

04-27-2018 LETTING ITEM 141

CONTRACT NO. 95818

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
STP OFF-SYSTEM BRIDGE FUNDING

TR 434 OVER HOG CREEK
SECTION 10-08125-00-BR
PROJECT NO. BVRL(572)
LOUDON ROAD DISTRICT
FAYETTE COUNTY
JOB NO. C-97-005-18

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	1
CONTRACT NO. 95818				
RAAI JOB NO. 52316				

INDEX OF SHEETS

- COVER SHEET
- SUMMARY OF QUANTITIES, GENERAL NOTES, AND TYPICAL SECTIONS
- PLAN AND PROFILE OF ROADWAY
- GENERAL PLAN AND ELEVATION
- 5.-6. PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS
- STEEL RAILING, TYPE S1 DETAILS
- ABUTMENT DETAILS
- HP PILE DETAILS
- 10.-11. CROSS SECTIONS OF ROADWAY

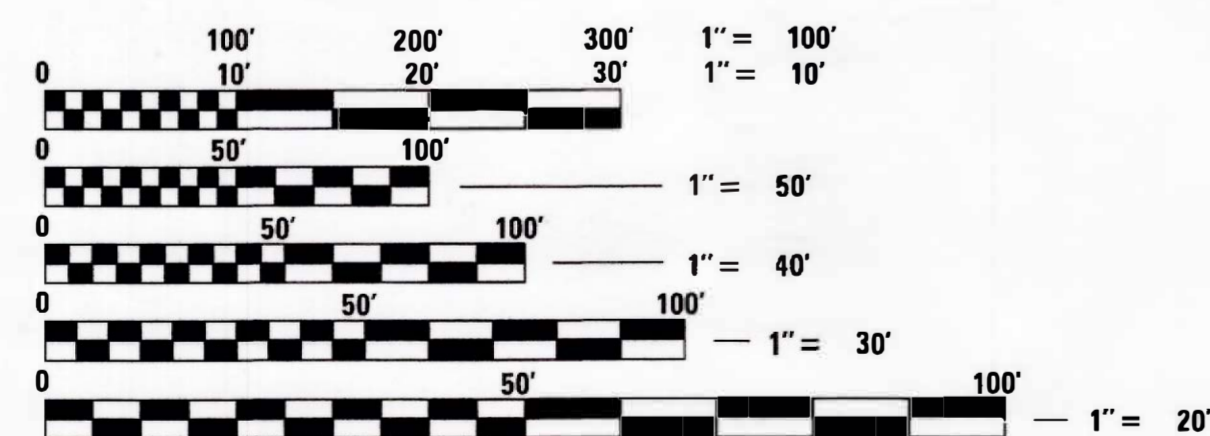
HIGHWAY STANDARDS (SEE SPECIFICATIONS)

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 515001-03 NAME PLATE FOR BRIDGES
- 701901-07 TRAFFIC CONTROL DEVICES
- 725001-01 OBJECT AND TERMINAL MARKERS
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

SOIL BORINGS (SEE SPECIFICATIONS)

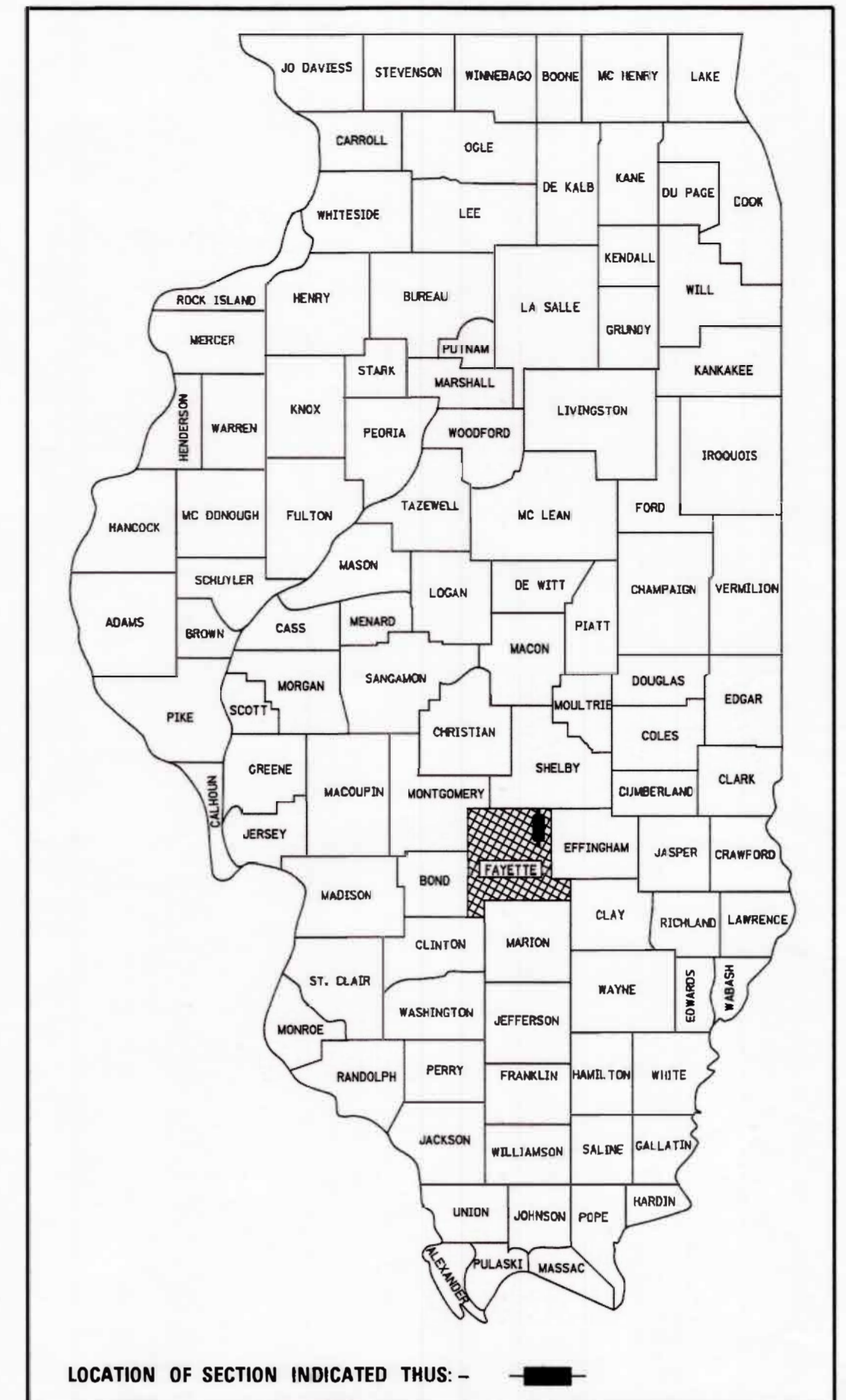
DESIGN CLASSIFICATION: RURAL LOCAL ROAD
ADT₂₀₁₇ : 75

DESIGN SPEED: 30 MPH



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 LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123 or 811 Website: <http://www.illinois1call.com>

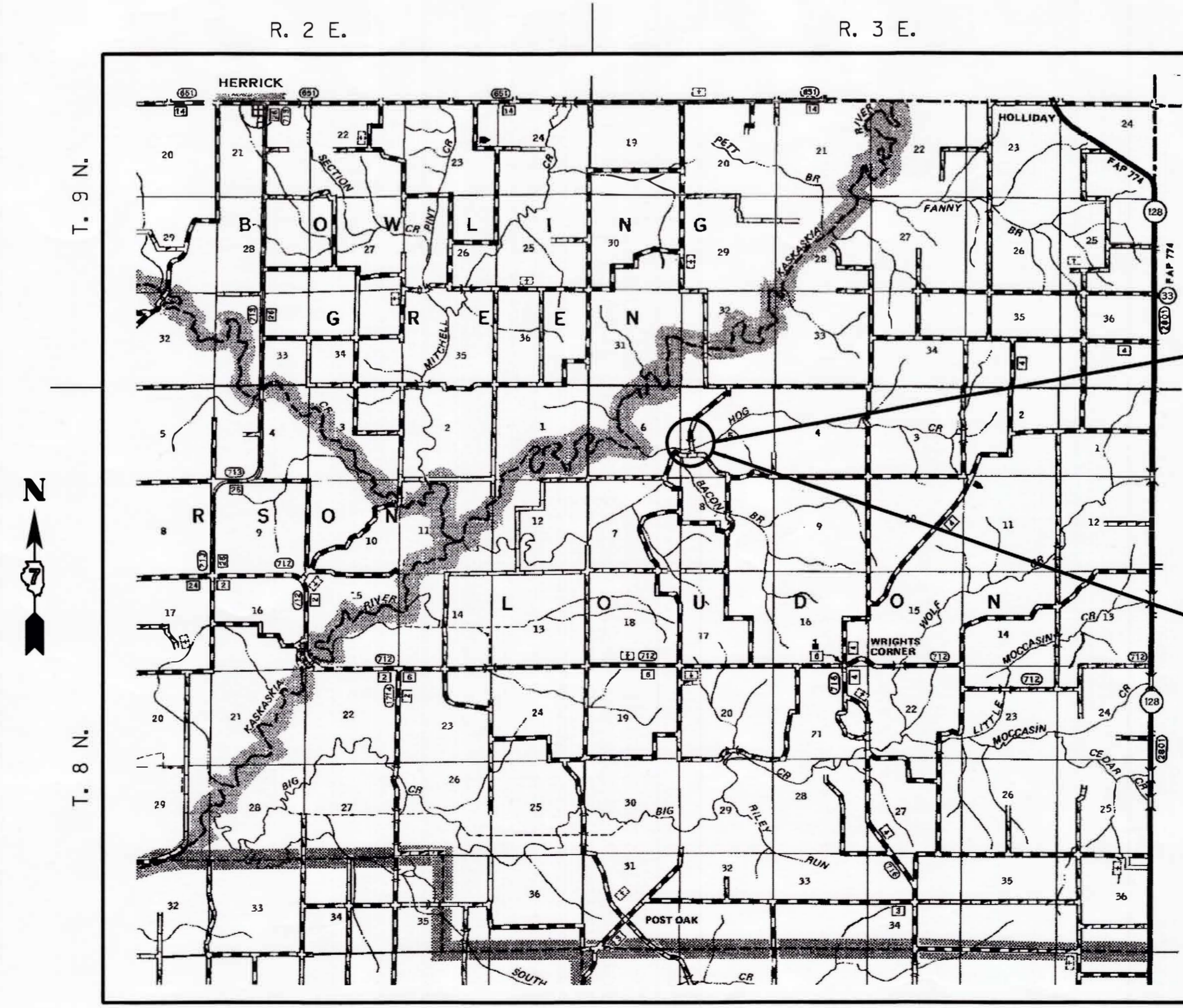


FAYETTE COUNTY
HIGHWAY DEPARTMENT

APPROVED: 12-12, 2017
[Signature]
FAYETTE COUNTY, COUNTY ENGINEER

PASSED: 1-2, 2018
[Signature]
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW: 1-2, 2018
[Signature]
REGION FOUR ENGINEER



SECTION ENDS
STA. 52+80.00

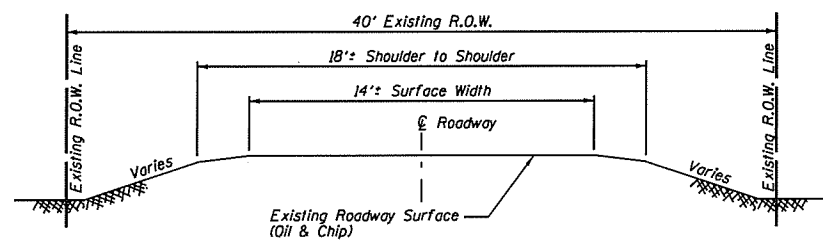
SECTION 10-08125-00-BR INCLUDES THE CONSTRUCTION OF A SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE CARRYING TR 434 OVER HOG CREEK, 65'-10 1/2" BK. TO BK. ABUTMENTS X 24' WIDE, 15° AHEAD RIGHT SKEW. EXISTING STRUCTURE NO. 026-5015 PROPOSED STRUCTURE NO. 026-3470

SECTION BEGINS
STA. 48+34.00

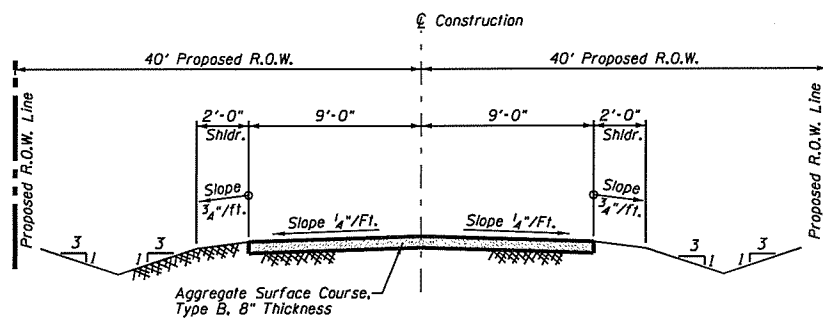
LOCATION: IN THE NW 1/4 OF THE SW 1/4, SECTION 5, T8N, R3E, 3RD P.M.
NET LENGTH OF PROJECT: 446.00 FT. = 0.084 MI.



[Signature] 12/12/2017
BRENT L. TAYLOR
SALEM, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL
ENGINEER NO. 062-066114
EXPIRES NOV. 30, 2019



**TYPICAL SECTION
EXISTING APPROACH ROADWAY**



**TYPICAL SECTION
PROPOSED APPROACH ROADWAY**

UTILITIES

J.U.L.I.E.: Design Phase Locate
Dig No.: A1923000-00A
07/11/2017

Water: Fayette Water Company
Attn: Denny Vaughn
2371 E 1350 St
Brownstown, IL 62418
Phone: 618-347-2430

Telephone: Frontier Communications
Attn: Mr. Rod Eller
801 West Jackson Street
Altamont, IL 62411
Phone: 618-483-6205

Electric: Southwestern Electric Co-Op
Attn: Ms. Kim Jackson
525 U.S. Route 40
Greenville, IL 62246
Phone: 618-664-5922

SUMMARY OF QUANTITIES

Code No.	Item	Unit	Quantity
20100500	TREE REMOVAL, ACRES	ACRE	0.7
20200100	EARTH EXCAVATION	CU YD	151
20300100	CHANNEL EXCAVATION	CU YD	355
20400800	FURNISHED EXCAVATION	CU YD	769
20700110	POROUS GRANULAR EMBANKMENT	TON	100
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	155
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	347
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	24.2
50300280	CONCRETE ENCASEMENT	CU YD	2.8
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SO FT	1548
50800105	REINFORCEMENT BARS	POUND	3800
50900205	STEEL RAILING, TYPE S1	FOOT	132
51201600	FURNISHING STEEL PILES HP12X53	FOOT	455
51202305	DRIVING PILES	FOOT	455
51203600	TEST PILE STEEL HP12X53	EACH	1
51204650	PILE SHOES	EACH	8
51500100	NAME PLATES	EACH	1
67100100	MOBILIZATION	L SUM	1
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.4

* Specialty Item

GENERAL NOTES

- This section shall be constructed according to the plans, the Special Provisions, and the "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016.
- Any reference to a Standard in these plans shall be interpreted to mean the edition as indicated by the sub-number listed in the Index of Sheets or the copy of the Standard included in these plans.
- Roadway Centerline profiles refer to the finished surface.
- Existing utilities shown are located from surface observations or information provided by the respective utilities and must be considered approximate. There may be others, the exact location of which are unknown and not shown. The Contractor will be responsible for notifying the respective utilities before work is begun. Field marking of underground utilities may be obtained by providing a minimum of 48 hours advance notice through the J.U.L.I.E. system by calling 1-800-892-0123, 811, or by direct contact with non-members of J.U.L.I.E.
- The nominal thickness for surface course is shown on the Typical Sections, Standards, Schedules, or Special Details. The constructed thickness of the above item shall not be less than 90 percent of the nominal thickness at any location.
- Factors used for quantity calculations are as follows:
Porous Granular Embankment 2.1 tons/cu. yd.
Stone Dumped Riprap 130 pounds/cu. ft.
Aggregate Surface Course 2.1 tons/cu. yd.
- Commitments: The Fayette County Engineer will perform a final inspection of the bridge for bays prior to construction.

No tree clearing will be allowed or performed from April 1 through September 30 as part of the effort to conserve the Indiana and Northern Long-Eared bat.

The Fayette County Engineer will notify public service providers prior to the start of construction.

To date, no other commitments have been made.

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
SALEM, ILLINOIS FREEBURG, ILLINOIS
ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED - BLT	REVISED -
DRAWN - JLN	REVISED -
CHECKED - GLH	REVISED -
DATE - 12/12/2017	REVISED -

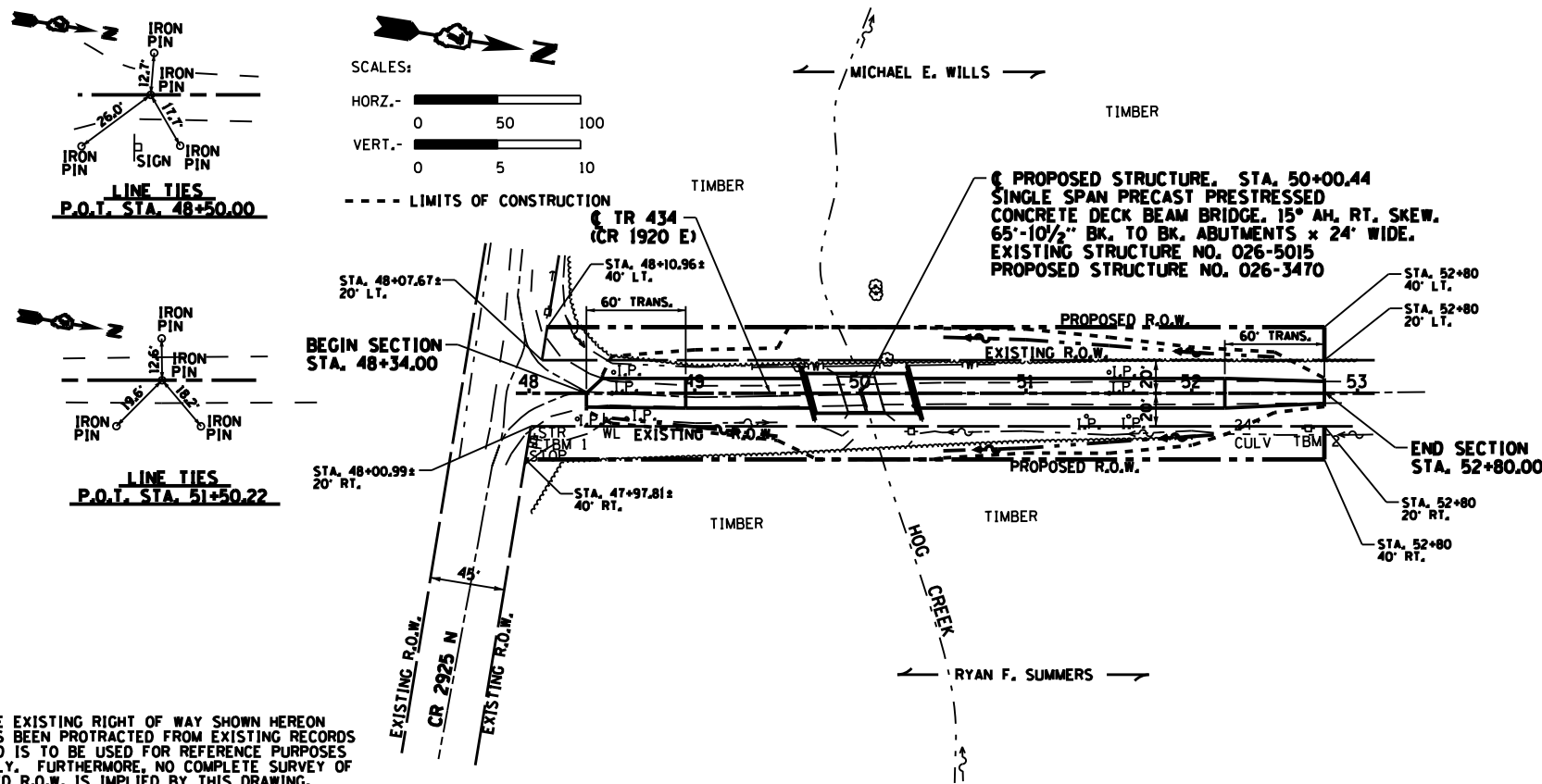
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES, GENERAL NOTES, AND TYPICAL SECTIONS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	2
CONTRACT NO. 95818				

