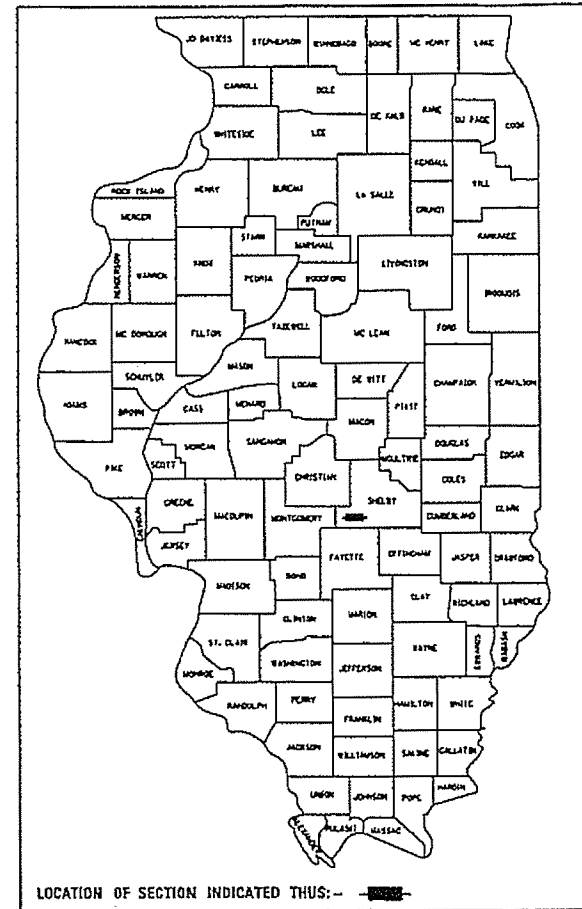


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

# PLANS FOR PROPOSED SURFACE TRANSPORTATION – BRIDGE

PROJECT NO. CJBC(416)  
T.R. 22 OVER OPOSSUM CREEK  
SECTION 15-11119-00-BR  
SHELBY COUNTY  
JOB NO. C-97-057-16  
CONTRACT NO. 95823



- INDEX OF SHEETS**
- 1 - TITLE SHEET
  - 2 - SUMMARY OF QUANTITIES, SCHEDULES, GENERAL NOTES, TYPICAL SECTIONS
  - 3 - ENTRANCE DETAILS
  - 4 - PLAN & PROFILE
  - 5-6 - GENERAL PLAN & ELEVATION
  - 7-10 - SUPERSTRUCTURE
  - 11 - RAILING
  - 12 - ABUTMENTS
  - 13 - PIERS
  - 14 - HP PILE DETAILS
  - 15-23 - CROSS SECTIONS

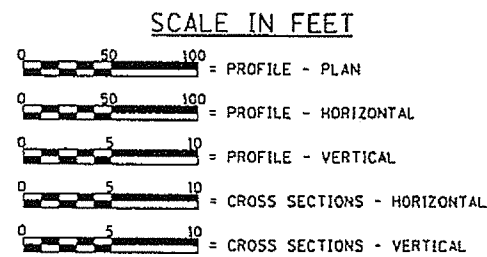
- STANDARDS**
- STANDARD 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
  - STANDARD 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
  - STANDARD 515001-03 NAME PLATE FOR BRIDGES
  - STANDARD 701901-07 TRAFFIC CONTROL DEVICES
  - STANDARD 725001-01 OBJECT AND TERMINAL MARKERS
  - STANDARD BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

**LIST OF UTILITIES**

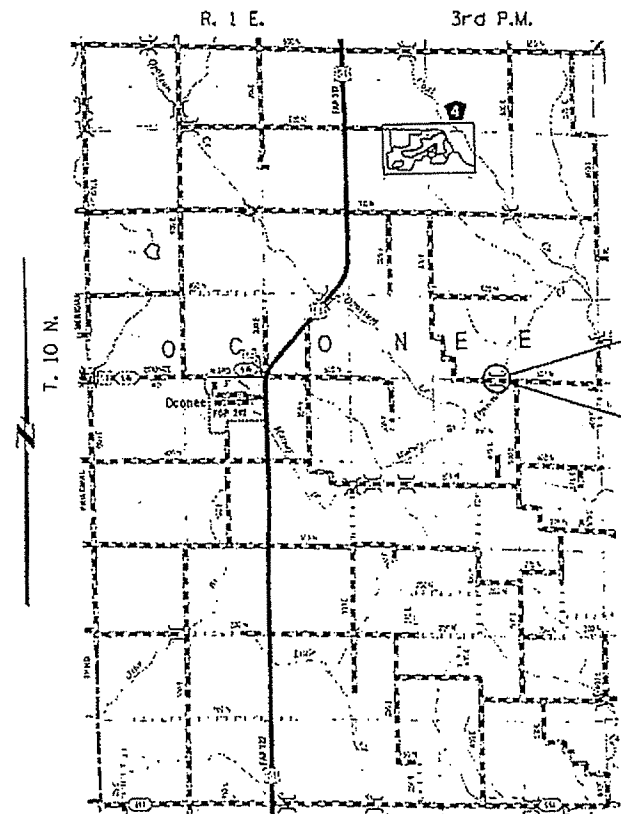
SHELBY ELECTRIC COOPERATIVE  
P.O. BOX 560  
SHELBYVILLE, ILLINOIS 62565  
CONTACT: JAMES MATLOCK  
217-774-3986

FRONTIER COMMUNICATIONS INC.  
801 W. JACKSON  
ALTAMONT, ILLINOIS 62411  
CONTACT: ROD ELLER  
618-483-6205

EJ WATER COOP  
P.O. BOX 336  
DIETRICH, IL. 62424



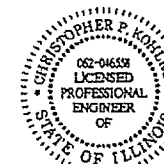
LAND SECTION - 23 & 26  
LAND QUARTER SECTION - S.E. & N.E.  
FUNCTIONAL CLASSIFICATION: LOCAL ROAD (NON-URBAN)  
A.D.T. - 125 (2014)  
A.D.T. - 150 (2034)  
30 M.P.H. DESIGN SPEED



**LOCATION PLAN**  
LENGTH OF SECTION - 740.00 FEET = 0.140 MILES  
SCALE: 1" = 1 MILE

**EXISTING STRUCTURE:** TWO SPAN TIMBER DECK ON STEEL STRINGERS SUPPORTED BY CLOSED TIMBER ABUTMENTS WITH TIMBER WINGWALLS AND ONE TIMBER PILE BENT PIER. ±73'-0" BK.-BK. ABUTMENTS, ±20'-0" OUT.-OUT. DECK. STEEL RAILING. 0° SKEW. EXISTING STRUCTURE NO. 087-3059

**PROPOSED STRUCTURE:** PROPOSED STRUCTURE: 3 SPAN PRECAST PRESTRESSED CONCRETE DECK BEAMS (21') ON OPEN CONCRETE ABUTMENTS AND TWO SOLID CONCRETE PIERS. 110'-0" BK.-BK. ABUTMENTS, 24'-0" OUT.-OUT. DECK. STEEL RAILING TYPE S1. 30° SKEW LT. FWD. PROPOSED S.N. 087-3587



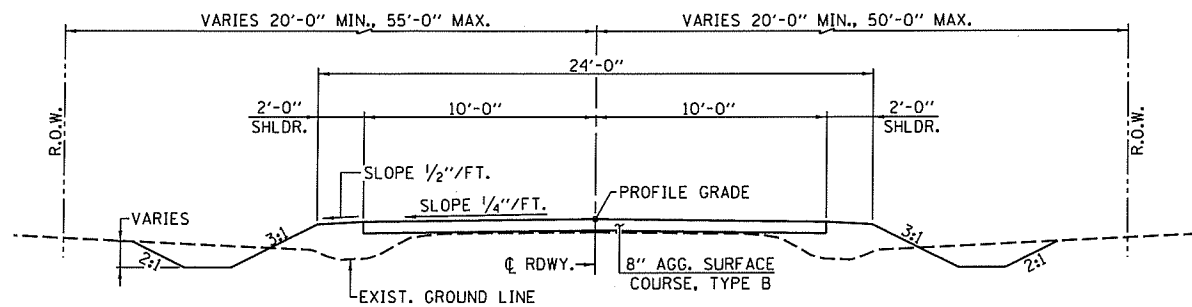
*Christopher P. Kordus* 10/24/17  
EXPIRATION: 11/30/2017

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED <u>10-31-2017</u>	[Signature] COUNTY ENGINEER
APPROVED <u>10-30-2017</u>	[Signature] TOWNSHIP ROAD COMMISSIONER
PASSED <u>11-1-2017</u>	[Signature] DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS
Releasing For Bid Based on Limited Review	<u>11-1-2017</u> [Signature] REGION FOUR ENGINEER

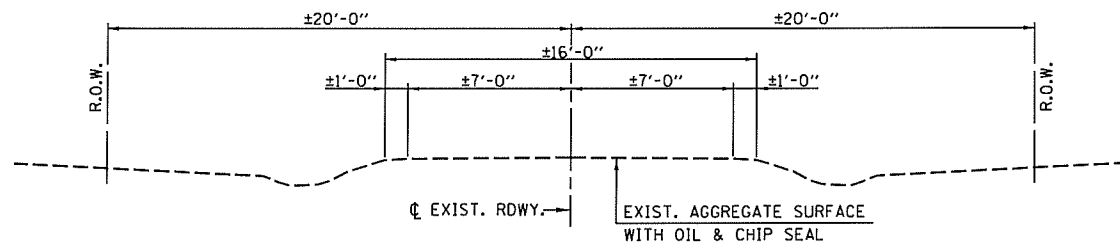
**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

TOLL FREE  
"JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS"  
(U.L.L.I.E.) TELEPHONE NUMBER  
1-800-892-0123

FILE NAME: [blank]	USER NAME: [blank]	DESIGNED: [blank]	REVISED: [blank]		<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL Design Firm No. 184-001939	TITLE SHEET	T.R. RTE. 22	SECTION 15-11119-00-BR	COUNTY SHELBY	TOTAL SHEETS 23	SHEET NO. 1	
PLOT SCALE: [blank]		CHECKED: [blank]	REVISED: [blank]		SCALE: [blank]	SHEET NO. 1 OF 1 SHEETS	STA. [blank] TO STA. [blank]	FED. ROAD DIST. NO. [blank] (ILLINOISIFIED) AND PROJECT CONTRACT NO. 95823				
PLOT DATE: [blank]		DATE: [blank]	REVISED: [blank]									



**PROPOSED TYPICAL ROADWAY CROSS SECTION**



**EXISTING TYPICAL ROADWAY CROSS SECTION**

**GENERAL NOTES**

WHERE SECTION OR SUBSECTION STONES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH STONES ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR REFERENCED THEIR LOCATION.  
 SEEDING: FERTILIZER NUTRIENTS SHALL BE APPLIED AT A RATIO OF 1:1:1 AND AT A RATE OF 90 POUNDS PER ACRE FOR EACH NUTRIENT.  
 MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE.  
 AREAS TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY AND EASEMENT AS DIRECTED BY THE ENGINEER.  
 BEFORE ORDERING PIPE CULVERTS CONTRACTOR SHALL CONSULT WITH ENGINEER TO VERIFY LENGTHS.  
 TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 200 LBS./ACRE.

**SUMMARY OF QUANTITIES**

ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	0.10
20200100	EARTH EXCAVATION	CU. YD. 1248
20300100	CHANNEL EXCAVATION	CU. YD. 1519
20400800	FURNISHED EXCAVATION	CU. YD. 1346
25000200	SEEDING, CLASS 2	ACRE 1.0
25000400	NITROGEN FERTILIZER NUTRIENT	POUND 90
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND 90
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND 90
25100115	MULCH, METHOD 2	ACRE 1.0
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND 200
28000305	TEMPORARY DITCH CHECKS	FOOT 21
28000500	INLET AND PIPE PROTECTION	EACH 2
28100807	STONE DUMPED RIPRAP, CLASS A4	TON 715
28200200	FILTER FABRIC	SO. YD. 935
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON 644
50100100	REMOVAL OF EXISTING STRUCTURES	EACH 1
50200100	STRUCTURE EXCAVATION	CU. YD. 130
50300225	CONCRETE STRUCTURES	CU. YD. 111.4
50300280	CONCRETE ENCASEMENT	CU. YD. 2.8
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SO. FT. 2598
50800105	REINFORCEMENT BARS	POUND 9400
50900205	STEEL RAILING, TYPE S1	FOOT 220
51201400	FURNISHING STEEL PILES HP 10X42	FOOT 288
51201600	FURNISHING STEEL PILES HP 12X53	FOOT 400
51202305	DRIVING PILES	FOOT 688
51203400	TEST PILE STEEL HP10X42	EACH 2
51203600	TEST PILE STEEL HP10X53	EACH 2
51500100	NAME PLATES	EACH 1
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT 36
54201075	PIPE CULVERTS, CLASS D, TYPE 2 30"	FOOT 108
67100100	MOBILIZATION	L. SUM 1
72501000	TERMINAL MARKER - DIRECT APPLIED	EACH 4

\* SEE SPECIAL PROVISIONS  
 Δ SPECIALTY ITEMS

CONSTRUCTION TYPE CODE: 0010

**SCHEDULE SEEDING, CLASS 2 & MULCH, METHOD 2**

LOCATION	QUANTITY (ACRE)
STA. 8+10 TO STA. 15+50 LT.	0.42
TEMPORARY EASEMENT LT.	0.10
STA. 8+10 TO STA. 15+50 RT.	0.42
TEMPORARY EASEMENT RT.	0.09
<b>TOTAL</b>	<b>1.03</b>

SAY 1.0 ACRE

**SCHEDULE TEMPORARY DITCH CHECKS**

LOCATION	QUANTITY (FOOT)
STA. 10+50 37' RT.	7
STA. 12+50 34' LT.	7
STA. 12+50 32' RT.	7
<b>TOTAL</b>	<b>21</b>

**SCHEDULE INLET & PIPE PROTECTION**

LOCATION	QUANTITY (EACH)
STA. 10+04 37' LT.	1
STA. 13+32 34' LT.	1
<b>TOTAL</b>	<b>2</b>

**SCHEDULE TREE REMOVAL (ACRES)**

LOCATION	QUANTITY (ACRE)
STA. 10+72 49' RT. TO STA. 11+07 50' RT., 80' RT.	0.03
STA. 12+73 23' LT. 58' LT. TO STA. 15+12 24' LT.	0.07
<b>TOTAL</b>	<b>0.10</b>

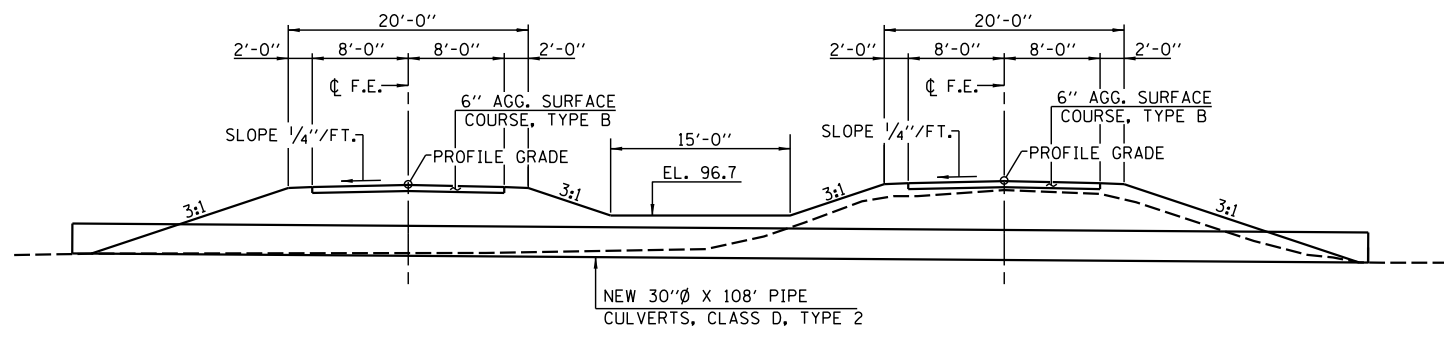
**SCHEDULE AGGREGATE SURFACE COURSE, TYPE B**

LOCATION	QUANTITY (TON)
STA. 8+10 TO STA. 11+07.50	269
STA. 12+17.50 TO STA. 15+50	301
F.E. STA. 10+32 LT.	28
F.E. STA. 10+77.50 LT.	26
F.E. STA. 13+50 LT.	20
<b>TOTAL</b>	<b>644</b>

**EARTHWORK SCHEDULE**

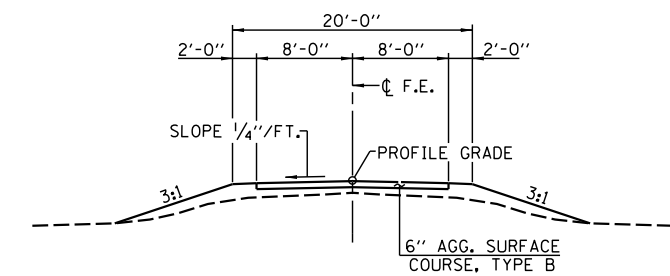
LOCATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU. YD.	CU. YD.	CU. YD.	CU. YD.
STA. 8+10 TO STA. 8+50	19	14	5	11
STA. 8+50 TO STA. 9+00	61	46	44	2
STA. 9+00 TO STA. 9+50	99	74	123	-49
STA. 9+50 TO STA. 10+00	122	91	231	-140
STA. 10+00 TO STA. 10+50	122	92	410	-318
STA. 10+50 TO STA. 11+00	229	92	370	-198
STA. 11+00 TO STA. 11+07.50	38	28	58	-30
BRIDGE OMISSION - STA. 11+07.50 TO STA. 12+17.50				
STA. 12+17.50 TO STA. 12+50	249	187	125	62
STA. 12+50 TO STA. 13+00	222	166	221	-55
STA. 13+00 TO STA. 13+50	52	39	274	-235
STA. 13+50 TO STA. 14+00	24	18	265	-247
STA. 14+00 TO STA. 14+50	6	4	254	-250
STA. 14+50 TO STA. 15+00	4	3	200	-197
STA. 15+00 TO STA. 15+50	1	1	82	-82
<b>TOTAL</b>	<b>1248</b>	<b>936</b>	<b>2662</b>	<b>-1346***</b>

\*\*\* FURNISHED EXCAVATION QUANTITY TO BE REDUCED BY 350 CU. YDS. OF SUITABLE CHANNEL AND 30 CU. YDS. OF STRUCTURE EXCAVATION.

