

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 283A	06-02119-00-BR	SHELBY	22	1
ROAD DIST.		ILLINOIS	BIG SPRING	

CONTRACT NO. 95657

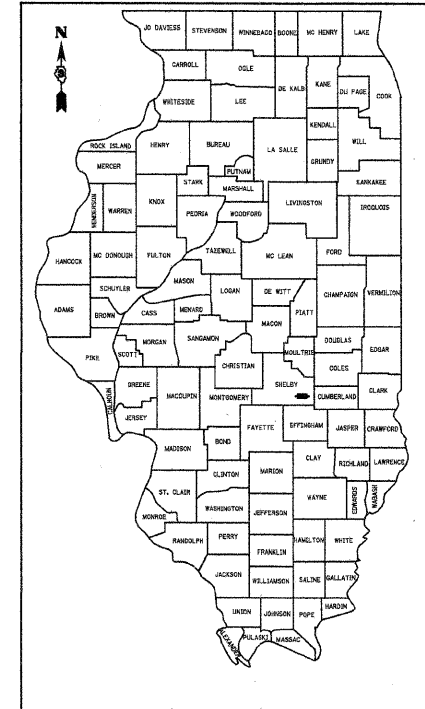
# STATE OF ILLINOIS

## DEPARTMENT OF TRANSPORTATION

### DIVISION OF HIGHWAYS

# PLANS FOR PROPOSED HIGHWAY BRIDGE PROGRAM

**BIG SPRING ROAD DISTRICT**  
**SECTION 06-02119-00-BR**  
**SHELBY COUNTY**  
**PROJECT NO. BROS-173(175)**  
**T.R. 283A**  
**JOB NO.: C-97-063-11**



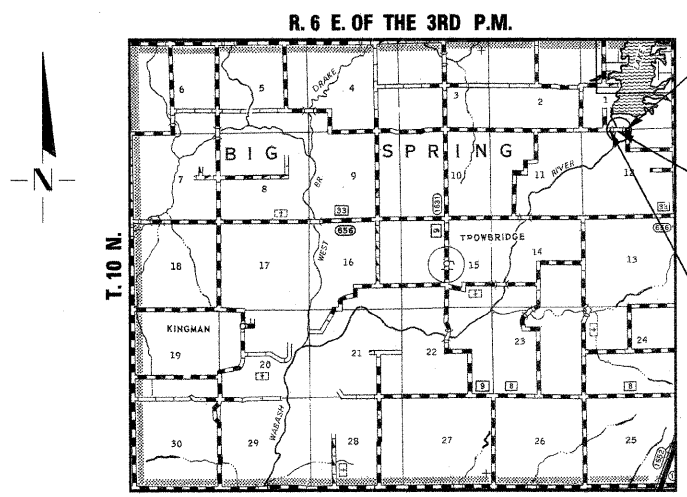
LOCATION OF SECTION INDICATED THUS:   
**CLASSIFICATION: RURAL TWO-LANE LOCAL ROADS**  
**DESIGN VOLUME: UNDER 250 ADT**  
**CURRENT ADT: 187 (2011)**  
**DESIGN SPEED: 30 M.P.H.**

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

PASSED	06 APR 11 20 11
ROAD DISTRICT COMMISSIONER	
PASSED	06 APR 11 20 11
COUNTY ENGINEER	
PASSED	4/21 20 11
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS	
RELEASED FOR BID BASED ON LIMITED REVIEW	4/21 20 11
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER	
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

SHEET NO.	TITLE
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS
3.	PLAN AND PROFILE
4.	SHOULDER AND GUARDRAIL DETAILS
5.-15.	BRIDGE PLANS
16.-21.	STATION CROSS SECTIONS
22.	EROSION CONTROL PLAN

STANDARDS	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
630001-09	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701901-01	TRAFFIC CONTROL DEVICES
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 27-1	TRAFFIC BARRIER TERMINAL, TYPE 5A



**LOCATION PLAN**

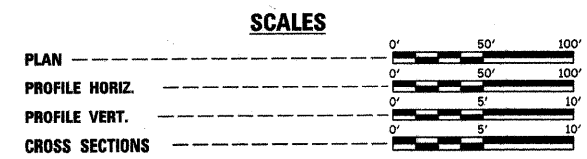
GROSS LENGTH OF SECTION = 833.00 FEET = 0.158 MILES  
NET LENGTH OF SECTION = 833.00 FEET = 0.158 MILES

SCALE IN MILES

**IMPROVEMENT ENDS  
STA. 18 + 58**

**STA. 15 + 00 - SPECIAL BRIDGE DESIGN  
PRECAST PRESTRESSED CONCRETE DECK BEAM  
BRIDGE, THREE SPANS @ 44'-0", 52'-0", 44'-0";  
24'-0" ROADWAY, SKEW = 0°  
EXISTING S.N. 087-3191  
PROPOSED S.N. 087-3560**

**IMPROVEMENT BEGINS  
STA. 10 + 25**



ILLINOIS PROFESSIONAL NO. 43408

EXPIRES 11-30-11

4440 ASH GROVE  
SPRINGFIELD, ILL. 62711  
(217) 793-8600  
www.fehr-graham.com

**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL; MOOREVILLE, IL; ROCKFORD, IL; SPRINGFIELD, IL

**SUMMARY OF QUANTITIES**

CONSTRUCTION TYPE  
CODE 0011

NUMBER	ITEM	UNIT	QUANTITY
* 20100500	TREE REMOVAL, ACRES	ACRE	0.6
20200100	EARTH EXCAVATION	CU YD	1,403
20300100	CHANNEL EXCAVATION	CU YD	450
20400800	FURNISHED EXCAVATION	CU YD	2,076
* 25000200	SEEDING, CLASS 2	ACRE	0.9
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	81
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	81
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	81
* 25100115	MULCH, METHOD 2	ACRE	0.9
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	200
28000305	TEMPORARY DITCH CHECKS	FOOT	128
28000400	PERIMETER EROSION BARRIER	FOOT	311
28000500	INLET AND PIPE PROTECTION	EACH	2
* 28100207	STONE RIPRAP, CLASS A4	TON	237
28200200	FILTER FABRIC	SQ YD	346
* 40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	875
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	92.4
50300280	CONCRETE ENCASMENT	CU YD	4.4
* 50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	3,360
50800105	REINFORCEMENT BARS	POUND	9,020
50900205	STEEL RAILING, TYPE S1	FOOT	281
51201600	FURNISHING STEEL PILES HP12X53	FOOT	518
51500100	NAME PLATES	EACH	1
* 542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	44
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	112
63000003	STEEL PLATE BEAM GUARD RAIL, TYPE A, 9 FOOT POSTS	FOOT	25
63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	2
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
63200310	GUARDRAIL REMOVAL	FOOT	104
67100100	MOBILIZATION	L SUM	1
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
* X2830495	AGGREGATE DITCH (SPECIAL)	TON	315
* X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
* X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1
* Z0065000	SETTING PILES IN ROCK	EACH	18

\*SEE SPECIAL PROVISIONS  
Δ SPECIALTY ITEMS

**GENERAL NOTES**

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL CHECK WITH THE ENGINEER FOR EXACT LENGTH OF PIPE CULVERTS BEFORE ORDERING.

**SEEDING QUANTITIES**

ITEM	RATE OF APPLICATION	QUANTITIES
SEEDING, CLASS 2		0.9 ACRE
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE	81 POUNDS
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE	81 POUNDS
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE	81 POUNDS
MULCH METHOD 2	2 TON / ACRE	0.9 ACRE

**APPLICATION RATES USED IN QUANTITY CALCULATIONS**

AGGREGATE SURFACE COURSE, TYPE B	2.05 TON/CU YD
AGGREGATE DITCH (SPECIAL)	1.50 TON/CU YD
STONE RIPRAP, CLASS A4	1.65 TON/CU YD

**TREE REMOVAL**

ALL TREES BETWEEN THE LIMITS SHOWN BELOW AND THE ADJACENT SHOWN R.O.W. WHICH INTERFERE WITH THE CONSTRUCTION SHALL BE REMOVED ONLY AS DIRECTED BY THE ENGINEER (SEE SPECIAL PROVISIONS).

25.85' LT. STA. 10+25.00 TO 17.90' LT. STA. 10+95.50  
17.90' LT. STA. 10+95.50 TO 16.45' LT. STA. 12+44.00  
16.45' LT. STA. 12+44.00 TO 22.75' LT. STA. 14+43.00  
22.75' LT. STA. 14+43.00 TO 35.00' LT. STA. 14+70.00

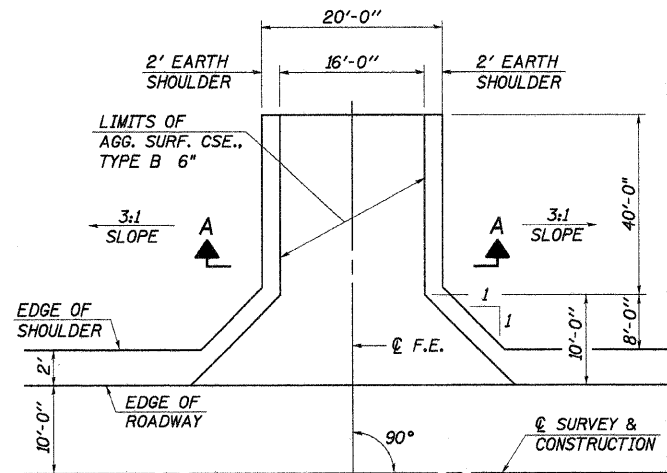
50.00' RT. STA. 13+88.00 TO 17.70' RT. STA. 14+04.00  
17.70' RT. STA. 14+04.00 TO 16.10' RT. STA. 14+60.00  
16.10' RT. STA. 14+60.00 TO 35.00' RT. STA. 14+57.00

32.65' LT. STA. 15+43.00 TO 32.65' LT. STA. 15+62.00  
32.65' LT. STA. 15+62.00 TO 38.55' LT. STA. 15+75.00  
38.55' LT. STA. 15+75.00 TO 57.40' LT. STA. 15+85.50  
57.40' LT. STA. 15+85.50 TO 35.00' LT. STA. 16+32.00  
35.00' LT. STA. 16+32.00 TO 35.00' LT. STA. 16+65.00

35.00' LT. STA. 16+65.00 TO 26.50' LT. STA. 17+05.00  
26.50' LT. STA. 17+05.00 TO 26.45' LT. STA. 17+46.00  
26.45' LT. STA. 17+46.00 TO 21.30' LT. STA. 17+85.00  
21.30' LT. STA. 17+85.00 TO 17.20' LT. STA. 18+58.00

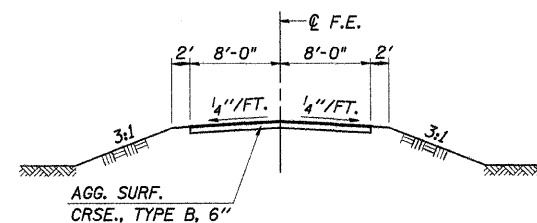
35.00' RT. STA. 15+51.00 TO 12.00' RT. STA. 15+69.00  
12.00' RT. STA. 15+69.00 TO 17.30' RT. STA. 16+00.00  
17.30' RT. STA. 16+00.00 TO 16.00' RT. STA. 16+59.00  
16.00' RT. STA. 16+59.00 TO 12.10' RT. STA. 16+99.00  
12.10' RT. STA. 16+99.00 TO 12.80' RT. STA. 17+94.00  
12.80' RT. STA. 17+94.00 TO 18.75' RT. STA. 18+58.00

TREE REMOVAL, ACRES = 0.6 ACRE

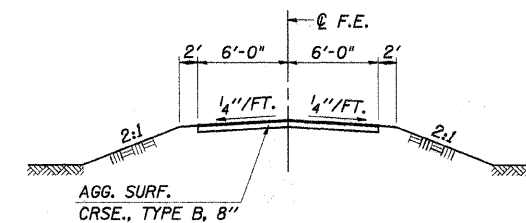


**FIELD ENTRANCE DETAIL**

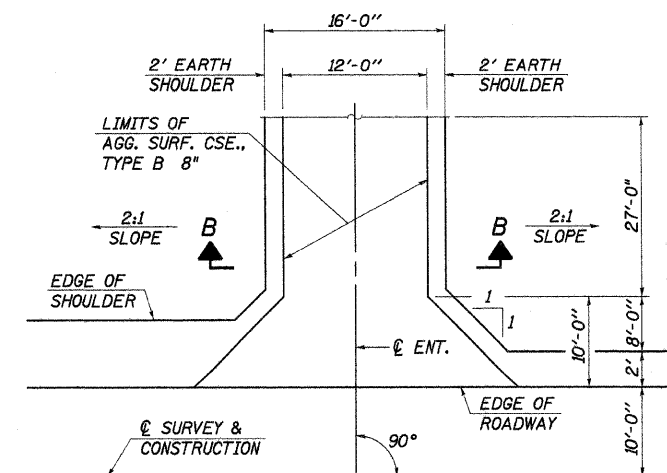
RT. STA. 13+25



**SECTION A-A**



**SECTION B-B**



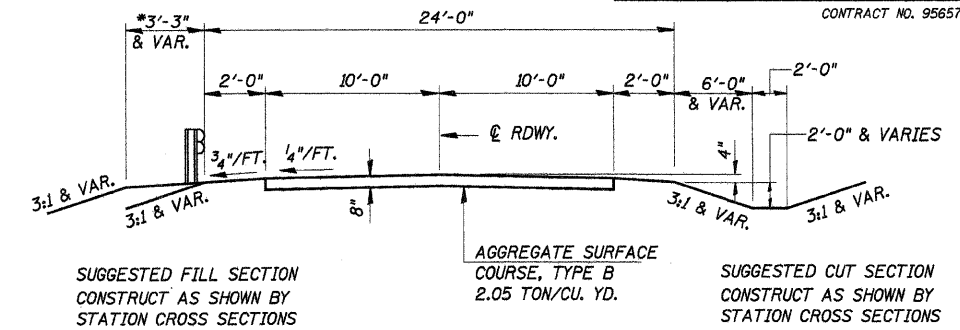
**PARKING LOT ENTRANCE DETAIL**

LT. STA. 16+60

**EARTHWORK TABLE**

LOCATION	EARTH EXCAVATION	EARTH EX. AFTER SHRINKAGE	SUITABLE CHANNEL EXCAVATION	CHAN. EX. AFTER SHRINKAGE	EMBANKMENT (FOR INFO. ONLY)	BALANCE WASTE (+) FURNISHED (-)
STA. 10+25.00 TO STA. 14+29.12	244	183			1,767	-1,584
STA. 15+70.88 TO STA. 18+50.00	1,159	869			1,458	-589
F.E. RT. STA. 13+25.00					107	-107
CHANNEL EXCAVATION			272	204		204
<b>TOTAL</b>	<b>1,403</b>		<b>272</b>		<b>3,332</b>	<b>-2076</b>

\*SEE SHEET 4 AND STD. 630301 FOR SHOULDER AND GUARDRAIL DETAILS

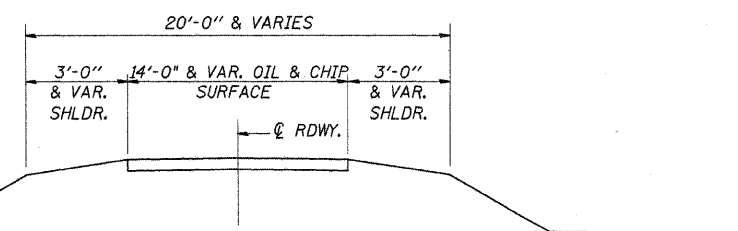


**TYPICAL PROPOSED CROSS SECTION**

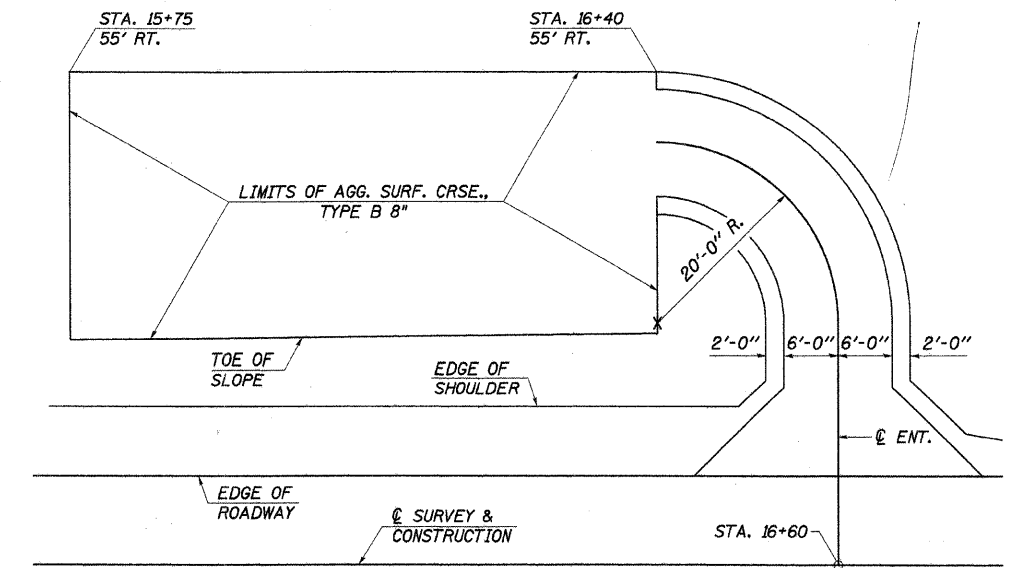
STA. 10+75 TO STA. 18+00

ROAD CLASSIFICATION: LOCAL ROAD (NON-URBAN) ADT 0-250  
CURRENT ADT 187 (2011)

TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 10+25 TO STA. 10+75 AND FROM STA. 18+00 TO STA. 18+58.



