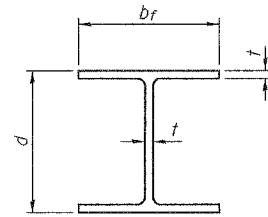


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                       |                |                   |         |           |
|-----------------------|----------------|-------------------|---------|-----------|
| ROUTE NO.             | SECTION        | COUNTY            | STATION | SHEET NO. |
| FAP 327               | (51-23)<br>B-3 | LAWRENCE          | 56      | 42        |
| FED. ROAD DIST. NO. 7 | ILLINOIS       | FED. AID PROJECT- |         |           |

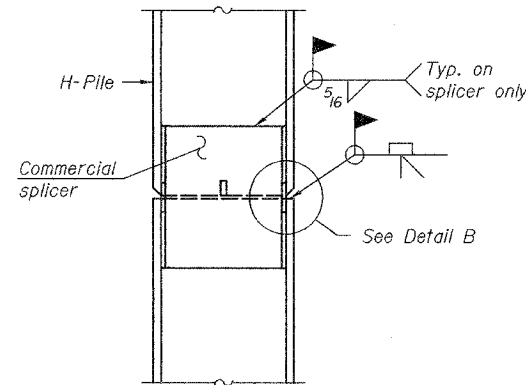
SHEET No. 25  
29 SHEETS

Contract No. 94967

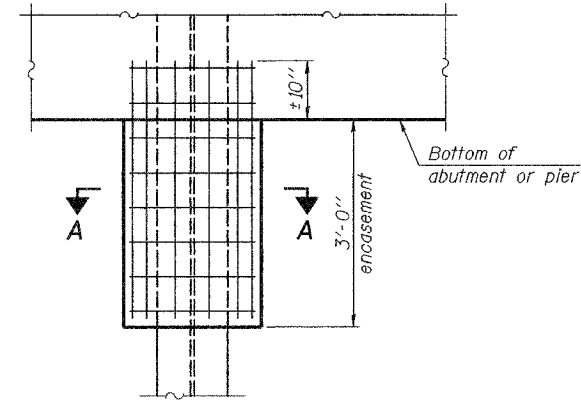


STEEL PILE TABLE

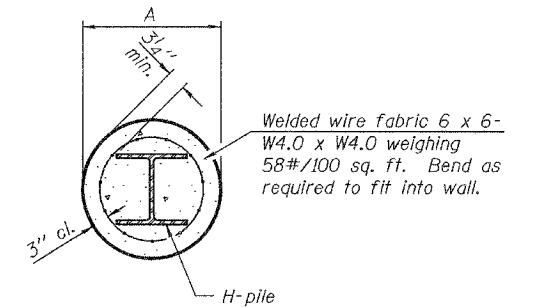
| Designation | Depth d | Flange width b <sub>f</sub> | Web and Flange thickness t | Encasement diameter A |
|-------------|---------|-----------------------------|----------------------------|-----------------------|
| HP 14x117   | 14 1/4" | 14 7/8"                     | 13 1/16"                   | 30"                   |
| x102        | 14"     | 14 3/4"                     | 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"                     | 1/16"                      | 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



