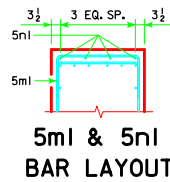
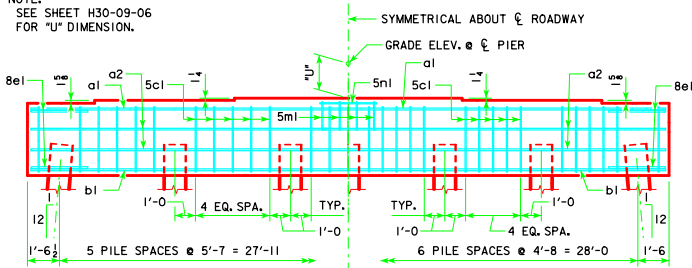


TYPICAL PLAN



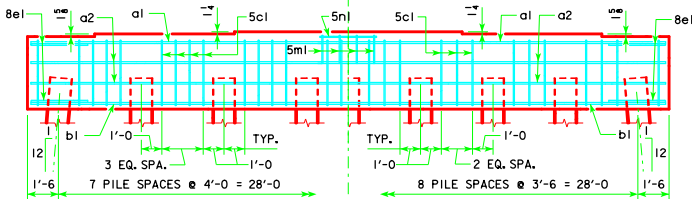
5ml & 5nl  
BAR LAYOUT

NOTE:  
SEE SHEET H30-09-06  
FOR "U" DIMENSION.



6 PILE BENT

7 PILE BENT



8 PILE BENT

9 PILE BENT

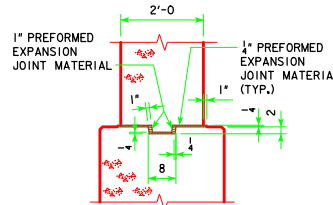
PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

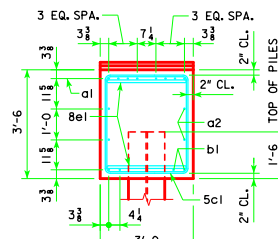
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

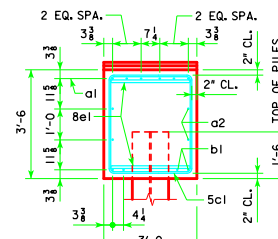
PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.



KEYED NOTCH DETAIL



VIEW A-A  
FOR 6 & 7 PILE BENTS

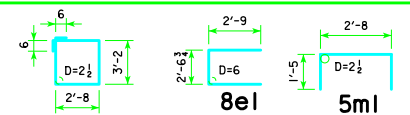


VIEW A-A  
FOR 8 & 9 PILE BENTS

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

| BAR                      | LENGTH | SHAPE | 6 PILE BENT |      |        | 7 PILE BENT |      |        | 8 PILE BENT |      |        | 9 PILE BENT |      |        |
|--------------------------|--------|-------|-------------|------|--------|-------------|------|--------|-------------|------|--------|-------------|------|--------|
|                          |        |       | NO.         | SIZE | WEIGHT | NO.         | SIZE | WEIGHT | NO.         | SIZE | WEIGHT | NO.         | SIZE | WEIGHT |
| a1                       | 30'-8" |       | 8           | 9    | 834    | 8           | 9    | 834    | 6           | 9    | 626    | 6           | 9    | 626    |
| a2                       | 30'-8" |       | 4           | 8    | 328    | 4           | 8    | 328    | 4           | 8    | 328    | 4           | 8    | 328    |
| b1                       | 30'-8" |       | 4           | 9    | 417    | 4           | 9    | 417    | 4           | 8    | 328    | 4           | 8    | 328    |
| 5c1                      | 12'-8" |       | 27          | 5    | 357    | 32          | 5    | 423    | 30          | 5    | 396    | 26          | 5    | 343    |
| 8e1                      | 8'-1"  |       | 4           | 8    | 86     | 4           | 8    | 86     | 4           | 8    | 86     | 4           | 8    | 86     |
| 5ml                      | 5'-6"  |       | 4           | 5    | 23     | 4           | 5    | 23     | 4           | 5    | 23     | 4           | 5    | 23     |
| 5nl                      | 2'-8"  |       | 4           | 5    | 11     | 4           | 5    | 11     | 4           | 5    | 11     | 4           | 5    | 11     |
| REINFORCING STEEL (LB.)  |        |       | 2056        |      |        | 2122        |      |        | 1798        |      |        | 1745        |      |        |
| STRUCTURAL CONCRETE (CY) |        |       | 3           |      |        | 12.6        |      |        | 12.6        |      |        | 12.6        |      |        |

BENT BAR DETAILS



NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

FRICITION OR POINT BEARING PILING

| ABUTMENT BEARING | PIOL TYPE 3             |           |  |
|------------------|-------------------------|-----------|--|
|                  | NUMBER OF TRESTLE PILES | PILE SIZE | LRFD P <sub>u</sub> STRENGTH I, DES. LOAD (KIPS) |
| 138'-10"         | 6                       | HP14x73   | 157  |
|                  | 6                       | HP14x89   | 157  |
| 151'-4"          | 6                       | HP14x73   | 166  |
|                  | 6                       | HP14x89   | 166  |
| 163'-10"         | 6                       | HP14x73   | 179  |
|                  | 6                       | HP14x89   | 179  |
| 176'-4"          | 7                       | HP14x73   | 161  |
|                  | 6                       | HP14x89   | 187  |
| 188'-10"         | 7                       | HP14x73   | 168  |
|                  | 6                       | HP14x89   | 196  |
| 201'-4"          | 8                       | HP14x73   | 164  |
|                  | 6                       | HP14x89   | 218  |
| 213'-10"         | 8                       | HP14x73   | 172  |
|                  | 7                       | HP14x89   | 197  |
| 226'-4"          | 8                       | HP14x73   | 181  |
|                  | 7                       | HP14x89   | 207  |
| 243'-0"          | 9                       | HP14x73   | 170  |
|                  | 7                       | HP14x89   | 218  |

NOTE: P<sub>u</sub> STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

NOTE: FRICTION BEARING INCLUDES SIDE FRICTION AND END BEARING IN SOIL. POINT BEARING INCLUDES SIDE FRICTION AND POINT BEARING IN ROCK.

REVISED 04-13 - REVISION FOR LRFD PILE DESIGN.

LATEST REVISION DATE  
04-13

APPROVED BY BRIDGE ENGINEER  
*Thomas E. M. Donnell*

STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES

**PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES**

DECEMBER, 2006

**H30-47-06**

**PILE BENT PIERS**  
**HPI4 PILES**  
0° SKEW

**H30-47-06**