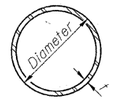
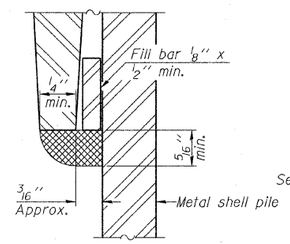
MCHENRY COUNTY
DIVISION OF TRANSPORTATION

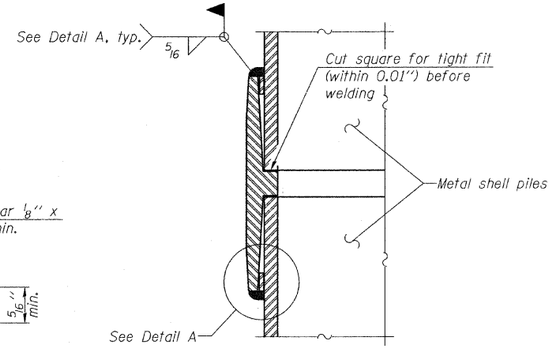


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.^{3}/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

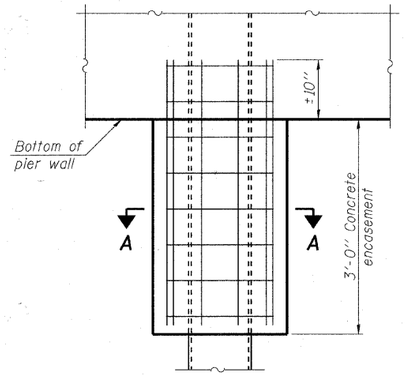


DETAIL A

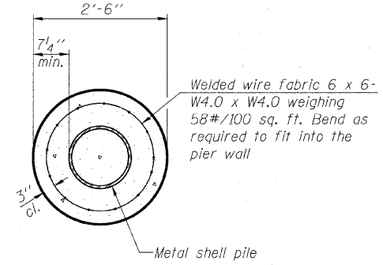


Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



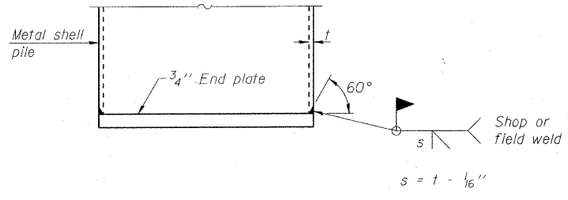
ELEVATION



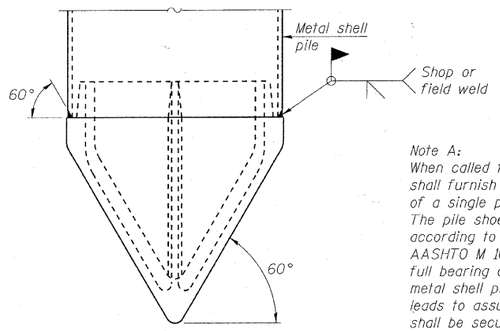
SECTION A-A

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

CONCRETE ENCASEMENT AT PIERS



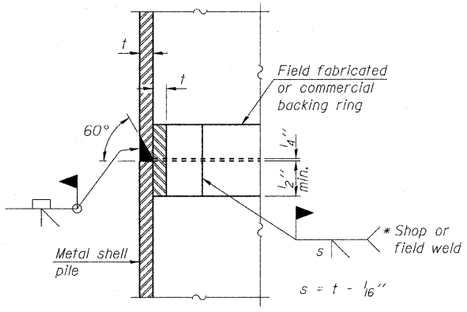
END PLATE ATTACHMENT



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.

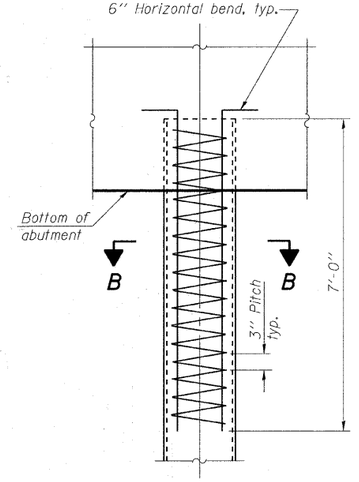
METAL SHELL PILE SHOE ATTACHMENT

(See Note A)



COMPLETE PENETRATION WELD SPLICE

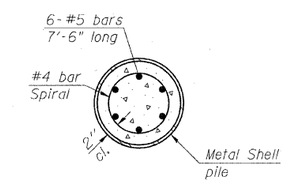
* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION

Welded Wire Fabric included with the cost of Concrete Encasement.

Metal Shell Reinforcement at Abutments included with Furnishing Metal Shell Piles.



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

DESIGNED	BLB
CHECKED	AS
DRAWN	BCD
CHECKED	BLB

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

METAL SHELL PILE DETAILS
STRUCTURE NO. 056-3178

SHEET NO. 20	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
23 SHEETS	0034	06-00320-02-BR	MCHENRY	65	45
			CONTRACT NO. 63536		
	JOB NO. C-91-140-11	ILLINOIS	FED. AID PROJECT BRS-0034(107)		

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