

# PLANS FOR PROPOSED FEDERAL-AID PROJECT

TWP. NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
TR 49	08-03119-00-BR	OGLE	14	1
CONTRACT #85694				

## TR 49 WATER ROAD BRIDGE OVER MILL CREEK SECTION 08-03119-00-BR BYRON ROAD DISTRICT OGLE COUNTY S.N. 071-3342 PROJECT KT7J(580) JOB NO. C-92-050-19

### INDEX OF SHEETS

Sheet Number	Sheet Title
1	TITLE
2	SUMMARY OF QUANTITIES
3	PLAN AND PROFILE
4	EROSION CONTROL PLAN
5	CROSS SECTIONS
6	GENERAL PLAN AND ELEVATION
7	SUPERSTRUCTURE
8	BEAM DETAILS (1 OF 2)
9	BEAM DETAILS (2 OF 2)
10	ABUTMENT
11	RAIL DETAILS
12	PILE DETAILS
13	SOIL BORINGS (1 OF 2)
14	SOIL BORINGS (2 OF 2)

### HIGHWAY STANDARDS\*

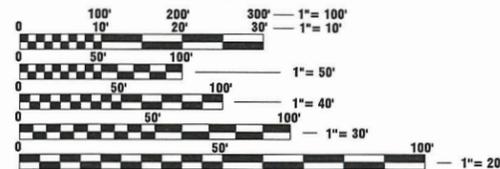
- 000001-07 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-04 NAME PLATE FOR BRIDGES
- 601101-02 CONCRETE HEADWALL FOR PIPE UNDERDRAINS
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701901-08 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)

BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS  
\* SEE SPECIFICATIONS FOR STANDARDS

### UTILITIES

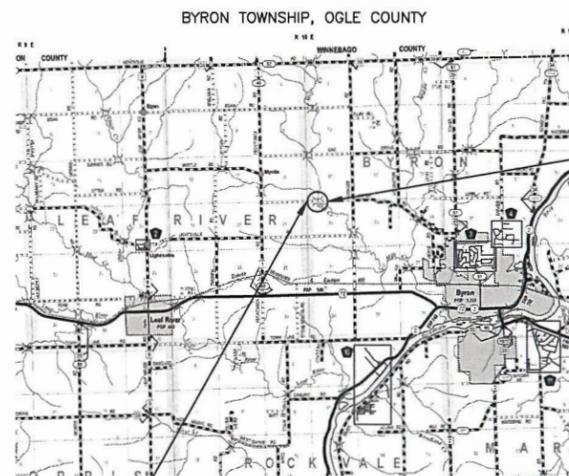
GAS: NICOR (630) 983-8676 NAPERVILLE, ILLINOIS  
ELECTRIC: COMMONWEALTH EDISON COMPANY (815) 756-9541 DEKALB, ILLINOIS  
TELEPHONE: VERIZON NORTH (815) 895-1515 SYCAMORE, ILLINOIS

THE LOCATIONS OF UTILITY FACILITIES AS SHOWN ON THESE PLANS ARE AN ESTIMATE AND NOT INTENDED AS FIELD LOCATIONS FOR CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES PRIOR TO CONSTRUCTION AND CALLING J.U.L.I.E. AT 800-892-0123 FOR CONFIRMATION OF EXISTING UTILITY LOCATIONS.



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123



SECTION 08-03119-00-BR  
BEGIN AT STA. 9+00

LOCATION MAP  
GROSS LENGTH OF SECTION = 325 FEET (0.06 MILE)  
NET LENGTH OF SECTION = 325 FEET (0.06 MILE)  
TOWNSHIP 25 NORTH, RANGE 10 EAST

SECTION 08-03119-00-BR  
ENDS AT STA. 12+25

STA. 9+95.83  
PROPOSED STRUCTURE (SN 071-3342)  
INCLUDES A SINGLE SPAN PRECAST  
PRESTRESSED CONCRETE DECK BEAM  
BRIDGE ON SPILL THROUGH  
ABUTMENTS. 44'-11" BK.-BK.  
ABUTMENTS.

STA. 9+94.69  
EXISTING STRUCTURE 071-3224  
A SINGLE SPAN PRECAST CONCRETE  
DECK BEAM BRIDGE ON CLOSED  
PILE BENT ABUTMENTS WITH STEEL  
SHEET PILE ABUTMENT WALLS AND  
WINGWALLS. 27'-6" BK.-BK.  
ABUTMENTS.



LOCATION OF SECTION INDICATED THUS: -

### DESIGN CRITERIA

ROADWAY	DESIGN CLASSIFICATION	ADT 2020	ADT 2040	DESIGN SPEED
WATER ROAD	LOCAL ROAD	<100	<100	30

SCOTT A. BROWN  
062-053649  
DATE 2/19/2020  
SCOTT A. BROWN  
DIXON, ILLINOIS  
ILLINOIS LICENSED PROFESSIONAL  
ENGINEER NO. 062-053649  
EXPIRES 11-30-2021

wendler  
wendler engineering services, inc.  
civil • structural • surveying  
www.wendlers.com ph: 815.288.2261  
Illinois Professional Design Firm No. 184-000848

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED FEB 18 20 20

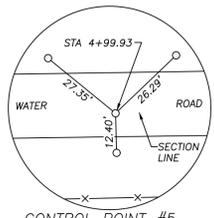
PASSED 2/26 20 20

RELEASED FOR BID BASED ON LIMITED REVIEW 2/26 20 20

SCOTT A. BROWN COUNTY ENGINEER  
JERRY M. BARNETT DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS  
MARCUS ALMADA DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER

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OF THE STATE OF ILLINOIS





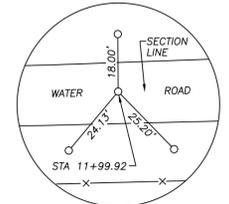
CONTROL POINT #5  
SET 5/8" STEEL PIN  
ALL TIES ARE SET 5/8"  
STEEL PINS

**BENCHMARK INFORMATION**

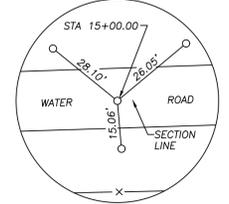
B.M. "A" - SET CHISELED "A" ON S.W. EDGE OF EXISTING STRUCTURE HEADWALL. ELEV=714.21

B.M. "B" - SET 5/8" STEEL PIN WITH WES CAP ±200' WEST FROM CENTER OF EXISTING STRUCTURE AND ±20' SOUTH OF CL OF WATER ROAD. ELEV=724.39

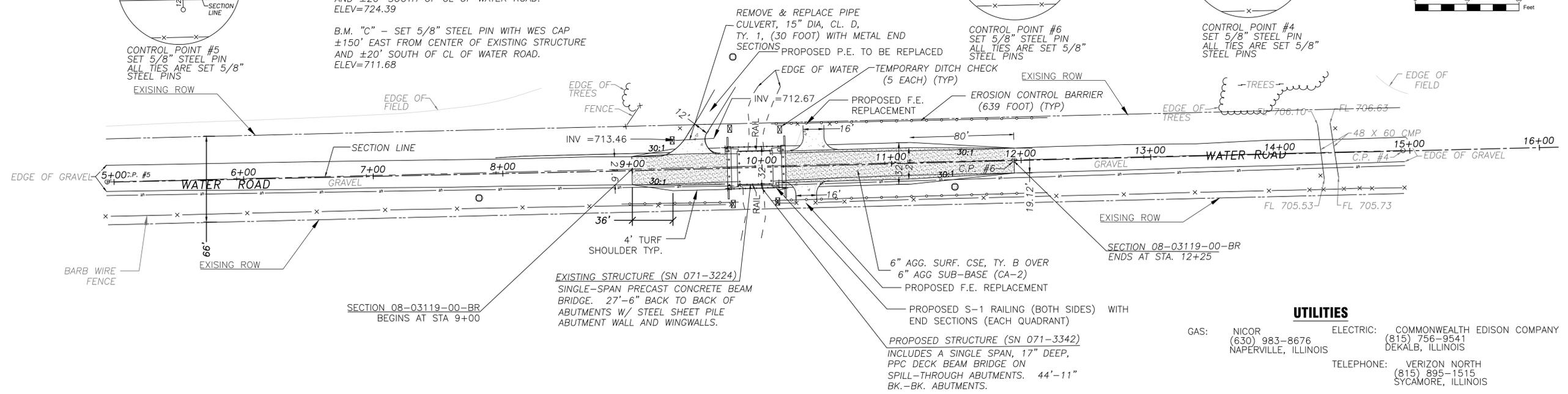
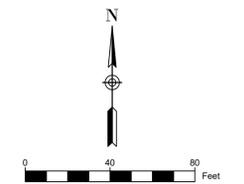
B.M. "C" - SET 5/8" STEEL PIN WITH WES CAP ±150' EAST FROM CENTER OF EXISTING STRUCTURE AND ±20' SOUTH OF CL OF WATER ROAD. ELEV=711.68



