

07-31-2015 LETTING ITEM 060

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 245	08-0714-00-BR	CHRISTIAN	14	1
ROAD DIST.		ILLINOIS		

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
PLANS FOR PROPOSED  
HIGHWAY BRIDGE PROGRAM

SECTION 08-07114-00-BR ✓  
PROJECT BROS-0021(175) ✓  
CHRISTIAN COUNTY ✓  
LOCUST ROAD DISTRICT ✓  
TOWNSHIP ROAD 245  
JOB NUMBER C-96-225-12 ✓

INDEX OF SHEETS	
SHEET NO.	TITLE
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, TYPICAL SECTIONS & GENERAL NOTES
3.	PLAN AND PROFILE SHEET
4.-9.	BRIDGE PLANS
10.-14.	STATION CROSS SECTIONS

SCALES	
PLAN	1" = 100'
PROFILE HORIZ.	1" = 50'
PROFILE VERT.	1" = 10'
CROSS SECTIONS	1" = 10'

**STANDARDS**

280001-07  
515001-03  
701901-04  
BLR 21-9  
BLR 24-2

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

Electric  
Shelby Electric CO-OP  
(217) 774-3088  
Attn: Jim Matlock

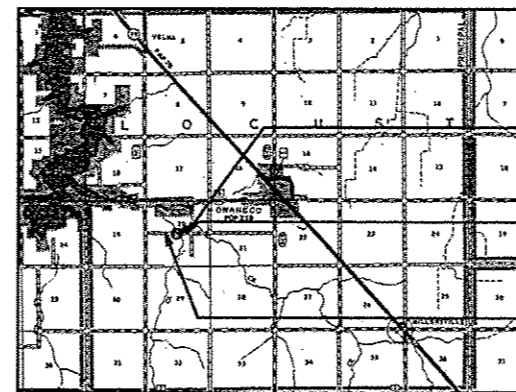
Telephone  
Consolidated Communications  
(217) 235-333  
Attn: Wes Chambers

Cable Television  
NewWave Communications  
(217) 287-7091  
Attn: Larry Repacher

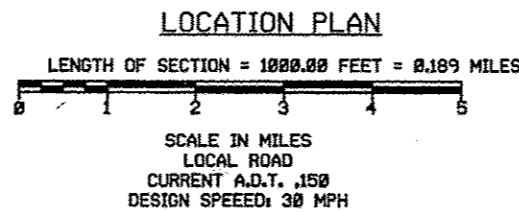
Contract 93597



T. 12 N.



R. 1 W., 3RD P.M.



IMPROVEMENT ENDS  
STA. 15+00

STA. 10+00- SPECIAL BRIDGE DESIGN  
PRECAST PRESTRESSED CONCRETE DECK  
BEAM BRIDGE; ONE SPAN AT 75'-6";  
24'-0" ROADWAY, SKEW=0

PROPOSED S.N. 011-3419  
REPLACES  
EXISTING S.N. 011-3195

IMPROVEMENT BEGINS  
STA. 5+00



*Philip G. Martin*  
ILLINOIS PROFESSIONAL ENGINEER NO. 48381  
DATE SIGNED *May 11, 2015*  
LICENSE EXP. DATE: *November 30, 2015*

APPROVED	<i>5/18</i>	15
	<i>Craig D. Fry</i>	
	CHRISTIAN COUNTY ENGINEER	
APPROVED	<i>5/18</i>	15
	<i>George A. Brubaker</i>	
	LOCUST ROAD DISTRICT COMMISSIONER	
PASSED	<i>May 29</i>	15
	<i>Scott D. Smith</i>	
	DISTRICT SURVEY ENGINEER OF LOCAL ROADS & STREETS	
PASSED	<i>May 29 2015</i>	
	<i>Ken Decker</i>	
	DISTRICT SURVEY ENGINEER OF CONSTRUCTION	
Released For Bid Based on Limited Review	<i>May 29</i>	15
	<i>Rock J. Decker</i>	
	DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER	
	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

SUMMARY OF QUANTITIES

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, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

REMOVAL OF THE EXISTING PAVEMENT (BITUMINOUS SURFACE AND AGGREGATE BASE), WHERE NECESSARY TO CONSTRUCT THE PROPOSED PAVEMENT, SHALL BE CONSIDERED EARTH EXCAVATION. SAWCUTTING THE EXISTING PAVEMENT SHALL BE INCLUDED IN THE COST FOR EARTH EXCAVATION.

THE LOCATIONS OF THE EXISTING ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND FIELD INSPECTION. SEE STANDARD SPECIFICATIONS.

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

SEEDING, CLASS 2 (SPECIAL) \* 0.8 ACRES

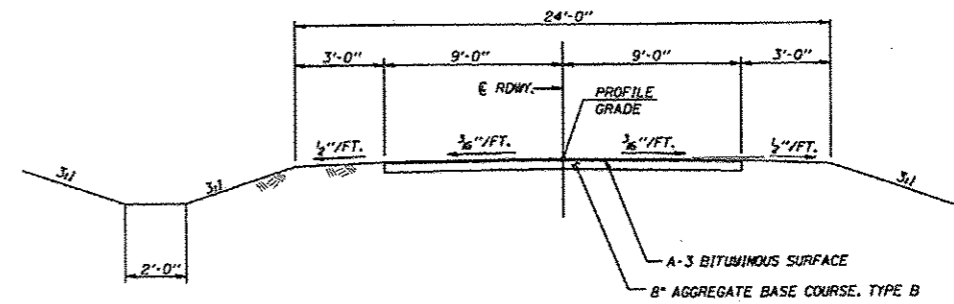
THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF PIPE CULVERTS AND PIPE DRAINS BEFORE ORDERING THESE ITEMS.

APPLICATION RATES USED IN QUANTITY CALCULATIONS

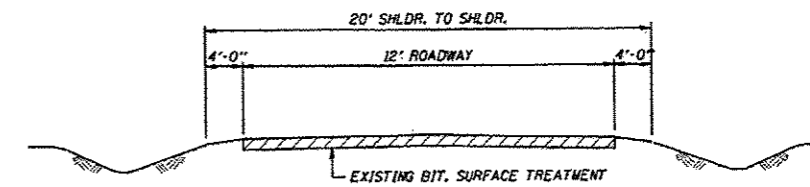
GRAVEL MATERIALS	2.05 TONS/CU. YD.
COVER AND SEAL COAT AGGREGATE	30#/SQ. YD.
BITUMINOUS COVER AND SEAL COAT	35 GAL./SQ. YD.
BITUMINOUS PRIME COAT	50 GAL./SQ. YD.
RIP RAP SPECIAL	1.5 TONS/CU. YD.
TEMP. EROSION CONTROL SEEDING	100 LB./ACRE

<u>CODE NO.</u>	<u>ITEM</u>	<u>UNIT</u>	<u>TOTAL</u>
20100500	TREE REMOVAL, ACRES	ACRE	0.1
20200100	EARTH EXCAVATION	CU YD	520
20300100	CHANNEL EXCAVATION	CU YD	310
20400800	FURNISHED EXCAVATION	CU YD	2398
* X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.8
28000305	TEMPORARY DITCH CHECKS	FOOT	48
28100207	STONE RIPRAP, CLASS A4	TON	173
28200200	FILTER FABRIC	SQ YD	266
3510400	AGGREGATE BASE COURSE, TYPE B	TON	825
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	20
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	905
40300300	BITUMINOUS MATERIALS (COVER AND SEAL COATS)	GALLON	1900
40300500	COVER COAT AGGREGATE	TON	55
40300600	SEAL COAT AGGREGATE	TON	28
* 50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1
* 50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	19.2
50300280	CONCRETE ENCASEMENT	CU YD	3.4
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SO FT	1,776
50800105	REINFORCEMENT BARS	POUND	2,340
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	148
51201600	FURNISHING STEEL PILES HP12X53	FOOT	450
51202305	DRIVING PILES	FOOT	450
51203600	TEST PILE STEEL HP12X53	EACH	1
51500100	NAME PLATES	EACH	1
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2
54001004	PRECAST CONCRETE BOX CULVERTS 4'X4'	FOOT	30
67100100	MOBILIZATION	L SUM	1
* 70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1

\* SEE SPECIAL PROVISIONS    Δ SPECIALTY ITEMS

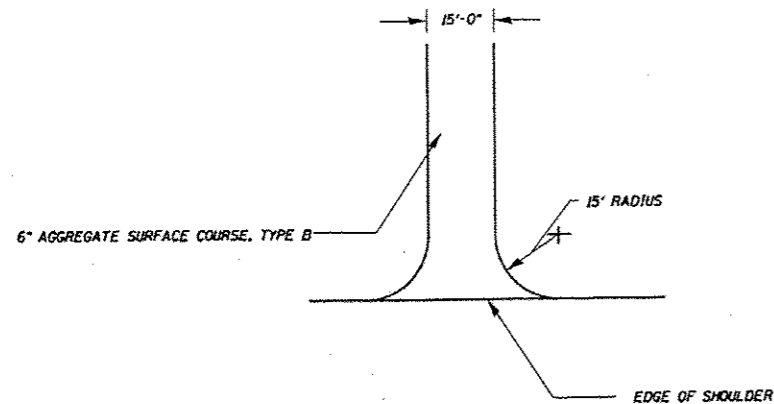


PROPOSED TYPICAL CROSS SECTION  
STA. 5+00 TO STA. 15+00



TYPICAL EXISTING CROSS SECTION

NOTE: THE EXISTING PAVEMENT TO BE REMOVED WILL NOT TO BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR "EARTH EXCAVATION."

