

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

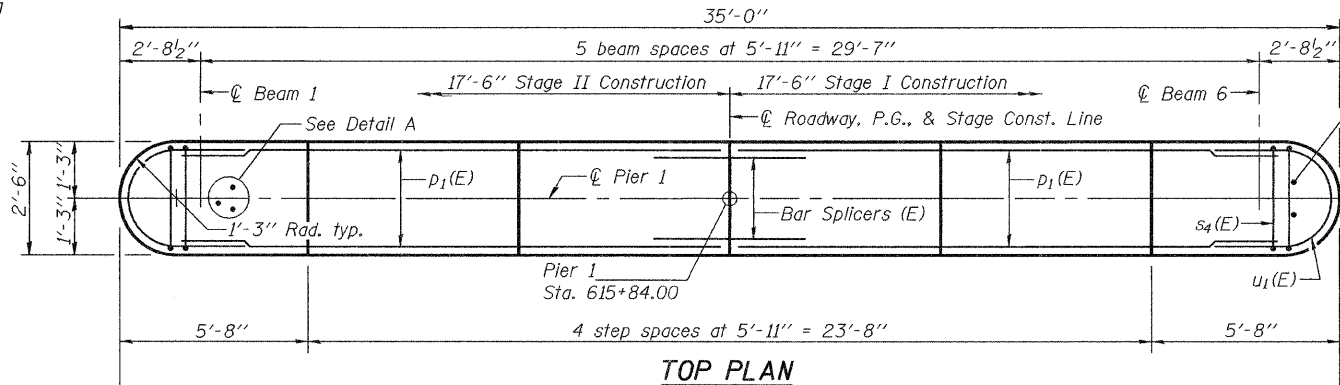
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 24 29 SHEETS
FAS 1536	125BR	Macon	45	36	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Contract #74145

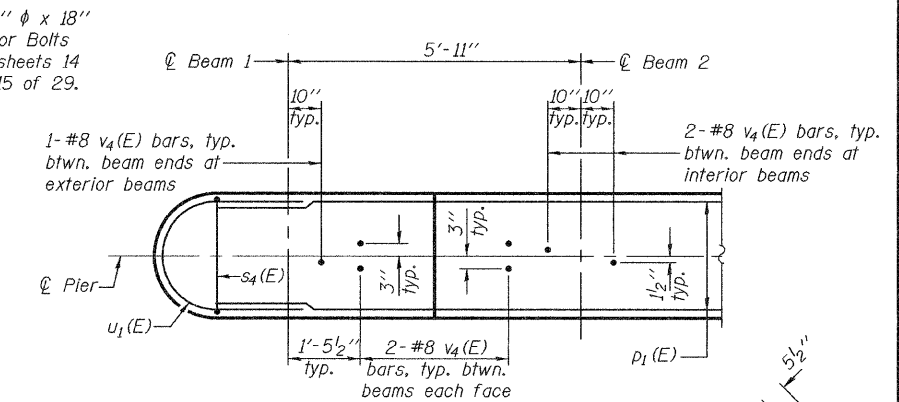
Notes:  
Pour steps monolithically with cap.  
For details of piles, see sheet 26 of 29.  
The Contractor shall limit the pile hammer size selected considering the relatively high soil strengths indicated in the borings and avoid overdriving the piles beyond their nominal required bearing to prevent pile damage during driving.

**PILE DATA**

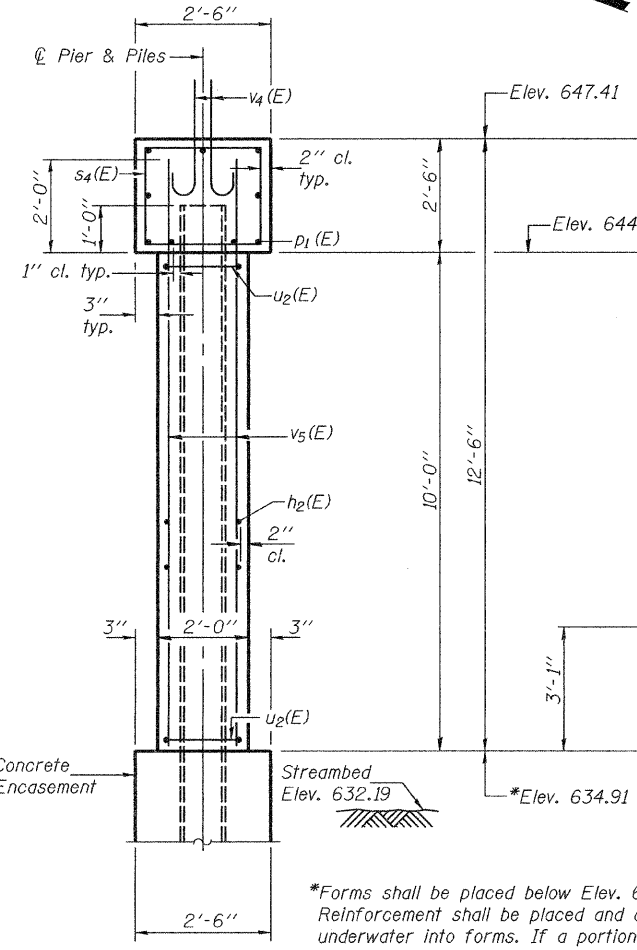
Type: 14" Metal Shell with 0.312" Wall Thickness  
Nominal Required Bearing: 427 k  
Factored Resistance Available: 213 k  
Est. Length: 71'-0"  
No. Production Piles: 7  
No. Test Piles: 1