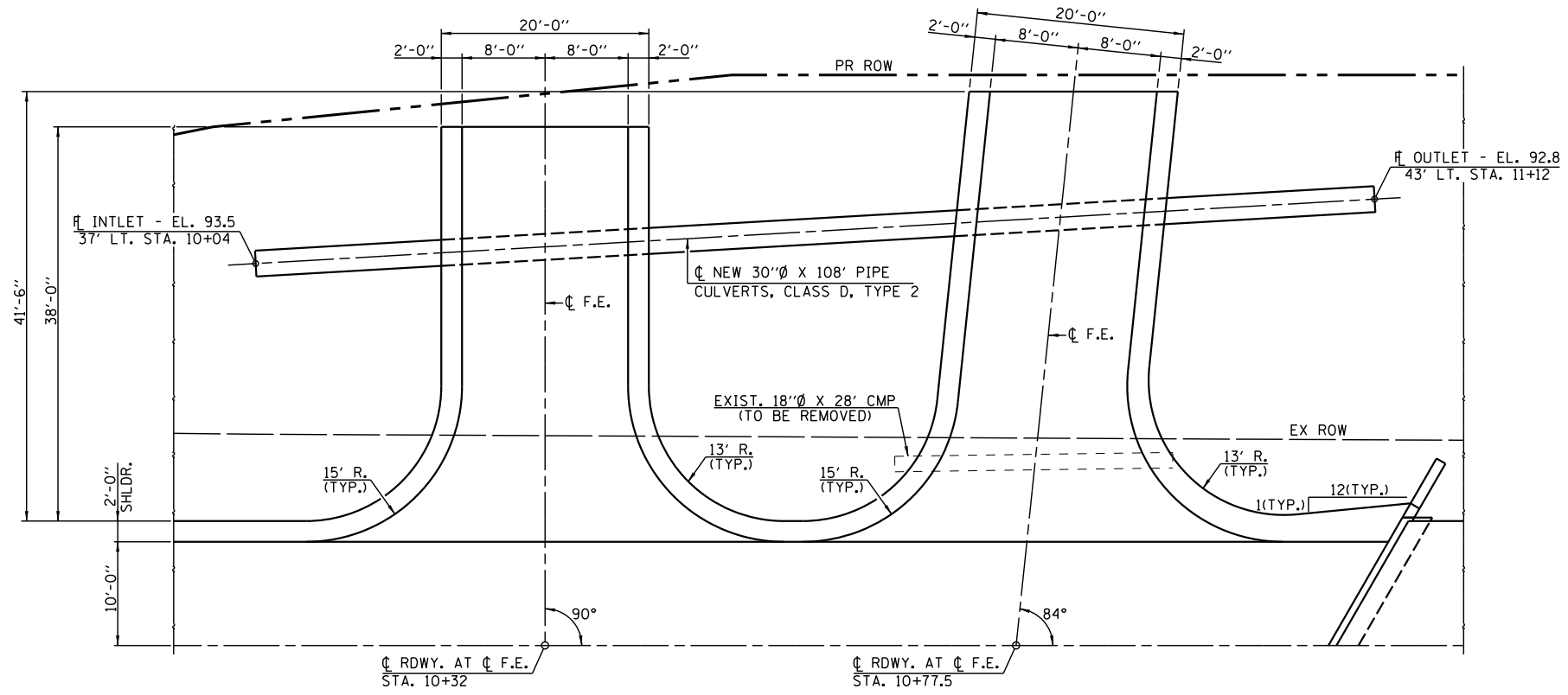


**FIELD ENTRANCE**  
(F.E. STA. 10+32 LT.)

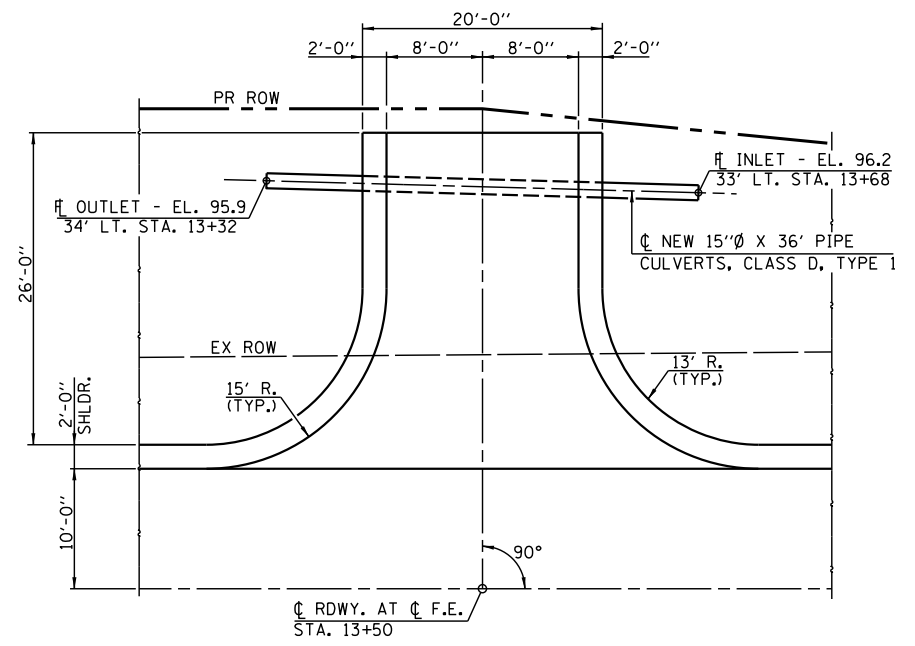
**FIELD ENTRANCE**  
(F.E. STA. 10+77.5 LT.)



**TYPICAL FIELD ENTRANCE**  
(F.E. STA. 10+32 LT., STA. 10+77.5 LT. & STA. 13+50 LT.)



**PLAN**  
(F.E. STA. 10+32 LT., 10+77.5 LT.)  
ESTIMATED QUANTITY - 54 TON AGGREGATE SURFACE COURSE, TYPE B

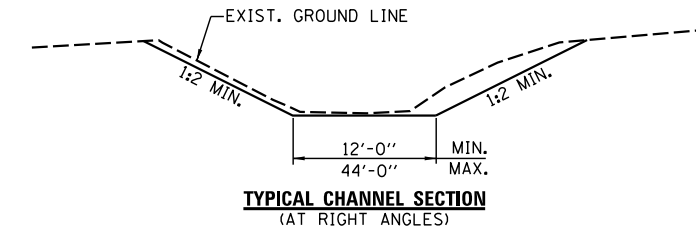
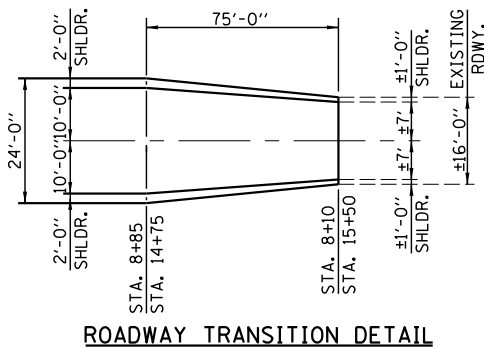
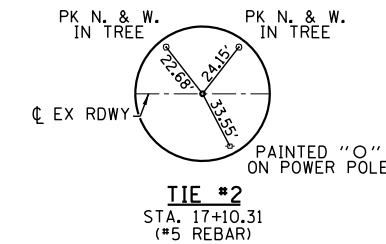
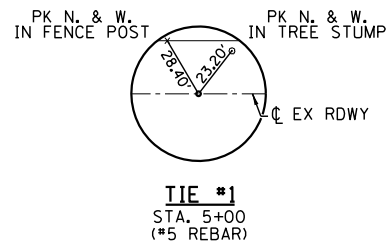


**PLAN**  
(F.E. STA. 13+50 LT.)  
ESTIMATED QUANTITY - 20 TON AGGREGATE SURFACE COURSE, TYPE B

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -	<b>V&amp;K</b>	<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>ENTRANCE DETAILS</b>			T.R. SHEETS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = *DATE*	CHECKED -	REVISED -			CONTRACT NO. 95823							
		DATE -	REVISED -			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
	PLOTTED	BY
	NOTE BOOK	
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	NOTE BOOK	
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
	NO.	



SECTION 23, T. 10 N., R. 1 E., 3RD PM

SECTION 26, T. 10 N., R. 1 E., 3RD PM

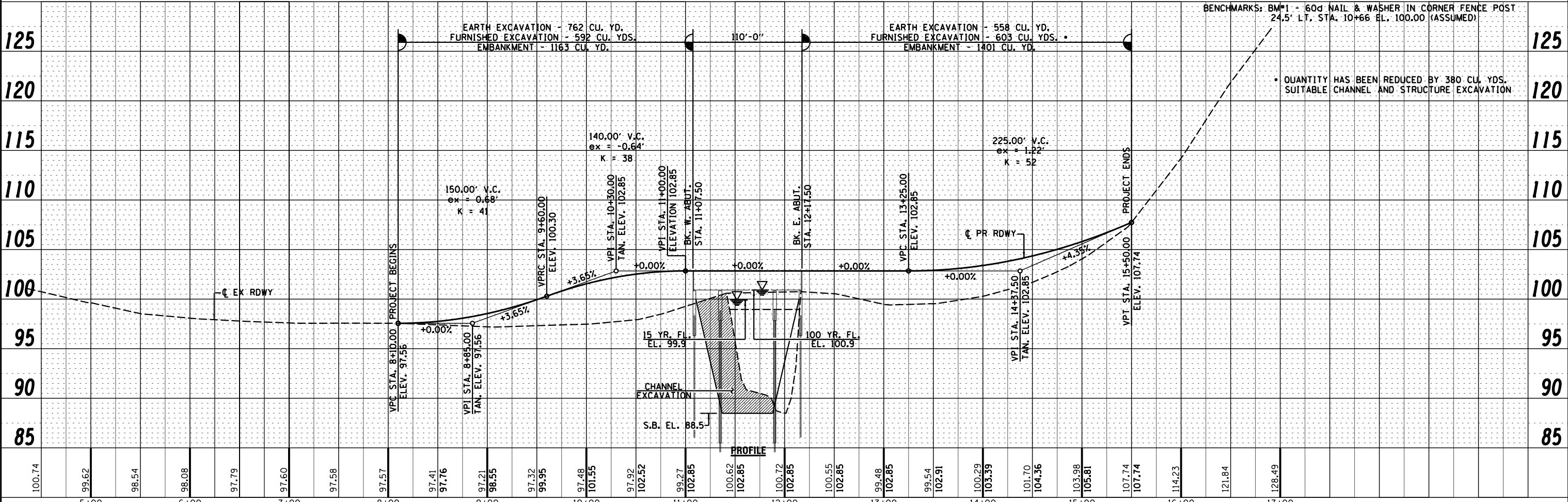
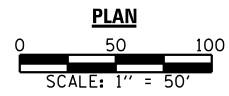
HOWARD E. BUOY

KATHY COFFEE, ET AL

JEFFREY L. & VICTORIA L. KIRK

WAYNE E. & FRANCES M. DONALDSON, ET AL  
C/O/ FRANCES DONALDSON

WAYNE E. & FRANCES M. DONALDSON, ET AL  
C/O/ FRANCES DONALDSON

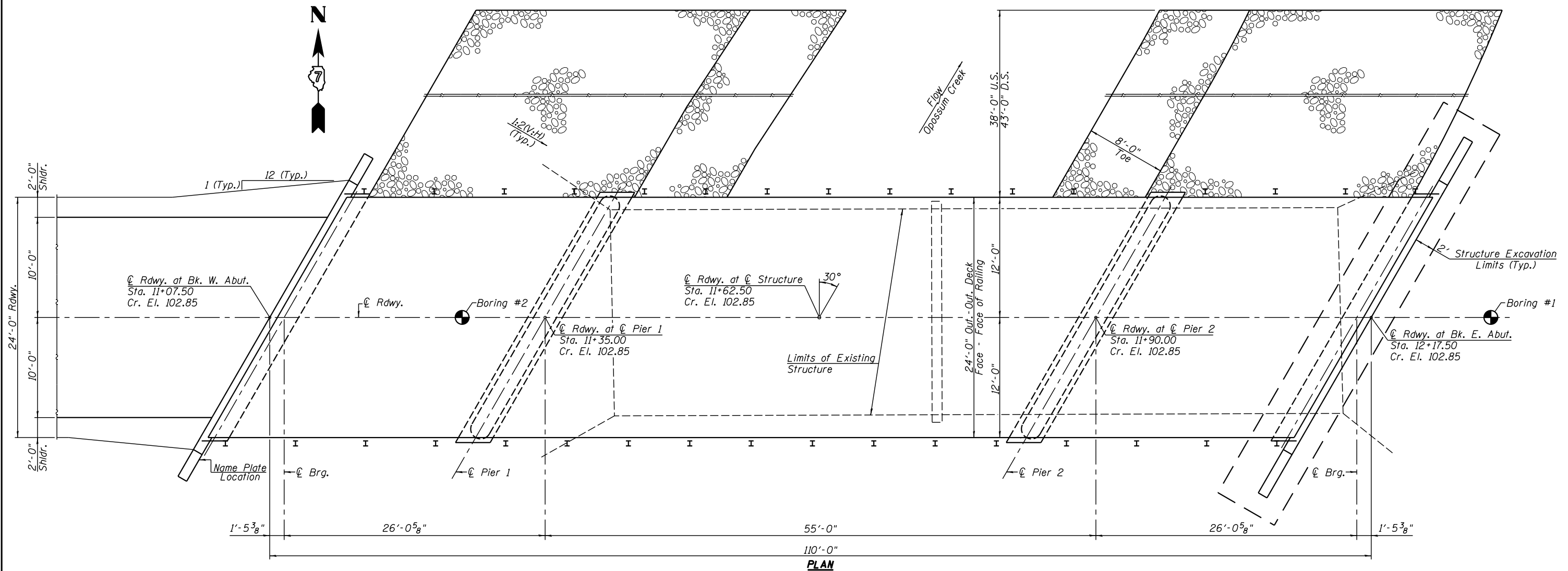
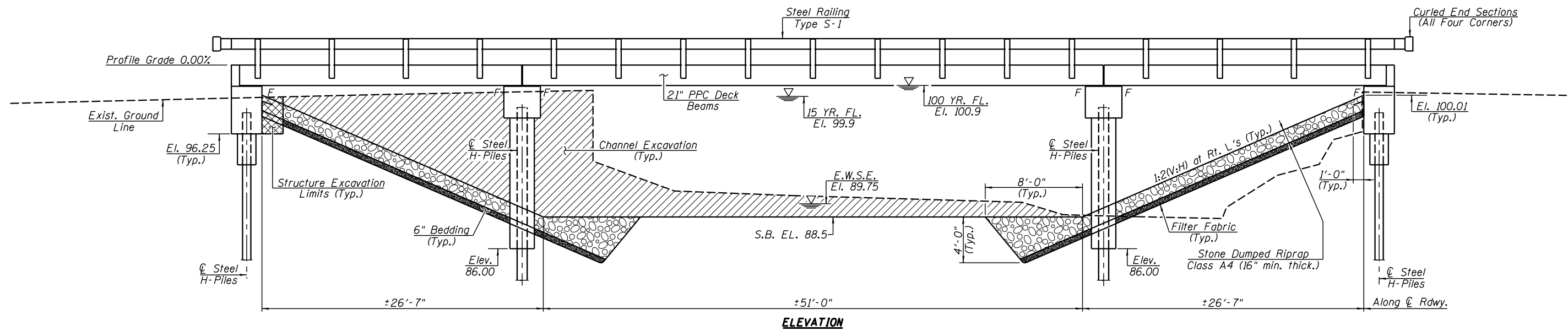


FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISD -	<p><b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939</p>	PLAN & PROFILE		T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
*FILEL*	PLOT SCALE = *SCALE*	CHECKED -	REVISD -		SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	22	15-11119-00-BR	SHELBY	23	4
	PLOT DATE = *DATE*	DRAWN -	REVISD -					CONTRACT NO. 95823					
		CHECKED -	REVISD -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

Existing Structure: Two span timber deck on steel stringers supported by closed timber abutments with timber wingwalls and one timber pile bent pier. ±73'-0" Bk.-Bk. Abutments, ±20'-0" Out.-Out. Deck. Steel Railing, 0° Skew.  
Existing Structure No. 087-3059

Benchmarks: BM#1 - 60d Nail & Washer in corner fence post  
24.5' Lt. Sta. 10+66 El. 100.00 (Assumed)

Salvage: See Special Provisions



FILE NAME = *FILE*	USER NAME = *USER*	DESIGNED -	REVISED -	<b>V&amp;K</b>	<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>GENERAL PLAN &amp; ELEVATION</b> <b>STRUCTURE NO. 087-3587</b>			T.R. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = *DATE*	CHECKED -	REVISED -			CONTRACT NO. 95823							
		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT					

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			1519
Stone Dumped Riprap, Class A4	Ton		715	715
Filter Fabric	Sq. Yd.		935	935
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		130	130
Concrete Structures	Cu. Yd.		111.4	111.4
Concrete Encasement	Cu. Yd.		2.8	2.8
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	2598		2598
Reinforcement Bars	Pound		9400	9400
Steel Railing, Type S1	Foot	220		220
Furnishing Steel Piles HP 10x42	Foot		288	288
Furnishing Steel Piles HP 12x53	Foot		400	400
Test Pile Steel HP 10x42	Each		2	2
Test Pile Steel HP 12x53	Each		2	2
Driving Piles	Foot		688	688
Name Plates	Each		1	1

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit State	Design Scour Elevations (ft.)					Item I13
	W. Abut.	Pier 1	Pier 2	E. Abut.		
0100	96.25	83.70	83.70	96.25		8
0200	96.25	83.70	83.70	96.25		
Design	96.25	83.70	83.70	96.25		
Check	96.25	83.70	83.70	96.25		

**WATERWAY INFORMATION**

Flood		Freq. Yr.	0 C.F.S.	Opening Sq. Ft.		Natural H.W.E.		Head - ft.		Headwater El.	
				Exist.	Prop.	H.W.E.		Exist.	Prop.	Exist.	Prop.
Design		15	4642	539	805	99.9		0.2	0.4	100.1	100.3
Base		100	7920	539	857	100.9		0.3	0.6	101.2	101.5
Exist. Overtop.		7.2	3600								
Prop. Overtop.		7.7	3750								
Max. Calc.		500	10766	539	857	101.7		0.3	0.6	102.0	102.3

**LOADING HL 93**

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

**DESIGN SPECIFICATIONS**

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 and 2016 Interims.

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3500$  psi  
 $f_y = 60000$  psi (Reinforcement)

**PRECAST PRESTRESSED UNITS**

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

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.138 g  
 Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.314 g  
 Soil Site Class = C

**GENERAL NOTES**

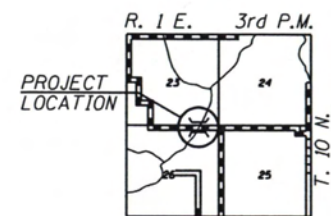
See Proposal for Boring Data.  
 Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

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 "A.A.S.H.T.O. LRFD Bridge Design Specifications.

*Mark A. Henderson* 8/29/2017  
 Expiration Date 11/30/2018

OPOSSUM CREEK  
 BUILT 20 BY  
 SHELBY COUNTY  
 SECTION 15-11119-00-BR  
 STA. 11+62.50  
 STR. NO. 087-3587 LOADING HL 93

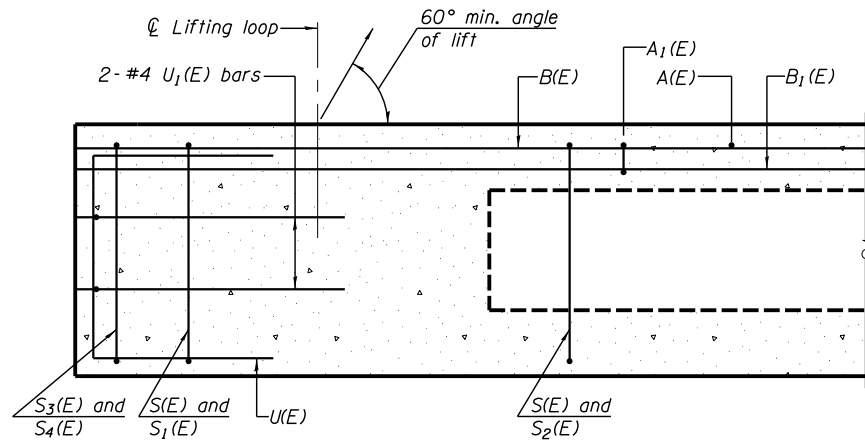
**NAME PLATE**  
 (Standard 515001)



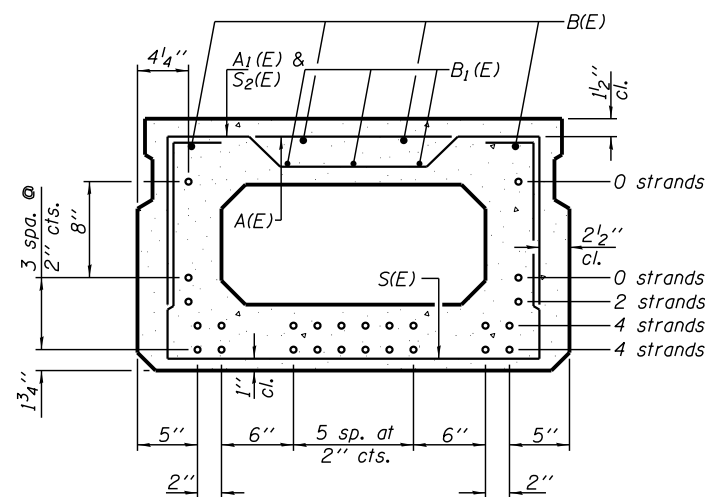
**LOCATION SKETCH**



FILE NAME *	USER NAME * #USER#	DESIGNED -	REVISED -	<p><b>Veenstra &amp; Kimm, Inc.</b>                  Springfield, IL. Phone: (217)544-8033                  IL. Design Firm No. 184-001939</p>	GENERAL DATA			T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILEL#		DRAWN -	REVISED -		STRUCTURE NO. 087-3587	22	15-11119-00-BR	SHELBY	23	6		
	PLOT SCALE * #SCALE#	CHECKED -	REVISED -		SCALE: _____	SHEET NO. 2 OF 10 SHEETS	STA. _____ TO STA. _____	CONTRACT NO. 95823				
	PLOT DATE * #DATE#	DATE -	REVISED -		FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT							



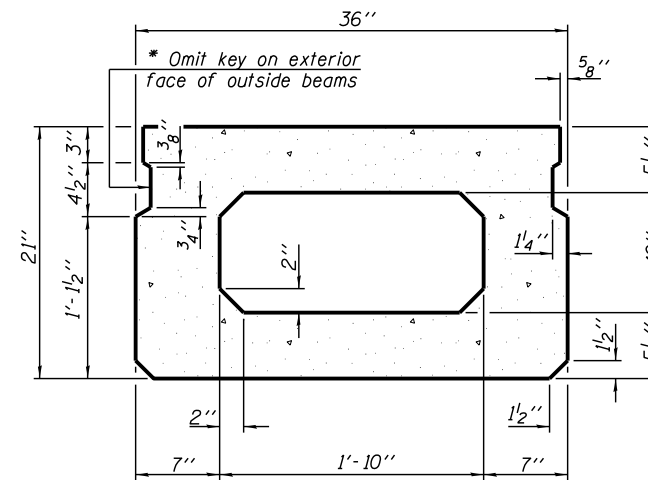
**SECTION A-A**



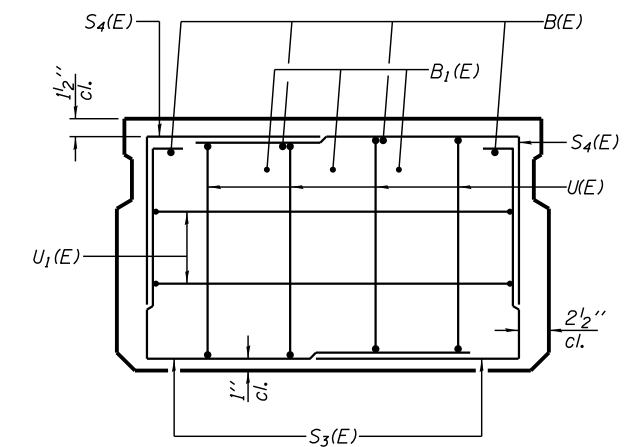
**SECTION B-B**

(Showing reinforcement and permissible strand locations)

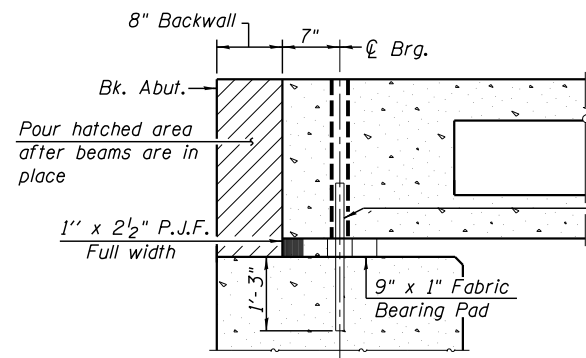
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.