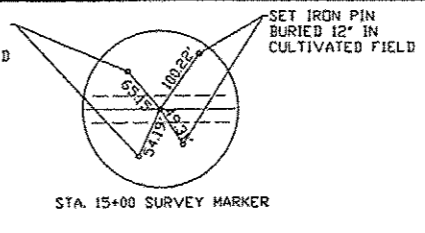
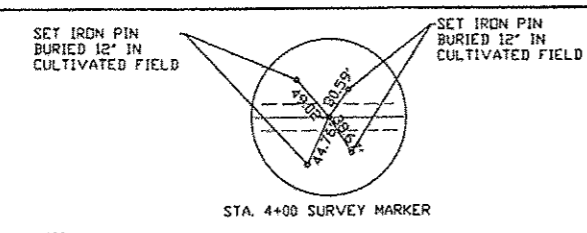
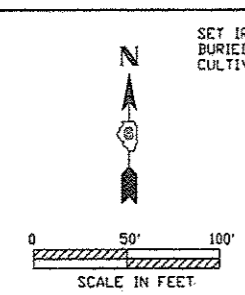


PRIVATE ENTRANCE DETAIL  
RT. STA. 7+71.88

FILE NAME * #FILEL#	USER NAME * LJM	DESIGNED - LJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES, TYPICAL SECTIONS, DETAILS TR 245 OVER COTTONWOOD CREEK STA. 10+00	SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	F.A. RTE. TR 245	SECTION 08-07114-00-BR	COUNTY CHRISTIAN	TOTAL SHEETS	SHEET NO.
	PLOT SCALE * N/A	CHECKED - LJM	REVISED -									14	2
	PLOT DATE * MARCH 31, 2010	DATE - MARCH 31, 2010	REVISED -									93597	

**MEC**  
MARTIN ENGINEERING COMPANY  
CONSULTING ENGINEERS AND SURVEYORS  
(ILLINOIS PROFESSIONAL DESIGN FIRM NO. 154-002843)  
3223 E. MEADOWBROOK RD., SPRINGFIELD, ILLINOIS 62711  
Phone: (217) 628-8200, Fax: (217) 628-8222, E-Mail: mec@martinengr.com

PROJECT NO.  
DATE: MAR. 31, 2010

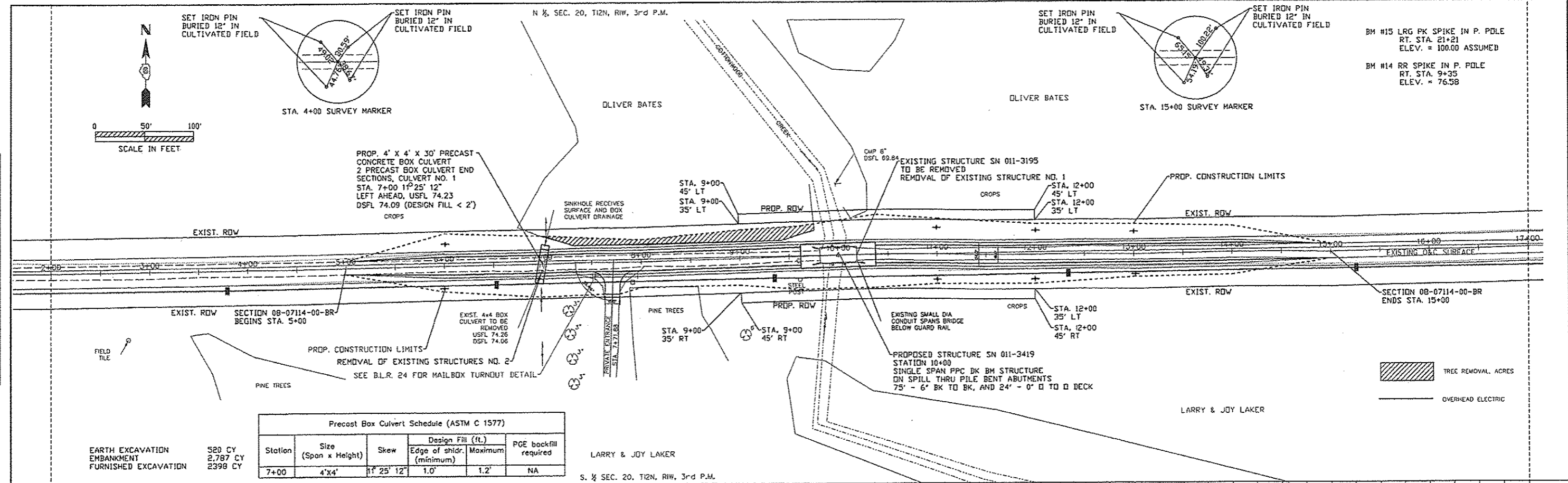


BM #15 LRG PK SPIKE IN P. POLE  
RT. STA. 21+21  
ELEV. = 100.00 ASSUMED

BM #14 RR SPIKE IN P. POLE  
RT. STA. 9+35  
ELEV. = 76.38

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
FILE NAME	
NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
FILE NAME	
NO.	



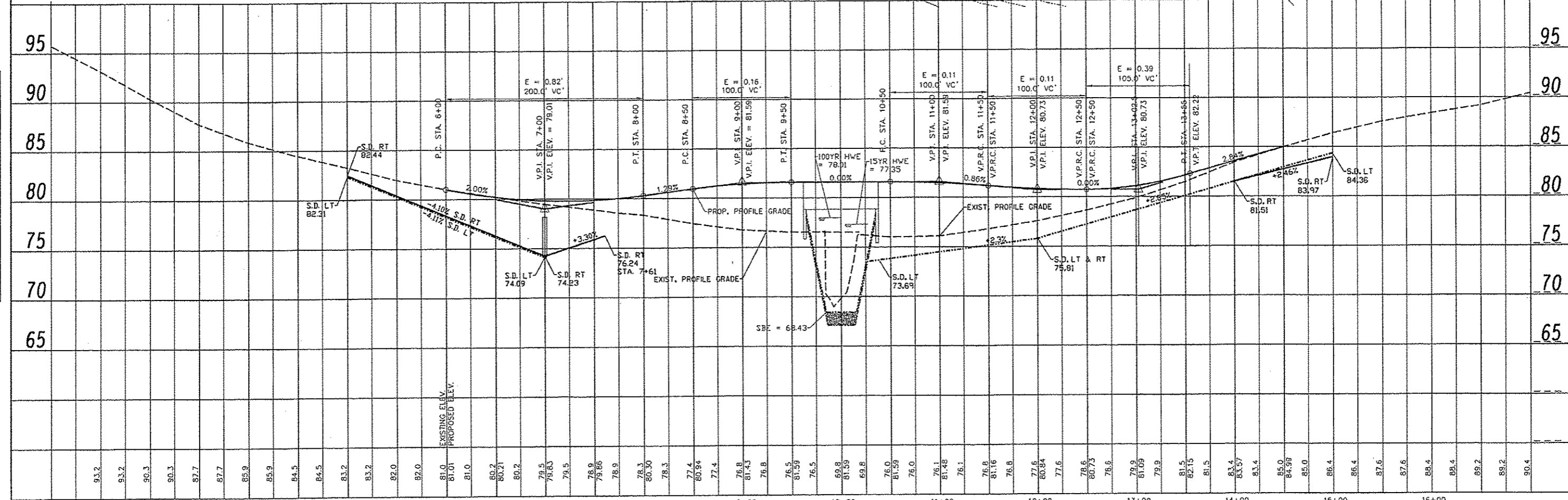
Precast Box Culvert Schedule (ASTM C 1577)

Station	Size (Span x Height)	Skew	Design Fill (ft.) Edge of shldr. Minimum	Maximum	PGE backfill required
7+00	4'x4'	1° 25' 12"	1.0'	1.2'	NA

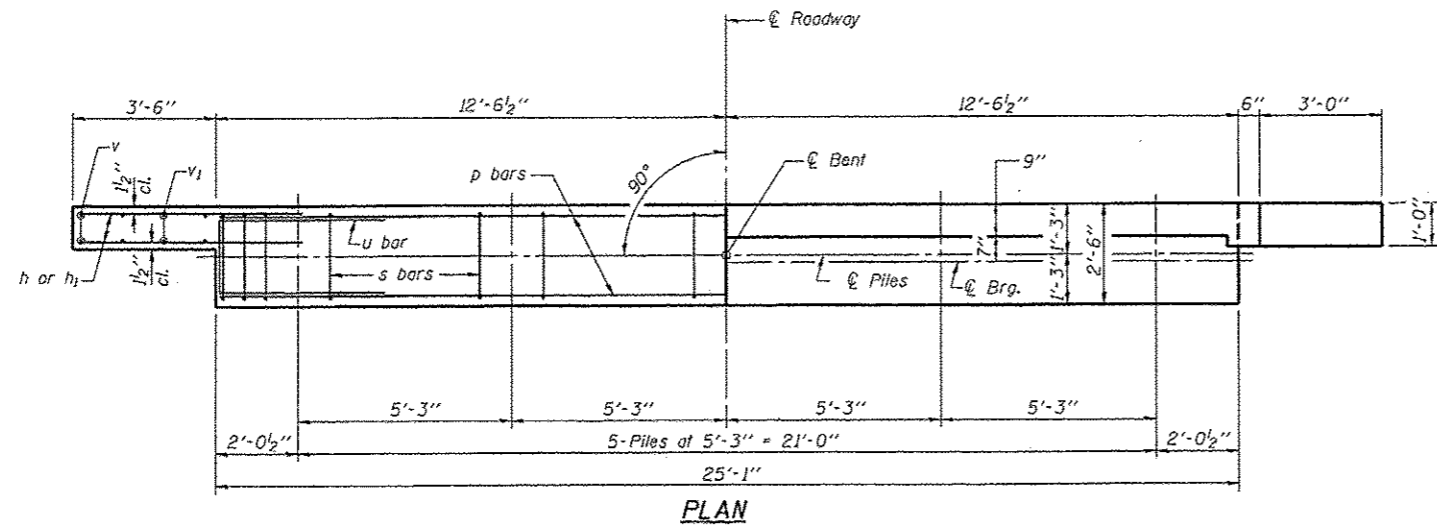
EARTH EXCAVATION  
EMBANKMENT  
FURNISHED EXCAVATION

