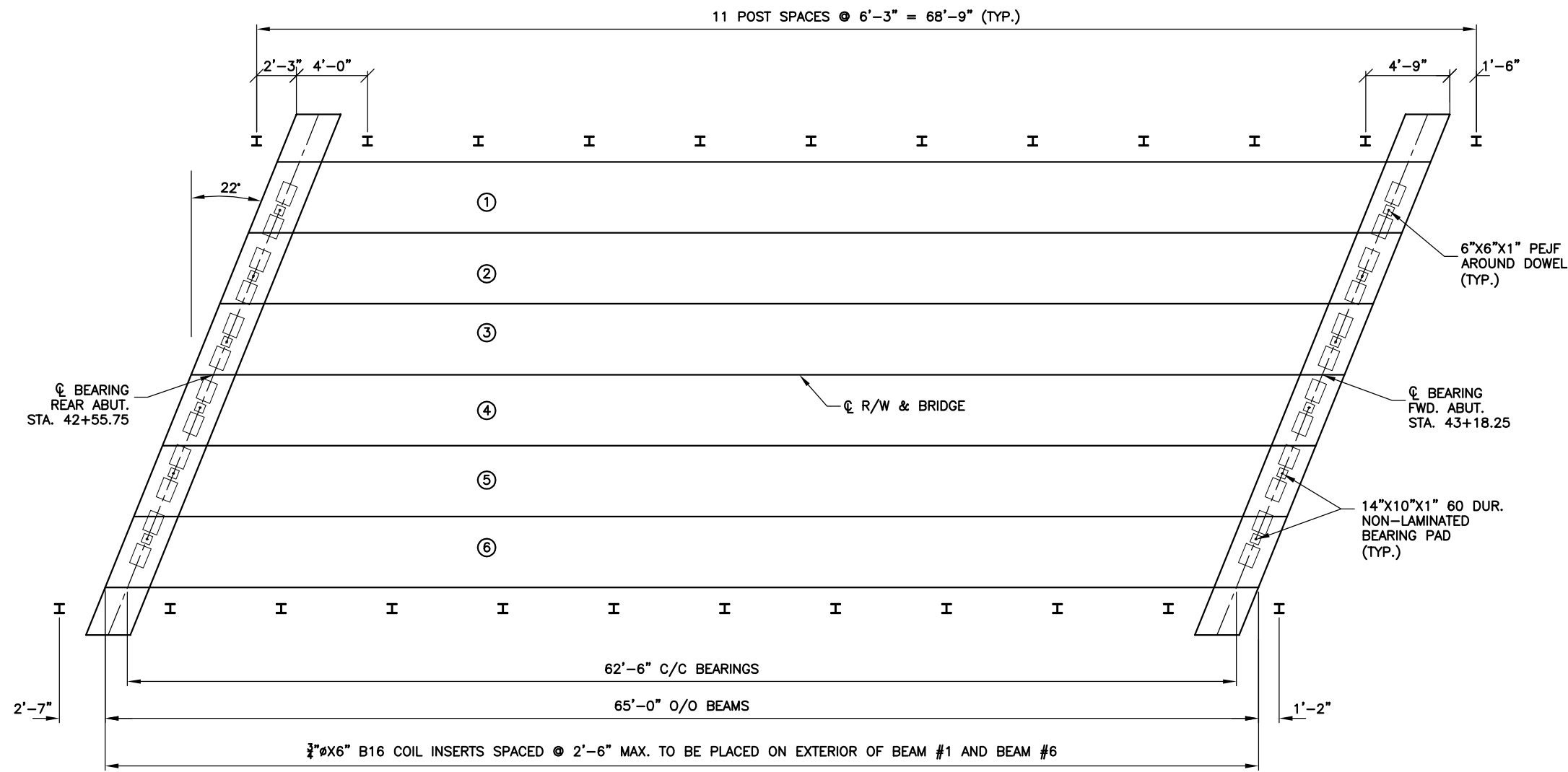
**ELEVATION**  
LOOKING AT FRONT FACE  
OF FRONT & REAR ABUTMENTS

**PILING NOTE:**  
DESIGN BEARING: 40 TONS  
ULTIMATE BEARING: 80 TONS  
DRIVE IN ACCORDANCE WITH LOGAN  
COUNTY PILE BEARING CHART