**SECTION B-B**  
(Showing dimensions)



**VIEW C-C**



**SECTION THRU ABUTMENT**  
(At Right Angles)

1"  $\phi$  x 2'-6" Dowel Rods in 1/2"  $\phi$  Holes drilled in cap (2 Ea. End). Cost included with "Precast Prestressed Concrete Deck Beams (21" Depth).

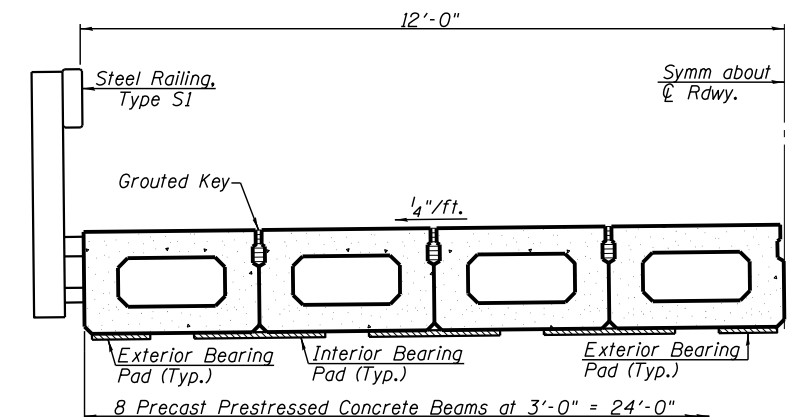
\* Rail post anchors to be cast into exterior face of outside beams (Per sheet 7 of 10)

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.

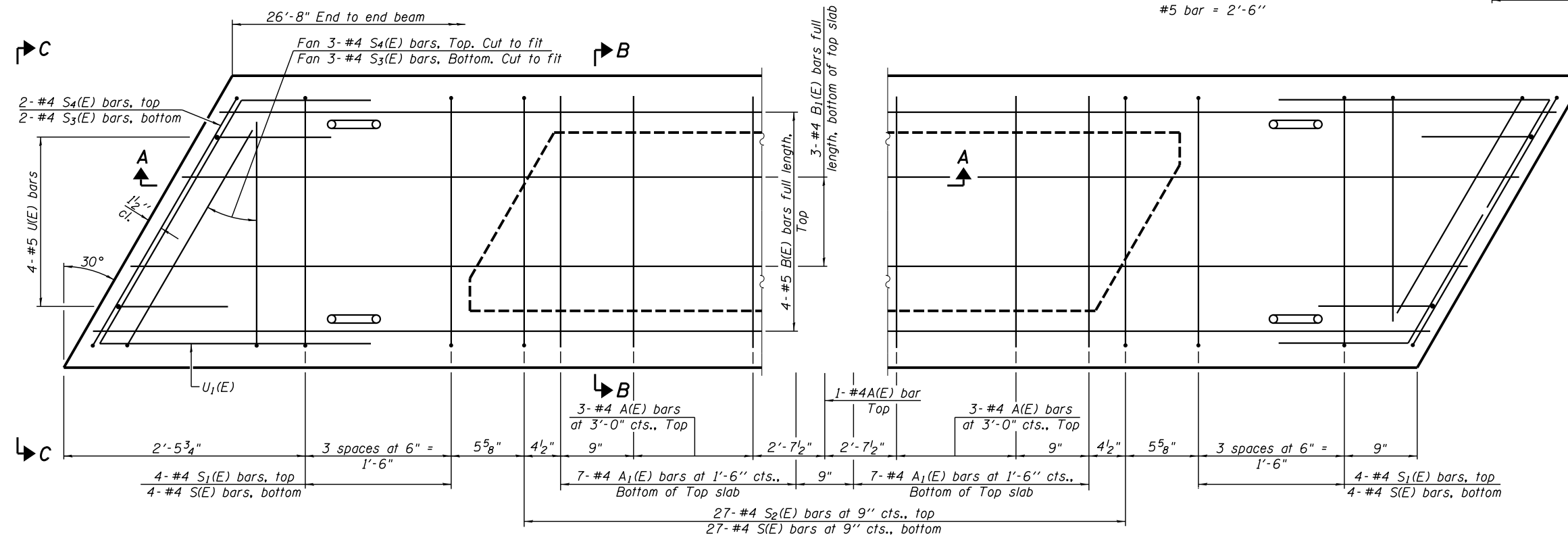
Notes: After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.

**MINIMUM BAR LAP**

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



**HALF CROSS SECTION**



**PLAN VIEW**

**BAR LIST**  
**ONE BEAM ONLY**

(For information only)

Bar	No.	Size	Length	Shape
A(E)	7	#4	2'-7"	—
A1(E)	14	#4	2'-10"	~
B(E)	4	#5	26'-4"	—
B1(E)	3	#4	26'-4"	—
S(E)	35	#4	6'-5"	U
S1(E)	8	#4	4'-11"	U
S2(E)	27	#4	5'-2"	U
S3(E)	10	#4	4'-11"	U
S4(E)	10	#4	4'-2"	U
U1(E)	8	#5	4'-0"	U
U1(E)	4	#4	6'-10"	U

Note: See sheet 4 of 10 for additional details and Bill of Material. Reinforcement bars designated (E) shall be epoxy coated.

PD-2136-L

6-8-15

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -
		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

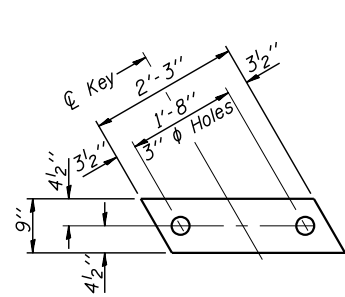


**Veenstra & Kimm, Inc.**  
Springfield, IL. Phone: (217)544-8033  
IL. Design Firm No. 184-001939

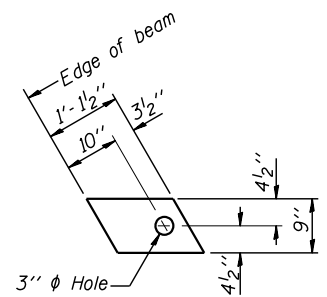
21" x 36" PPC DECK BEAM (SPANS 1 & 3)  
STRUCTURE NO. 087-3587

SCALE: SHEET NO. 3 OF 10 SHEETS STA. TO STA.

T.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15-11119-00-BR	SHELBY	23	7
CONTRACT NO. 95823				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

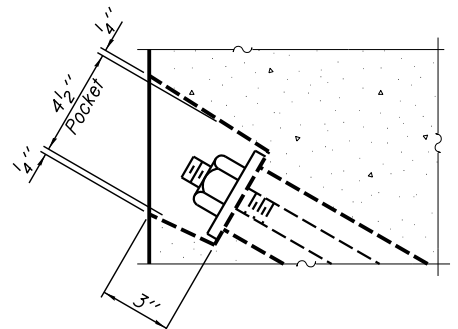


**FABRIC BEARING PAD**  
(Interior)  
(24 Required)

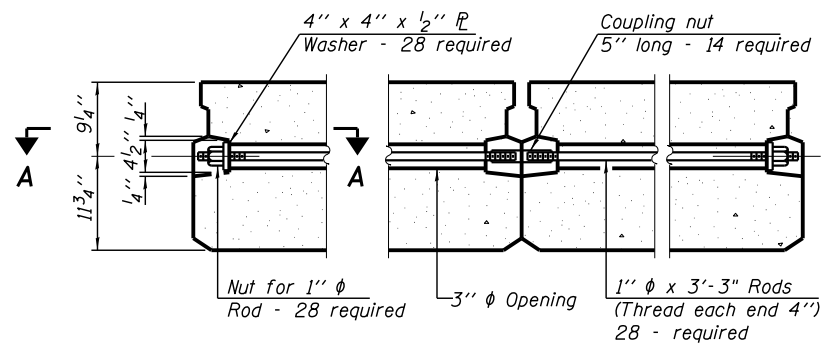


**FABRIC BEARING PAD**  
(Exterior)  
(16 Required)

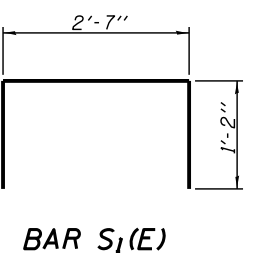
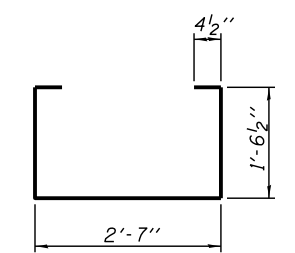
Notes:  
All bearing pads shall be 1" thick.



**SECTION A-A**

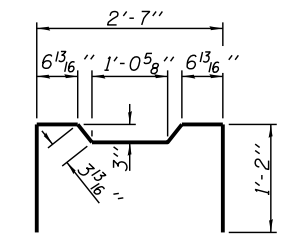


**TYPICAL TRANSVERSE TIE ASSEMBLY**

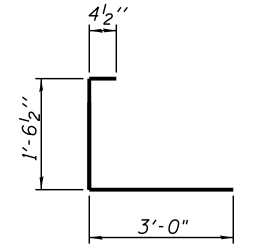


**BAR S1(E)**

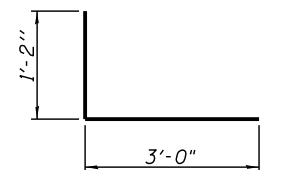
**BAR S1(E)**



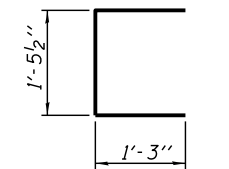
**BAR S2(E)**



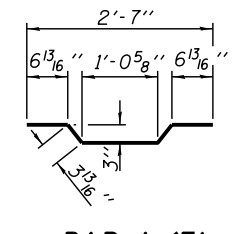
**BAR S3(E)**



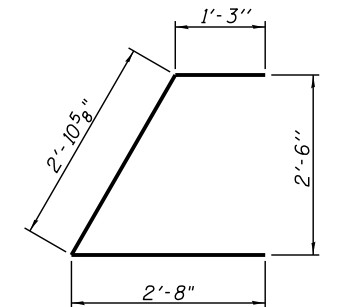
**BAR S4(E)**



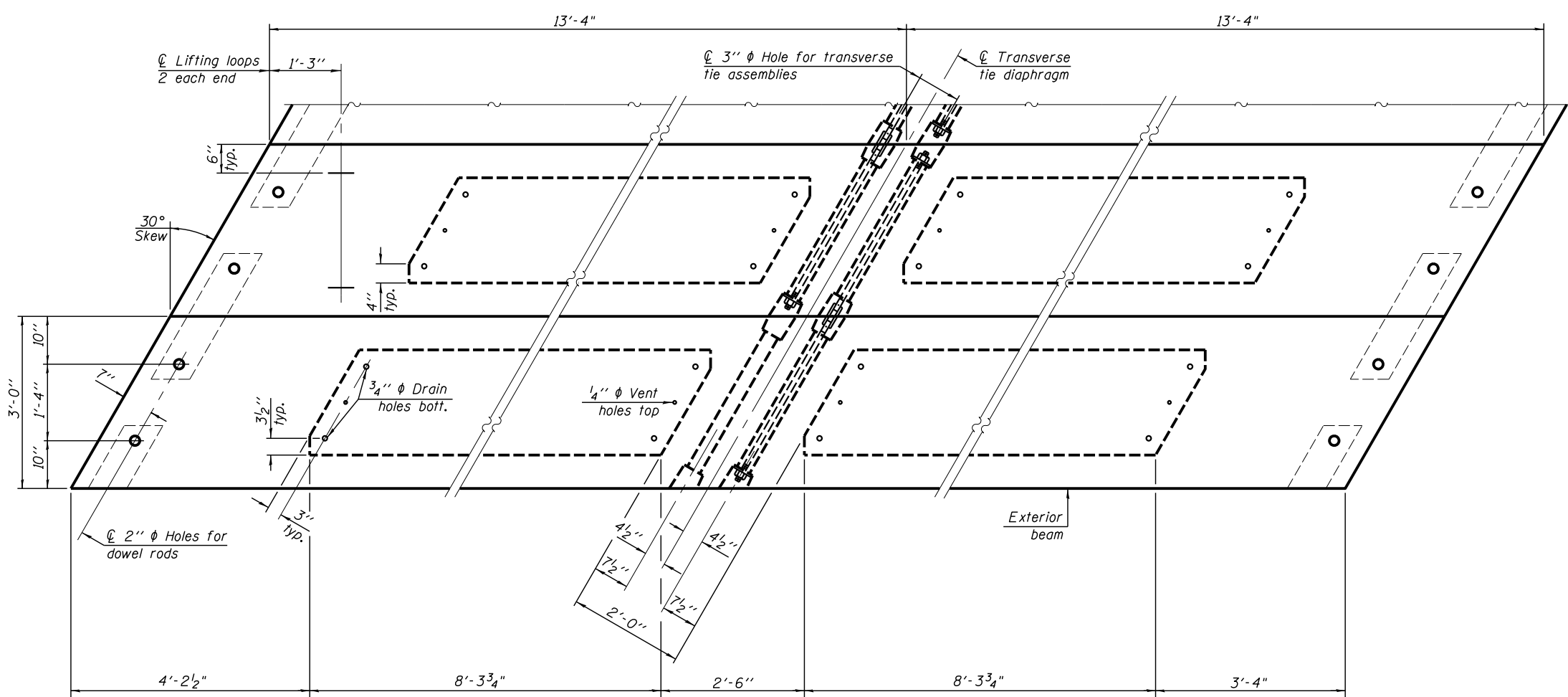
**BAR U(E)**



**BAR A1(E)**



**BAR U1(E)**



**PLAN VIEW**

**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" phi 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.

Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

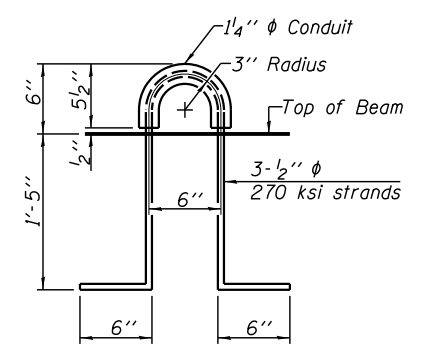
A minimum 2 1/2" phi lifting pin shall be used to engage the lifting loops during handling.

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.

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



**LIFTING LOOP DETAIL**

**BILL OF MATERIAL**

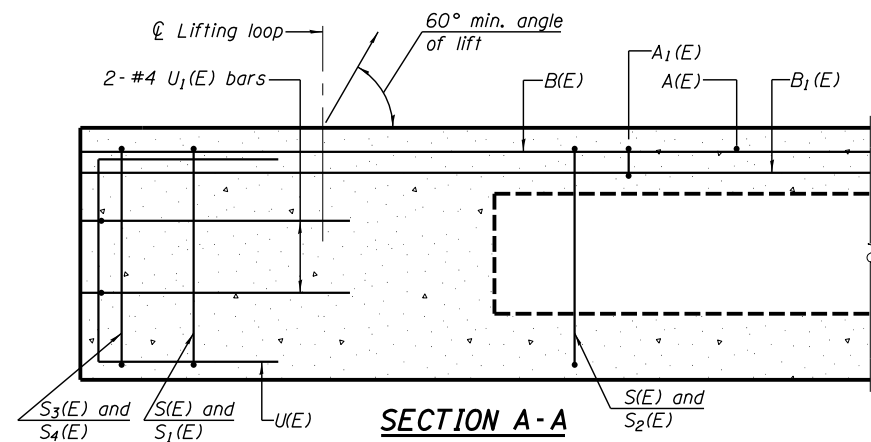
Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1280
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PD-2136-LD

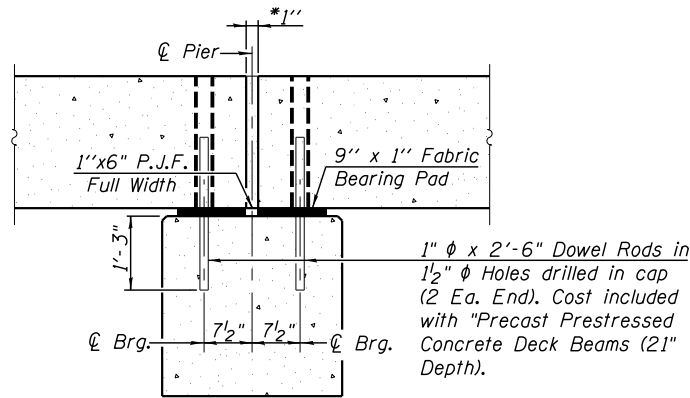
7-1-10

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -		<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>21" x 36" PPC DECK BEAM (SPANS 1 &amp; 3)</b> <b>STRUCTURE NO. 087-3587</b>			T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILE#	PLOT SCALE = *SCALE*	DRAWN -	REVISED -						22	15-11119-00-BR	SHELBY	23	8
	PLOT DATE = *DATE*	CHECKED -	REVISED -			CONTRACT NO. 95823							
		DATE -	REVISED -			SCALE:	SHEET NO. 4 OF 10 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		





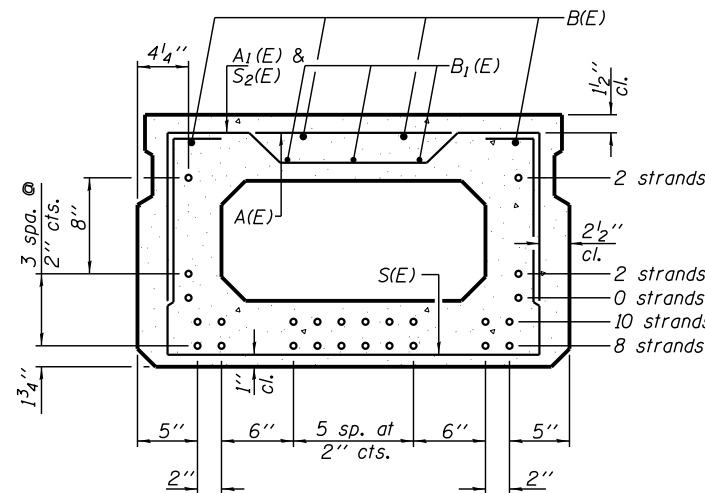
**SECTION A-A**



**SECTION THRU PIER**

Notes : After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.

