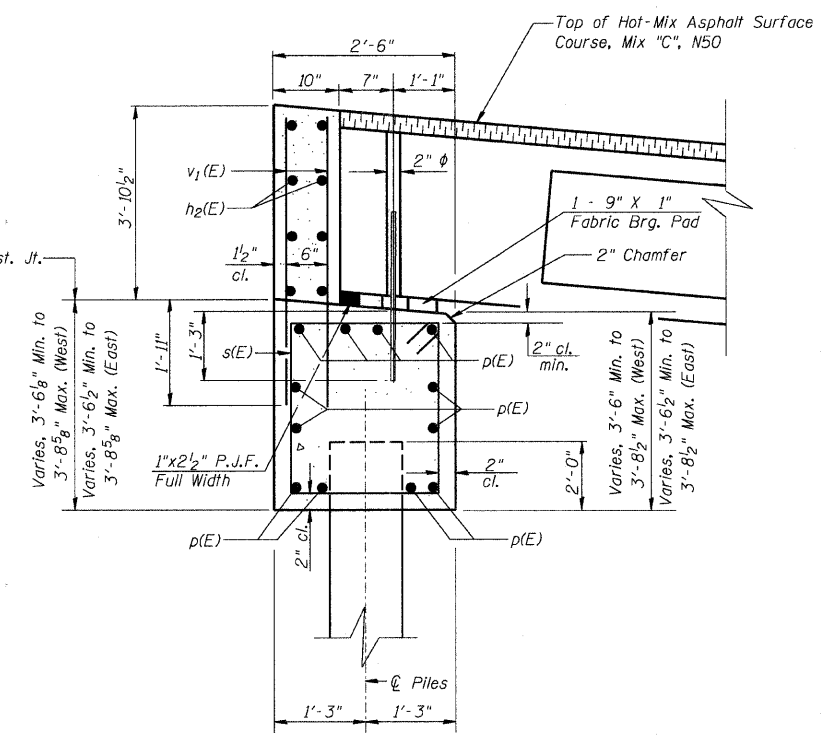
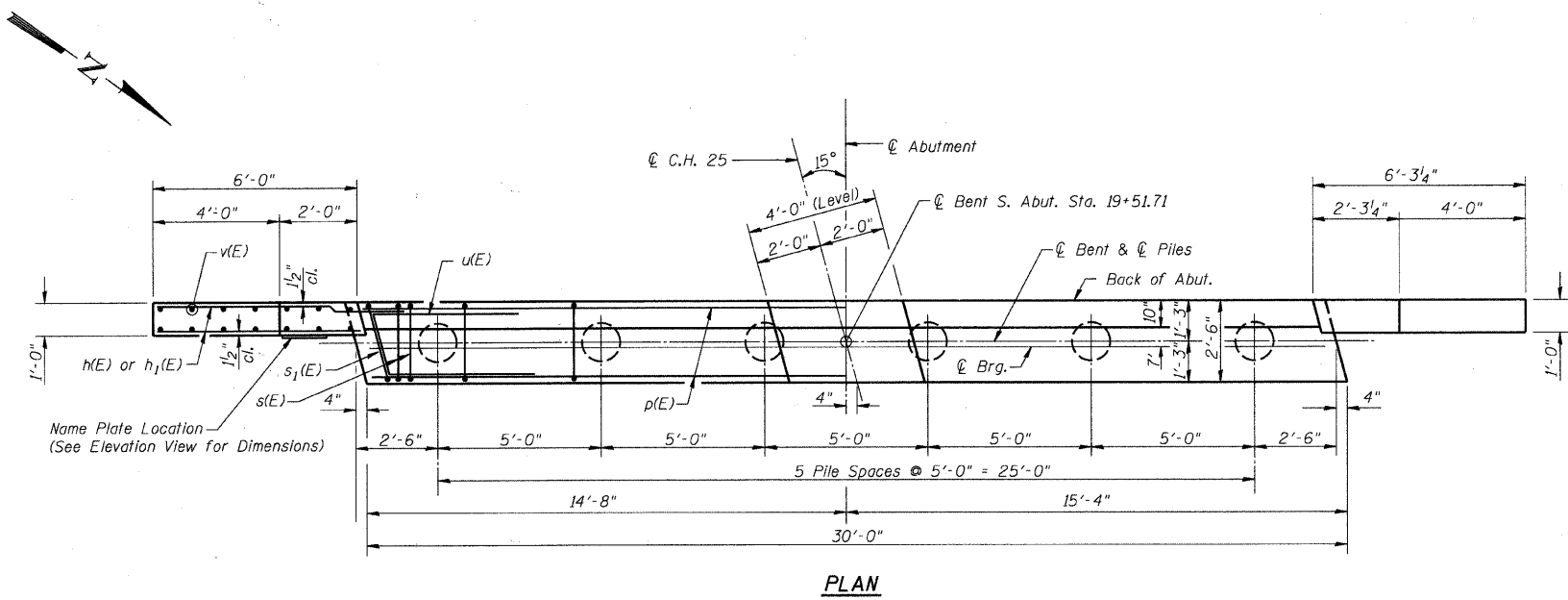