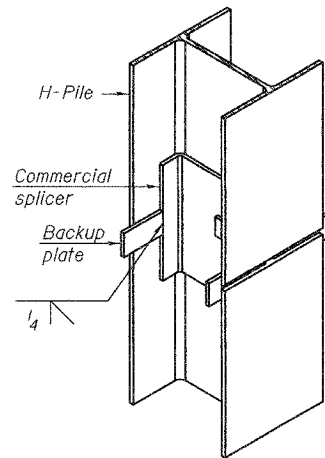
ELEVATION



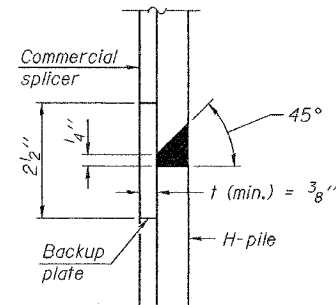
SECTION A-A

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

PILE ENCASEMENT

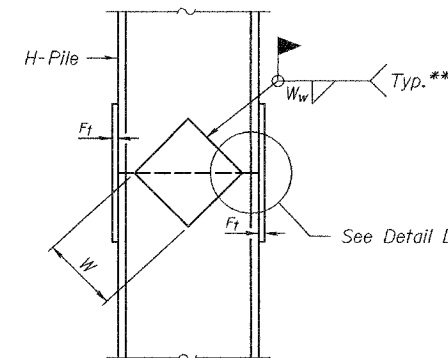


ISOMETRIC VIEW

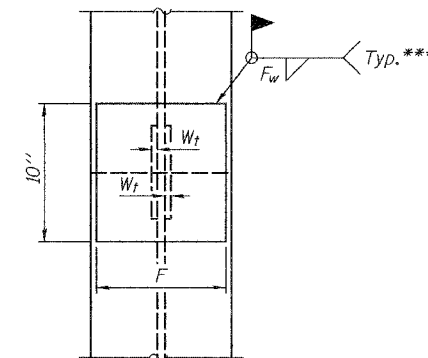


DETAIL "B"

WELDED COMMERCIAL SPLICE



ELEVATION

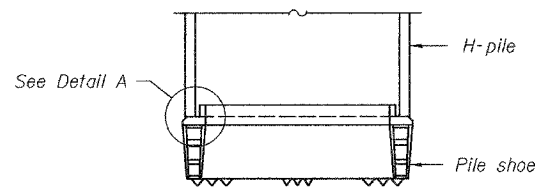


END VIEW

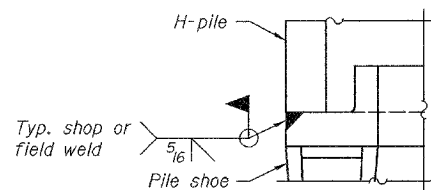
| Designation | F       | F <sub>t</sub> | F <sub>w</sub> | W      | W <sub>t</sub> | W <sub>w</sub> |
|-------------|---------|----------------|----------------|--------|----------------|----------------|
| HP 14x117   | 12 1/2" | 1"             | 7/8"           | 7 3/4" | 5/8"           | 1/2"           |
| 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"           |

WELDED PLATE FIELD SPLICE

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

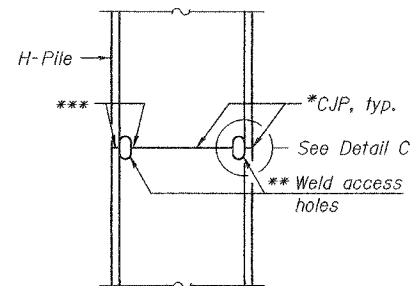


ELEVATION

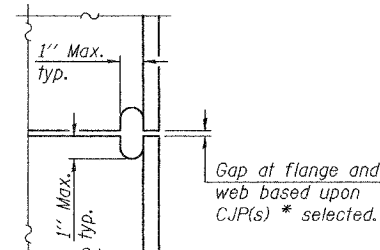


DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION



DETAIL C

COMPLETE PENETRATION WELD SPLICE

- \* 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.

|          |                 |
|----------|-----------------|
| DESIGNED | Chad E. Hodel   |
| CHECKED  | Mark D. Shaffer |
| DRAWN    | h.t. duong      |
| CHECKED  | CEH/MDS         |

Oct. 2, 2007  
EXAMINED *Thomas J. Donagabali*  
ENGINEER OF BRIDGE DESIGN  
PASSED *Ronald E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

F-HP 11-1-06

STEEL HP DETAILS  
F.A.P. RT. 327 - SEC. (51-23)B-3  
LAWRENCE COUNTY  
STATION 553+95.50  
STRUCTURE NO. 051-0063