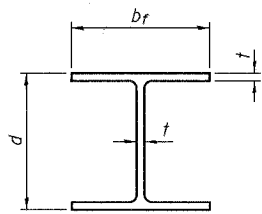


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------|----------------|----------|-------------------|-----------|
| F.A.U. 3887 | 06-00214-06-BR | KANE | 55 | 37 |
| FED. ROAD DIST. NO. 7 | | ILLINOIS | FED. AID PROJECT- | |

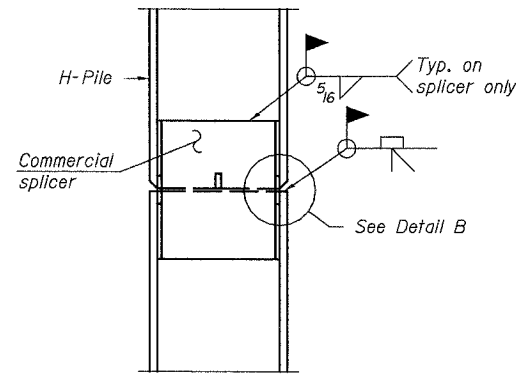
SHEET NO. 22
25 SHEETS

CONTRACT NO. 83923

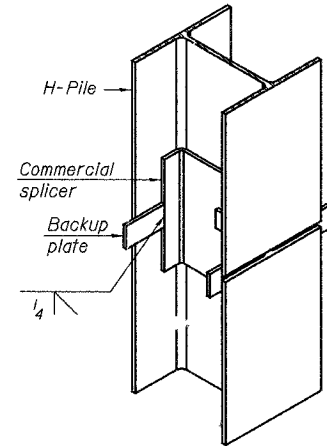


STEEL PILE TABLE

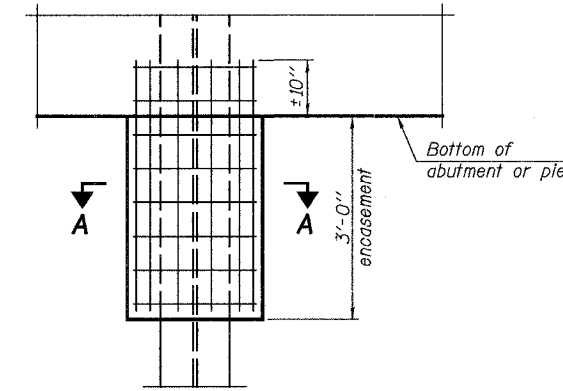
| Designation | Depth d | Flange width b _f | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------------------|----------------------------|-----------------------|
| HP 14x117 | 14 1/4" | 14 7/8" | 1 3/16" | 30" |
| x102 | 14" | 14 3/4" | 1 1/16" | 30" |
| 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

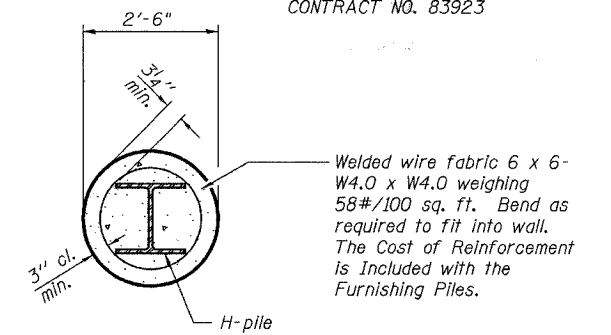


ISOMETRIC VIEW



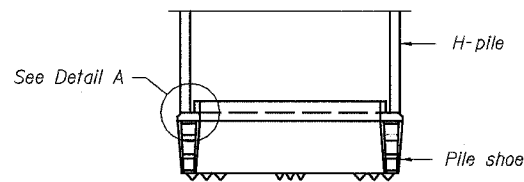
ELEVATION

PILE ENCASEMENT

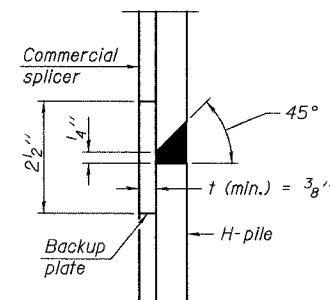


SECTION A-A

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

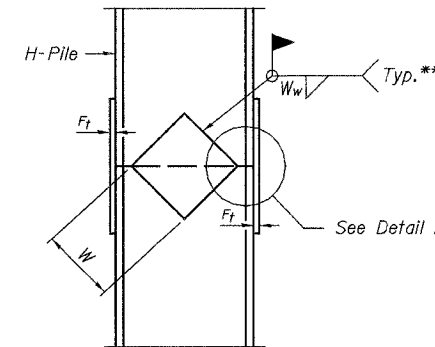


ELEVATION

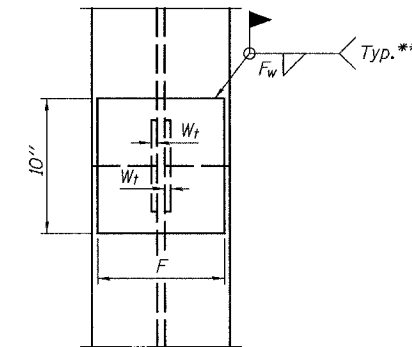


DETAIL "B"

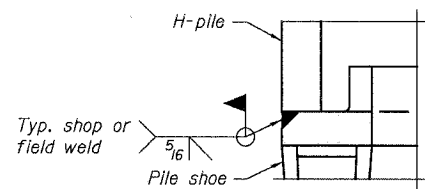
WELDED COMMERCIAL SPLICE



ELEVATION

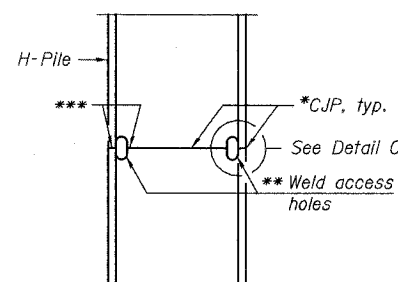


END VIEW

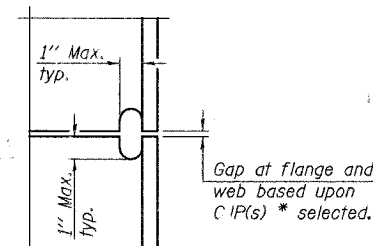


DETAIL A

H-PILE SHOE ATTACHMENT

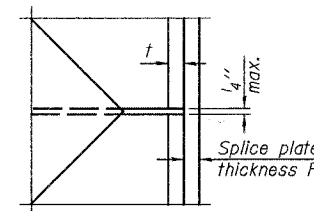


ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE



DETAIL D

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

- * 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.

DESIGNED NPP
CHECKED JPB
DRAWN SOI
CHECKED JPB

F-HP

11-1-06

100 South Wacker Drive,
Suite 500
Chicago, IL 60606
(312) 939-1000

URS

| REVISIONS | |
|-----------|------|
| NAME | DATE |
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| | |
| | |
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| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 31 OVER NEW STEARNS ROAD
KANE COUNTY
**H-PILE DETAIL AND WELD
PLATE FIELD SPLICE**

F.A.U. 3887
STATION 113+61.11
SCALE:

SECTION 06-00214-06-BR
STRUCTURE NO. 045-2031
DATE: 00/00/2007