

B.M.: U.S.C. & G.S. 2-234 ELEV. 473.874 STANDARD BRASS DISK SET VERTICALLY IN E. FACE OF WESTERMOST PIER OF EAST BOUND McCLUGAGE BRIDGE. STAMPED 2-234 1980

EXISTING STRUCTURE: S.A. 072-0038 BUILT IN 1948. THREE SPAN 153 FEET LONG REINFORCED CONCRETE GIRDER STRUCTURE ON CONCRETE PILE BENT PIERS AND OPEN STYLE CONCRETE ABUTMENTS. TO BE REMOVED. NO SALVAGE.

SEE SHEET 20 OF 20 FOR EXISTING STRUCTURE DETAILS.

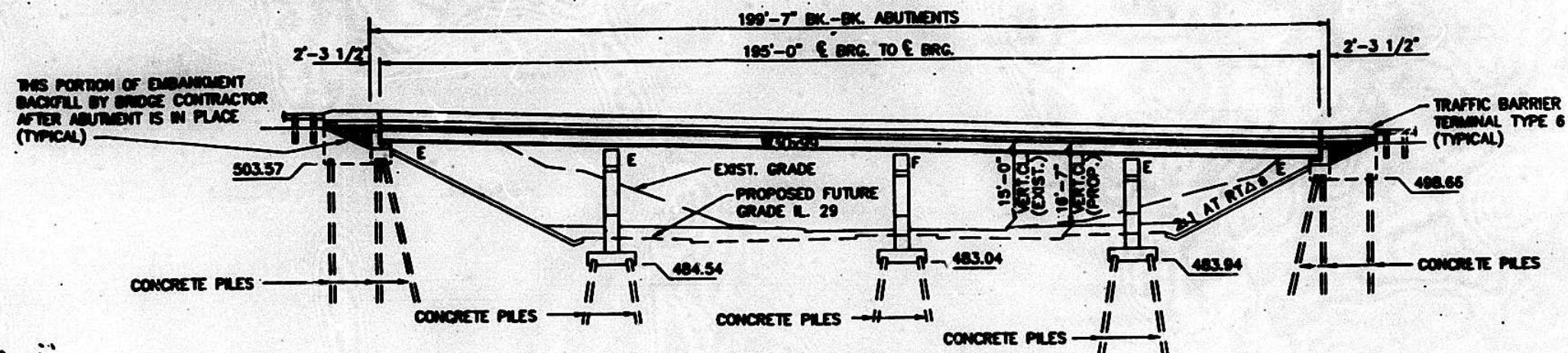
**DESIGN SPECIFICATIONS**  
1980 AASHTO, 1980 AND 1981 INTERM  
SEISMIC ACCELERATION COEFFICIENT = 0.04

**LOADING HS 20-44**  
ALLOW 25#/SQ. FT. FOR FUTURE WEARING SURFACE

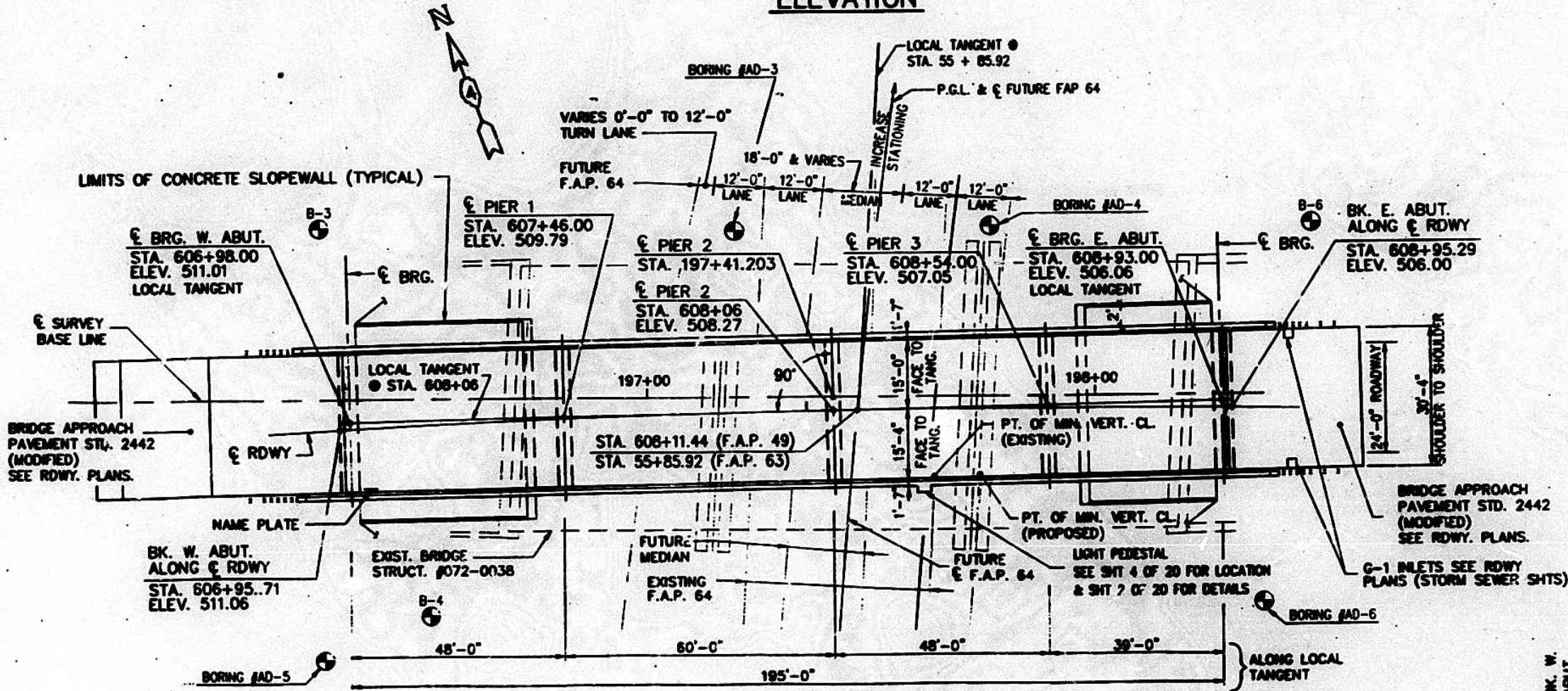
**DESIGN STRESSES**  
F<sub>c</sub> = 3,900 PSI  
F<sub>y</sub> = 60,000 PSI (A572 GR. 50)  
F<sub>y</sub> = 50,000 PSI (A270 GR. 50)  
F<sub>y</sub> = 36,000 PSI (A270 GR. 36)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	TOTAL SHEETS
317	(14th) DR	PEORIA		156
		ILLINOIS		FED. AID PROJECT

SHEET 1 OF 20



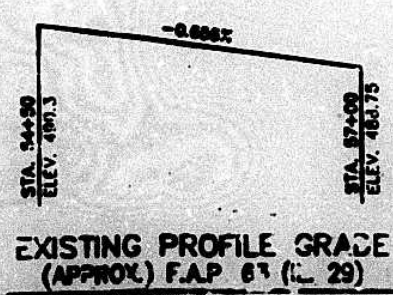
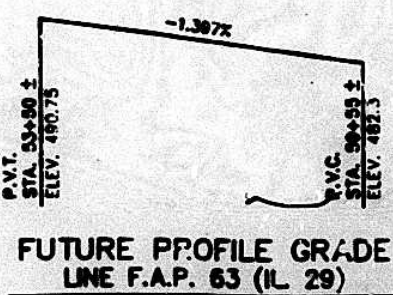
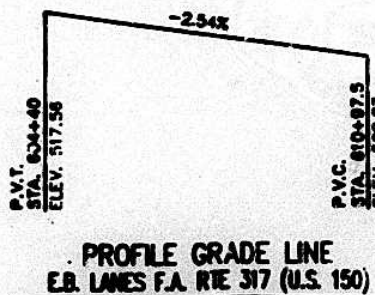
**ELEVATION**



