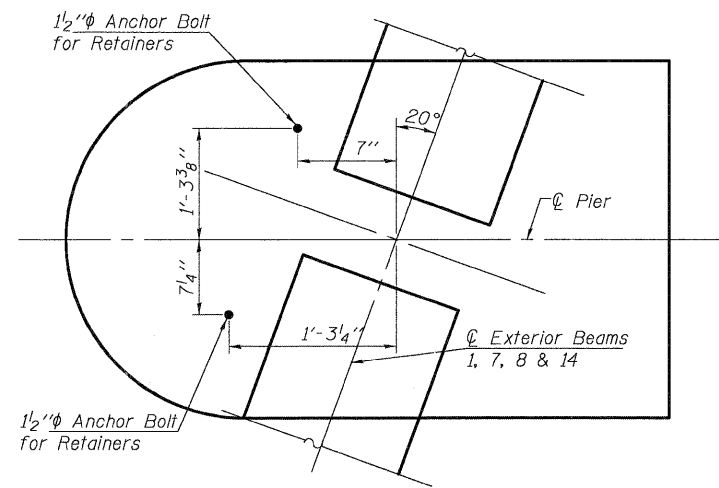
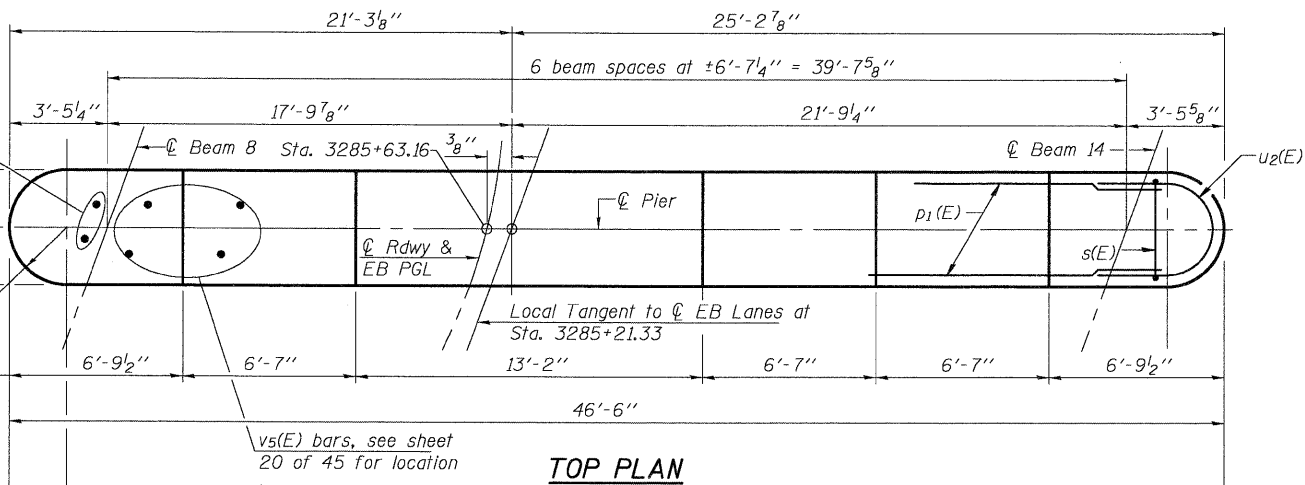