RAAI JOB NO. 52316

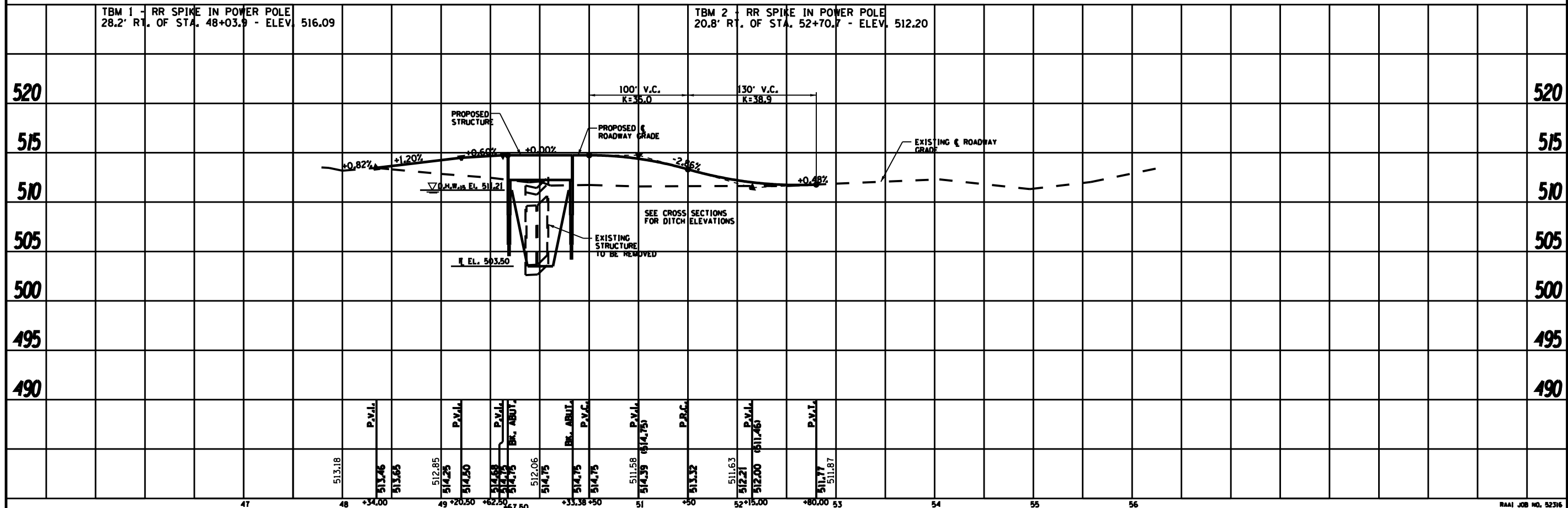
EXISTING STRUCTURE: STRUCTURE NO. 026-5015, REINFORCED CONCRETE BOX CULVERT WITH CONCRETE WINGWALLS, DOUBLE 10' SPAN X 6' RISE X 22' LONG 10° AH. RT. SKEW. TO BE REMOVED. NO SALVAGE.



TREE REMOVAL, ACRES	
LOCATION	ACRE
LT., STA. 48+32 TO LT., STA. 52+58	0.4
RT., STA. 48+78 TO RT., STA. 52+32	0.3
TOTAL	0.7

EARTHWORK SCHEDULE				
LOCATION	EARTH EXCAVATION CU. YD.	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE* CU. YD.	EMBANKMENT CU. YD.	EARTHWORK BALANCE** WASTE (+) OR SHORTAGE (-) CU. YD.
STA. 48+34 TO STA. 49+67.50	23	17	242	-225
STA. 50+33.38 TO STA. 52+80	128	96	640	-544
TOTAL	151	113	882	-769

*25% SHRINKAGE **FURNISHED EXCAVATION



DATE	BY	DATE
PLAN	SURVEYED	NOTE BOOK
	ADJUSTED	RT. OF WAY CHECKED
		PAID FILE NAME

DATE	BY	DATE
PROFILE	SURVEYED	NOTE BOOK
	ADJUSTED	RT. OF WAY CHECKED
		STRUCTURE NOTATIONS CHECKED

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS - LAND SURVEYORS
SALEM, ILLINOIS FREEBURG, ILLINOIS
ILLINOIS DESIGN FIRM LICENSE NO. 184-00287

DESIGNED - BLT	REVISED -
DRAWN - JN	REVISED -
CHECKED - GLH	REVISED -
DATE - 12/12/2017	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF ROADWAY

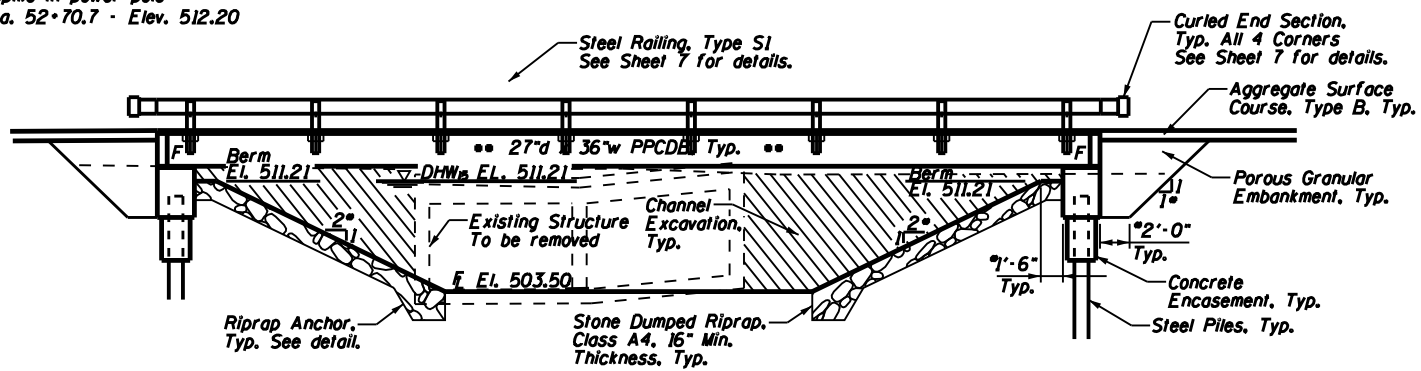
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	3
			CONTRACT NO. 95818	

STA. 48+00 TO STA. 53+00

RAAI JOB NO. 52316

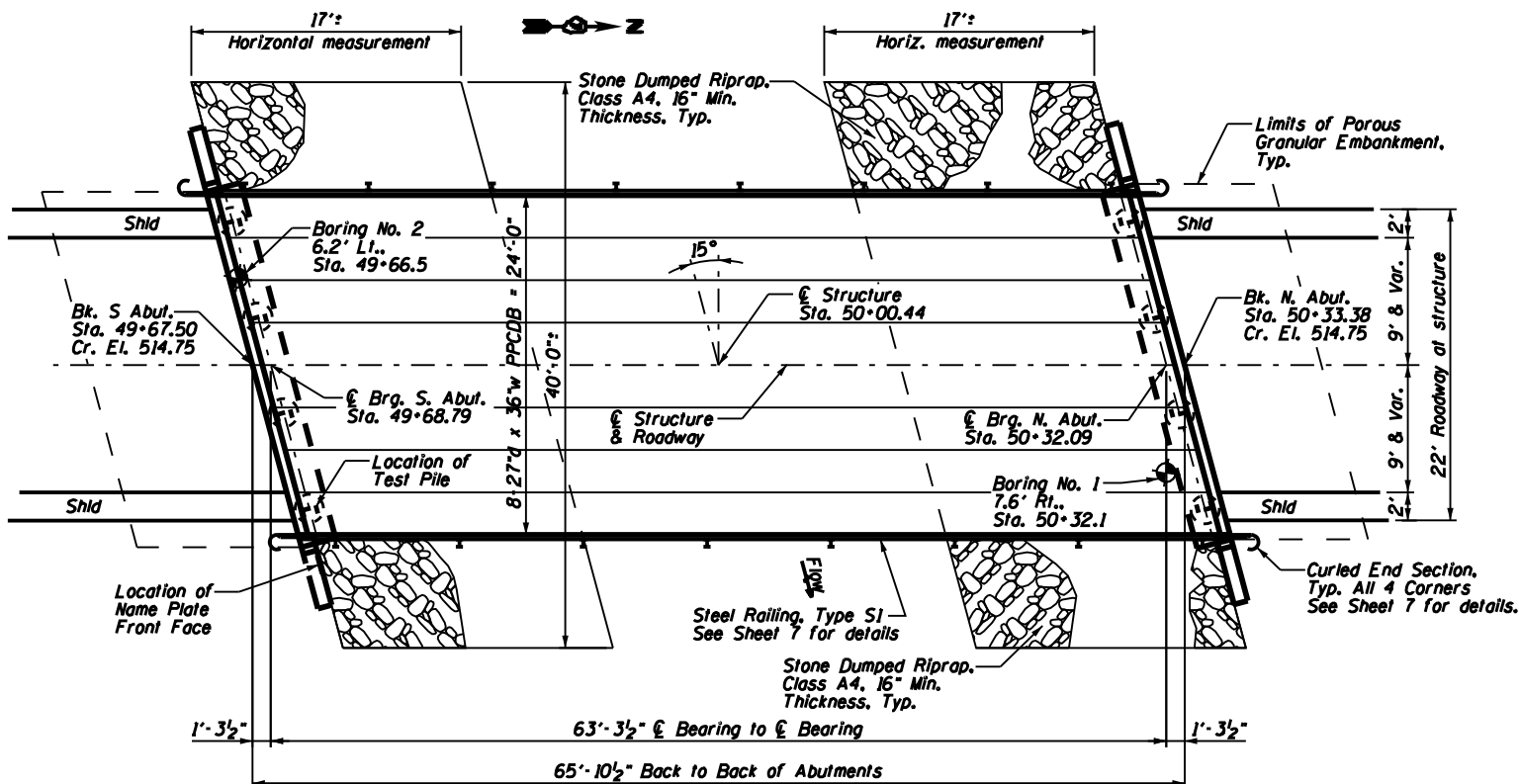
TBM #1 - RR Spike in power pole
28.2° Rt. of Sta. 48+03.9 - Elev. 516.09