**SECTION @ WINGWALL**

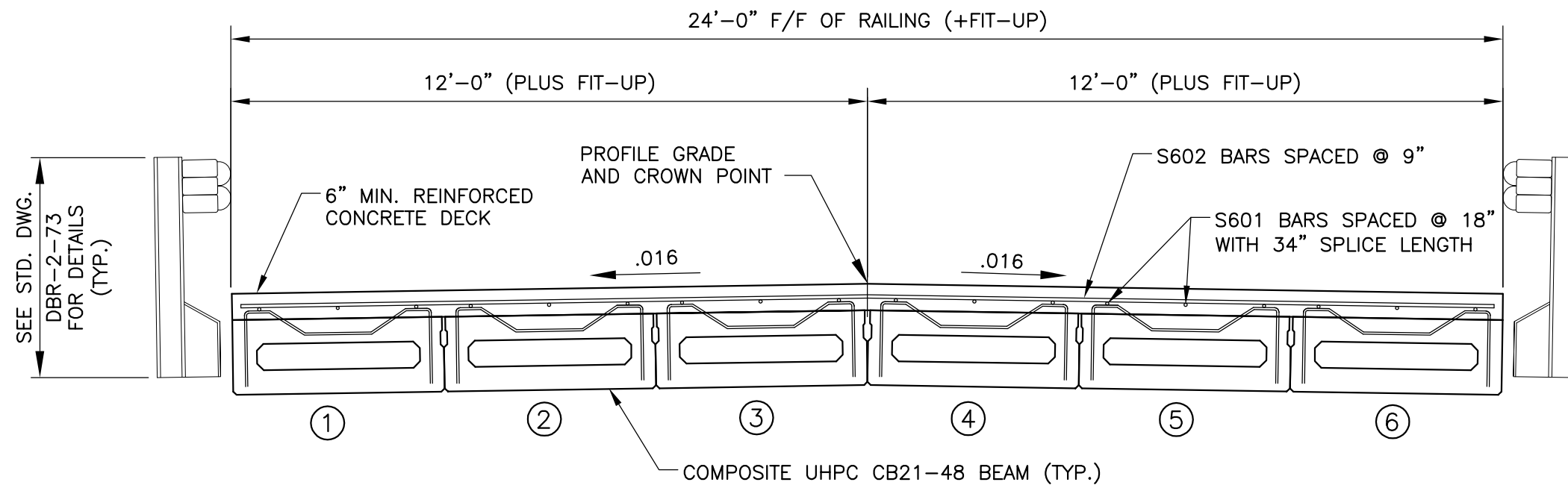
DESIGNED	MJK	CHECKED	SCC
DRAWN	MJK	REVISED	
REVIEWED	SCC	DATE	8/15/2024
LOGAN COUNTY ENGINEER'S OFFICE	1991 C.R. 13, P.O. BOX 427	BELLEVILLE, OHIO 43311	4632614
<b>ABUTMENT DETAILS</b>			
<b>BRIDGE T 30-0.80</b>			
3/7			



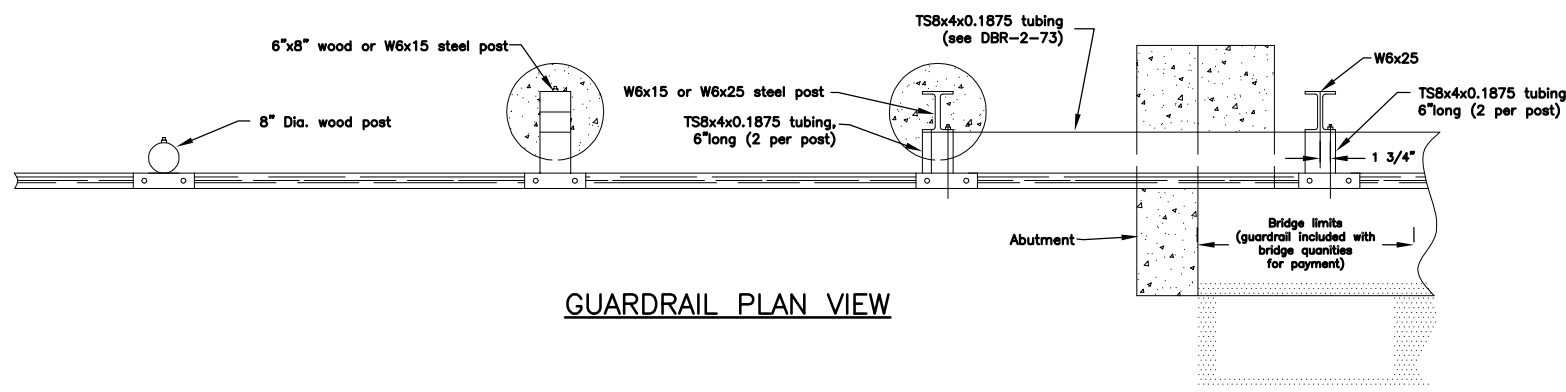
DECK FRAMING PLAN

SUPERSTRUCTURE NOTES:

