

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
STP-BRIDGE**

**TR 290 OVER TRIBUTARY
TO LINN CREEK
SECTION 14-13134-00-BR
PROJECT NO. BROS-0051(100)
SEFTON ROAD DISTRICT
FAYETTE COUNTY
JOB NO. C-97-047-15**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	1
RAAI JOB NO. 53714		CONTRACT NO. 95774		

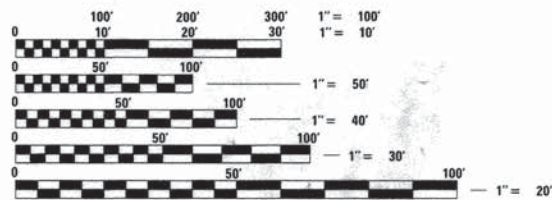
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- STEEL RAILING, TYPE S1 DETAILS
- ABUTMENT DETAILS
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SOIL BORINGS (SEE SPECIFICATIONS)

DESIGN CLASSIFICATION: RURAL LOCAL ROAD
ADT₂₀₁₅ : 150
DESIGN SPEED: 30 MPH

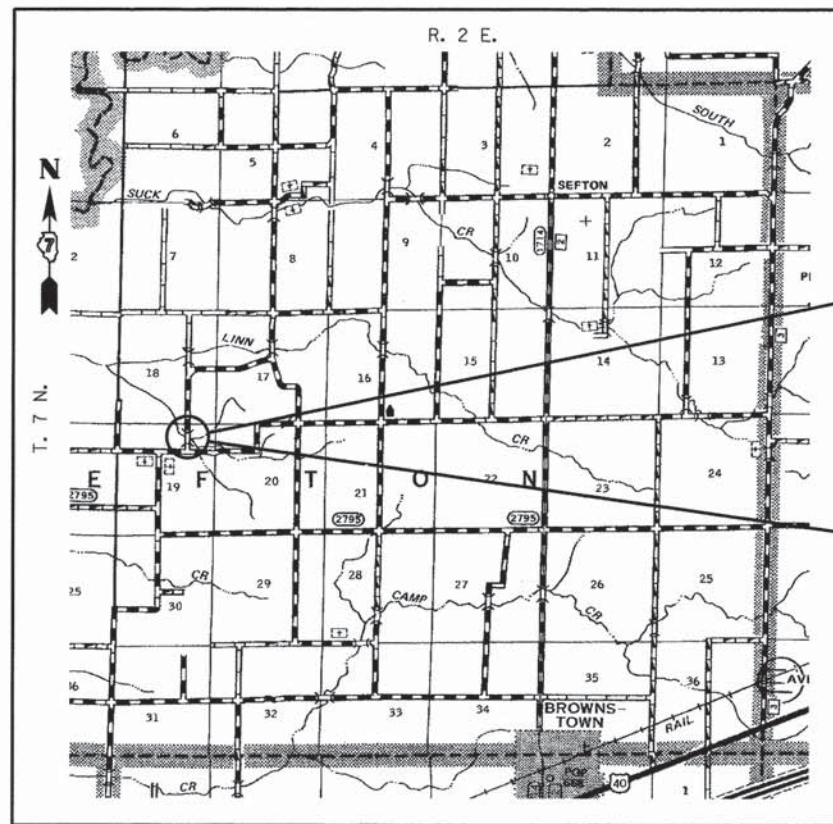


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123 or 811 Website: <http://www.illinois1call.com>



Brent L. Taylor 12/14/2015
BRENT L. TAYLOR
CENTRALIA, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL
ENGINEER NO. 062-066114
EXPIRES NOV. 30, 2017



SECTION ENDS
STA. 51+00.00

SECTION 14-13134-00-BR INCLUDES THE CONSTRUCTION OF A SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE CARRYING TR 290 OVER TRIBUTARY TO LINN CREEK, 62'-4" BK. TO BK. ABUTMENTS X 24' WIDE, NO SKEW. EXISTING STRUCTURE NO. 026-3276 PROPOSED STRUCTURE NO. 026-3464

SECTION BEGINS
STA. 49+00.00

LOCATION: NEAR THE SE CORNER OF THE NW 1/4 OF THE NE 1/4, SECTION 19, T7N, R2E, 3RD P.M.
NET LENGTH OF PROJECT: 200.00 FT. = 0.038 MI.



FAYETTE COUNTY
HIGHWAY DEPARTMENT

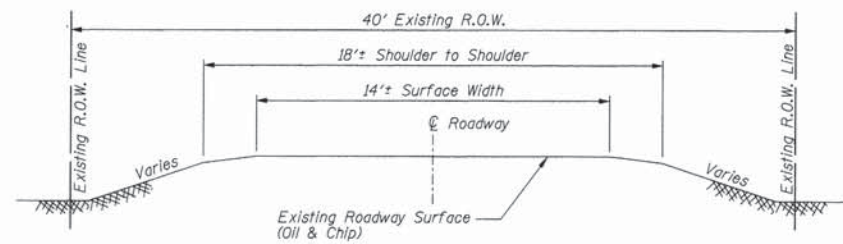
APPROVED 12-15, 2015
William A. Wood
FAYETTE COUNTY, COUNTY ENGINEER

PASSED 12-23, 2015
Maurice K. Kaut
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

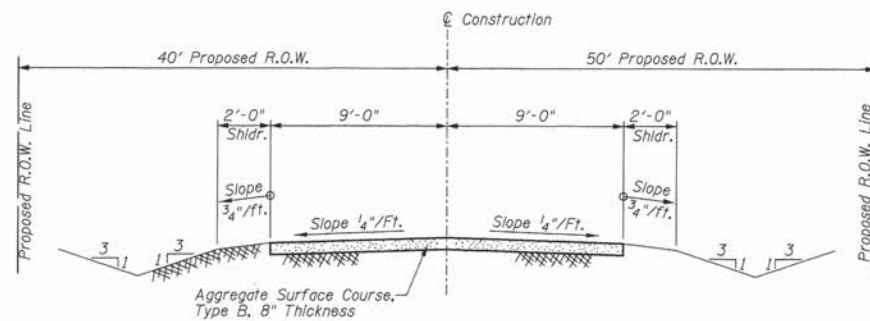
RELEASING FOR BID
BASED ON LIMITED
REVIEW 12/23, 2015
Robert D. Duabell
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER

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OF THE STATE OF ILLINOIS**

CONTRACT NO. 95774



**TYPICAL SECTION
EXISTING APPROACH ROADWAY**



**TYPICAL SECTION
PROPOSED APPROACH ROADWAY**

Looking North (Upstation)
See Sheet 3 for limits
of Proposed R.O.W.

UTILITIES

- J.U.L.I.E.: Design Phase Locate
Dig No.: A1333635
- Water: Fayette Water Company
Attn: Denny Buchanan
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
- Pipeline: Buckeye Partners
Attn: Beth M. Auman
Five TEK Park
9999 Hamilton Boulevard
Breinigsville, PA 18031
Phone: 610-904-4539
Stephen Kapp
Phone: 618-973-3752
- Pipeline: Enbridge (U.S.) Inc.
Attn: Normandie D. Lyon
21979 N. 1500 East Road
Pontiac, IL 61764
Phone: 815-842-3917

SUMMARY OF QUANTITIES

Code No.	Item	Unit	Quantity
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	24
20200100	EARTH EXCAVATION	CU YD	117
20300100	CHANNEL EXCAVATION	CU YD	215
20700110	POROUS GRANULAR EMBANKMENT	TON	150
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	423
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	116
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	31.2
50300280	CONCRETE ENCASEMENT	CU YD	2.8
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1464
50800105	REINFORCEMENT BARS	POUND	4820
* 50900205	STEEL RAILING, TYPE S1	FOOT	125
51201600	FURNISHING STEEL PILES HP12X53	FOOT	324
51202305	DRIVING PILES	FOOT	324
51203600	TEST PILE STEEL HP12X53	EACH	1
51204650	PILE SHOES	EACH	8
51500100	NAME PLATES	EACH	1
67100100	MOBILIZATION	L SUM	1
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1

* 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 January 1, 2012.
- 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.
- If Ash trees are removed on the Project, the Contractor shall become familiar with and comply with measures specified by the Illinois Department of Agriculture (IDOA) to prevent the spread of the Emerald Ash Borer. The IDOA information for Ash tree removal can be found on the IDOA website at www.agr.state.il.us/eab.
- 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.
- Areas to be seeded shall consist of all disturbed earth surfaces within the Right-of-way as directed by the Engineer.
- Commitments:
The County will notify all emergency, school, and postal services of the road closure before construction begins.

No work should be conducted on the bridge from April 1 through August 15 of any construction year in order to protect nesting birds under the bridge. If the bridge work cannot be started until after April 1, the County shall place netting or other obstructions under the bridge prior to April 1 to prevent birds from nesting under the bridge.

If the bridge work cannot be started until after April 1, the County and the Contractor shall meet at the site for a final inspection of the bridge for bats. The inspection shall be conducted no more than 7 days prior to the start of construction activity.