TBM #2 - RR Spike in power pole
20.8° Rt. of Sta. 52+70.7 - Elev. 512.20

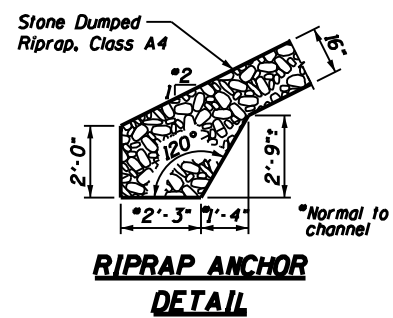


SOUTH ABUTMENT **ELEVATION** **NORTH ABUTMENT**

*Normal to channel



PLAN



RIPRAP ANCHOR DETAIL

WATERWAY INFORMATION

Drainage Area = 4.97 sq. mi. Existing Low Grade Elev. 511.32 @ Sta. 55+00
Proposed Low Grade Elev. 511.32 @ Sta. 55+00

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	15	1810	120	321	511.21	1.22	0.29	512.43	511.50
Base	100	2970	120	377	512.14	0.89	1.00	513.03	513.14
Max. Calc.	500	4100	120	385	512.78	0.66	1.81	513.44	514.59

LOADING HL-93

50#/sq. ft. included in dead load for future wearing surface.

DESIGN SPECIFICATIONS

2014 (7th ED.) w/2015 & 2016 Revisions
AASHTO LRFD Bridge Design Specifications.

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
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_{psi} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_y = 60,000$ psi (reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Soil Site Classification = C
 $S_{D1} = 0.147$ $S_{D5} = 0.350$

Existing Structure: Structure No.: 026-5015. Reinforced concrete box culvert with concrete wingwalls. Double 10' span x 6' rise x 22' long, 10° Ah. Rt. skew. To be removed. No Salvage.

BILL OF MATERIALS (BRIDGE ONLY)

ITEM	UNIT	TOTAL
Channel Excavation	Cu Yd	355
Porous Granular Embankment	Ton	100
Stone Dumped Riprap, Class A4	Ton	155
Removal of Existing Structures	Each	1
Concrete Structures	Cu Yd	24.2
Concrete Encasement	Cu Yd	2.8
PPCDB (27" Depth)	Sq Ft	1548
Reinforcement Bars	Pound	3800
Steel Railing, Type S1	Foot	132
Furnishing Steel Piles HP12x53	Foot	455
Driving Piles	Foot	455
Pile Shoes	Each	8
Test Pile Steel HP12x53	Each	1
Name Plates	Each	1
Terminal Marker - Direct Applied	Each	4

GENERAL NOTES

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

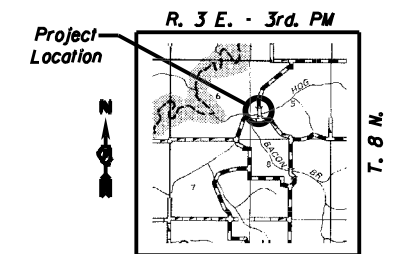
See Section 502 of the Standard Specifications for Structural Excavation.

Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at 40' Lt. and Rt. (from \mathcal{E}) of the bridge. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Special Provisions for Soil Borings.

Do not scale these drawings.

The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

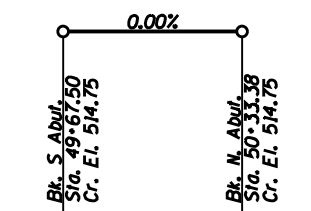


LOCATION SKETCH

HOG CREEK
BUILT 20__ BY
FAYETTE COUNTY
SEC. 10-08125-00-BR
TR 434 STA. 50+00.44
LOADING HL-93
STRUCTURE NO. 026-3470

NAME PLATE

See Std. 515001



GRADE ON STRUCTURE
(along \mathcal{E} TR 434)

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 Standard Specifications for Highway Bridges.



William D. Lueking 12/12/2017
William D. Lueking
Salem, Illinois
Illinois Licensed Structural
Engineer No. 081-4341
Expires Nov. 30, 2018

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
SALEM, ILLINOIS FREEBURG, ILLINOIS
ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED -	BLT	REVISED -
DRAWN -	JM	REVISED -
CHECKED -	WDL	REVISED -
DATE -	12/12/2017	REVISED -

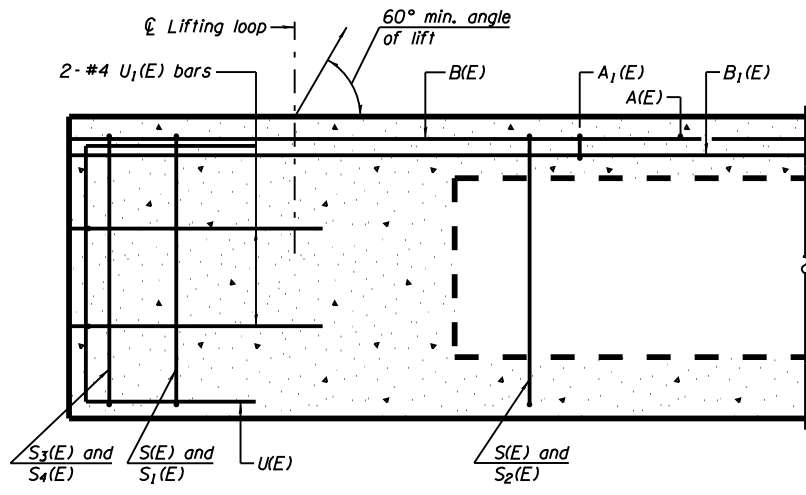
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION

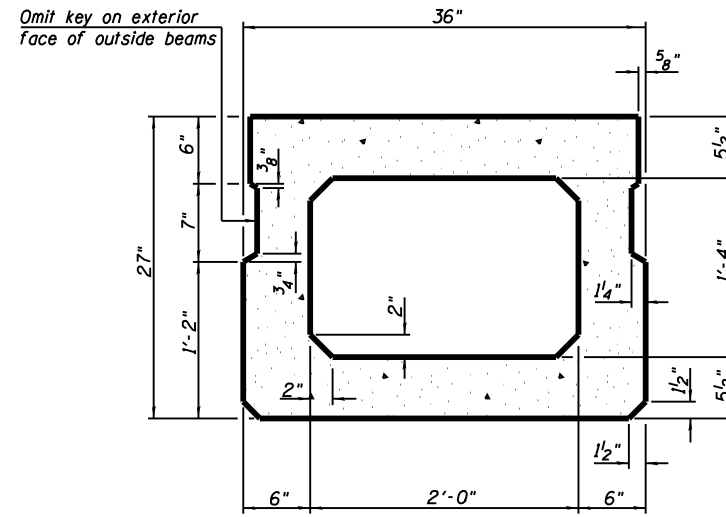
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	4