CONTROL POINT #6  
SET 5/8" STEEL PIN  
ALL TIES ARE SET 5/8"  
STEEL PINS



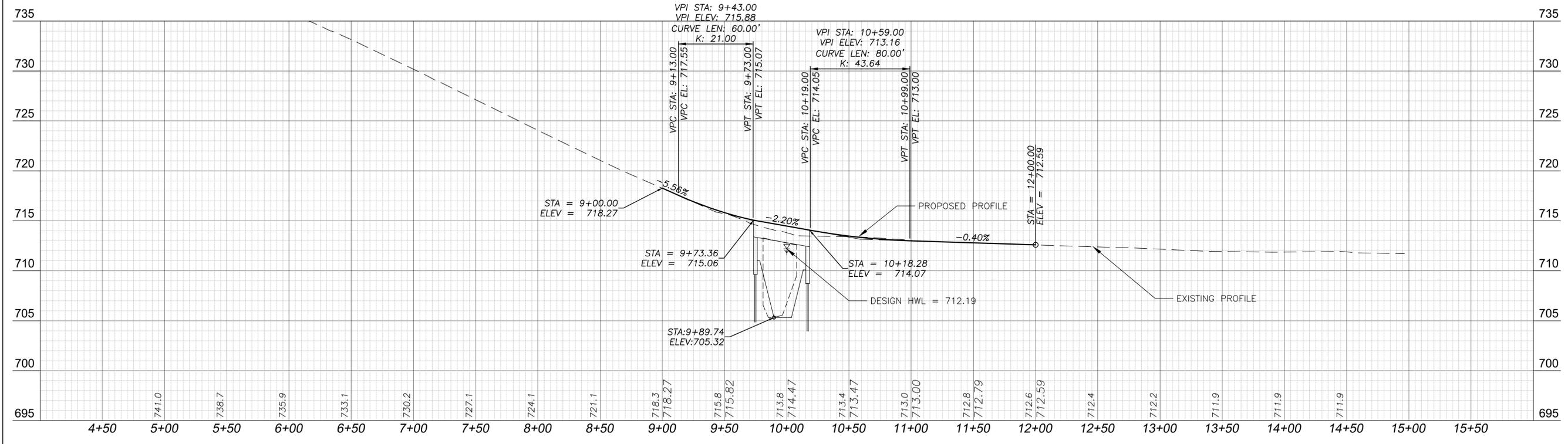
CONTROL POINT #4  
SET 5/8" STEEL PIN  
ALL TIES ARE SET 5/8"  
STEEL PINS



**UTILITIES**

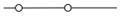
GAS: NICOR (630) 983-8676 NAPERVILLE, ILLINOIS  
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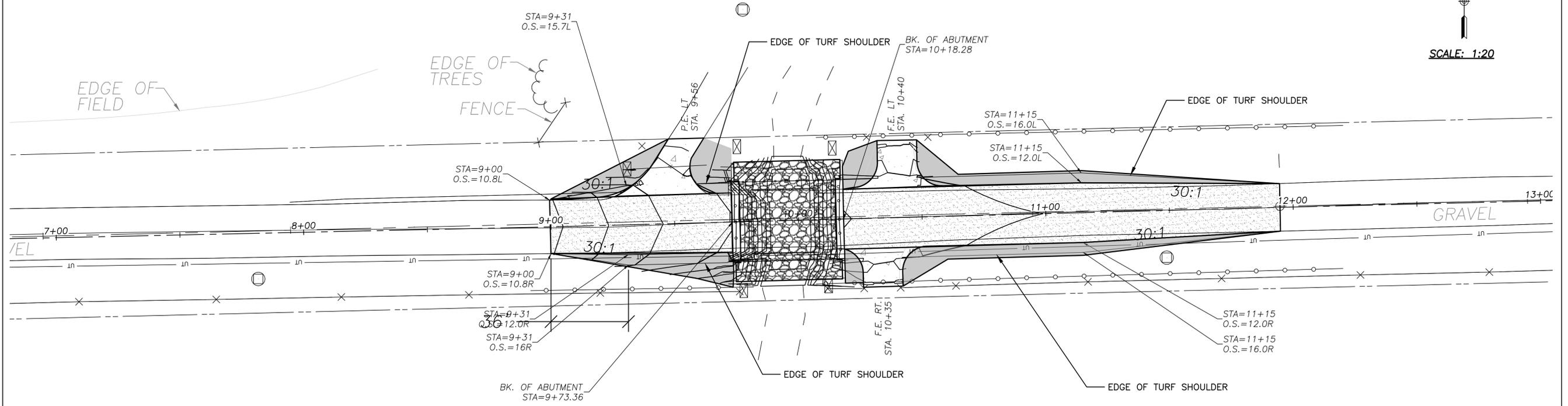


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www.wendlers.com	FILE NAME = plan and profile ctc.dwg	CHECKED - SB	REVISED -	SCALE: 1"=40'	SHEET - OF - SHEETS	STA. -	TO STA. -	CONTRACT NO	85694	
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**LEGEND**

-  STONE RIP RAP, CLASS A5
-  SEEDING, CLASS 2 SPECIAL WITH EROSION CONTROL BLANKET
-  6" COMPACTED AGGREGATE SURFACE COURSE, TYPE B OVER 6" COMPACTED AGGREGATE BASE COURSE, TYPE B
-  12" COMPACTED AGGREGATE SURFACE COURSE, TYPE B
-  TEMPORARY DITCH CHECK
-  PERIMETER EROSION BARRIER

N  
  
 SCALE: 1:20



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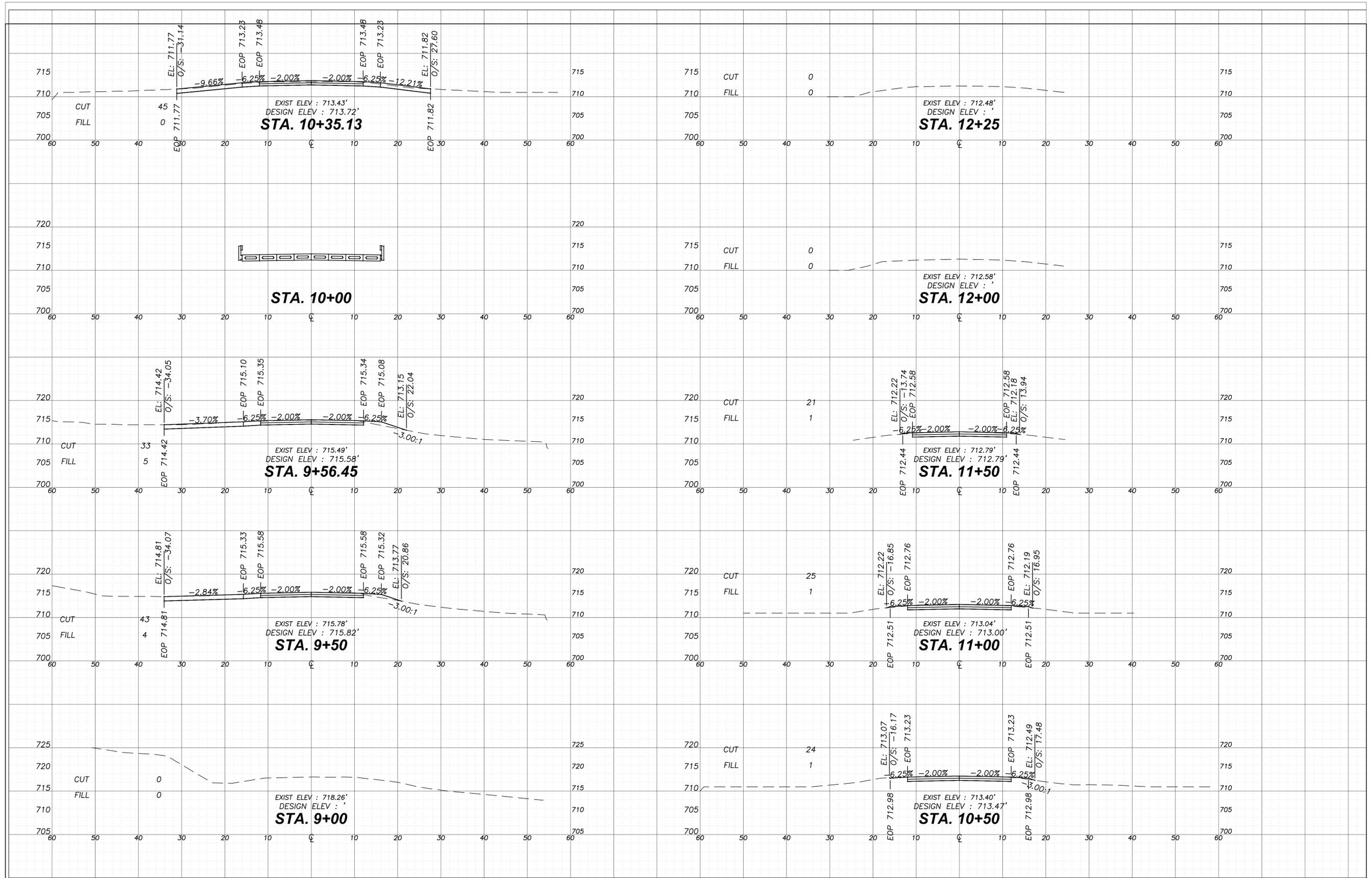
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL PLAN**

SCALE: - SHEET - OF - SHEETS STA. - TO STA. -

TR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	08-03119-00-BR	Ogle	14	4
CONTRACT NO			85694	
ILLINOIS FED. AID PROJECT -				

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

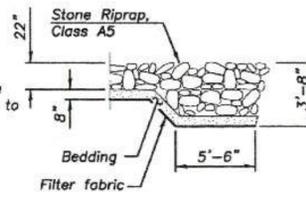
<b>CROSS SECTIONS</b>		TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		ILLINOIS FED. AID PROJECT				