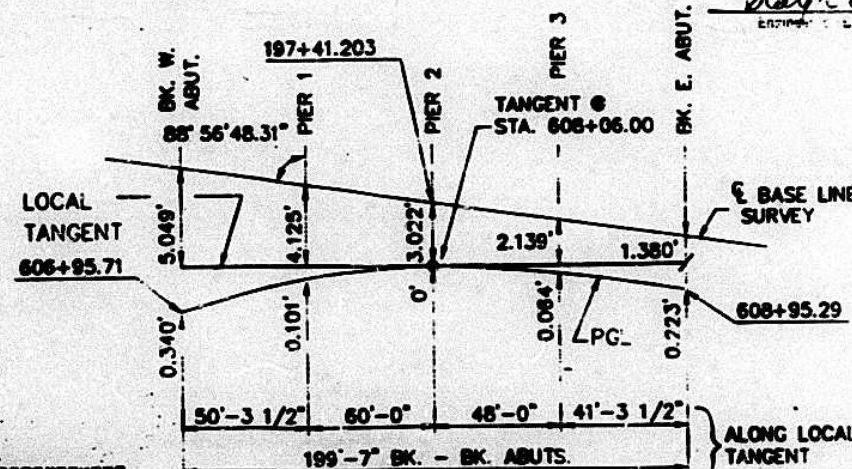
**PLAN**

**HORIZ. CURVE DATA - FUTURE F.A.P. 64**  
P.I. STA. 5+43.90  
Δ = 9° 30' 0.00"  
D = 3' 15" 58.23"  
R = 1754.21'  
L = 293.86'  
E = 6.048'  
T = 145.784'  
NOT FINAL FROM PRELIM. DESIGN.

**HORIZ. CURVE DATA - EAST BOUND P.G.L.**  
P.I. STA. 608+51.05  
Δ = 1° 49' 4.61"  
D = 0' 19" 13.54"  
R = 17881.00'  
L = 567.349'  
E = 2.250'  
T = 283.699'



**AS REVISED**



**OFFSET SKETCH**

**GENERAL NOTES**

- FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 3/4" DIAMETER, OPEN HOLES 13/16" DIAMETER, UNLESS OTHERWISE NOTED.
- CALCULATED WEIGHT OF STRUCTURAL STEEL = 102,640 LBS (A270 GR. 50) / 21,970 LBS (A270 GR. 36)
- THE ZINC-SILICATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED. THE COLOR OF THE VINYL FINISH COAT SHALL BE MUNSELL NO. 10Y 7/1, LIGHT GREY.
- FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
- ANCHOR BOLTS SHALL BE SET BEFORE BOLTING DIAPHRAGMS OVER SUPPORTS.
- THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE WIDE FLANGE BEAMS AND ALL SPLICE PLATE MATERIAL EXCEPT FILL PLATES.
- REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31, M-42 OR M-53 GRADE 60.
- SLOPE WALL SHALL BE REINFORCED WITH WELDED WIRE FABRIC, 6" x 6" - W4.0 x W4.0, WEIGHING 58 LBS. PER 100 SQ. FT.
- BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS. FOR TYPE I ELASTOMERIC BEARINGS, SHIMS OF THE DIMENSIONS OF TOP PLATE SHALL BE PROVIDED AND PLACED AS DETAILED.
- THE CONTRACTOR SHALL DRIVE THREE CONCRETE TEST PILES IN A PERMANENT LOCATION AT THE WEST AND EAST ABUTMENTS AND AT PIER 2 AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.
- BRIDGE SEAT SEALER SHALL BE APPLIED TO THE TOP SURFACE OF BOTH ABUTMENT CAPS.

FOR SLIPFORM PARAPET OPTION SEE SHEET 126 OF THE RDWY PLANS & CHECK SHEET #37 (RECURRING SPECIAL PROVISIONS)

**FOR INFORMATION ONLY**

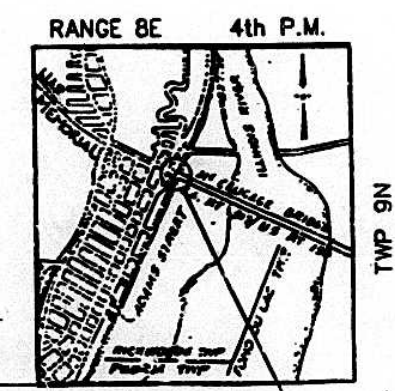
\* As built with Contract No. 88154 in 1994 and 1995



Frank L. Stiley  
ILLINOIS STRUCTURAL NO. 3100  
EXPIRES 11-30-94

**APPROVE**  
FOR STRUCTURAL ENGINEER

*Robert E. Anderson*  
ENGINEER



**LOCATION SKETCH**

**GENERAL PLAN & ELEVATION**

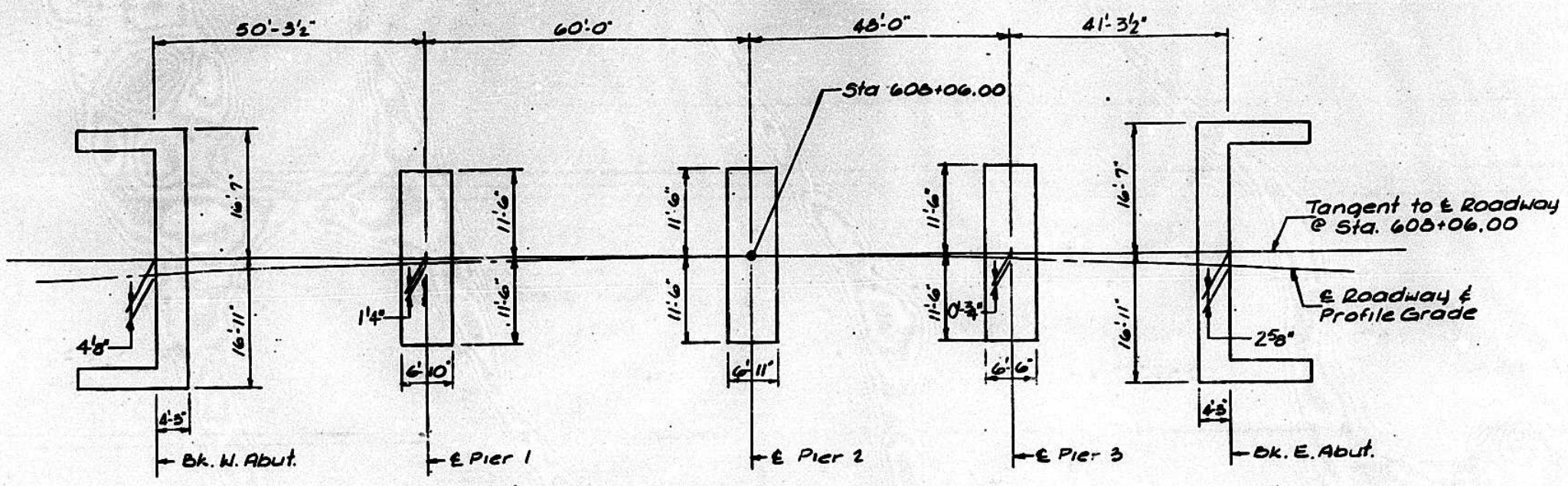
U.S. 150 OVER I. 29 (EASTBOUND)  
F.A. P.C.L.T. 317 SECTION (14th) DR  
PEORIA COUNTY  
STATION 607+00.00  
STRUCTURE NUMBER 072-0067