CONTRACT NO. 95818

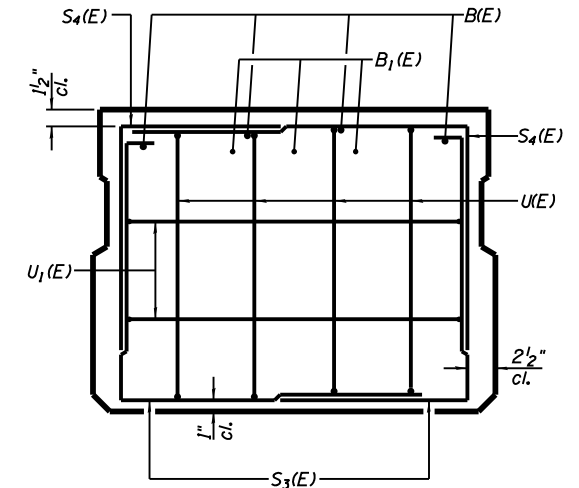
RAAI JOB NO. 52716



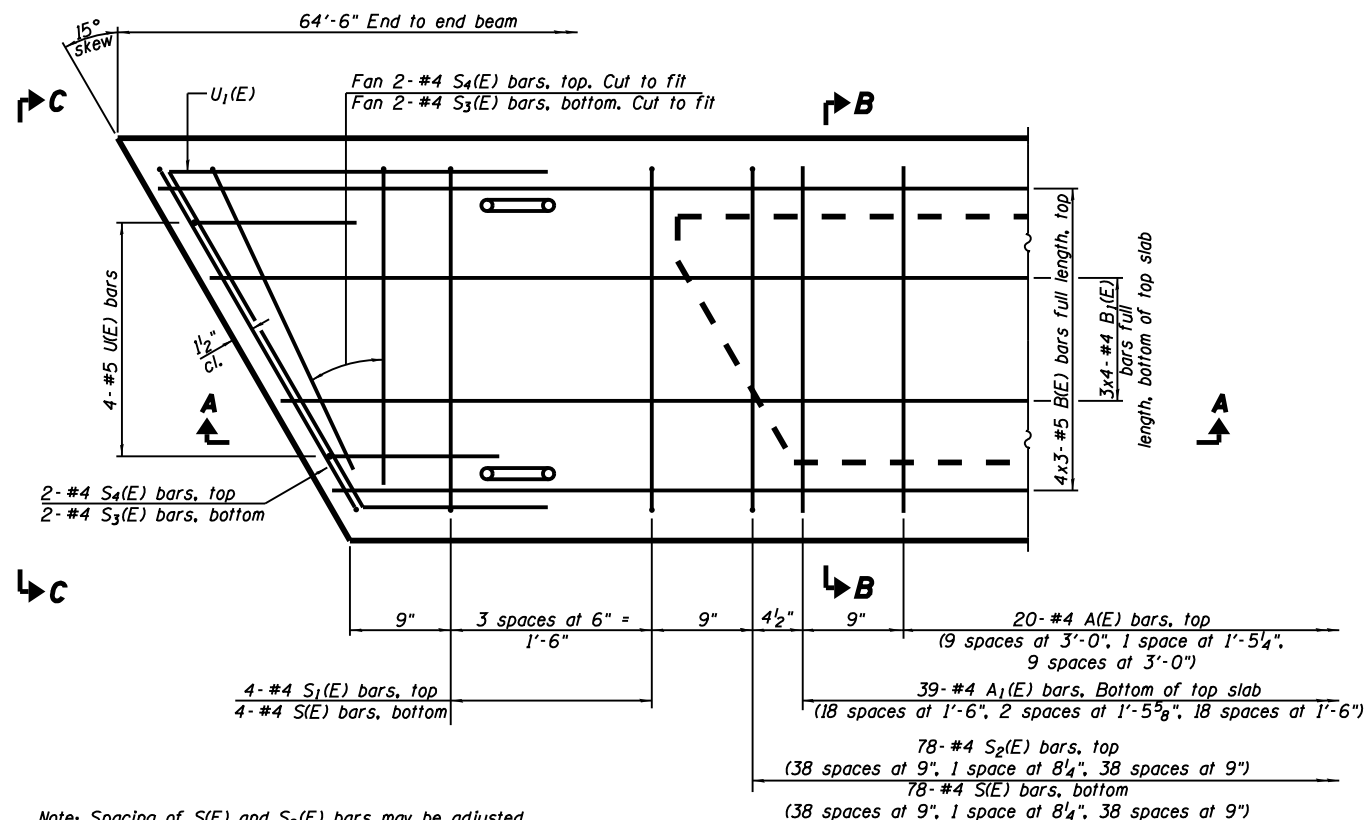
SECTION A-A



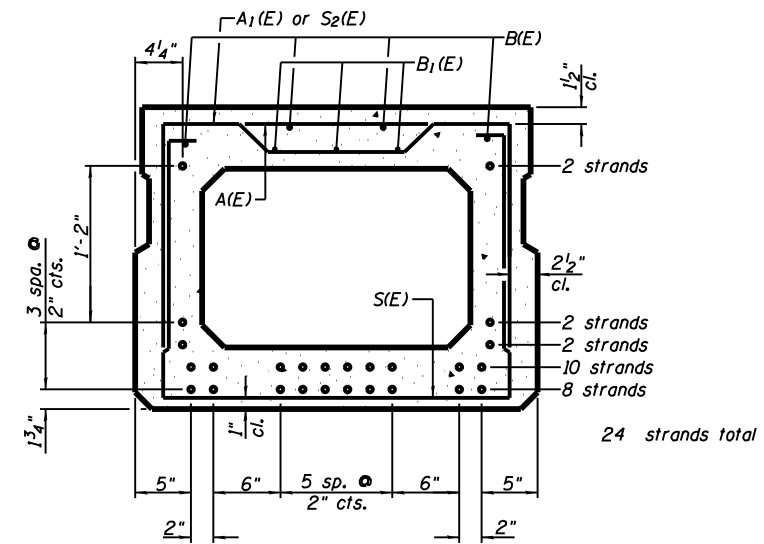
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible 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)	20	#4	2'-7"	—
A1(E)	39	#4	2'-10"	—
B(E)	12	#5	23'-1"	—
B1(E)	12	#4	17'-6"	—
S(E)	86	#4	7'-5"	U
S1(E)	8	#4	5'-11"	J
S2(E)	78	#4	6'-2"	J
S3(E)	8	#4	5'-1"	J
S4(E)	8	#4	4'-4"	J
U(E)	8	#5	4'-6"	C
U1(E)	4	#4	5'-11"	C

Note: See sheet 6 for additional details and Bill of Material.

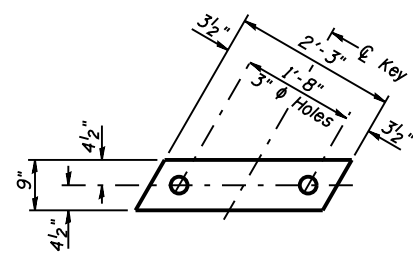
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

Bars indicated thus: 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.

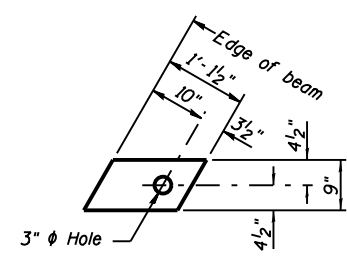
MINIMUM BAR LAP

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

Similar about C



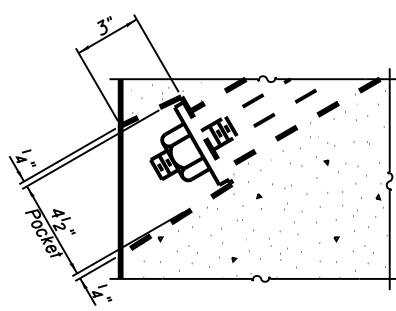
FABRIC BEARING PAD
(Interior)



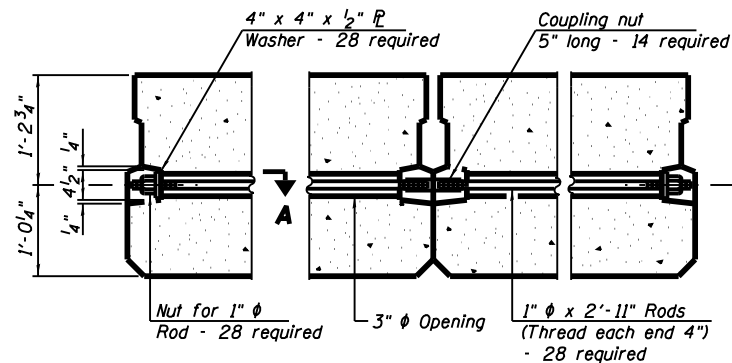
FABRIC BEARING PAD
(Exterior)

FIXED

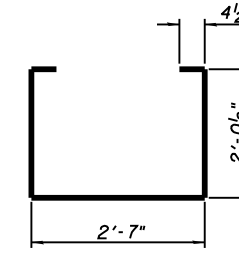
Notes: All bearing pads shall be 1" thick.



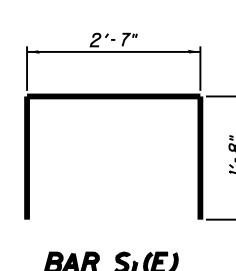
SECTION A-A



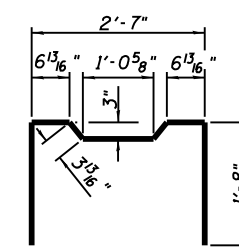
TYPICAL TRANSVERSE TIE ASSEMBLY



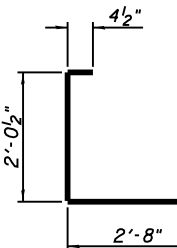
BAR S1(E)



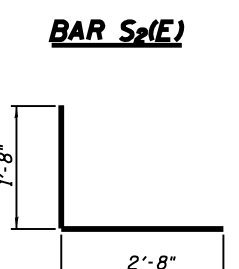
BAR S1(E)



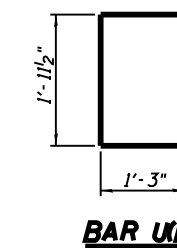
BAR S2(E)



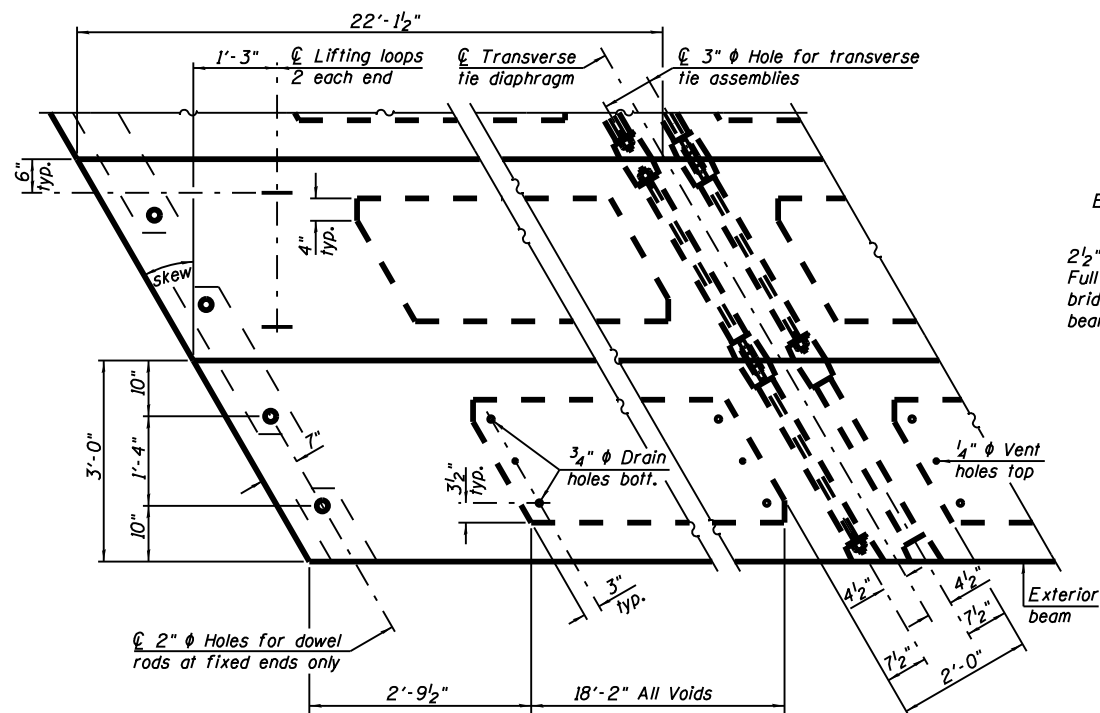
BAR S3(E)