**NOTES**

- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- 1" dia. x 2'-6" dowel rods in 1 1/2" dia. holes drilled in cap (2 each beam). Dowel rods to be grouted after beams are in place and allowed to cure (min. 24 hrs.) prior to grouting the shear keys. The grout shall be an approved non-shrink grout.
- Reinforcement bars designated (E) shall be Epoxy coated.
- Reinforcement bars shall conform to the requirements of A.S.T.M A706 Grade 60. See Special Provisions. Bonded Const. Jt.
- Space reinforcement in cap to miss dowel rods.
- The Contractor shall drive test piles to 110 Percent of the Nominal Required Bearing indicated in the Pile Data information before ordering the remainder of the piles.

**DESIGN STRESSES**

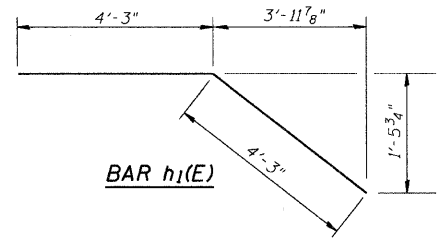
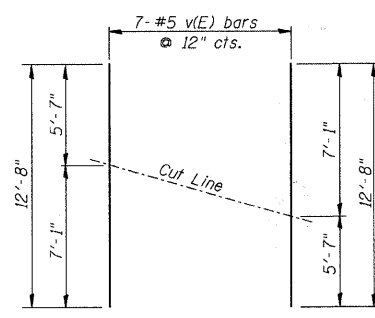
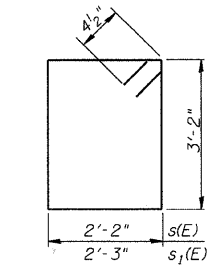
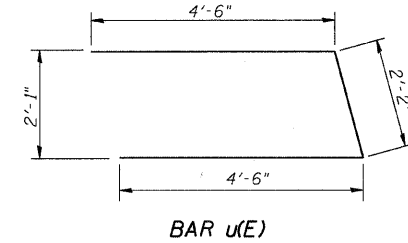
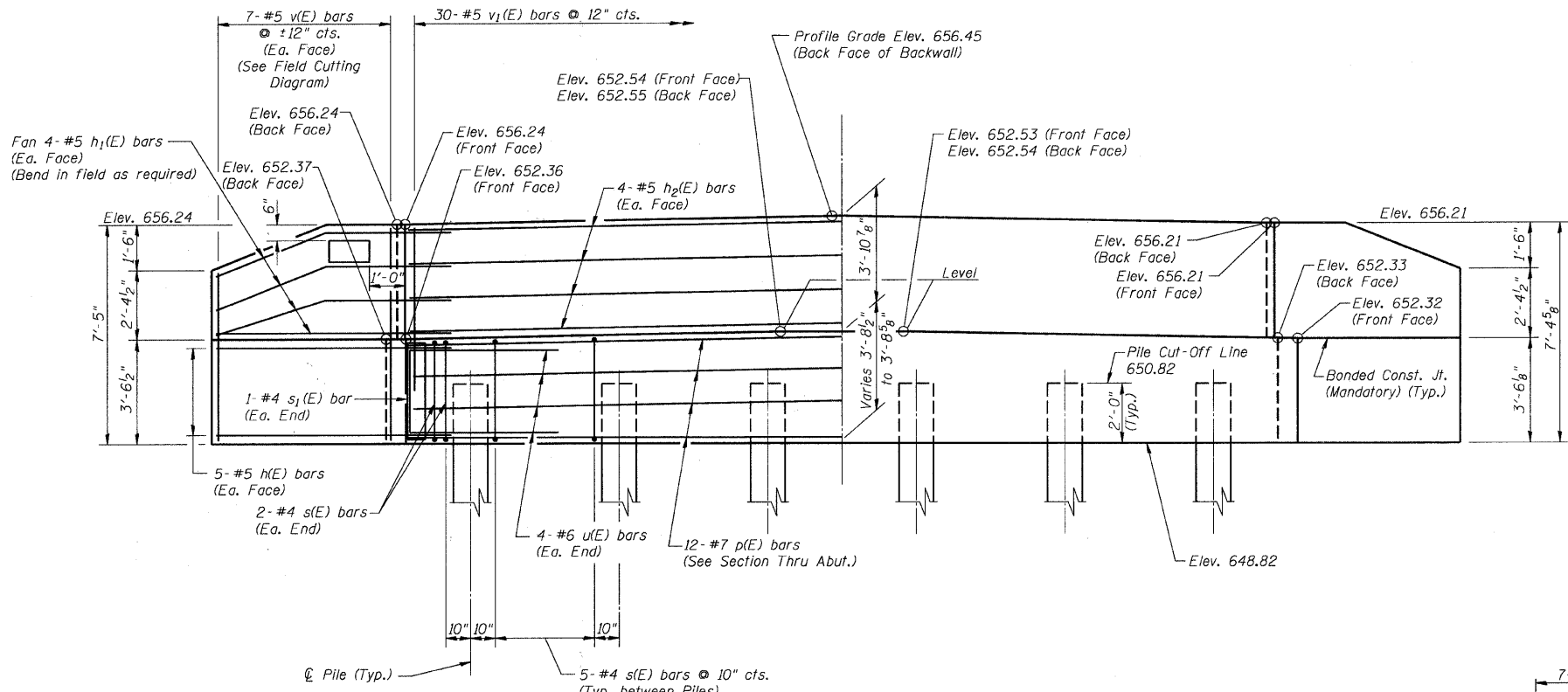
$f'_c = 3,500 \text{ psi}$   