All horizontal dimensions are at right angles to beam ends.  
\* 1" joint shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.



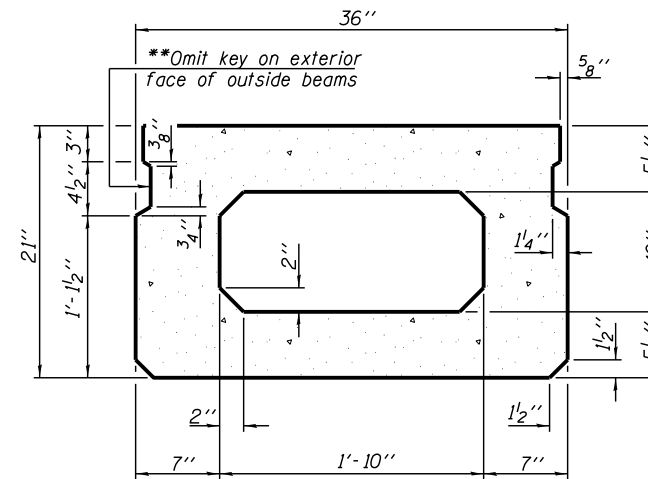
**SECTION B-B**

(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.

\*\* Rail post anchors to be cast into exterior face of outside beams (Per sheet 7 of 10)

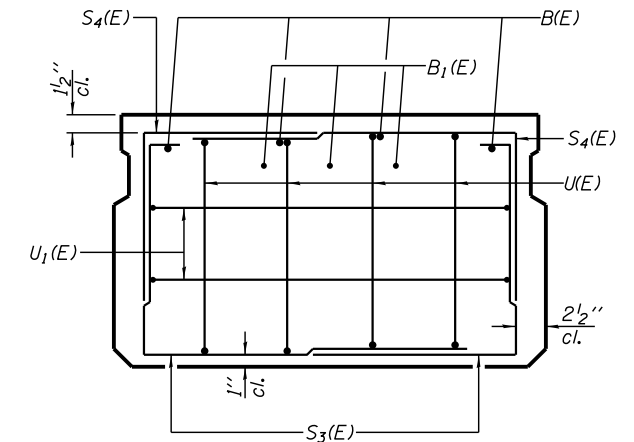
Notes: After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.



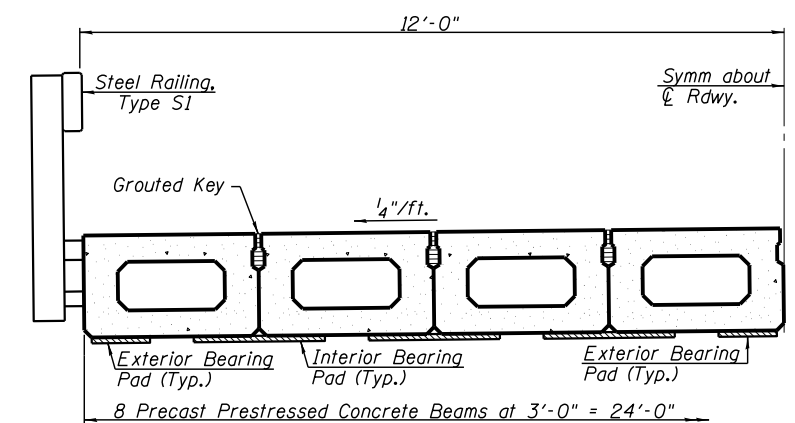
**SECTION B-B**

(Showing dimensions)

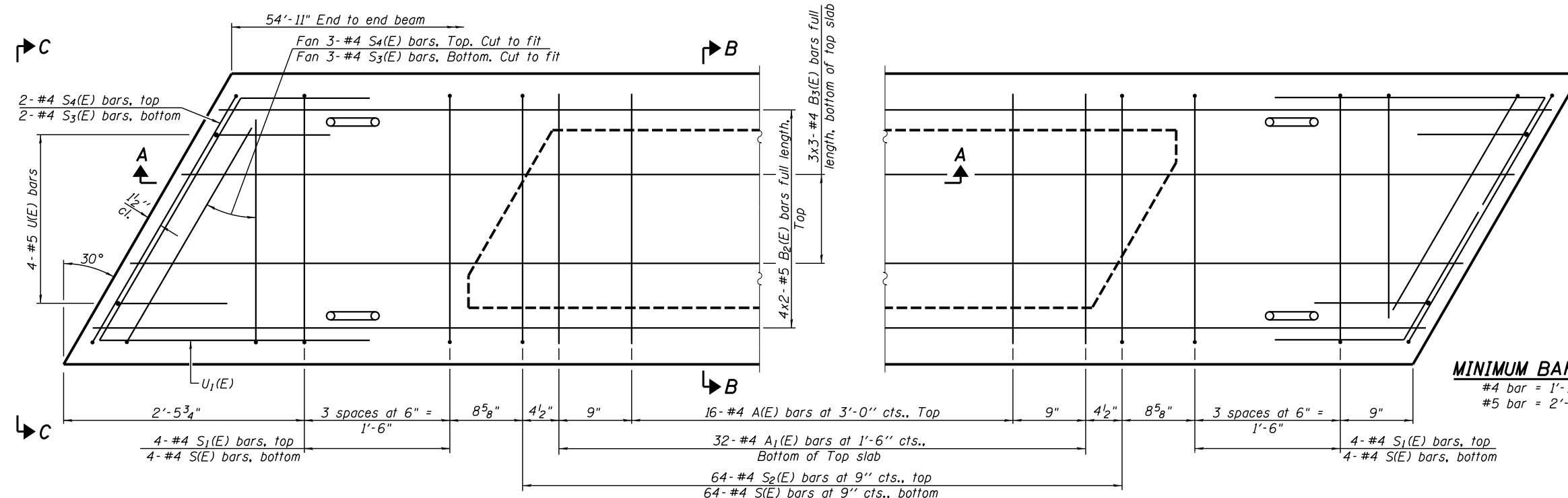
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



**VIEW C-C**



**HALF CROSS SECTION**



**PLAN VIEW**

**BAR LIST  
ONE BEAM ONLY**

(For information only)

Bar	No.	Size	Length	Shape
A(E)	16	#4	2'-7"	—
A1(E)	32	#4	2'-10"	~
B2(E)	8	#5	28'-7"	—
B3(E)	9	#4	20'-2"	—
S(E)	72	#4	6'-5"	—
S1(E)	8	#4	4'-11"	—
S2(E)	64	#4	5'-2"	—
S3(E)	10	#4	4'-11"	—
S4(E)	10	#4	4'-2"	—
U(E)	8	#5	4'-0"	—
U1(E)	4	#4	6'-10"	—

Note: See sheet 6 of 10 for additional details and Bill of Material.  
Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.  
Reinforcement bars designated (E) shall be epoxy coated.

PD-2136-L

6-8-15

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -
*FILE#		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

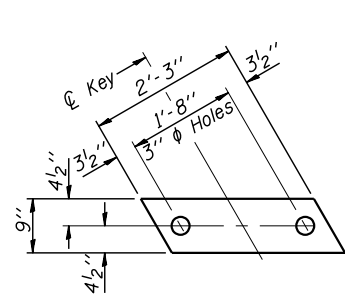


**Veenstra & Kimm, Inc.**  
Springfield, IL. Phone: (217)544-8033  
IL. Design Firm No. 184-001939

**21" x 36" PPC DECK BEAM (SPAN 2)**  
**STRUCTURE NO. 087-3587**

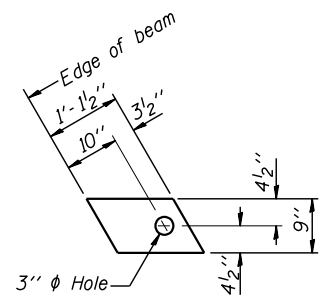
SCALE: SHEET NO. 5 OF 10 SHEETS STA. TO STA.

T.R. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15-11119-00-BR	SHELBY	23	9
CONTRACT NO. 95823				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**FABRIC BEARING PAD**

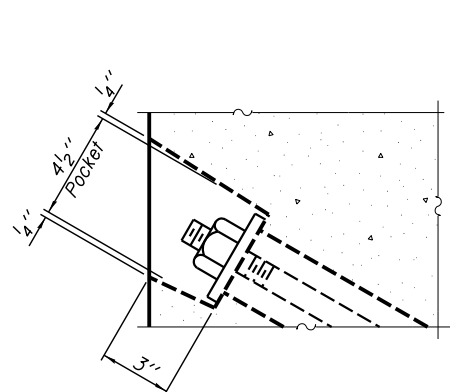
(Interior)  
(24 Required)



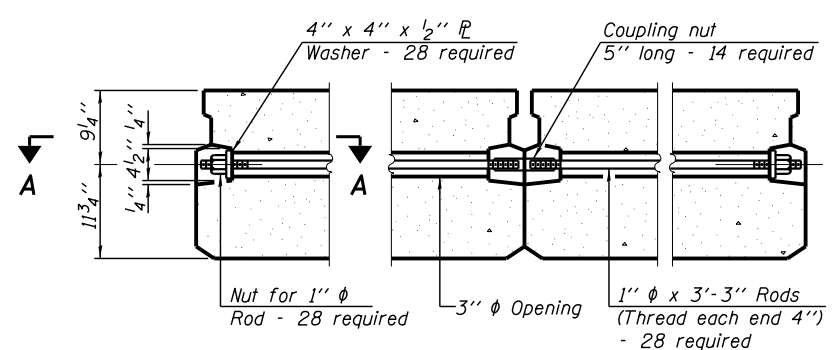
**FABRIC BEARING PAD**

(Exterior)  
(16 Required)

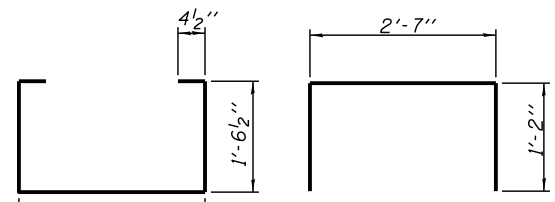
Notes:  
All bearing pads shall be 1" thick.



**SECTION A-A**

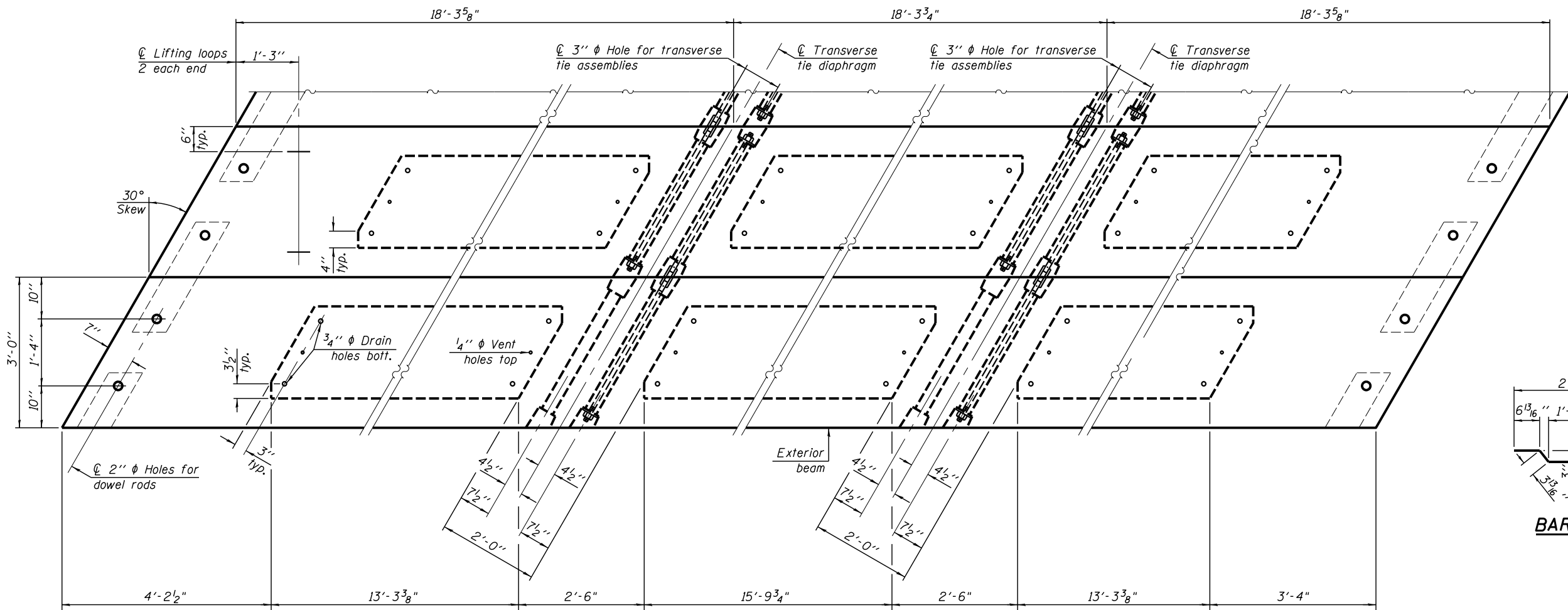


**TYPICAL TRANSVERSE TIE ASSEMBLY**

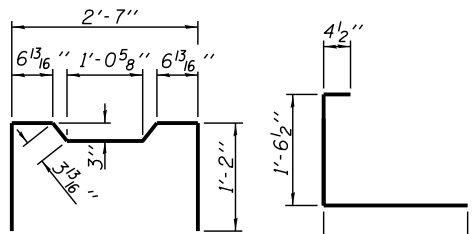


**BAR S(E)**

**BAR S1(E)**

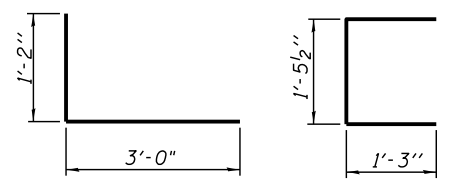


**PLAN VIEW**



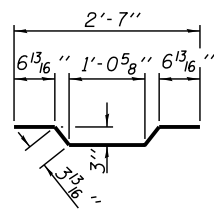
**BAR S2(E)**

**BAR S3(E)**

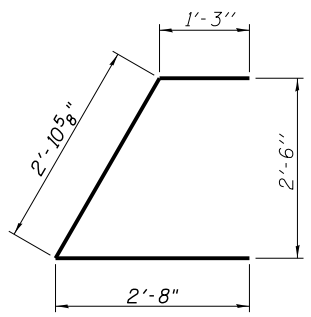


**BAR S4(E)**

**BAR U(E)**



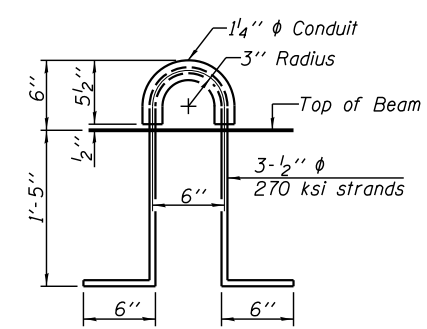
**BAR A1(E)**



**BAR U1(E)**

**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" phi 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.  
Two 1#8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.  
A minimum 21#2" phi 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.



**LIFTING LOOP DETAIL**

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1318
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Note: Connect beams in pairs with the transverse tie configuration shown.

PD-2136-LD

7-1-10

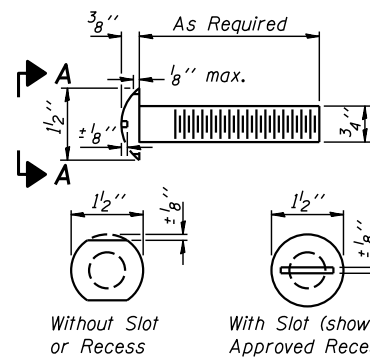
FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -
*FILE#		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -



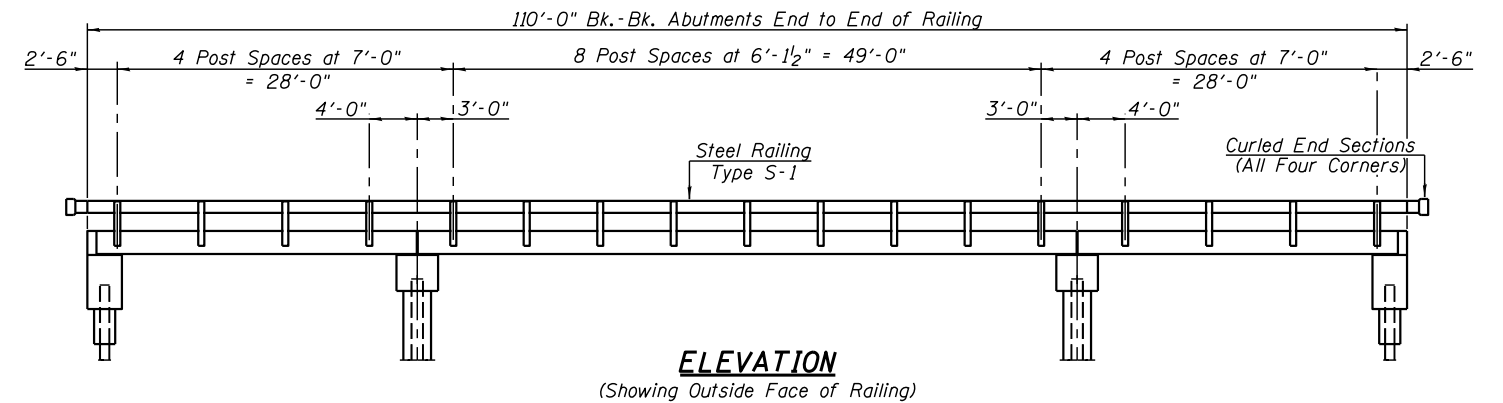
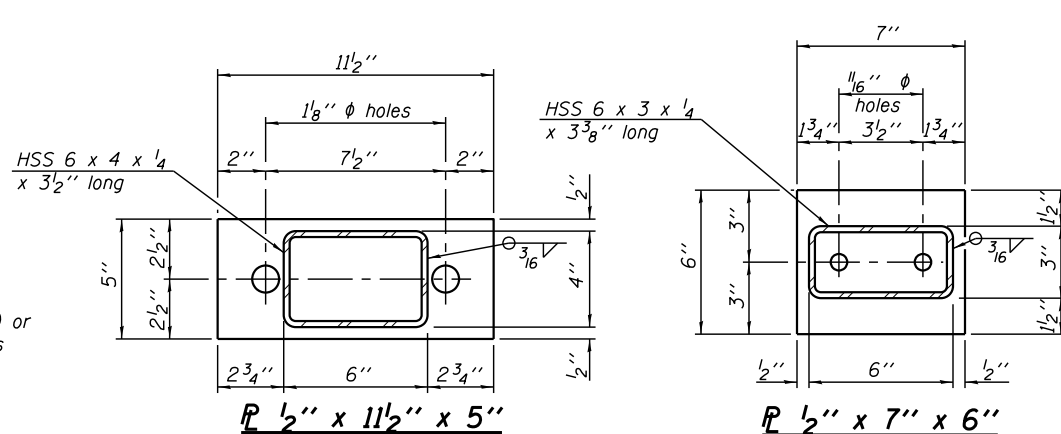
**Veenstra & Kimm, Inc.**  
Springfield, IL. Phone: (217)544-8033  
IL. Design Firm No. 184-001939

21" x 36" PPC DECK BEAM (SPAN 2)  
STRUCTURE NO. 087-3587  
SCALE: \_\_\_\_\_ SHEET NO. 6 OF 10 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

