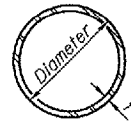


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

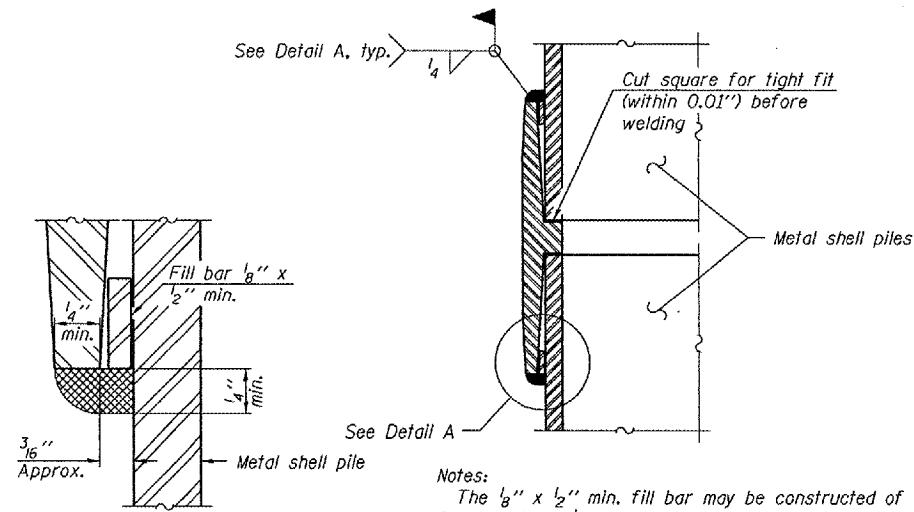
ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 16 20 SHEETS
FAP 662	V,T)B-2	MACOUPIN	68	47	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract #72993



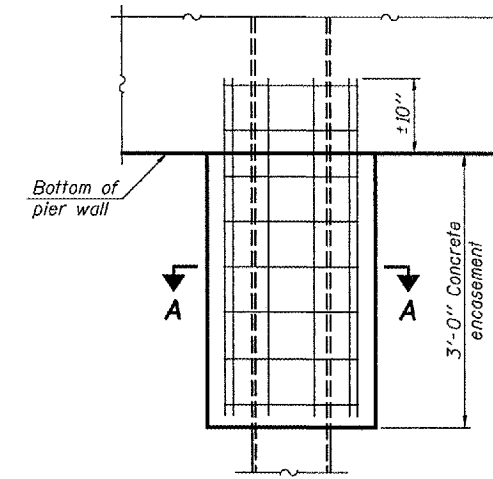
**METAL SHELL PILE TABLE**

Designation	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)	Encasement diameter A
PP12	0.179"	22.60	0.0274	30"
PP12	0.250"	31.37	0.0267	30"
PP14	0.250"	36.71	0.0368	30"
PP14	0.312"	45.61	0.0361	30"

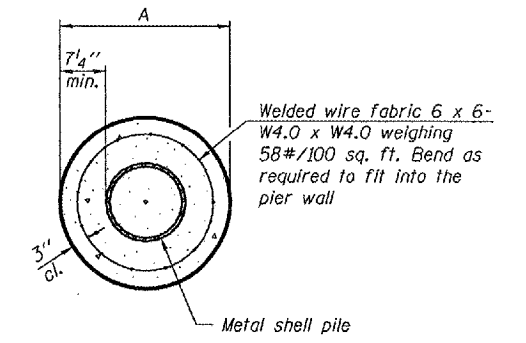


Notes:  
The  $\frac{1}{8}$ " x  $\frac{1}{2}$ " min. fill bar may be constructed of 2 bars with a  $\frac{1}{8}$ " max. gap between them.  
Pile segments shall be driven to solid contact with splicer before welding.