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

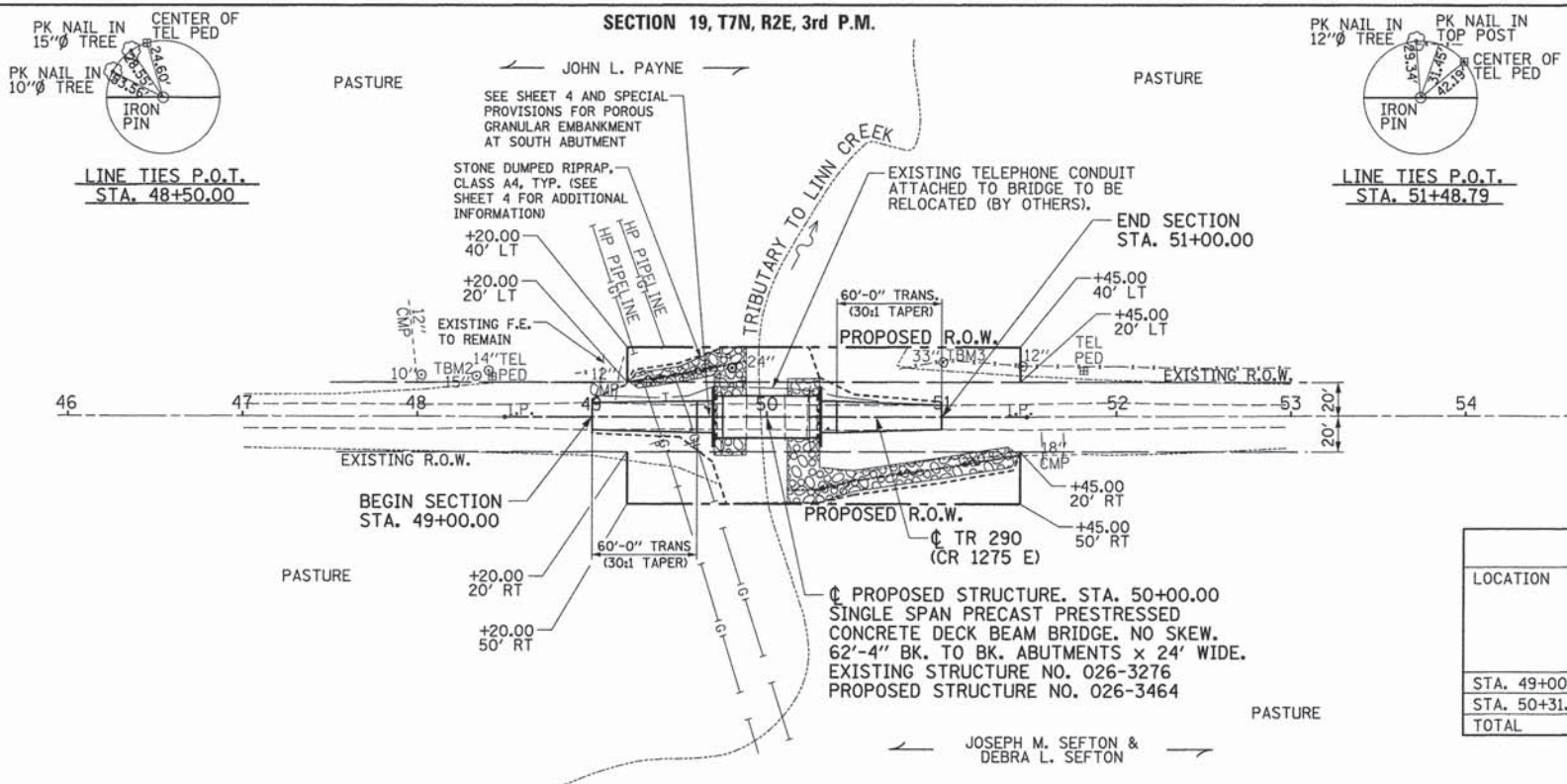
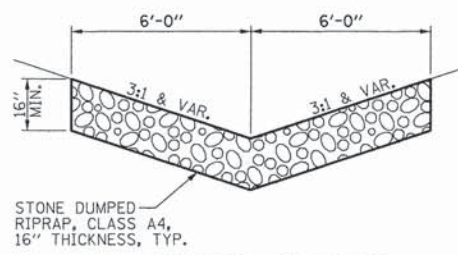
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DRAWN -	JN	REVISED -	
CHECKED -	GLH	REVISED -	
DATE -	12/14/2015	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES, GENERAL NOTES, AND TYPICAL SECTIONS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	2
RAAI JOB NO. 53714			CONTRACT NO. 95774	

SCALES:
 HORZ.- 0 50 100
 VERT.- 0 5 10
 ----- LIMITS OF CONSTRUCTION



TREE REMOVAL (OVER 15 UNITS DIAMETER)

LOCATION	SIZE
28' LT., STA. 49+80	24"
TOTAL	24"

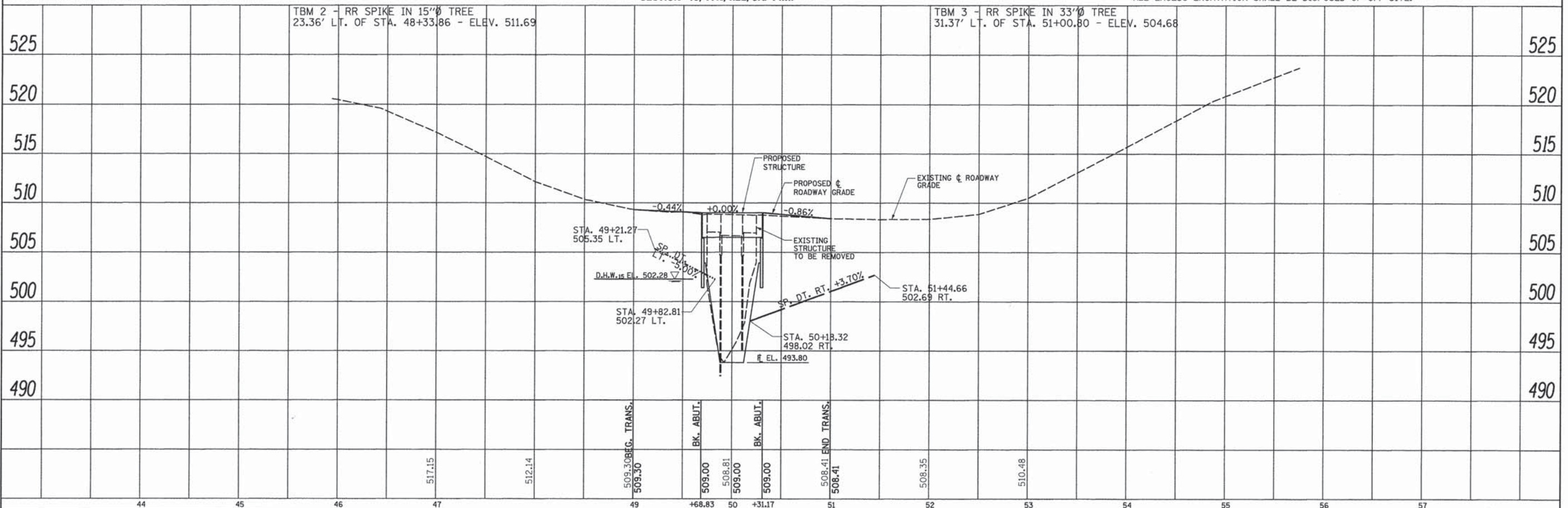
EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION CU. YD.	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE* CU. YD.	EMBANKMENT CU. YD.	EARTHWORK BALANCE** WASTE (+) OR SHORTAGE (-) CU. YD.
STA. 49+00.00 TO STA. 49+68.83	44	33	16	17
STA. 50+31.17 TO STA. 51+45.00	73	55	75	-20
TOTAL	117	88	91	-3

*25% SHRINKAGE **FURNISHED EXCAVATION

THE EXISTING RIGHT OF WAY SHOWN HEREON HAS BEEN PROTRACTED FROM EXISTING RECORDS AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. FURTHERMORE, NO COMPLETE SURVEY OF SAID R.O.W. IS IMPLIED BY THIS DRAWING.

THERE ARE SUFFICIENT AMOUNTS OF EXCAVATED MATERIAL AVAILABLE FROM THE CHANNEL EXCAVATION THAT WILL BE SUITABLE TO SUPPLY THE 3 CU. YD. OF FURNISHED EXCAVATION REQUIRED. ALL EXCESS EXCAVATION SHALL BE DISPOSED OF OFF-SITE.



DESIGNED - BLT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN - JN	REVISED -	PLAN AND PROFILE OF ROADWAY	TR 290	14-13134-00-BR	FAYETTE	11	3
CHECKED - GLH	REVISED -						
DATE - 12/07/2015	REVISED -						

STA. 46+00 TO STA. 55+50

RAAJ JOB NO. 53714

CONTRACT NO. 95774

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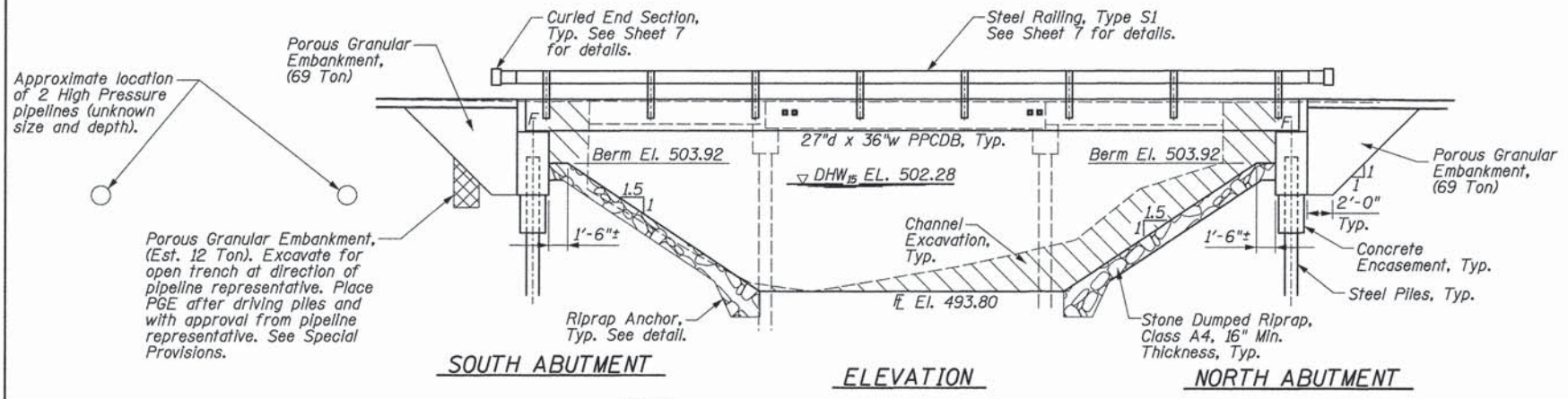
DATE: _____ BY: _____
 PLAN: _____
 CHECKED: _____
 DATE: _____

DATE: _____ BY: _____
 PROFILE: _____
 CHECKED: _____
 DATE: _____

TBM #2: RR Spike in 15" tree
23.36' Lt. of Sta. 48+33.86 - Elev. 511.69

TBM #3: RR Spike in 33" tree
31.37' Lt. of Sta. 51+00.80 - Elev. 504.68

Existing Structure: S.N. 026-3276 Three span bridge with precast concrete channel beams supported on closed timber abutments w/ conc. caps and timber pile bent piers w/ conc. caps. 51.0' L. x 26.3' W. To be removed. See Special Provisions for salvage.



LOADING HL-93
50#/sq. ft. included in dead load for future wearing surface.