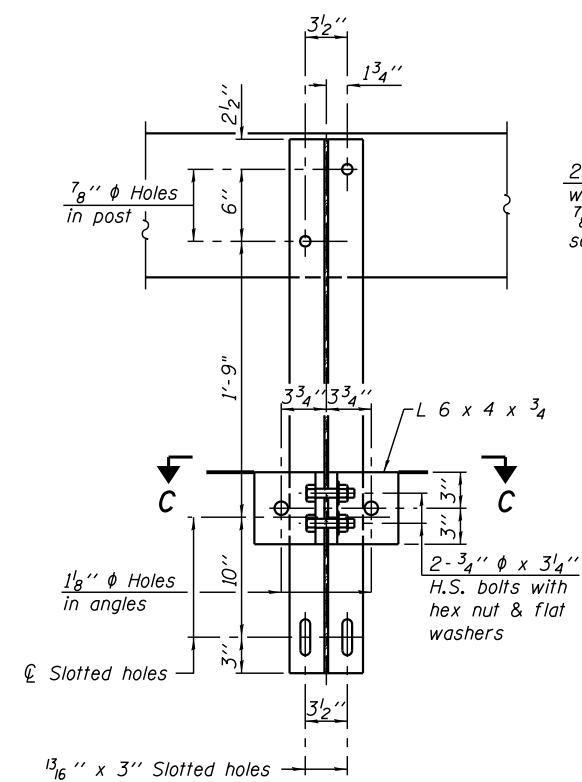
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15-11119-00-BR	SHELBY	23	10
CONTRACT NO. 95823				
FED. ROAD DIST. NO. [ ] ILLINOIS FED. AID PROJECT				



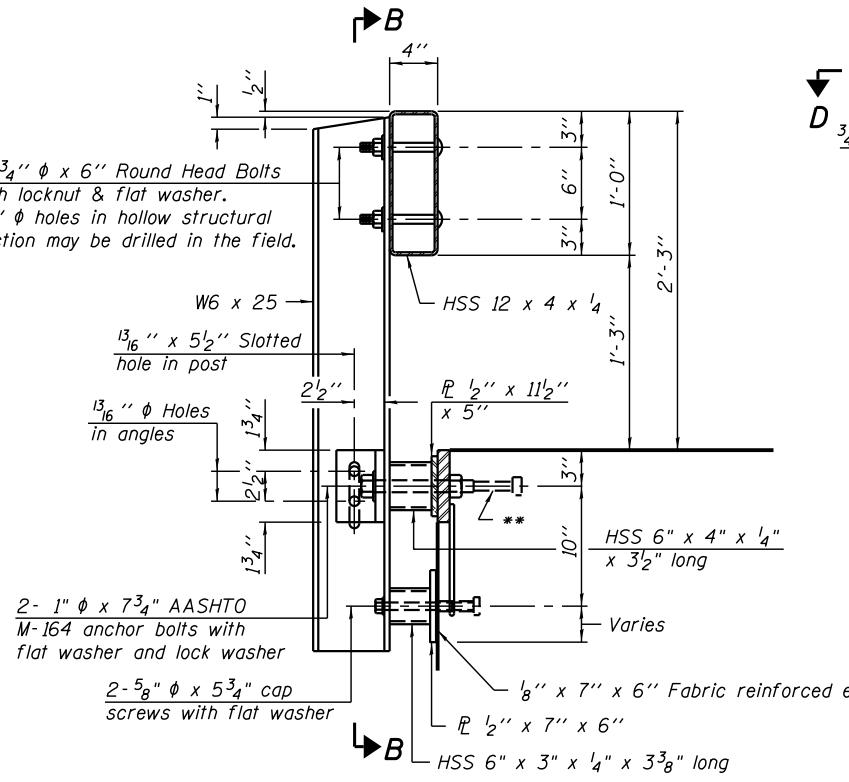
**VIEW A-A**  
**ROUND HEAD BOLT**



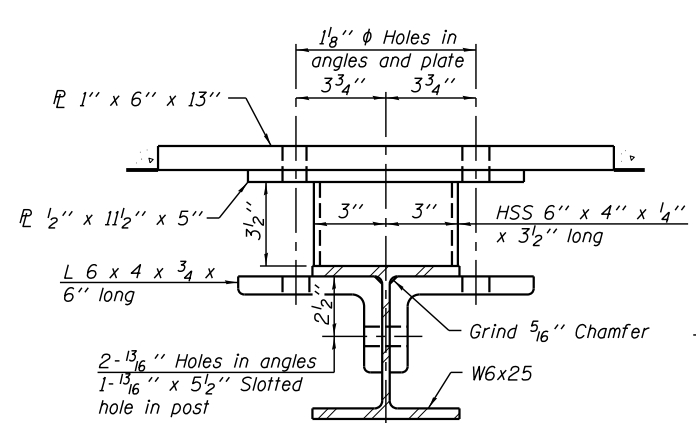
**ELEVATION**  
(Showing Outside Face of Railing)



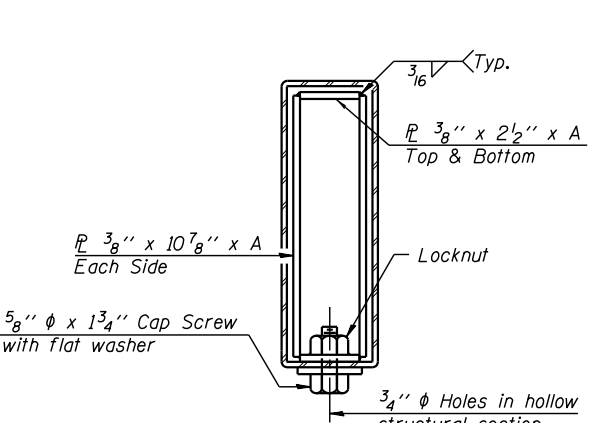
**SECTION B-B**



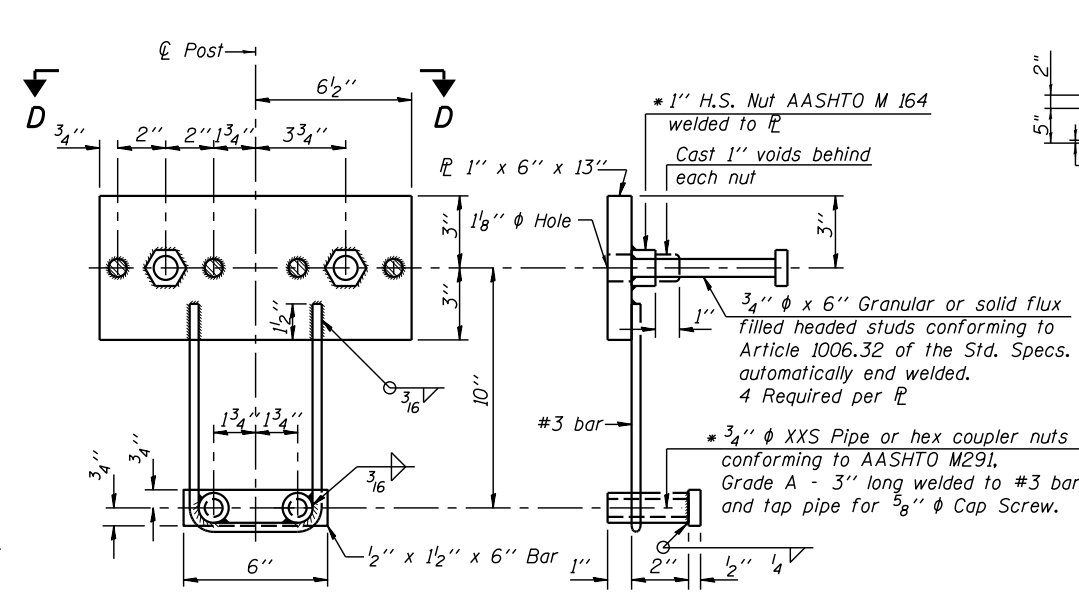
**SECTION AT RAILING POST**



**SECTION C-C**

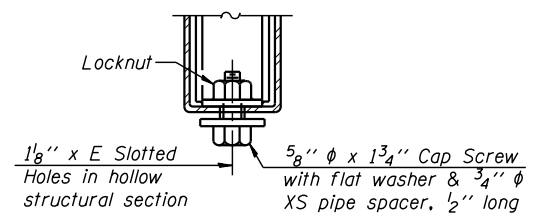


**SECTIONS AT RAIL SPLICE**

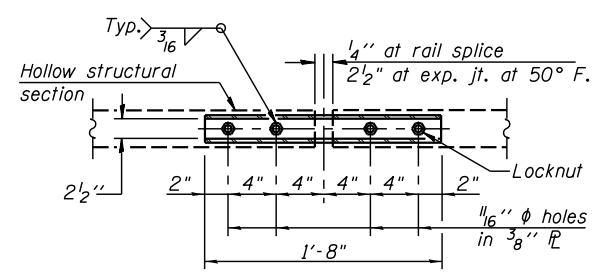


**ANCHOR DEVICE**

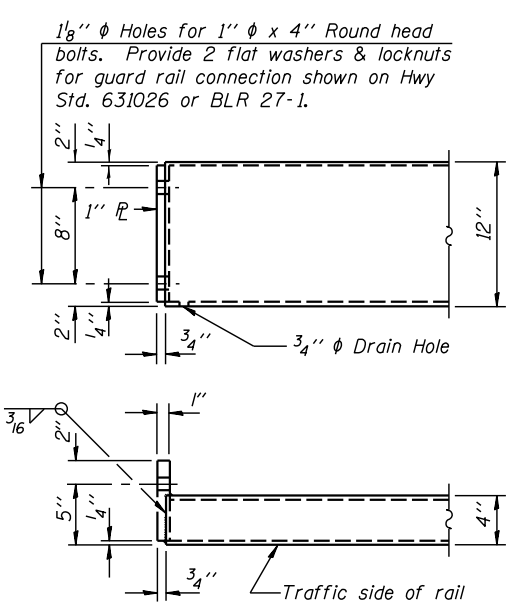
\* Threaded areas shall be plugged or blocked off during casting of beam.



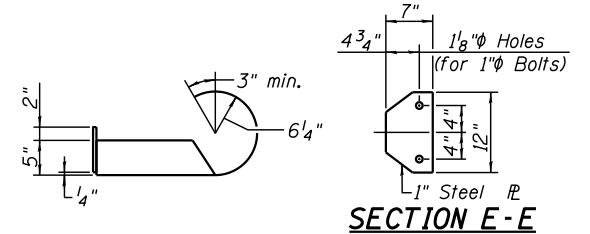
**RAIL SPLICE CONNECTION AT EXPANSION JT.**



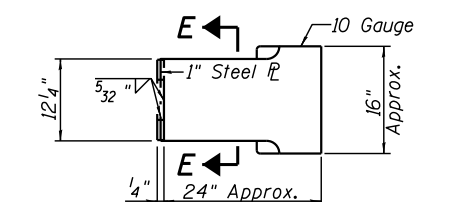
**PLAN-BOTT. SPLICE TYPICAL**



**END OF RAIL DETAILS**



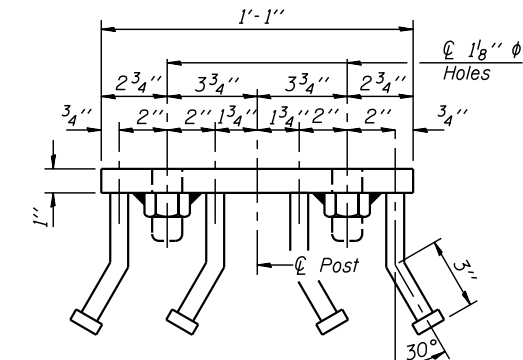
**SECTION E-E**



**CURLLED END SECTION DETAILS (4 Required)**

(Cost of Curled End Sections to be included in the cost of Steel Railing, Type S-1.)

Notes:  
For multi-span bridges, sufficient 1/4 inch x 6 inch x 1'-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
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. The anchorage studs may be bent down 1/2 inch to accommodate the top reinforcement bar placement.



**VIEW D-D**

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	220

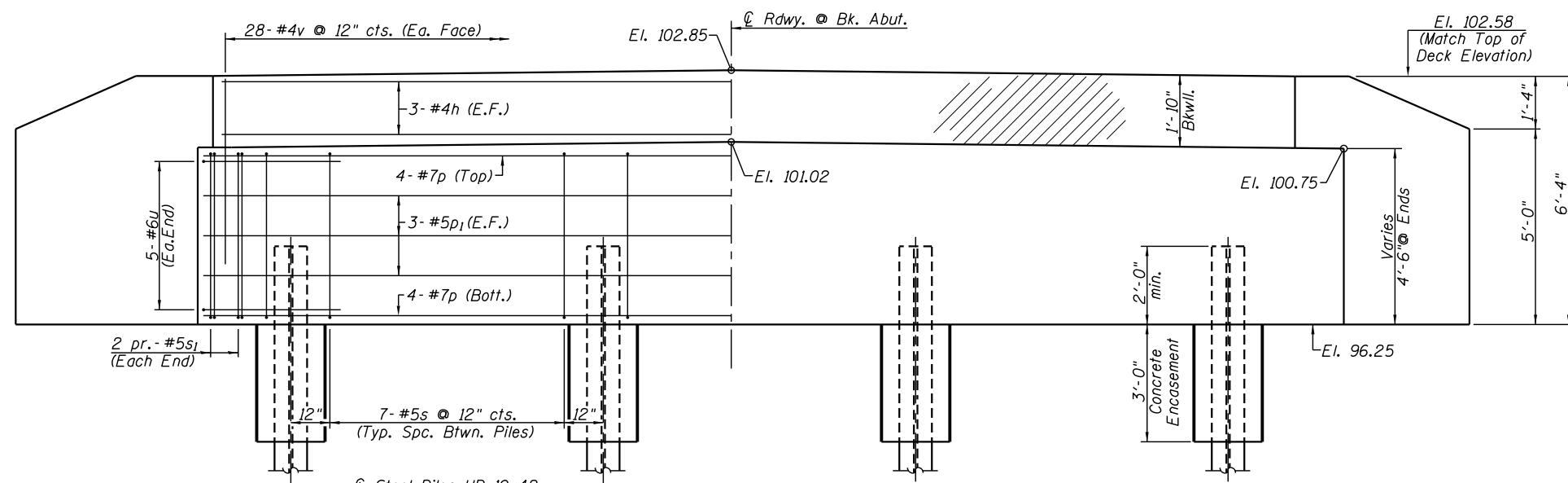
R-23A 1-12-15 (10'-9" Maximum Post Spacing)

FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -
*FILE#		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
	PLOT DATE = *DATE*	DATE -	REVISED -

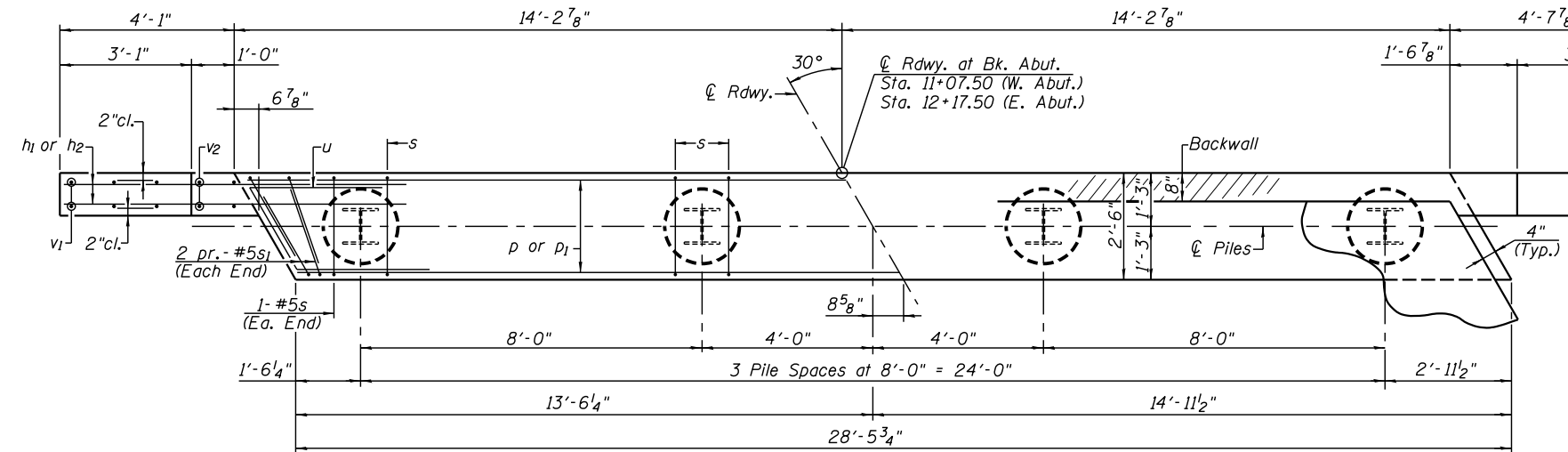
**V&K**  
**Veenstra & Kimm, Inc.**  
Springfield, IL. Phone: (217)544-8033  
IL. Design Firm No. 184-001939

**STEEL RAILING, TYPE S-1**  
**STRUCTURE NO. 087-3587**  
SCALE: SHEET NO. 7 OF 10 SHEETS STA. TO STA.

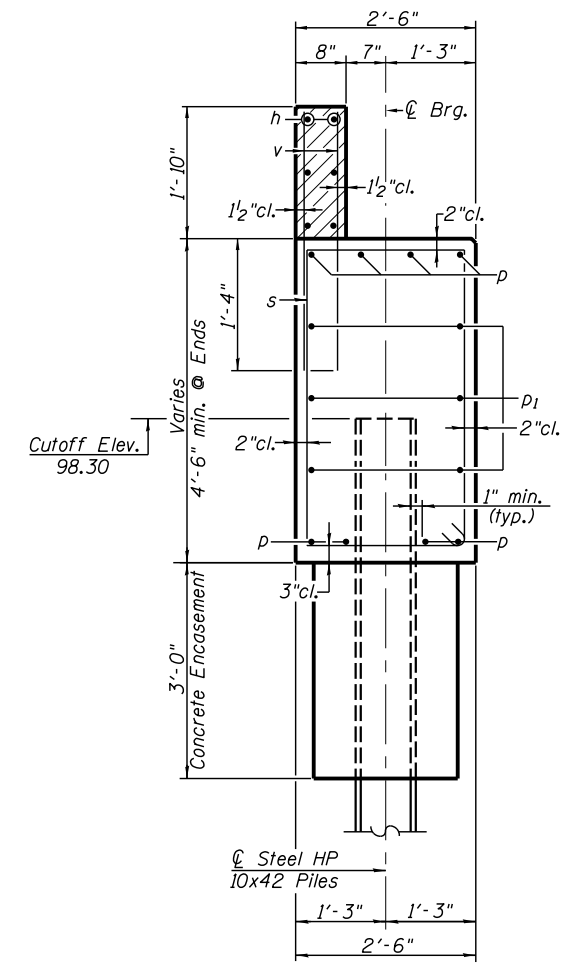
T.R. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15-11119-00-BR	SHELBY	23	11
CONTRACT NO. 95823				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



**ELEVATION**  
(W. Abut. Looking West)  
(E. Abut. Looking East)



**PLAN**



**SECTION THRU ABUTMENT**  
(Dimensions are at Rt. L's)

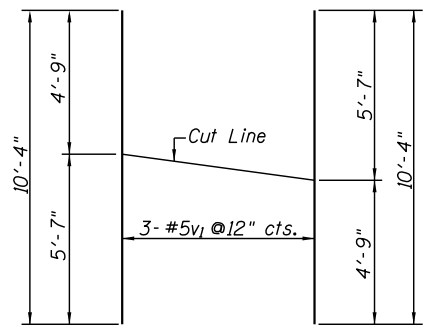
**PILE DATA**

	W. Abut.	E. Abut.
Pile Type & Size:	Steel HP 10x42	Steel HP 10x42
Nominal Required Bearing:	335 Kips	335 Kips
Factored Resistance Available:	184 Kips	184 Kips
Estimated Pile Length:	48'	48'
Number of Piles:	3	3
Number of Test Piles:	1	1

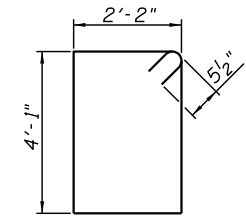
**TWO ABUTMENTS  
BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	#4	30'-8"	—
h1	48	#5	7'-0"	—
h2	24	#5	5'-0"	—
p	16	#7	28'-0"	—
p1	12	#5	28'-0"	—
s	46	#5	13'-5"	□
s1	16	#5	8'-5"	□
u	20	#6	10'-5"	└
v	112	#4	3'-0"	—
v1	12	#5	10'-4"	—
v2	16	#5	6'-0"	—

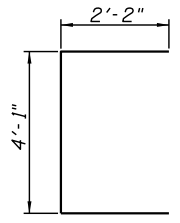
Concrete Structures	Cu. Yd.	30.8
Reinforcement Bars	Pound	3540
Concrete Encasement	Cu. Yd.	2.8
Structure Excavation	Cu. Yd.	78
Furnishing Steel Piles HP 10x42	Foot	288
Driving Piles	Foot	288
Test Pile Steel HP 10x42	Each	2



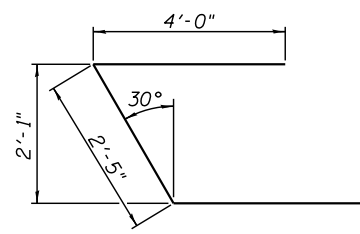
**v1 - BAR CUT DIAGRAM**  
Order v1 bars full length: Layout in field according to diagram. Cut v1 bars along cut line. Use remainder of each bar in opposite face.