**EXISTING TYPICAL CROSS SECTION**



**PARKING LOT DETAIL**

CONSTRUCT AS SHOWN BY STATION CROSS SECTIONS.

**SUMMARY OF QUANTITIES, GENERAL NOTES AND TYPICAL CROSS SECTION**

SECTION 06-02119-00-BR  
BIG SPRING ROAD DISTRICT  
SHELBY COUNTY  
STA. 15+00

4440 ASH GROVE  
SPRINGFIELD, IL 62711  
(217) 793-8600  
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**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
P.O. BOX 1111, HOUSTON, TX 77258-1111

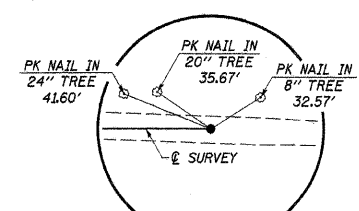
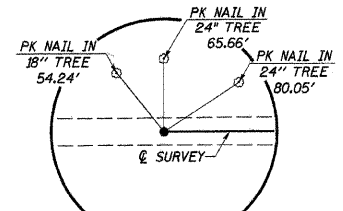
DRAWN: S.A.P.  
DATE: 02/23/07

CHECKED: G.J.C.  
DATE: 03/16/07

JOB NO.: 46863  
FILE: 0504SUMTYP.DGN  
DATE: 04/04/11

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	3
STA. 10+00 TO STA. 18+71.72		BIG SPRING		
ROAD DIST.		ILLINOIS		
CONTRACT NO. 95657				

SW 1/4, SEC. 1, T. 10 N., R. 6 E., 3RD P.M.  
CITY OF MATTOON



**ENTRANCES TO BE BUILT**  
RT. STA. 13+25, F.E. -15.0%, 20' ROADBED  
LT. STA. 16+60, -15.0%, 16' ROADBED  
QUANTITIES INCLUDED IN THOSE LISTED

**ENTRANCES TO BE REMOVED**  
LT STA. 14+05, F.E. 10' ROADBED

P.O.T. STA. 10+00  
R.R. SPIKE (FLUSH)

P.O.T. STA. 18+71.72  
#5 REBAR (FLUSH)

IRON PIN (FOUND)  
NW CORNER, SECTION 12

IRON PIN W/ CAP #3118 (FOUND)  
N 1/4 CORNER, SECTION 12

IMPROVEMENT BEGINS  
STA. 10+25

IMPROVEMENT ENDS  
STA. 18+58

**CHANNEL EXCAVATION**

THE CHANNEL SHALL BE EXCAVATED AS SHOWN WITHIN THE LIMITS OF THE PROPOSED STRUCTURE THEN TAPER TO THE EXISTING CHANNEL AT THE R.O.W. LINES. SUITABLE EXCAVATED MATERIAL TO BE USED IN THE EMBANKMENT AS DIRECTED BY THE ENGINEER.

CHANNEL EXCAVATION = 450 CU. YD.

NOTE: SEE SHEET 18 FOR EROSION CONTROL PLAN.

INDICATES TEMPORARY CONSTRUCTION EASEMENT TO BE ACQUIRED.

PIPE CULVERT, CLASS D  
TYPE 1 24" 112' LONG  
DS. 39' LT. STA. 15+65  
ELEV. 188.99  
US. 39' LT. STA. 16+77  
ELEV. 190.39

GUARDRAIL REMOVAL  
= 104 FOOT

STA. 15+00 - SPECIAL BRIDGE DESIGN  
PRECAST PRESTRESSED CONCRETE  
DECK BEAM BRIDGE, THREE SPANS @  
44'-0", 52'-0", 44'-0", 24'-0" ROADWAY; 0° SKEW  
PROPOSED S.N. 087-3560

**UTILITIES**

**GAS LINE**  
AMEREN CIPS  
CURT FISHER  
(217)-234-0429

**TELEPHONE**  
FRONTIER COMMUNICATIONS  
GREG CURTIS  
(217)-892-3359

**OVERHEAD POWER**  
SHELBY ELECTRIC CO-OP  
JIM MATLOCK  
(217)-774-3986

**EXISTING STRUCTURE NO. 087-3191**

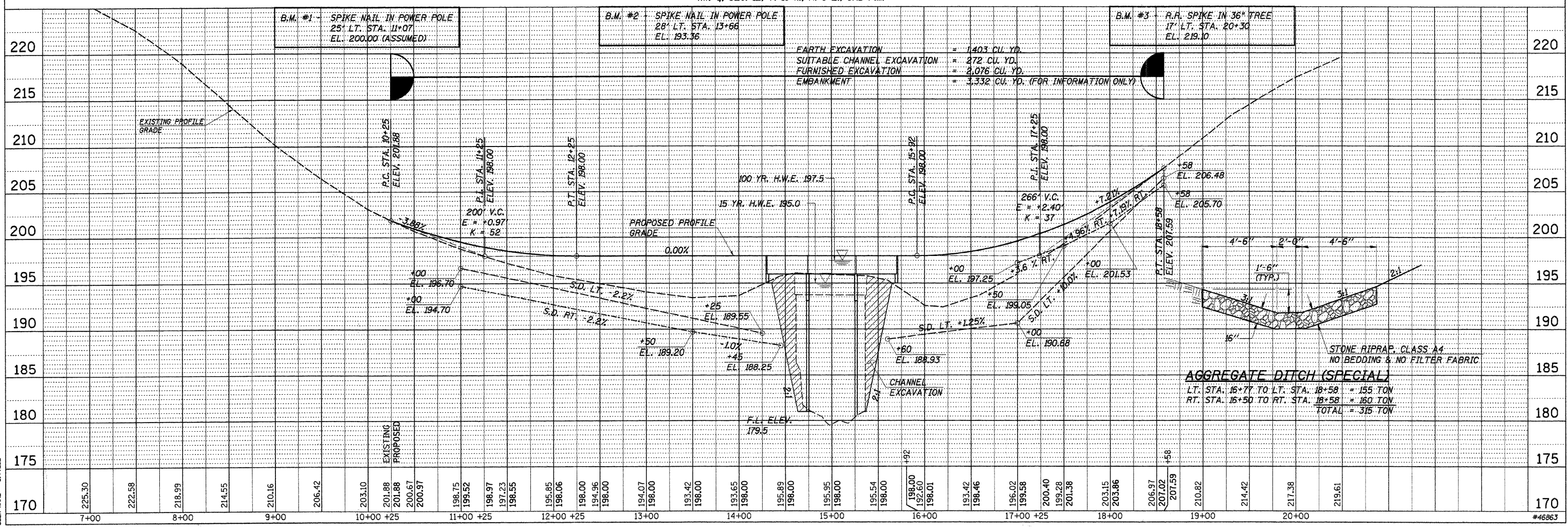
TWO SPAN STEEL STRINGER BRIDGE WITH TIMBER DECK ON CLOSED TIMBER ABUTMENTS AND TIMBER PILE BENT PIERS. BK.-BK. 77'-6", 0.-0. 21'-6", 0° SKEW.

REMOVAL OF EXISTING STRUCTURES = 1 EACH

GARY & LUANN HARTKE  
NW 1/4, SEC. 12, T. 10 N., R. 6 E., 3RD P.M.

PLAN
SURVEYED
PLOTTED
CHECKED
DATE
BY
NOTE BOOK NO.
PAID FILE NAME

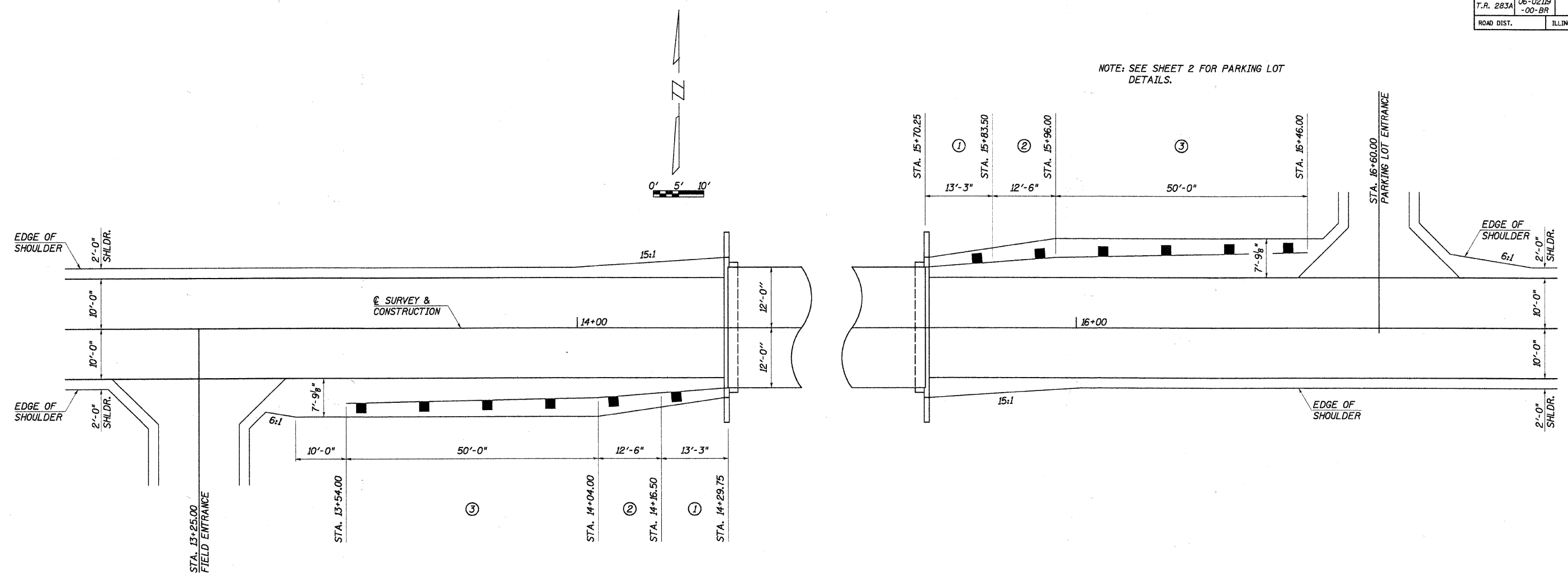
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BY
NOTE BOOK NO.
STRUCTURE NOTATIONS DRWD
USER NAME = S. PRICE



PLT DATE = 1/28/07  
FILE NAME = 46863a-03.dgn  
USER NAME = S. PRICE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 283A	06-02119-00-BR	SHELBY	22	4
ROAD DIST.	ILLINOIS		BIG SPRING	
CONTRACT NO. 95657				

NOTE: SEE SHEET 2 FOR PARKING LOT DETAILS.



SHOULDER AND GUARDRAIL DETAIL

TRAFFIC BARRIER TERMINAL, TYPE 5A  
 13.03' RT. STA. 14+16.50 TO 12' RT. STA. 14+29.75 = 1 EACH  
 12' LT. STA. 15+70.25 TO 13.03' LT. STA. 15+83.50 = 1 EACH  
 TOTAL = 2 EACH

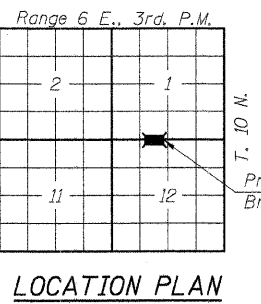
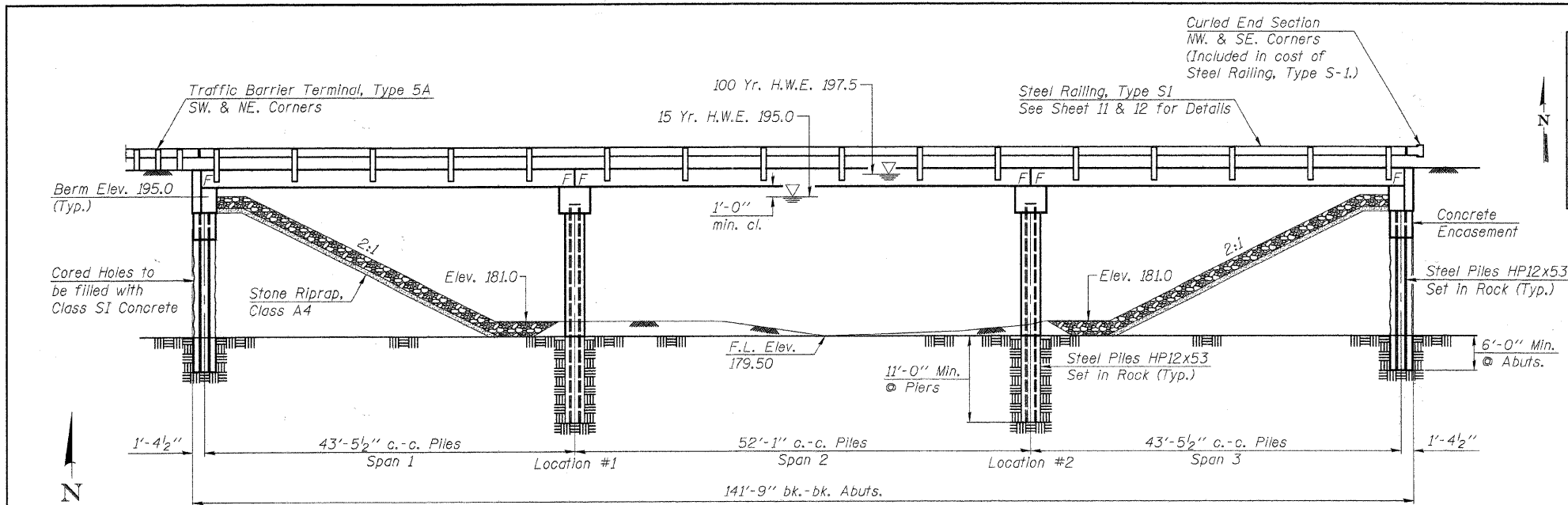
STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS  
 14' RT. STA. 14+04.00 TO 13.03' RT. STA. 14+16.50 = 12.5 FOOT  
 13.03' LT. STA. 15+83.50 TO 14' LT. STA. 15+96.00 = 12.5 FOOT  
 TOTAL = 25.0 FOOT

TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT  
 15' RT. STA. 13+54.00 TO 14' RT. STA. 14+04.00 = 1 EACH  
 14' LT. STA. 15+96.00 TO 15' LT. STA. 16+46.00 = 1 EACH  
 TOTAL = 2 EACH

- LEGEND**
- NOTE: ALL DIMENSIONS REFER TO FRONT FACE OF PROPOSED RAILING.
- ① TRAFFIC BARRIER TERMINAL, TYPE 5A
  - ② STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS
  - ③ TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) TANGENT

**SHOULDER AND GUARDRAIL DETAILS**  
 SECTION 06-02119-00-BR  
 BIG SPRING ROAD DISTRICT  
 SHELBY COUNTY  
 STA. 15+00

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	<b>FEHR-GRAHAM &amp; ASSOCIATES, LLC</b> ENGINEERING AND SCIENCE CONSULTANTS SPRINGFIELD, IL ROCHESTER, N.Y. ROCKFORD, IL MONROE, LA SPRINGFIELD, IL	DRAWN: S.A.P. DATE: 02/23/07	CHECKED: G.J.C. DATE: 03/16/07	JOB NO.: 46863 FILE: SHLDR.DGN DATE: 04/04/11
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**GENERAL NOTES**

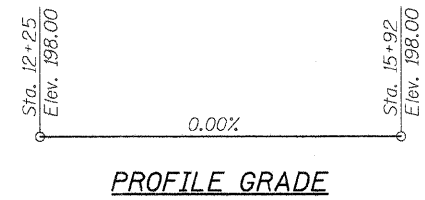
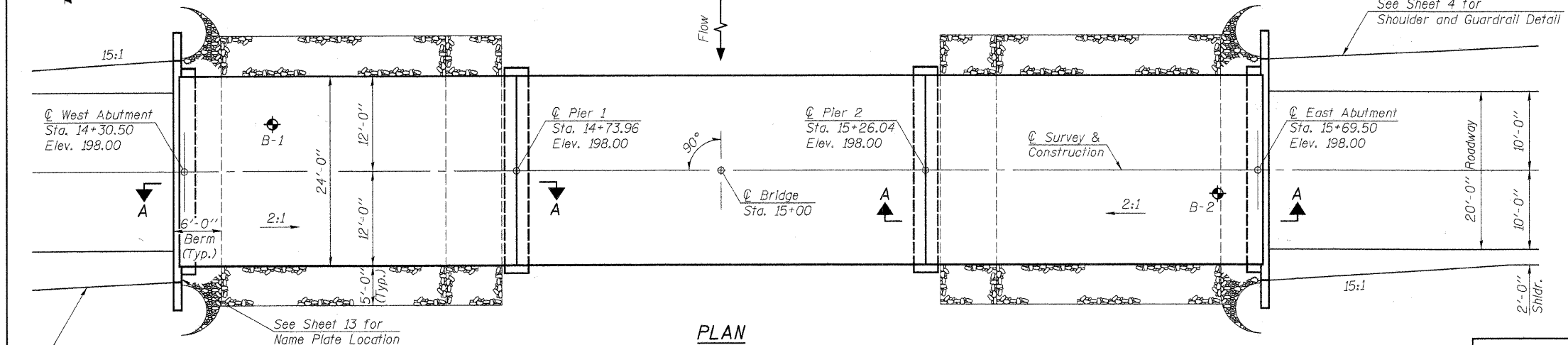
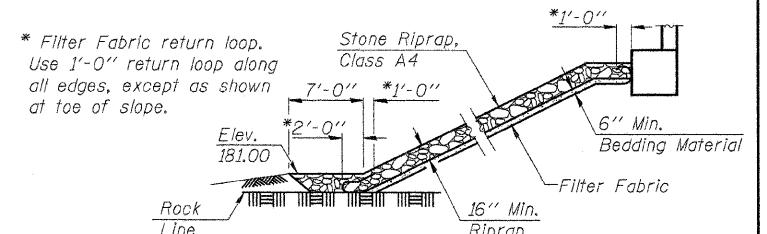
See Proposal Booklet for Boring data.

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60.

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

Structure Excavation will not be measured for payment but shall be included in the unit price bid for "Concrete Structures" or "Concrete Encasement."

All exposed portions of the abutments, wing walls, and piers shall receive a rubbed-finish in accordance with Article 503.15(b) of the Standard Specifications. Cost to be included in the cost of Concrete Structures.



**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
Design Spectral Acceleration at 1.0 sec. (S<sub>D1</sub>) = 0.134g  
Design Spectral Acceleration at 0.2 sec. (S<sub>D5</sub>) = 0.306g  
Soil Site Class = C

The requirements of the I.D.N.R. - Division of Water Resources have been fulfilled in accordance with Statewide Permit No. 2

**WATERWAY INFORMATION**

Drainage Area	57.55 Sq. Mi.
Existing Opening (15 Yr.)	1,008 Sq. Ft. (Bridge)
	322 Sq. Ft. (Roadway)
Required Opening (15 Yr.)	1,400 Sq. Ft.
Proposed Opening (15 Yr.)	1,400 Sq. Ft.
Design Discharge (15 Yr.)	6,953 C.F.S.
Created Head (15 Yr.)	0.5 Ft.
100 Year Discharge	11,022 C.F.S.
100 Yr. Created Head	1.0 Ft.
100 Yr. H.W.E.	197.5 Ft.

**DESIGN STRESSES**

f<sub>c</sub> = 6,000 p.s.i. (Prestressed Beams)  
f<sub>ci</sub> = 5,000 p.s.i. (Prestressed Beams)  
f<sub>s</sub> = 270,000 p.s.i. (Prestressed Strands)  
f<sub>si</sub> = 201,960 p.s.i. (Prestressed Strands)  
f<sub>c</sub> = 3,500 p.s.i. (Concrete -- Field Units)  
f<sub>y</sub> = 60,000 p.s.i. (Reinf. Bars)  
n = 8.5 (Concrete)  
LOADING HL-93  
Design Specifications: 2010 AASHTO LRFD & Interlms  
25#/Sq. Ft. included in dead load for future wearing surface.

"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".

John A. Morris  
ILLINOIS STRUCTURAL NO. 4277 (Expires 11/30/12)



**LITTLE WABASH RIVER  
BUILT 20\_\_ BY  
BIG SPRING ROAD DISTRICT  
SHELBY COUNTY  
SEC. 06-02119-00-BR  
F.A. PROJ. BROS-173(175)  
STR. NO. 087-3560 LOADING HL-93**

**LETTERING FOR NAME PLATE**  
See Std. 515001

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	3,360		3,360
Concrete Structures	Cu. Yd.		92.4	92.4
Reinforcement Bars	Pound		9,020	9,020
Steel Railing, Type S1	Foot	281		281
Name Plates	Each		1	1
Furnishing Steel Piles HP12x53	Foot		518	518
Setting Piles in Rock	Each		18	18
Stone Riprap, Class A4	Ton		237	237
Filter Fabric	Sq. Yd.		346	346
Concrete Encasement	Cu. Yd.		4.4	4.4
Underwater Structure Excavation Protection - Location 1	Each		1	1
Underwater Structure Excavation Protection - Location 2	Each		1	1

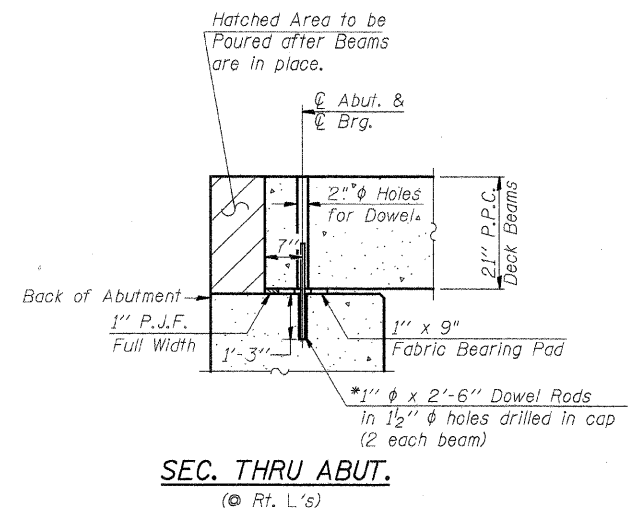
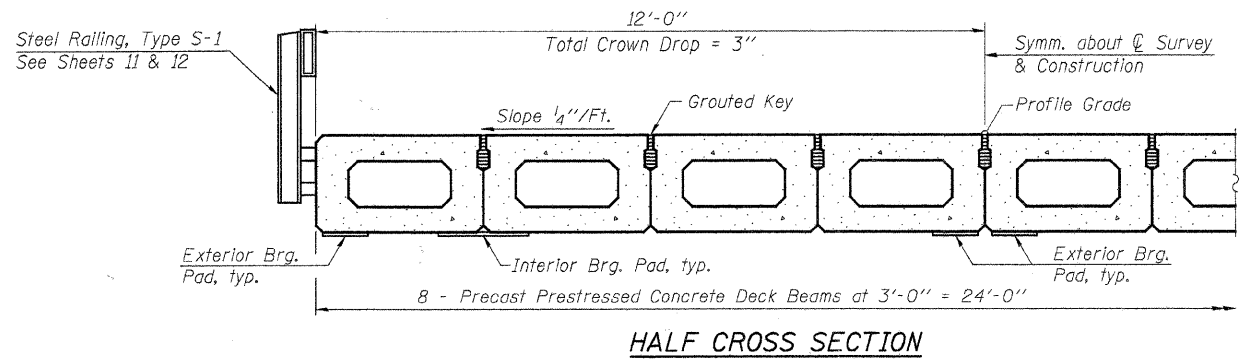
**GENERAL PLAN & ELEVATION  
SECTION 06-02119-00-BR  
SHELBY COUNTY  
STATION 15+00.00  
S.N. 087-3560**

FILE NAME = 46863U.GPE.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
		CHECKED - S.F.M.	REVISED -
	PLOT SCALE =	DRAWN - S.A.P.	REVISED -
	PLOT DATE = 04/24/11	CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -

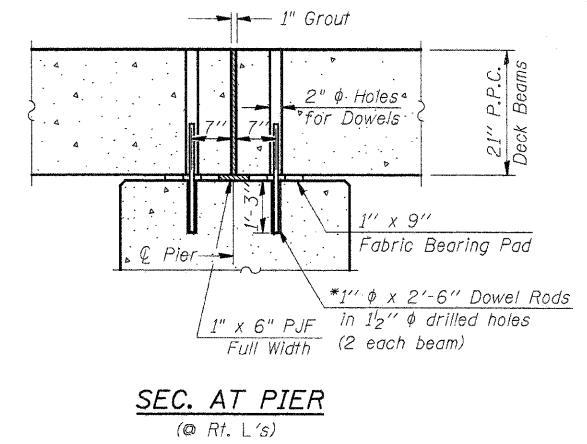
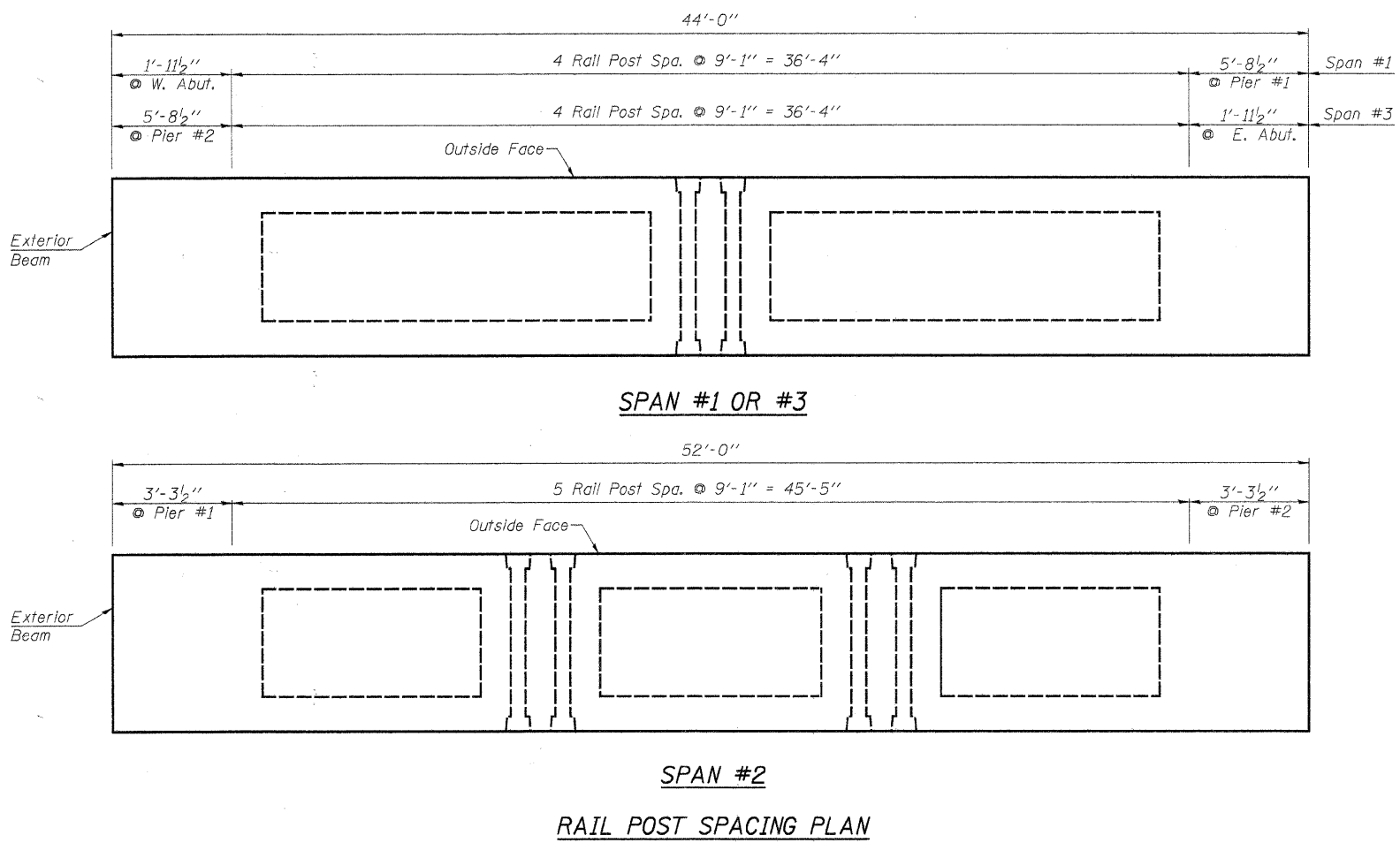
**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL. ROCKFORD, IL. ROCHELLE, IL. MONROE, WI. SPRINGFIELD, IL.