520 CY  
2,787 CY  
2398 CY

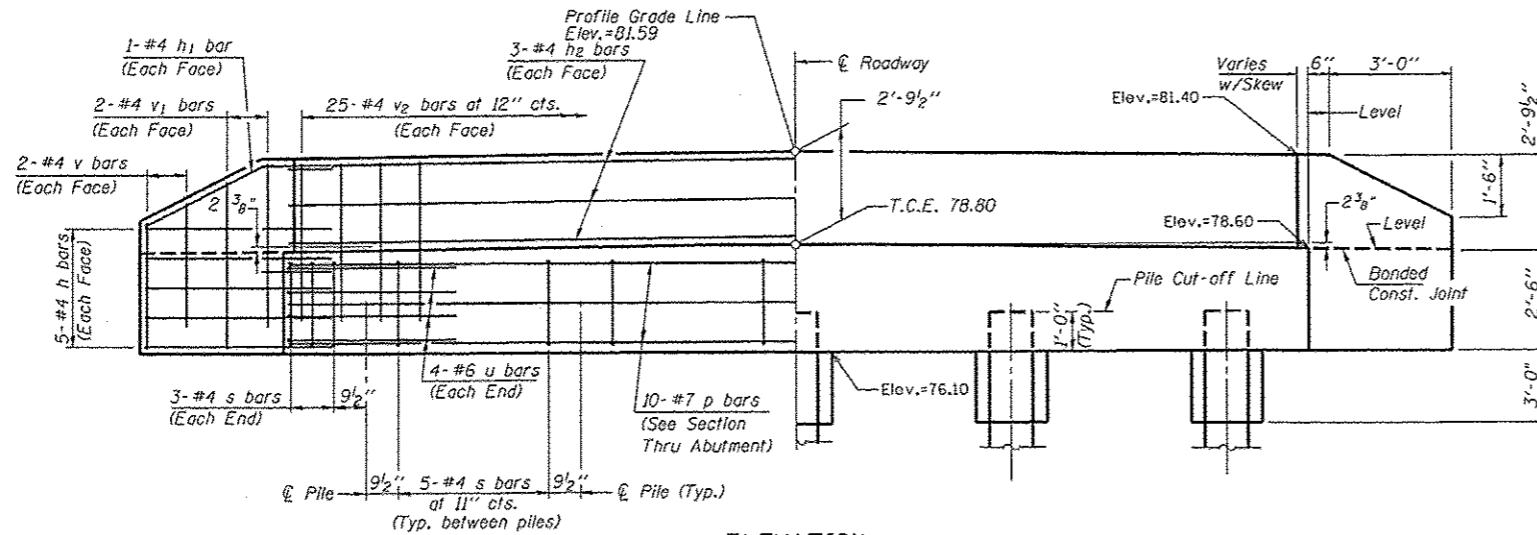
LARRY & JOY LAKER  
S. 1/2 SEC. 20, T12N, R1W, 3rd P.M.



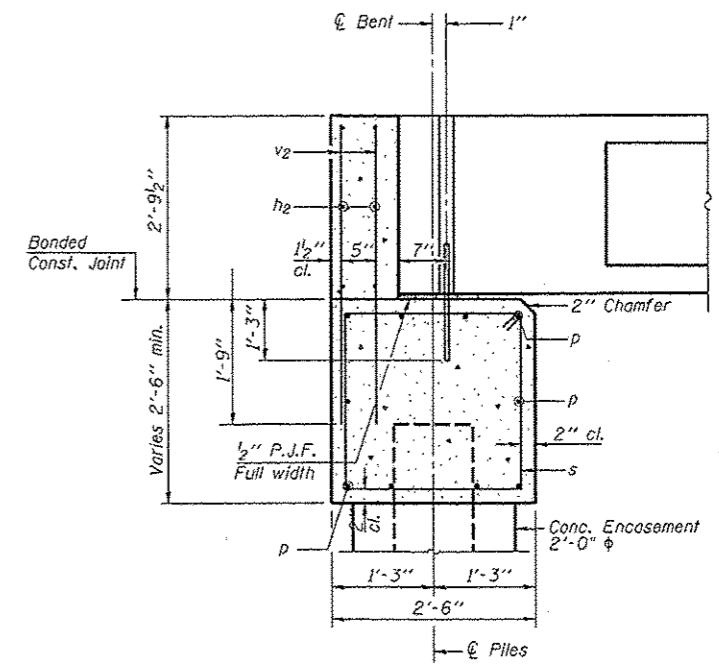




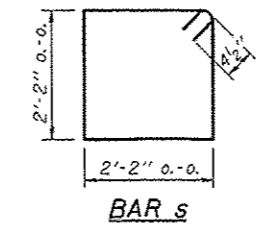
PLAN



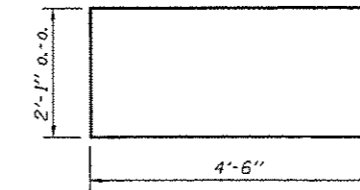
ELEVATION



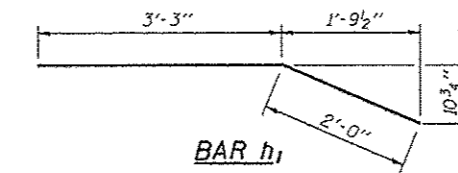
SECTION THRU ABUTMENT  
(At Right Angles)



BAR s



BAR u



BAR h1

**BILL OF MATERIAL FOR ONE ABUTMENT**

Bar	No.	Size	Length	Shape
h	20	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	24'-9"	—
p	10	#7	24'-9"	—
s	26	#4	9'-5"	□
u	8	#6	11'-1"	□
v	8	#4	3'-8"	—
v1	8	#4	4'-8"	—
v2	50	#4	4'-5"	—
Concrete Structures			9.6 Cu. Yds.	
Reinforcement Bars			1170 Lb.	
Concrete Encasement			1.7 Cu. Yds.	
Furnish STL Piles			250 Foot East	
HP 12x53			200 Foot West	

**NOTES**

1. The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
2. Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60.
3. Space reinforcement in cap to miss dowels.

**MAXIMUM PILE LOADS**

SPAN	TONS
75'	41

**DESIGN STRESSES**

f'c = 3,500 psi  
fy = 60,000 psi

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

P.P.C. DECK BEAMS PILE BENT ABUTMENT  
TR 245 OVER COTTONWOOD CREEK STA 10+00

**MEC**  
MILITARY ENGINEERING CONSULTING ENGINEERS AND SURVEYORS  
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-022843  
3225 S. WILSON AVENUE, SPRINGFIELD, ILLINOIS 62711  
Phone: (217) 528-8900, Fax: (217) 698-8312, E-Mail: mec2@aol.com

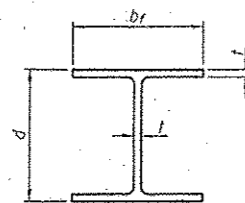
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 245	08-07114-00-BR	CHRISTIAN	14	5

93597

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

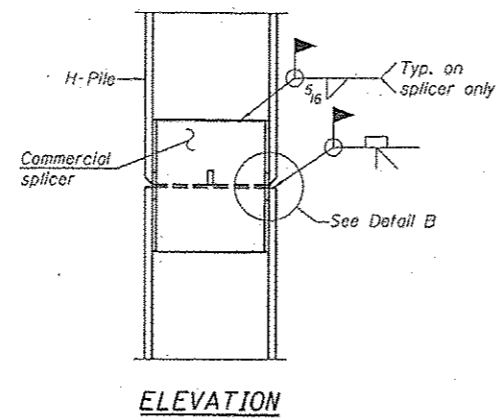
SCALE: \_\_\_\_\_ SHEET NO. 2 OF 6 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

ILLINOIS FED. AID PROJECT

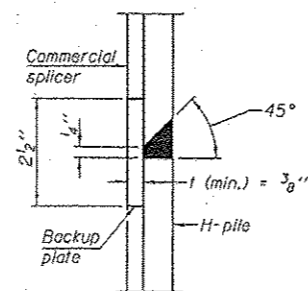


**STEEL PILE TABLE**

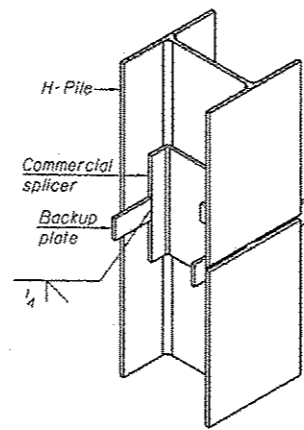
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 5/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 9/16"	12 1/4"	5/8"	24"
x63	12"	12 9/16"	1/2"	24"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



**ELEVATION**

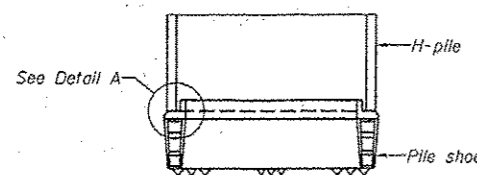


**DETAIL "B"**

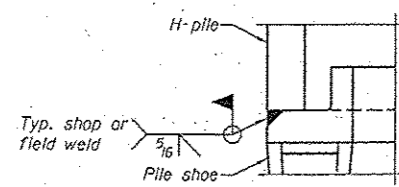


**ISOMETRIC VIEW**

**WELDED COMMERCIAL SPLICE**

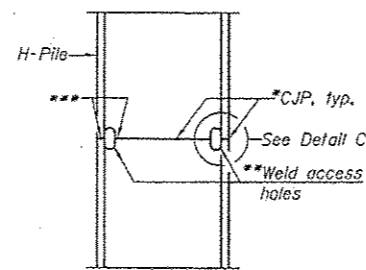


**ELEVATION**

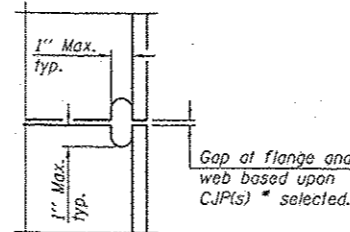


**DETAIL A**

**H-PILE SHOE ATTACHMENT**



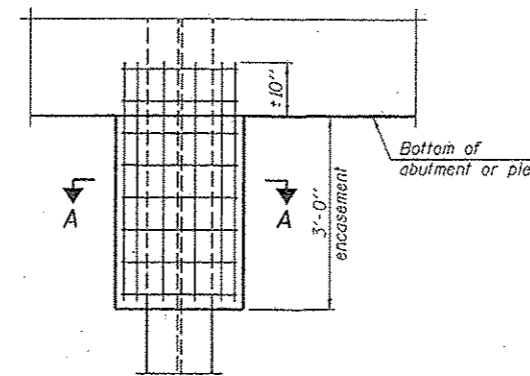
**ELEVATION**



**DETAIL C**

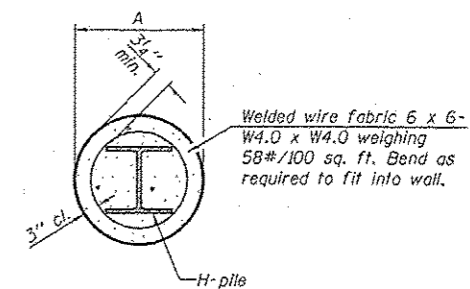
**COMPLETE PENETRATION WELD SPLICE**

- \* Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.
- \*\* Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.
- \*\*\* Interrupt welds 1/4" from end of each pile.



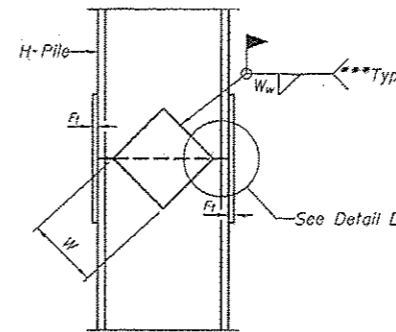
**ELEVATION**

**PILE ENCASEMENT**

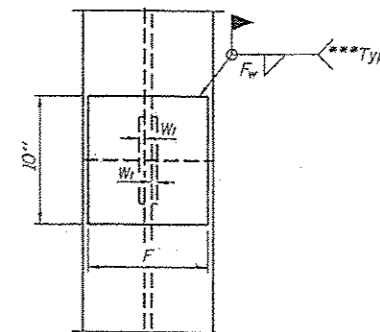


**SECTION A-A**

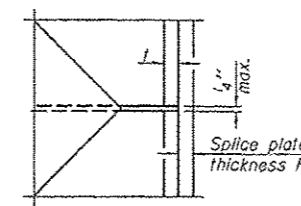
Note:  
Forms for encasement may be omitted when soil conditions permit.



**ELEVATION**



**END VIEW**



**DETAIL D**

**WELDED PLATE FIELD SPLICE**

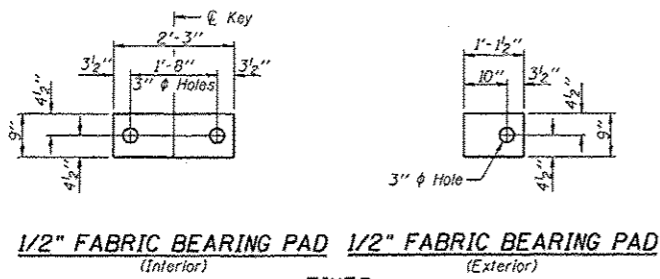
Designation	F	F <sub>1</sub>	F <sub>w</sub>	W	W <sub>1</sub>	W <sub>w</sub>
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 8/16"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 8/16"	1/2"
x89	12 1/2"	3/4"	9/16"	7 3/4"	5 8/16"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 8/16"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5 8/16"	1/2"
x74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

F-HP

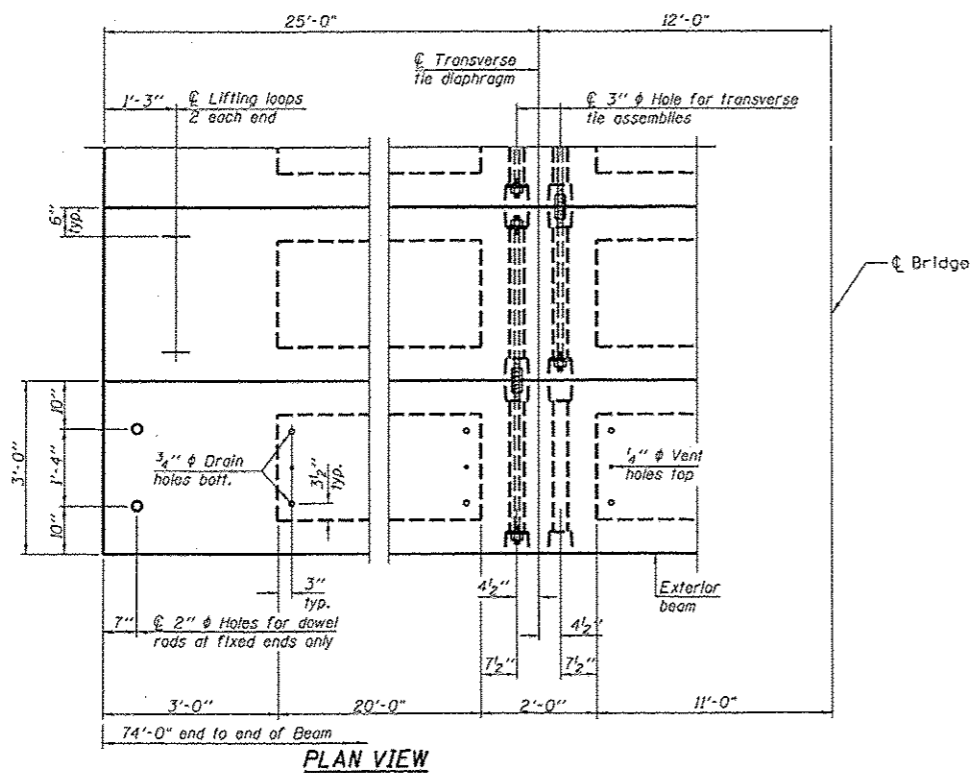
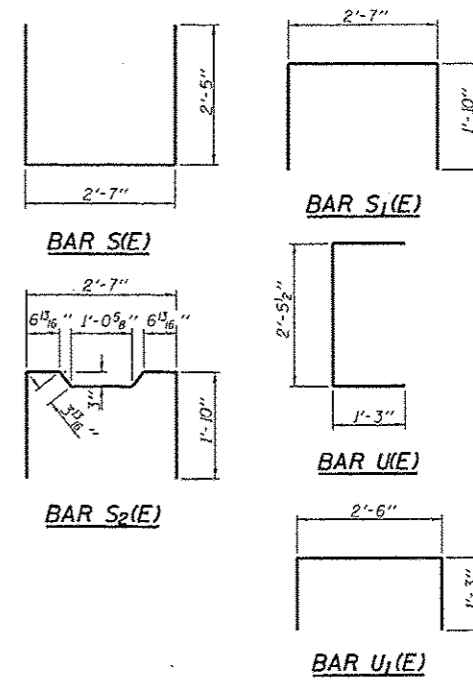
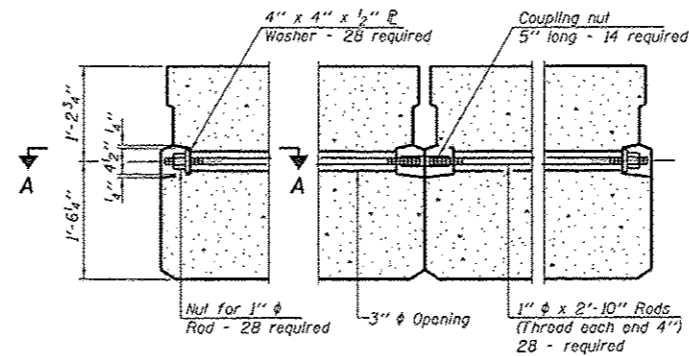
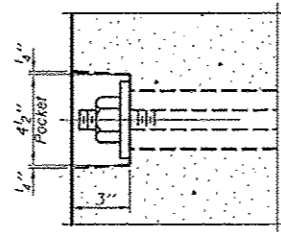
10-1-08

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

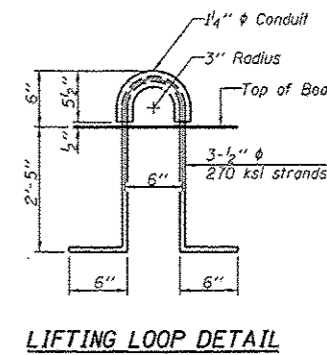
FILE NAME *FILE*	USER NAME *USER*	DESIGNED ---	REVISED ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HP PILE DETAILS STRUCTURE NO. 011-3419 TR 245 OVER COTTONWOOD CREEK STA.10+00	SCALE: _____ SHEET NO. 3 OF 6 SHEETS STA. _____ TO STA. _____	F.A. RTE. _____	SECTION TR 245	COUNTY CHRISTIAN	TOTAL SHEETS 14	SHEET NO. 6
PLOT SCALE *SCALE*	CHECKED ---	REVISED ---	ILLINOIS FED. AID PROJECT 93597								
PLOT DATE *DATE*	DATE ---	REVISED ---									



Note: Omit holes when using expansion bearings.



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



**NOTES**

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

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	1776
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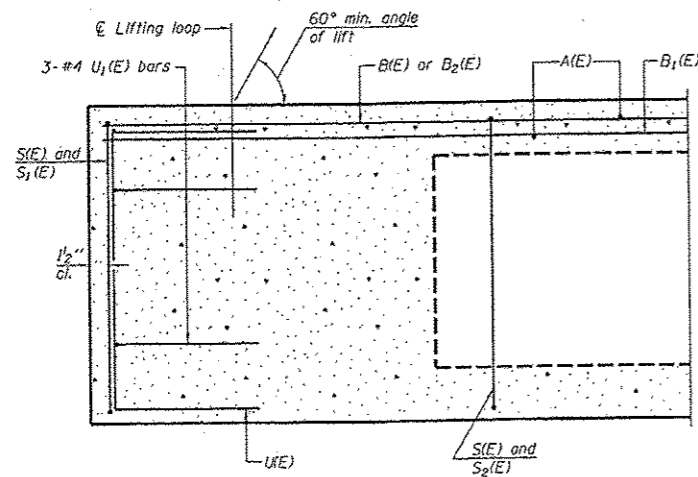
**33" X 36" PPC DECK BEAM DETAILS  
STRUCTURE NO.**

PD-3336-OD 10-1-08

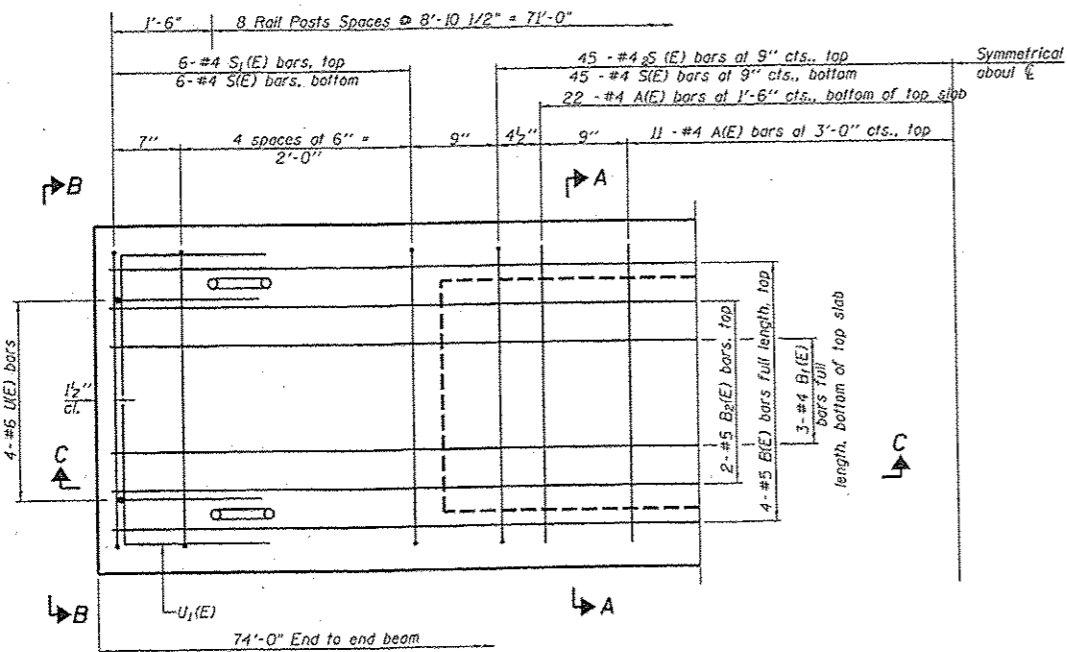
FILE NAME #	USER NAME #	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	33" X 36" PPC DECK BEAM DETAILS NO. 011-3419 TR 245 OVER COTTONWOOD CREEK STA. 10+00	SCALE: _____ SHEET NO. 4 OF 6 SHEETS	STA. _____ TO STA. _____	<table border="1"> <tr> <td>F.A. RTE.</td> <td>SECTION</td> <td>COUNTY</td> <td>TOTAL SHEETS</td> <td>SHEET NO.</td> </tr> <tr> <td>TR245</td> <td>08-07114-00-BR</td> <td>CHRISTIAN</td> <td>14</td> <td>7</td> </tr> </table>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	TR245	08-07114-00-BR	CHRISTIAN	14	7
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS					SHEET NO.													
TR245	08-07114-00-BR	CHRISTIAN	14					7													
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ILLINOIS FED. AID PROJECT																					
#DATE#	DATE	REVISOR -	REVISED -																		

**MEC**  
MARTIN ENGINEERING COMPANY  
CONSULTING ENGINEERS AND SURVEYORS  
ILLINOIS PROFESSIONAL ENGINEERS REG. NO. 124022-010  
333 S. MICHIGAN ST., SPRINGFIELD, ILLINOIS 62761  
Phone: (317) 698-8900 Fax: (317) 698-9222 E-Mail: mecmec@mecegroup.com





SECTION C-C

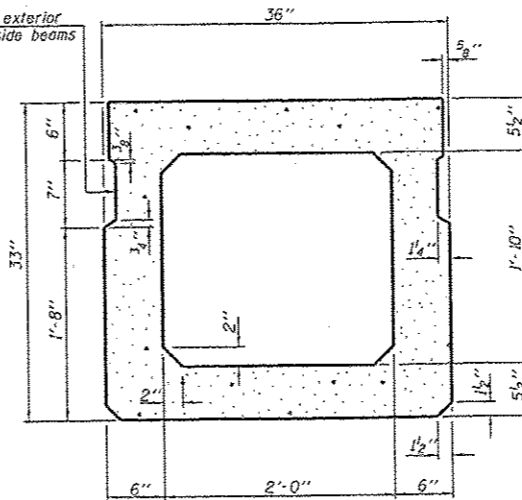


PLAN VIEW

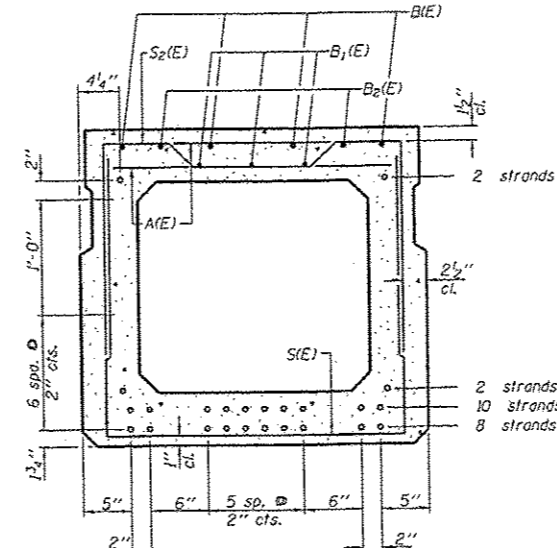
Note: Spacing of S1(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

\*Rail post anchor devices to be cast into exterior face of outside beams.

\*Omit key on exterior face of outside beams

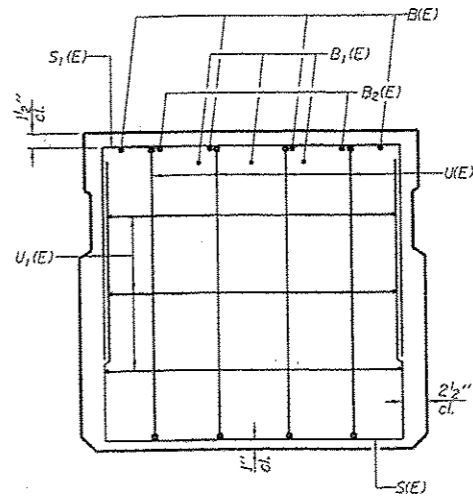


SECTION A-A (Showing dimensions)



SECTION A-A (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.



VIEW B-B

BAR LIST ONE BEAM ONLY (For information only)

Bar	No.	Size	Length	Shape
A(E)	66	#4	2'-7"	—
B1(E)	4	#5	73'-8"	—
B2(E)	3	#4	73'-8"	—
B2(E)	4	#5	15'-0"	—
S1(E)	90	#4	7'-5"	L
S1(E)	12	#4	6'-3"	—
S2(E)	90	#4	6'-6"	—
U1(E)	8	#6	5'-0"	—
U1(E)	6	#4	5'-0"	—

Note: See sheet 4 of 6 for additional details and Bill of Material.

Reinforcement designated (E) to be Epoxy Coated.

33" x 36" PPC DECK BEAM STRUCTURE NO. 011-3419

PD-3336-0 10-1-08

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

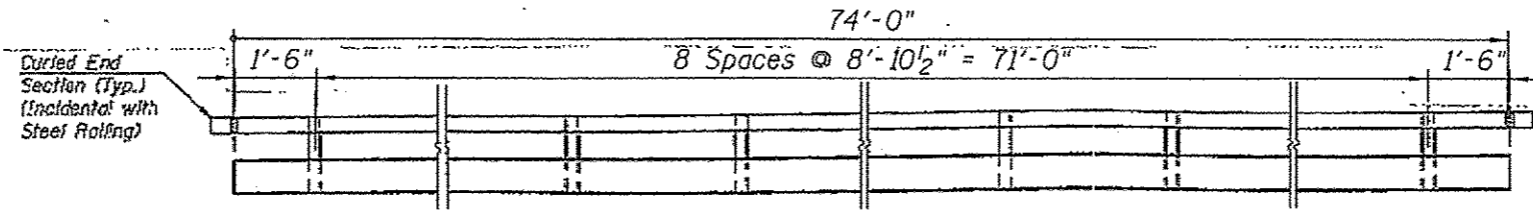
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

33" X 36" PPC DECK BEAM STRUCTURE NO. 011-3419 TR 245 OVER COTTONWOOD CREEK STA. 10+00

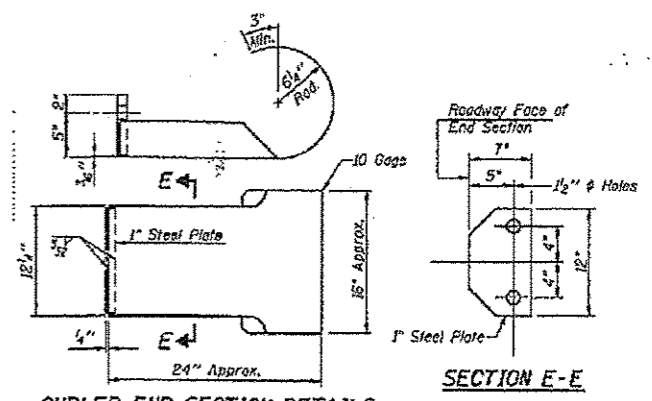
SCALE: SHEET NO. 5 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 245	08-07114-00-BR	CHRISTIAN	14	8
			93597	

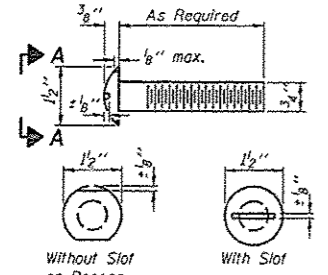




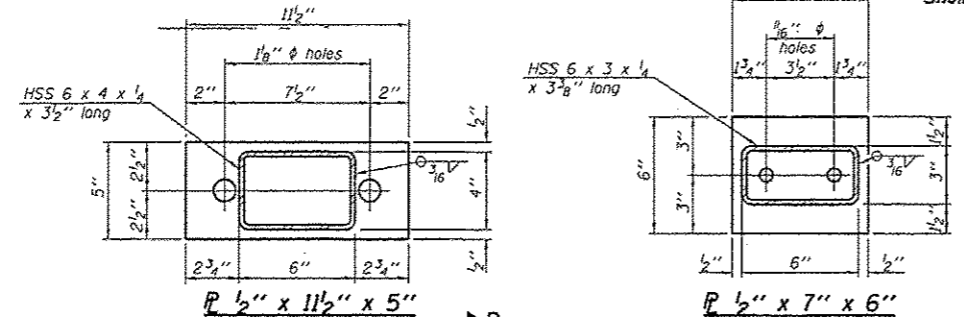
**ELEVATION**  
Showing Inside Face of Rail



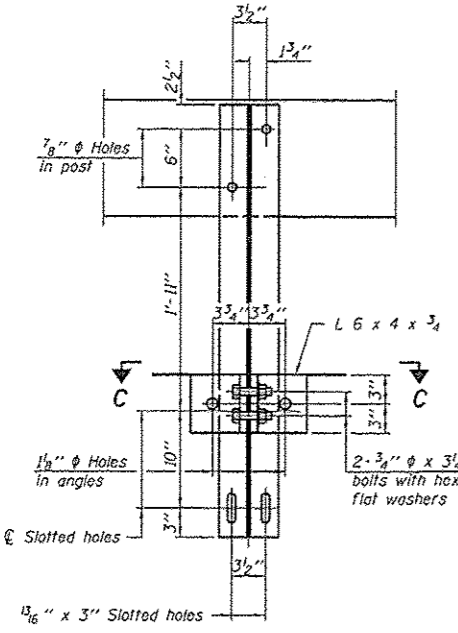
**CURLED END SECTION DETAILS**  
(14 Required)



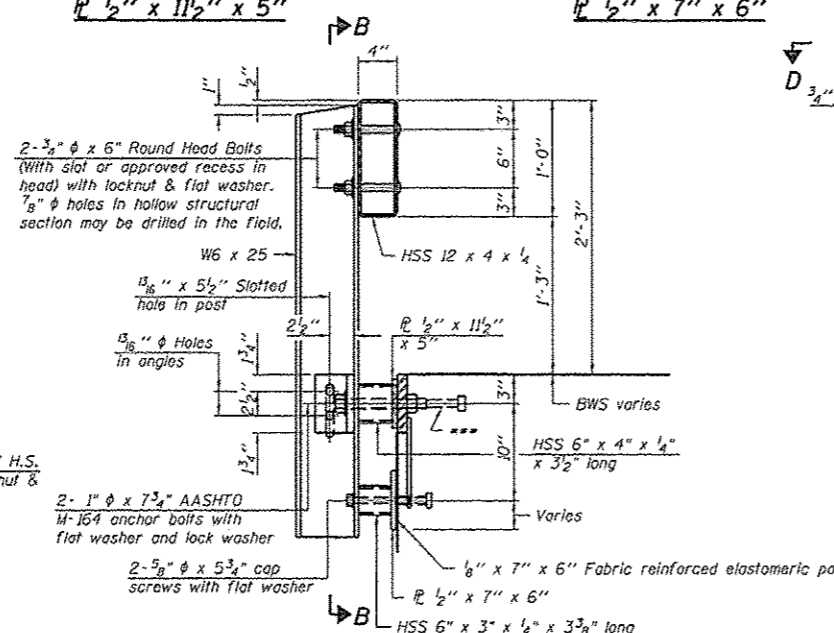
**VIEW A-A**  
**ROUND HEAD BOLT**



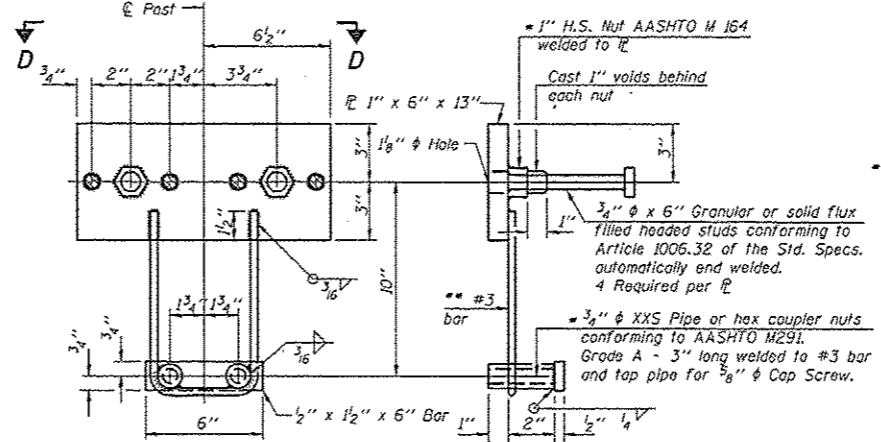
**SECTION AT RAILING POST**



**SECTION B-B**

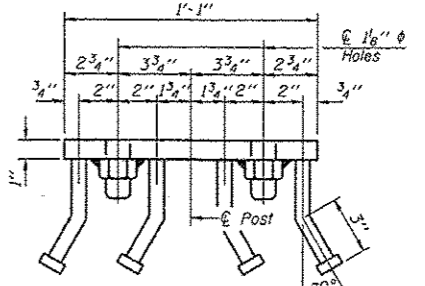


**SECTION C-C**

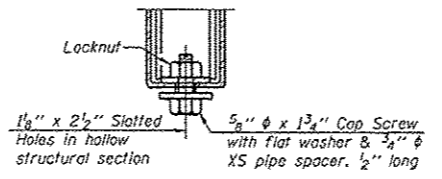


**ANCHOR DEVICE**

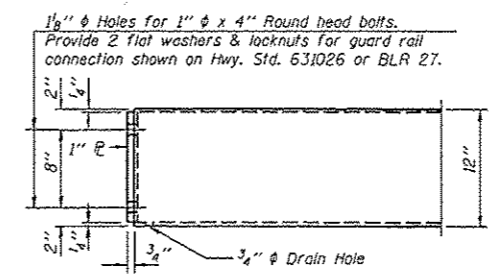
**Notes:**  
All field drilled holes shall be coated with an approved zinc rich paint before erection. For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cast included with Steel Railing, Type S-1. All steel rail elements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



**VIEW D-D**



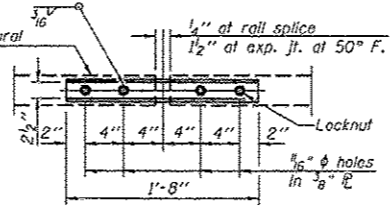
**RAIL SPLICE CONNECTION**  
AT EXPANSION JT.



