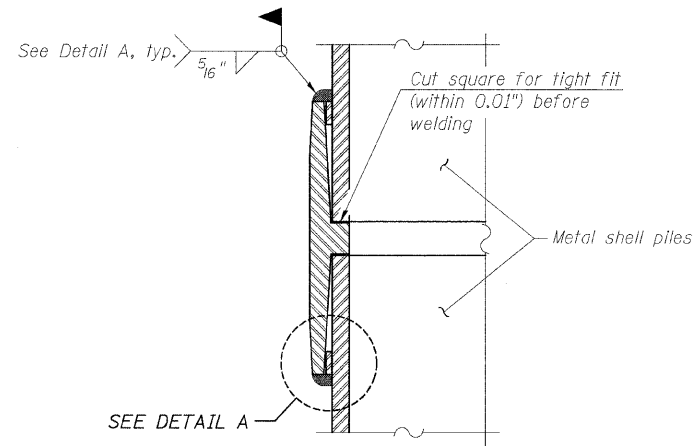


METAL SHELL PILE TABLE

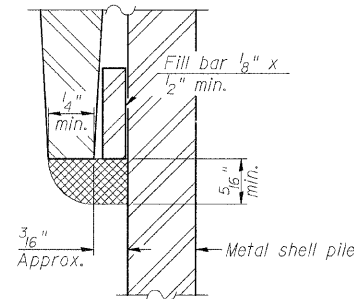
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



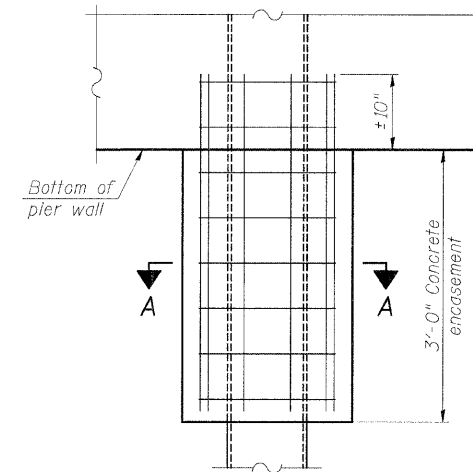
NOTES:

The 1/8"x1/2" 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.

