



**NOTES:**

1. PRE-BED SEAT WITH NON-SHRINK GROUT WITH THICKNESS SLIGHTLY MORE THAN SHIM STACK.
2. CARE SHALL BE TAKEN TO PREVENT CONTROLLED DENSITY FILL (NON-EXCAVATABLE) FROM ENTERING AND OCCUPYING, FULLY OR PARTIALLY, CMP VOIDS.
3. THE CONTRACTOR MAY USE CONCRETE IN LIEU OF CONTROLLED DENSITY FILL (NON-EXCAVATABLE) TO FACILITATE CONSTRUCTION. HOWEVER, NO ADDITIONAL COMPENSATION SHALL BE ASSUMED FOR THIS SUBSTITUTION.
4. LEVELING BOLTS SHOWN. CONTRACTOR MAY USE OTHER MEANS OF SETTING GRADE.

**SECTION 5**

SCALE:  $\frac{1}{2}$ " = 1'-0"

NOTES:

1. Show and note total number of piles in plan view of pile layout for each substructure.
2. Note the estimated pile tip elevations on the Construction Drawings.
3. Maximum spacing of piles is 10'-0".
4. Embedment of piles may exceed 12", if required.
5. The inside diameter of the CMP shall be equal, as a minimum, to the largest out-to-out pile dimension +8", rounded up to the nearest 3". The smallest CMP which satisfies the required above minimum dimension should be used.
6. For battered piles the minimum clear dimension from the edge of the pile to the inside wall of the CMP should be equal to 4".
7. Use this detail for footings with widely spaced piles. For other footings, use details on Dwg. No. 4.1.10.



LRFD BRIDGE

MANUAL, PART III

PRECAST FOOTING ON  
H-PILES – VERTICAL SECTION  
PRECAST PIERS

DATE OF ISSUE  
JUNE 2013

DRAWING NUMBER

**4.1.9**