

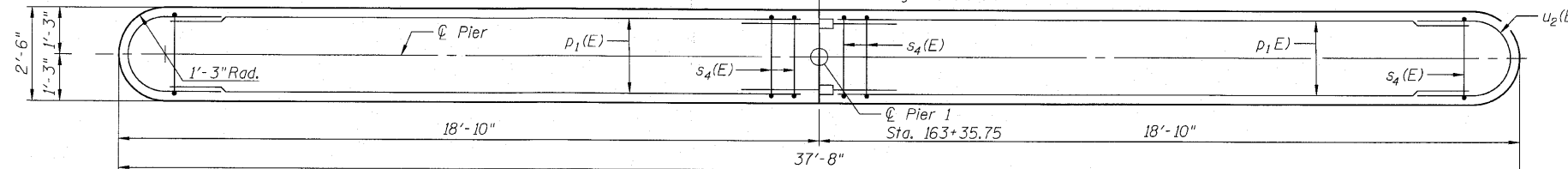
Notes:
 For Pile Details See Sheet 18 of 20.
 For Bar Splicer Details See Sheet 17 of 20.

If a portion of the pier or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.

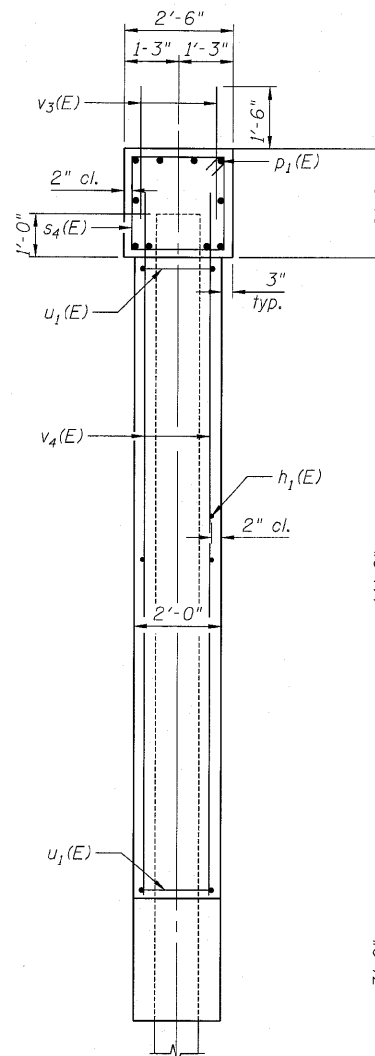
Item Underwater Structure Excavation Protection Location 1 is located at Pier 1.

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

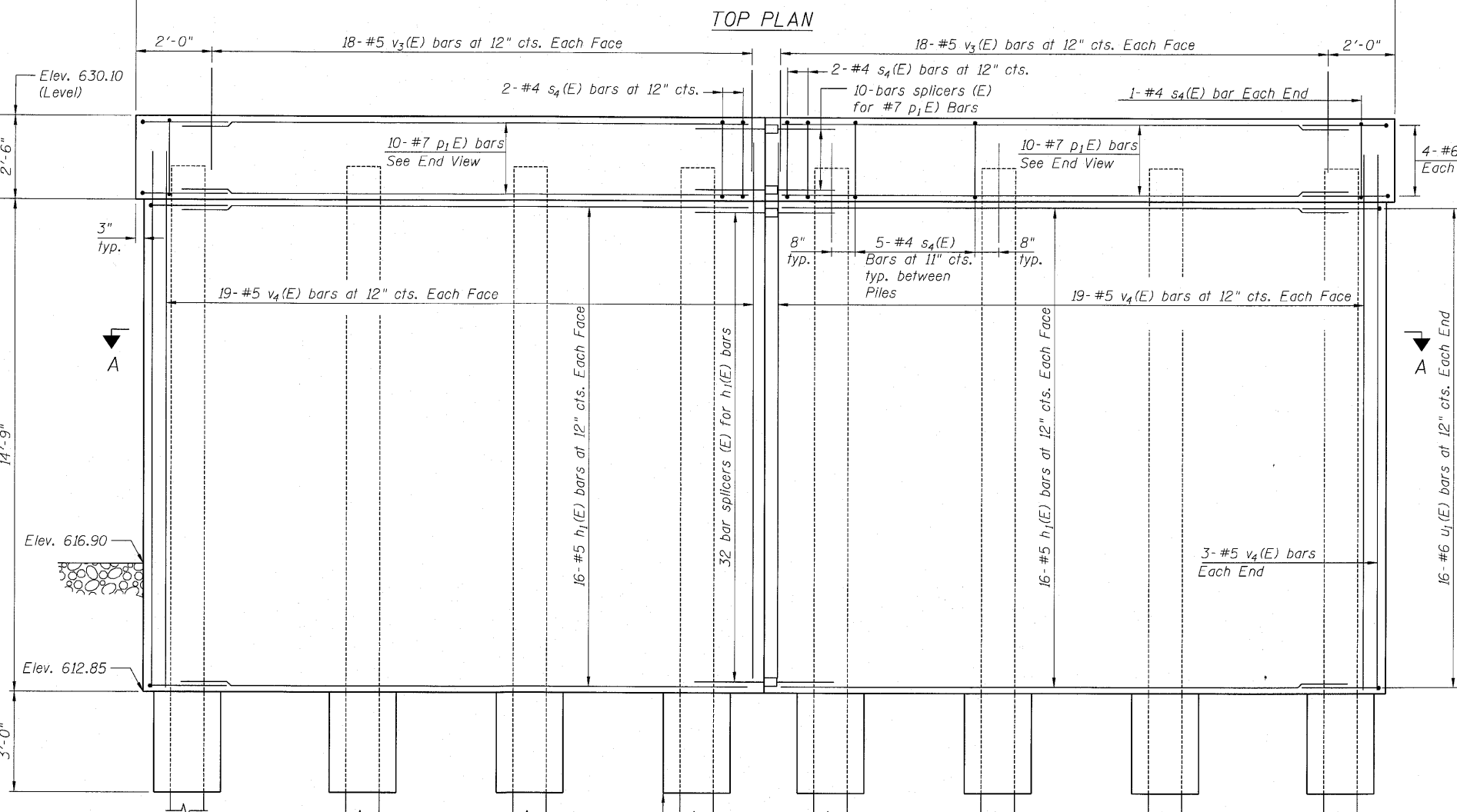
Stage II Construction Stage I Construction
 US 45, PGL & Stage Const. Jt.