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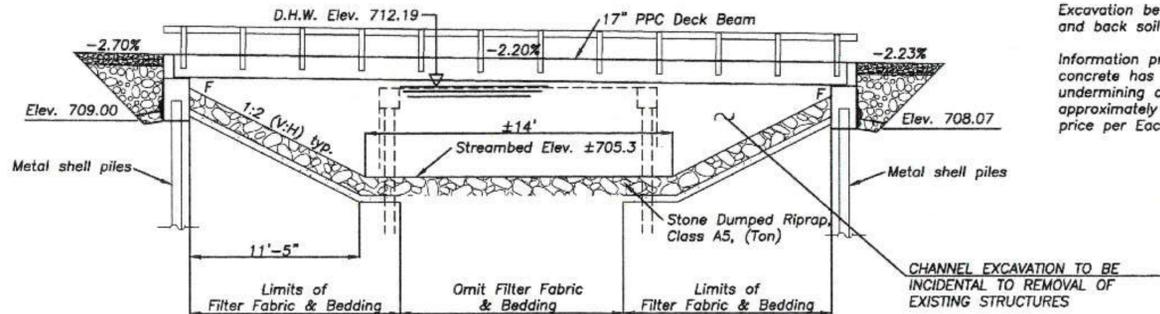
**Benchmarks:**  
 B.M. "A" - 60d nail on south face of nearest power pole west of structure. Elev.=803.58  
 B.M. "B" - Chiseled "□" on N.W. corner of existing deck. Elev.=805.82  
 B.M. "C" - 60d nail in south face of nearest power pole east of structure. Elev.=802.90

Existing Structure: S.N. 071-3224. Structure consists of single span precast prestressed concrete deck beams supported by pile bent abutments. 23'-6" span. 26'-0" out-to-out deck. Structure to be removed and replaced.

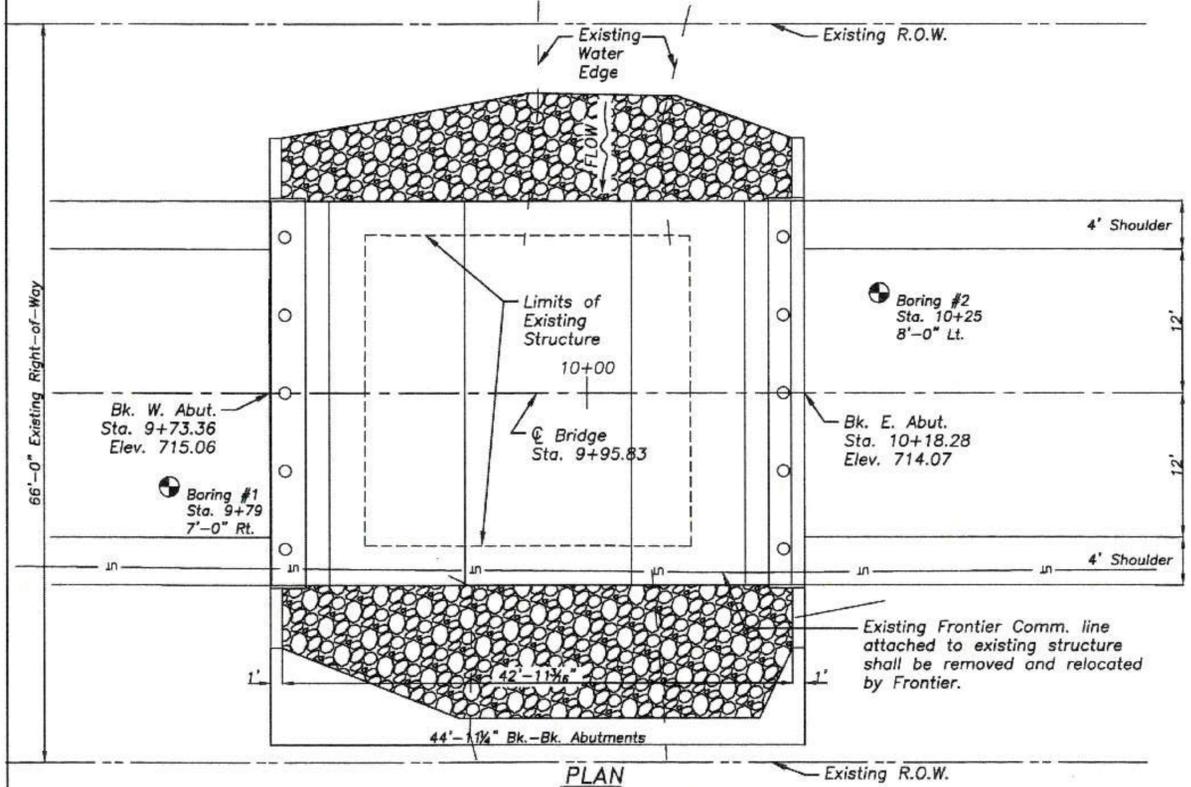
No Salvage



SECTION B-B



ELEVATION



PLAN

**GENERAL NOTES**

Concrete from the existing structure shall not be buried or placed within 200 feet of the proposed structure.  
 Protective coat shall be applied to top and side surfaces of superstructure and the exposed surfaces of wingwalls and top of backwalls when the concrete is at least 14 days old.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.  
 Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.  
 Information provided by others indicates approximately 5 to 8 cubic yards of concrete has been placed behind the existing abutments in an effort to prevent undermining of the approach roadway. Cost for removal and disposal of the approximately 5 to 8 cubic yards of concrete is included in the contract unit price per Each for Removal of Existing Structures.

**TOTAL BILL OF MATERIAL**

Code	Item	Unit of Measure	Quantity
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300300	PROTECTIVE COAT	SQ YD	51.30
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1374
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6240
50900205	STEEL RAILING, TYPE S1	FOOT	90
51200957	FURNISHING METAL SHELL PILES 12" X 0.250"	FOOT	160
51202305	DRIVING PILES	FOOT	160
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	52

**WATERWAY INFORMATION**

Flood Frequency	Q (cfs)	Opening Sq. Ft.		Natural H.W.E.		Head-Ft.		Headwater El.	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
Design	15	2103	170*	192**	711.92	0.40	0.27	712.32	712.19
Base	100	3550	183*	207**	712.42	0.34	0.28	712.76	712.70
Max Calc.	500	4840	203*	232**	712.81	0.29	0.20	713.10	713.01

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.079g  
 Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.120g  
 Soil Site Class = D

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c$  = 3,500 psi  
 $f_y$  = 60,000 psi (Reinforcement)

**PRECAST PRESTRESSED UNITS**

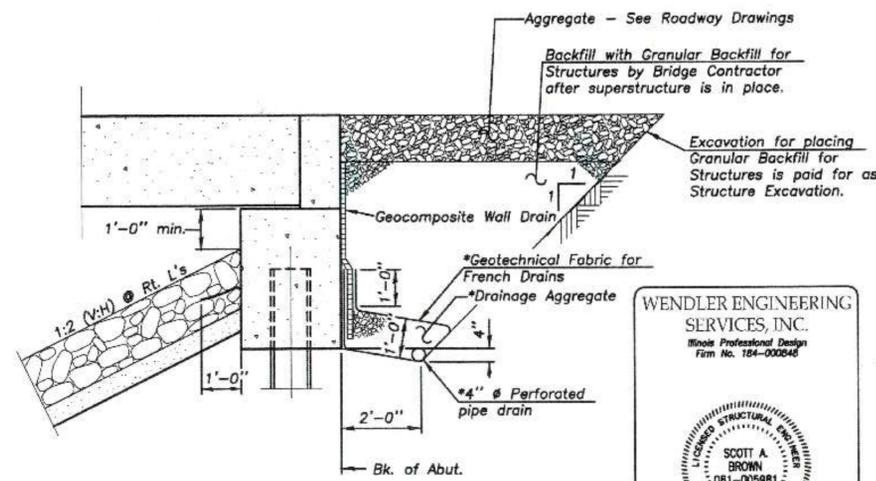
$f'_c$  = 6,000 psi  
 $f'_{ci}$  = 5,000 psi  
 $f'_s$  = 270,000 psi ( $1/2$ "  $\phi$  low lax. strands)  
 $f_{si}$  = 201,960 psi ( $1/2$ "  $\phi$  low lax. strands)

**LOADING HL-93**

Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition



SECTION THRU ABUTMENT

(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.  
 Note:  
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

MILL CREEK  
 BUILT 2020 BY  
 BYRON ROAD DISTRICT AND  
 OGLE COUNTY  
 SEC. 08-03119-00-BR  
 STATION 9+95.83  
 STR. NO. 071-3342 LOADING HL-93

**NAME PLATE**  
 See Std. 515001

WENDLER ENGINEERING SERVICES, INC.  
 Illinois Professional Design Firm No. 184-000840

SCOTT A. BROWN  
 081-005981  
 DATE 2/19/2020  
 SCOTT A. BROWN  
 OGLE, ILLINOIS  
 ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-005981  
 EXPIRES 11-30-2020

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications for Highway Bridges".

