

**DESIGNER NOTES**

FULL DESIGN LOADING CAN BE USED IF PREBORED HOLE IS LARGE ENOUGH TO AVOID PILE HANGUPS AND ALLOW FILLING WITH SAND.

SEE WISDOT POLICY ITEM IN BRIDGE MANUAL 11.3.1, 12.3 FOR GUIDANCE ON "HP" PILES.

**NOTES**

CAST-IN-PLACE PILE SHELL MATERIAL SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATION.

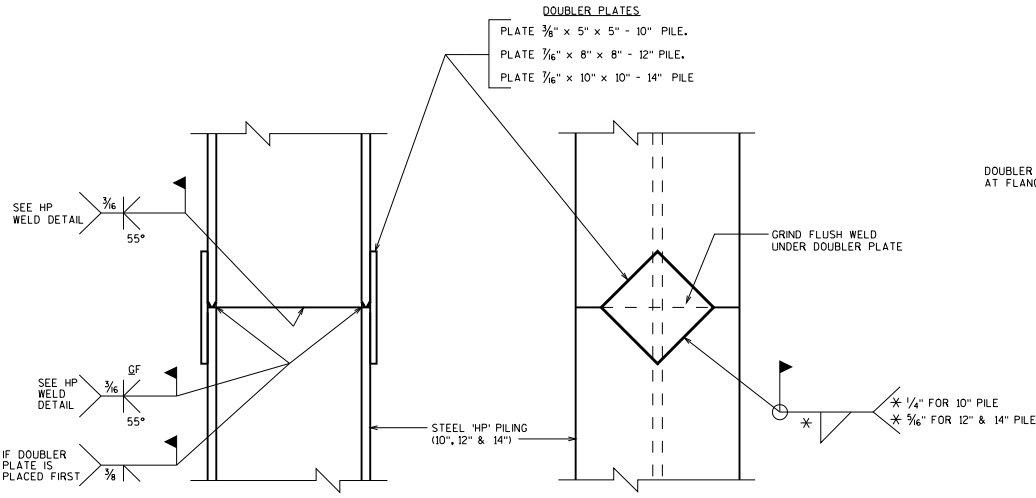
IF LESS THAN THE MAXIMUM AXIAL RESISTANCE IS REQUIRED BY DESIGN, STATE ONLY THE REQUIRED CORRESPONDING DRIVING RESISTANCE ON THE PLANS IF AT LEAST 20 TONS LESS THAN THE TABLE VALUES BELOW. CONSULT WITH THE GEOTECHNICAL ENGINEER REGARDING POSSIBLE ESTIMATED PILE LENGTH ADJUSTMENT.

GRINDING MAY BE USED IN LIEU OF BACKGOUGING.

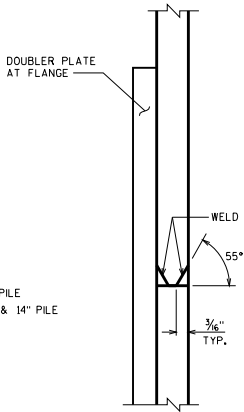
IF APPLICABLE, PLACE THE FOLLOWING NOTE ON THE PLANS:  
PILES PLACED IN PREBORED HOLES CORED INTO ROCK DO NOT REQUIRE DRIVING.

**PILE RESISTANCE**

PILE SIZE	SHELL THICKNESSES (INCHES)	FACTORED AXIAL COMPRESSION RESISTANCE (P <sub>r</sub> ) (TONS)	REQUIRED DRIVING RESISTANCE (R <sub>dr 95%</sub> ) (TONS)
CAST-IN-PLACE PILES			
10 3/4"	0.219	75	190
12 3/4"	0.250	105	265
14"	0.250	125	315
H PILES			
10x42	NA	110	275
12x53	NA	140	350
14x73	NA	190	475

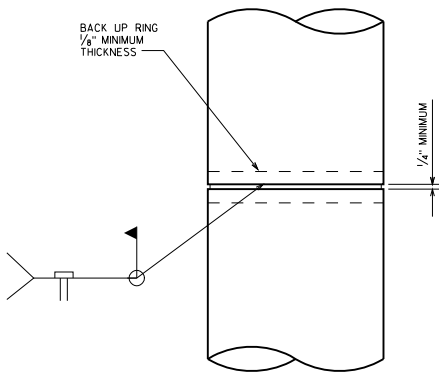


**STEEL 'HP' SHAPES**

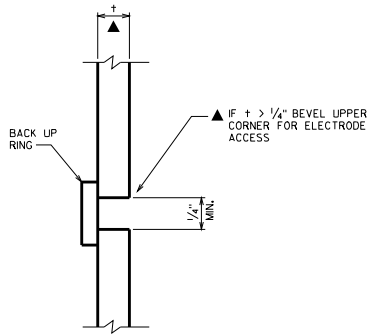


**HP WELD DETAIL**

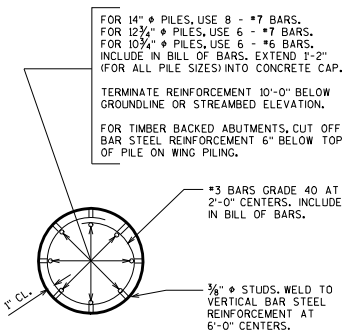
FLANGE SHOWN, WEB SIMILAR



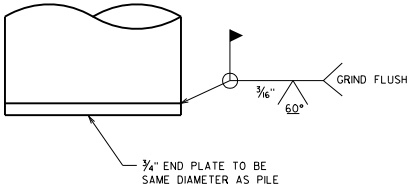
**CAST-IN-PLACE 'PIPE PILE'**



**CIP PILE WELD DETAIL**



**SECTION THRU CONCRETE CAST-IN-PLACE PILING USED WHEN PILES ARE EXPOSED**  
(OPEN PILE BENTS OR TIMBER BACKED ABUTMENTS)



**END PLATE DETAIL FOR CIP PILING IN ARTESIAN CONDITIONS**  
(ONLY USE FOR ARTESIAN CONDITIONS)

PILE DETAILS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DEVELOPMENT SECTION	
APPROVED: <b>Scot Becker</b>	DATE: 7-09