DESIGN SPECIFICATIONS
2012 (6th Ed.) 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
 $f'_a = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_{pb} = 201,960$ psi ($\frac{1}{2}$ " ϕ low lax. strands)
 $f_y = 60,000$ psi (reinforcement)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Soil Site Classification = C
 $S_{D1} = 0.157$ $S_{D2} = 0.384$

BILL OF MATERIALS (BRIDGE ONLY)

ITEM	UNIT	TOTAL
Channel Excavation	Cu Yd	215
Porous Granular Embankment	Ton	150
Stone Dumped Riprap, Class A4	Ton	423
Removal of Existing Structures	Each	1
Concrete Structures	Cu Yd	31.2
Concrete Encasement	Cu Yd	2.8
PPCDB (27" Depth)	Sq Ft	1464
Reinforcement Bars	Pound	4820
Steel Railing, Type S1	Foot	125
Furnishing Steel Piles HP12x53	Foot	324
Driving Piles	Foot	324
Test Pile Steel HP12x53	Each	1
Pile Shoes	Each	8
Name Plates	Each	1
Terminal Marker - Direct Applied	Each	4

*Quantity for Riprap under bridge - 136 Ton
Quantity for Riprap at NE Quad. - 200 Ton
Quantity for Riprap at SW Quad. - 87 Ton

GENERAL NOTES

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

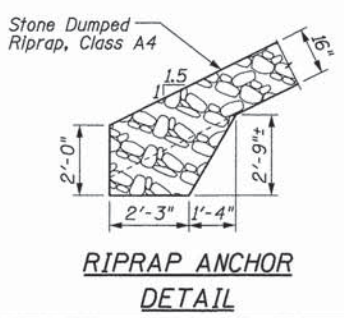
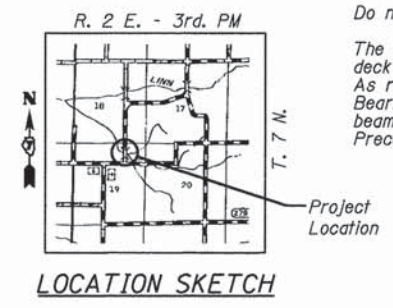
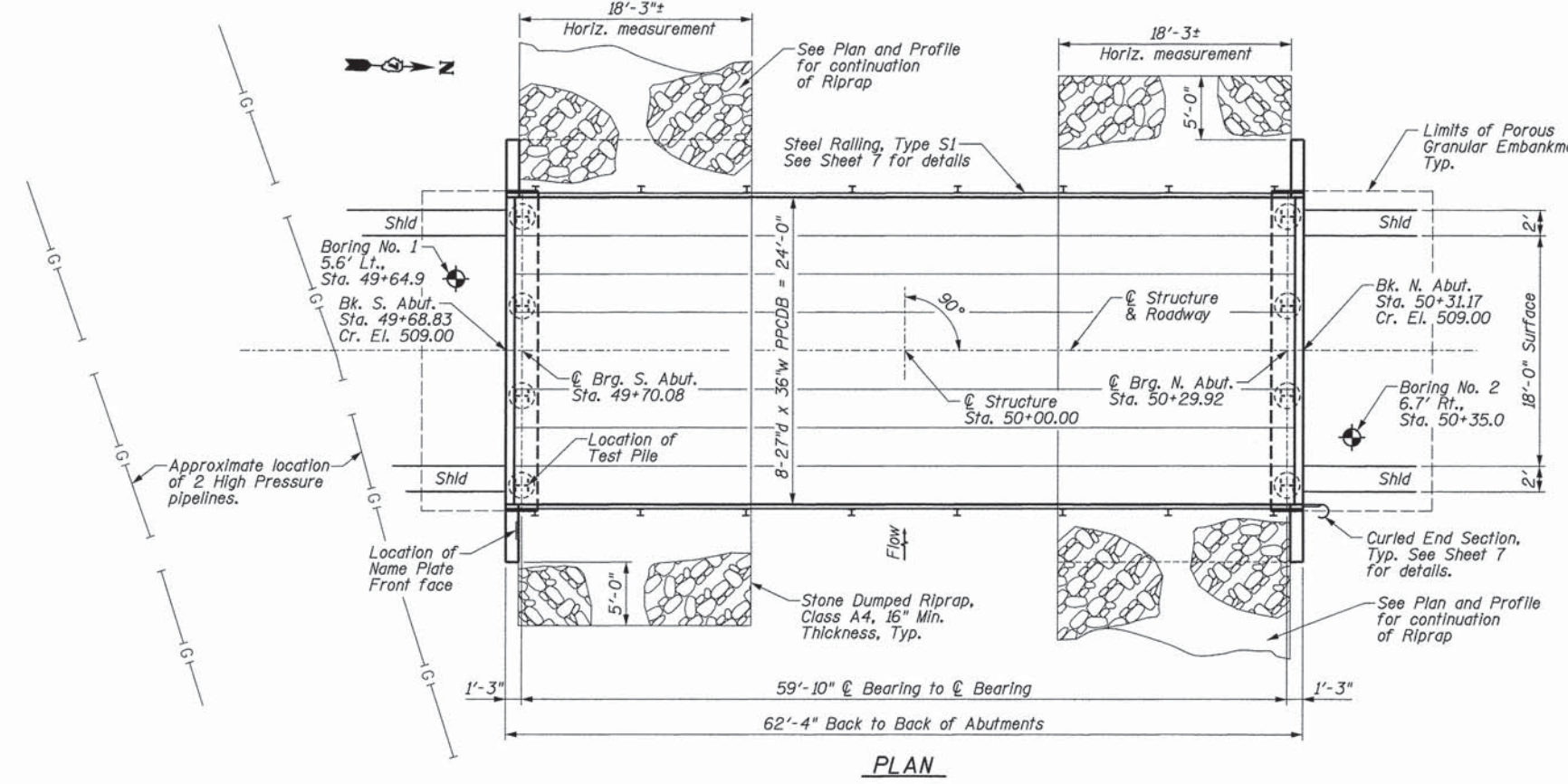
Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the Right-of-Way line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Section 502 of the Standard Specifications for Structural Excavation.

See Special Provisions for Soil Borings.

Do not scale these drawings.

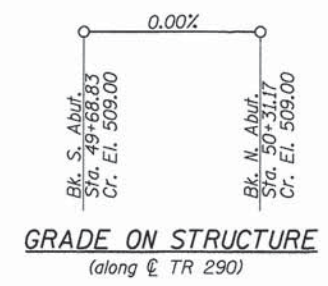
The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. The top surface of the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



WATERWAY INFORMATION

Drainage Area = 2.44 sq. mi. Existing Low Grade Elev. 508.35 Sta. 52+00
Proposed Low Grade Elev. 508.35 Sta. 52+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exlst.	Prop.	Nat. H.W.E. Exlst.	Prop.	Head - Ft. Exlst.	Prop.	Headwater El. Exlst.	Prop.
Design	15	1080	244	311	502.28	0.31	0.08	0.08	502.59	502.36
Base	100	1890	365	446	504.78	0.53	0.27	0.27	505.31	505.05
Base	500	2620	446	539	506.41	0.71	0.40	0.40	507.12	506.81



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
William D. Lueking
12/14/2015
Date of Signing
11/30/2016
Date of License Expiration

TRIBUTARY TO LINN CREEK
BUILT 201_ BY
FAYETTE COUNTY
SEC. 14-13134-00-BR
TR 290 STA. 50+00.00
LOADING HL-93
STRUCTURE NO. 026-3464

NAME PLATE
See Std. 515001

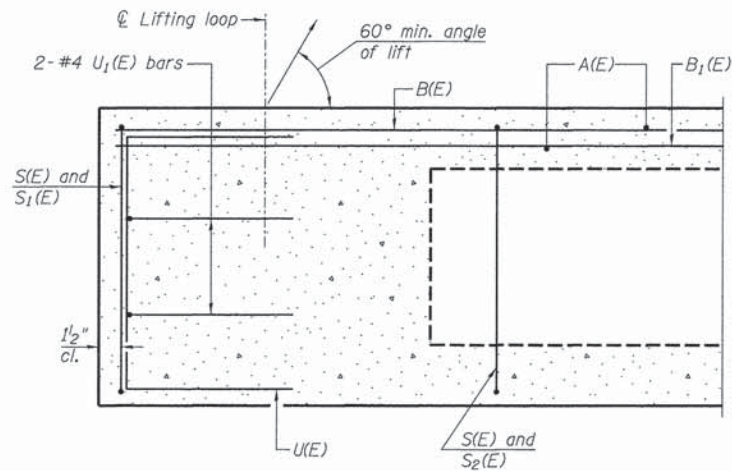
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ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED - BLT	REVISED -
DRAWN - JN	REVISED -
CHECKED - WDL	REVISED -
DATE - 12/14/2015	REVISED -

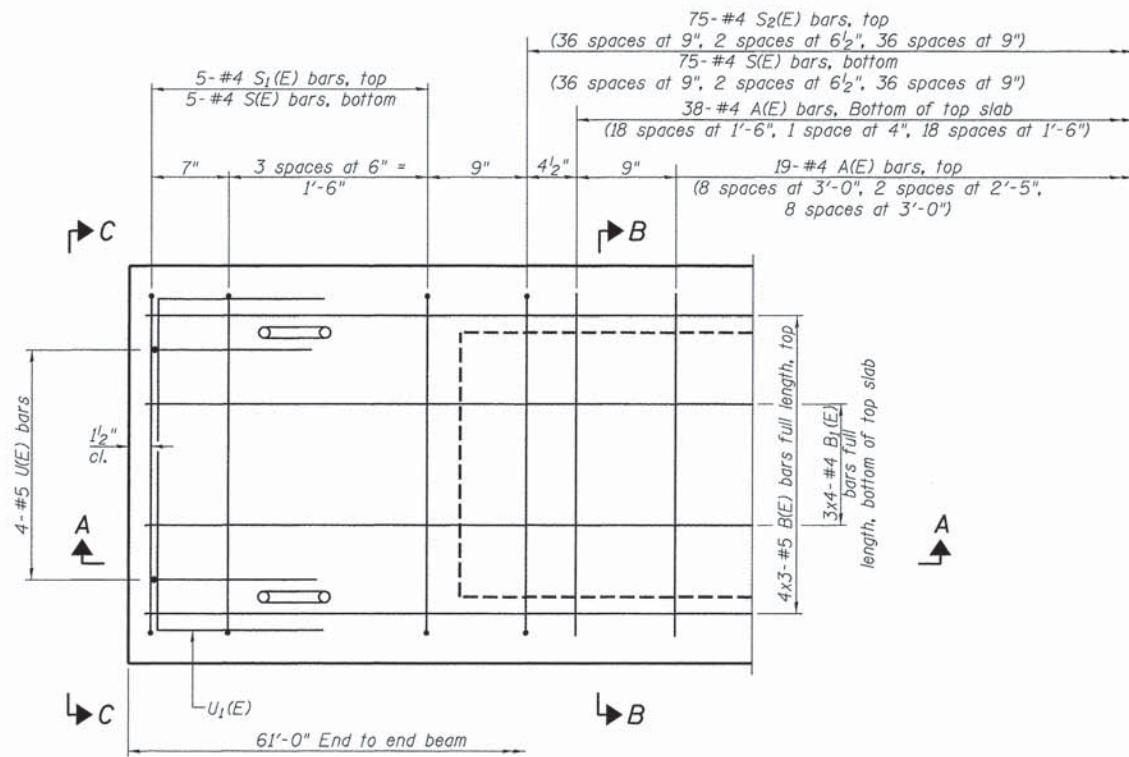
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	4
CONTRACT NO. 95774				
RAAI JOB NO. 53714				