CITY 0187 DWS 10/19/92

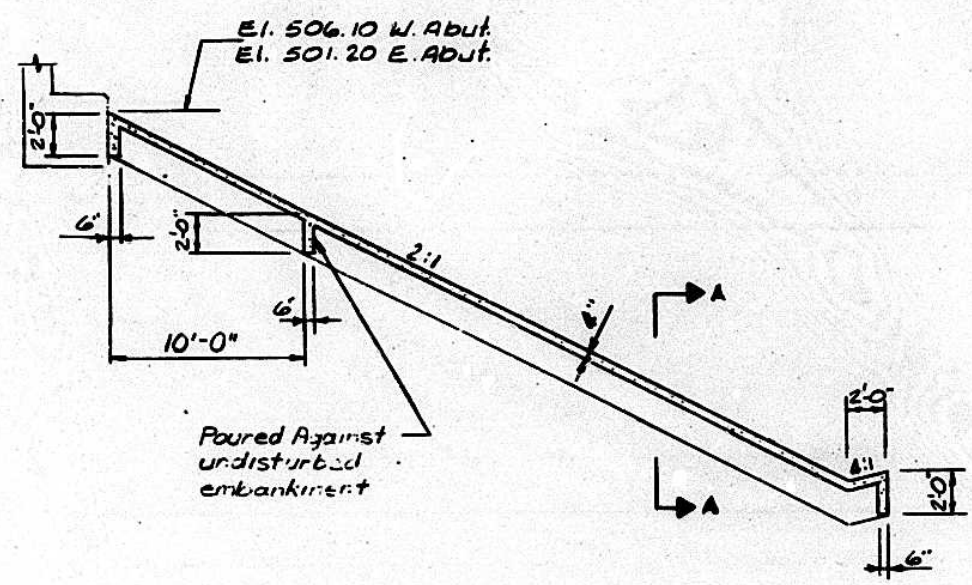
FAP R/E	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(14HB) BR	PEORIA		160
STA	TO STA			
FMWA REG.	ILLINOIS			

FOR INFORMATION ONLY

\* As built with Contract No. 88154 in 1994 and 1995



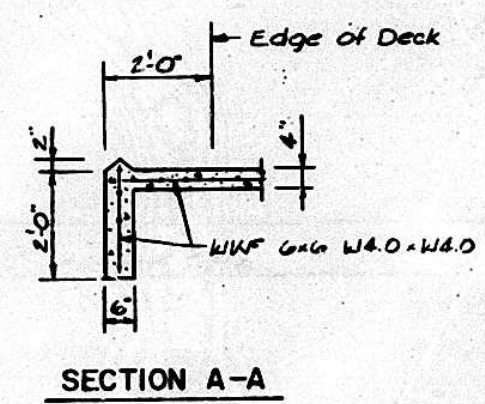
FOOTING LAYOUT



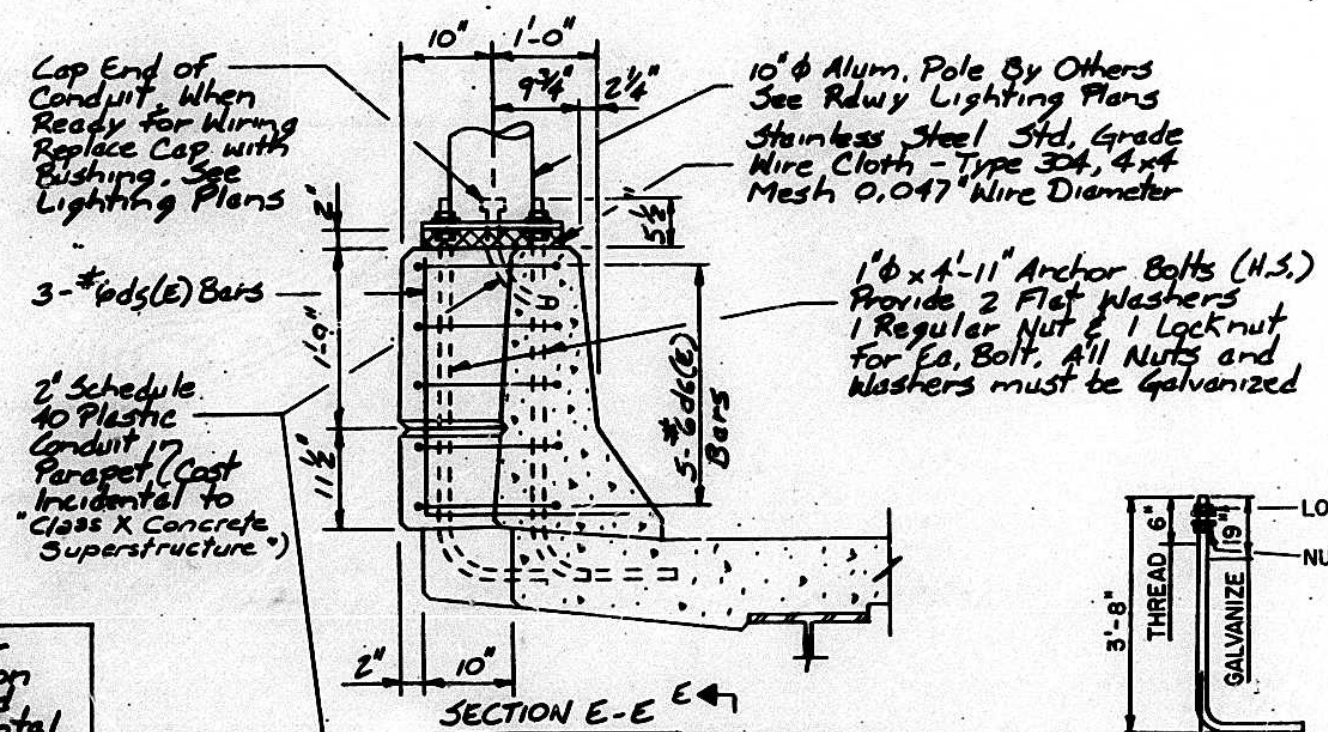
SLOPE WALL DETAIL

STATION 608+06.00  
 BUILT 199 BY  
 STATE OF ILLINOIS  
 F.A. RT. 317 SEC.(14HB)BR  
 LOADING HS-20  
 STR. NO. 072-0167

LETTERING FOR NAME PLATE See Standard 2113

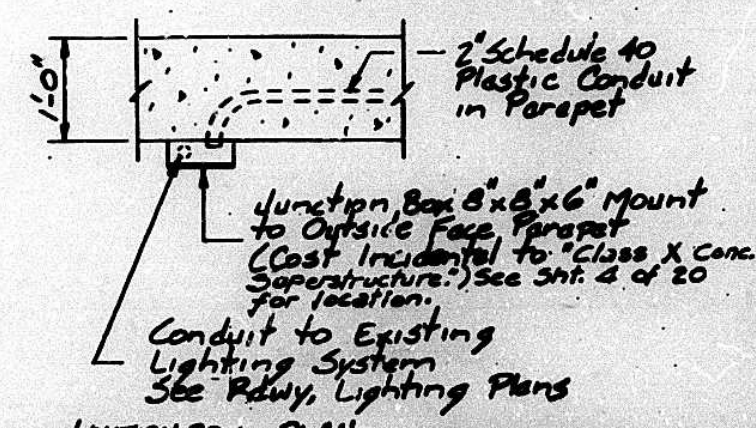


SECTION A-A

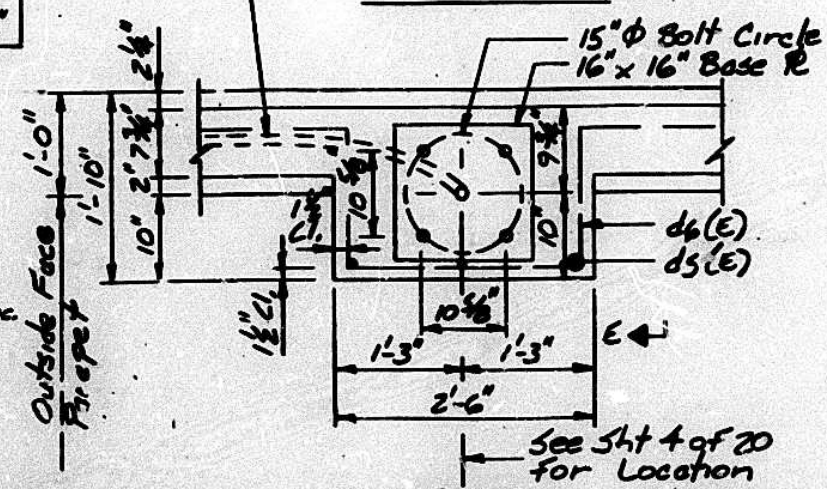


SECTION E-E

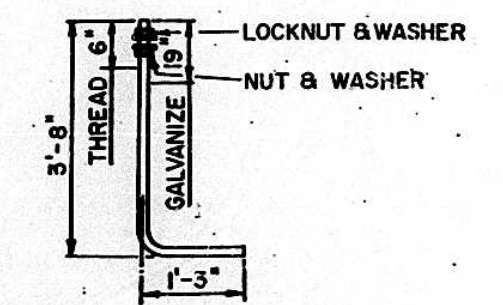
NOTE: Cast of Anchor Bolts Conduit Junction Boxes, Base Plates and Accessories is Incidental to "Class X Conc. Superstructure."



