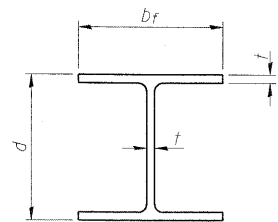


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|-----------------------|---------|----------|------------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | KANE | 545 | 339 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT | |

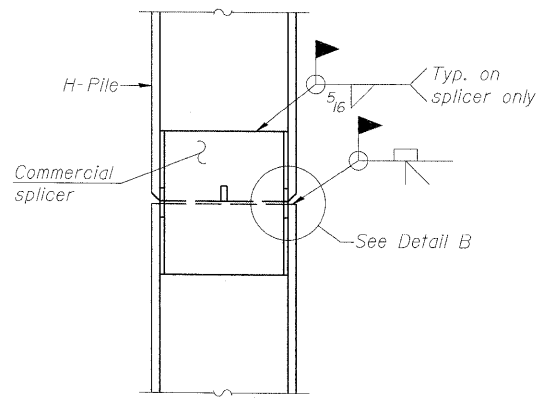
SHEET SD- 24
OF 34 SHEETS

Contract # 63074

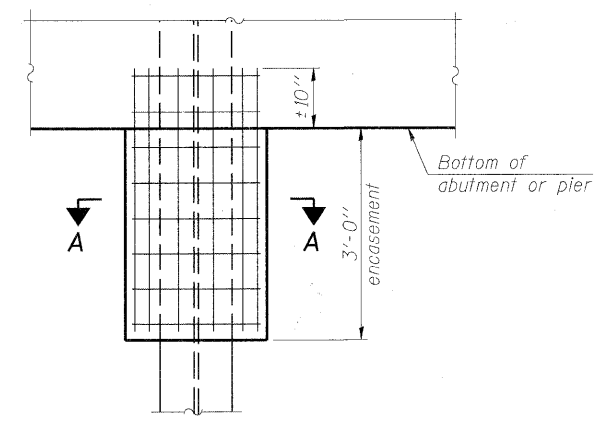


STEEL PILE TABLE

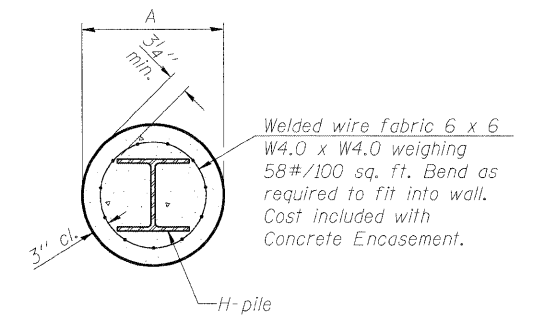
| Designation | Depth d | Flange width b _f | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 1 3/16" | 30" |
| x102 | 14" | 14 3/4" | 1 1/16" | 30" |
| x89 | 13 7/8" | 14 3/4" | 5/8" | 30" |
| x73 | 13 5/8" | 14 5/8" | 1/2" | 30" |
| HP 12x84 | 12 1/4" | 12 1/4" | 1 1/16" | 24" |
| x74 | 12 1/8" | 12 1/4" | 5/8" | 24" |
| x63 | 12" | 12 1/8" | 1/2" | 24" |
| x53 | 11 3/4" | 12" | 7/16" | 24" |
| HP 10x57 | 10" | 10 1/4" | 9/16" | 24" |
| x42 | 9 3/4" | 10 1/8" | 7/16" | 24" |
| HP 8x36 | 8" | 8 1/8" | 7/16" | 18" |



ELEVATION



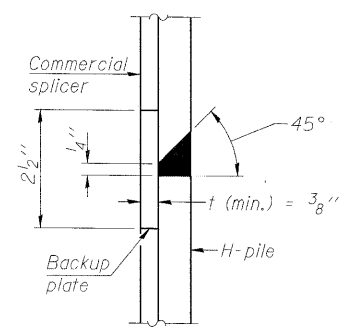
ELEVATION



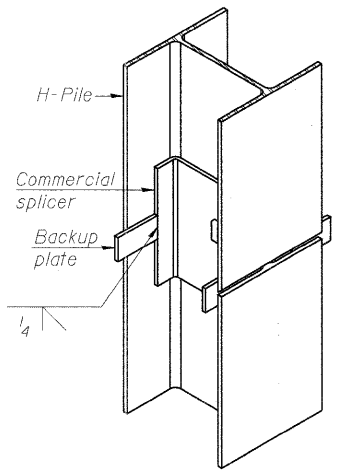
SECTION A-A

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

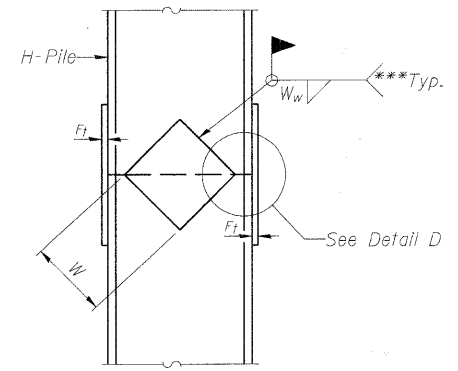
PILE ENCASUREMENT



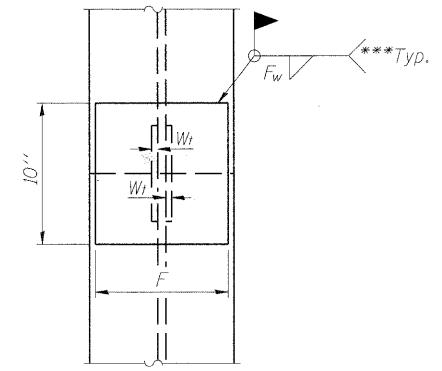
DETAIL "B"