**END OF RAIL DETAILS**

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	148



**PLAN-BOTT. SPLICE TYPICAL**

**SECTIONS AT RAIL SPLICE**

R-23A 11-1-09 (10'-9" Maximum Post Spacing)

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

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE S-1 STRUCTURE NO. 011-3419  
TR 245 OVER COTTONWOOD CREEK STA. 10+00

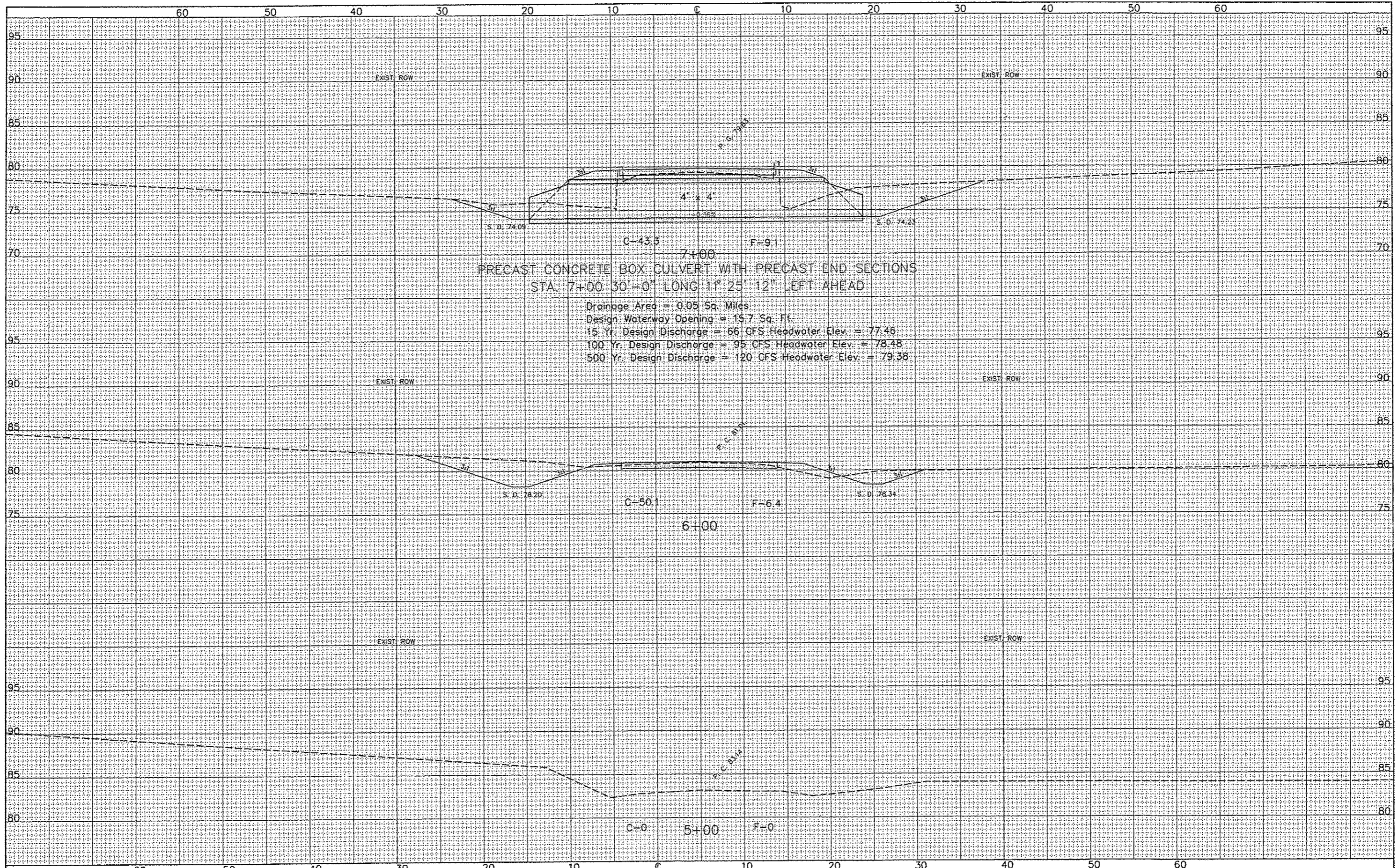
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 245	08-07114-00-BR	CHRISTIAN	14	9

93597

**MEC**  
MURPHY ENGINEERING COMPANY  
CONSULTING ENGINEERS AND ARCHITECTS  
ILLINOIS PROFESSIONAL DESIGN FIRM NO. 164-02840  
3325 S. WISCONSIN AVE., SPRINGFIELD, ILLINOIS 62711  
Phone: (217) 524-4100, Fax: (217) 524-4122, E-Mail: meca@murphyengineering.com

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

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



FILE NAME *	USER NAME * #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>ROAD &amp; CULVERT CROSS SECTIONS</b> <b>TR 245 OVER COTTONWOOD CREEK STA. 5+00 - 7+00</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		DATE -	REVISED -									ILLINOIS FED. AID PROJECT

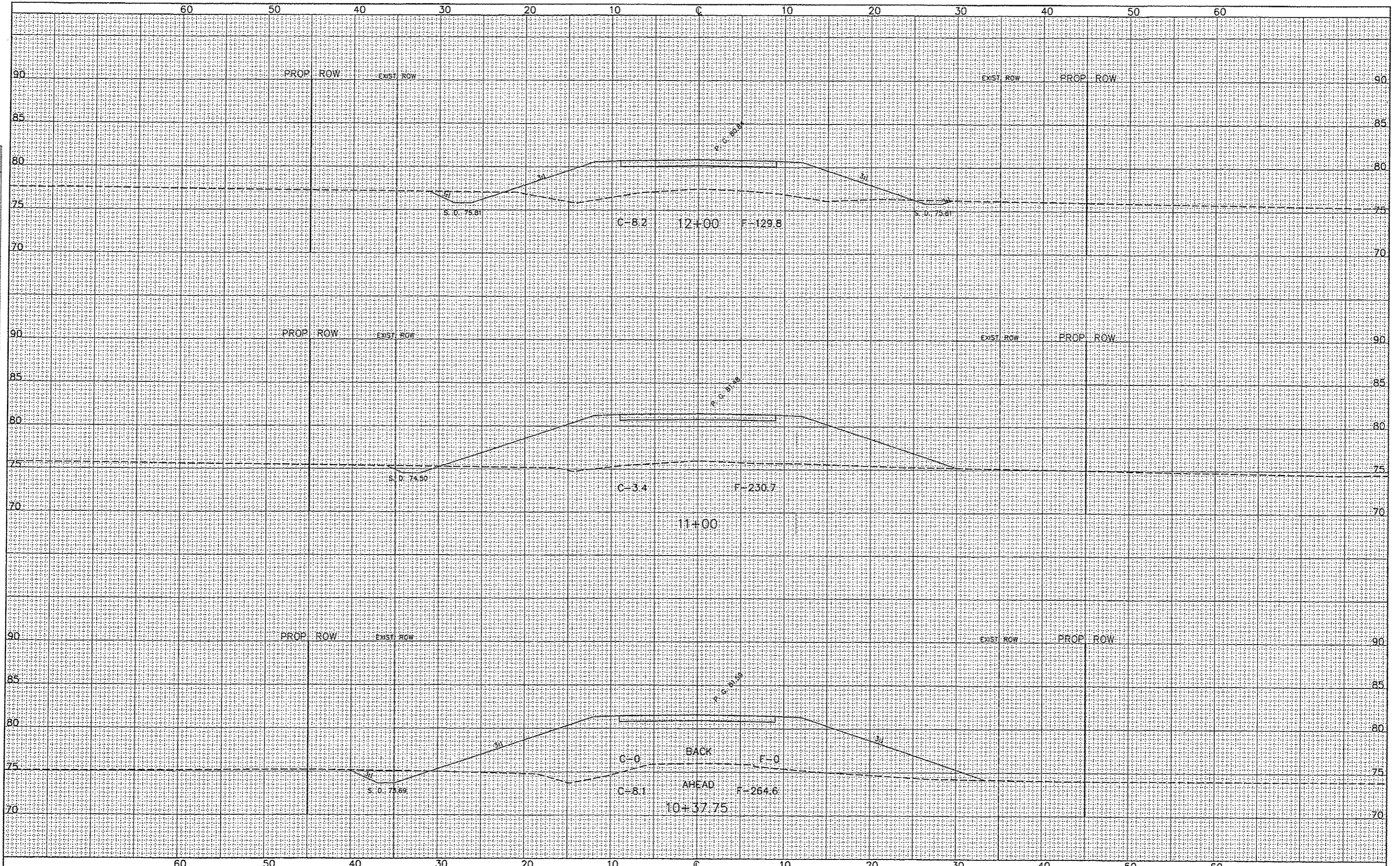






BT	DATE
SURVEYED	
PLOTTED	
TEMP. A/C	
NOTE BOOK	
AREAS CHECKED	
NO.	