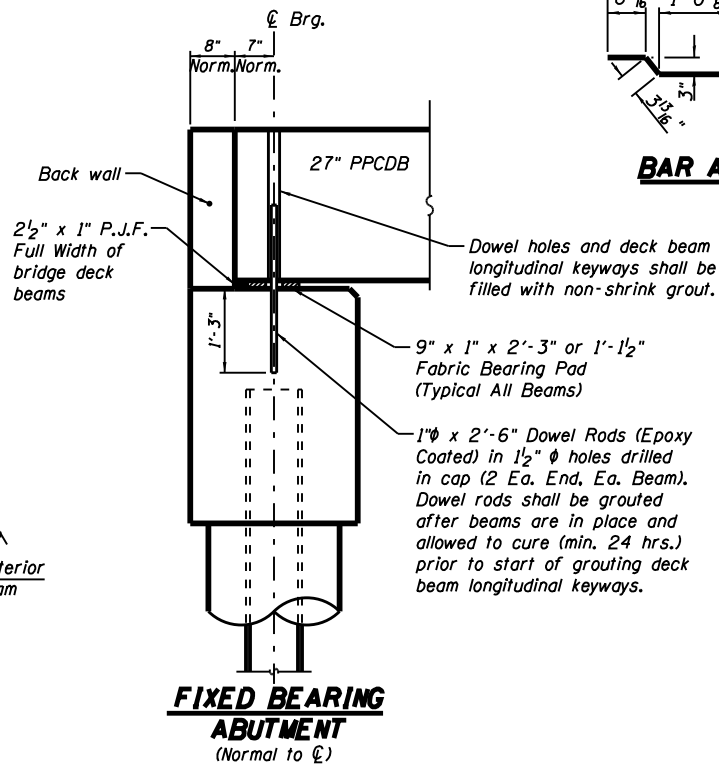
BAR S4(E)



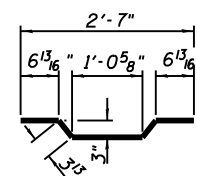
BAR UE(E)



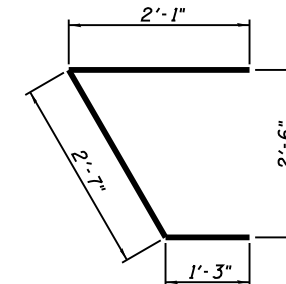
PLAN VIEW



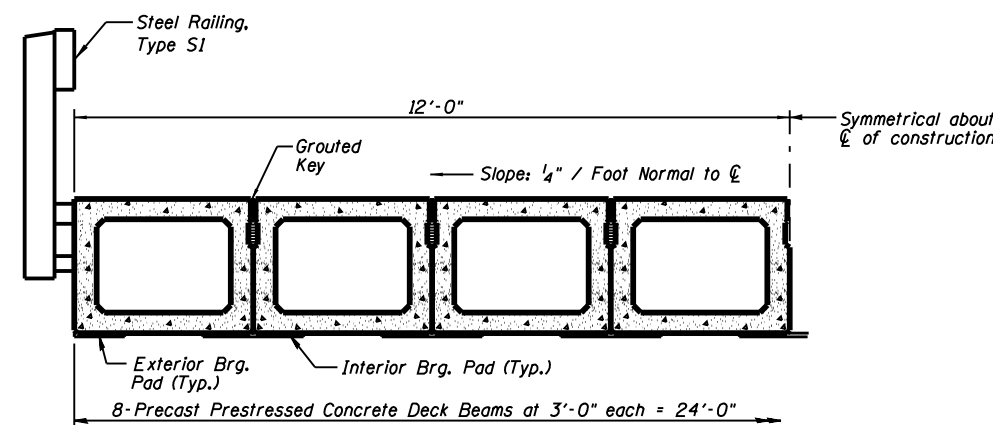
FIXED BEARING ABUTMENT
(Normal to C)



BAR A1(E)



BAR U1(E)

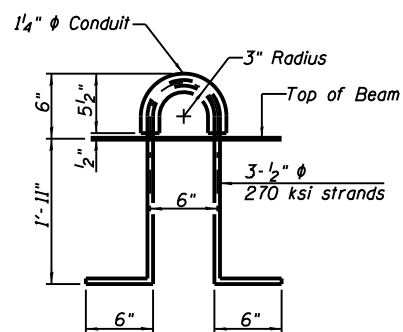


HALF CROSS SECTION

See Sheet 7 for the details showing the spacing and mounting of posts and rails to the PPCDB.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1548
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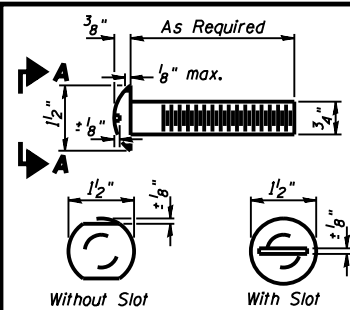


LIFTING LOOP DETAIL

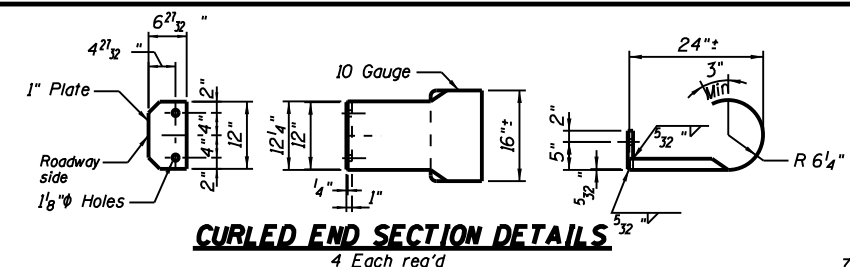
Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

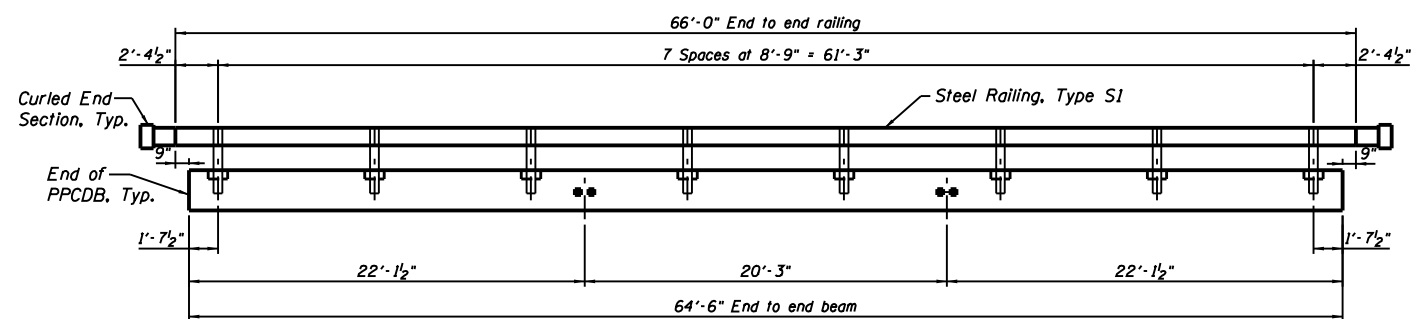
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior 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.



**VIEW A-A
ROUND HEAD BOLT**

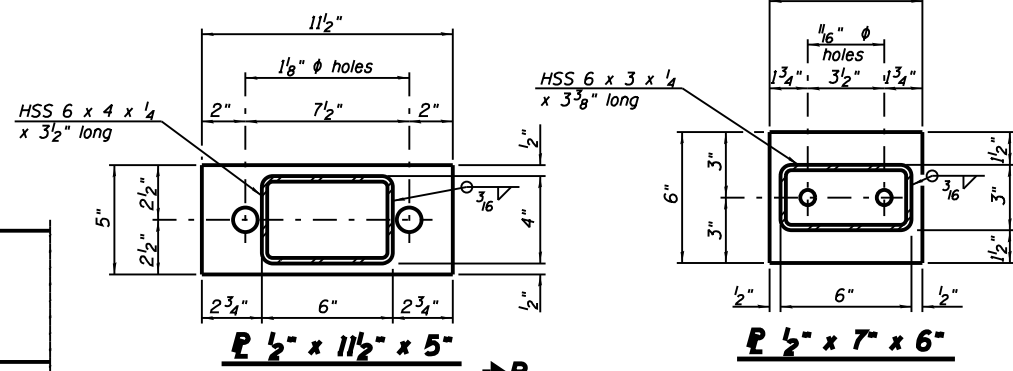


CURLLED END SECTION DETAILS
4 Each req'd

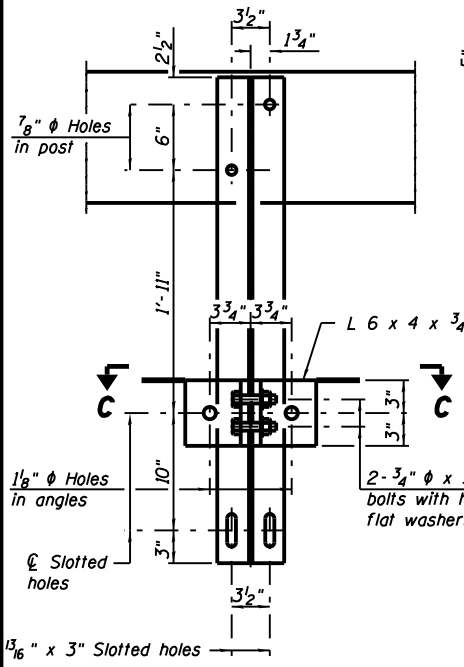


ELEVATION

Note: The cost of the Curled End Sections shall be included in the contract unit price per foot for "STEEL RAILING, TYPE S1", and no additional compensation will be allowed.