JUNCTION BOX - PLAN



PLAN



1" HIGH STRENGTH ANCHOR BOLT (ASTM A687)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
** Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yds.		360	360
Preformed Joint Seal, 4"	Lin. Ft.	67		67
Class X Concrete Superstructure	Cu. Yds.	204.2		204.2
* Protective Coat	Sq. Yds.	848		848
Elastomeric Bearing Assembly, Type I	Each	10		10
Elastomeric Bearing Assembly, Type II	Each	10		10
Class X Concrete	Cu. Yds.		192.3	192.3
Furnishing & Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	3345		3345
Reinforcement Bars	Lbs.		1420	1420
Reinforcement Bars, Epoxy Coated	Lbs.	51070	20630	71700
Furnishing Concrete Piles	Lin. Ft.		2229	2229
Driving Concrete Piles	Lin. Ft.		2229	2229
Test Piles, Concrete	Each		3	3
Name Plates	Each	1		1
Slope Wall, 4"	Sq. Yds.		326	326
Bridge Deck Grooving	Sq. Yds.	617		617
Bridge Seat Sealer	Sq. Ft.		184	184

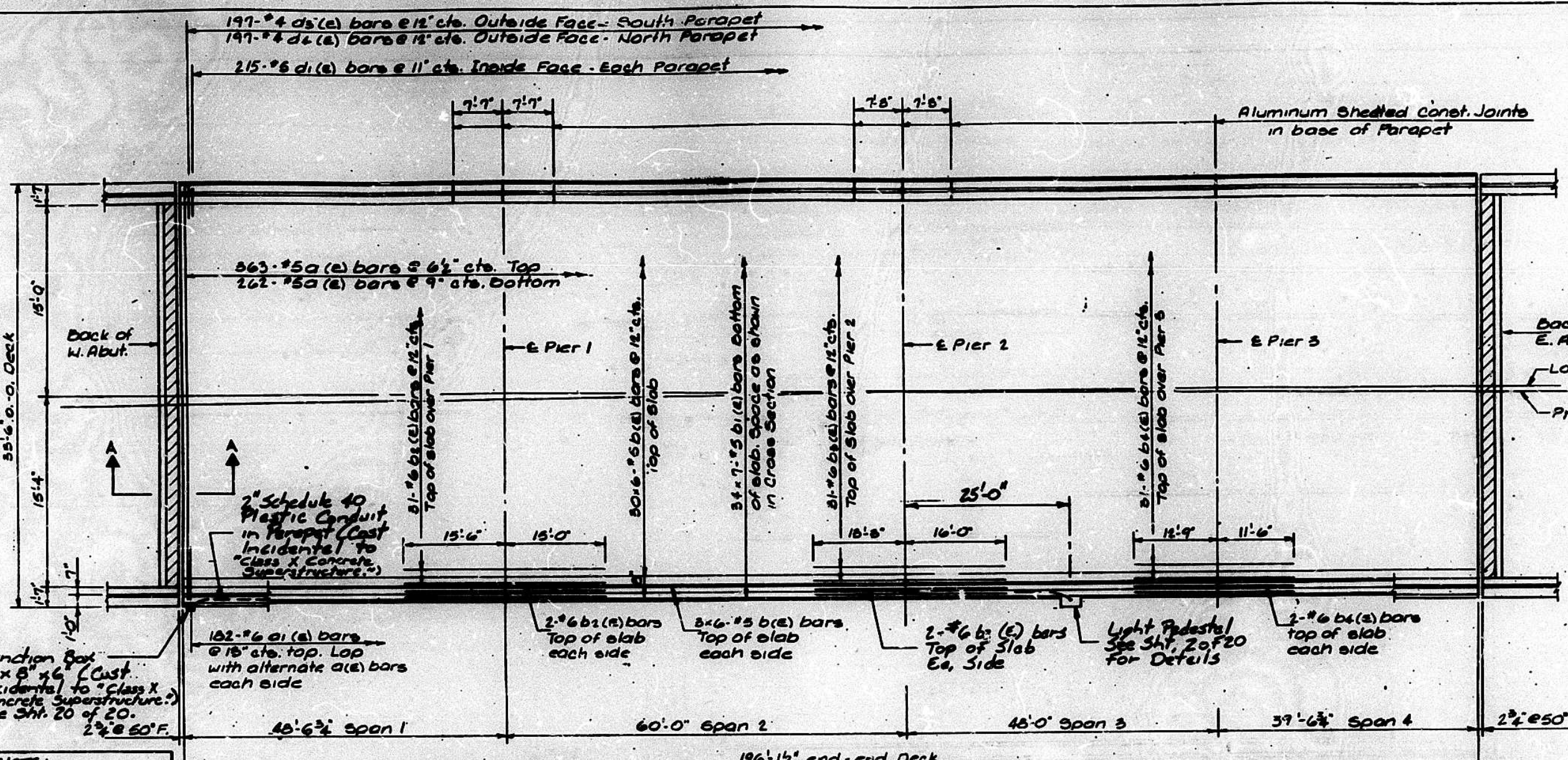
\* Includes Deck Surface  
 \*\* See Special Provisions

BILL OF MATERIAL & DETAILS  
 U.S. 150 OVER ILL 29 (EASTBOUND)  
 F.A. ROUTE 317 SECTION (14HB) BR  
 PEORIA COUNTY  
 STATION 608+06.00  
 STRUCTURE NUMBER 072-0167

FOR INFORMATION ONLY

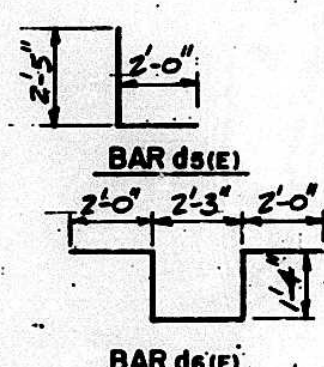
\* As built with Contract No. 88154  
in 1994 and 1995

F.P. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(14HB) BR	PEORIA		162
DATE	SCALE	BY SA		
		Sheet 4 of 20		