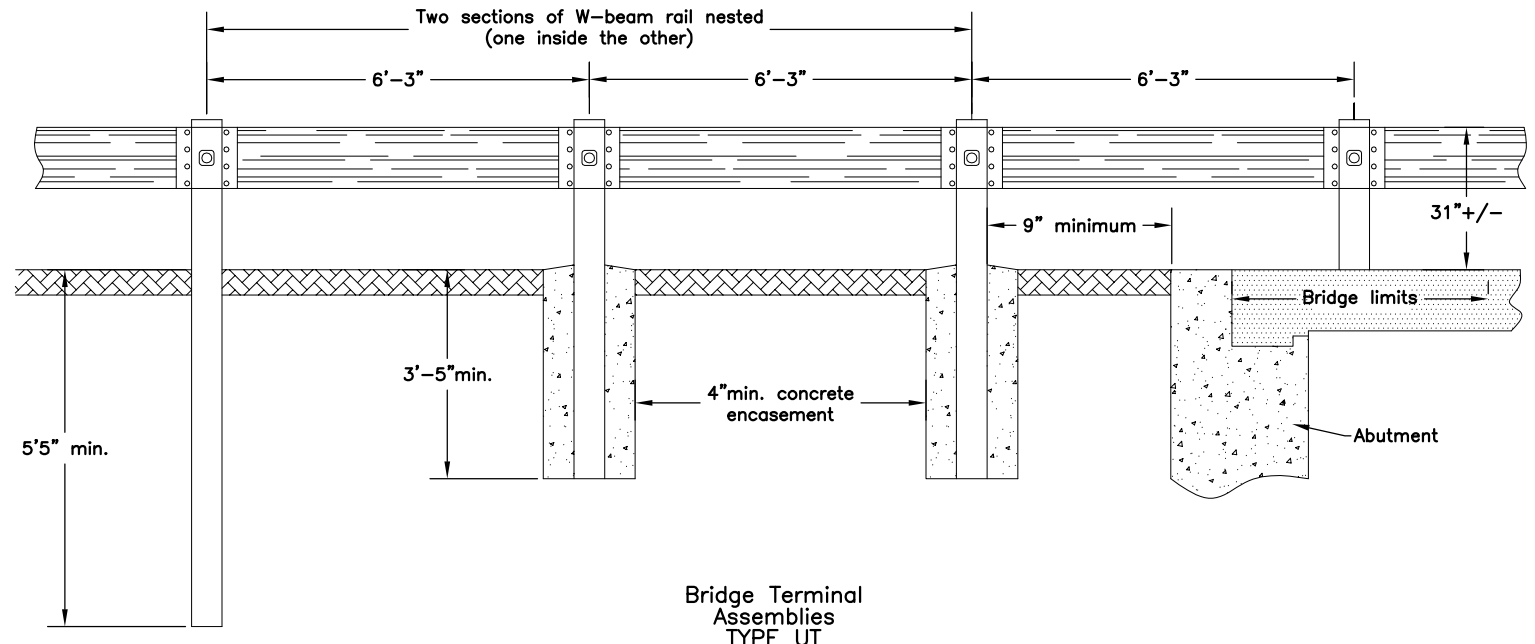
1. DESIGN LOADING: HL-93 AND 60 PSF FUTURE WEARING SURFACE.
2. REINFORCING STEEL: GRADE 60 MIN. YIELD STRENGTH = 60 KSI
3. ALL REINFORCING STEEL SHALL HAVE 3" MIN. CLEAR COVER
4. ABUTMENT CONCRETE TO BE QC1, ESTIMATED TO BE 18 CY PER ABUTMENT
5. DECK CONCRETE TO BE QC2 WITH IPANEX, ESTIMATED TO BE 35 CY
6. WINGWALL CONCRETE TO BE QC2
7. BURLAP ESTIMATE: 1560 SF
8. SILANE SEALER TO BE APPLIED PER ODOT BDM 302.1.4.3 AND 303.1
9. S602 TO BE PLACED PARALLEL TO THE ABUTMENT
10. DRIP STRIP TO BE PLACED PER DS-1-92