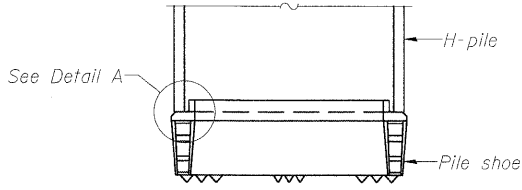
ISOMETRIC VIEW



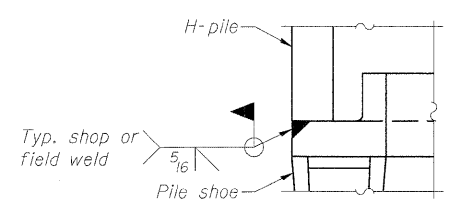
ELEVATION



END VIEW

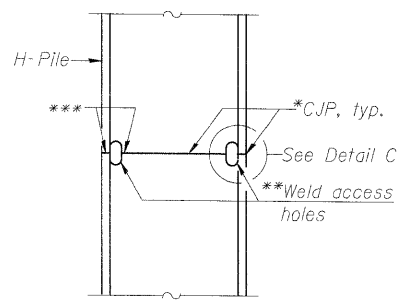


ELEVATION

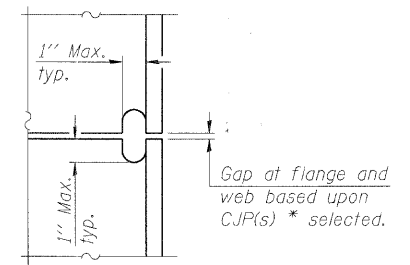


DETAIL A

H-PILE SHOE ATTACHMENT

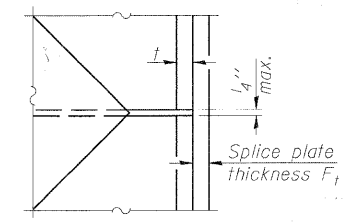


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

WELDED PLATE FIELD SPLICE

| Designation | F | F _t | F _w | W | W _t | W _w |
|-------------|---------|----------------|----------------|--------|----------------|----------------|
| HP 14x117 | 12 1/2" | 1" | 7/8" | 7 3/4" | 5 8/8" | 1 1/2" |
| x102 | 12 1/2" | 7/8" | 3/4" | 7 3/4" | 5 8/8" | 1 1/2" |
| x89 | 12 1/2" | 3/4" | 1 1/16" | 7 3/4" | 5 8/8" | 1 1/2" |
| x73 | 12 1/2" | 5/8" | 9/16" | 7 3/4" | 5 8/8" | 1 1/2" |
| HP 12x84 | 10" | 7/8" | 1 1/16" | 6 1/2" | 5 8/8" | 1 1/2" |
| x74 | 10" | 7/8" | 1 1/16" | 6 1/2" | 5 8/8" | 1 1/2" |
| x63 | 10" | 5/8" | 1/2" | 6 1/2" | 1 1/2" | 3/8" |
| x53 | 10" | 5/8" | 1/2" | 6 1/2" | 1 1/2" | 3/8" |
| HP 10x57 | 8" | 3/4" | 9/16" | 5 1/4" | 1 1/2" | 3/8" |
| x42 | 8" | 5/8" | 9/16" | 5 1/4" | 1 1/2" | 3/8" |
| HP 8x36 | 7" | 5/8" | 7/16" | 4 1/4" | 1 1/2" | 3/8" |

| | |
|----------|-----|
| DESIGNED | AJK |
| CHECKED | AAY |
| DRAWN | AYR |
| CHECKED | DMC |

F-HP 5-16-08

*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code-Steel.
**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code-Steel.
***Interrupt welds 1/4" from end of each pile.

Note: The steel H-piles shall be according to AASHTO M270 Grade 50.

benesch
alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450
Job # 3944

PILE DETAILS
IL 25/DUNHAM ROAD OVER THE
EAST BRANCH OF BREWSTER CREEK
F.A.P. 360 - SEC. 06-00214-15-BR
KANE COUNTY
STATION 276+36.96
STRUCTURE NO. 045-2032

x:\39000s\3944\engineering\documents\1125-dunham_road_over_brewster_sn045-2032\final\0452032-63074-024-piles.dgn 11:21:54 AM 3/30/2009