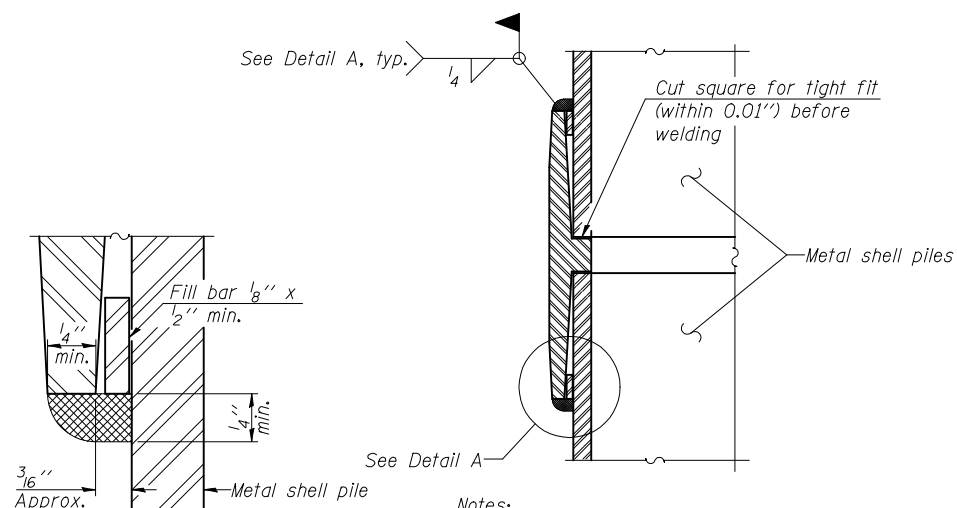


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 18 21 SHEETS
FAP 836	118 BR-2	Champaign	45	29	
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT-			



**METAL SHELL PILE TABLE**

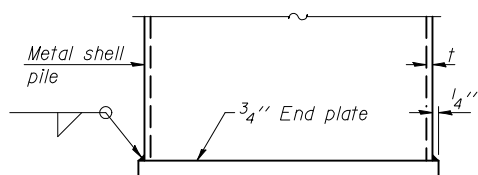
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



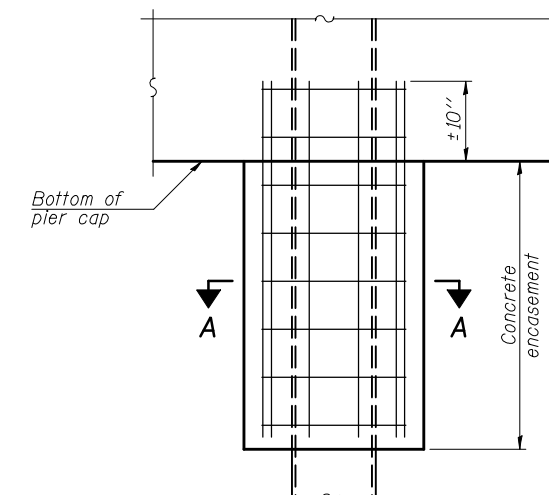
**DETAIL A**

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

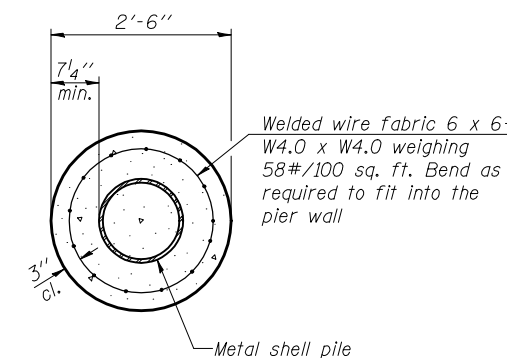
**WELDED COMMERCIAL SPLICE**



**END PLATE ATTACHMENT**



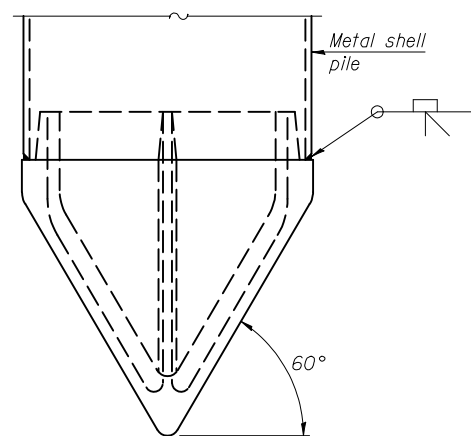
**ELEVATION**



**SECTION A-A**

**Note:**  
 Forms for encasement may be omitted when soil conditions permit.

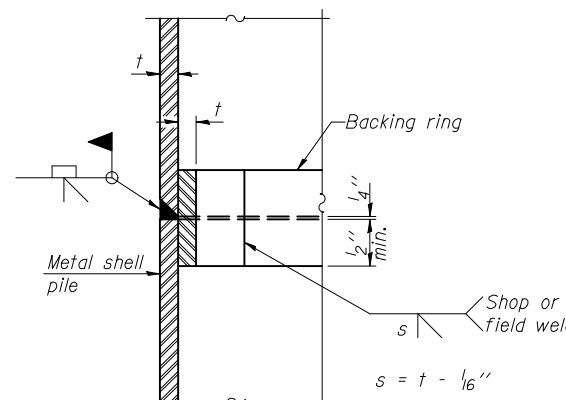
**CONCRETE ENCASEMENT AT PIERS**



**Note A:**  
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

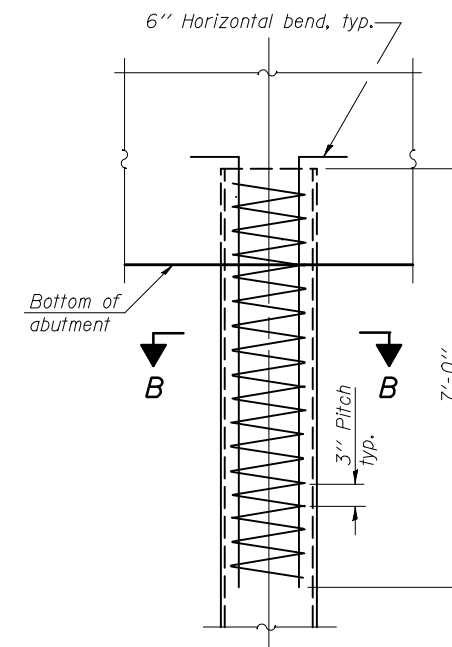
**METAL SHELL PILE SHOE ATTACHMENT**

(See Note A)

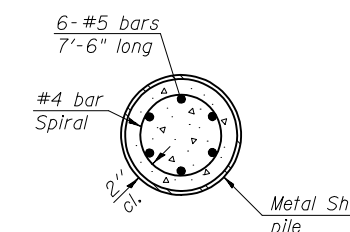


**COMPLETE PENETRATION WELD SPLICE**

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



**ELEVATION**



**SECTION B-B**

**METAL SHELL REINFORCEMENT AT ABUTMENTS**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**CONCRETE PILES**  
 IL RTE. 49 OVER LITTLE VERMILION RIVER  
 FAP 836 SECTION 118BR-2  
 CHAMPAIGN COUNTY  
 STA. 688+85 STR. NO. 010-0284  
 SCALE: VERT. HORIZ.  
 DATE MAY 2008  
 DRAWN BY GEW  
 CHECKED BY MJS

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

TUC PROJ. # 3107012-01  
 PLOT DATE = 8/19/2008 4:25:05 PM  
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