TRANSVERSE SECTION



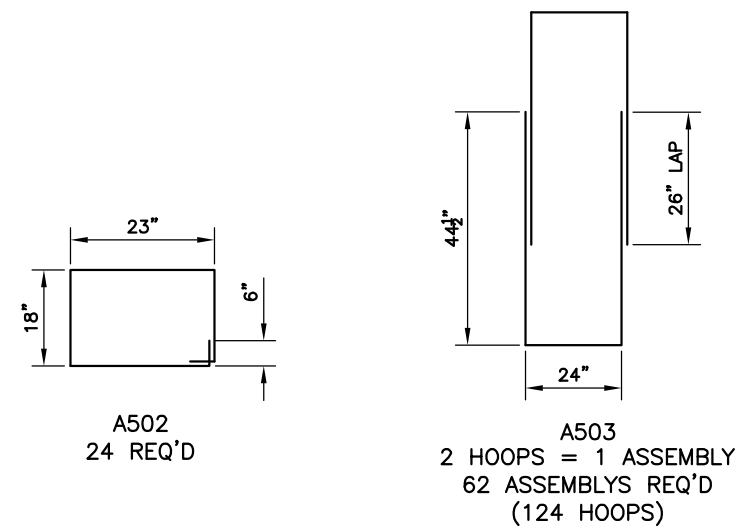
GUARDRAIL PLAN VIEW



Bridge Terminal Assemblies TYPE UT  
GUARDRAIL ELEVATION VIEW

REINFORCING STEEL LIST						
MARK	NUMBER PER ABUT/DECK	LENGTH EACH PIECE	LENGTH PER ABUT/DECK	TOTAL LENGTH	WEIGHT PER FT.	TOTAL WEIGHT
BENT STEEL						
A502	12	7'-10"	94	188	1.043	196
A503	31	18'-10"	584	1168	1.043	1218
STRAIGHT STEEL						
A501	6	31'-2"	187	374	1.043	390
A504	16	2'-9"	44	88	1.043	92
A505	12	2'-4"	28	56	1.043	59
A801	8	31'-2"	250	500	2.67	1332
S601	36	33'-8"	1213	1213	1.502	1821
S602	87	25'-4"	2204	2204	1.502	3310
TOTAL WEIGHTS: #5 BENT:1414 #5 SRT: 541 #8 SRT:1332 #6 SRT:5130						

- S601 AND S602 BARS SHALL BE HOT-DIPPED GALVANIZED AND SHALL USE GALVANIZED TIES AND GALVANIZED CHAIRS
- A501, A801, S601 & S602 TO BE PRE-CUT AND LABELED
- USE 6" TIES ON SUPERSTRUCTURE. TOTAL WEIGHT OF SUPERSTRUCTURE STEEL = 5131 POUNDS THUS NEED APPROXIMATELY 900 TIES
- USE 8" TIES ON ABUTMENT. TOTAL WEIGHT OF ABUTMENT STEEL = 3136 POUNDS THUS NEED APPROXIMATELY 720 TIES