SECTION B-B



SECTION C-C

2- 3/4" ϕ x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" ϕ holes in hollow structural section may be drilled in the field.

2- 3/4" ϕ x 3 1/4" H.S. bolts with hex nut & flat washers

W6 x 25

HSS 12 x 4 x 1/4

HSS 6" x 4" x 1/4" x 3 1/2" long

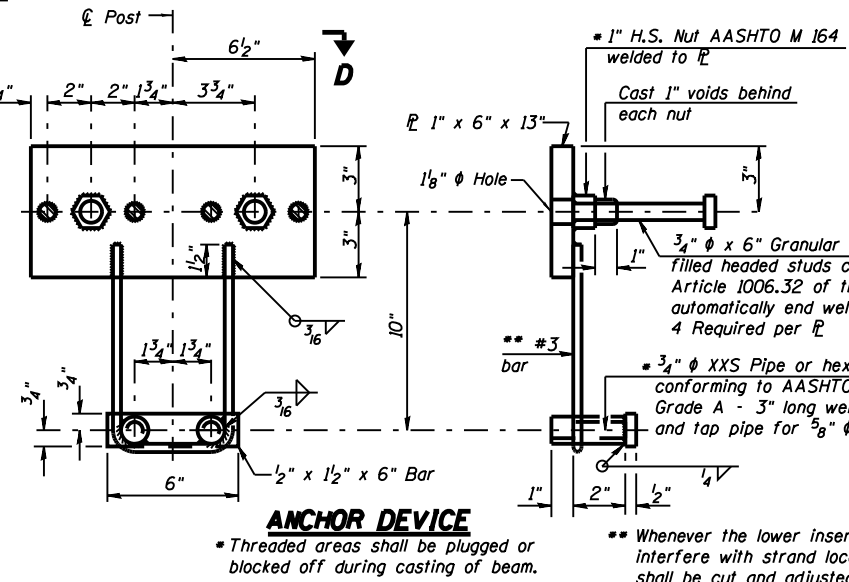
2- 1" ϕ x 7 3/4" AASHTO M-164 anchor bolts with flat washer and lockwasher

2- 5/8" ϕ x 5 3/4" cap screws with flat washer

1/8" x 7" x 6" Fabric bearing pad

R 1/2" x 7" x 6"

HSS 6" x 3" x 1/4" x 3 3/8" long



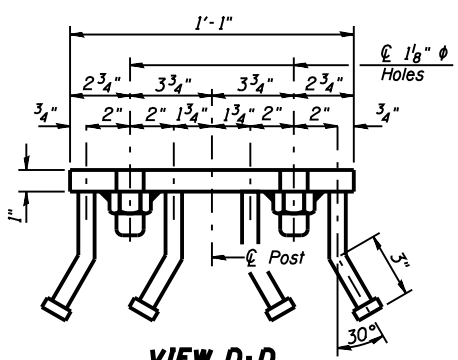
ANCHOR DEVICE

Threaded areas shall be plugged or blocked off during casting of beam.

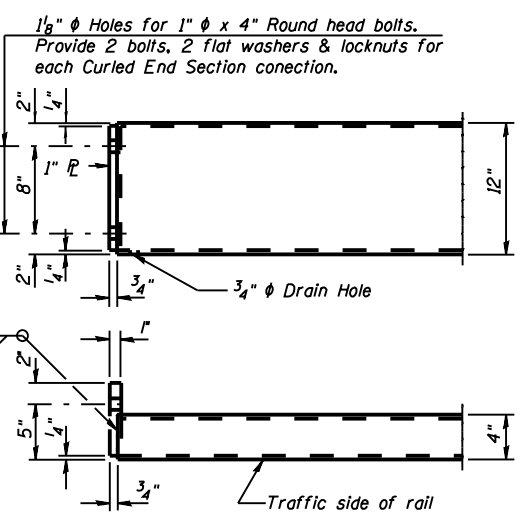
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



VIEW D-D



**PLAN-BOTT. SPLICE P
TYPICAL**

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	132

RAAI JOB NO. 52716

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ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

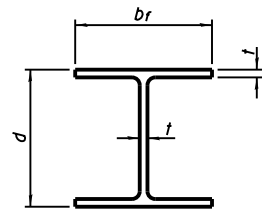
DESIGNED	BLT	REVISED
DRAWN	JN	REVISED
CHECKED	WDL	REVISED
DATE	10/04/2017	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE S1 DETAILS

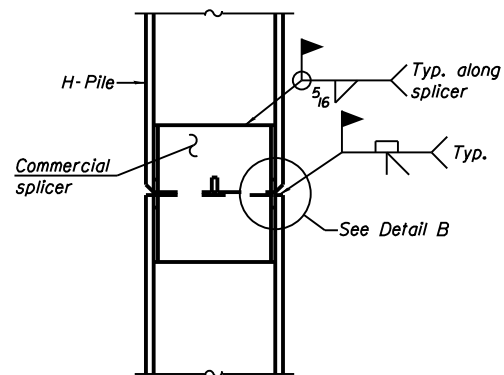
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	7

CONTRACT NO. 95818

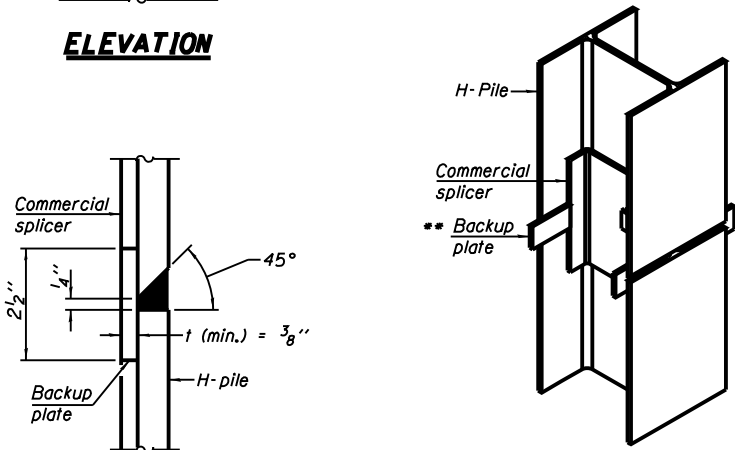


STEEL PILE TABLE

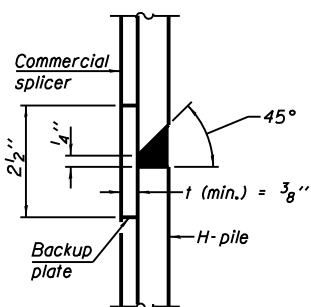
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

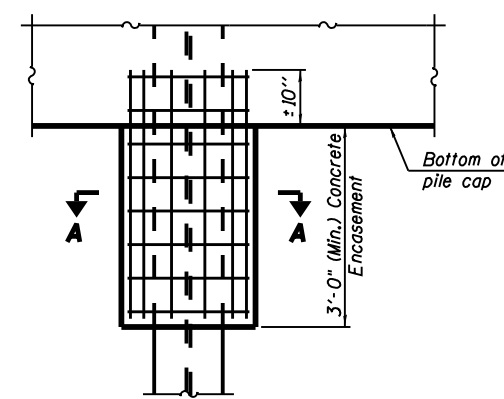


ISOMETRIC VIEW



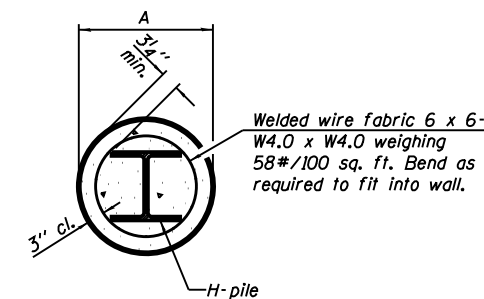
DETAIL "B"

WELDED COMMERCIAL SPLICE



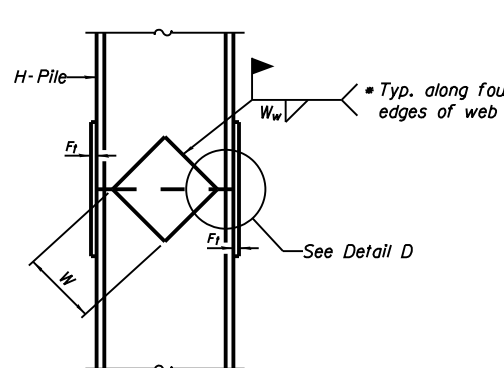
ELEVATION

PILE ENCASEMENT

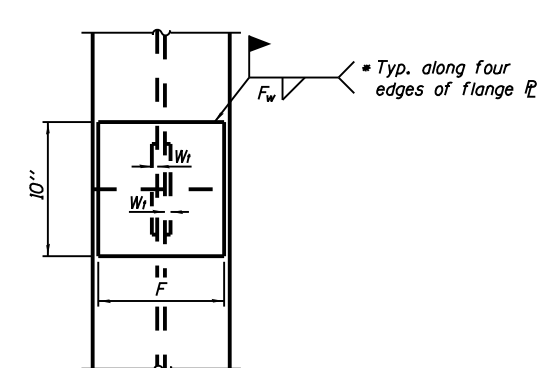


SECTION A-A

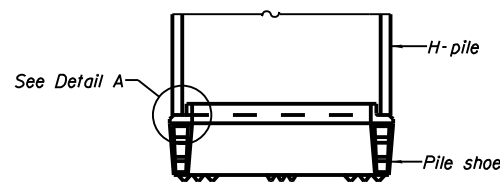
Note:
Forms for encasement may be omitted when soil conditions permit.



