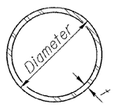
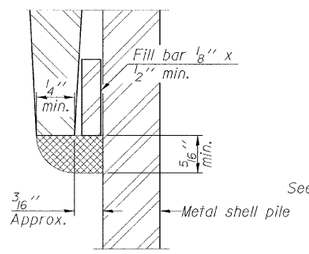
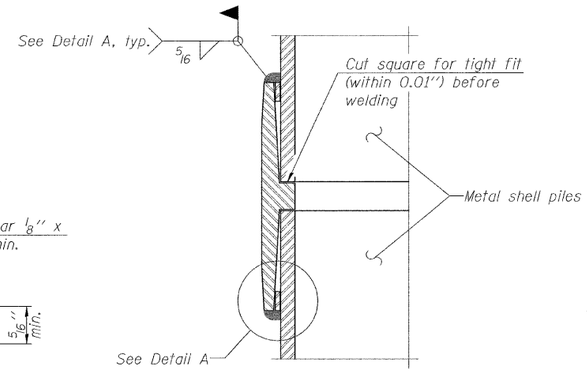



## METAL SHELL PILE TABLE

| 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 |

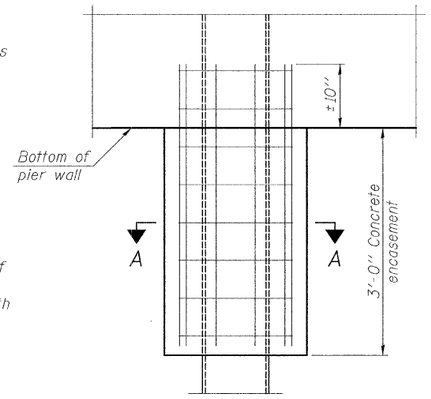



## DETAIL A

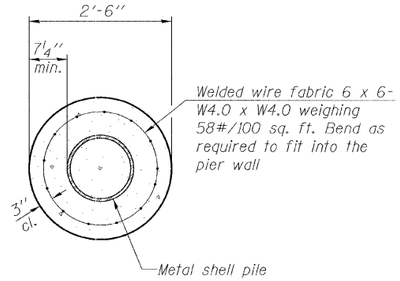



Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

## WELDED COMMERCIAL SPLICE



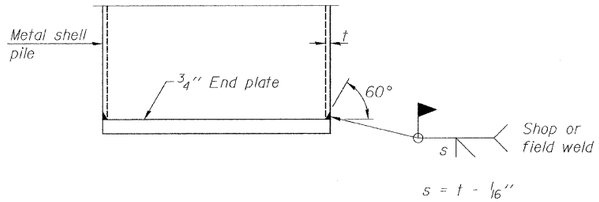

## ELEVATION




## SECTION A-A

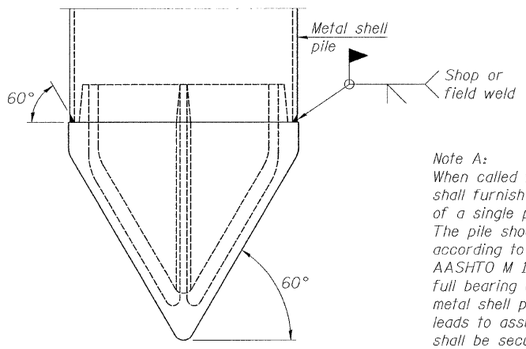
Note:
Forms for encasement may be omitted when soil conditions permit.

## CONCRETE ENCASEMENT AT PIERS




$s = t - 1/16''$

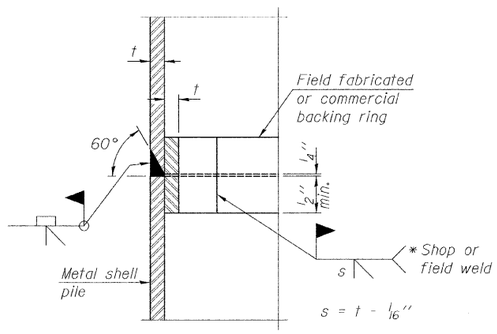
## END PLATE ATTACHMENT




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

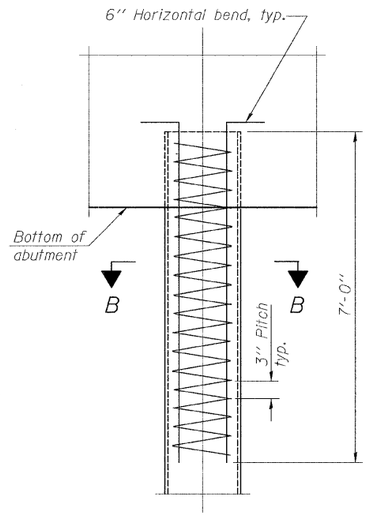
(See Note A)



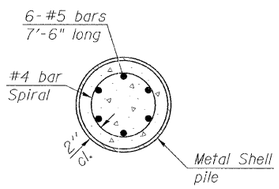

$s = t - 1/16''$

## 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




## SECTION B-B

## METAL SHELL REINFORCEMENT AT ABUTMENTS

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

F-MS 11-1-09

| | | | |
|---|---|---|---|
| FILE NAME = $FILE$ | USER NAME = $USER$ | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | PLOT SCALE = $SCALE$ | CHECKED - | REVISED - |
| | PLOT DATE = $DATE$ | DATE - | REVISED - |

Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL.
62703 Phone: (217)544-8033 IL. Design Firm No. 184-001907

**METAL SHELL PILE DETAILS**

SCALE: | SHEET NO. 10 OF 15 SHEETS | STA. | TO STA.

| T.R. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 43 | 08-03115-00-BR | MENARD | 15 | 10 |
| | | CONTRACT NO. 93530 | | |
| FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT | | |