



NOTES:
APPLICATION: Full-Height Headwalls shall be provided for skewed and non-skewed culverts having a diameter or inside width of 18 in. to 36 in., where required. Type 'A' is used when the clear height is 18 in. or more and the slope is 1:1 or steeper and over. Type 'B' is used when the clear height is 18 in. or more and over.
CONCRETE: Concrete shall be Class C.
REINFORCING STEEL: Bars shall be #6 (60F) and epoxy coated.
DETAILS AND QUANTITIES: Are shown for circular sections only. When used with rectangular reinforced concrete pipe, quantities for reinforcement shall be increased by 10% to allow for necessary adjustments and quantities to conform to those listed for the nearest standard size. The dimensions shown are for vertical dimensions only. The diameter shall apply to the outside diameter of the pipe. All dimensions shall apply to steel. All dimensions shall be rounded to the nearest 1/8". Character of reinforcement shall be #6.
FOUNDATION: Where the soil bearing capacity is less than 2000 PSF, it will be necessary to increase the width of the footing.
SLOPES: The slope adjacent to the headwall shall be 2:1.
SPECIFICATIONS: For additional details see the City of Wooster Standard Drawings ST-11 and ST-12. The City of Wooster Standard Drawings ST-11 and ST-12 shall be designed in accordance with HRF-2.

PIPE DIA. D	Ø ~ 0°			Ø ~ 15°			Ø ~ 30°			Ø ~ 45°			Ø ~ 60°		
	L	L1	W	L	L1	W	L	L1	W	L	L1	W	L	L1	W
18"	6'-0"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"
18"	6'-0"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"
21"	6'-0"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"
24"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"
30"	6'-0"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"	6'-11"	7'-0"	3'-0"

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE CITY ENGINEER.
NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBERS AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2784 AND O.A.G.P.U.P.S. @ (800) 925-0388.

NO.	DATE	REVISION
1	10/03/01	ISSUED

City of Wooster : Division of Engineering
 538 N. Market Street Wooster, Ohio 44681
 Phone: (330) 263-5234 Fax: (330) 263-5247
 Joel Montgomery, P.E.
 City Engineer

STANDARD FULL HEAD & END WALLS

CAD FILE: ENGINEERING STANDARDS/ST-11.DWG				SHEET: ST-12.0	
DRWN BY: A.J.M	APPRV BY: JES	ISSUE DATE: 10/03/01	SCALE: NONE		