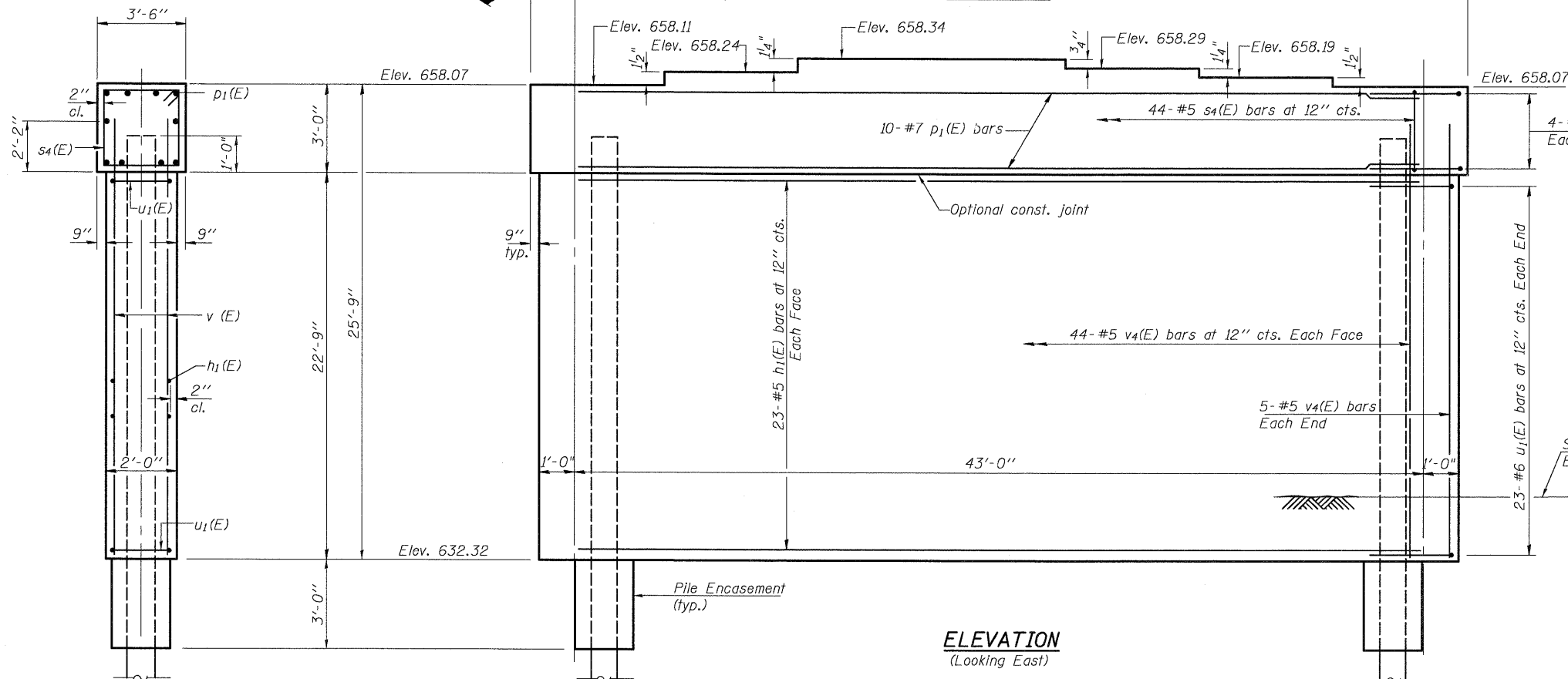