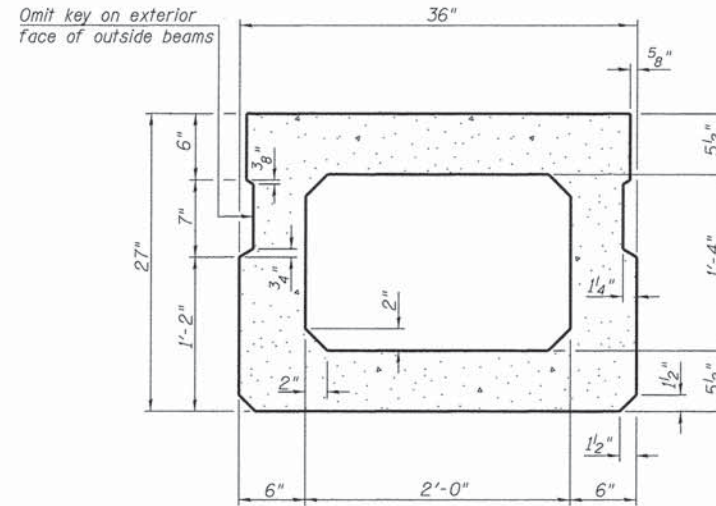
SECTION A-A



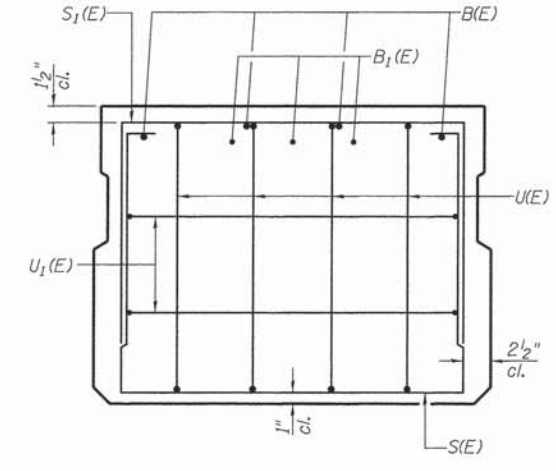
PLAN VIEW

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: 4x3-#5 etc. indicates 4 lines of bars with 3 lengths per line.

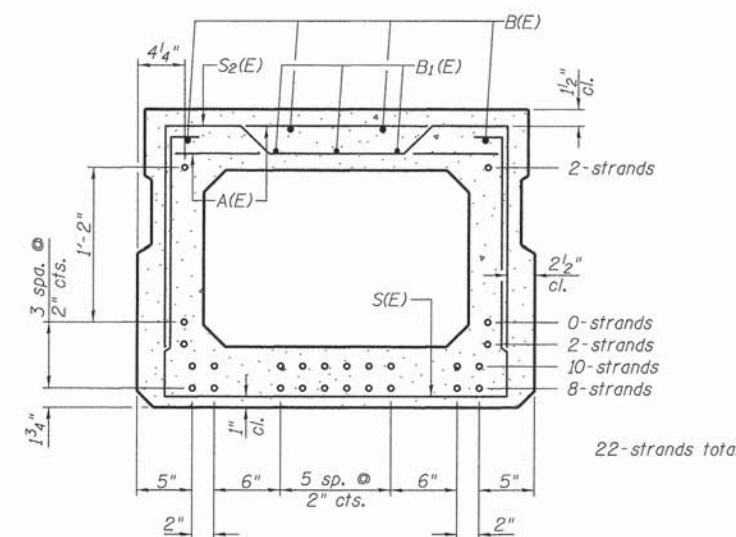


SECTION B-B
(Showing dimensions)



VIEW C-C

Symmetrical about C



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.

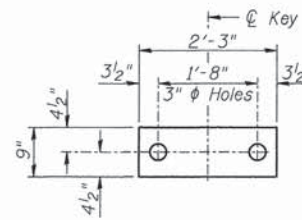
BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	57	#4	2'-7"	—
B(E)	12	#5	21'-11"	—
B ₁ (E)	12	#4	16'-9"	—
S(E)	85	#4	7'-5"	□
S ₁ (E)	10	#4	5'-11"	□
S ₂ (E)	75	#4	6'-2"	□
U(E)	8	#5	4'-6"	□
U ₁ (E)	4	#4	5'-0"	□

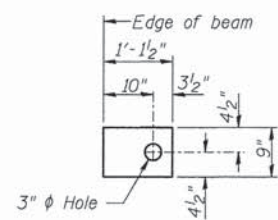
Note: See sheet 6 for additional details and Bill of Material.

MINIMUM BAR LAP

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

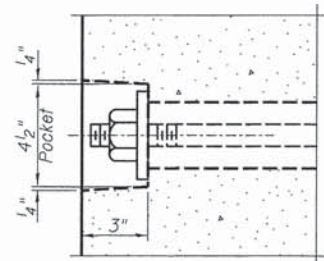


FABRIC BEARING PAD
(Interior)

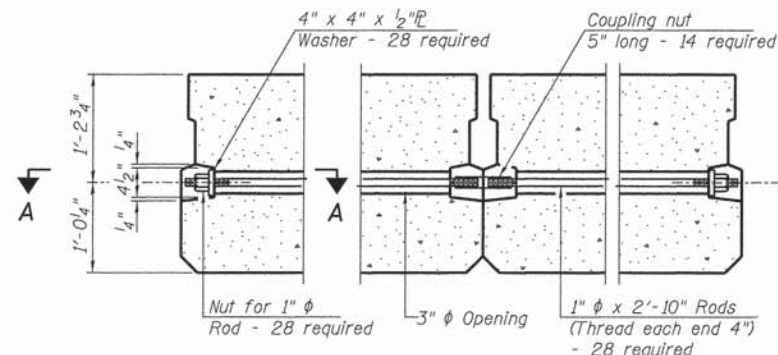


FABRIC BEARING PAD
(Exterior)

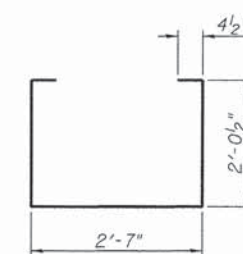
Notes: All bearing pads shall be 1" thick.



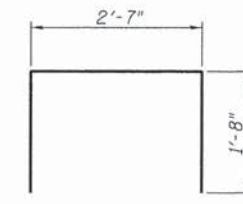
SECTION A-A



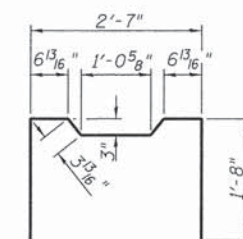
TYPICAL TRANSVERSE TIE ASSEMBLY



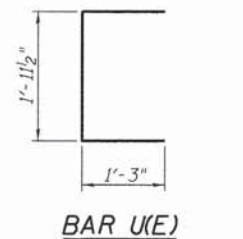
BAR S(E)



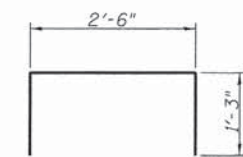
BAR S1(E)



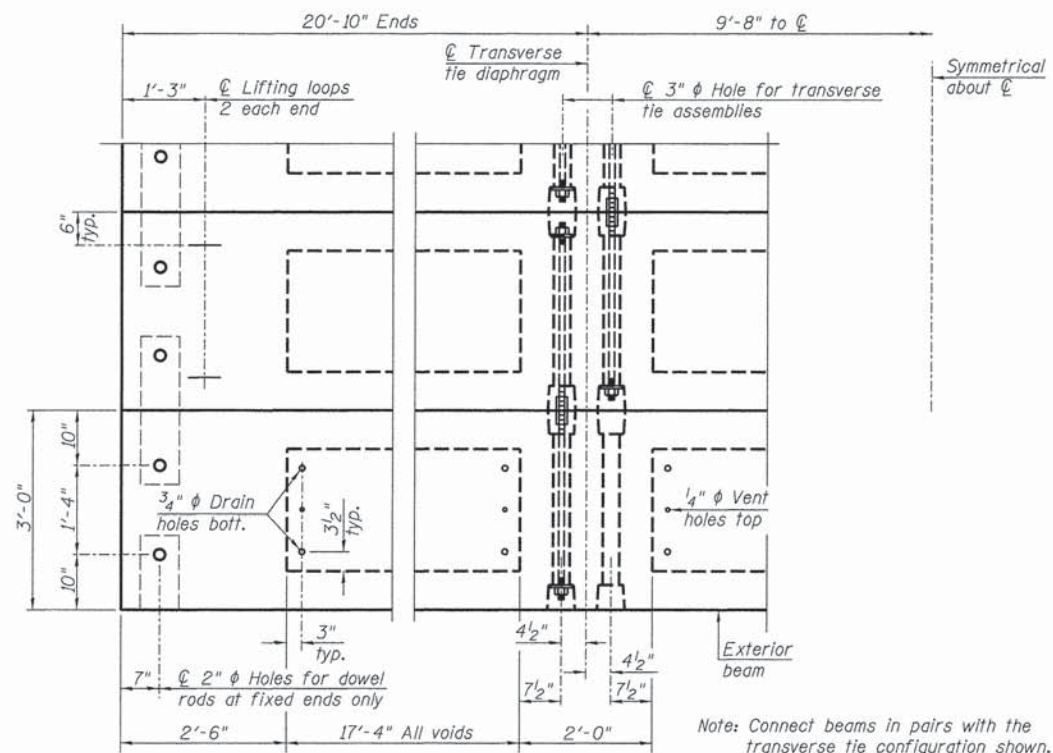
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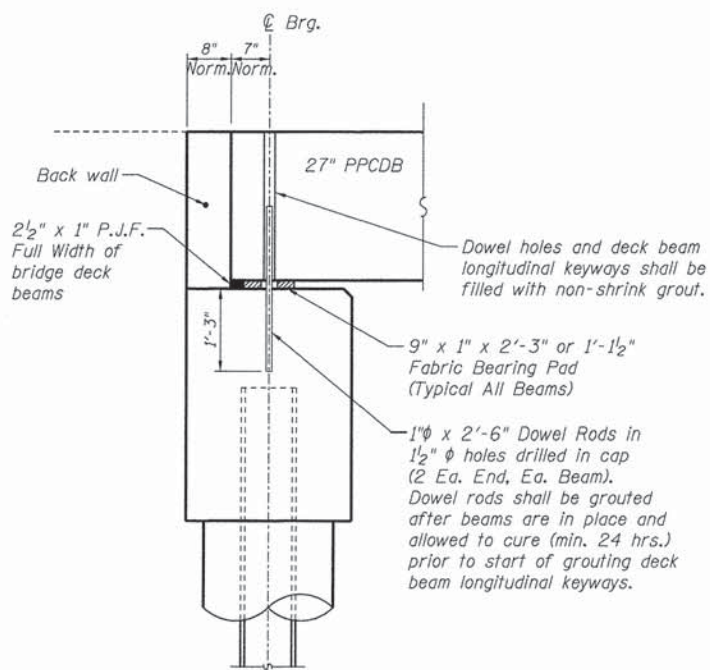
BAR UE