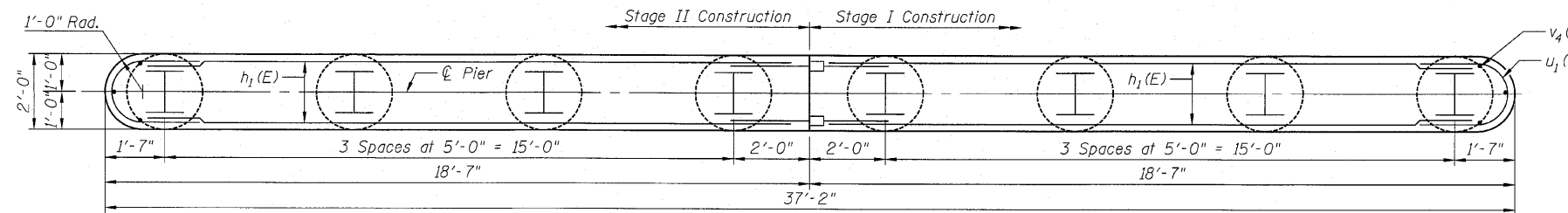
TOP PLAN



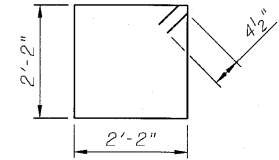
END VIEW



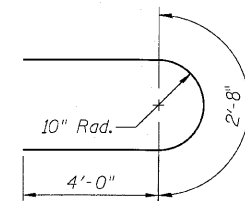
ELEVATION
 (Looking West)



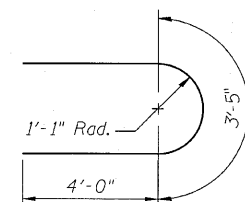
SECTION A-A



BAR s4(E)



BAR u1(E)



BAR u2(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	64	#5	17'-5"	—
p1(E)	20	#7	17'-5"	—
s4(E)	36	#4	9'-5"	□
u1(E)	32	#6	10'-8"	U
u2(E)	8	#6	11'-5"	U
v3(E)	72	#5	3'-6"	—
v4(E)	82	#5	16'-4"	—
Structure Excavation		Cu. Yd.	33.5	
Concrete Structures		Cu. Yd.	48.7	
Reinforcement Bars, Epoxy Coated		Pound	4,415	
Furnishing Steel				
Piles HP12x74		Foot	480	
Driving Piles		Foot	480	
Pile Shoes		Each	8	
Concrete Encasement		Cu. Yd.	2.8	
Underwater Structure Excavation Protection Location 1		Each	1	

PIER 1
 STRUCTURE NO. 038-0221

PILE DATA
 Type: HP 12X74 with Pile Shoes
 Nominal Required Bearing: 499 kips
 Factored Resistance Available: 249 kips
 Est. Length: 60'-0"
 No. Production Piles: 8
 No. Test Piles: 0

SHEET NO. 15 OF 20 SHEETS	F.A.P. RTE. 681	SECTION 118BR	COUNTY IROQUOIS	TOTAL SHEETS 42	SHEET NO. 24
	CONTRACT NO. 66861				
FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT					

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ZROKA Engineering, P.C.
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 Chicago, IL 60613
 Date: 7-28-10 Drawn By: AJP Checked By: DZ

PC-1

11-1-09