**BAR s**

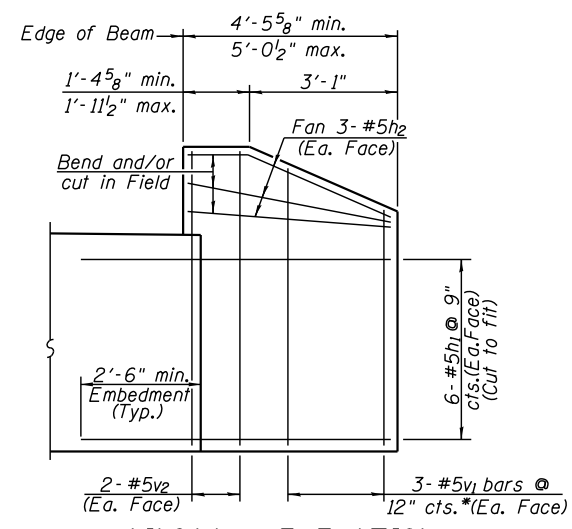


**BAR s1**



**BAR u**

**NOTES**  
All exposed edges shall have standard 3/4" chamfer.  
Space reinforcement in cap to miss beam anchor dowels.  
Wingwalls and Backwalls may, at the contractor's option, be cast monolithically.  
Hatched area and wingwalls shall be poured after deck beams are anchored in place.  
For details of Piles and Concrete Encasement, see Sheet 10 of 10.



**WINGWALL ELEVATION**

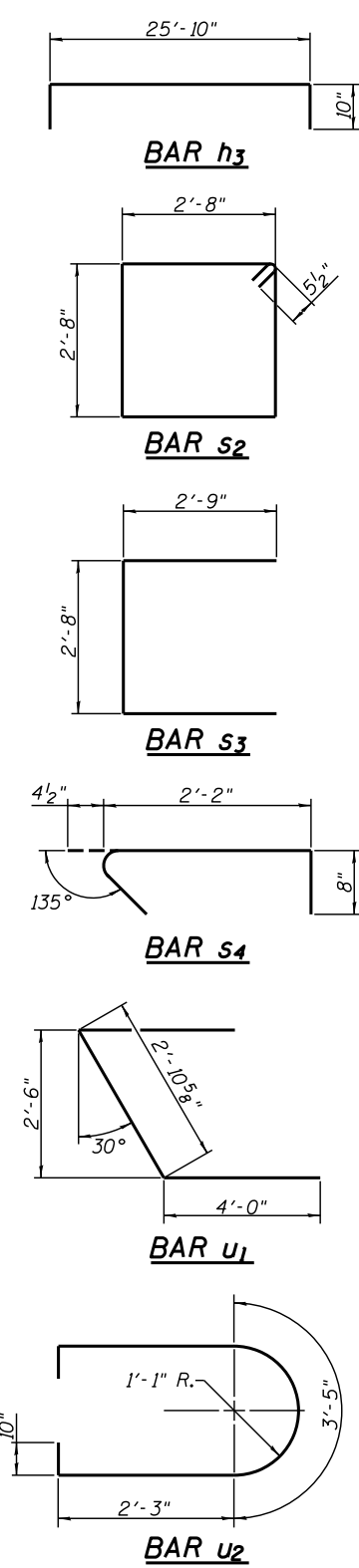
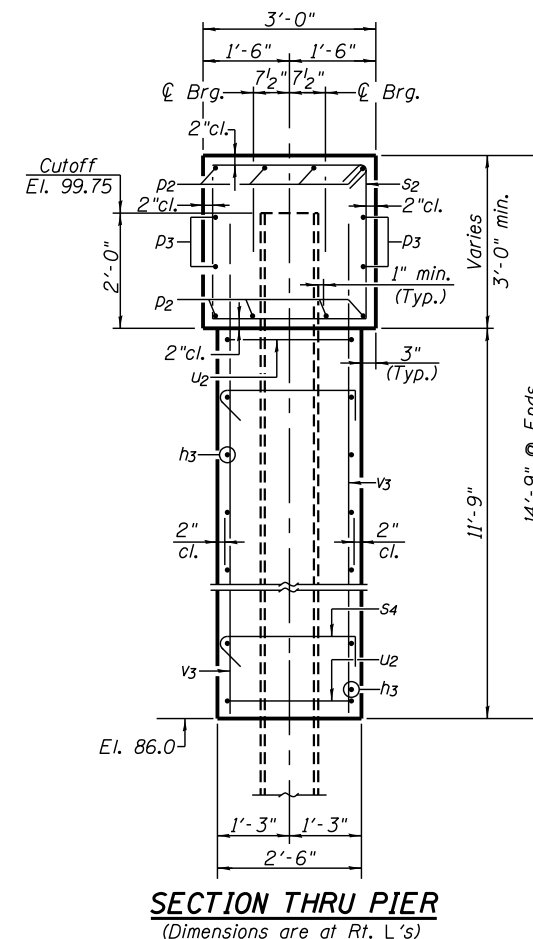
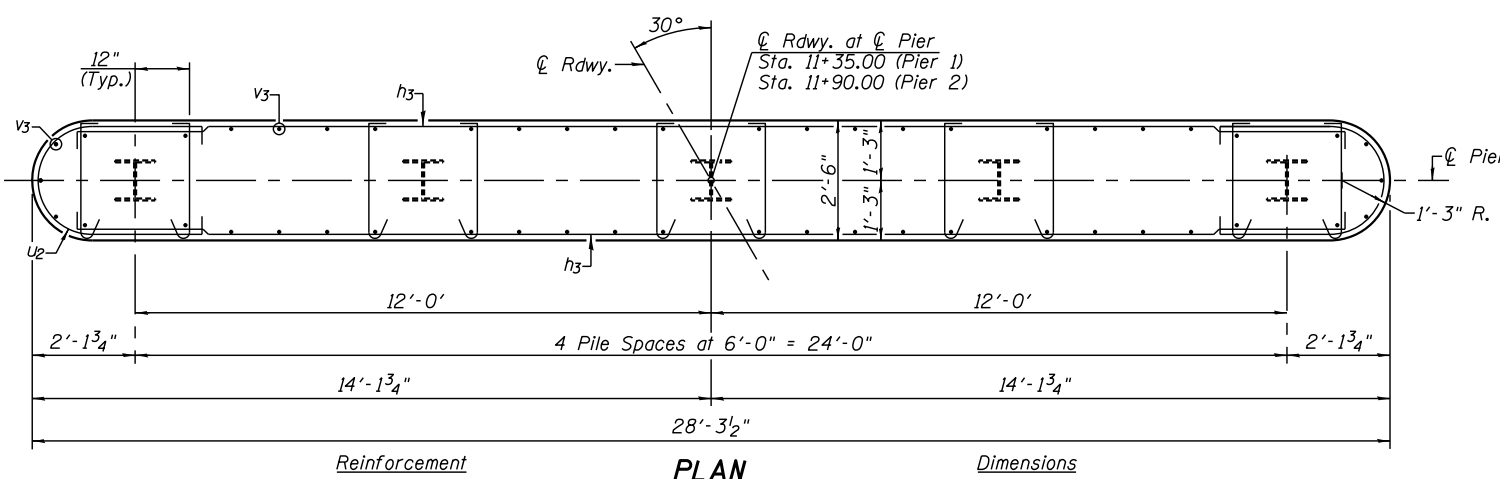
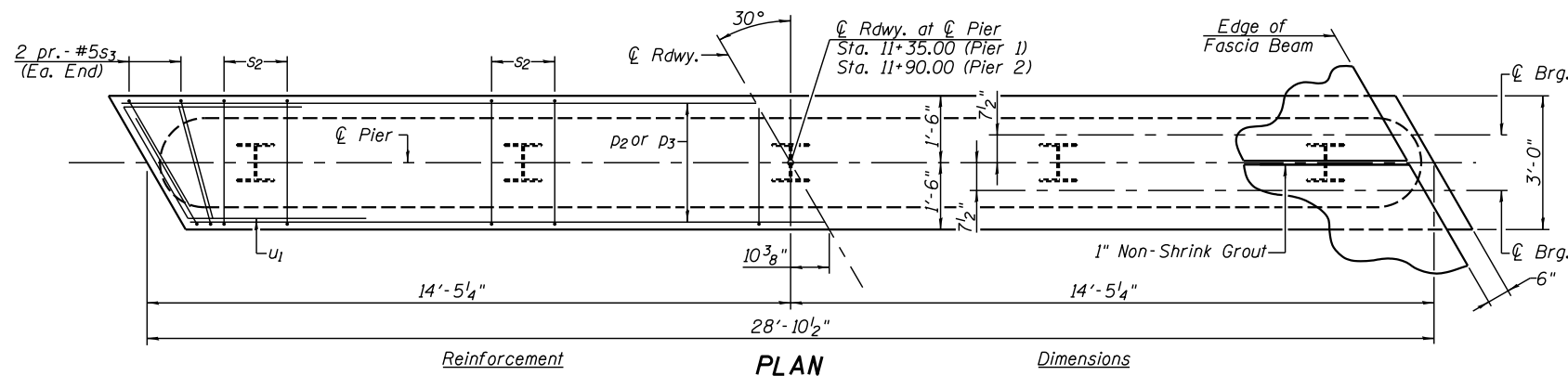
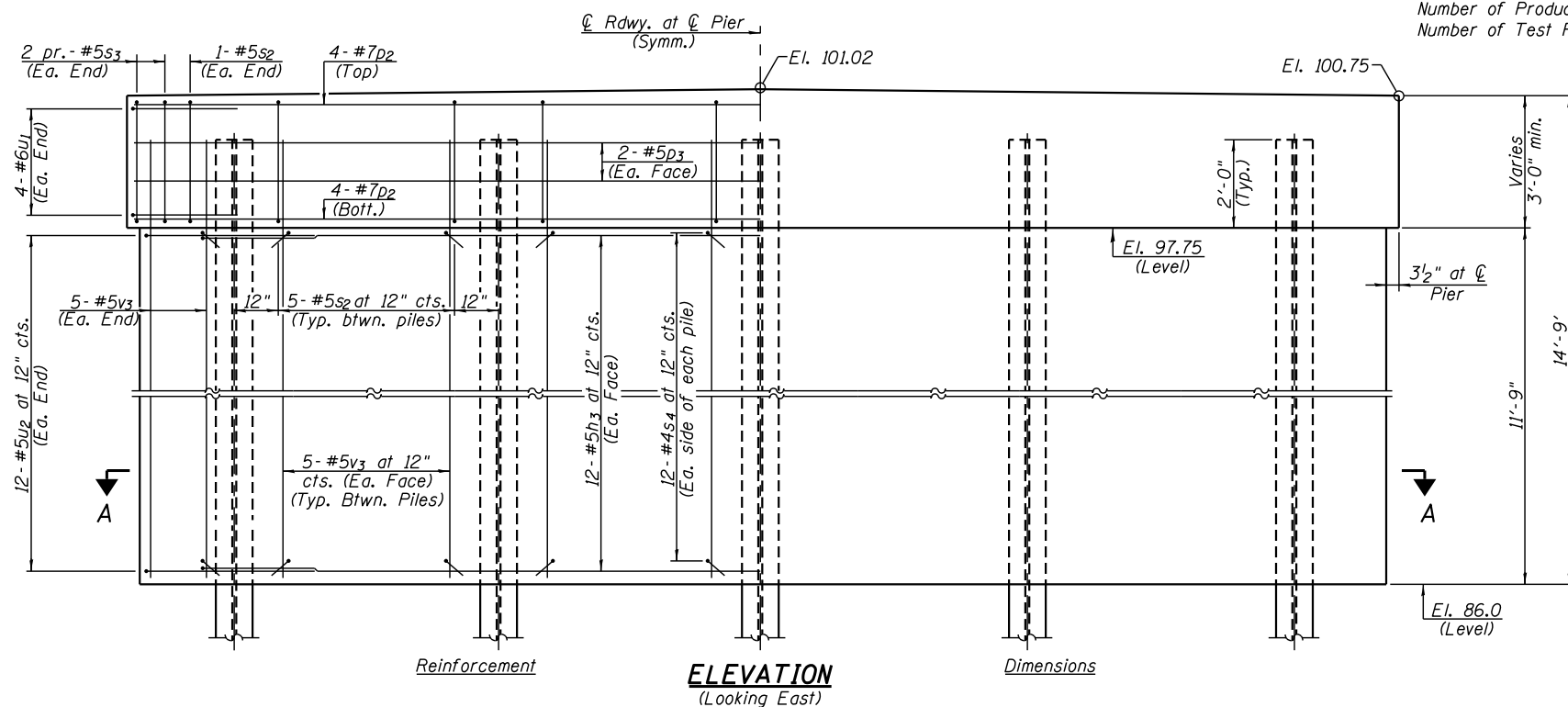
\* See v1 - bar cut diagram

**NOTES**

All exposed edges shall have standard 3/4" chamfer except as noted.  
 Space reinforcement in pier caps to miss beam anchor dowels.  
 For Details of Piles see Sheet 10 of 10.

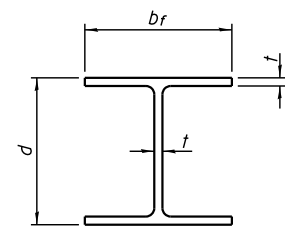
**PILE DATA**

	Pier 1	Pier 2
Type:	Steel HP 12x53	Steel HP 12x53
Nominal Required Bearing:	418 Kips	418 Kips
Factored Resistance Available:	230 Kips	230 Kips
Estimated Pile Length:	50'	50'
Number of Production:	4	4
Number of Test Piles:	1	1



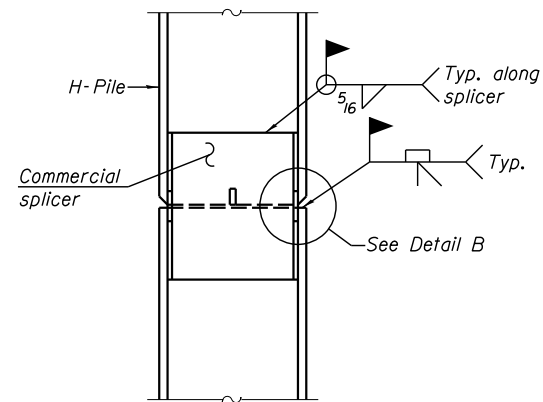
**TWO PIERS BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE	
h3	48	#5	27'-6"	[Shape]	
p2	16	#7	28'-6"	[Shape]	
p3	8	#5	28'-6"	[Shape]	
s2	44	#5	11'-7"	[Shape]	
s3	16	#5	8'-2"	[Shape]	
s4	240	#4	3'-3"	[Shape]	
u1	16	#6	10'-11"	[Shape]	
u2	48	#5	9'-7"	[Shape]	
v3	100	#5	13'-3"	[Shape]	
Structure Excavation				Cu. Yd.	52
Concrete Structures				Cu. Yd.	80.6
Reinforcement Bars				Pound	5860
Furnishing Steel Piles, HP 12x53				Foot	400
Driving Piles				Foot	400
Test Pile Steel HP 12x53				Foot	2

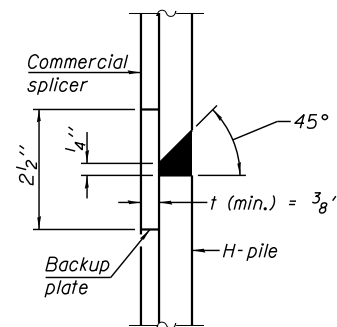


**STEEL PILE TABLE**

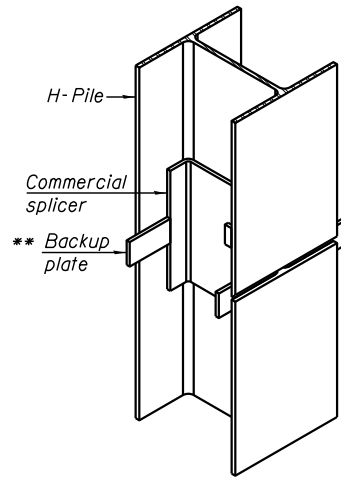
Designation	Depth <i>d</i>	Flange width <i>b<sub>r</sub></i>	Web and Flange thickness <i>t</i>	Encasement diameter <i>A</i>
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	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**

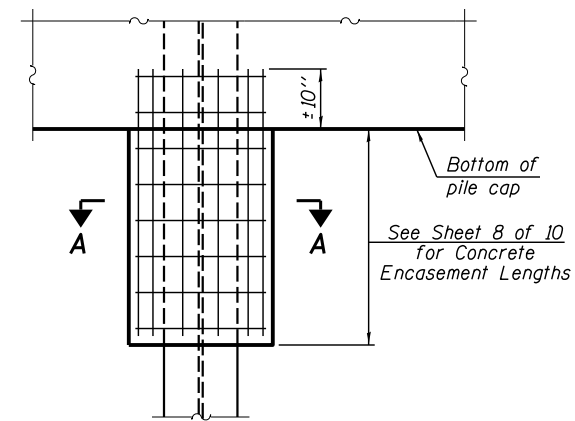


**DETAIL "B"**



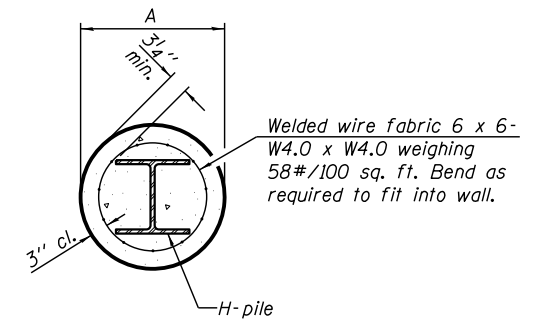
**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**



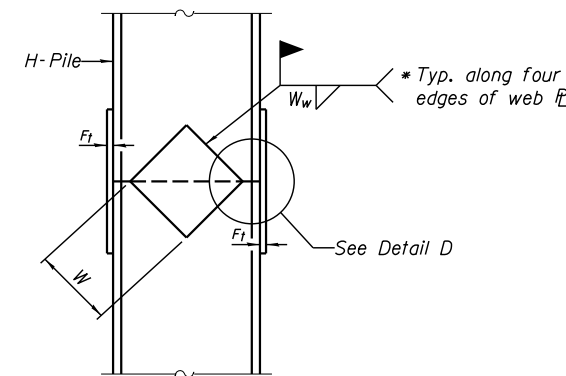
**ELEVATION**

**PILE ENCASEMENT**

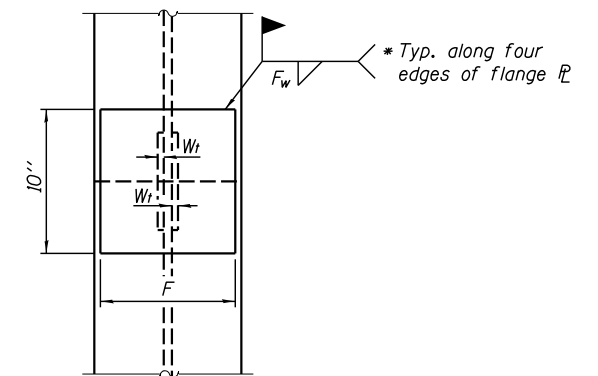


**SECTION A-A**

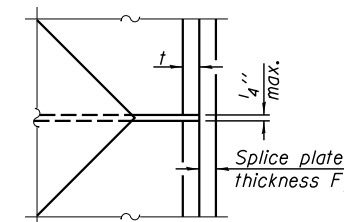
Note:  
Forms for encasement may be omitted when soil conditions permit.