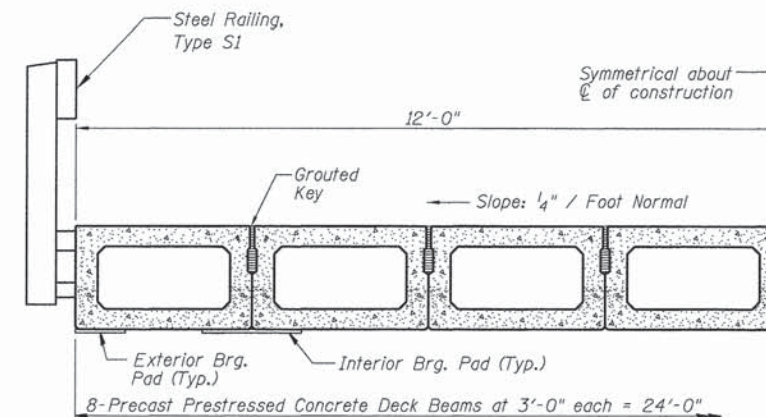
BAR U1(E)



PLAN VIEW

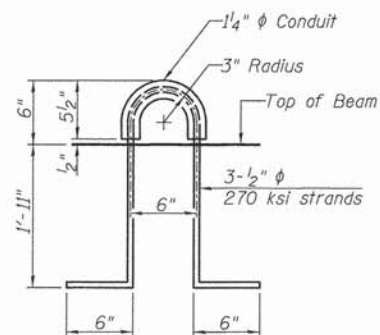


FIXED BEARING ABUTMENT
(Normal to C)



HALF CROSS SECTION

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



LIFTING LOOP DETAIL

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.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (IL. Modified).
- 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" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 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'cl, shall be 5000 psi.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	1464
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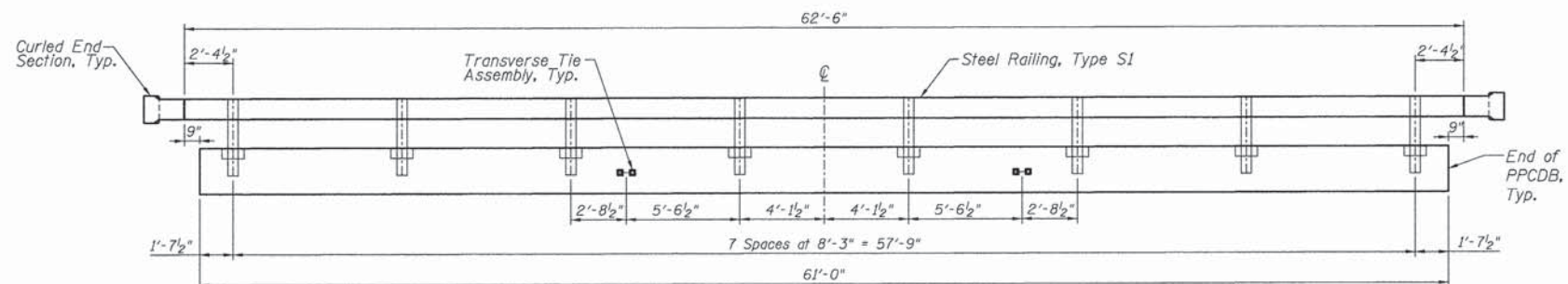
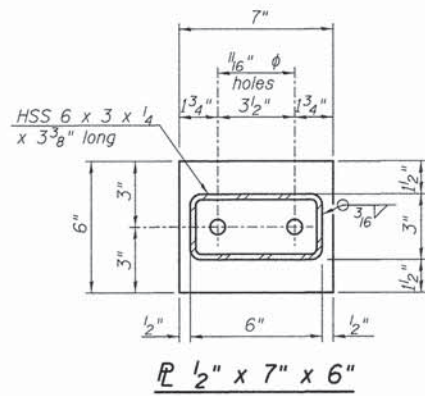
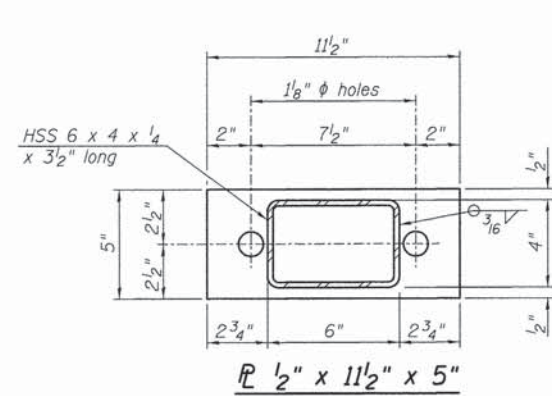
RHUTASEL and ASSOCIATES, INC.
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ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

DESIGNED - BLT	REVISED -
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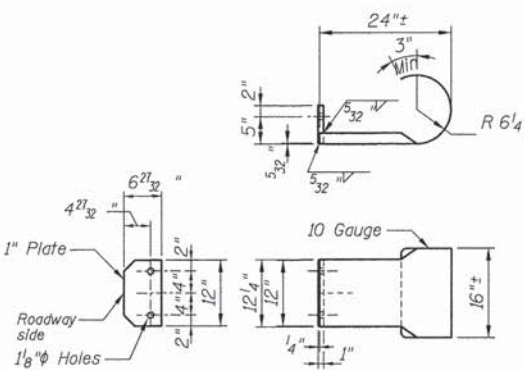
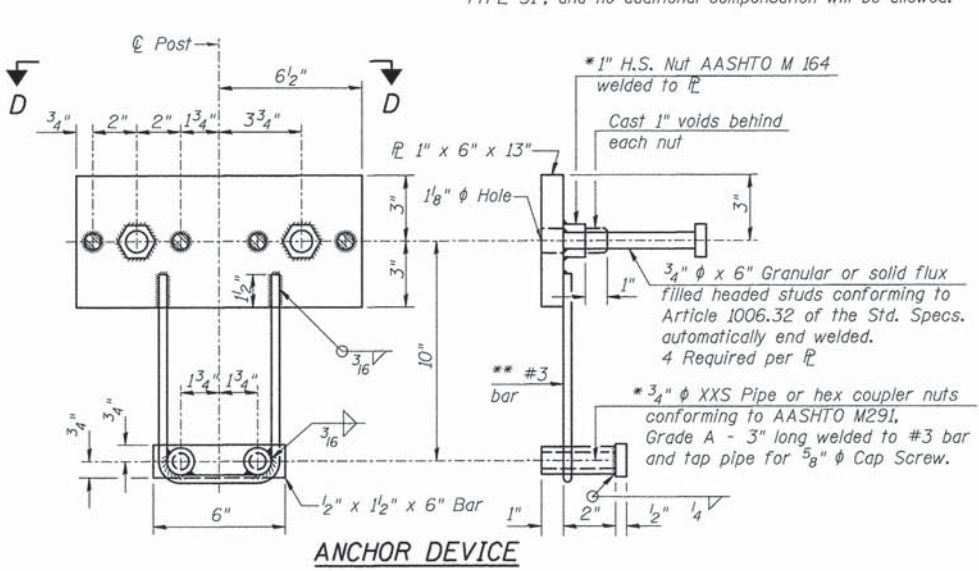
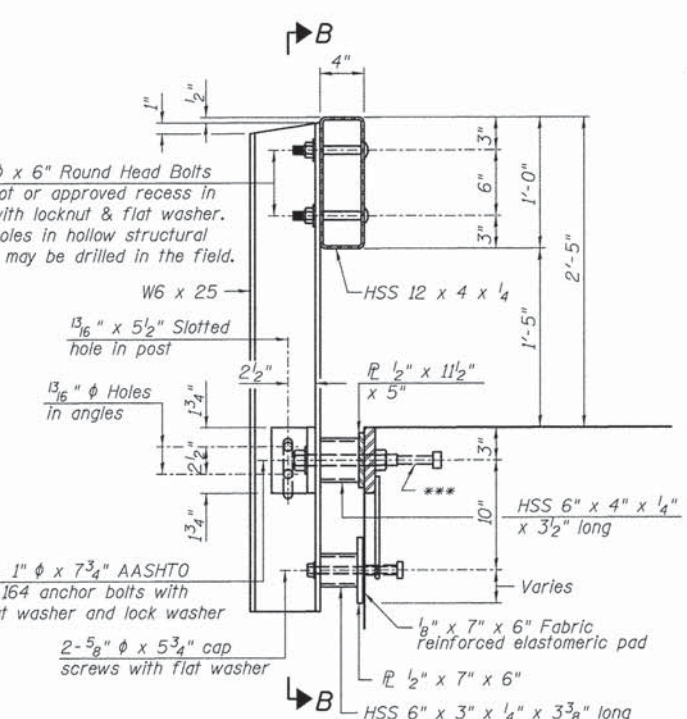
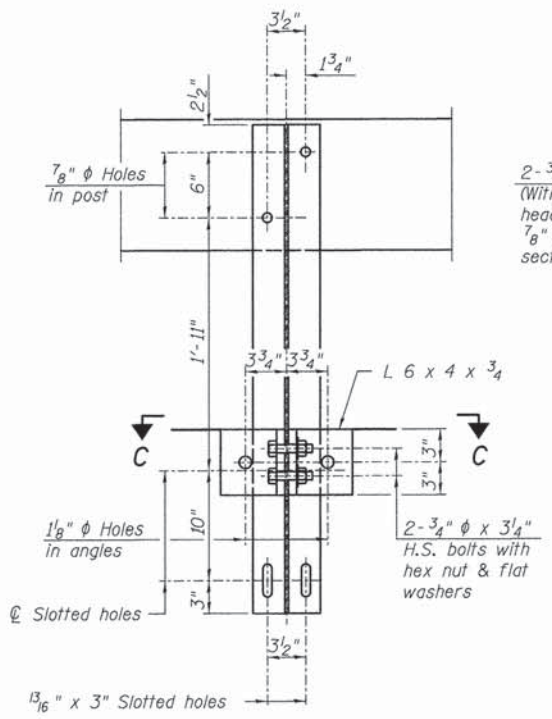
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST PRESTRESSED CONCRETE DECK BEAM DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	6
RAAI JOB NO. 53714			CONTRACT NO. 95774	