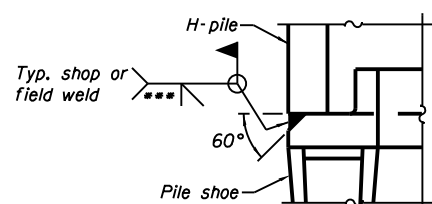
ELEVATION



END VIEW

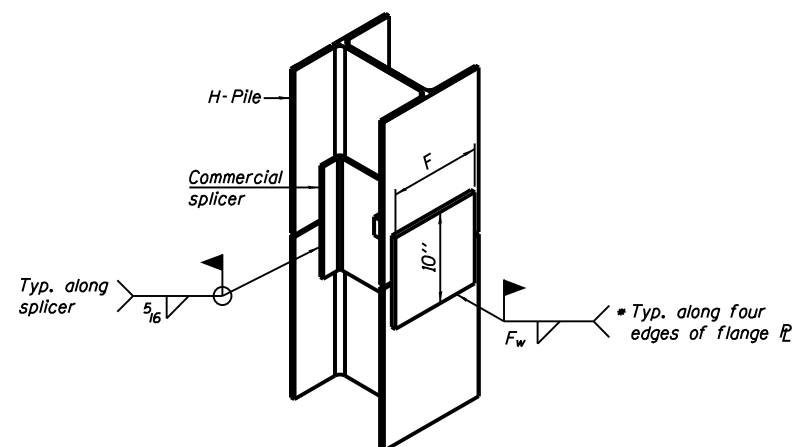


ELEVATION

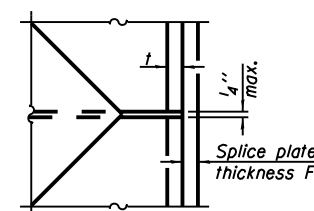


DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

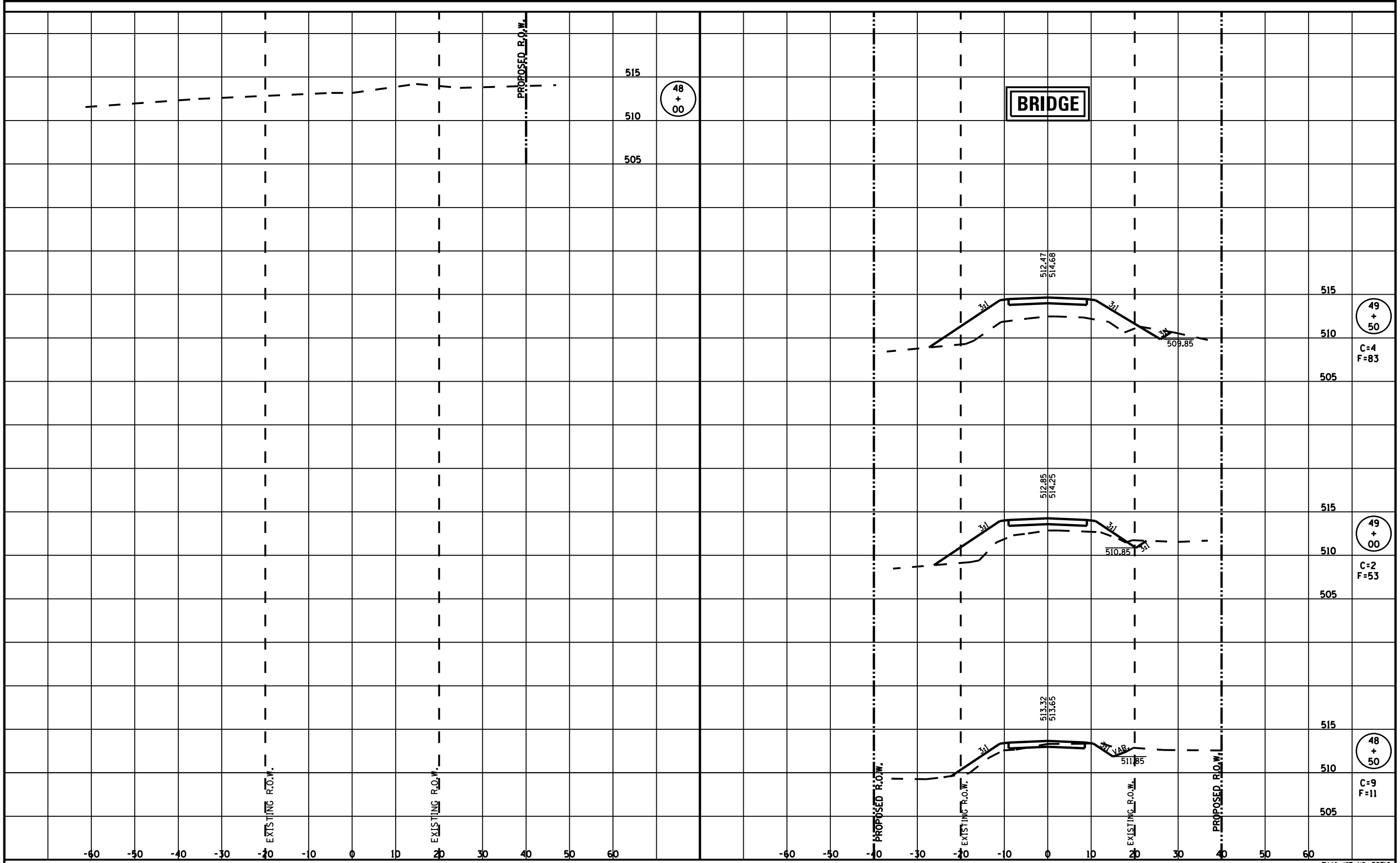
WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

FINAL	DATE
SURVEY	BY
NOTE BOOK	
NO.	
REVISIONS	
DATE	
BY	
REASON	
NO.	

ORIGINAL	DATE
SURVEY	BY
NOTE BOOK	
NO.	
REVISIONS	
DATE	
BY	
REASON	
NO.	



RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 SALEM, ILLINOIS FREEBURG, ILLINOIS
 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED -	BLT	REVISED -	
DRAWN -	JN	REVISED -	
CHECKED -	GLH	REVISED -	
DATE -	10/04/2017	REVISED -	

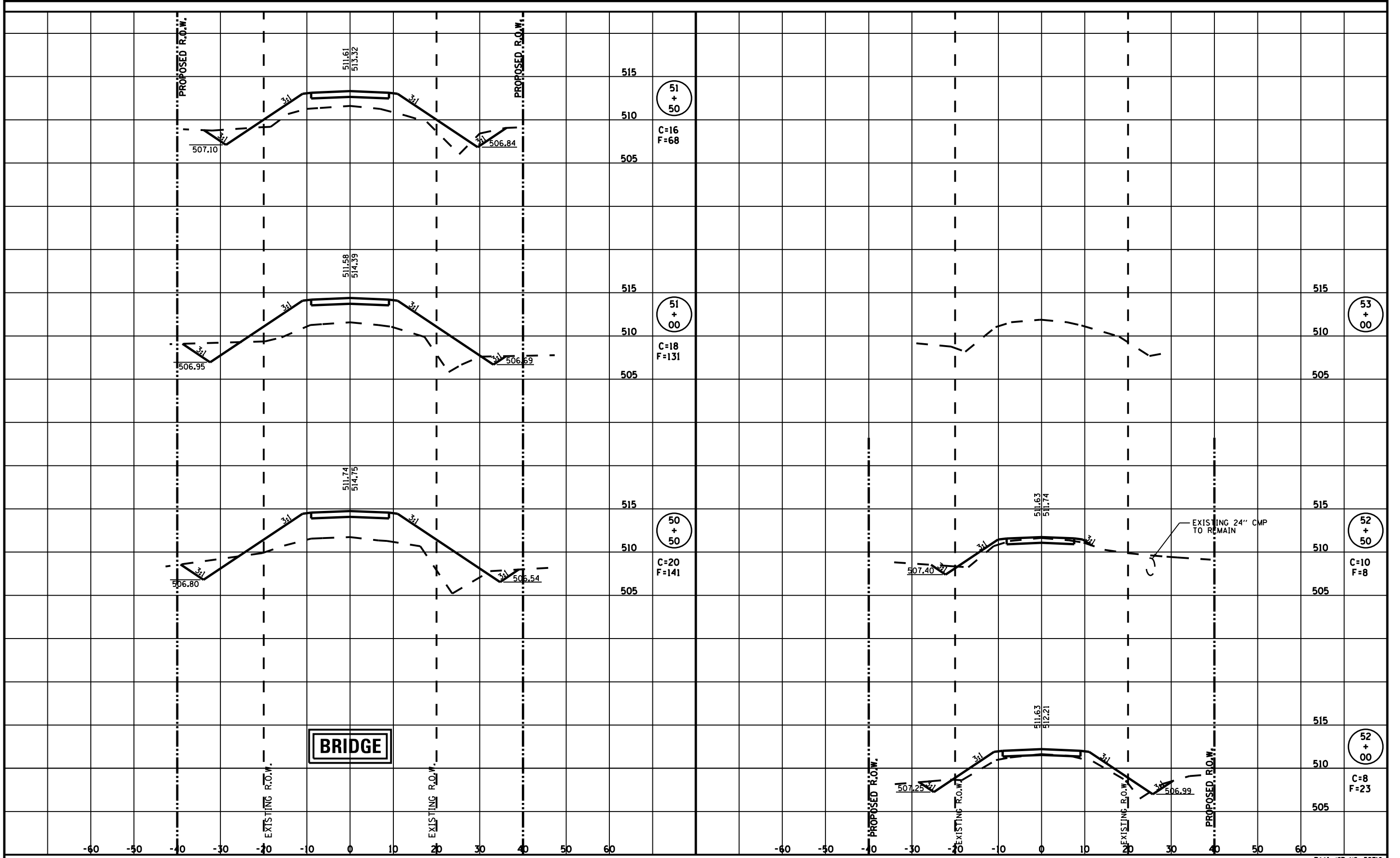
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS OF ROADWAY
 STA. 48+00 TO STA. 49+50

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	10
RAAI JOB NO. 52316			CONTRACT NO. 95818	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
NO.	
FINAL SURVEY	
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
NO.	
ORIGINAL SURVEY	
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	



RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 SALEM, ILLINOIS FREEBURG, ILLINOIS
 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED	- BLT	REVISED	-
DRAWN	- JLN	REVISED	-
CHECKED	- CLH	REVISED	-
DATE	- 12/12/2017	REVISED	-

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS OF ROADWAY
 STA. 50+50 TO STA. 53+00

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 434	10-08125-00-BR	FAYETTE	11	11
RAAI JOB NO. 52316			CONTRACT NO. 95818	