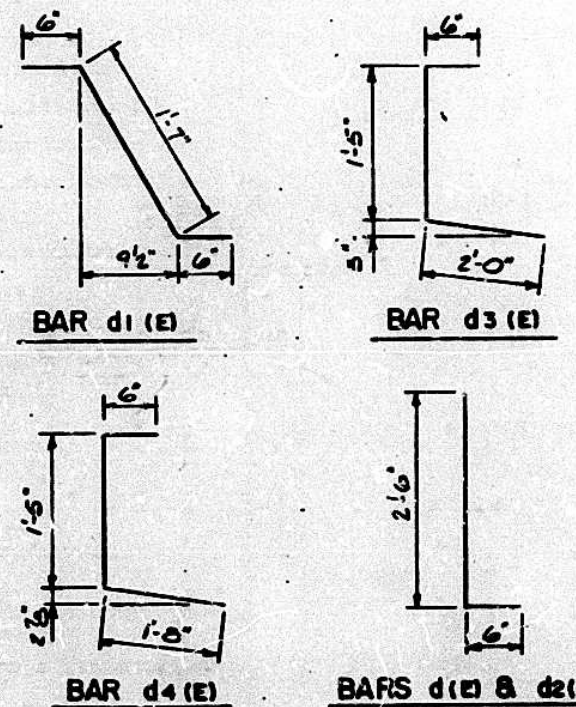
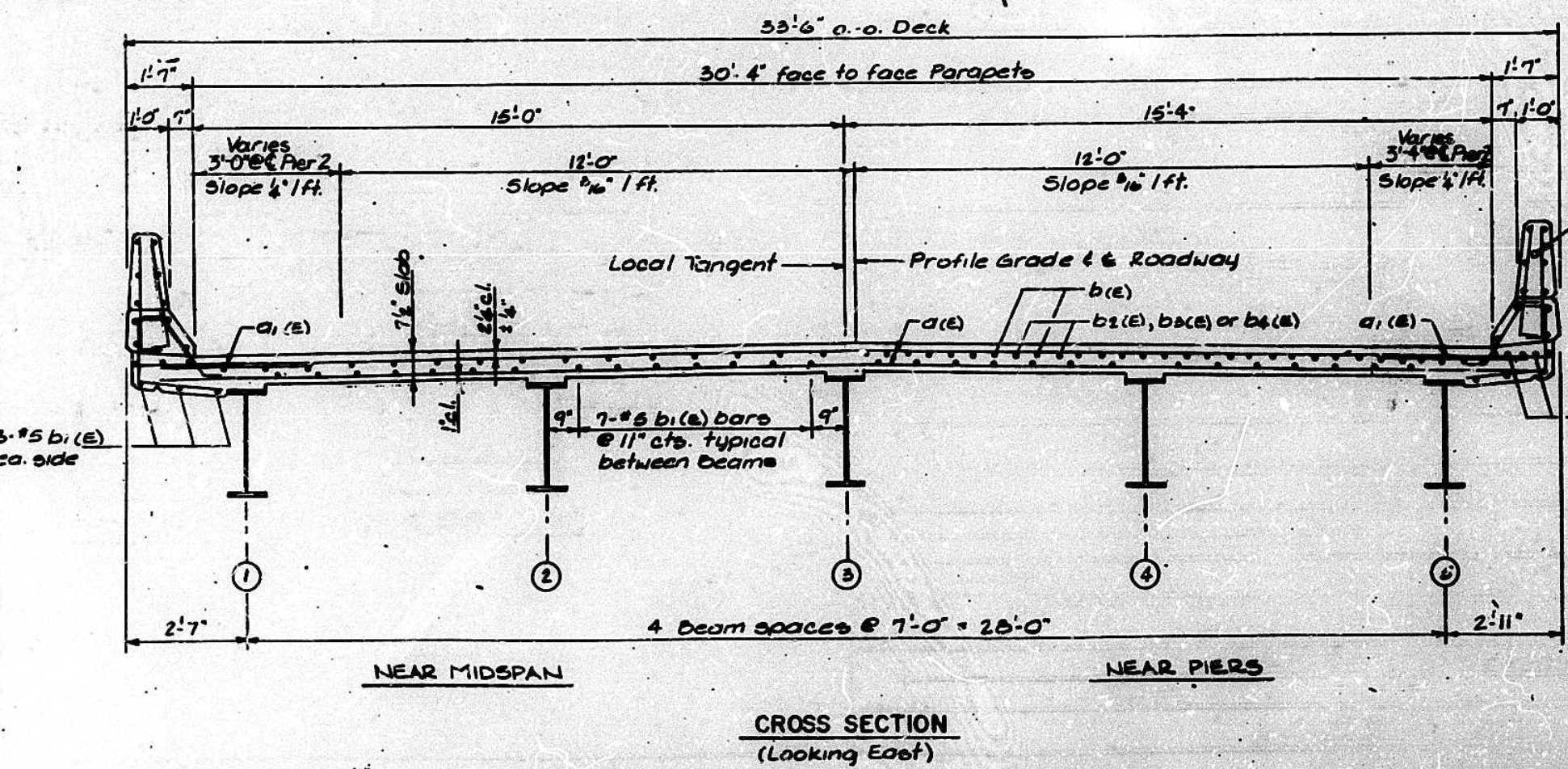
SUPERSTRUCTURE BILL OF MATERIAL

BAR NO.	SIZE	LENGTH	SHAPE
a1(e)	#5	31'-10"	
a2(e)	#6	4'-0"	
b1(e)	#5	34'-6"	
b2(e)	#5	29'-11"	
b3(e)	#6	30'-6"	
b4(e)	#6	29'-5"	
b5(e)	#6	24'-3"	
b6(e)	#5	3'-0"	
b7(e)	#5	2'-7"	
b8(e)	#4	3'-0"	
b9(e)	#4	3'-11"	
b10(e)	#4	3'-7"	
b11(e)	#6	8'-11"	
b12(e)	#4	15'-5"	
b13(e)	#4	7'-4"	
b14(e)	#4	14'-9"	
b15(e)	#4	7'-0"	
b16(e)	#4	15'-4"	
b17(e)	#4	12'-11"	
b18(e)	#8	22'-8"	
b19(e)	#8	7'-4"	
b20(e)	#8	24'-9"	
b21(e)	#8	7'-0"	
b22(e)	#8	22'-6"	
b23(e)	#8	22'-0"	
b24(e)	#5	21'-6"	
b25(e)	#5	7'-4"	
b26(e)	#5	23'-7"	
b27(e)	#5	7'-0"	
b28(e)	#5	21'-4"	
b29(e)	#5	20'-9"	
Class X Concrete Superstructure Cu. Yds. 204.2			
Reinforcement bars, Epoxy Coated Lbs. 51070			



MIN. BAR LAPS  
#5 = 2'-2"

NOTE: For Lighting Conduit continuing off the structure, see Lighting Plans

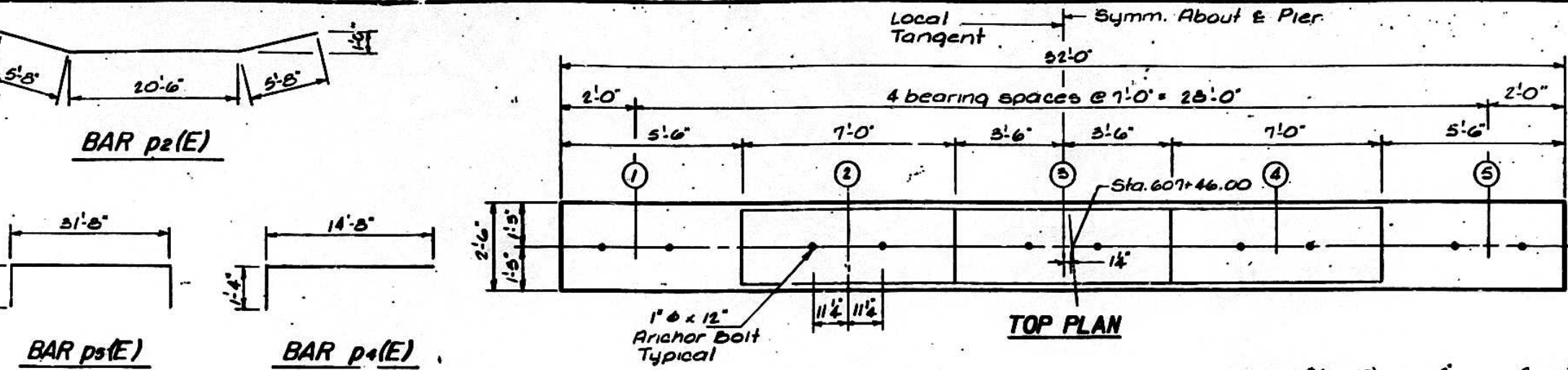


NOTES  
Reinforcement Bars designated (E) shall be epoxy coated.  
Bars indicated thus 30 #6 #5 etc. indicates 30 lines of bars with 6 lengths per line.  
For Superstructure Details see Sheet 5 of 20.