**GENERAL PLAN & ELEVATION  
S.N. 087-3560**

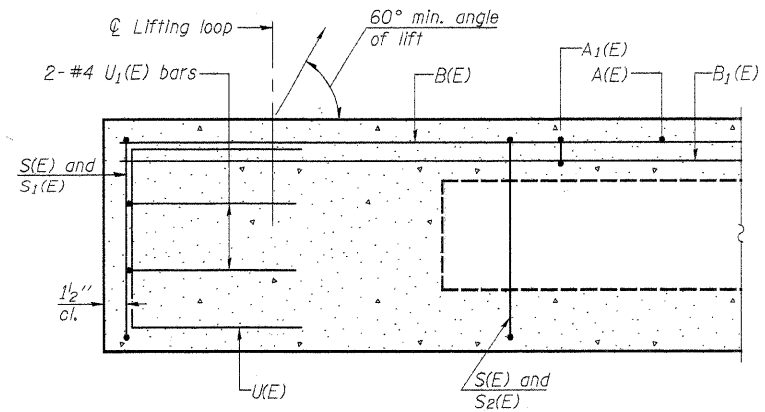
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	5
			CONTRACT NO. 95657	
			ILLINOIS BIG SPRING ROAD DISTRICT	



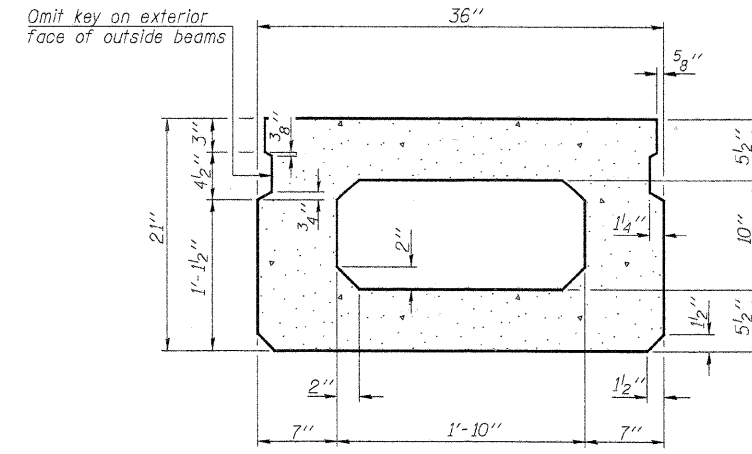
\* Note: After beams are in place, 1/2" holes shall be drilled into the Substructure, and the dowel rods grouted in place and allowed to cure (Min. 24 Hrs.) prior to grouting shear key.



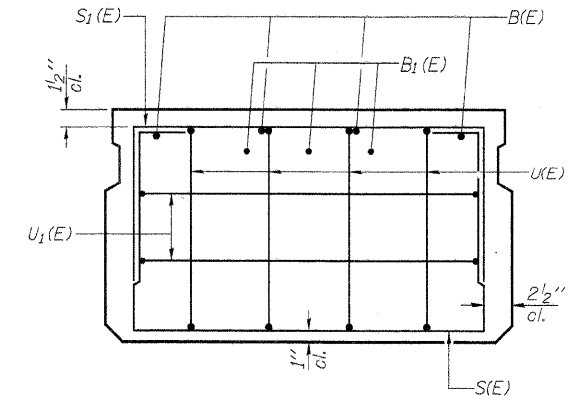
FILE NAME = 46835U.SUPER.DON	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -	<b>FEHR-GRAHAM &amp; ASSOCIATES, LLC</b> ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL	<b>SUPERSTRUCTURE</b> <b>S.N. 087-3560</b>	TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE =	CHECKED - S.F.M.	REVISED -			283A	06-02119-00-BR	SHELBY	22	6	
	PLOT DATE = 04/04/11	DRAWN - S.A.P.	REVISED -			CONTRACT NO. 95657					
		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -			ILLINOIS BIG SPRING ROAD DISTRICT					



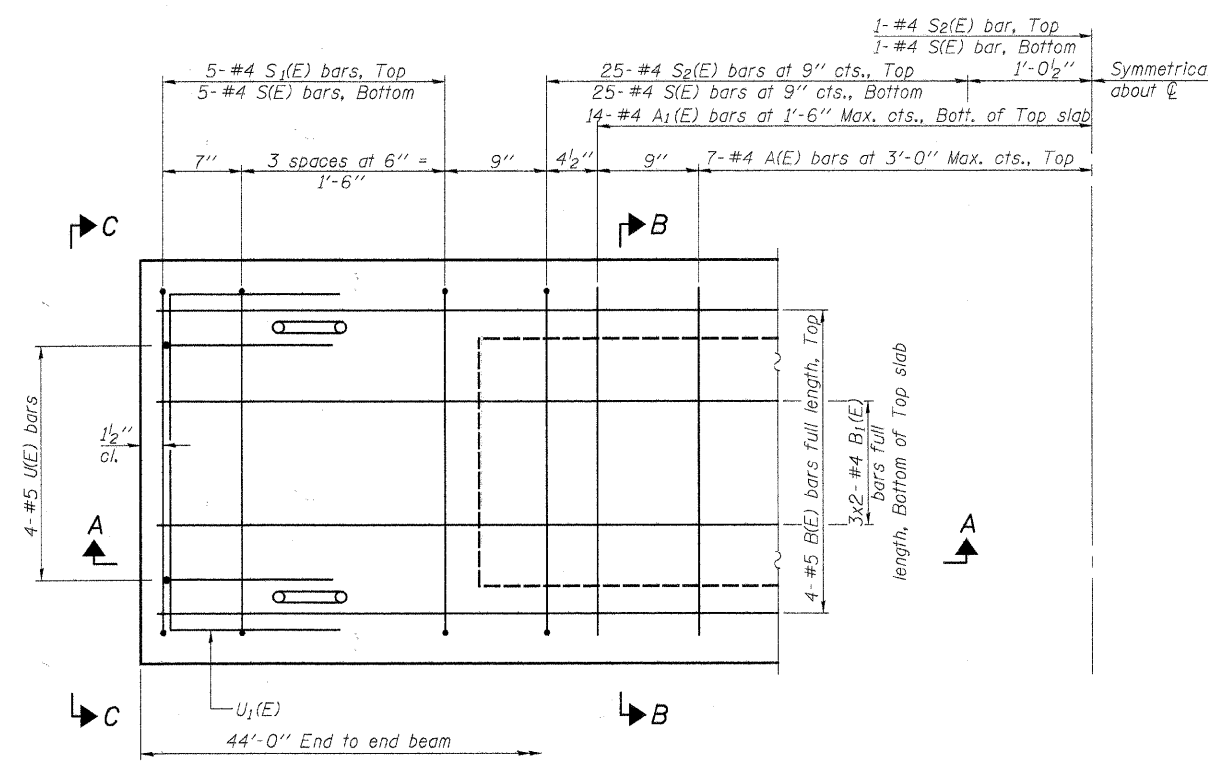
**SECTION A-A**



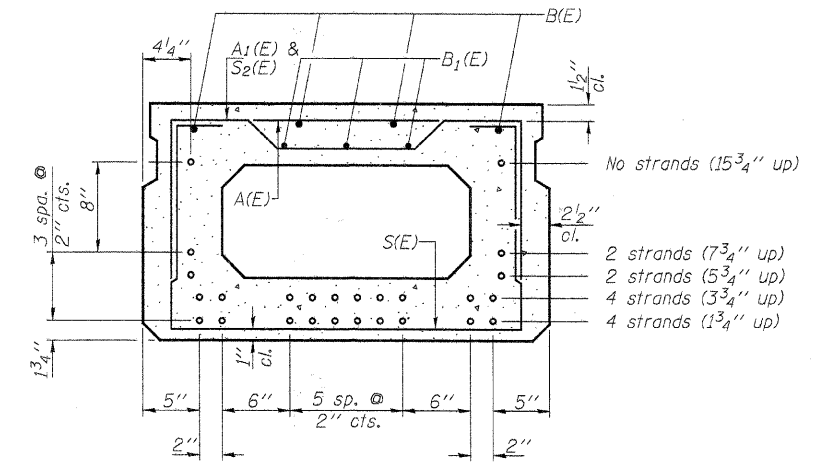
**SECTION B-B**  
(Showing dimensions)



**VIEW C-C**



**PLAN VIEW**



Use 12 - 1/2"  $\phi$  strands at the locations shown.  
**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)	13	#4	2'-7"	—
A1(E)	27	#4	2'-10"	—
B(E)	4	#5	43'-8"	—
B1(E)	6	#4	23'-0"	—
S(E)	61	#4	6'-5"	U
S1(E)	10	#4	4'-11"	U
S2(E)	51	#4	5'-2"	U
U(E)	8	#5	4'-0"	U
U1(E)	4	#4	5'-0"	U

Note: See sheet 8 for additional details and Bill of Material. Reinforcement bars designated (E) shall be epoxy coated.

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.

**MINIMUM BAR LAP**  
#4 bar = 2'-0"  
#5 bar = 2'-6"

Bars Indicated thus, 3x2-#4 bars etc., Indicates 3 lines of bars with 2 lengths per line.

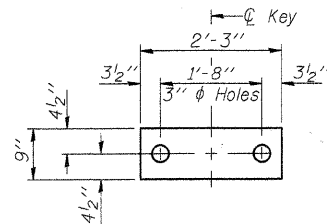
PD-2136-0 7-1-10

FILE NAME = 46835U.SUPER.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
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		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -
PLOT SCALE =			
PLOT DATE = 04/04/11			

**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

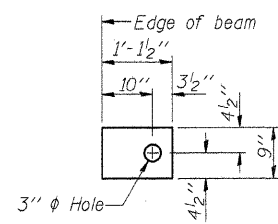
**21" x 36" PPC DECK BEAM - SPANS 1 & 3**  
S.N. 087-3560

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	7
ILLINOIS			CONTRACT NO. 95657	
BIG SPRING ROAD DISTRICT				



**FABRIC BEARING PAD**

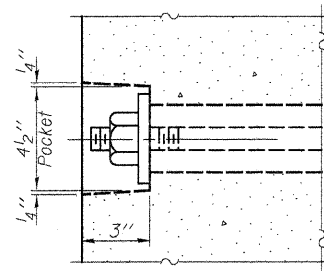
(Interior)  
(24 Required)



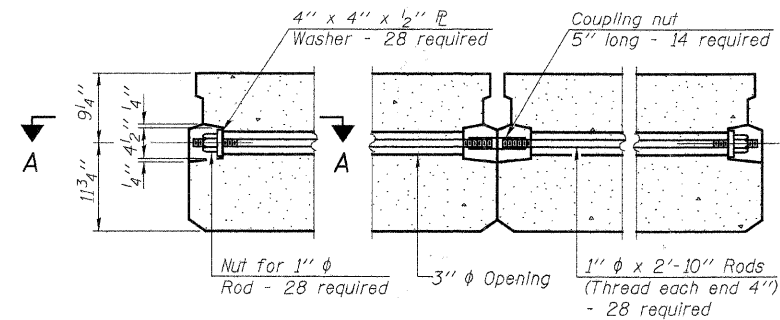
**FABRIC BEARING PAD**

(Exterior)  
**FIXED**  
(16 Required)

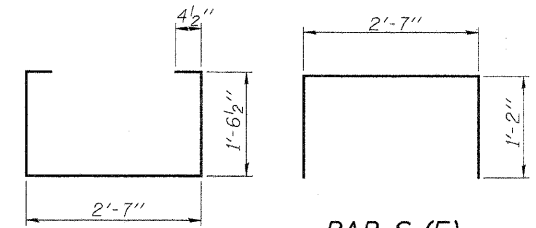
Notes:  
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pad shall be bonded to the substructure.



**SECTION A-A**

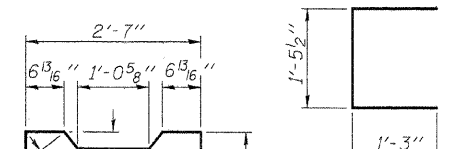


**TYPICAL TRANSVERSE TIE ASSEMBLY**



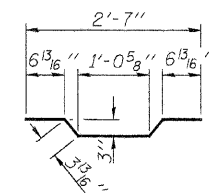
**BAR S<sub>1</sub>(E)**

**BAR S(E)**

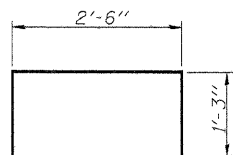


**BAR U(E)**

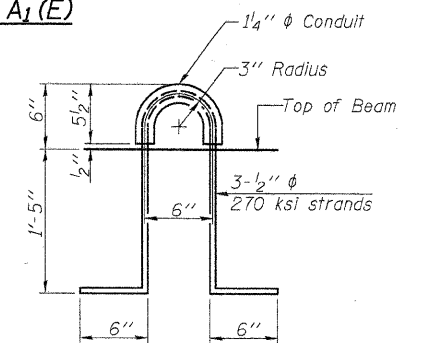
**BAR S<sub>2</sub>(E)**



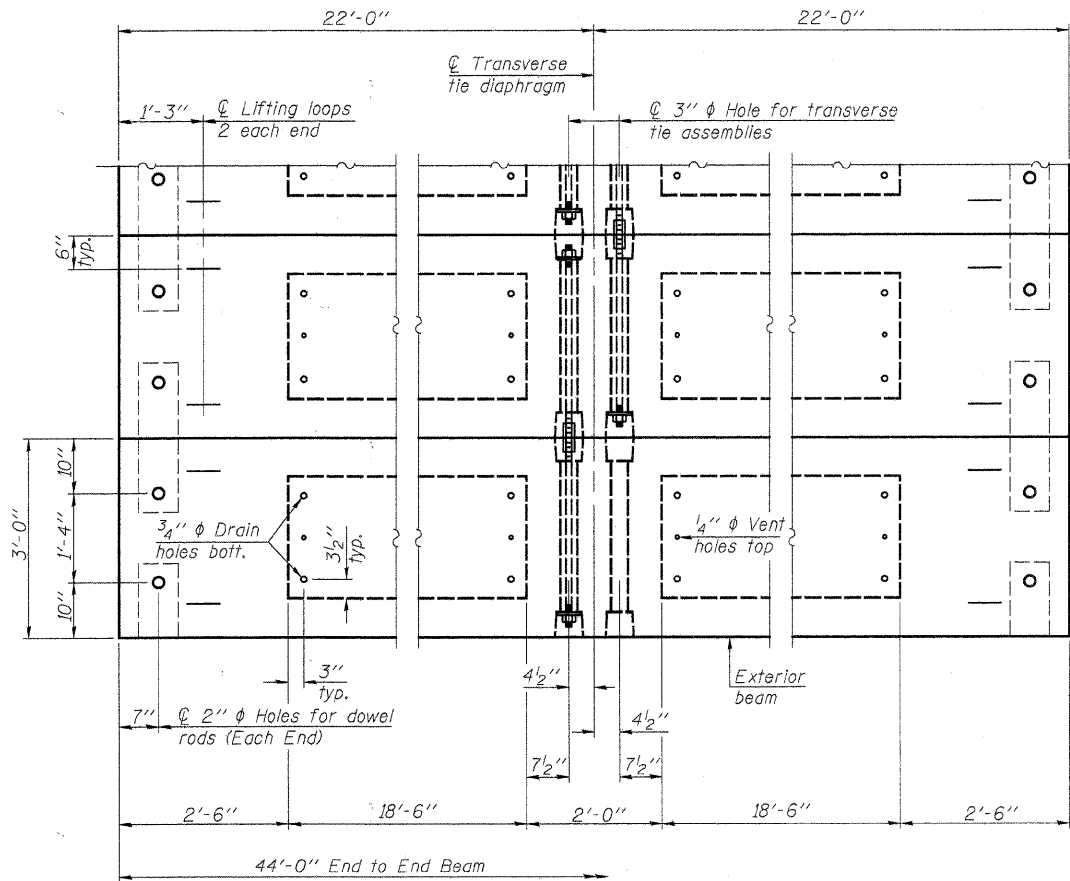
**BAR A<sub>1</sub>(E)**



**BAR U<sub>1</sub>(E)**



**LIFTING LOOP DETAIL**



**PLAN VIEW**

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

**NOTES**

Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" diameter 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. (80 Required)  
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'ci, shall be 5000 psi.  
Roll post inserts, specified elsewhere, shall be cast into the exterior face of the outside beams. See Special Provisions for review and distribution of shop drawings.