BAR BENDING DIAGRAMS

DESIGN AGENCY  
LOGAN COUNTY ENGINEER'S OFFICE  
1991 C.R. 13, P.O. BOX 427  
BELLEFONTAINE, OHIO 43311

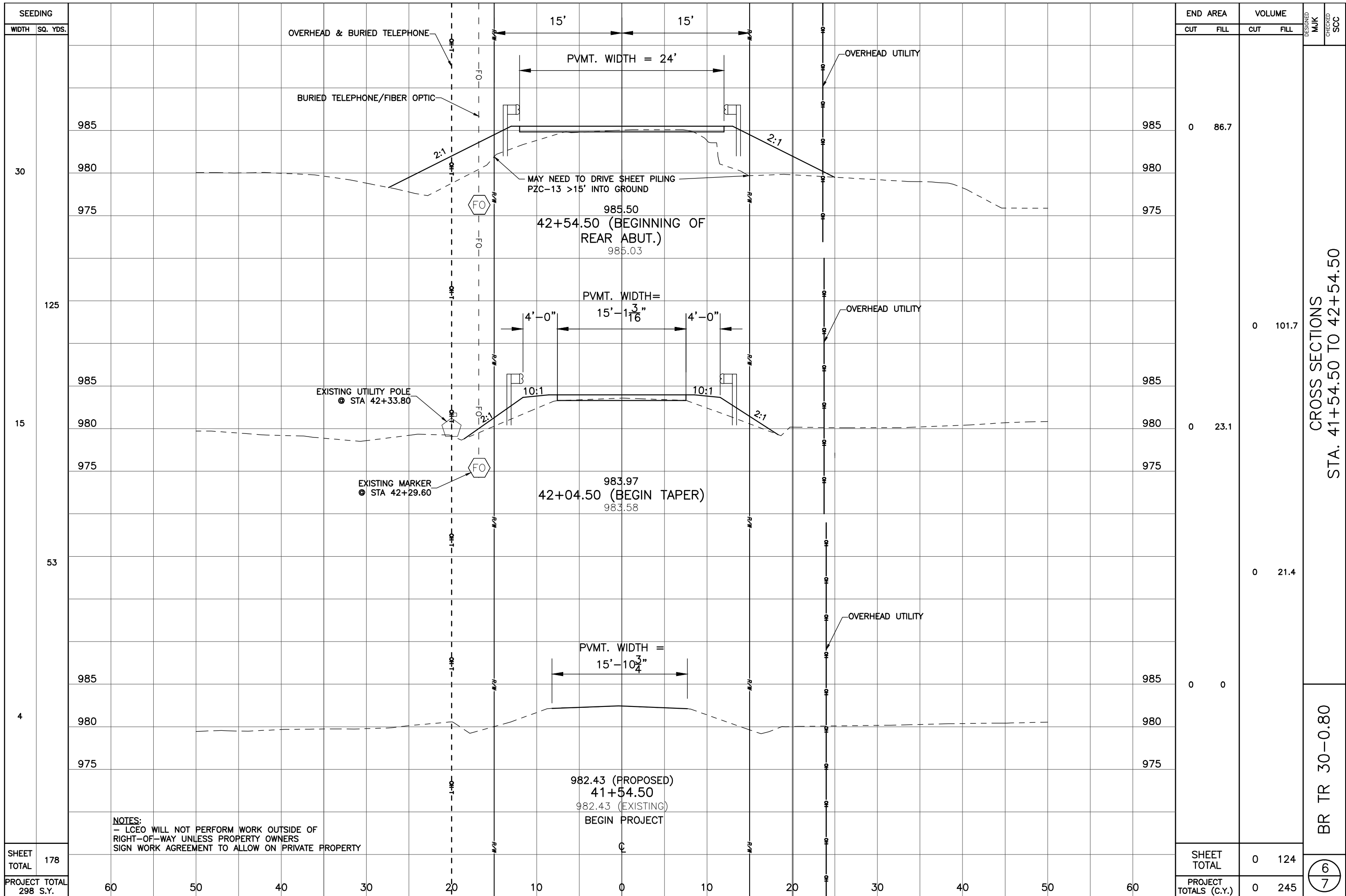
DATE  
8/15/2024  
REVIEWED  
SCC  
DRAWN  
MJK  
DESIGNED  
MJK  
CHECKED  
SCC

GUARDRAIL & REINFORCING STEEL DETAILS

BRIDGE T 30-0.80

5/7





END AREA	VOLUME	
	CUT	FILL
985	0	86.7
980		
975		
125		
985		0
980	0	23.1
975		
53		
985		0
980		
975		21.4
4		
985	0	0
980		
975		
<b>SHEET TOTAL</b>	<b>0</b>	<b>124</b>
<b>PROJECT TOTALS (C.Y.)</b>	<b>0</b>	<b>245</b>

DESIGNED: MJK  
 CHECKED: SCC  
 CROSS SECTIONS  
 STA. 41+54.50 TO 42+54.50  
 BR TR 30-0.80  
6  
7

**NOTES:**  
 - LCEO WILL NOT PERFORM WORK OUTSIDE OF  
 RIGHT-OF-WAY UNLESS PROPERTY OWNERS  
 SIGN WORK AGREEMENT TO ALLOW ON PRIVATE PROPERTY

982.43 (PROPOSED)  
 41+54.50  
 982.43 (EXISTING)  
 BEGIN PROJECT

SHEET TOTAL 178  
 PROJECT TOTAL 298 S.Y.