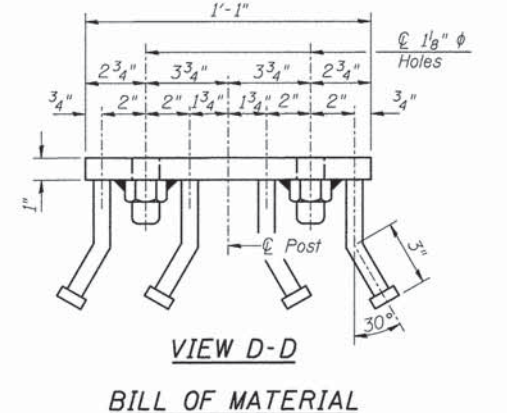
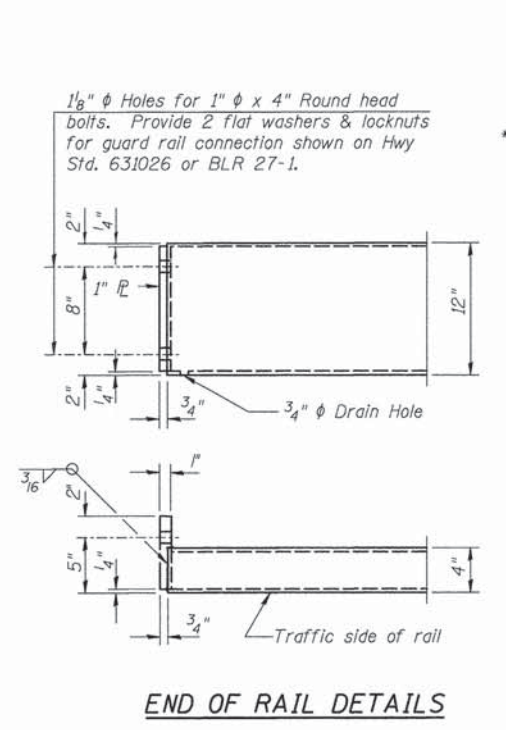
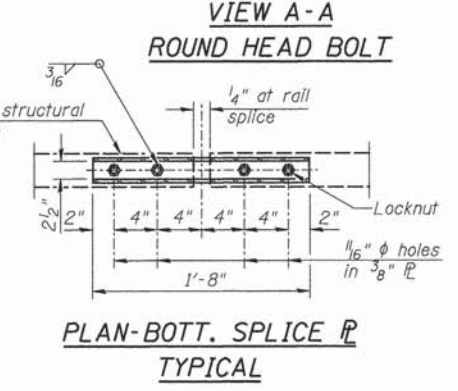
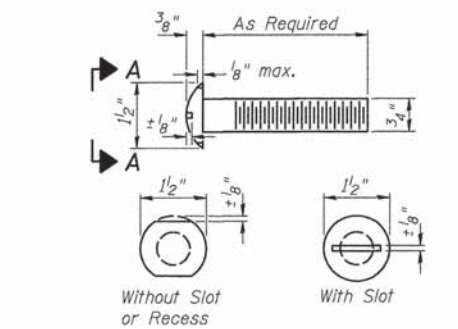
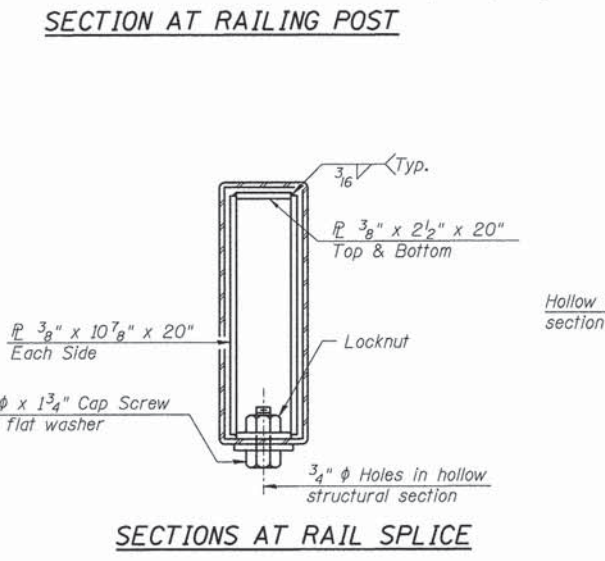
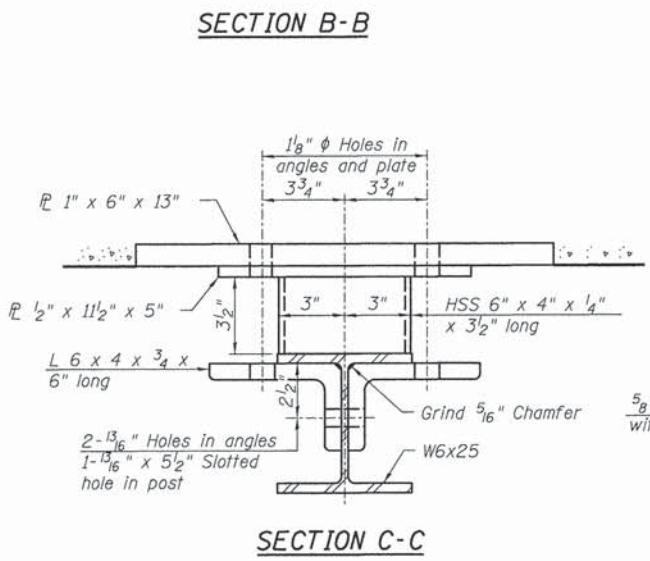


Note: The cost of the Curled End Sections shall be included in the contract unit price per foot for "STEEL RAILING, TYPE S1", and no additional compensation will be allowed.



NOTES

- All field drilled holes shall be coated with an approved zinc rich paint before erection.
- All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
- 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".
- *** 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.



Item	Unit	Quantity
Steel Railing, Type S1	Foot	125

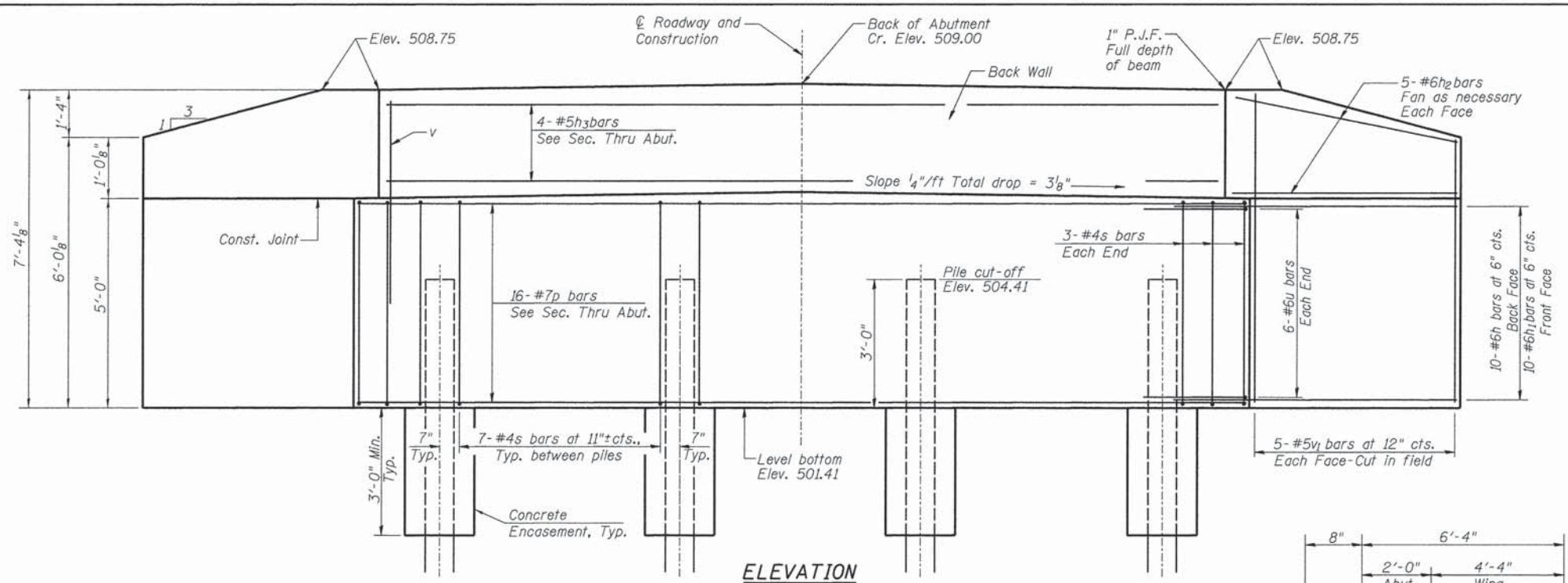
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DATE - 12/07/2015	REVISED -