**BILL OF MATERIAL - SPANS 1 & 3**

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	2,112
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Estimated Total Weight (One Beam) = 26,400 Pounds

PD-2136-OD

7-1-10

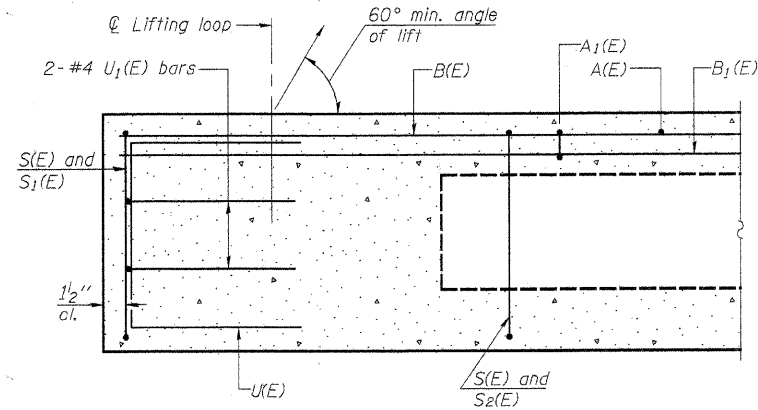
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		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -
	PLOT SCALE =		
	PLOT DATE = 04/04/11		

**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

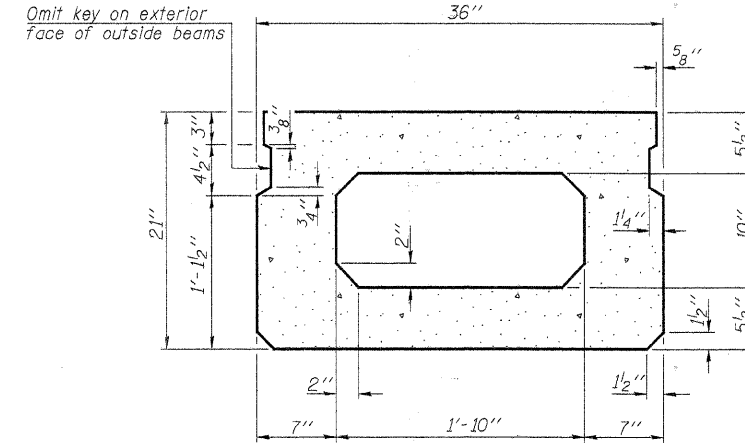
**21" x 36" PPC DECK BEAM DETAILS - SPANS 1 & 3**  
S.N. 087-3560

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	8
CONTRACT NO. 95657			ILLINOIS	
BIG SPRING ROAD DISTRICT				

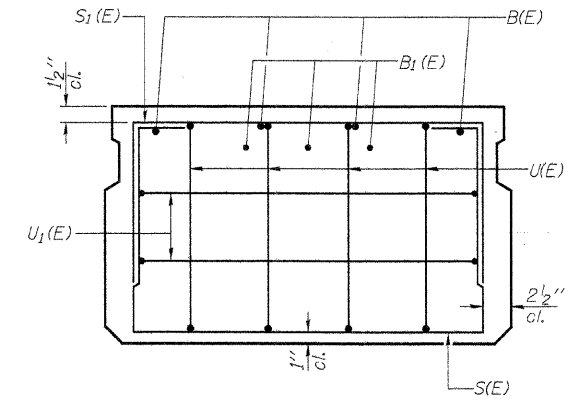




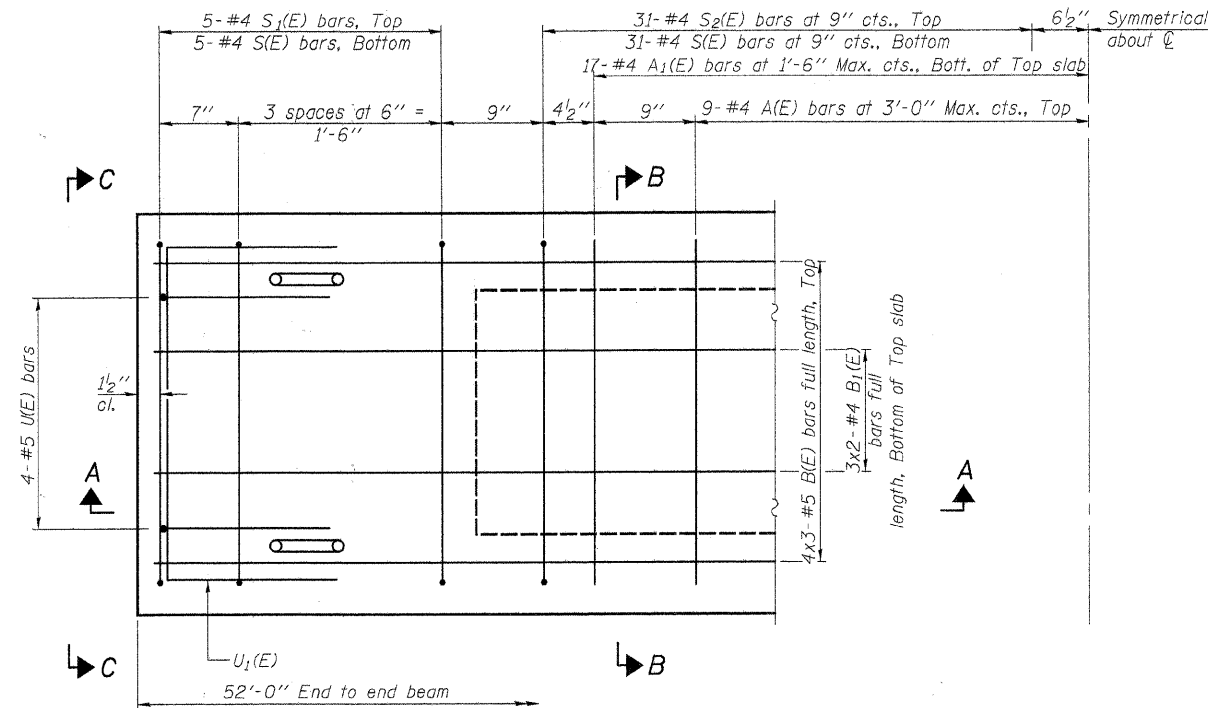
**SECTION A-A**



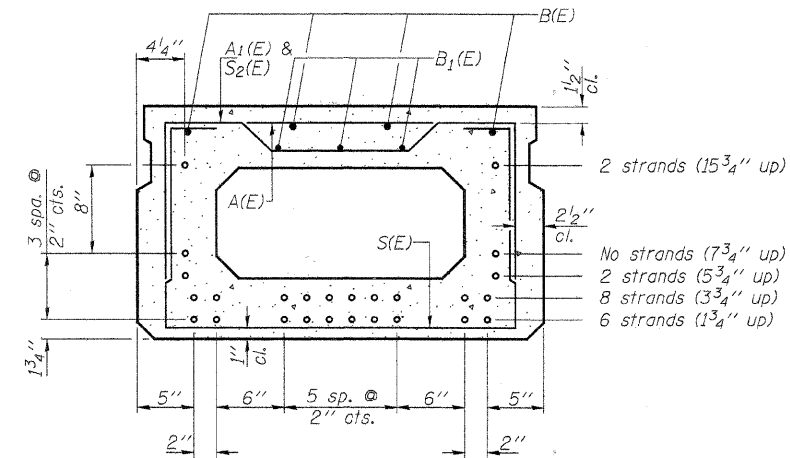
**SECTION B-B**  
(Showing dimensions)



**VIEW C-C**



**PLAN VIEW**



Use 18 - 1/2"  $\phi$  strands at the locations shown.  
**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)	17	#4	2'-7"	—
A1(E)	33	#4	2'-10"	—
B(E)	12	#5	19'-0"	—
B1(E)	6	#4	27'-0"	—
S(E)	72	#4	6'-5"	□
S1(E)	10	#4	4'-11"	□
S2(E)	62	#4	5'-2"	□
U(E)	8	#5	4'-0"	□
U1(E)	4	#4	5'-0"	□

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

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, 3x2-#4 bars etc., indicates 3 lines of bars with 2 lengths per line.

**MINIMUM BAR LAP**  
#4 bar = 2'-0"  
#5 bar = 2'-6"

PD-2136-0

7-1-10

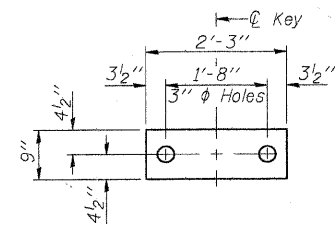
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	PLOT DATE = 04/04/11	CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -

**FEHR-GRAHAM & ASSOCIATES, LLC**  
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FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

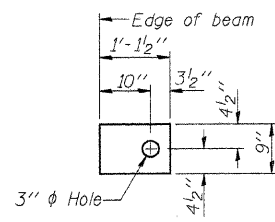
**21" x 36" PPC DECK BEAM - SPAN 2**  
S.N. 087-3560

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS			CONTRACT NO. 95657	
			BIG SPRING ROAD DISTRICT	

\*46863



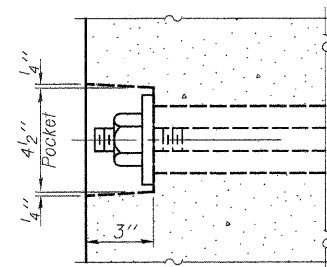
**FABRIC BEARING PAD**  
(Interior)  
(12 Required)



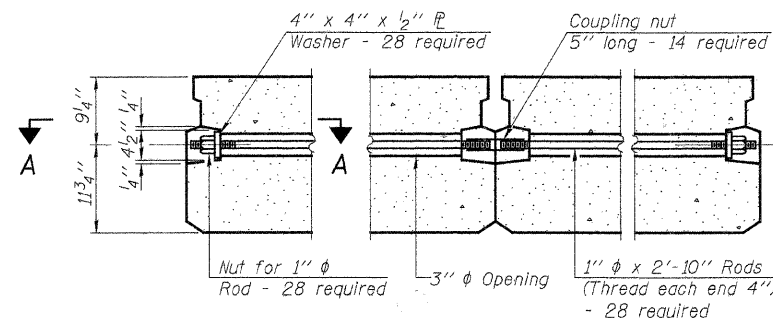
**FABRIC BEARING PAD**  
(Exterior)  
(8 Required)

**FIXED**

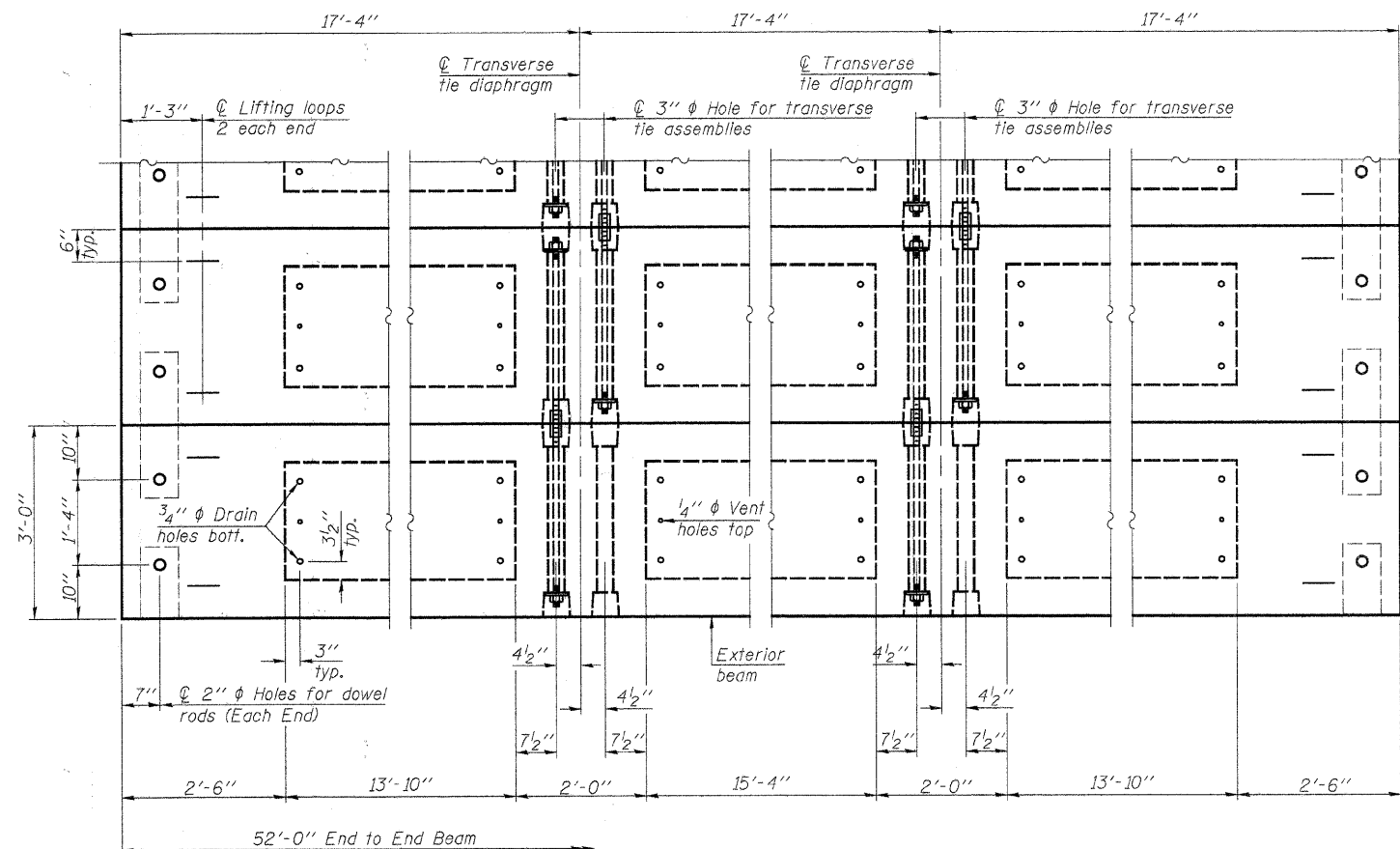
Notes:  
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pad shall be bonded to the substructure.



**SECTION A-A**

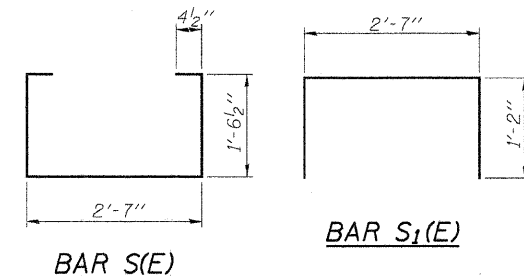


**TYPICAL TRANSVERSE TIE ASSEMBLY**

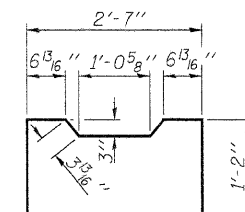


**PLAN VIEW**

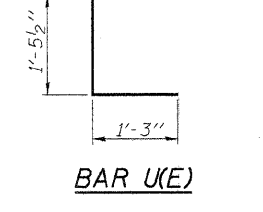
Note: Connect beams in pairs with the transverse tie configuration shown.



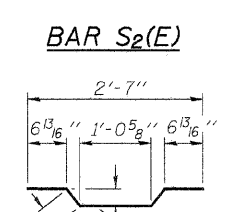
**BAR S<sub>1</sub>(E)**



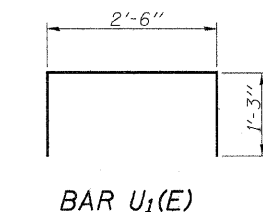
**BAR S(E)**



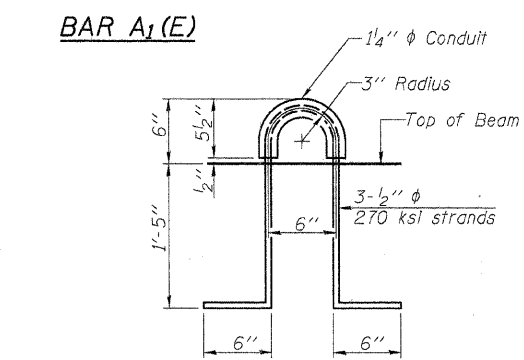
**BAR U(E)**



**BAR S<sub>2</sub>(E)**



**BAR U<sub>1</sub>(E)**



**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.

Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. (40 Required)

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'ci, shall be 5000 psi.