Notes:  
 Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.  
 For details of piles, see sheet 38 of 45.

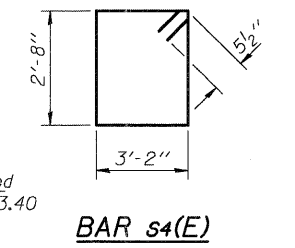
1/2" φ Anchor Bolts  
 for Retainers, See  
 Detail this sheet  
 for location



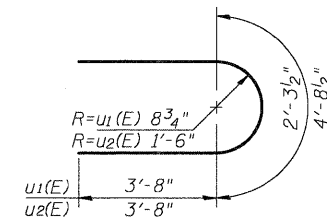
ANCHOR BOLT LOCATION DETAIL



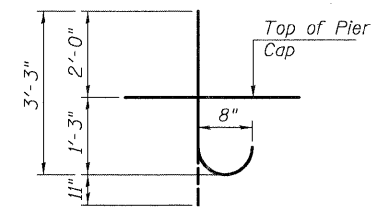
ELEVATION  
 (Looking East)



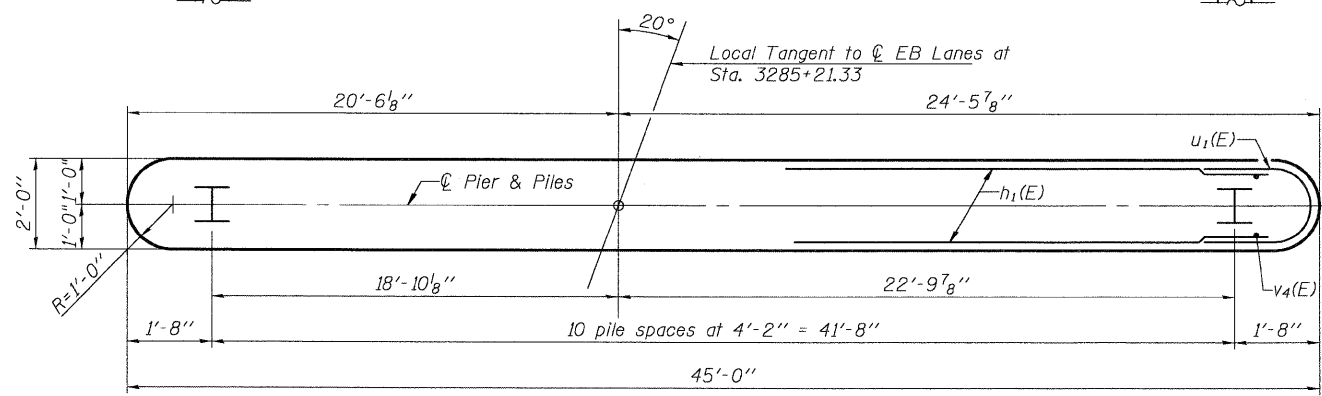
BAR s4(E)



BARS u1(E) & u2(E)



BAR v5(E)



PLAN

END VIEW

**PILE DATA**

Type: Steel HP12 x 53  
 Nominal Required Bearing: 315 kip  
 Allowable Resistance Available: 105 kip  
 Est. Length: 75 ft.  
 No. Production Piles: 10  
 No. Test Piles: 1

**NOTE**

If a portion of the pier wall 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.

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h1(E)	46	#5	43'-0"	—
p1(E)	10	#7	43'-0"	—
s4(E)	44	#5	12'-7"	□
u1(E)	46	#6	9'-8"	U
u2(E)	8	#6	12'-1"	U
v4(E)	98	#5	24'-11"	—
v5(E)	36	#8	4'-2"	U
Concrete Structures		Cu. Yd.	94.1	
Reinforcement Bars, Epoxy Coated		Pound	7280	
Furnishing Steel Piles, HP12x53		Foot	750	
Driving Piles		Foot	750	
Test Pile, Steel HP12x53		Each	1	
Underwater Structure Excavation Protection-Location 4		Each	1	
Concrete Encasement		Cu. Yd.	3.8	

**PIER 2 EB  
 SN 006-0172 (EB)**

PLOT DATE = 09/08/2009  
 FILE NAME = J:\060172\0172-66908-037-pi-1-pier-2-ab.dgn  
 PLOT SCALE = 1/8" = 1'-0"  
 USER NAME = CFC

**Coombe-Bloxdorf P.C.**  
 - CIVIL ENGINEERS -  
 - STRUCTURAL ENGINEERS -  
 - LAND SURVEYORS -  
 Design Firm License No. 184-002703

PROJECT NO. 05061	SHEET NO. 37	F.A.I. RTE. 80	SECTION *	COUNTY BUREAU	TOTAL SHEETS 344	SHEET NO. 190
SCALE	DATE 8/05/09	DESIGN BY RM/MCB	DRAWN BY TFG	CHECKED BY MCB	CONTRACT NO. 66908	
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT						

\*06-L7BR & BR-1, TVB-M, 6BR & 6, 7 RS-1 & 11