**GENERAL PLAN AND ELEVATION**  
**WATER ROAD OVER MILL CREEK**  
 SEC. 08-03119-00-BR  
 OGLE COUNTY  
 STATION 10+00  
 STRUCTURE NO. 071-3342

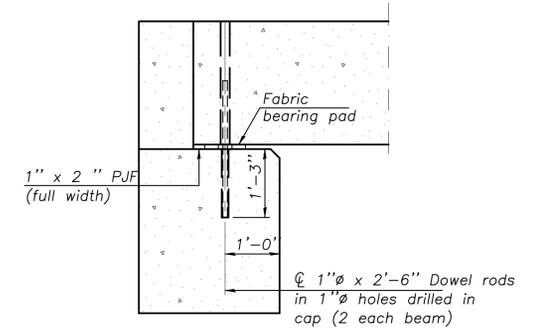
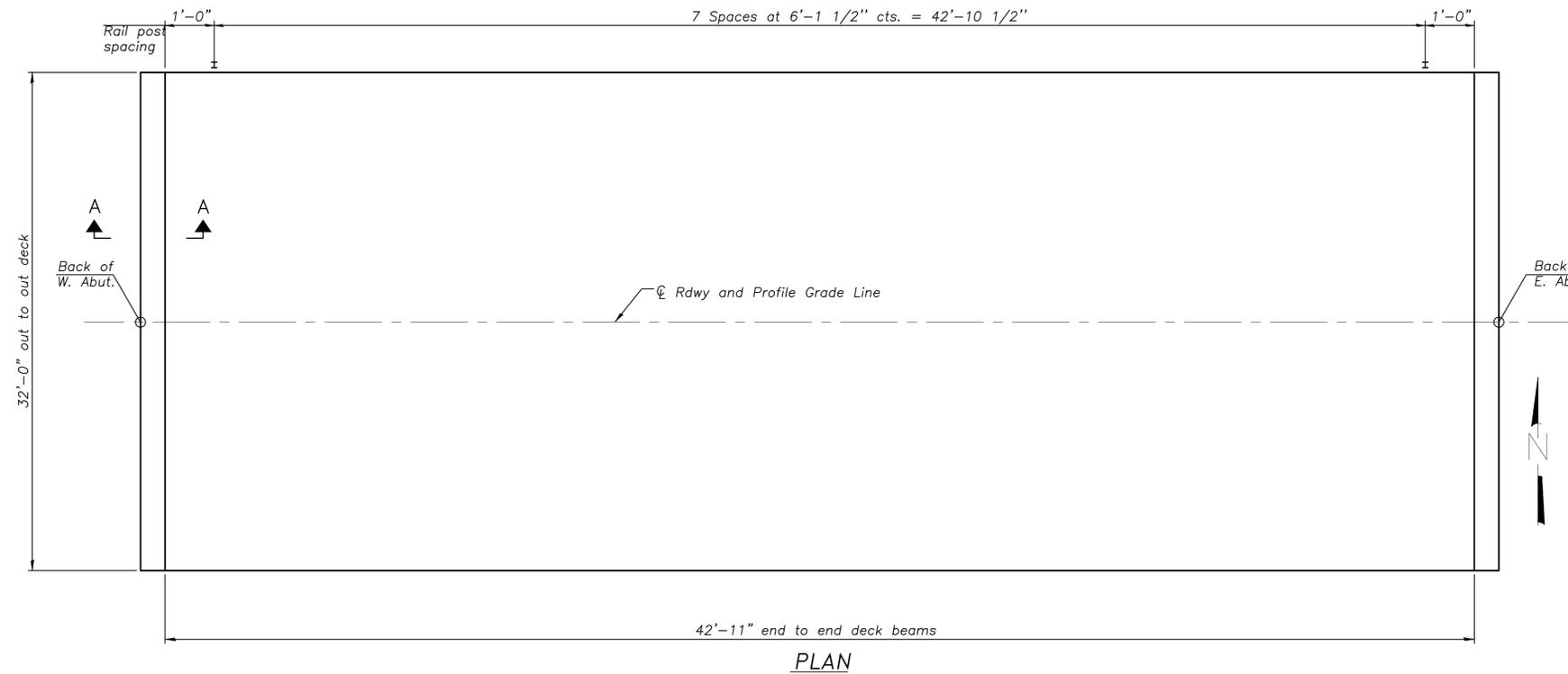


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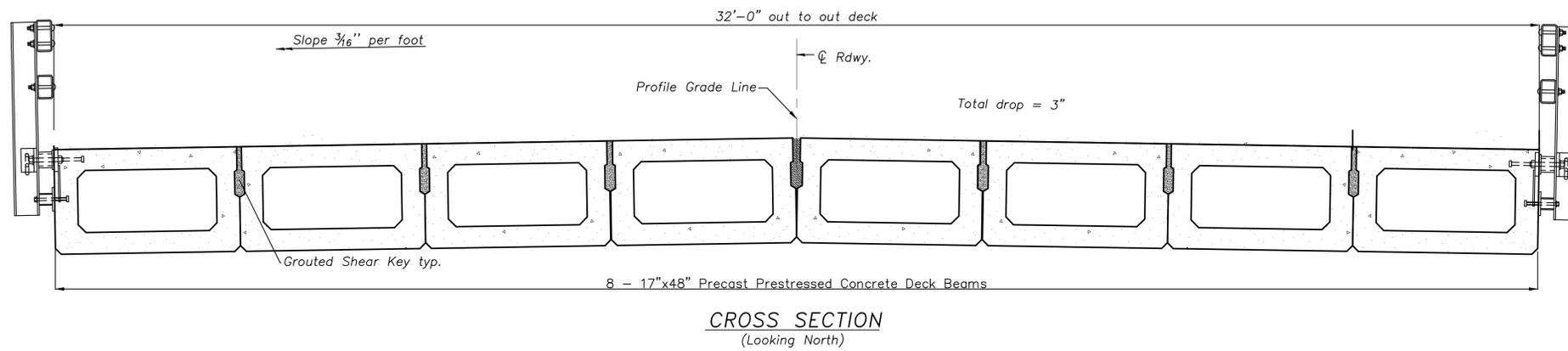
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

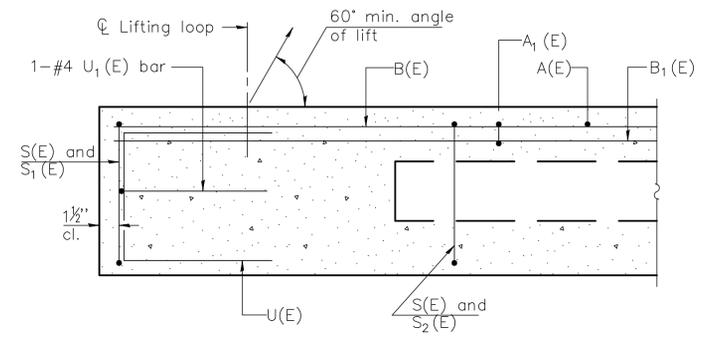
GENERAL PLAN AND ELEVATION

TR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO.				85694
ILLINOIS FED. AID PROJECT				-