Roll post inserts, specified elsewhere, shall be cast into the exterior face of the outside beams. See Special Provisions for review and distribution of shop drawings.

**BILL OF MATERIAL - SPAN 2**

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1,248
Estimated Total Weight (One Beam) = 31,500 Pounds		

PD-2136-0D

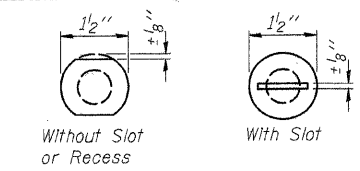
7-1-10

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		CHECKED - S.F.M.	REVISED -
		DRAWN - S.A.P.	REVISED -
		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -
	PLOT SCALE =		
	PLOT DATE = 04/04/11		

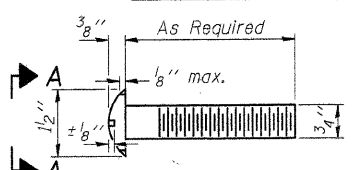
**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

**21" x 36" PPC DECK BEAM DETAILS - SPAN 2**  
S.N. 087-3560

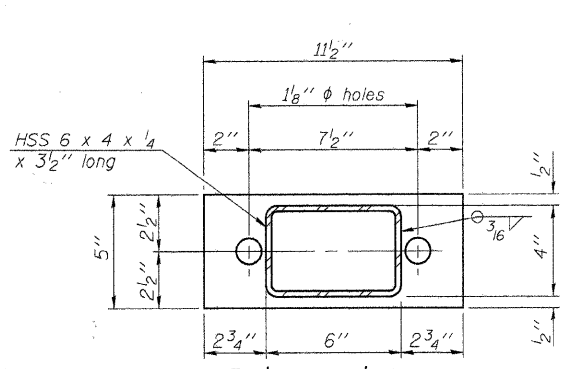
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	10
ILLINOIS			CONTRACT NO. 95657	
			BIG SPRING ROAD DISTRICT	



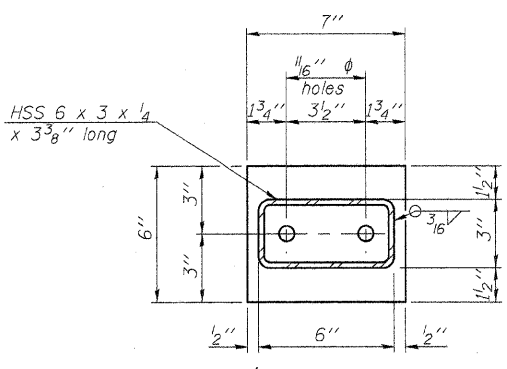
VIEW A-A



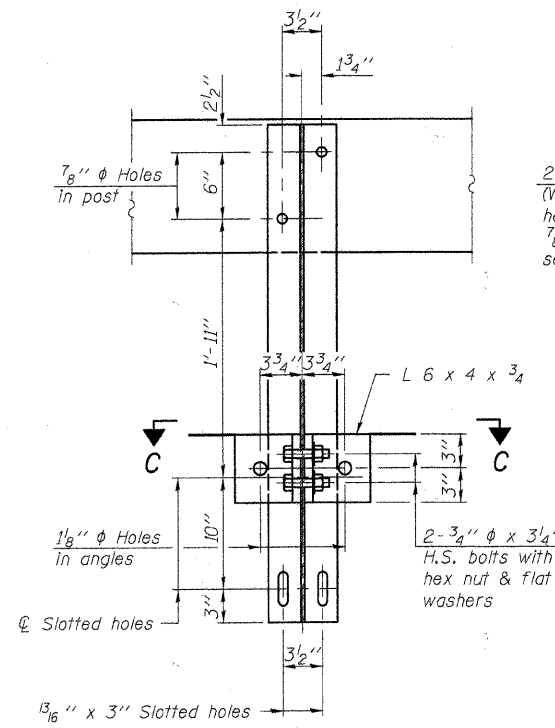
ROUND HEAD BOLT



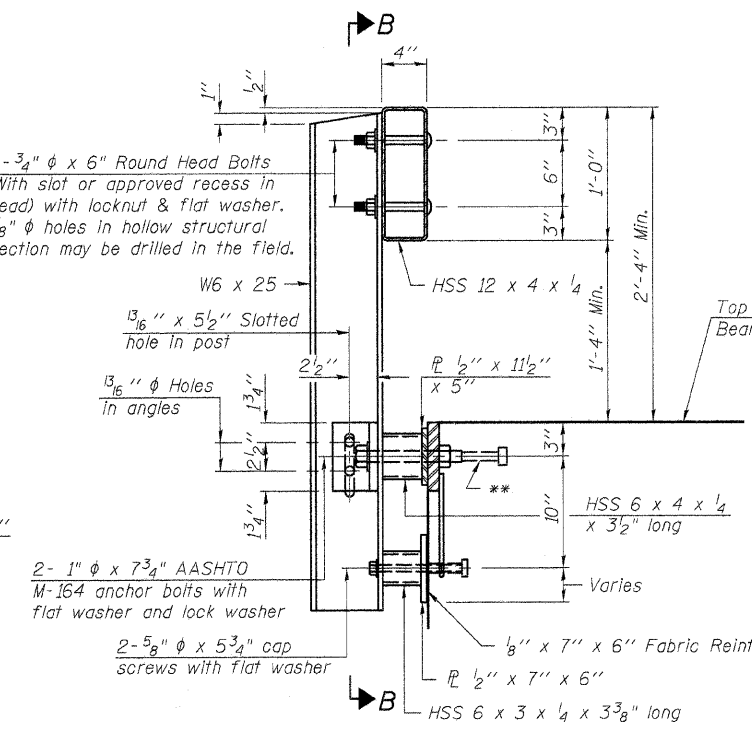
$P \frac{1}{2}'' \times 11\frac{1}{2}'' \times 5''$



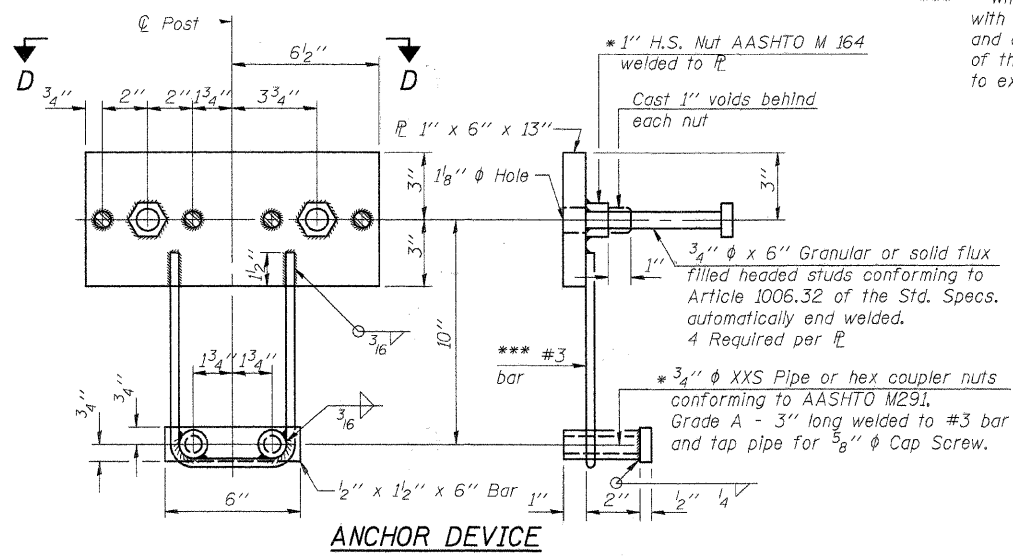
$P \frac{1}{2}'' \times 7'' \times 6''$



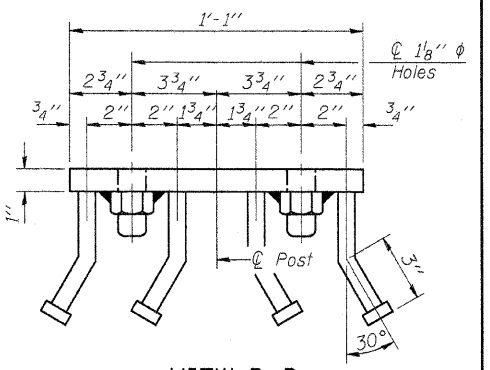
SECTION B-B



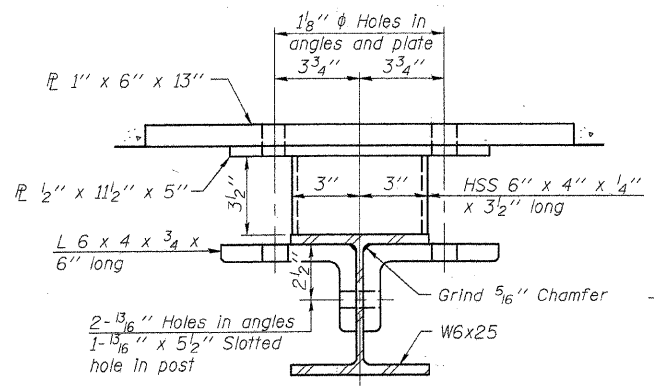
SECTION AT RAILING POST



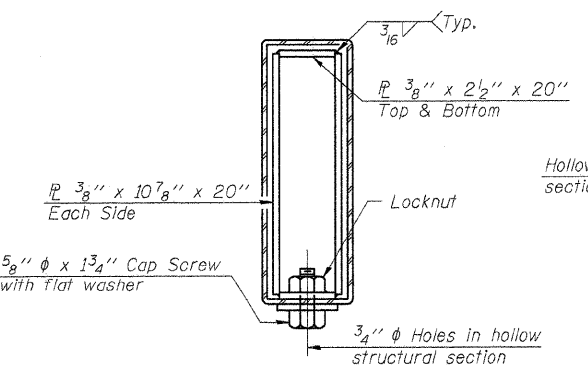
ANCHOR DEVICE



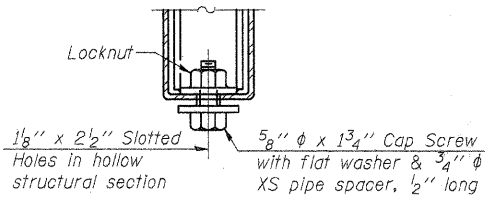
VIEW D-D



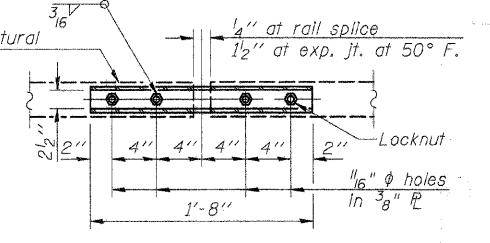
SECTION C-C



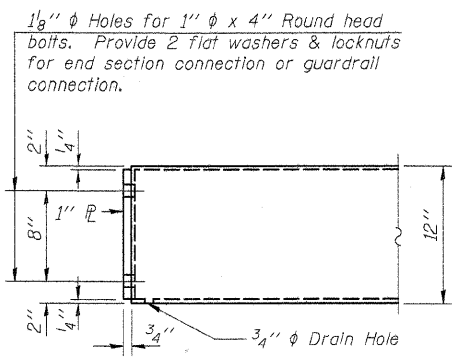
SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE P TYPICAL



END OF RAIL DETAILS

Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.  
 \* Threaded areas of nuts or pipes used for anchor devices shall be plugged or blocked off during casting of beam.  
 \*\* 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.  
 \*\*\* 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".

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	281

Note: Work this sheet with Sheet 12.

R-23A 7-1-10 (10'-9" Maximum Post Spacing)

FILE NAME = RAIL_SI-5A_3.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
		CHECKED - S.F.M.	REVISED -
	PLOT SCALE =	DRAWN - S.A.P.	REVISED -
	PLOT DATE = 04/04/11	CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -

**FEHR-GRAHAM & ASSOCIATES, LLC**  
 ENGINEERING AND SCIENCE CONSULTANTS  
 FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

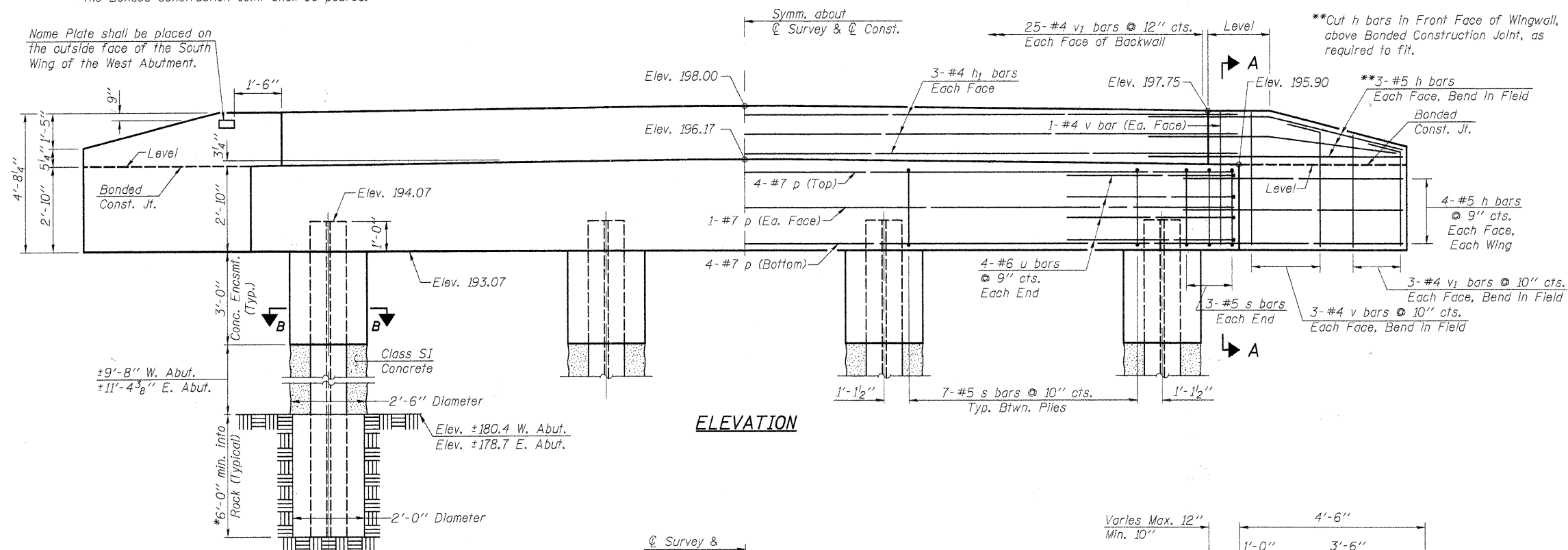
**STEEL RAILING, TYPE S-1**  
 S.N. 087-3560

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	11
ILLINOIS			CONTRACT NO. 95657	
			BIG SPRING ROAD DISTRICT	

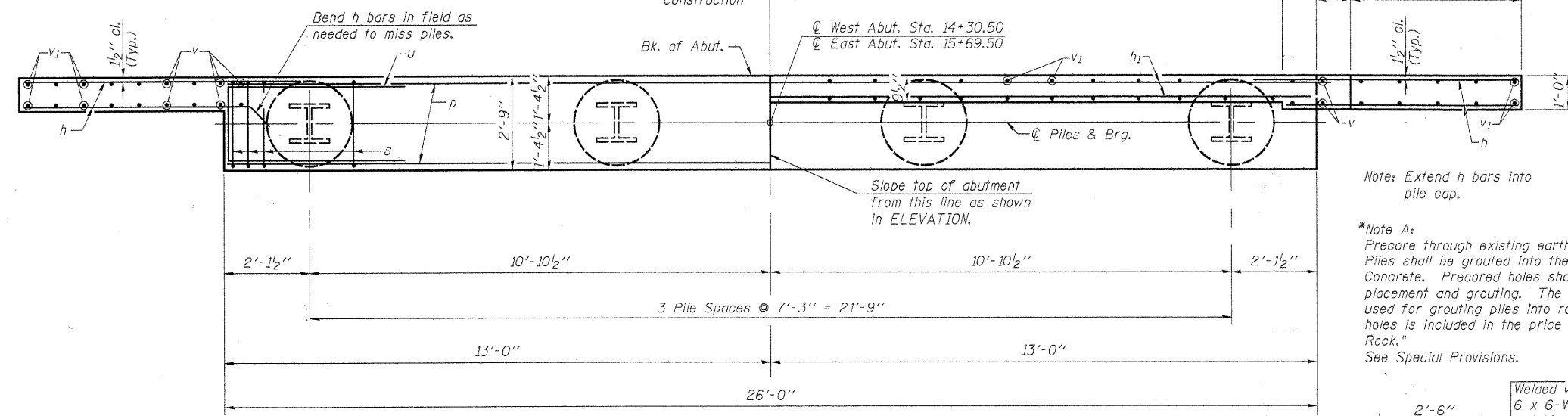


Note: After beams are in place and dowel rods grouted, the backwall and the portions of the wingwalls above the Bonded Construction Joint shall be poured.