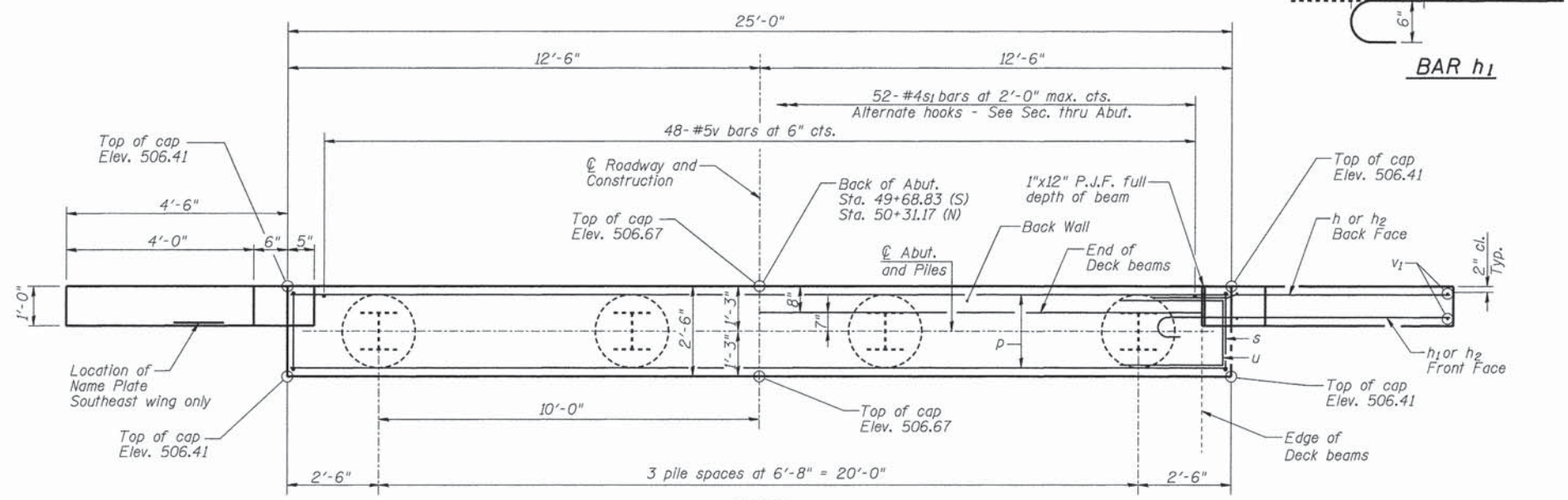
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STEEL RAILING, TYPE S1 DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	7
CONTRACT NO. 95774				



ELEVATION



PLAN

PILE DATA SOUTH ABUTMENT

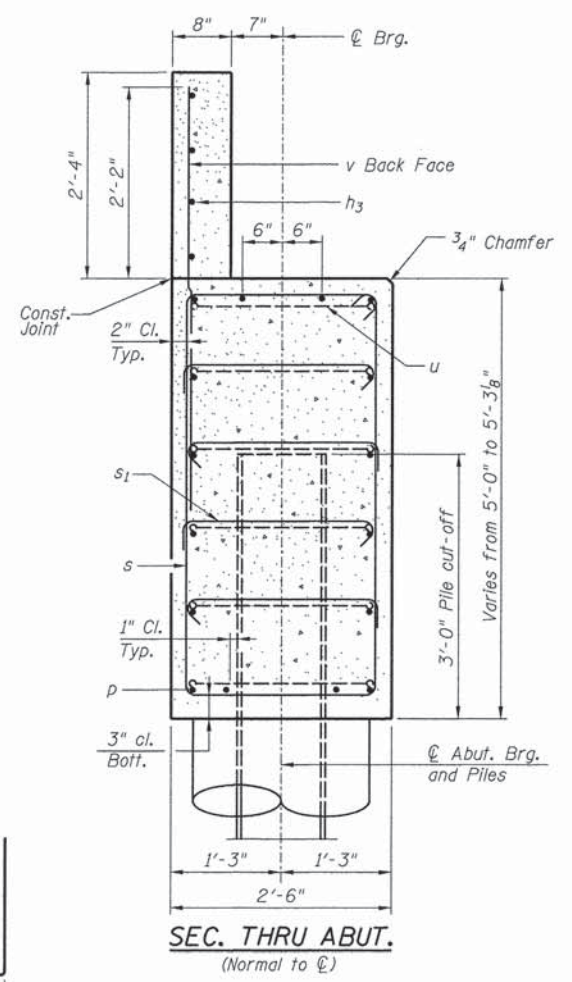
Type: Steel HP12x53
 Nominal Required Bearing: 341 kips
 Factored Resistance Available: 188 kips
 Estimated Length: 52'/pile
 No. Production Piles w/Piles Shoes: 3
 No. Test Piles w/Pile Shoes: 1

PILE DATA NORTH ABUTMENT

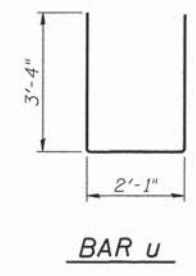
Type: Steel HP12x53
 Nominal Required Bearing: 357 kips
 Factored Resistance Available: 196 kips
 Estimated Length: 42'/pile
 No. Production Piles w/Piles Shoes: 4
 No. Test Piles w/Pile Shoes: 0

GENERAL NOTES

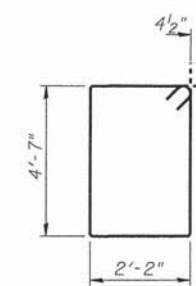
- Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (Illinois Modified).
- All exposed edges shall have standard 3/4" chamfer, unless otherwise noted or as directed by the Engineer.
- All clearances between rebar and form surface shall be 2", unless otherwise noted.
- Space reinforcement in cap to miss PPCDB dowel rods.
- The position of the 90° & 135° hooked ends of the s1 bar shall be alternated between adjacent bars.
- The back wall and portion of the wingwalls above the construction joint shall be cast against the in-place deck beams.
- The Steel H-piles shall be according to AASHTO M270 Grade 50.
- The Contractor shall drive one (1) Steel HP12x53 Test Pile in a production location as directed by the Engineer before ordering the remainder of the piles.
- The Test Pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.



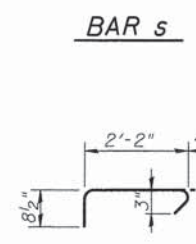
SEC. THRU ABUT.
(Normal to C)



BAR h1



BAR u



BAR s



BAR s1

BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	20	#6	7'-8"	—
h1	20	#6	7'-0"	U
h2	20	#6	4'-8"	—
h3	4	#5	23'-8"	—
p	16	#7	24'-8"	—
s	27	#4	14'-3"	□
s1	52	#4	3'-3"	U
u	12	#6	8'-9"	U
v	48	#5	5'-0"	—
v1	20	#5	7'-0"	CUT IN FIELD
Concrete Structures		Cu Yd	15.6	
Concrete Encasement		Cu Yd	1.4	
Reinforcement Bars		Pound	2,410	
Furnishing Steel		S Abut	156	
Piles, HP12x53		N Abut	168	
Driving Piles		N Abut	156	
Test Pile, Steel HP12x53		S Abut	1	
		N Abut	0	
Pile Shoes		S Abut	4	
		N Abut	4	

For details of piles and Concrete Encasement, see Sheet 9.

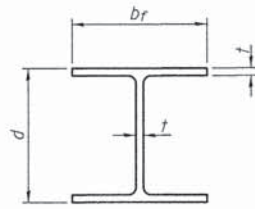
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 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

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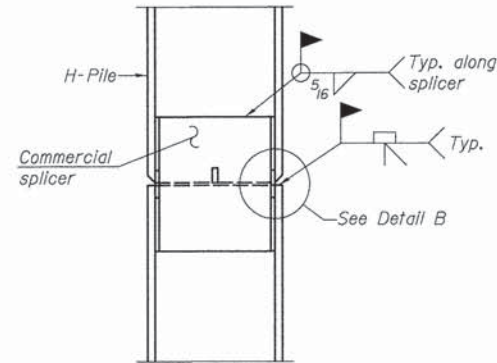
ABUTMENT DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	8
CONTRACT NO. 95774				
RAAI JOB NO. 53714				

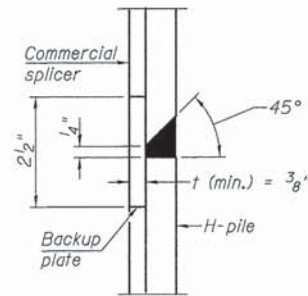


STEEL PILE TABLE

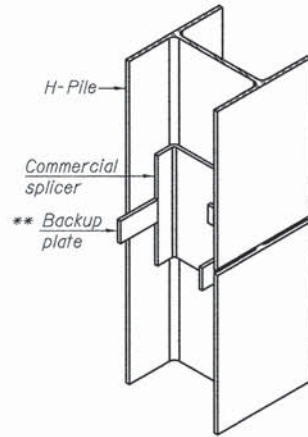
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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

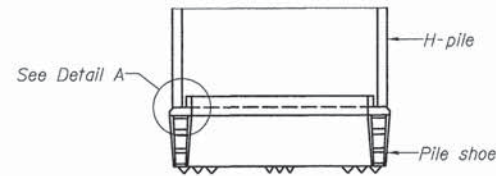


DETAIL "B"

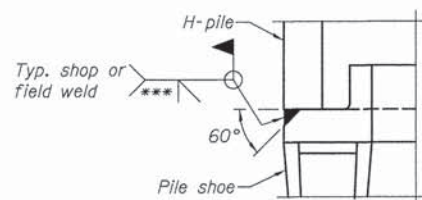


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

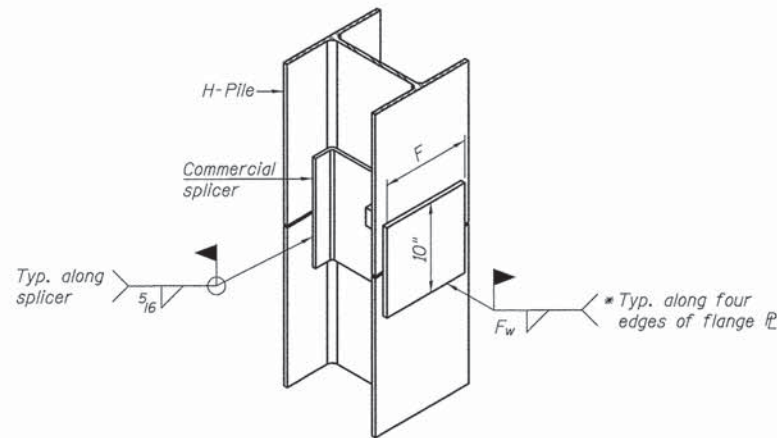


ELEVATION



DETAIL A

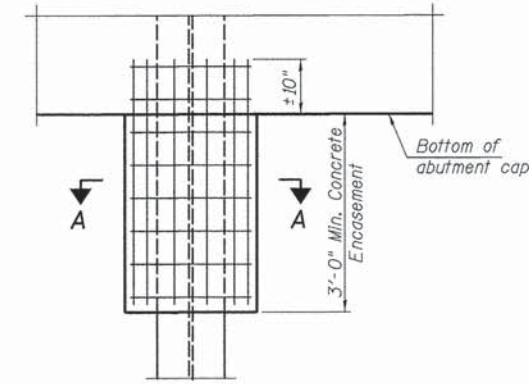
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

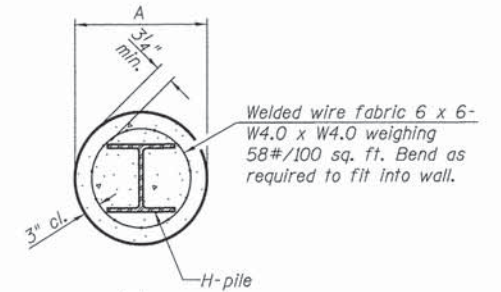
WELDED COMMERCIAL SPLICE ALTERNATE

- * 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.).