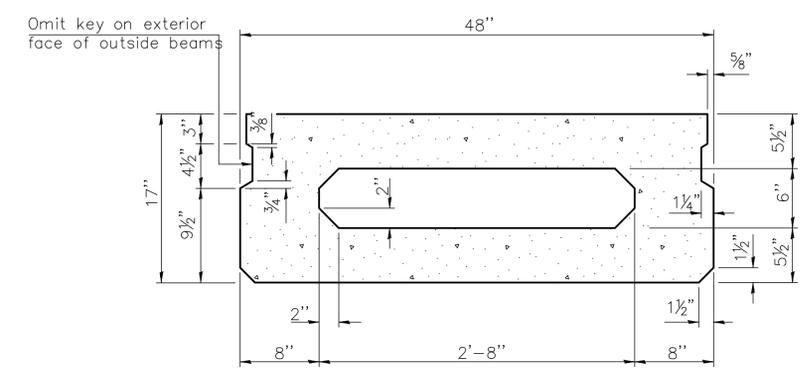


**SECTION A-A**  
See sheet 9 of 15 for fabric bearing pad details.

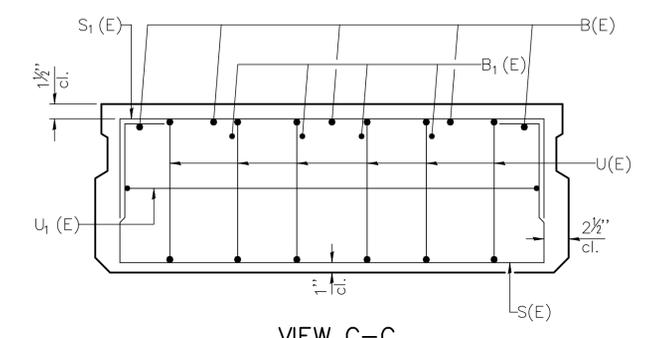




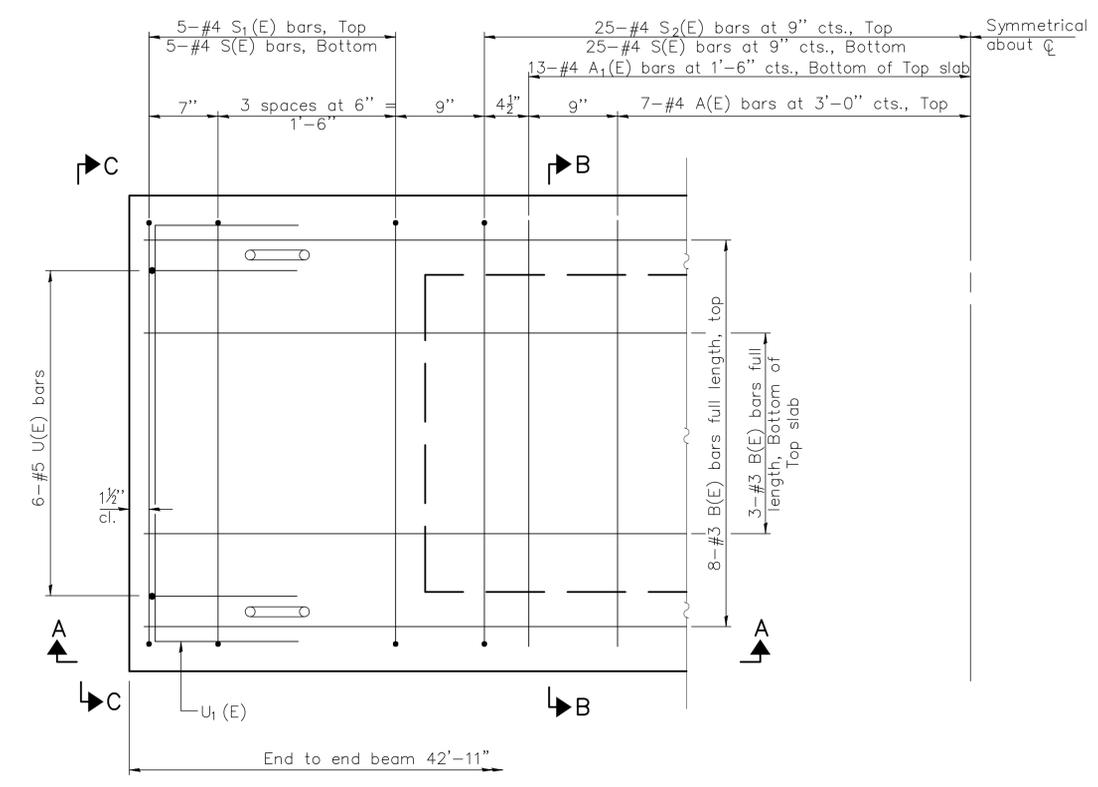
SECTION A-A



SECTION B-B  
(Showing dimensions)

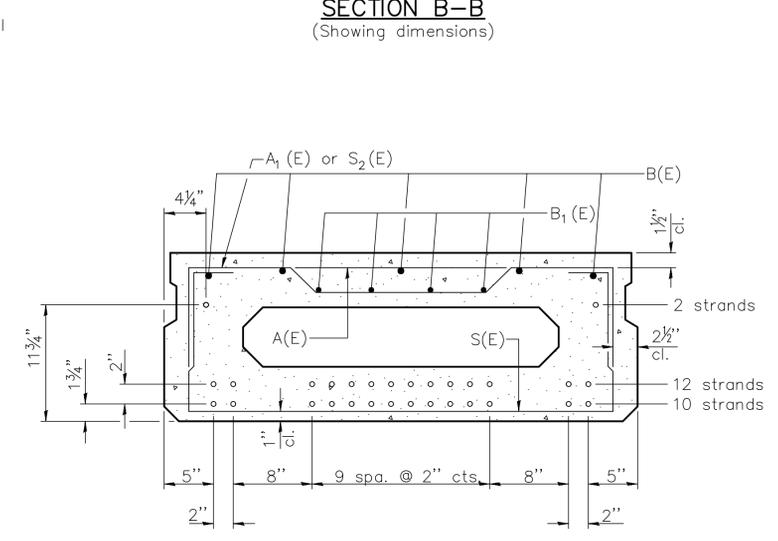


VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S<sub>2</sub>(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION B-B  
(Showing reinforcement and strand locations)  
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST  
ONE BEAM ONLY  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	8	#4	3'-7"	—
A <sub>1</sub> (E)	16	#4	3'-10"	—
B(E)	11	#3	42'-8"	—
B <sub>1</sub> (E)	4	#4	42'-8"	—
S(E)	60	#4	6'-9"	□
S <sub>1</sub> (E)	10	#4	5'-3"	□
S <sub>2</sub> (E)	50	#4	5'-6"	□
U(E)	12	#5	3'-8"	□
U <sub>1</sub> (E)	2	#4	6'-0"	□

Note: See sheet 7 of 11 for additional details and Bill of Material.

MINIMUM BAR LAP  
#4 bar = 1'-11"  
#5 bar = 2'-6"

PD-1748-0 06-01-16  
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USER NAME = ehod_clauson	DESIGNED = CC	REVISED =
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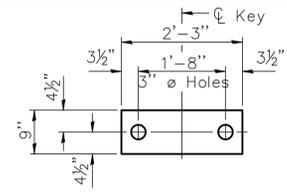
STATE OF ILLINOIS  
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BEAM DETAILS (1 OF 2)

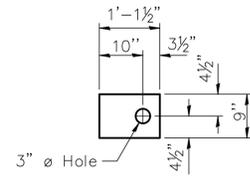
SCALE: - SHEET - OF - SHEETS STA. - TO STA. -

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	08-03119-00-BR	Ogle	14	8
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ILLINOIS FED. AID PROJECT				

S.N. 071-3342  
17" X 48" PPC DECK BEAM  
SECTION 08-03119-00-BR  
OGLE COUNTY



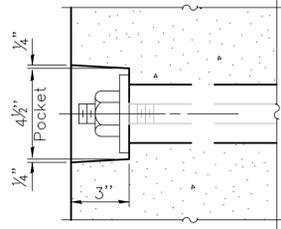
**FABRIC BEARING PAD**  
(Interior)



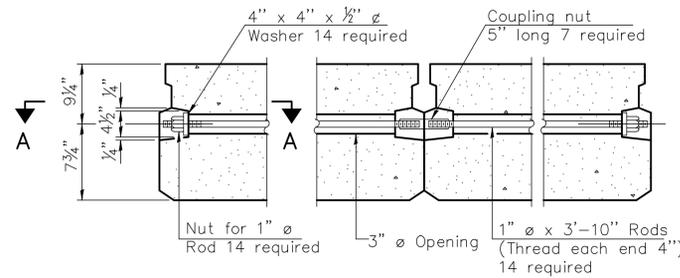
**FABRIC BEARING PAD**  
(Exterior)

**FIXED**

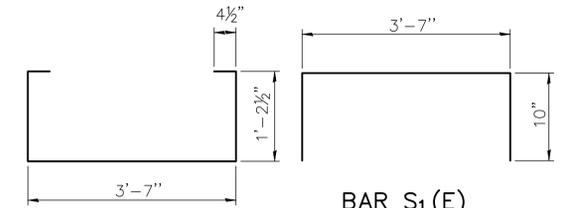
Note: Omit holes when using expansion bearings.