**ELEVATION**



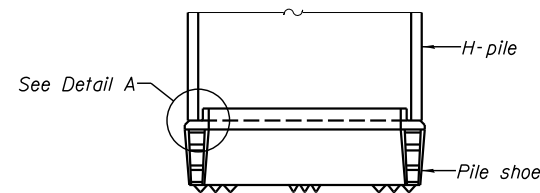
**END VIEW**



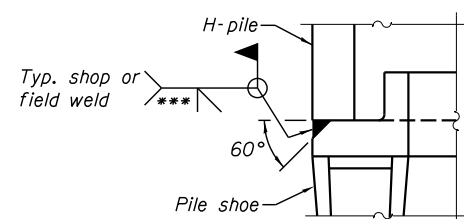
**DETAIL D**

**WELDED PLATE FIELD SPLICE**

Designation	<i>F</i>	<i>F<sub>t</sub></i>	<i>F<sub>w</sub></i>	<i>W</i>	<i>W<sub>t</sub></i>	<i>W<sub>w</sub></i>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 1/2"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/2"	1/2"
x89	12 1/2"	3/4"	1/16"	7 3/4"	5 1/2"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 1/2"	1/2"
HP 12x84	10"	7/8"	1/16"	6 1/2"	5 1/2"	1/2"
x74	10"	7/8"	1/16"	6 1/2"	5 1/2"	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"

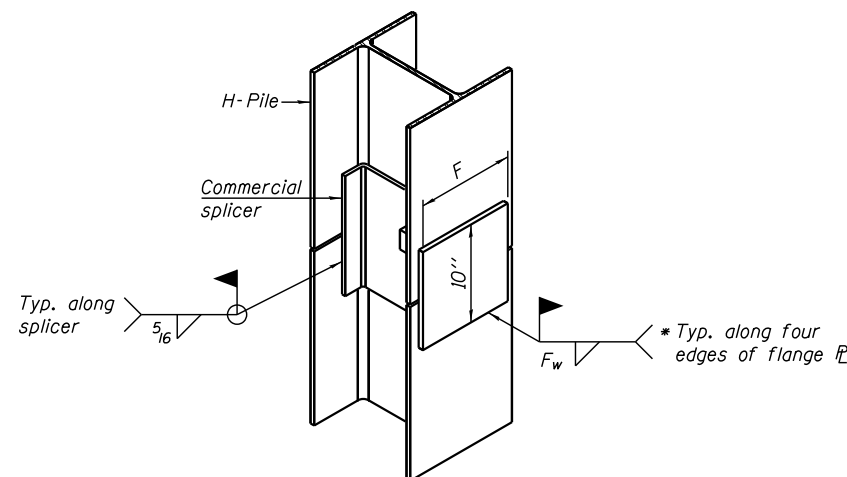


**ELEVATION**



**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.).

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

F-HP 1-27-12

FILE NAME = *FILEL*	USER NAME = *USER*	DESIGNED -	REVISED -	<b>V&amp;K</b>	<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>HP PILE DETAILS</b> STRUCTURE NO. 087-3587			T.R. RTE. 22	SECTION 15-11119-00-BR	COUNTY SHELBY	TOTAL SHEETS 23	SHEET NO. 14	
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		DATE -	REVISED -											

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
 ORIGINAL SURVEY PLOTTED \_\_\_\_\_  
 SURVEYED PLOTTED \_\_\_\_\_  
 NOTE BOOK TEMPLATE \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

DATE \_\_\_\_\_  
 BY \_\_\_\_\_  
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 SURVEYED PLOTTED \_\_\_\_\_  
 NOTE BOOK TEMPLATE \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_

**TRANSITION FROM 3:1 AT STA. 9+50  
 TO 2:1 AT STA. 10+00 RT.**

**9 + 50.00**

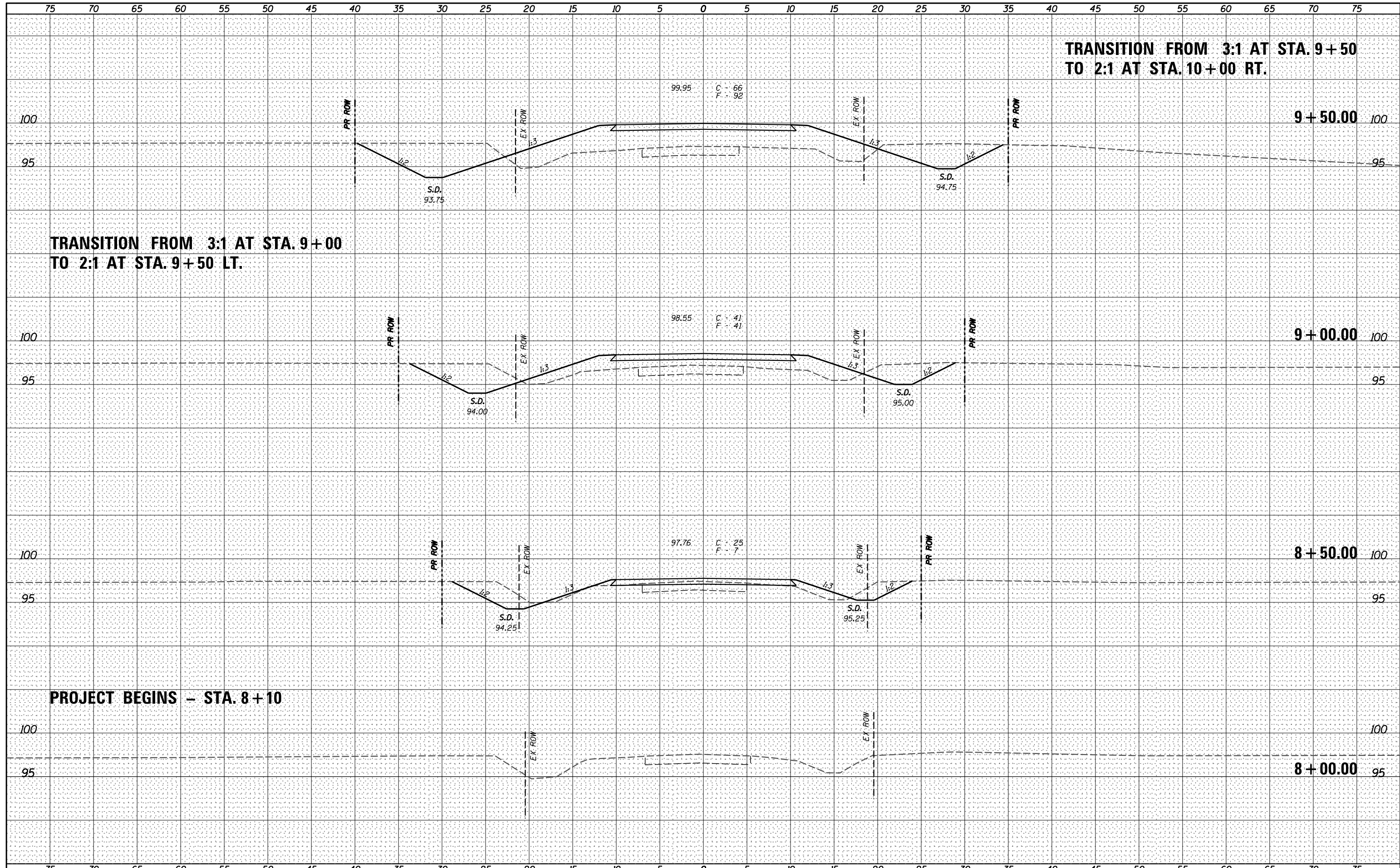
**TRANSITION FROM 3:1 AT STA. 9+00  
 TO 2:1 AT STA. 9+50 LT.**

**9 + 00.00**

**8 + 50.00**

**PROJECT BEGINS - STA. 8+10**

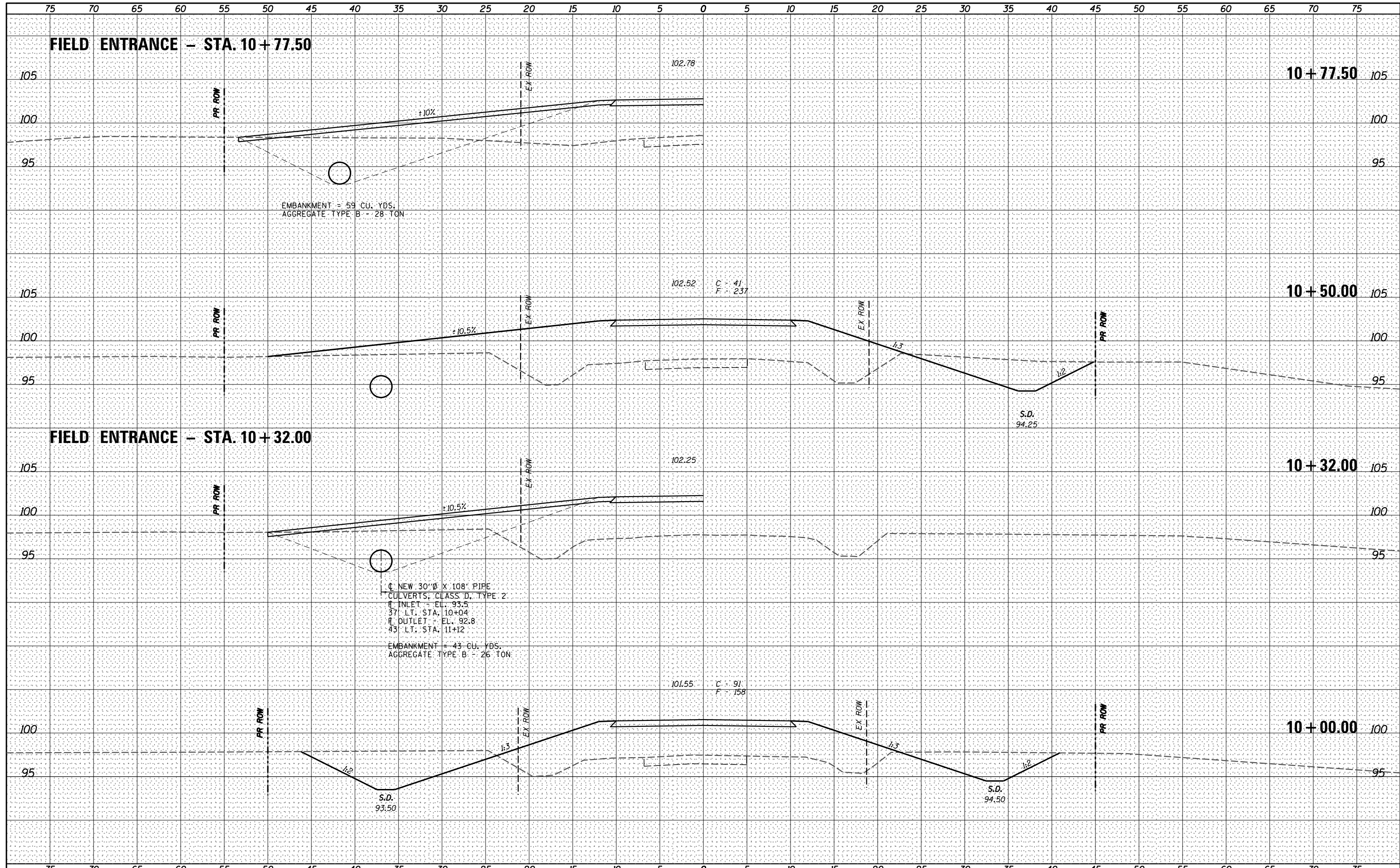
**8 + 00.00**



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*FILEL*	PLOT SCALE = *SCALE*	CHECKED -	REVISED -				SCALE: 1" = 5'	SHEET NO. 1 OF 5 SHEETS	STA. 8+00.00	TO STA. 9+50.00	CONTRACT NO. 95823
	PLOT DATE = *DATE*	DATE -	REVISED -				FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	
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SURVEYED	
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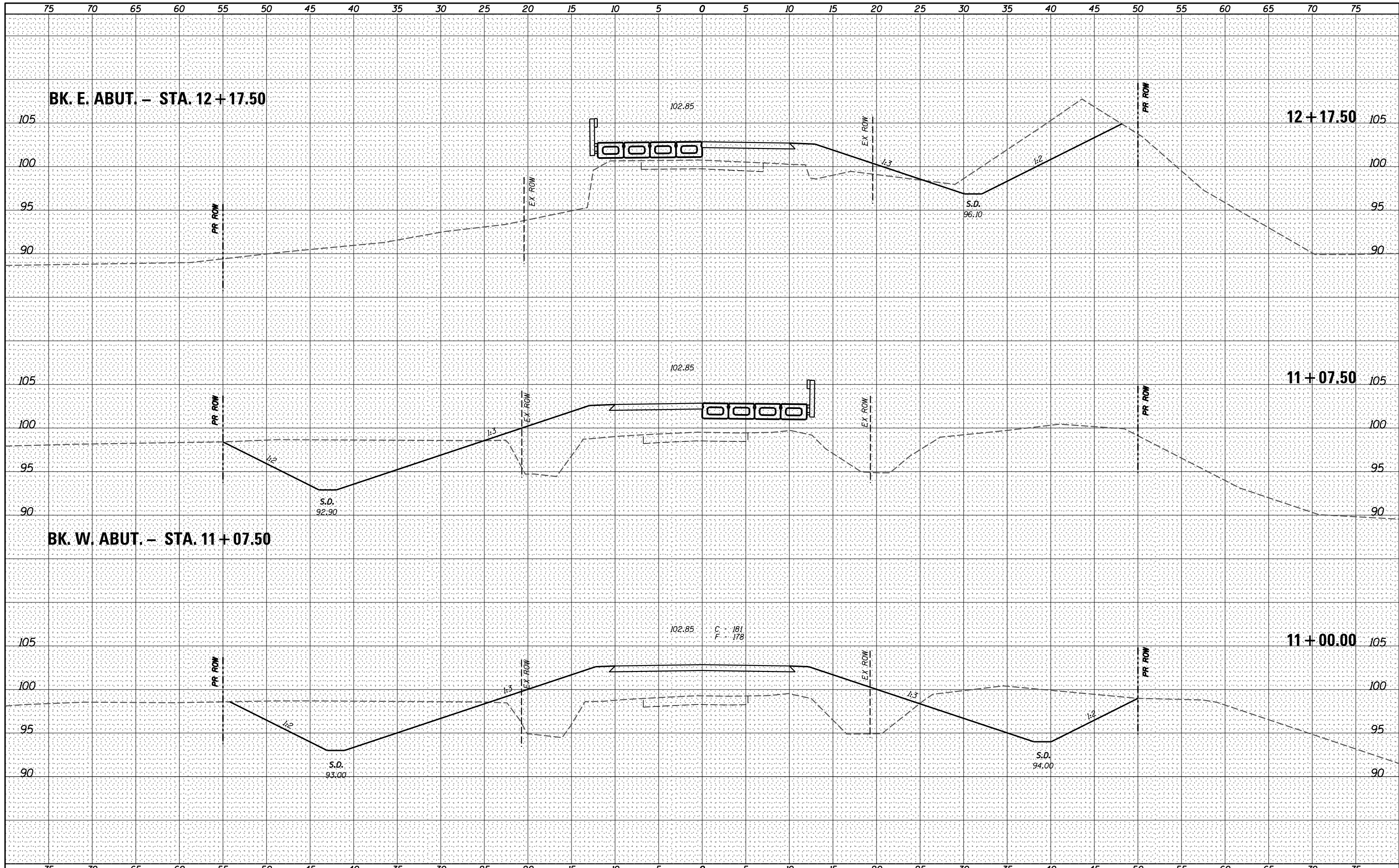


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		DATE -	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



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SURVEYED PLOTTED
NOTE BOOK AREAS CHECKED
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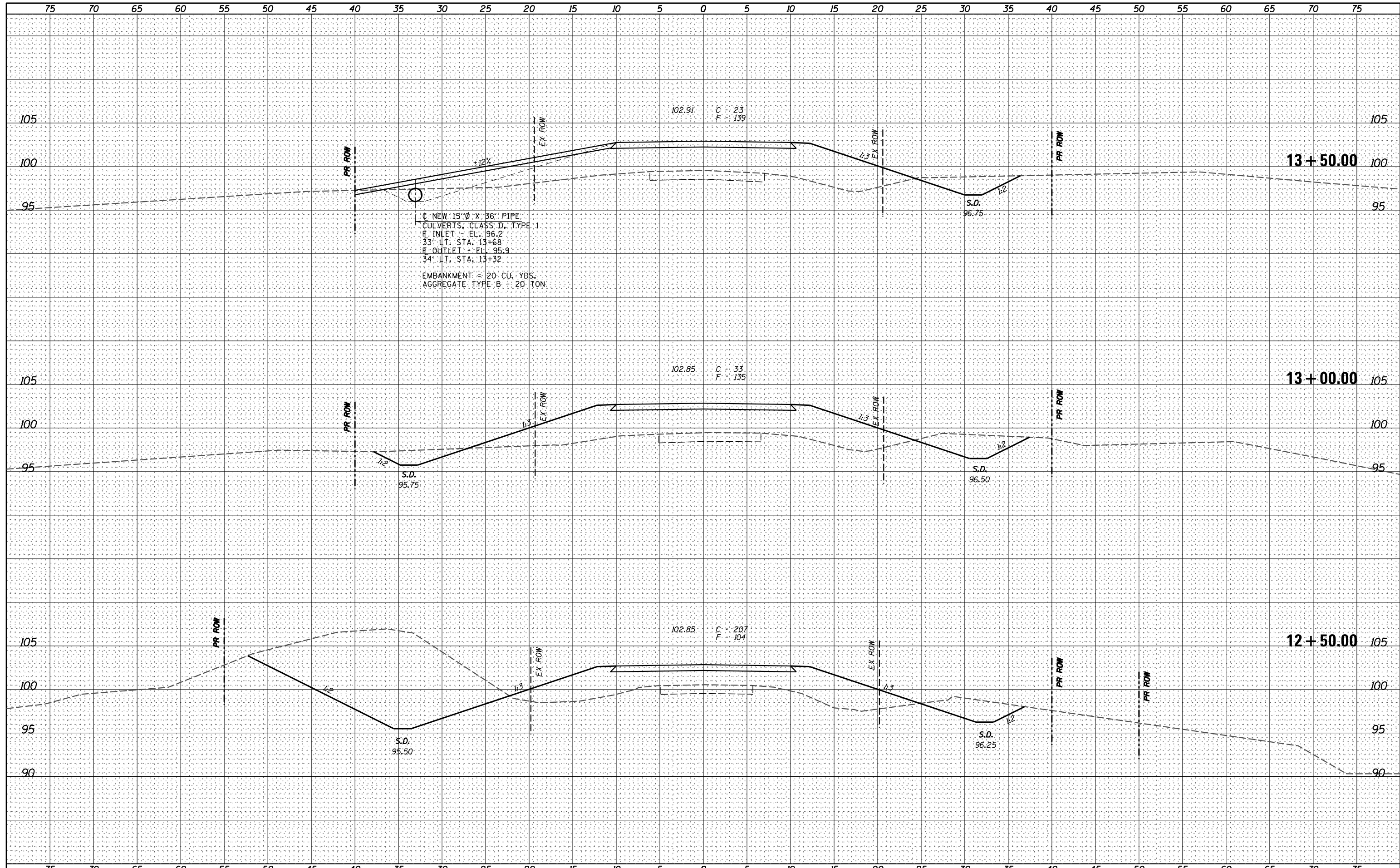
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NOTE BOOK AREAS CHECKED
TEMPLATE AREAS CHECKED



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	PLOT DATE = *DATE*	CHECKED -	REVISD -										
		DATE -	REVISD -										

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 BY \_\_\_\_\_  
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 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
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 TEMPLATE \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 AREAS CHECKED \_\_\_\_\_  
 NO. \_\_\_\_\_



NEW 15'0" X 36" PIPE  
 CULVERTS, CLASS D, TYPE 1  
 INLET - EL. 96.2  
 33' LT. STA. 13+68  
 OUTLET - EL. 95.9  
 34' LT. STA. 13+32  
 EMBANKMENT = 20 CU. YDS.  
 AGGREGATE TYPE B = 20 TON

FILE NAME = \_\_\_\_\_  
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USER NAME = \*USER\*  
 PLOT SCALE = \*SCALE\*  
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DRAWN -	REVISD -
CHECKED -	REVISD -
DATE -	REVISD -



