
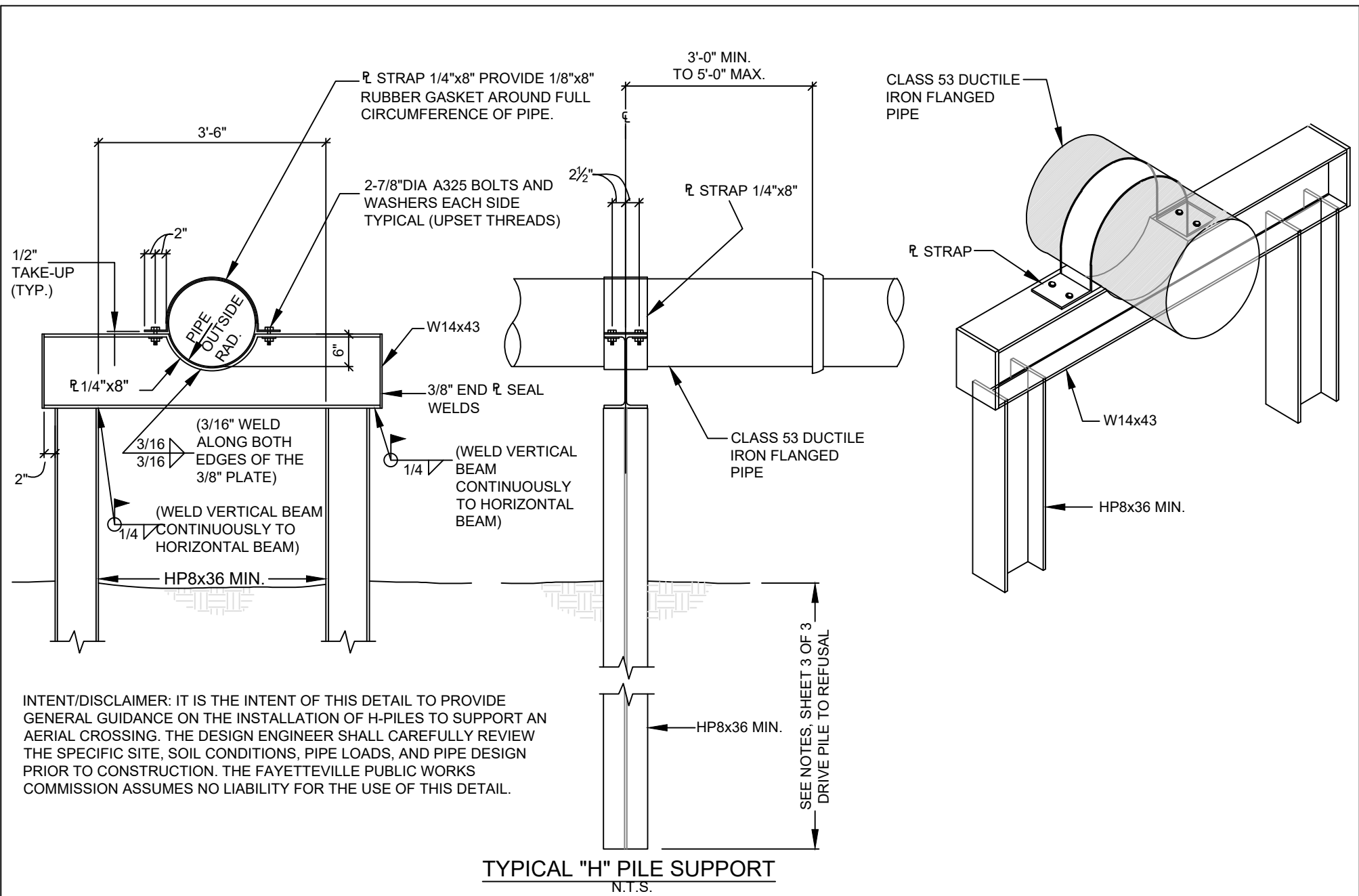


INTENT/DISCLAIMER: IT IS THE INTENT OF THIS DETAIL TO PROVIDE GENERAL GUIDANCE ON THE INSTALLATION OF H-PILES TO SUPPORT AN AERIAL CROSSING. THE DESIGN ENGINEER SHALL CAREFULLY REVIEW THE SPECIFIC SITE, SOIL CONDITIONS, PIPE LOADS, AND PIPE DESIGN PRIOR TO CONSTRUCTION. THE FAYETTEVILLE PUBLIC WORKS COMMISSION ASSUMES NO LIABILITY FOR THE USE OF THIS DETAIL.

TYPICAL "H" PILE SUPPORT
N.T.S.

H-PILE DETAIL 4" THRU 16" PIPE FOR AERIAL CROSSINGS N.T.S.			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.			NO.	DATE	REVISION
SHEET NO. 1 OF 3	DWG. NO.	M.13	DWG BY:	FAYPWC		1	07/09	UPDATED DETAIL
	DATE:	JAN. 01, 2025	APPROVED BY:	K.A.H.		2	09/10	REVISED NOTES
						3	07/17	REVISED NOTES
			WATER RESOURCES ENGINEERING DEPARTMENT					



H-PILE DETAIL >16" THRU 24" PIPE FOR AERIAL CROSSINGS N.T.S.		
SHEET NO. 2 OF 3	DWG. NO. M.13 DATE: JAN. 01, 2025	DWG BY: FAYPWC APPROVED BY: K.A.H.