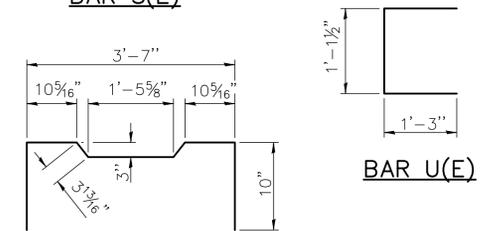
**SECTION A-A**



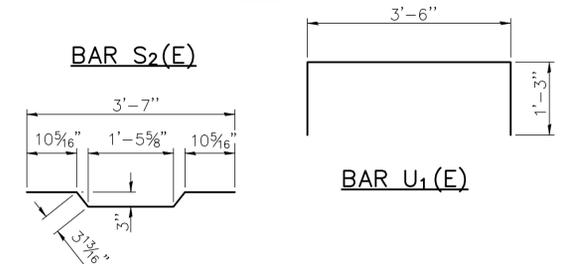
**TYPICAL TRANSVERSE TIE ASSEMBLY**



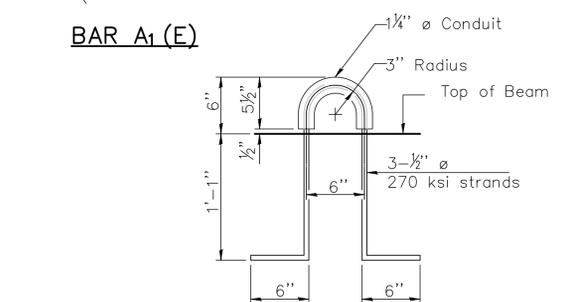
**BAR S(E)**



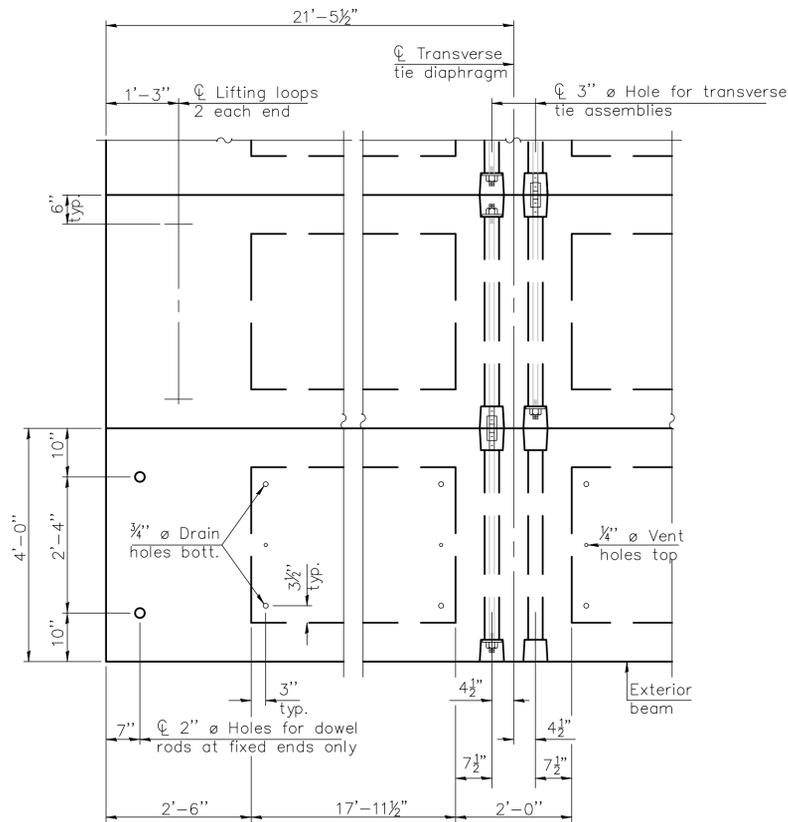
**BAR U(E)**



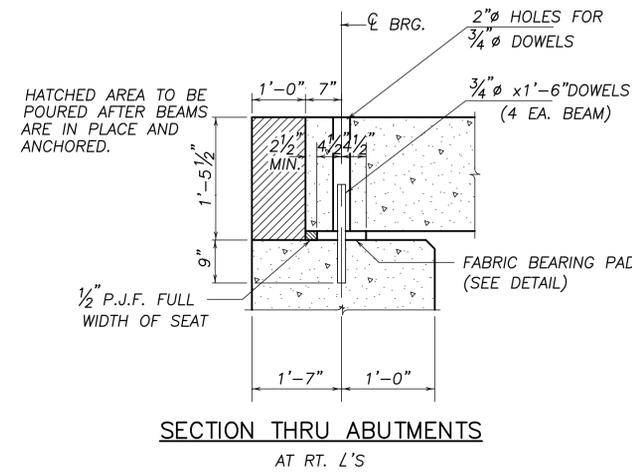
**BAR S2(E)**



**LIFTING LOOP DETAIL**



**PLAN VIEW**



**SECTION THRU ABUTMENTS  
AT RT. L'S**

Note: Connect beams in pairs with the transverse tie configuration shown.

**NOTES**

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1374
---	---------	------

S.N. 071-3342  
17" X 48" PPC DECK BEAM  
SECTION 08-03119-00-BR  
BYRON ROAD DISTRICT  
OGLE COUNTY

PD-1748-0D 1-28-16  
F:\2008Jobs\2080444\DWG\Super1.dwg



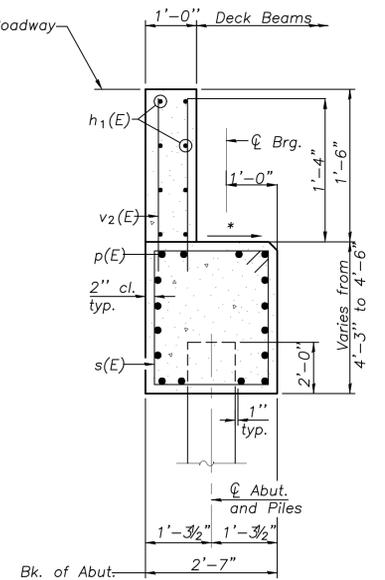
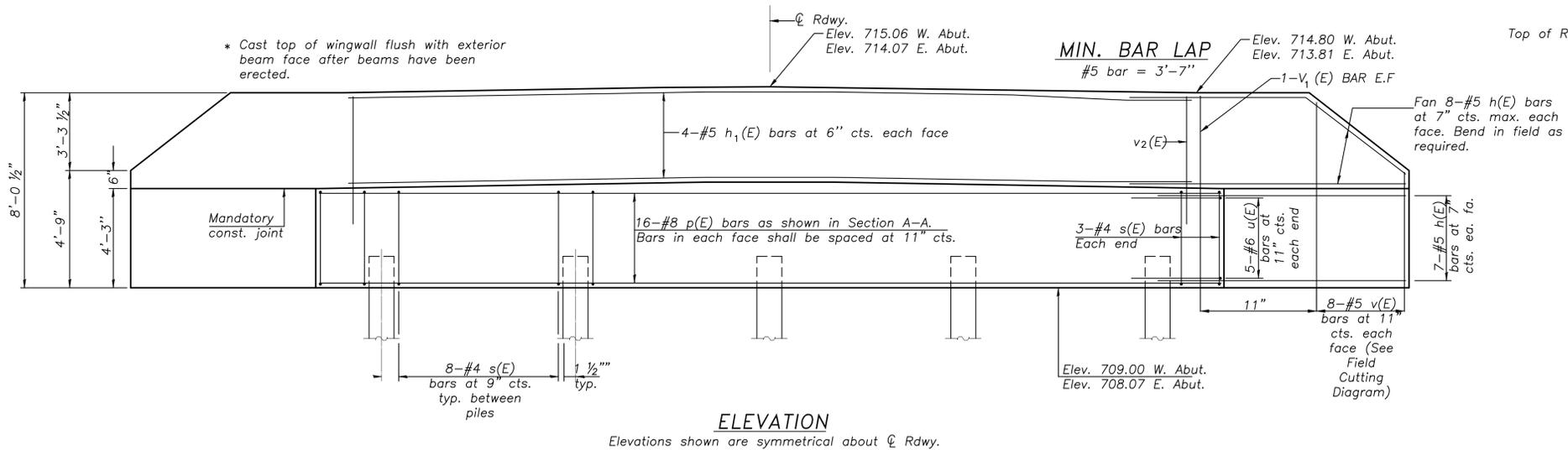
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

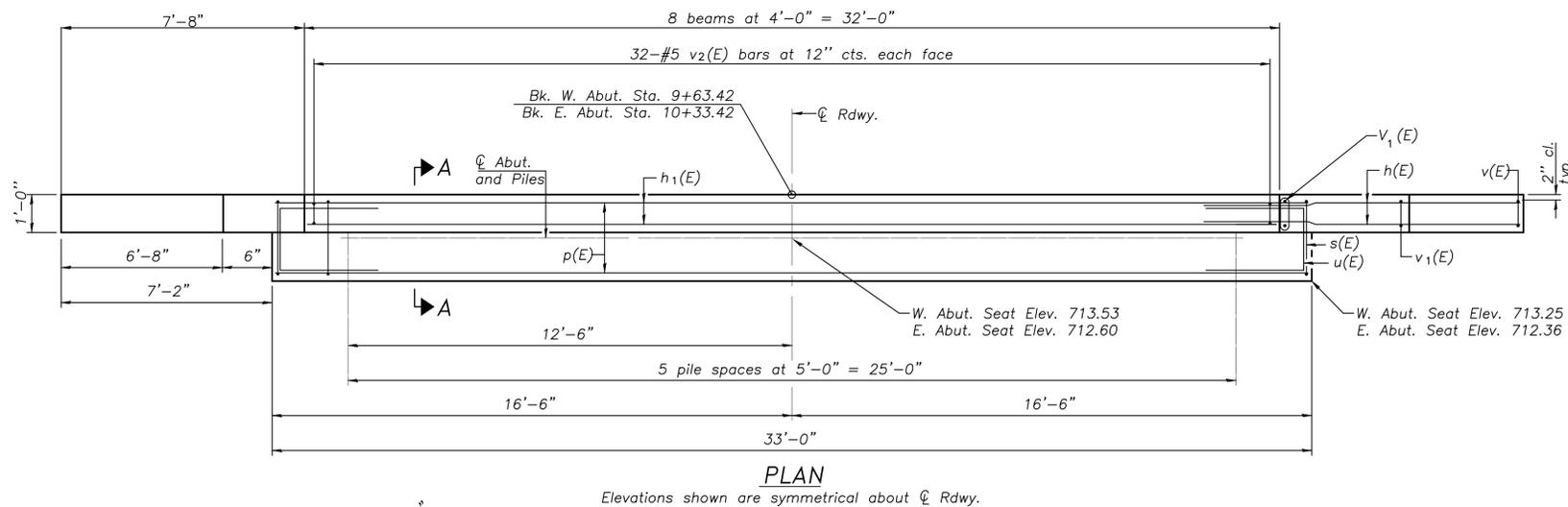
**BEAM DETAILS (2 OF 2)**

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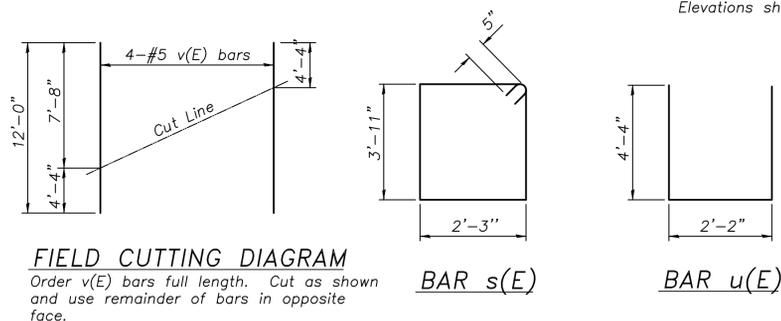
TR. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	08-03119-00-BR	Ogle	14	9
CONTRACT NO			85694	
ILLINOIS FED. AID PROJECT				



**SECTION A-A**  
\* Slope seat -2.2% West / +2.2% East



**PLAN**  
Elevations shown are symmetrical about  $\phi$  Rdwy.



**FIELD CUTTING DIAGRAM**

Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.