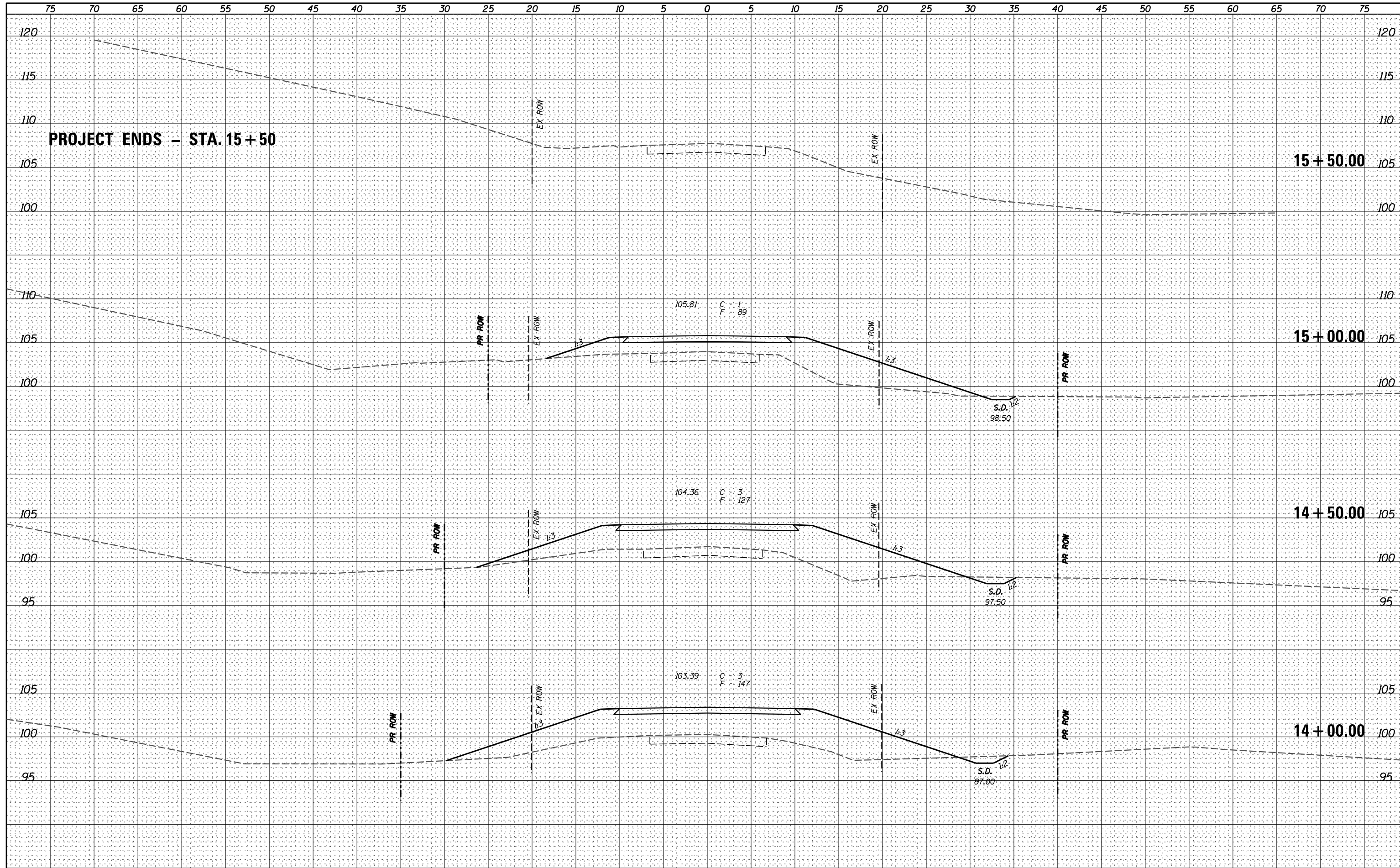
**Veenstra & Kimm, Inc.**  
 Springfield, IL. Phone: (217)544-8033  
 IL. Design Firm No. 184-001939

**CROSS SECTIONS**  
 (TR 22)  
 SCALE: 1" = 5'  
 SHEET NO. 4 OF 5 SHEETS  
 STA. 12+50.00 TO STA. 13+50.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15-11119-00-BR	SHELBY	23	18
CONTRACT NO. 95823				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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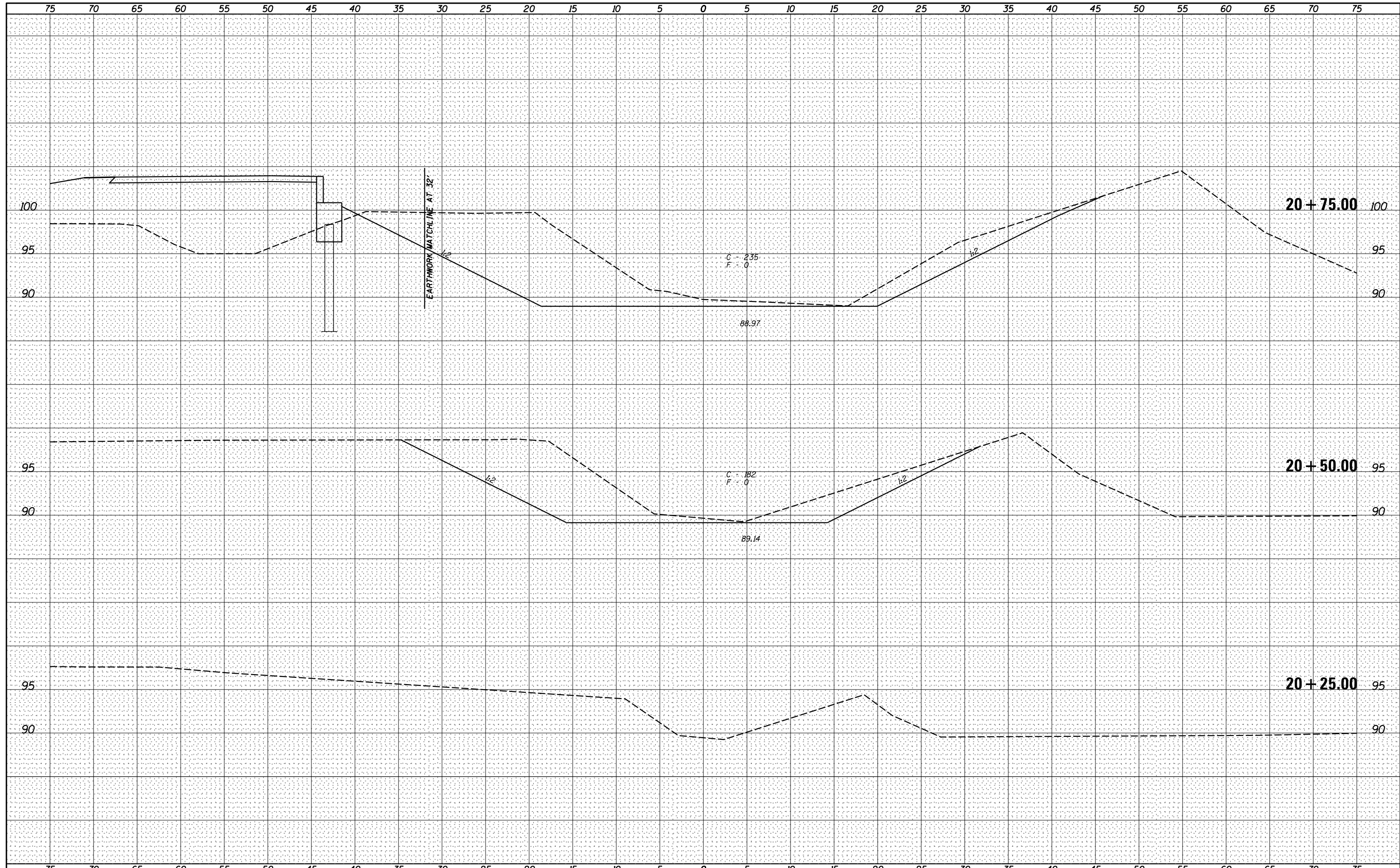
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FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>CROSS SECTIONS</b> (TR 22)	T.R. 22	SECTION 15-11119-00-BR	COUNTY SHELBY	TOTAL SHEETS 23	SHEET NO. 19		
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PLOT DATE = *DATE*	DATE -	REVISIED -	REVISIED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
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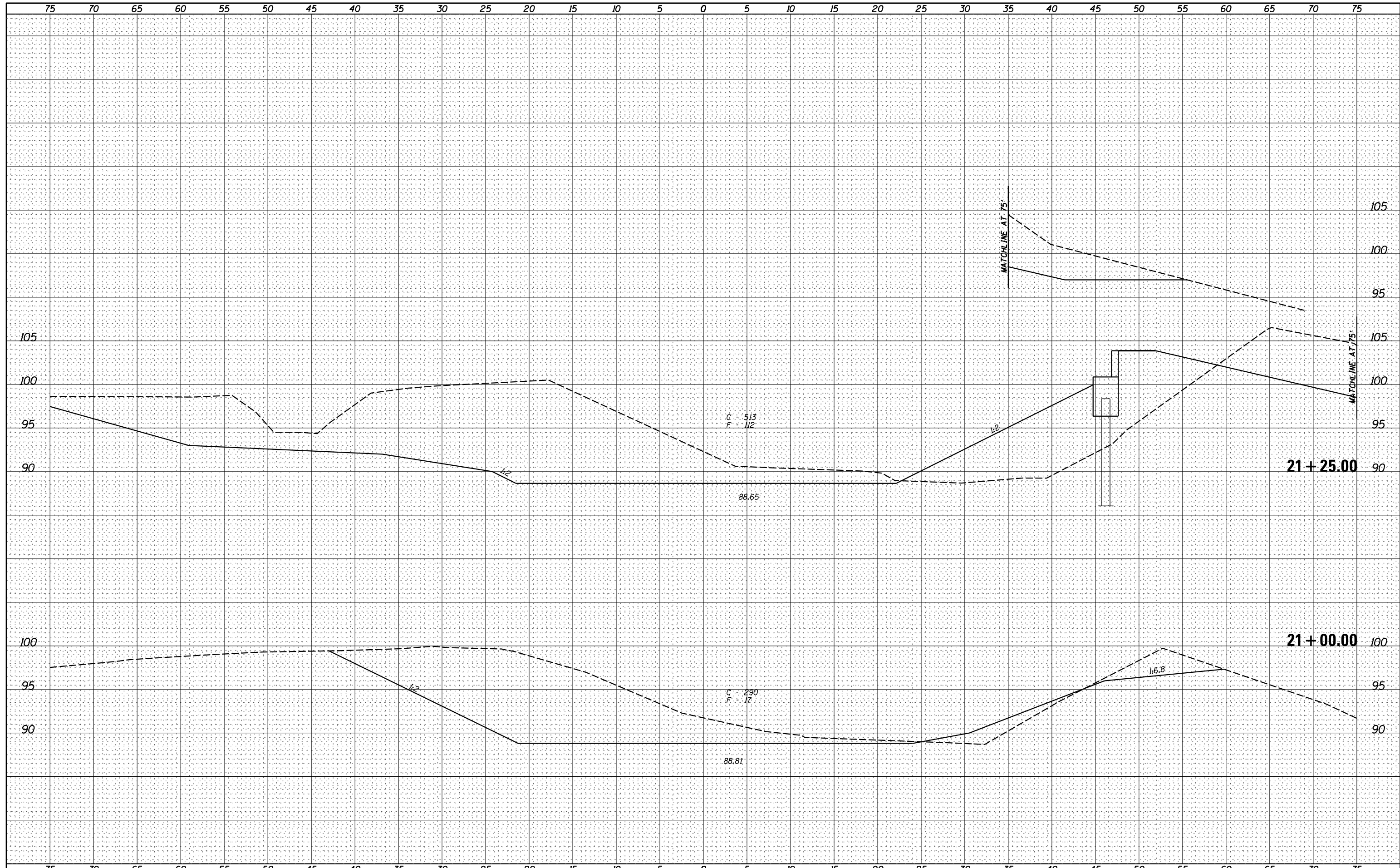
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FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	 <b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>CHANNEL CROSS SECTIONS</b>			T.R. 22	SECTION 15-11119-00-BR	COUNTY SHELBY	TOTAL SHEETS 23	SHEET NO. 20
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	PLOT DATE = *DATE*	DATE -	REVISED -									

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

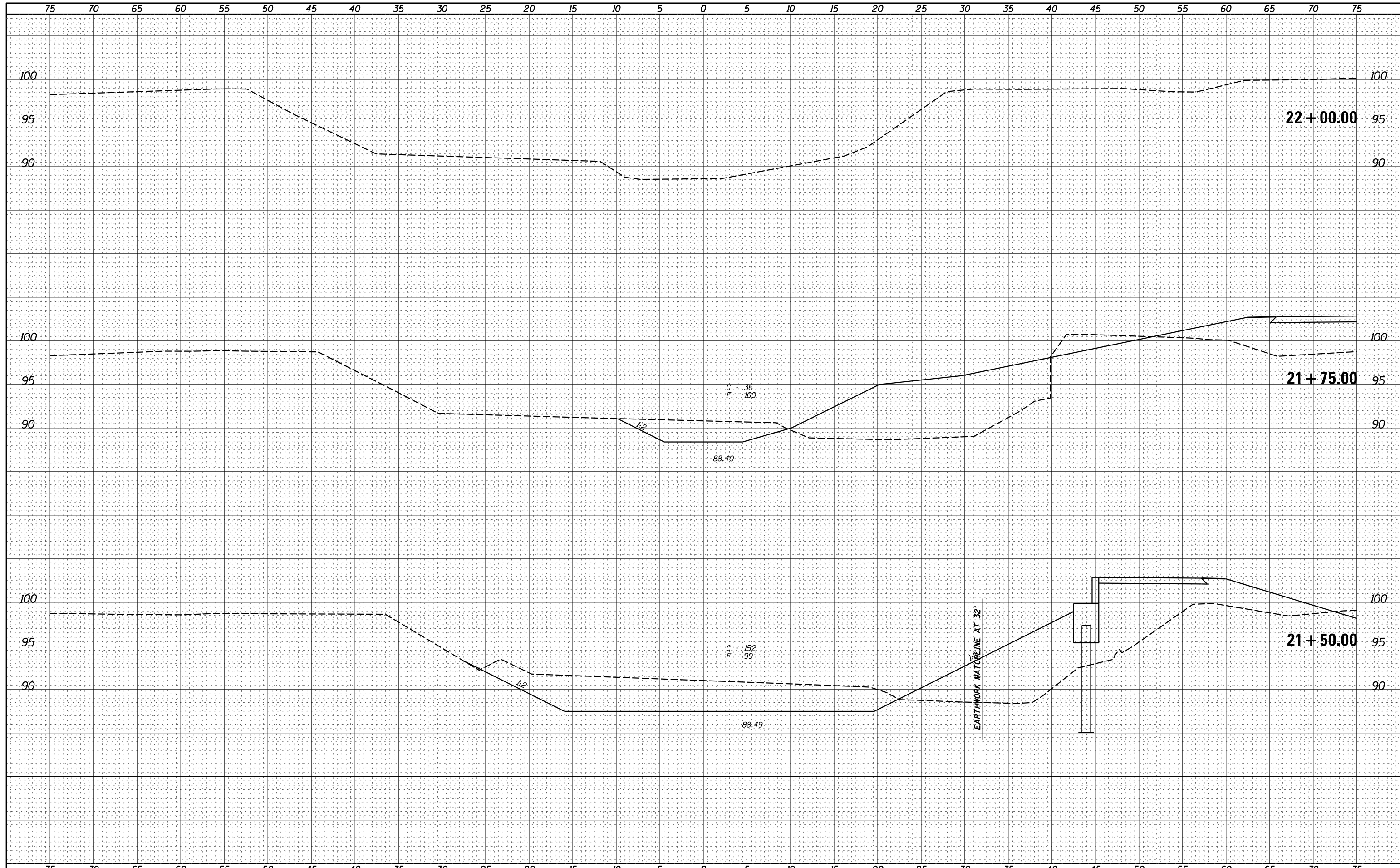
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ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISIED -	 <b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>CHANNEL CROSS SECTIONS</b> SCALE: 1" = 5'    SHEET NO. 2 OF 4 SHEETS    STA. 21+00.00 TO STA. 21+25.00			T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CHECKED -	REVISIED -		<b>CONTRACT NO. 95823</b>							
		DATE -	REVISIED -		FED. ROAD DIST. NO.    ILLINOIS FED. AID PROJECT							

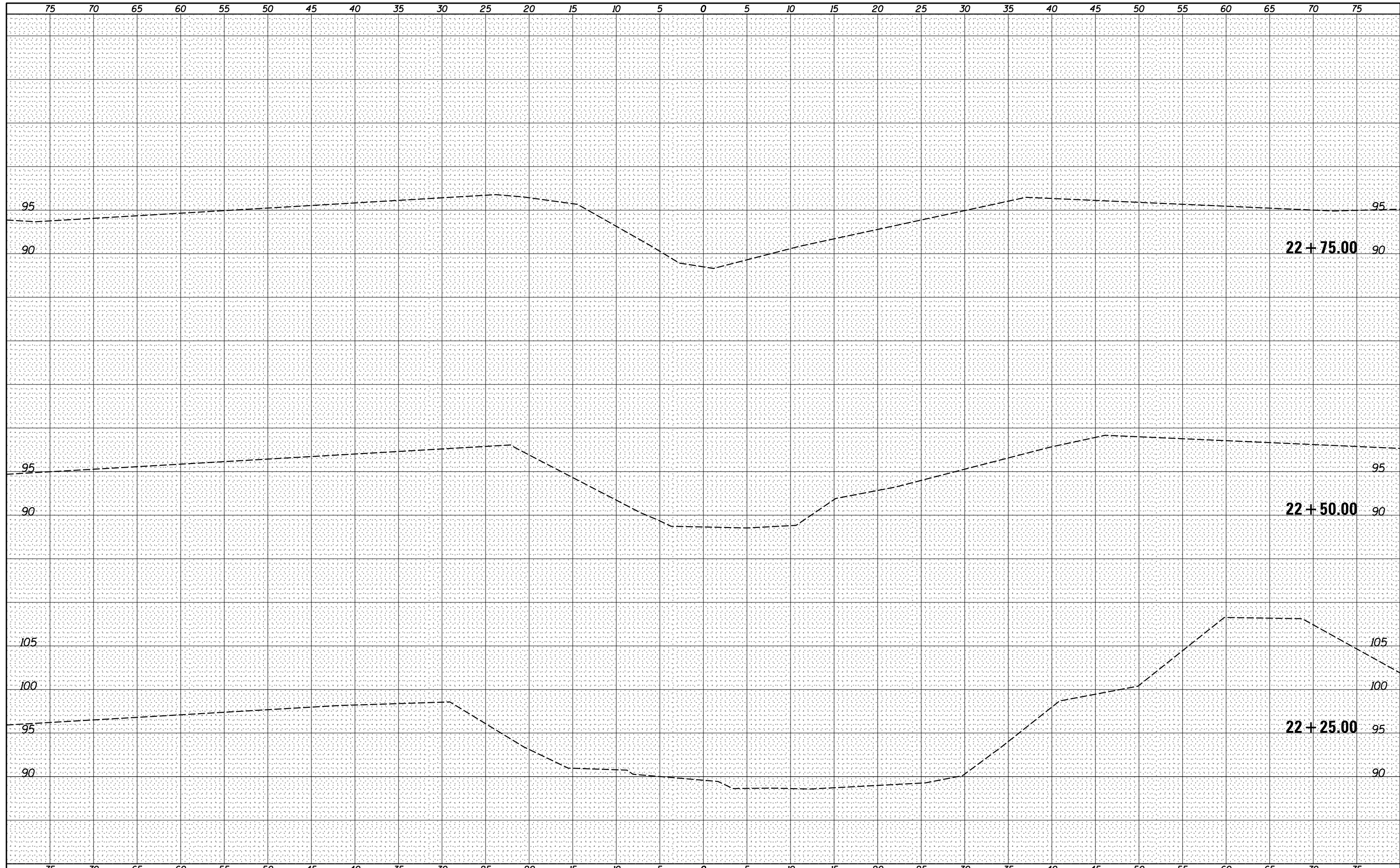
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	<b>Veenstra &amp; Kimm, Inc.</b> Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	<b>CHANNEL CROSS SECTIONS</b> SCALE: 1" = 5'    SHEET NO. 3 OF 4 SHEETS    STA. 21+50.00 TO STA. 22+00.00			T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*FILEL*		DRAWN -	REVISED -					22	15-11119-00-BR	SHELBY	23	22
		CHECKED -	REVISED -		CONTRACT NO. 95823							
		DATE -	REVISED -		FED. ROAD DIST. NO.    ILLINOIS FED. AID PROJECT							

BY	DATE
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED



BY	DATE
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

FILE NAME =  
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USER NAME = \*USER\*  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE = \*DATE\*

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**Veenstra & Kimm, Inc.**  
 Springfield, IL. Phone: (217)544-8033  
 IL. Design Firm No. 184-001939

**CROSS SECTIONS**  
 SCALE: 1" = 5'  
 SHEET NO. 4 OF 4 SHEETS  
 STA. 22+50.00 TO STA. 22+75.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22	15-11119-00-BR	SHELBY	23	23
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 95823	