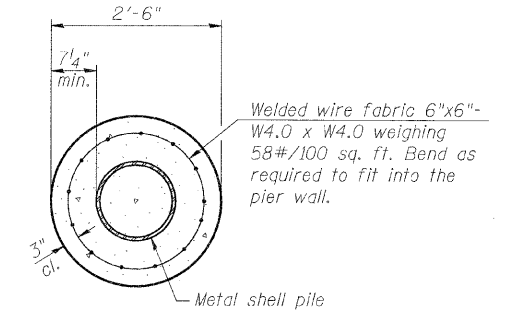
WELDED COMMERCIAL SPLICE



DETAIL A



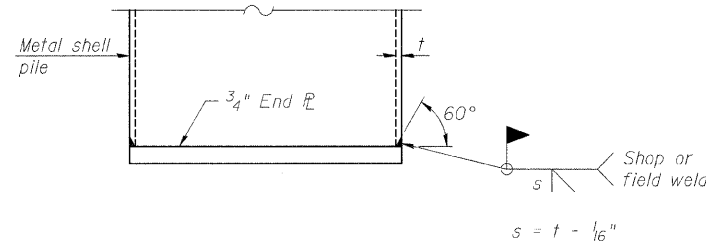
ELEVATION



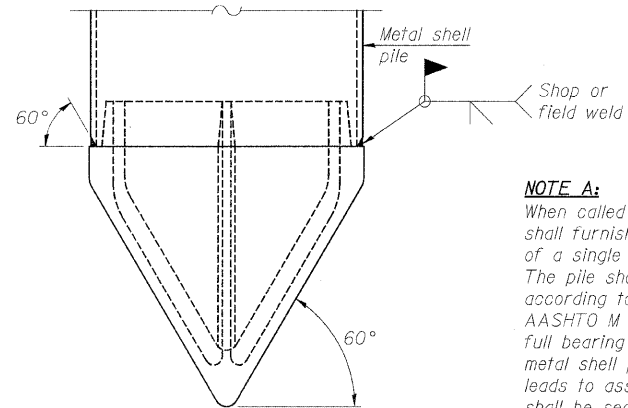
SECTION A-A

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

CONCRETE ENCASMENT AT PIERS



END PLATE ATTACHMENT

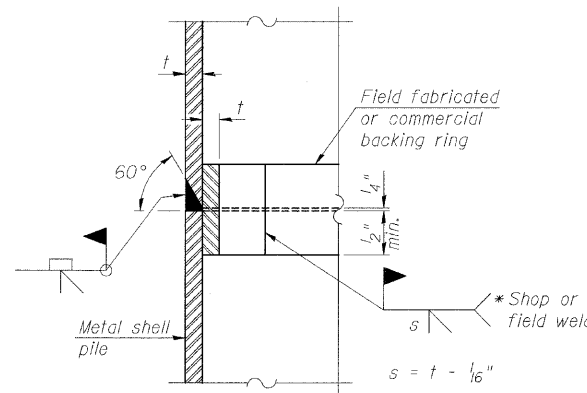


METAL SHELL PILE SHOE ATTACHMENT

(See Note A)

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.

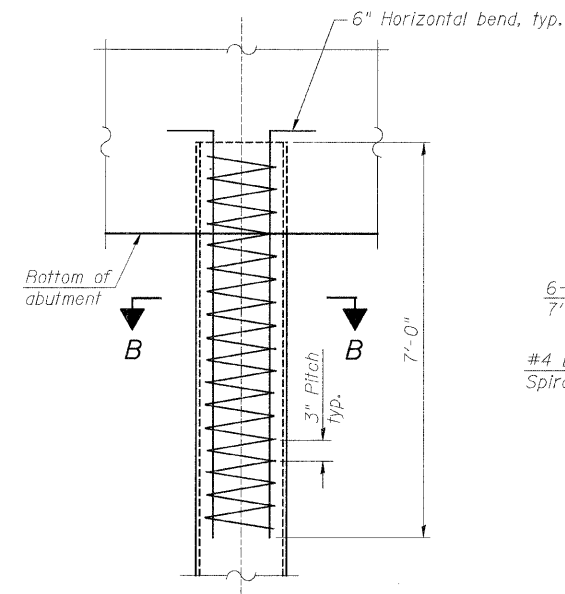


COMPLETE PENETRATION WELD SPLICE

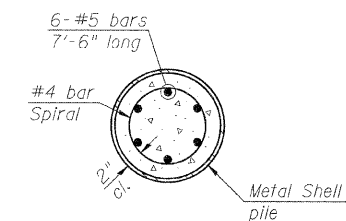
*Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

NOTE:

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



ELEVATION



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS



WILLETT HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - MICHAEL WAGNER
CHECKED - BRIAN CONVERSE
DRAWN - RON ALLEN
CHECKED - MEGAN CACKLEY

REVISED -
REVISED -
REVISED -
REVISED -

BUREAU COUNTY
T.R. 106 (850 E. ST.) OVER HICKORY CREEK
STATION 20+00

METAL SHELL PILE DETAILS
STRUCTURE NO. 006-4218

STRUCTURAL SHEET NO. 8 OF 9 SHEETS

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
106	08-15119-00-BR	BUREAU	18	14
WHA# 1287D10			CONTRACT NO. 87523	
[ILLINOIS] FED. AID PROJECT BRCS-00110861				

FILE - SA PROJECTS - 2018 - 1287D10 - Bureau Co. - 181865 - DESIGN STRUCTURE - 08-15119-00-BR - Metal Shell Pile.dgn