**BAR s(E)**

**BAR u(E)**

Special attention is called to Articles 512.15 & 512.16 of the Standard Specifications.

**WEST ABUTMENT PILE DATA**

Type: Metal Shell 12" X 0.250"  
Nominal Required Bearing: 312 kips  
Factored Resistance Available (in boring): 190 kips  
Est. Length: 20'  
No. Production Piles: 4  
No. Test Piles: 1

**EAST ABUTMENT PILE DATA**

Type: Metal Shell 12" X 0.250"  
Nominal Required Bearing: 312 kips  
Factored Resistance Available (in boring): 188 kips  
Est. Length: 20'  
No. Production Piles: 4  
No. Test Piles: 1

Notes:  
For details of piles see sheet 12 of 14.  
Cast backwall after beams have been erected.

**BILL OF MATERIAL FOR 2 ABUTMENTS**

Bar	No.	Size	Length	Shape
h <sub>1</sub> (E)	92	#5	11'-8"	—
h <sub>2</sub> (E)	16	#5	32'-8"	—
p(E)	32	#8	32'-8"	—
s(E)	76	#4	13'-2"	□
u(E)	20	#6	10'-10"	—
v(E)	16	#5	10'-8"	—
v <sub>1</sub> (E)	8	#5	7'-3"	—
v <sub>2</sub> (E)	128	#5	4'-0"	—
Concrete Structures	Cu. Yd.	31.3		
Reinforcement Bars, Epoxy Coated	Pound	6,240		
Furnishing Metal Shell Piles 12" X 0.250"	Foot	160		
Driving Piles	Foot	160		
Test Pile Metal Shells	Each	2		



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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT**

SCALE: — SHEET — OF — SHEETS STA. — TO STA. —

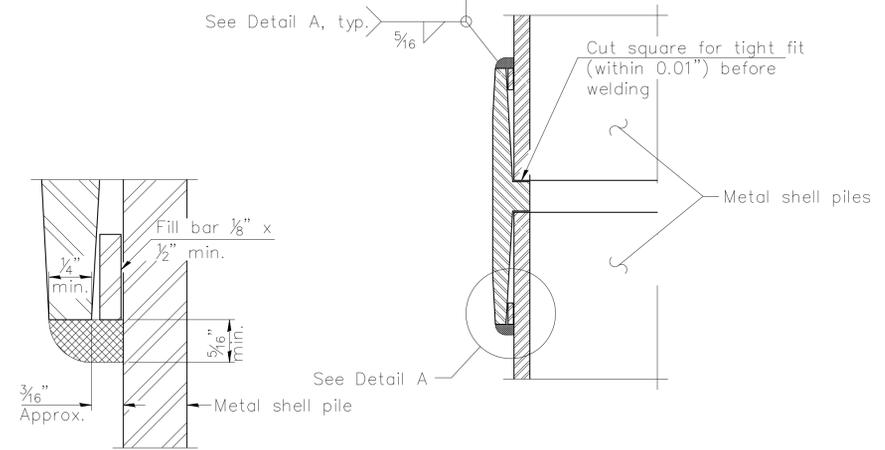
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49	08-03119-00-BR	Ogle	14	10
CONTRACT NO			85694	
ILLINOIS FED. AID PROJECT				



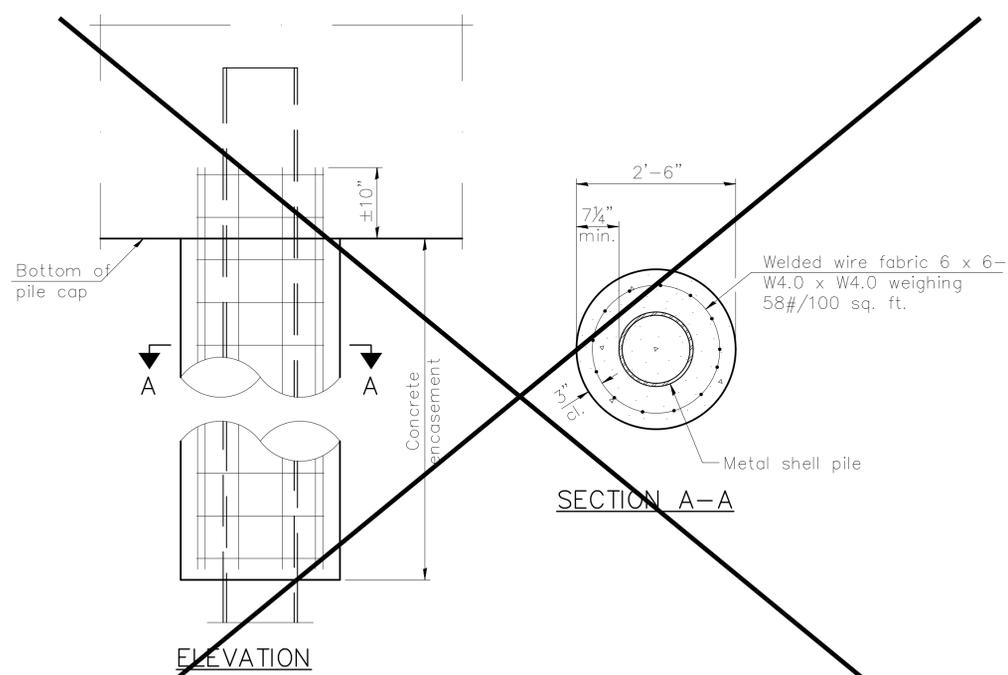


**METAL SHELL PILE TABLE**

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	43.61	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



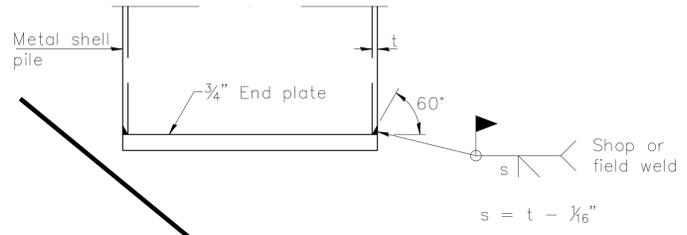
**DETAIL A**



**ELEVATION**

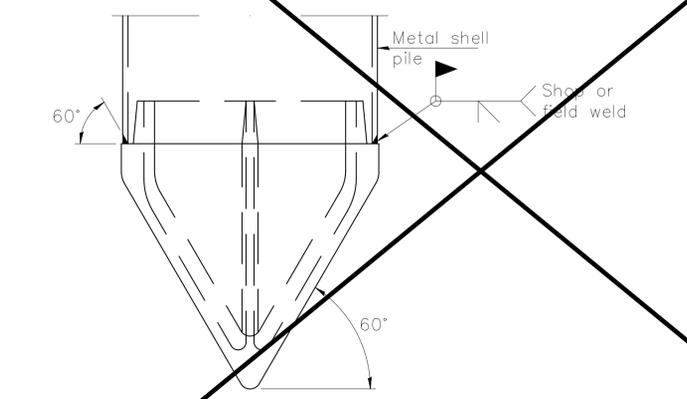
**SECTION A-A**

**INDIVIDUAL PILE CONCRETE ENCASEMENT AT PIERS**



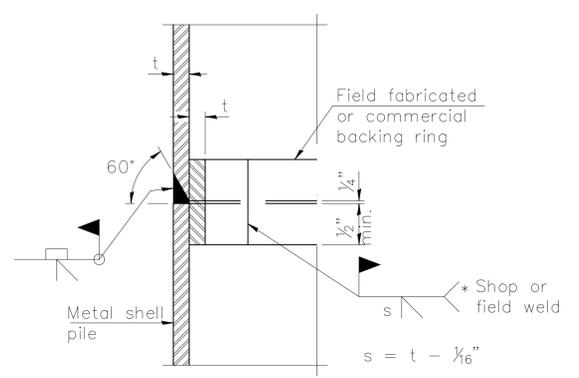
**END PLATE ATTACHMENT**

**WELDED COMMERCIAL SPLICE**  
 Notes:  
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
 Pile segments shall be driven to solid contact with splicer before welding.



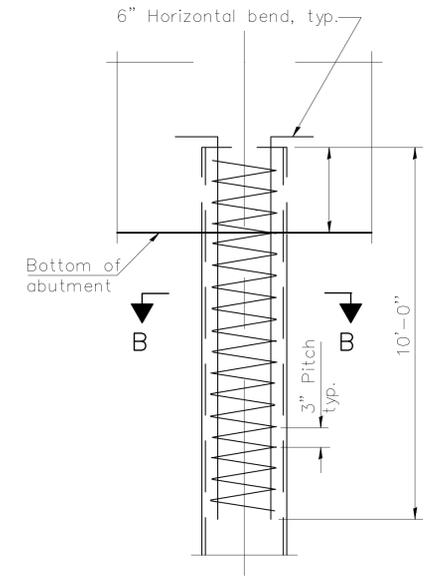
**PILE SHOE ATTACHMENT**

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

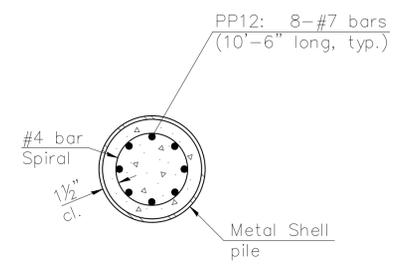


**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**



**SECTION B-B**

**REINFORCEMENT AT ABUTMENTS**

Note:  
 The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

Reinforcing and concrete shown shall be considered included in the price bid per foot of Metal Shell Piles.