Name Plate shall be placed on the outside face of the South Wing of the West Abutment.



ELEVATION



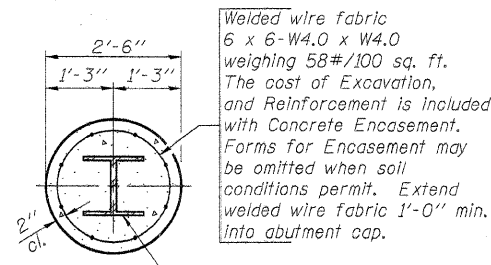
PLAN

PILE DATA

Type & Size.....Steel Piles HP12x53  
 No. Req'd. (2 Abutments).....8  
 Nominal Required Bearing.....Set in Rock (See Note A)  
 Estimated Length.....25 ft. @ W. Abut.  
 27 ft. @ E. Abut.

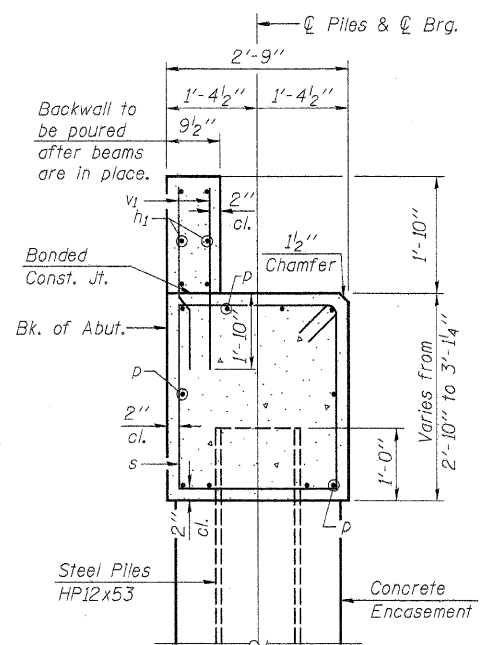
The Steel H-piles shall be according to ASTM A270 Grade 50.

Estimated length of piles have been adjusted to allow for depths of coring beyond that shown in the plans.

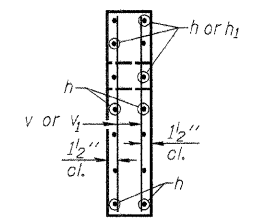


SECTION B-B

Concrete Encasement



SECTION THRU ABUT.



SECTION A-A

2 ABUTMENTS  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h	56	#5	6'-0"	—	
h <sub>1</sub>	12	#4	27'-6"	—	
p	20	#7	25'-8"	—	
s	54	#5	10'-9"	□	
u	16	#6	12'-4"	—	
v	32	#4	4'-3"	—	
v <sub>1</sub>	124	#4	3'-6"	—	
Concrete Structures				Cu. Yd.	21.3
Reinforcement Bars				Pound	2,900
Name Plates				Each	1
Steel Piles HP12x53				Foot	208
Concrete Encasement				Cu. Yd.	4.4
Setting Piles in Rock				Each	8

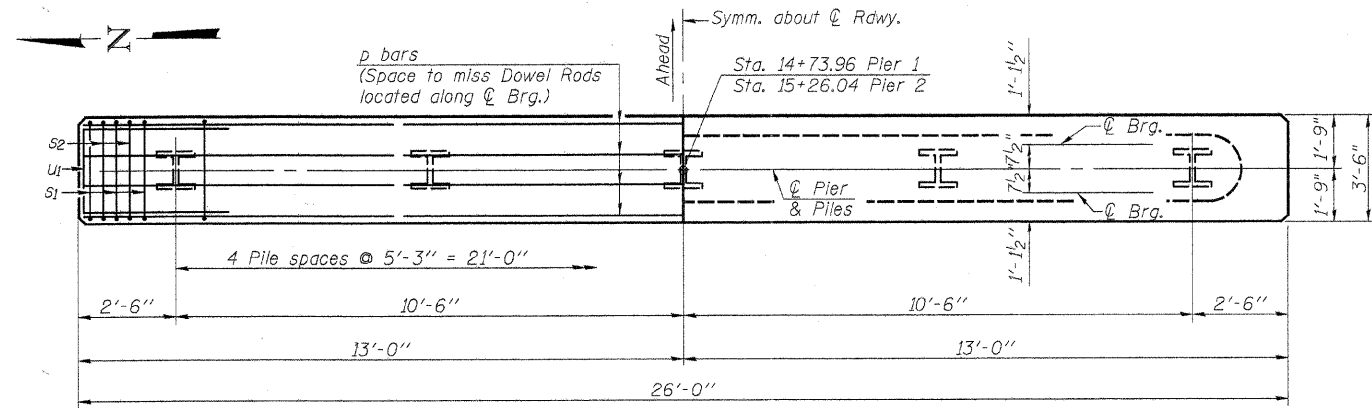
See Sheet 15 for Pile Details.

FILE NAME = 46863J.ABUTS.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
		CHECKED - S.F.M.	REVISED -
		DRAWN - S.A.P.	REVISED -
		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -
PLOT SCALE =			
PLOT DATE = 04/04/11			

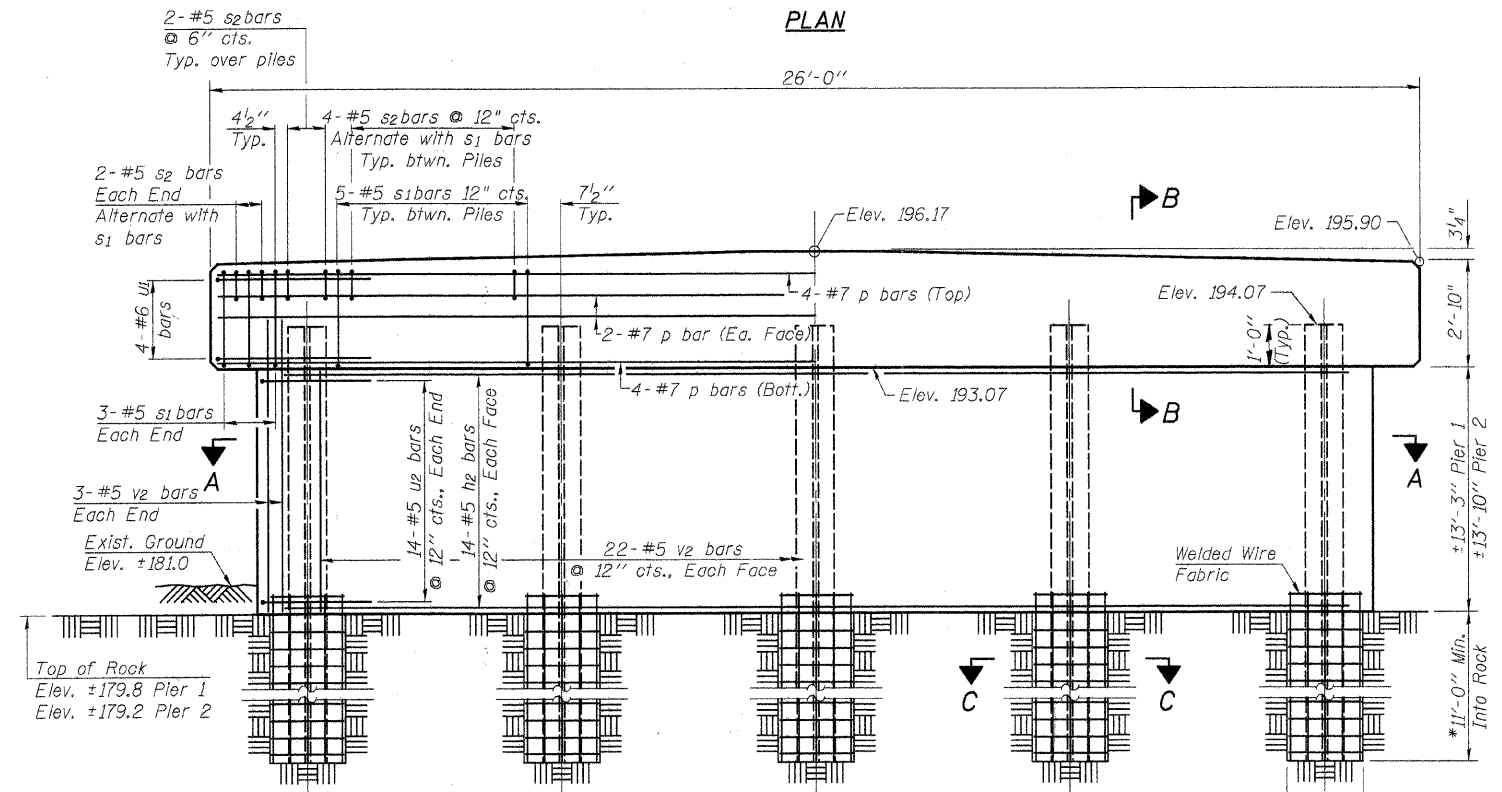
**FEHR-GRAHAM & ASSOCIATES, LLC**  
 ENGINEERING AND SCIENCE CONSULTANTS  
 FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

**ABUTMENT DETAILS**  
 S.N. 087-3560

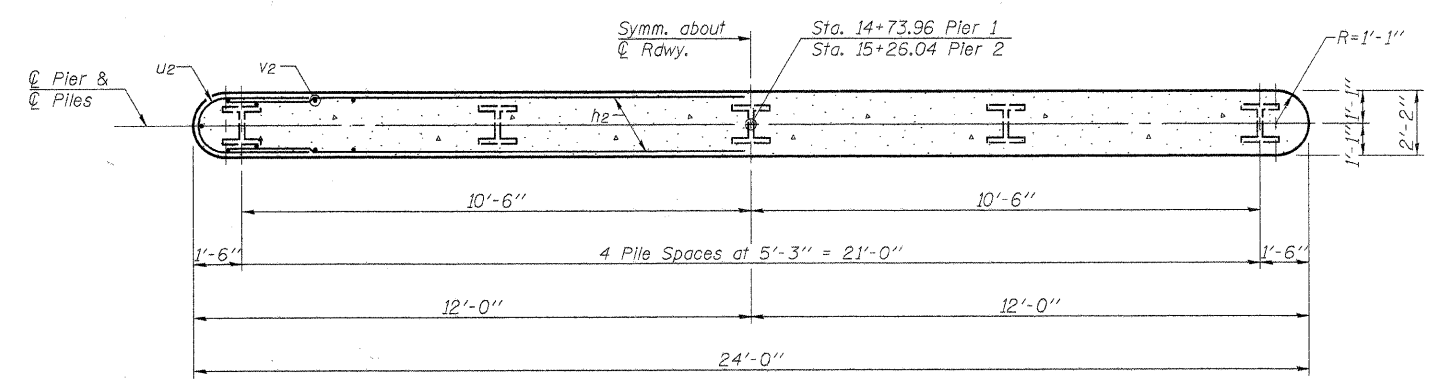
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	13
ILLINOIS			CONTRACT NO. 95657	
			BIG SPRING ROAD DISTRICT	



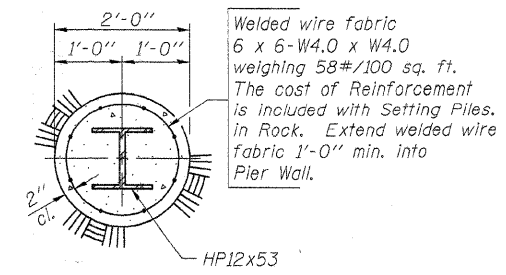
PLAN



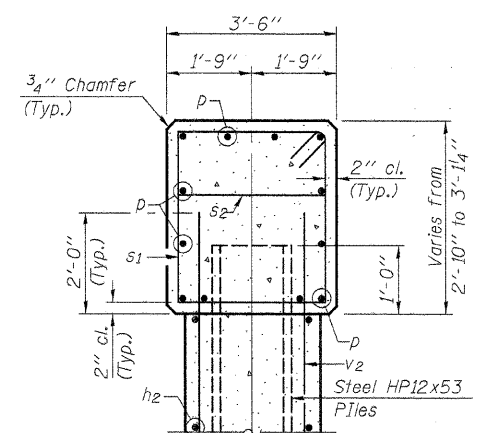
ELEVATION  
(Looking East)



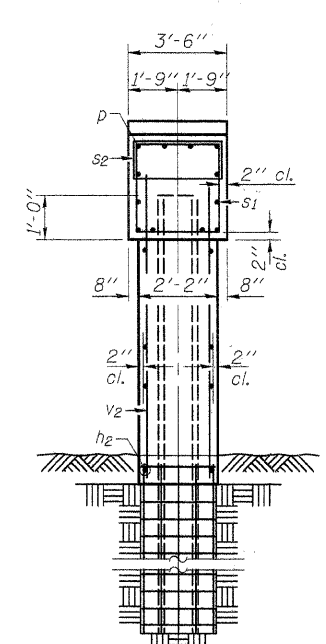
SECTION A-A



SECTION C-C



SECTION B-B



END VIEW

PILE DATA

Type & Size.....Steel HP12x53  
 No. Req'd.....10  
 Nominal Required Bearing.....Set in Rock  
 Estimated Length.....31 ft.

Estimated length of piles has been adjusted to allow for depths of coring beyond that shown in the plans.

\*Note A:  
 Precore through existing earth and rock as shown. Piles shall be grouted into the rock with Class SI Concrete. Precored holes shall be clean at time of placement and grouting. The Class SI Concrete and welded wire fabric used for grouting piles into rock is included in the price for "Setting Piles in Rock." See Special Provisions.

The Steel H-Piles shall be according to AASHTO M270 Grade 50.

BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE
h2	56	#5	21'-9"	—
p	24	#7	25'-8"	—
s1	52	#5	12'-3"	□
s2	60	#5	8'-5"	□
u1	16	#6	13'-1"	—
u2	56	#5	7'-10"	—
v2	100	#5	15'-7"	—
Concrete Structures			Cu. Yd.	71.1
Reinforcement Bars			Pound	6,120
Steel Piles HP12x53			Foot	310
Setting Piles in Rock			Each	10
Underwater Structure Excavation Protection			Each	2

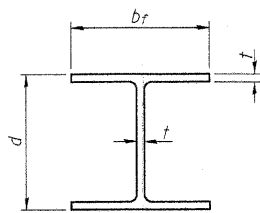
See Sheet 15 for Pile Details.

