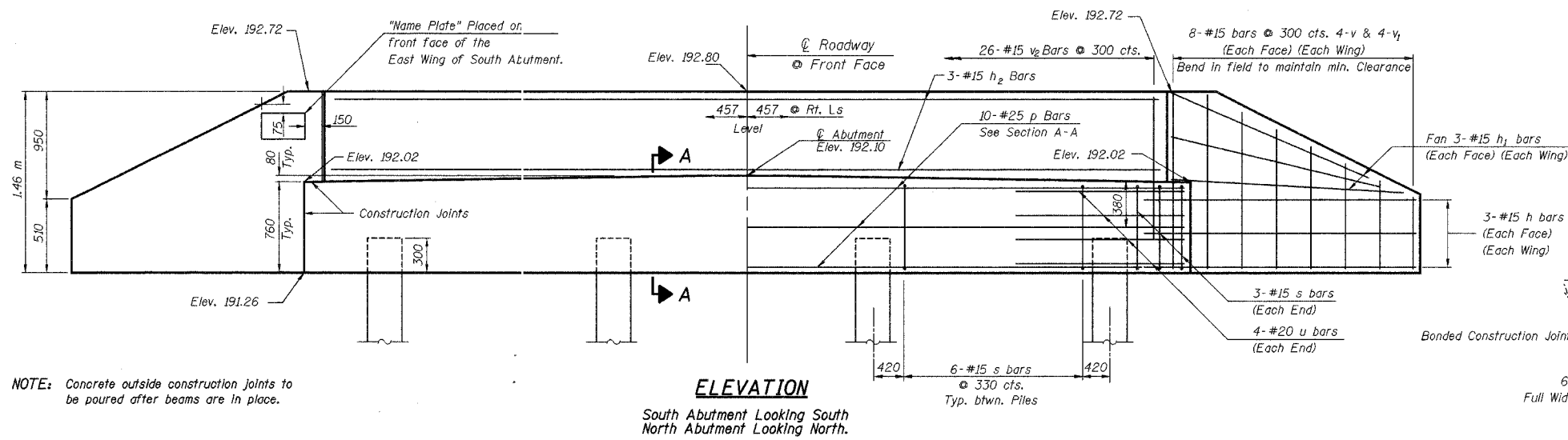


Contract # 91231

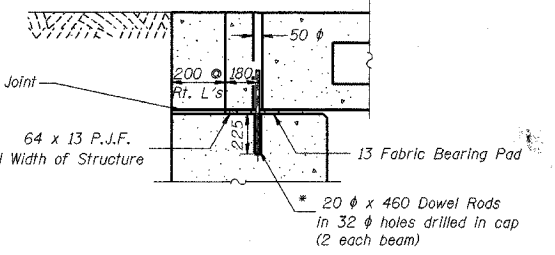
RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
408	97-21117-00-BR	SHELBY	12	5



NOTE: Concrete outside construction joints to be poured after beams are in place.

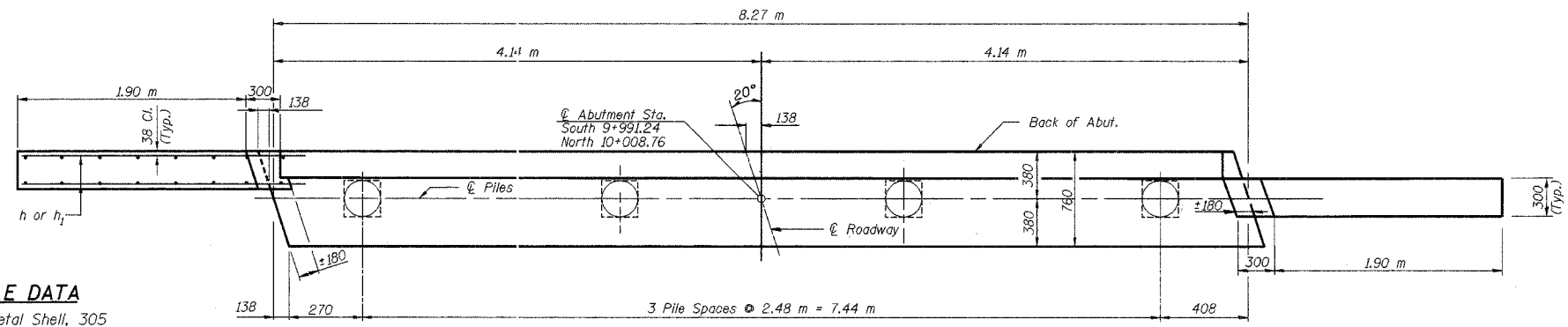
**ELEVATION**

South Abutment Looking South  
North Abutment Looking North.



**SEC. THRU ABUT.**

\* Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hrs.) prior to grouting the shear keys.