**FAYETTEVILLE
 PUBLIC WORKS COMMISSION
 FAYETTEVILLE, N.C.**

**WATER RESOURCES
 ENGINEERING DEPARTMENT**

FWC	NO.	DATE	REVISION
	1	07/09	UPDATED DETAIL
	2	09/10	REVISED NOTES
	3	07/17	REVISED NOTES

NOTES:

1. ALL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A992 GRADE 50.
2. A SUBSURFACE GEO-TECHNICAL REPORT IS REQUIRED TO DETERMINE PILE EMBEDMENT LENGTH.
3. THIS DETAIL IS FOR GUIDANCE/INFORMATION ONLY. THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR PROVIDING A PROJECT SPECIFIC DESIGN.
4. FOR ALL AERIAL CROSSINGS, A PROJECT SPECIFIC DESIGN SHALL BE SUBMITTED TO FAYPWC FOR REVIEW AND APPROVAL.
5. A SUBSURFACE GEO-TECHNICAL EVALUATION IS REQUIRED IN ORDER TO DESIGN THE PILE LENGTH, EMBEDMENT, AND SPACING FOR THE SPECIFIC PROJECT LOCATION. THE DESIGN ENGINEER SHALL PROVIDE A COPY OF THE REPORT AND THE DESIGN TO FAYPWC.
6. THE DESIGN ENGINEER SHALL FURNISH A STRUCTURAL DESIGN BASED UPON ACTUAL FIELD CONDITIONS AND THE INTENDED USE OF THE STRUCTURE. LATERAL LOADS MAY REQUIRE THE ADDITION OF A BATTERED PILE. THE DESIGN ENGINEER SHALL CONSIDER SUCH LOADS AS ICE/SNOW, FLOODING, ETC.
7. FOR AERIAL SUPPORT OF PRESSURE MAINS, THE ENGINEER SHALL ENSURE THAT THE PIPE JOINTS CAN PROVIDE THE NECESSARY THRUST RESTRAINT. CALCULATIONS SHALL BE SUBMITTED TO FAYPWC FOR REVIEW, PRIOR TO CONSTRUCTION.
8. LOCATION AND SPACING OF PILES SHALL BE BASED UPON ACTUAL FIELD CONDITIONS AND AS SPECIFIED BY THE DESIGN ENGINEER. EACH PIPE JOINT SHALL BE SUPPORTED BY A PILE, UNLESS OTHERWISE APPROVED BY FAYPWC.
9. ANY CHANGES TO THIS DETAIL SHALL BE REVIEWED AND APPROVED BY FAYPWC PRIOR TO CONSTRUCTION.
10. ANY REVISIONS TO THIS DETAIL SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED TO FAYPWC FOR REVIEW.
11. PILES SHOULD NOT BE PLACED IN THE CENTERLINE OF THE STREAM.
12. PILES SHALL BE DRIVEN UTILIZING A VIBRATORY HAMMER OR PILE HAMMER.
13. ALL PILES SHALL BE DRIVEN TO REFUSAL. THE DESIGN ENGINEER SHALL PROVIDE FAYPWC WITH CALCULATIONS AND/OR A REPORT THAT CLEARLY DEFINES WHAT CONSTITUTES REFUSAL. SHOULD THE CONTRACTOR UTILIZE A DIFFERENT DRIVING METHOD THAN SPECIFIED, THEN REVISED CALCULATIONS SHALL BE PROVIDED TO FAYPWC.
14. PILES SHALL BE CUT OFF SQUARE AT THE REQUIRED ELEVATIONS WITH METHOD OF CUT APPROVED BY THE DESIGN ENGINEER.
15. EXPANSION JOINTS SHALL BE PROVIDED AS REQUIRED. THE EXPANSION JOINTS SHALL BE SUPPORTED BY PLACEMENT OF PIERS WITHIN 3 FEET ON BOTH SIDES OF THE JOINT OR AS SPECIFIED IN THE DESIGN.
16. ALL PILE LOCATIONS SHALL BE STAKED BY A NC LICENSED PROFESSIONAL SURVEYOR, IN ACCORDANCE WITH THE APPROVED PLANS.
17. ALL WELDS SHALL BE BY A CERTIFIED WELDER.
18. ALL STEEL MEMBERS AND STRAPS WILL BE POWER TOOL CLEANED TO A MINIMUM OF SSPC-SP3 AND HOT-DIP GALVANIZED PER ASTM A123. BOLTS AND WASHERS WILL BE HOT-DIP GALVANIZED PER ASTM A153. ALL WELDS WILL BE GRINDED AND COATED WITH 2 COATS OF A COLD APPLIED GALVANIZING PAINT.
19. ALL DI PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTO 401 OR APPROVED EQUAL.

H-PILE DETAIL NOTES			FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.			NO.	DATE	REVISION
SHEET NO. 3 OF 3	DWG. NO. M.13	DWG BY: FAYPWC	WATER RESOURCES ENGINEERING DEPARTMENT			1	07/09	UPDATED DETAIL
	DATE: JAN. 01, 2025	APPROVED BY: K.A.H.				2	09/10	REVISED NOTES
						3	07/17	REVISED NOTES