SUPERSTRUCTURE  
U.S. 50 OVER I-79 (EASTBOUND)  
F.A. ROUTE 317 SECTION (14HB) BR  
PEORIA COUNTY  
STATION 608+06.00  
STRUCTURE NUMBER 072-0167



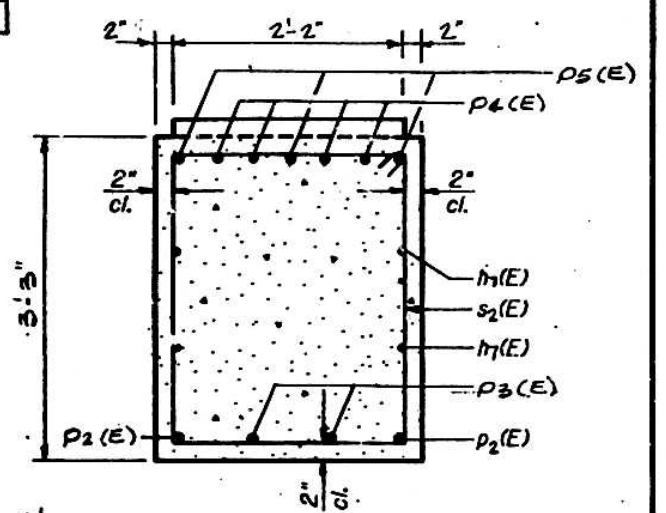




**FOR INFORMATION ONLY**

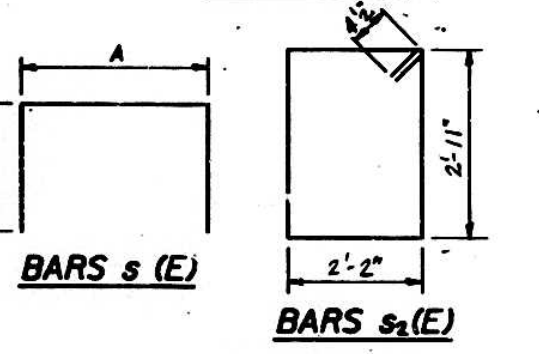
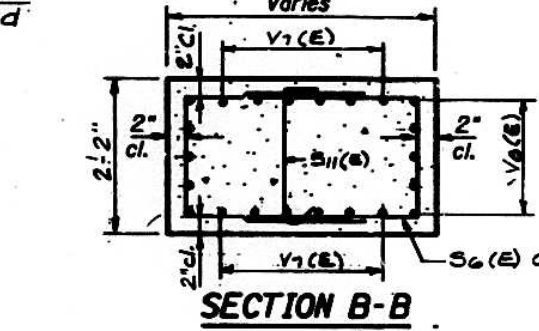
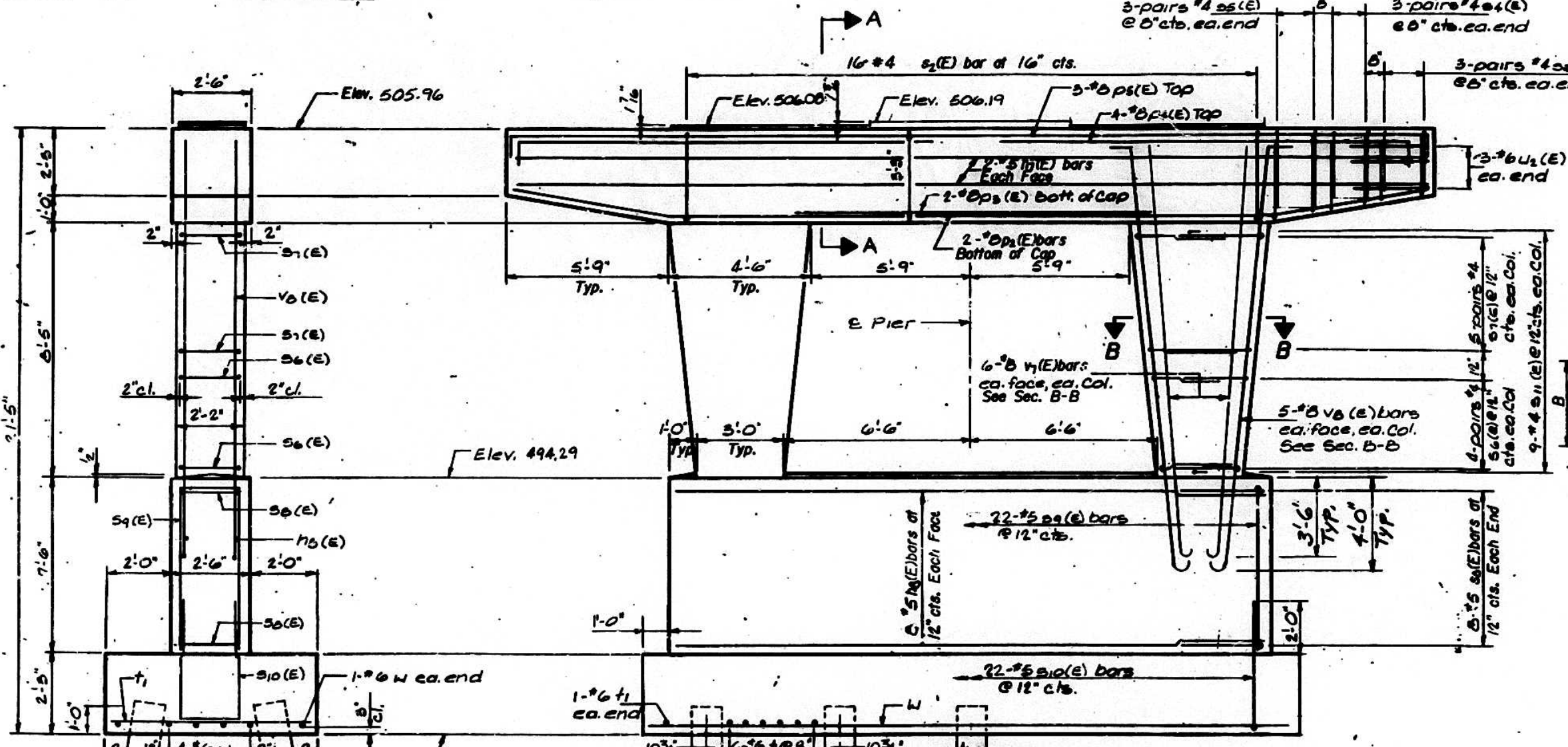
\* As built with Contract No. 88154 in 1994 and 1995 \*

**Note:**  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 All edges shall have standard 3/4" chamfers except as noted.



**SECTION A-A**

Reinforcement bars designated (E) shall be epoxy coated.

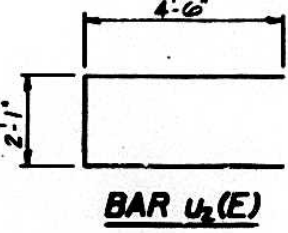


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
m1(E)	4	#5	31'-5"	
m2(E)	16	#5	20'-5"	
p2(E)	2	#8	31'-10"	
p3(E)	2	#8	12'-6"	
p4(E)	8	#8	16'-0"	
p5(E)	3	#8	24'-4"	
s1(E)	16	#4	10'-11"	□
s2(E)	12	#4	6'-0"	□
s3(E)	12	#4	7'-2"	□
s4(E)	16	#4	7'-2"	□
s5(E)	20	#4	8'-2"	□
s6(E)	16	#5	9'-5"	□
s7(E)	22	#5	16'-6"	□
s8(E)	22	#5	10'-2"	□
s9(E)	18	#4	2'-7"	□
s10(E)	26	#6	6'-4"	□
u1(E)	6	#6	11'-1"	□
v1(E)	24	#8	15'-11"	□
v2(E)	20	#8	17'-9"	□
w	6	#6	22'-6"	□