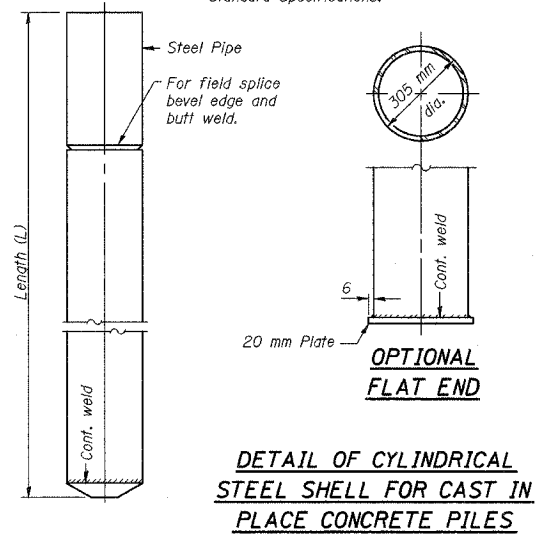


**PLAN VIEW**

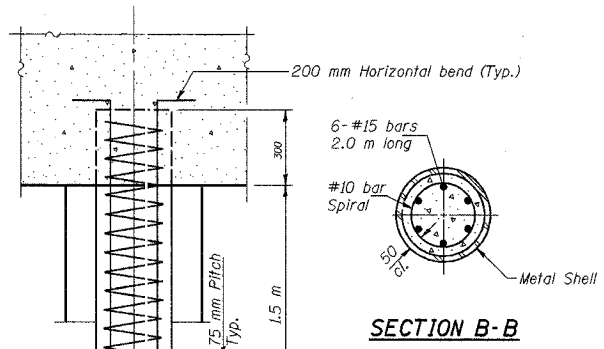
**PILE DATA**

Type: Metal Shell, 305  
Capacity: 300 Kn / Pile  
Est. Length: 5m  
No. Required: 7  
Test Pile: 1 @ West Abut.

Notes: Driving and bearing ends of pipe shall be cut square. The thickness of the shell shall be 6.35 mm with a tolerance of 5%. The shell shall be according to Article 1006.05(a) of the Standard Specifications.



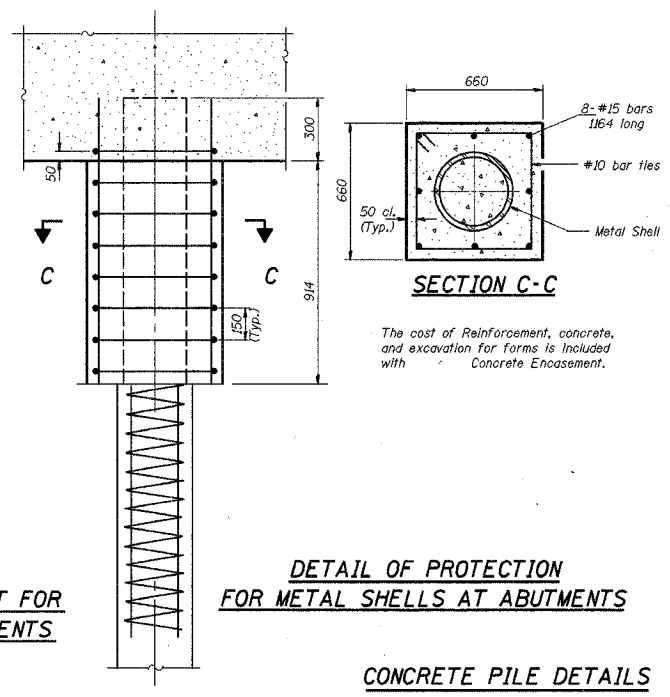
**DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES**



**SECTION B-B**

The cost of Reinforcement is included with furnishing piles.

**DETAIL OF REINFORCEMENT FOR METAL SHELLS AT ABUTMENTS**

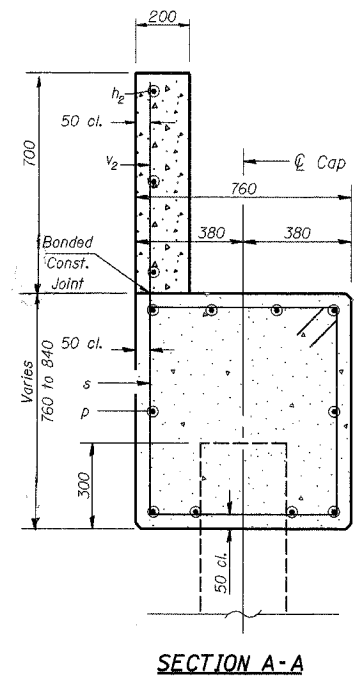


**SECTION C-C**

The cost of Reinforcement, concrete, and excavation for forms is included with Concrete Encasement.

**DETAIL OF PROTECTION FOR METAL SHELLS AT ABUTMENTS**

**CONCRETE PILE DETAILS**



**SECTION A-A**

**BAR U**

**BAR S**

**BILL OF MATERIAL 2-ABUTMENTS**

Bar	No.	Size	Length (m)	Shape
h	24	#15	2.52	—
h1	24	#15	2.12	—
h2	6	#15	7.80	—
p	20	#25	8.17	—
s	48	#15	2.92	□
u	16	#20	3.675	—
v	32	#15	1.35	—
v1	32	#15	0.90	—
v2	52	#15	1.04	—
Concrete Structures		m <sup>3</sup>	14.2	
Reinforcement Bars		Kg.	1,446	
Name Plates		Each	1	
Furnishing Metal Pile Shells 305 MM		Lin. m	35	
Driving and Filling Shells		Lin. m	35	
Test Piles Metal Shells		Each	1	

**EAST AND WEST ABUTMENT  
T.R.408  
SHELBY COUNTY  
SECTION 97-21117-00-BR  
STA. 10+000.000**

<b>RC ENGINEERS, LTD. CONSULTING ENGINEERS</b>	
DESIGNED: G.R.	DRAWN: J.T.C.
CHECKED: G.R.	CHECKED: D.H.F.

October 11, 2000  
g:\rc\p06\97-21117\ridge\abutment.dgn