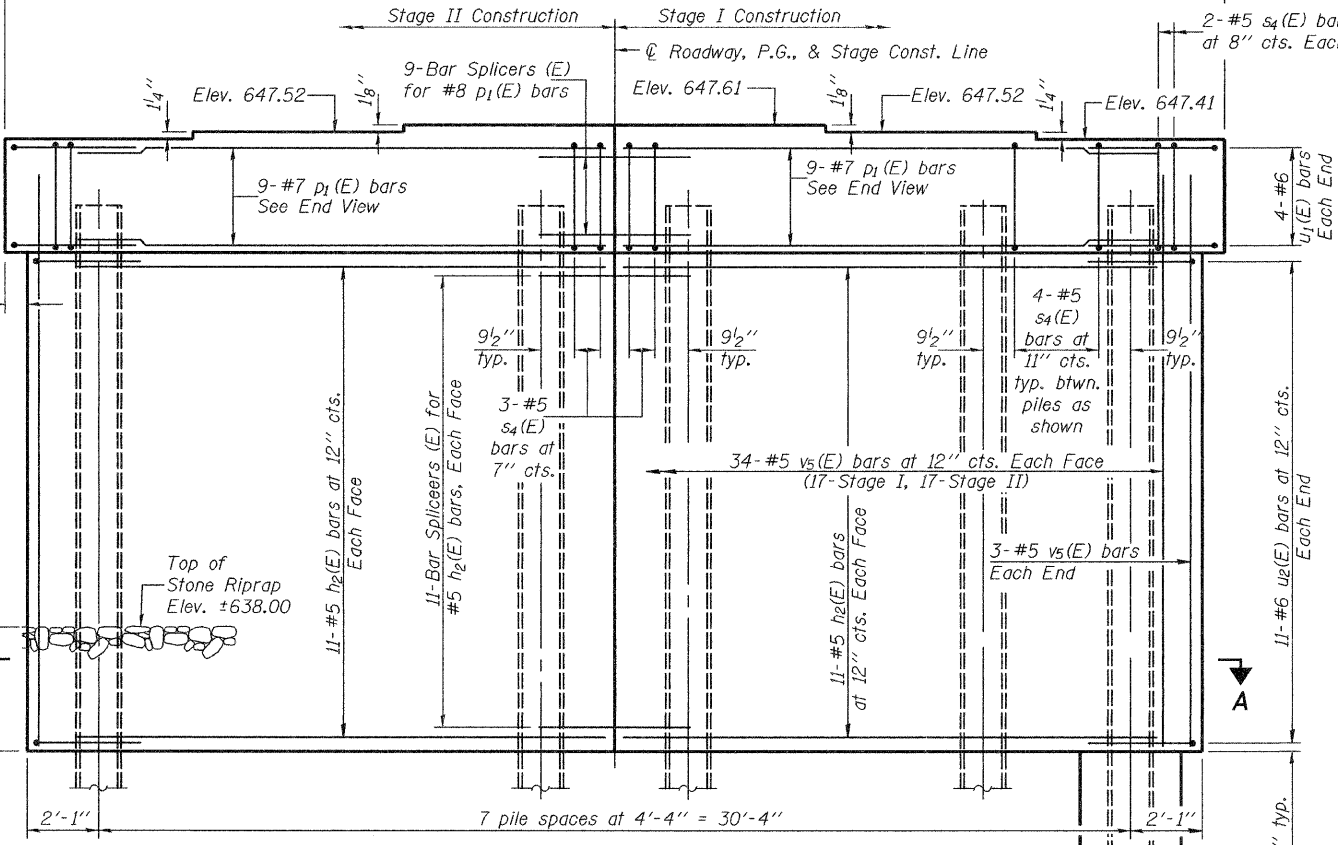
**TOP PLAN**



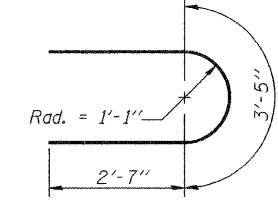
**DETAIL A**



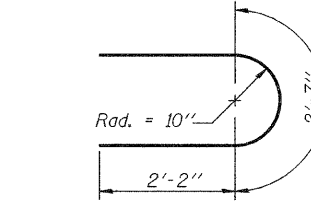
**END VIEW**



**ELEVATION**  
(Looking East)



**BAR u1(E)**

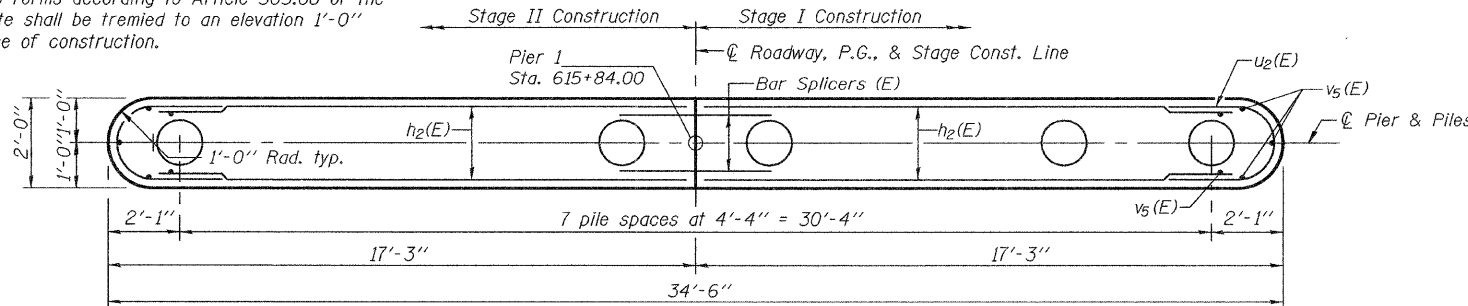


**BAR u2(E)**

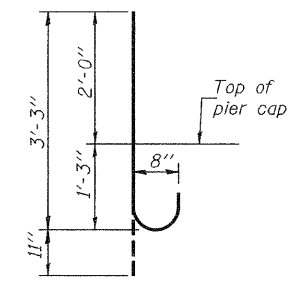
**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h2(E)	44	#5	16'-1"	—
p1(E)	18	#7	16'-1"	—
s4(E)	34	#5	9'-7"	□
u1(E)	8	#6	8'-7"	U
u2(E)	22	#6	6'-11"	U
v4(E)	30	#8	4'-2"	U
v5(E)	74	#5	11'-11"	—
Structure Excavation			Cu. Yd.	11
Concrete Structures			Cu. Yd.	33.5
Reinforcement Bars, Epoxy Coated			Pound	3250
Furnishing Metal Shell Piles, 14"φ x 0.312"			Foot	497
Driving Piles			Foot	497
Test Pile Metal Shells			Each	1
Concrete Encasement			Cu. Yd.	13.1
Underwater Structure Excavation Protection, Location 1			Each	1

\*Forms shall be placed below Elev. 634.91 after excavation for pier wall. Reinforcement shall be placed and concrete encasement shall be poured underwater into forms. If a portion of the pier wall is underwater, concrete shall be tremied underwater into forms according to Article 503.08 of the Standard Specifications. Concrete shall be tremied to an elevation 1'-0" above the water level at the time of construction.



**SECTION A-A**



**BAR v4(E)**

**PIER 1**  
F.A.S. ROUTE 1536 - SEC. 125BR  
MACON COUNTY  
STATION 616+26.50  
STRUCTURE NO. 058-0132

DESIGNED	Ray Ahanchi
CHECKED	Nick Barnett
DRAWN	BECKY M. LEACH
CHECKED	GRA & NRB

November 14, 2008  
EXAMINED *Thomas J. Damagala*  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGE DESIGN  
ENGINEER OF BRIDGES AND STRUCTURES