**A & B DIMENSIONS**

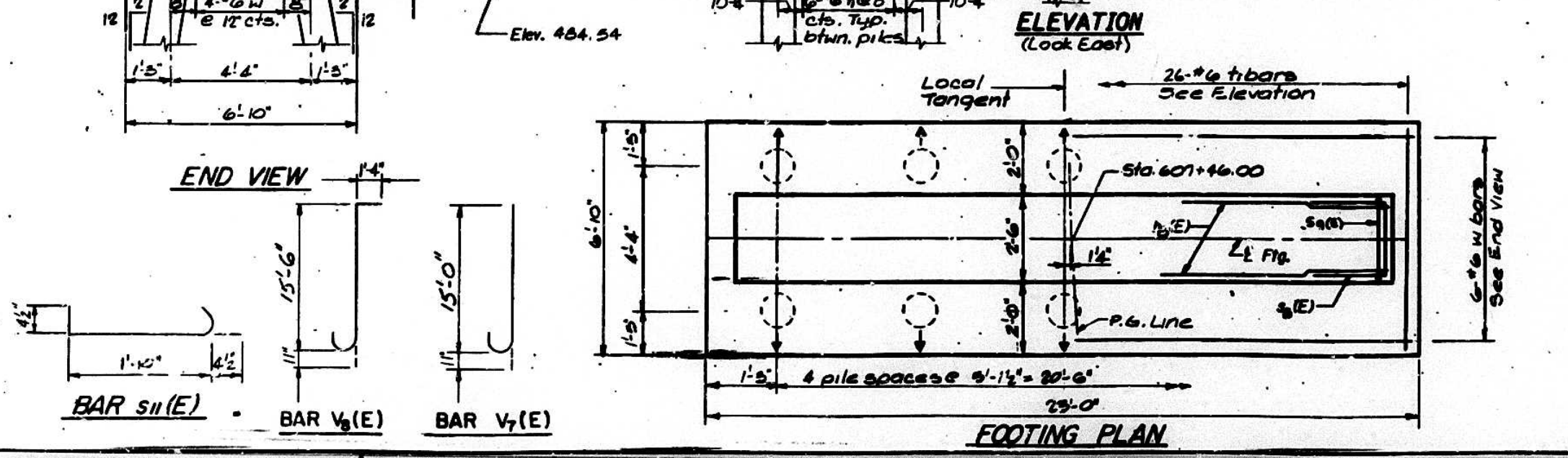
Bar	A	B
s2(E)	2'-2"	1'-11"
s3(E)	2'-2"	2'-3"
s4(E)	2'-2"	2'-6"
s5(E)	1'-10"	2'-5"
s6(E)	1'-10"	2'-2"
s7(E)	2'-1"	3'-8"
s8(E)	2'-2"	7'-2"
s9(E)	2'-2"	4'-0"



**PILE DATA**

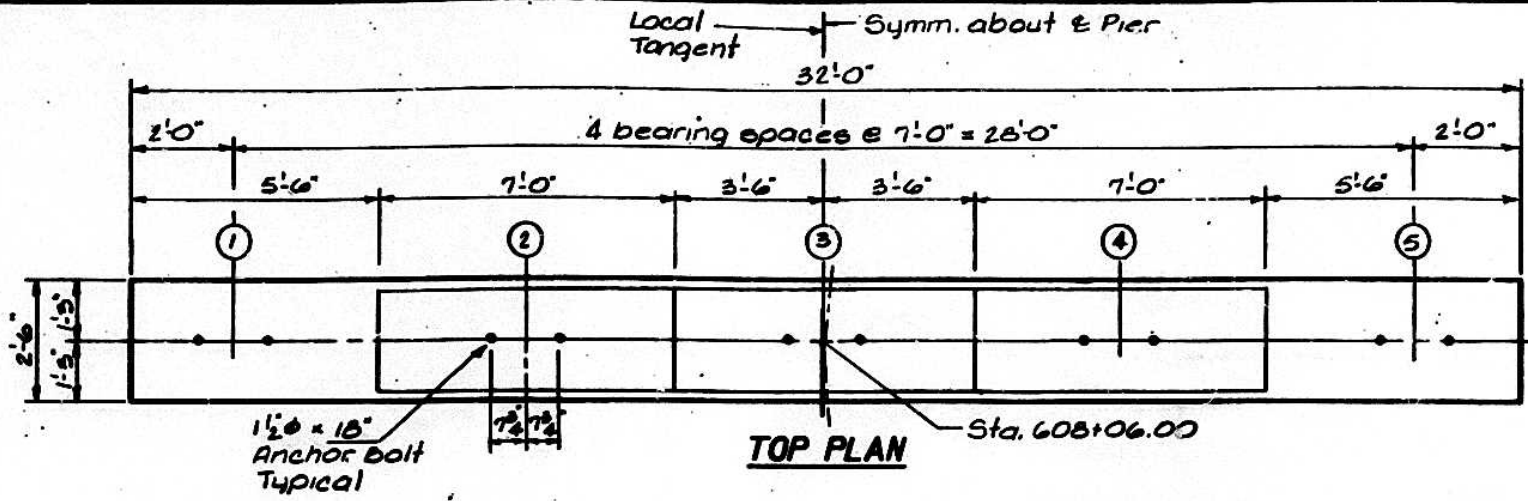
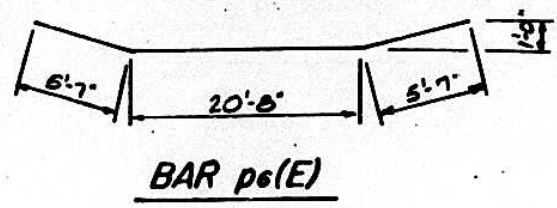
Type - Concrete  
 Capacity - 41 Tons  
 Est. Length - 39 Feet  
 No. Piles - 10

Indicates direction of 2 in 12 batter



**PIER I**  
 U.S. 50 OVER ILL. 29 (EASTBOUND)  
 F.A. ROUTE 317 SECTION (14HB) BR  
 PEORIA COUNTY  
 STATION 608+06.00  
 STRUCTURE NUMBER 072-0167

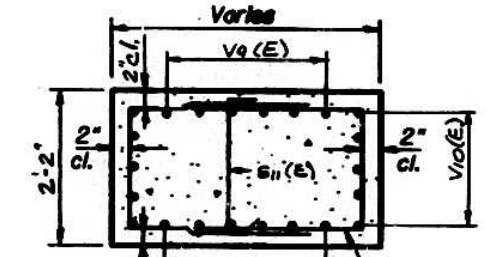
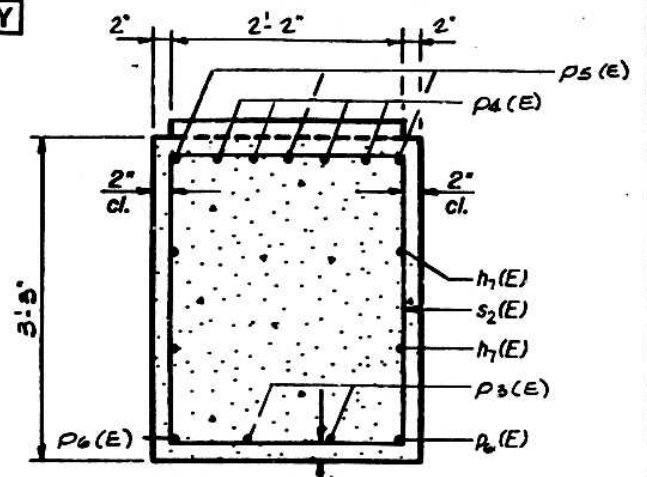
TAP NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(14HB) BR	PEORIA		171
STA. TO STA.				
F.M.A. REG. E.L.NOS.				



**FOR INFORMATION ONLY**

\*As built with Contract No. 88154 in 1994 and 1995\*

**Note:**  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 All edges shall have standard 3/4" chamfers except as noted.