**WELDED COMMERCIAL SPLICE**



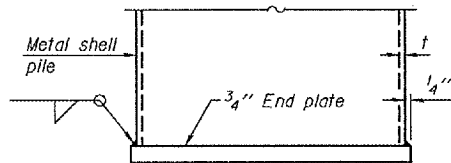
**ELEVATION**



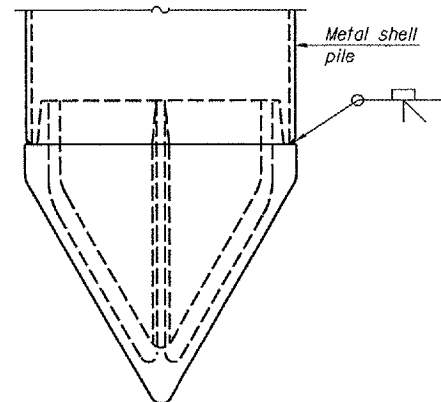
**SECTION A-A**

Notes:  
See Metal Shell Pile Table for dimension "A".  
Forms for encasement may be omitted when soil conditions permit.

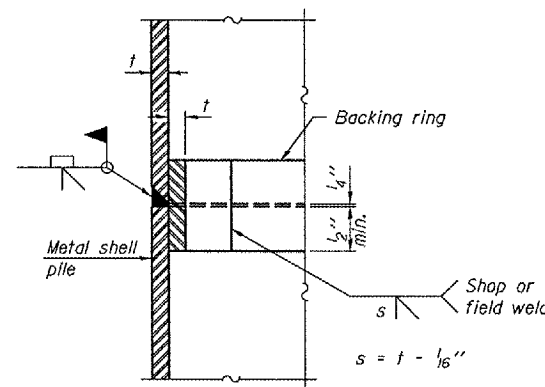
**CONCRETE ENCASEMENT AT PIERS**



**END PLATE ATTACHMENT**

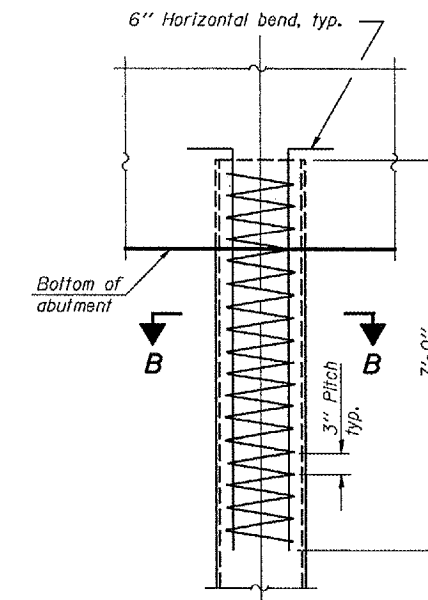


**METAL SHELL PILE SHOE ATTACHMENT**



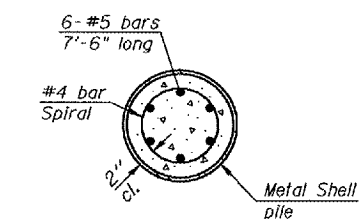
**COMPLETE PENETRATION WELD SPLICE**

Backing ring made from pile shell. Remove segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**ELEVATION**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**



**SECTION B-B**

DESIGNED	DPN
CHECKED	AJB
DRAWN	h.t. duong
CHECKED	FT/AJB/DPN

Jan 23, 2007

EXAMINED *Thomas J. Donagallo*  
ENGINEER OF BRIDGE DESIGN

PASSED *Ralph E. Carlson*  
ENGINEER OF BRIDGES AND STRUCTURES

F-MS 11-1-06

Note:  
The metal shell piles shall be according to ASTM A 252 Grade 3.

**METAL SHELL PILE DETAILS**  
**F.A.P. RT. 662 SECTION (V,T)B-2**  
**MACOUPIN COUNTY**  
**STATION 447+03.80**  
**STRUCTURE NO. 059-0504**