BT	DATE
SURVEYED	
PLOTTED	
TEMP. A/C	
NOTE BOOK	
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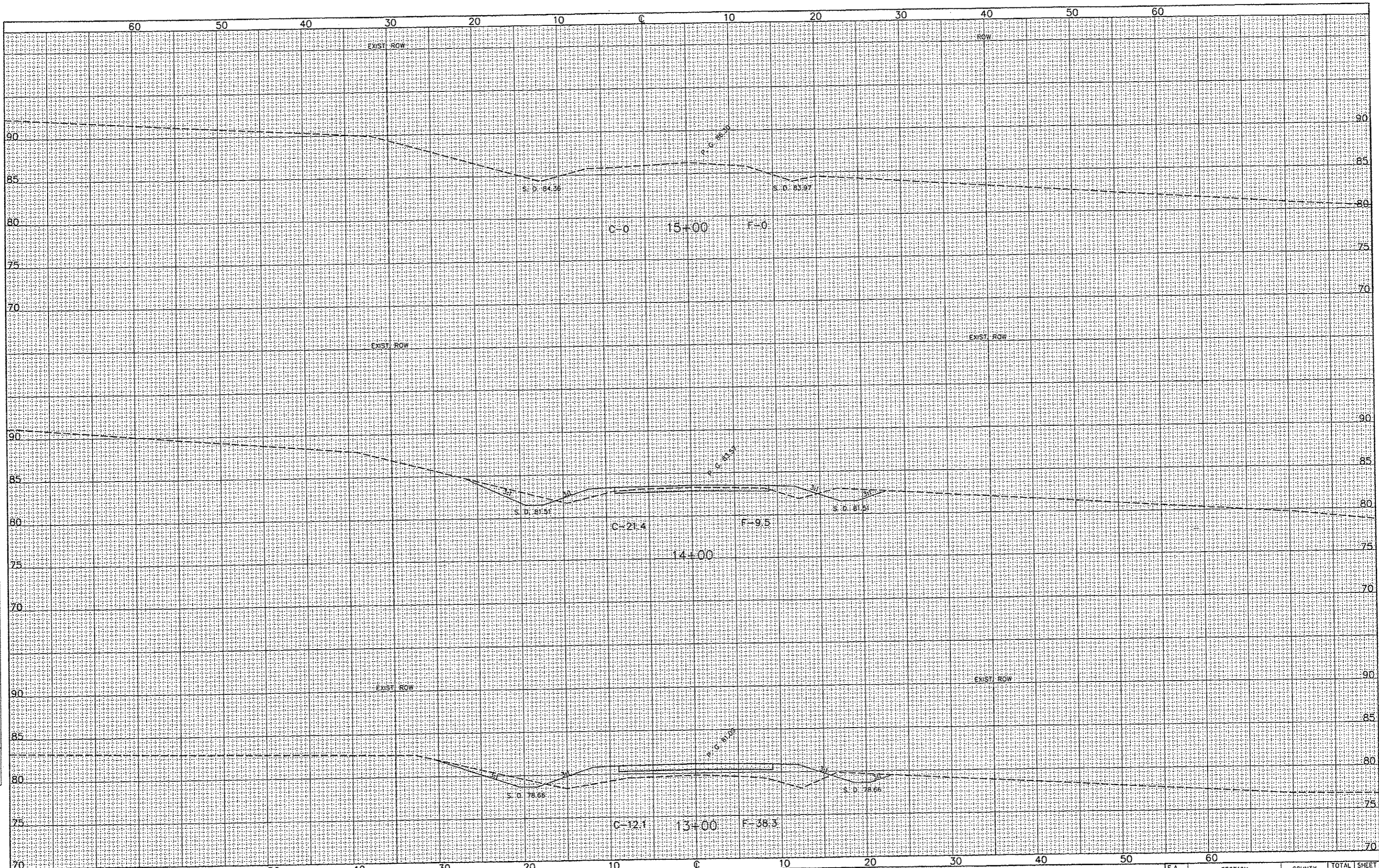


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*FILE#		DRAWN -	REVISED -			TR 245 OVER COTTONWOOD CREEK STA. 10+37.75 - 12+00		TR 245	08-07114-00-BR	CHRISTIAN	14	12
		CHECKED -	REVISED -	SCALE: _____		SHEET NO. 3 OF 5 SHEETS		STA. 10+37.75 TO STA. 12+00		93597		
		DATE -	REVISED -					ILLINOIS FED. AID PROJECT				



FILED	DATE
SURVEYED	
PLOTTED	
TEMPERATURE	
NOTE BOOK	
AREAS CHECKED	
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FILED	DATE
SURVEYED	
PLOTTED	
TEMPERATURE	
NOTE BOOK	
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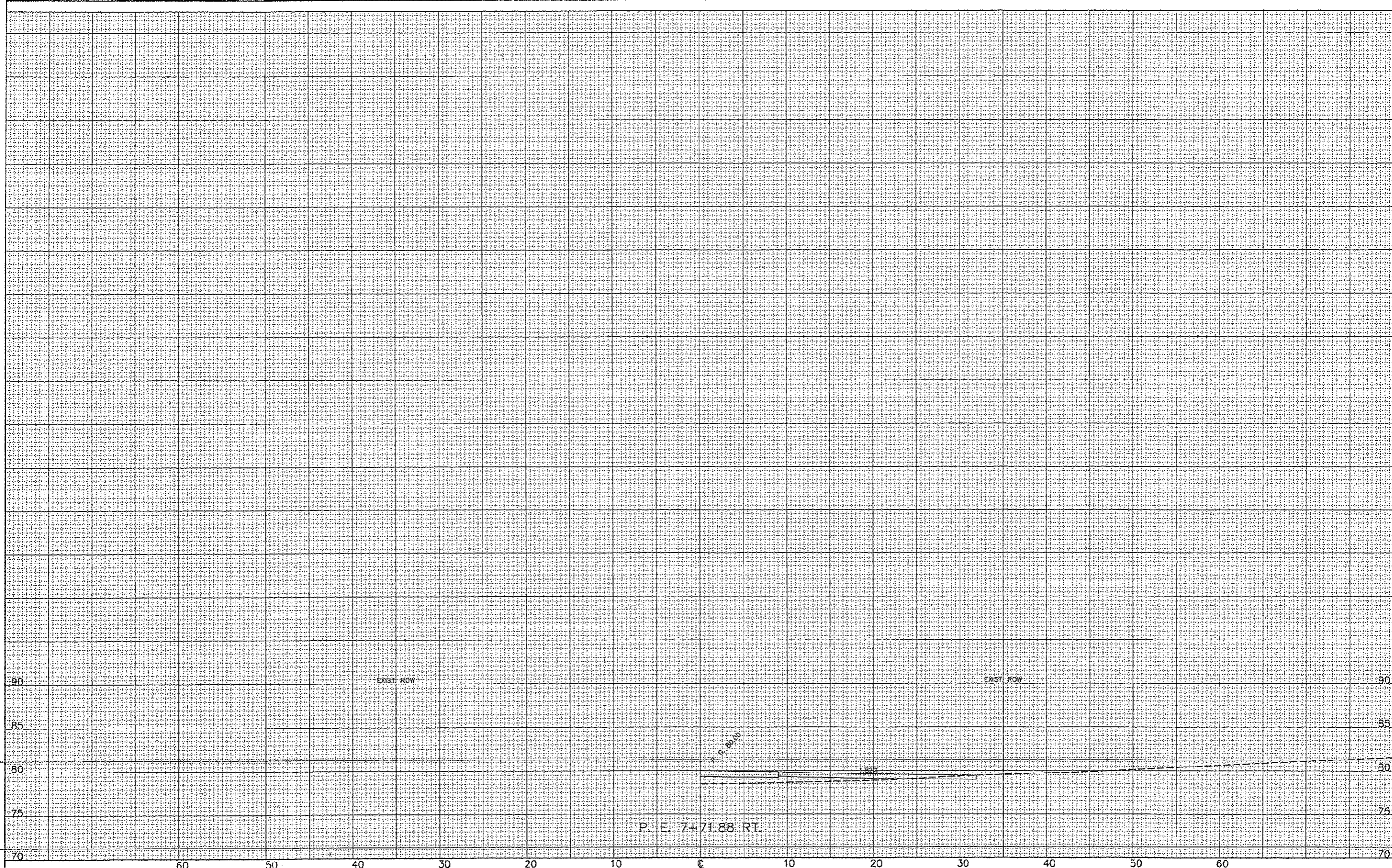


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		CHECKED -	REVISED -									93597
		DATE -	REVISED -									
								ILLINOIS FED. AID PROJECT				



DATE	
BY	
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FILE NAME *	USER NAME * #USER*	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>ROAD &amp; P.E. CROSS SECTIONS</b> <b>TR 245 OVER COTTONWOOD CREEK STA. 7+71.88 RT.</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		DATE -	REVISED -		ILLINOIS FED. AID PROJECT							