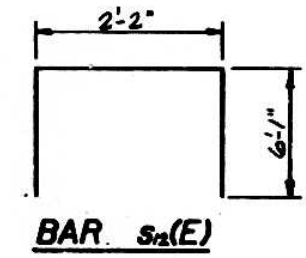


**SECTION A-A**

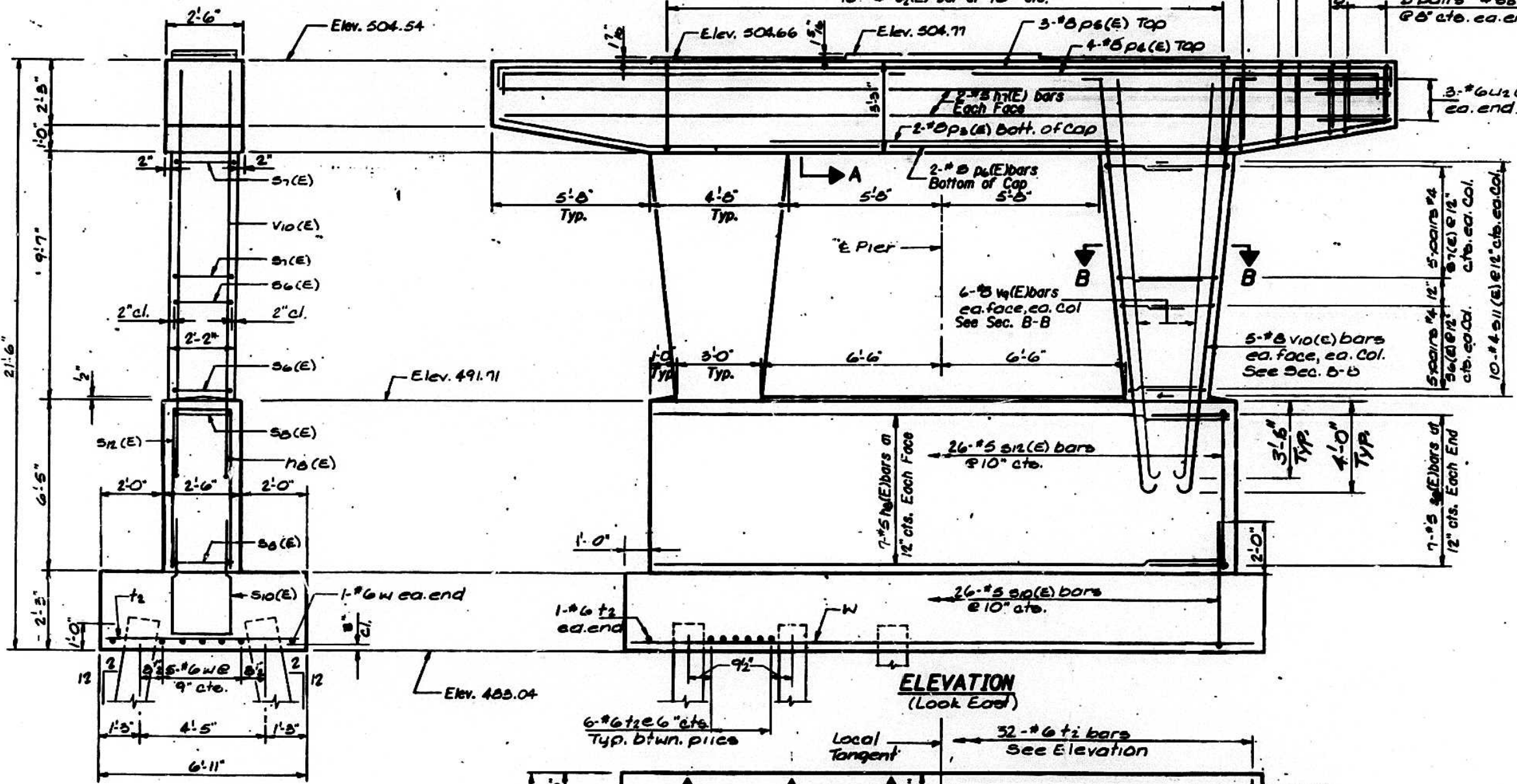
**SECTION B-B**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	4	#5	31'-8"	—
h2(E)	14	#5	20'-8"	—
pa(E)	2	#8	12'-6"	—
pb(E)	8	#8	16'-0"	—
ps(E)	3	#8	34'-4"	—
pt(E)	2	#8	31'-10"	—
s2(E)	16	#4	10'-11"	□
s3(E)	12	#4	6'-0"	□
s4(E)	12	#4	6'-8"	□
s5(E)	12	#4	7'-2"	□
s6(E)	20	#4	7'-2"	□
s7(E)	20	#4	8'-2"	□
s8(E)	14	#5	9'-5"	□
s9(E)	26	#5	10'-2"	□
s10(E)	20	#4	2'-7"	□
s11(E)	26	#5	18'-4"	□
t2	32	#6	6'-5"	—
u2(E)	6	#6	11'-1"	—
v9(E)	24	#8	17'-1"	—
vi0(E)	20	#8	18'-11"	—
w	7	#6	22'-6"	—
Structure Excavation		Cu. Yds.	65	
Class X Concrete		Cu. Yds.	40.7	
Reinforcement Bars, Epoxy Coated		Lbs.	540	
Concrete Piles		Ln. Ft.	629	
Test Pile (Concrete)		Each	1	



**BAR s11(E)**

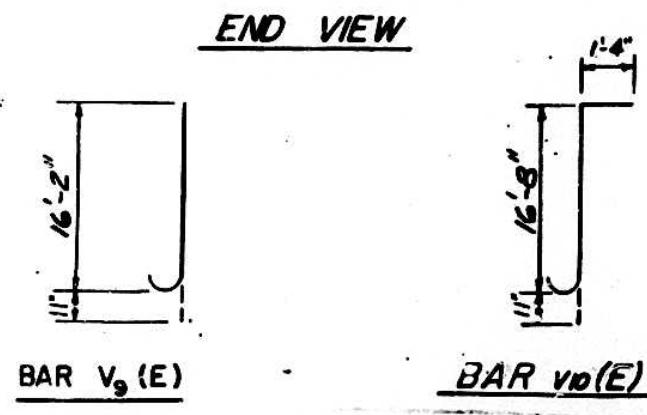


**ELEVATION (Look East)**

Reinforcement Bars designated (E) shall be epoxy coated.  
 For details of bent bars not shown, see Sheet 12 of 20.

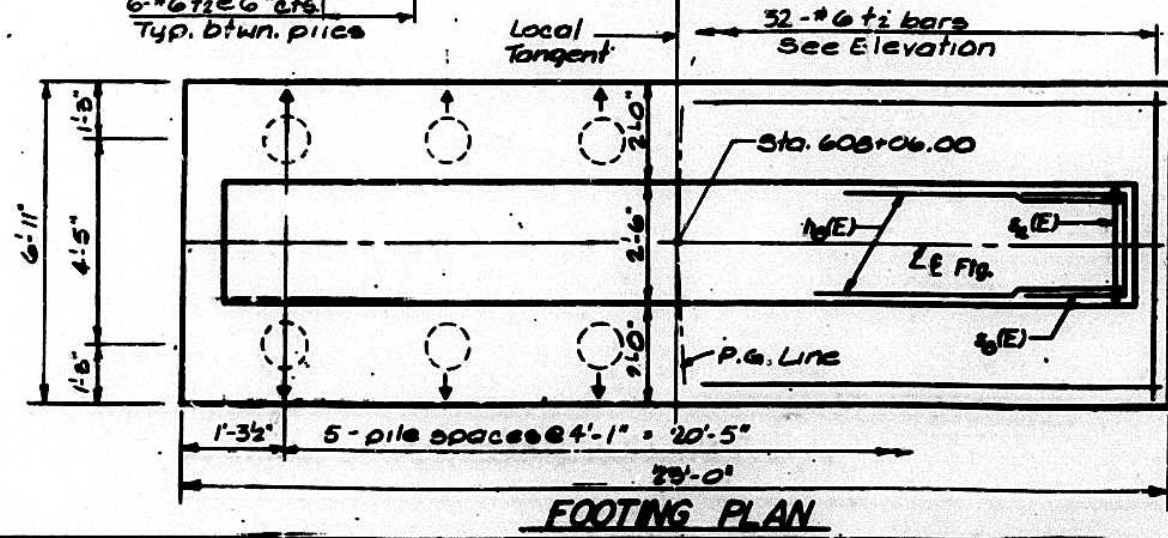
**PILE DATA**

Type - Concrete  
 Capacity - 39 Tons  
 Est. Length - 39 Feet  
 No. Req'd. - 11 + 1 Test Pile  
 ← Indicates direction of 2 in. 12 batter



**BAR v9(E)**

**BAR vi0(E)**



**FOOTING PLAN**

**PIER 2**  
 U.S. 50 OVER ILL 29 (EASTBOUND)  
 F.A. ROUTE 317 SECTION (14HB) BR  
 PEORIA COUNTY  
 STATION: 608+06.00  
 STRUCTURE NUMBER 072-0167