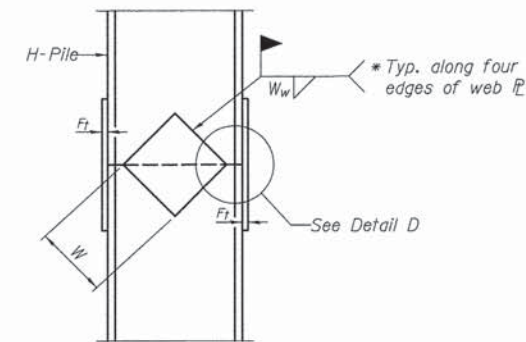
ELEVATION

PILE ENCASEMENT

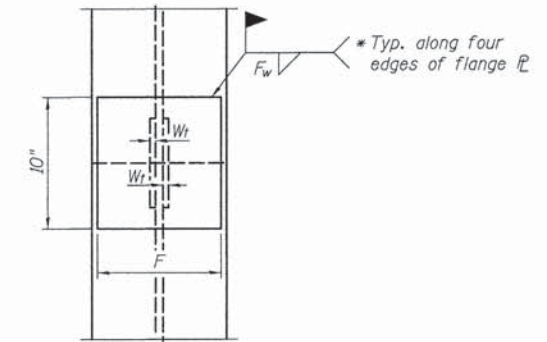


Note:
Forms for encasement may be omitted when soil conditions permit.

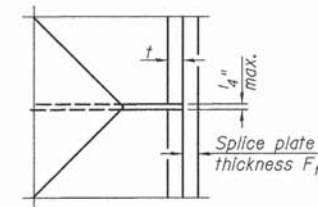
SECTION A-A



ELEVATION



END VIEW



DETAIL D

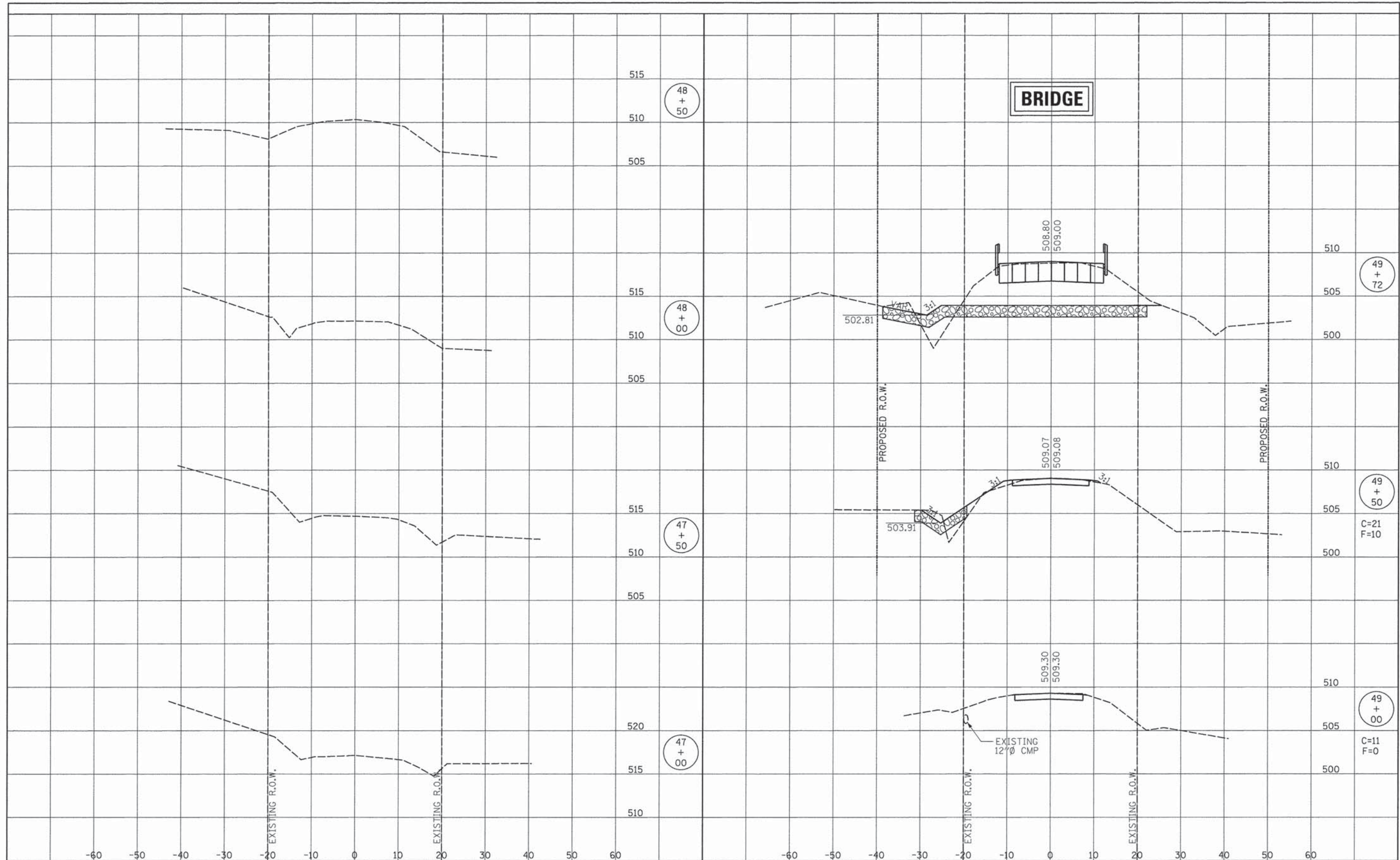
WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
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 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 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 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"

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

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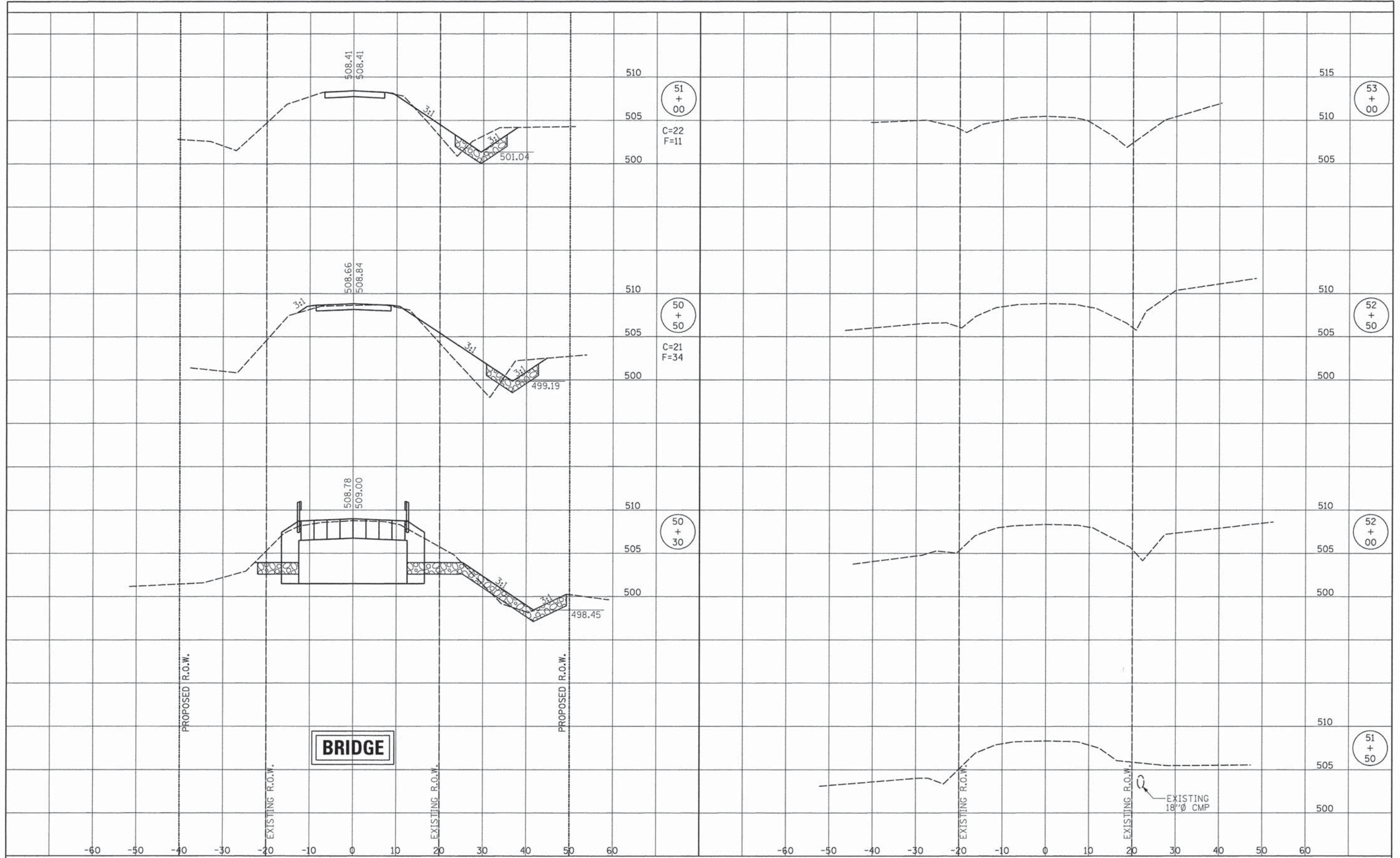
CROSS SECTIONS OF ROADWAY

STA. 47+00 TO STA. 49+72

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	10
CONTRACT NO. 95774				
RAAI JOB NO. 53714				

DATE	BY
DATE	BY
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DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS OF ROADWAY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 290	14-13134-00-BR	FAYETTE	11	11
RAAT JOB NO. 53714			CONTRACT NO. 95774	

STA. 50+30 TO STA. 53+00