 $f_y = 60,000 \text{ psi}$



SECTION THRU ABUT.  
(At Rt. Angles)

**BILL OF MATERIAL SOUTH ABUTMENT**

Bar	No.	Size	Length	Shape	
h(E)	20	#5	8'-3"	—	
h1(E)	16	#5	8'-6"	—	
h2(E)	8	#5	29'-8"	—	
p(E)	12	#7	29'-8"	—	
s(E)	29	#4	11'-5"	□	
s1(E)	2	#4	11'-7"	□	
u(E)	8	#6	11'-2"	—	
v(E)	14	#5	12'-8"	—	
v1(E)	60	#5	5'-7"	—	
Concrete Structures				Cu. Yd.	16.75
Reinforcement Bars, Epoxy Coated				Pound	2200
Metal Shell Pile 14" X 0.250"				Foot	130
Test Pile Metal Shell				Each	1



**PILE DATA**

Type & Size: Metal Shell - 14" dia. x 0.250 in. walls  
 Nominal Required Bearing: 331 Kips  
 Factored Resistance Available: 182 Kips  
 Estimated Length: 26'-0"  
 No. Required: 5 plus 1 Permanent Test Pile

<b>SOUTH ABUTMENT</b>		Sheet No.
Date	Designed MJP	C.H. 25 OVER KICKAPOO CREEK SECTION 06-00213-00-BR MACON COUNTY STA. 20+00.11 PROP. STR. NO. 058-3394
Revisions	Drawn BKN	
	Checked KWB	
	Approved KWB	
Prepared by: <b>URS</b>	345 East Ash Avenue Decatur, IL 62526	URS Job No. 36431926