FILE NAME = 46863U.PIERS.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
		CHECKED - S.F.M.	REVISED -
PLOT SCALE =		DRAWN - S.A.P.	REVISED -
PLOT DATE = 04/04/11		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -

**FEHR-GRAHAM & ASSOCIATES, LLC**  
 ENGINEERING AND SCIENCE CONSULTANTS  
 FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

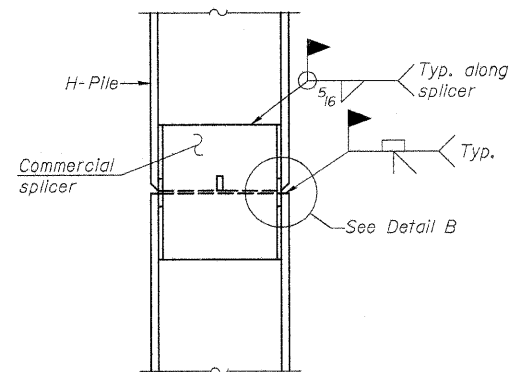
PIER DETAILS  
 S.N. 087-3560

TWP.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	14
				CONTRACT NO. 95657
ILLINOIS				BIG SPRING ROAD DISTRICT

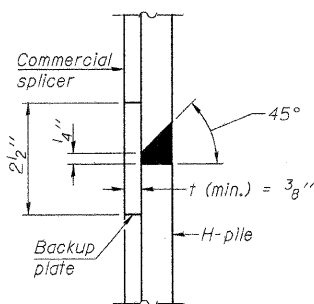


**STEEL PILE TABLE**

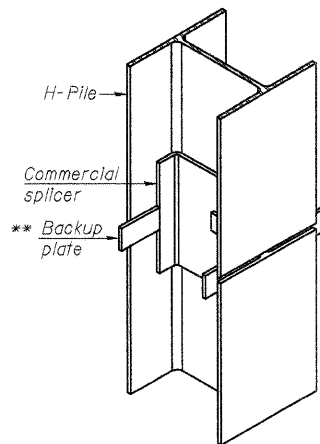
Designation	Depth d	Flange width b <sub>f</sub>	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/2"	12 1/4"	5/8"	24"
x63	12"	12 1/8"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

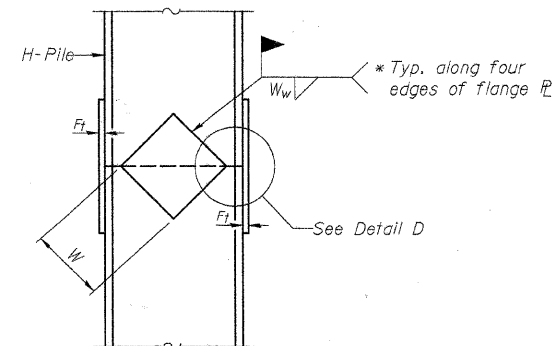


**DETAIL "B"**

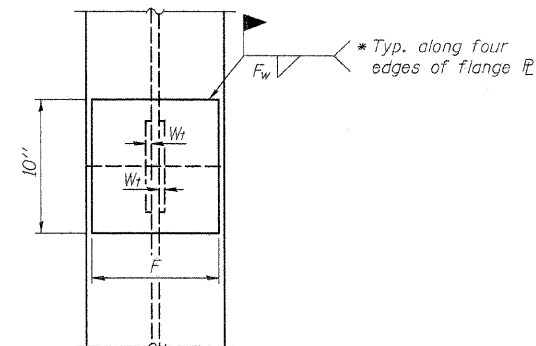


**ISOMETRIC VIEW**

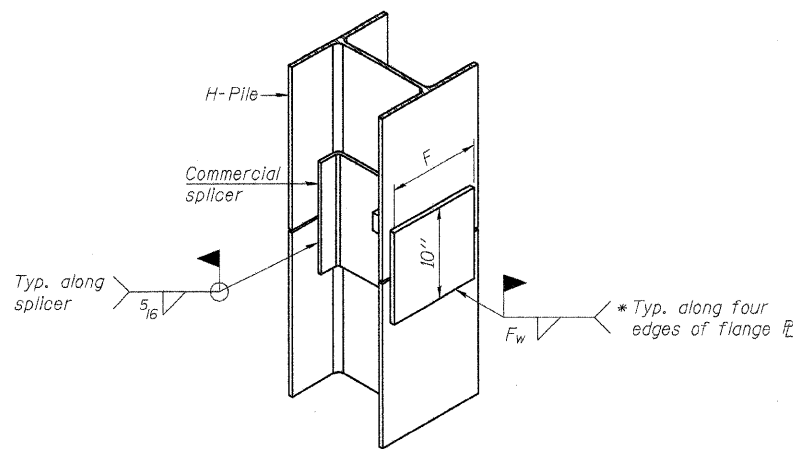
**WELDED COMMERCIAL SPLICE**



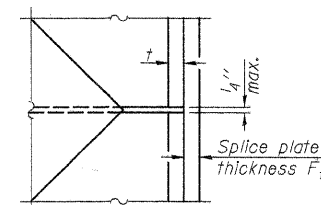
**ELEVATION**



**END VIEW**



**ISOMETRIC VIEW**



**DETAIL D**

**WELDED PLATE FIELD SPLICE**

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

**WELDED COMMERCIAL SPLICE ALTERNATE**

- \* Interrupt welds 1/4" from end of web and/or each flange.
- \*\* Remove portions of backup plates that extend outside the flanges.

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

F-HP

7-1-10

FILE NAME = 46863U_PILES.DGN	USER NAME = S.A.P.	DESIGNED - J.A.M.	REVISED -
		CHECKED - S.F.M.	REVISED -
		DRAWN - S.A.P.	REVISED -
		CHECKED - J.A.M., S.F.M. & A.R.K.	REVISED -
	PLOT SCALE =		
	PLOT DATE = 04/04/11		

**FEHR-GRAHAM & ASSOCIATES, LLC**  
ENGINEERING AND SCIENCE CONSULTANTS  
FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL

**HP PILE DETAILS**  
S.N. 087-3560

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	15
ILLINOIS			CONTRACT NO. 95657	
			BIG SPRING ROAD DISTRICT	

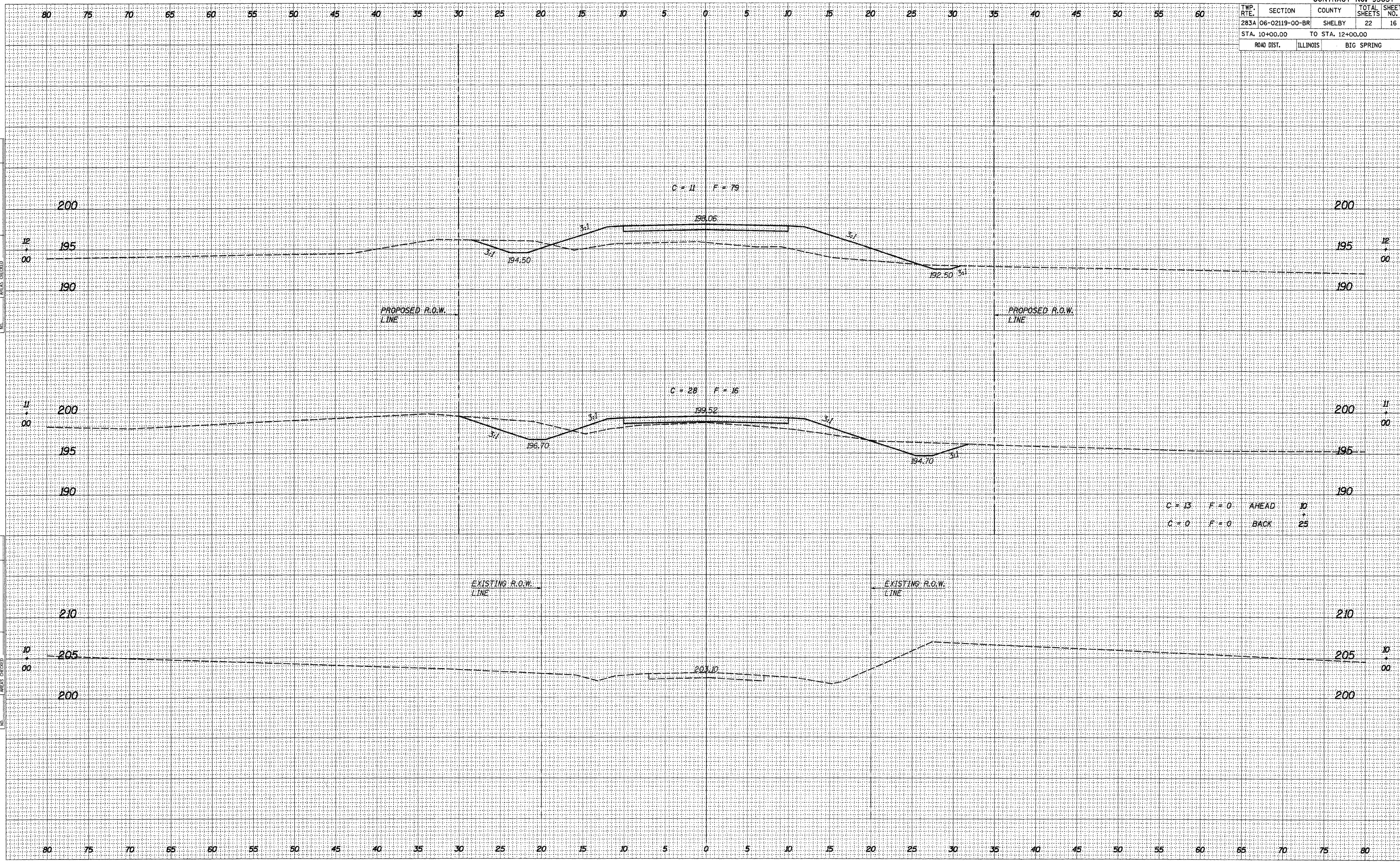
#46863

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
283A	06-02119-00-BR	SHELBY	22	16
STA. 10+00.00 TO STA. 12+00.00				
ROAD DIST.		ILLINOIS	BIG SPRING	

BY	DATE

BY	DATE

ORIGINAL SURVEY PLOTTED  
 NOTE BOOK NO. \_\_\_\_\_  
 USER NAME \_\_\_\_\_  
 FILE NAME = 48633SECTIONSHETS.DGN  
 PLOT DATE = 01/29/07  
 USER NAME = S. PRICE









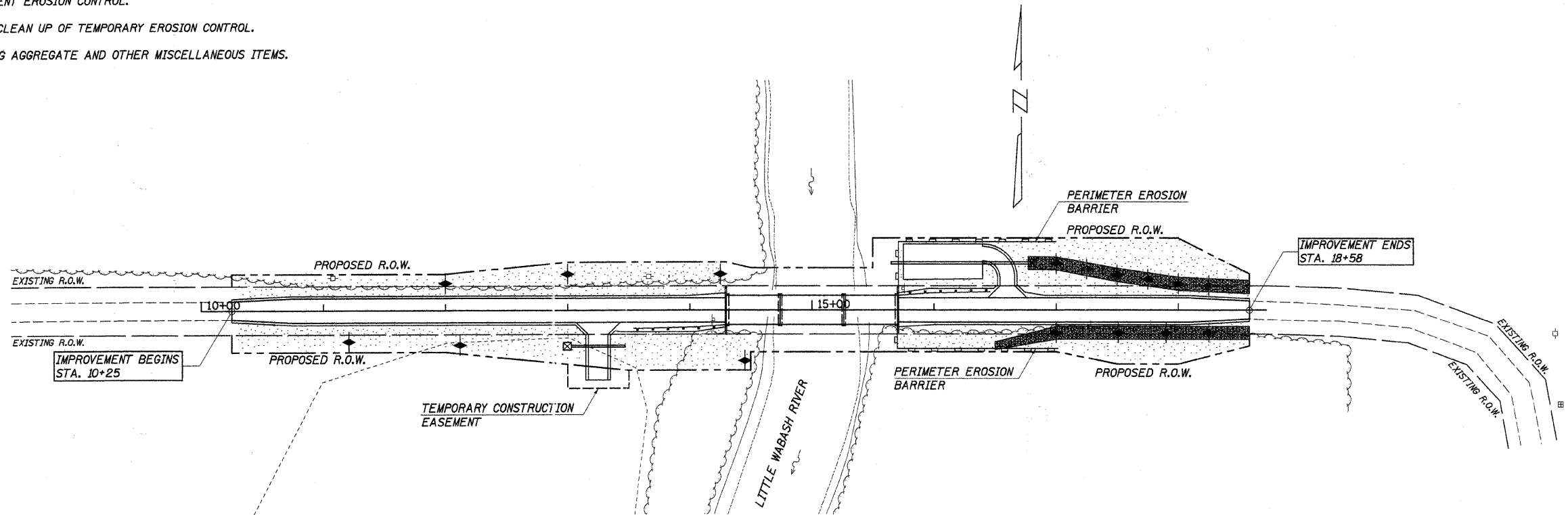






**DESCRIPTION OF INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB EARTH AND LEAD TO POSSIBLE EROSION FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:**

1. PLACEMENT OF PERIMETER EROSION CONTROL FENCE PRIOR TO THE COMMENCEMENT OF ANY ROAD OR BRIDGE WORK. SEE STD. 280001.
2. REMOVAL OF EXISTING STRUCTURE.
3. CONSTRUCTION OF THE REPLACEMENT STRUCTURE.
4. PLACEMENT OF ROADWAY EMBANKMENT TO RAISE THE ROADWAY TO THE PROPOSED GRADE.
5. DRAINAGE STRUCTURES, INCLUDING DITCHES, WILL BE INSTALLED BEFORE AND/OR DURING THE COMPLETION OF THE EMBANKMENT.
6. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL.
7. PLACEMENT OF PERMANENT EROSION CONTROL.
8. REMOVAL AND PROPER CLEAN UP OF TEMPORARY EROSION CONTROL.
9. FINAL GRADING, PLACING AGGREGATE AND OTHER MISCELLANEOUS ITEMS.



**TEMPORARY EROSION CONTROL:**

- PERIMETER EROSION BARRIER
- ◆ TEMPORARY DITCH CHECK
- ◇ INLET AND PIPE PROTECTION

**PERMANENT EROSION CONTROL:**

- SEEDING CLASS 2, FERTILIZERS, & MULCH, METHOD 2
- AGGREGATE DITCH (SPECIAL)

**TEMPORARY DITCH CHECKS**

LT. STA. 12+00	=	8 FOOT
LT. STA. 13+00	=	8 FOOT
RT. STA. 11+21	=	8 FOOT
RT. STA. 12+12	=	8 FOOT
LT. STA. 14+25	=	8 FOOT
RT. STA. 14+45	=	8 FOOT
LT. STA. 17+00	=	8 FOOT
LT. STA. 17+25	=	8 FOOT
LT. STA. 17+50	=	8 FOOT
LT. STA. 17+75	=	8 FOOT
LT. STA. 18+00	=	8 FOOT
LT. STA. 18+25	=	8 FOOT
RT. STA. 17+00	=	8 FOOT
RT. STA. 17+50	=	8 FOOT
RT. STA. 17+90	=	8 FOOT
RT. STA. 18+25	=	8 FOOT
<b>TOTAL</b>	=	<b>128 FOOT</b>

**INLET AND PIPE PROTECTION**

RT. STA. 13+03	=	1 EACH
LT. STA. 16+77	=	1 EACH
<b>TOTAL</b>	=	<b>2 EACH</b>

**PERIMETER EROSION BARRIER**

LT. STA. 15+70.88 TO LT. STA. 17+00.00	=	166 FOOT
RT. STA. 15+70.88 TO RT. STA. 17+00.00	=	145 FOOT
<b>TOTAL</b>	=	<b>311 FOOT</b>

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
TEMPORARY EROSION CONTROL SEEDING	POUND	200
TEMPORARY DITCH CHECKS	FOOT	128
PERIMETER EROSION BARRIER	FOOT	311
INLET AND PIPE PROTECTION	EACH	2

THE ABOVE QUANTITIES ARE ESTIMATES ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND THERE WILL BE NO ADJUSTMENT IN ANY PRICE DUE TO A CHANGE IN PLAN QUANTITY.

**EROSION CONTROL PLAN**  
SECTION 06-02119-00-BR  
BIG SPRING ROAD DISTRICT  
SHELBY COUNTY  
STA. 15+00