SN 071-3342  
 PILING DETAILS  
 SECTION 08-03119-00-BR  
 WATER COUNTY  
 BYRON ROAD DISTRICT  
 OGLE COUNTY

F-MS

8-11-2017

 wendler engineering services, inc. www.wendlers.com ph: 815.288.2261	USER NAME = chad_clauson	DESIGNED - CC	REVISED -
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PILE DETAILS**

SCALE: - SHEET - OF - SHEETS STA. - TO STA. -

TR RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
49	08-03119-00-BR	Ogle	14	12
CONTRACT NO			85694	
ILLINOIS FED. AID PROJECT -				

**Midwest Testing Services, Inc.**  
 3705 Progress Blvd.  
 Peru, IL 61354  
 Phone: 815-223-6696  
 Fax: 815-223-6659  
 e-mail: mts37@comcast.net

**BORING LOG**  
 Sheet 1 of 3  
 Boring No. B-1  
 Surface Elev. 100.80 714.6  
 Auger Depth 50' Rotary Depth NA  
 Start Date 09/04/09 Finish Date 09/04/09

Client: Wendler Engineering Services, Inc.  
 Project Name: Section 08-03119-00-BR Byron Township  
 Project Site: Ogle County, Illinois

Location: 7' South of centerline of roadway and  
 21' west of center of existing bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear		
100.80									Randy Safranski Diedrich-D120	
99.80	Black And Brown Clay Mixed With Broken Concrete And Limestone Fragments (Fill)		1	SS	---	---	---	---		
98.80			2	SS	---	---	---	---		
97.80			3	SS	---	---	---	---		
96.80	Medium Yellowish Brown Limestone Fragments (Fill)		4	SS	0.8	6	B	26		
95.80			5	SS	---	21	---	---		
94.80	Medium Black Silty Clay		6	SS	---	29	---	---		
93.80			7	SS	---	26	---	---		
92.80	Medium Brown And Gray Coarse Sand And Fine Gravel		8	SS	---	35	---	---		
91.80										
90.80	Dense Brown Fine Sand And Gravel									
89.80										
88.80										
87.80										
86.80										
85.80										
84.80										
83.80										
82.80										
81.80										
80.80										

Groundwater Data: Static water level after auger removal elevation 91.5.  
 Comments: Assumed center of existing bridge deck as 100.0.

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 Peru, IL 61354  
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 Fax: 815-223-6659  
 e-mail: mts37@comcast.net

**BORING LOG**  
 Sheet 2 of 3  
 Boring No. B-1  
 Surface Elev. 100.80 714.6  
 Auger Depth 50' Rotary Depth NA  
 Start Date 09/04/09 Finish Date 09/04/09

Client: Wendler Engineering Services, Inc.  
 Project Name: Section 08-03119-00-BR Byron Township  
 Project Site: Ogle County, Illinois

Location: 7' South of centerline of roadway and  
 21' west of center of existing bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear		
79.80									Randy Safranski Diedrich-D120	
78.80	Dense Brown Fine Sand		9	SS	---	44	---	---		
77.80			10	SS	---	32	---	---		
76.80			11	SS	---	34	---	---		
75.80	Dense Brown Fine Sand With Limestone Fragments		12	SS	---	43	---	---		
74.80			13	SS	2.1	15	B	18		
73.80	Very Stiff Tan To Gray Silty Loam Till									
72.80										
71.80										
70.80										
69.80										
68.80										
67.80										
66.80										
65.80										
64.80										
63.80										
62.80										
61.80										
60.80										
59.80										

Groundwater Data: Static water level after auger removal elevation 91.5.  
 Comments: Assumed center of existing bridge deck as 100.0.

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**BORING LOG**  
 Sheet 3 of 3  
 Boring No. B-1  
 Surface Elev. 100.80 714.6  
 Auger Depth 50' Rotary Depth NA  
 Start Date 09/04/09 Finish Date 09/04/09

Client: Wendler Engineering Services, Inc.  
 Project Name: Section 08-03119-00-BR Byron Township  
 Project Site: Ogle County, Illinois

Location: 7' South of centerline of roadway and  
 21' west of center of existing bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear		
58.80									Randy Safranski Diedrich-D120	
57.80	Very Stiff Silty Loam Till		15	SS	---	---	---	---		
56.80										
55.80	Very Dense Yellowish Brown Limestone (Penetrated With Rock Bit)									
54.80										
53.80										
52.80										
51.80										
50.80										
49.80										
48.80										
47.80										
46.80										
45.80										
44.80										
43.80										
42.80										
41.80										
40.80										
39.80										
38.80										

Groundwater Data: Static water level after auger removal elevation 91.5.  
 Comments: Assumed center of existing bridge deck as 100.0.

**Midwest Testing Services, Inc.**  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**  
Sheet 1 of 3

Phone: 815-223-6696  
Fax: 815-223-6659  
e-mail: mts37@comcast.net

Client: Wendler Engineering Services, Inc.  
Project Name: Section 08-03119-00-BR Byron Township  
Project Site: Ogle County, Illinois

Boring No. B-2  
Surface Elev. 99.50 713.6  
Auger Depth 53' Rotary Depth NA  
Start Date 09/04/09 Finish Date 09/04/09

Location: 8' North of centerline of roadway and  
25' east of center of existing bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear		
99.50									Randy Safranski Diedrich-D120	
98.50	Black And Brown Clay Mixed With Broken Concrete And Limestone Fragments (Fill)		1							
97.50			2	SS	---	---	---	---		
96.50			3	1	SS	---	---	---	---	
95.50	Medium Brown Silt And Limestone Fragments (Fill)		4							
94.50			5	2	SS	---	19	---	---	
93.50	Loose To Medium Black Sandy Loam		6							
92.50			7	3	SS	---	5	---	18	
91.50	Medium Black Sandy Loam With Wood Fragments		8							
90.50			9	4	SS	---	9	---	16	
89.50	Medium Black Sandy Loam With Wood Fragments		10							
88.50			11	5	SS	---	11	---	18	
87.50	Medium Brown And Gray Fine To Coarse Gravel		12							
86.50			13	6	SS	---	24	---	---	
85.50	Dense Brown Fine To Coarse Sand		14							
84.50			15	7	SS	---	24	---	---	
83.50			16							
82.50			17							
81.50			18							
80.50			19							
79.50			20	8	SS	---	32	---	---	

Groundwater Data: Static water level after auger removal elevation 91.5.  
Comments: Assumed center of existing bridge deck as 100.0.

**Midwest Testing Services, Inc.**  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**  
Sheet 2 of 3

Phone: 815-223-6696  
Fax: 815-223-6659  
e-mail: mts37@comcast.net

Client: Wendler Engineering Services, Inc.  
Project Name: Section 08-03119-00-BR Byron Township  
Project Site: Ogle County, Illinois

Boring No. B-2  
Surface Elev. 99.50 713.6  
Auger Depth 53' Rotary Depth NA  
Start Date 09/04/09 Finish Date 09/04/09

Location: 8' North of centerline of roadway and  
25' east of center of existing bridge

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear		
78.50									Randy Safranski Diedrich-D120	
77.50	Dense Brown Fine Sand With Limestone Fragments		22							
76.50			23	9	SS	---	42	---	---	
75.50			24	10	SS	---	36	---	---	
74.50	Dense Brown Fine Sand		25							
73.50			26	11	SS	---	37	---	---	
72.50	Dense Brown Fine Sand To Coarse Sand		27							
71.50			28	12	SS	---	47	---	---	
70.50	Very Stiff Brownish Gray Silty Loam Till		29							
69.50			30	13	SS	---	31	---	---	
68.50			31							
67.50			32							
66.50			33							
65.50			34							
64.50			35							
63.50			36	14	SS	---	18	B	15	
62.50			37							
61.50			38							
60.50			39							
59.50			40							
58.50			41							

Groundwater Data: Static water level after auger removal elevation 91.5.  
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Sheet 3 of 3

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Client: Wendler Engineering Services, Inc.  
Project Name: Section 08-03119-00-BR Byron Township  
Project Site: Ogle County, Illinois

Boring No. B-2  
Surface Elev. 99.50 713.6  
Auger Depth 53' Rotary Depth NA  
Start Date 09/04/09 Finish Date 09/04/09

Location: 8' North of centerline of roadway and  
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(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES					DRILLED BY	REMARKS
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear		
57.50									Randy Safranski Diedrich-D120	
56.50	Very Stiff Brownish Gray Silty Loam Till		43							
55.50			44							
54.50			45	15	SS	2.2	16	B	17	
53.50	Very Dense Yellowish Brown Limestone (Penetrated With Rock Bit)		46							
52.50			47							
51.50			48							
50.50			49							
49.50			50	16	SS					
48.50			51							
47.50			52							
46.50			53							
45.50			54							
44.50			55							
43.50			56							
42.50			57							
41.50			58							
40.50			59							
39.50			60							
38.50			61							
37.50			62							

Groundwater Data: Static water level after auger removal elevation 91.5.  
Comments: Assumed center of existing bridge deck as 100.0.

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