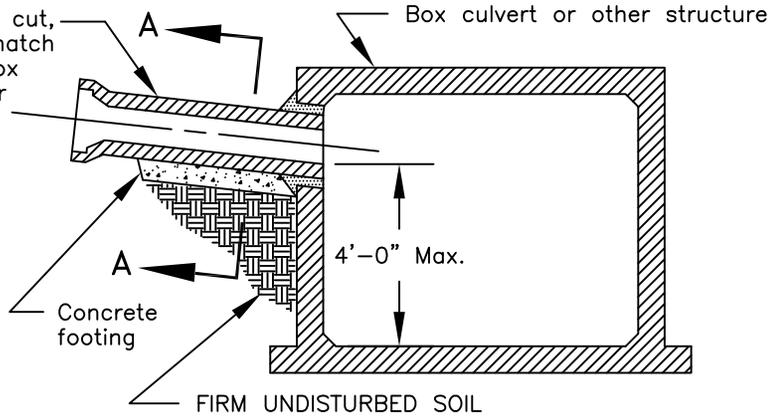


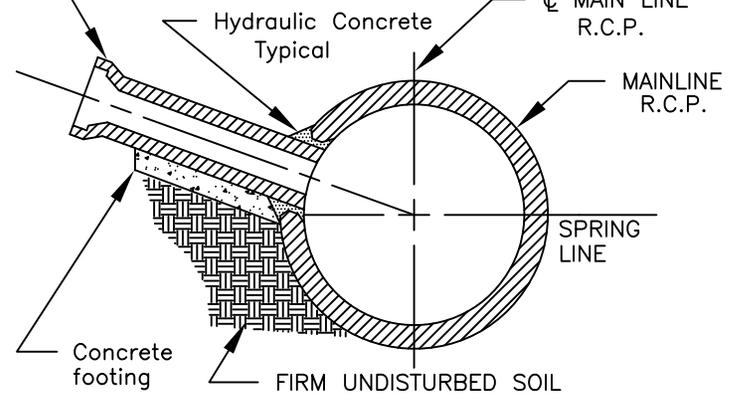
The connecting pipe shall be cut, before insertion, so as to match the inside surface of the box culvert and shall be flush or protruding in 1/2" max. (8'-0" min. length typical)



BOX CULVERT SECTION

NO SCALE

The connecting pipe shall be cut, before insertion, so as to match the inside surface of the mainline pipe and shall be flush or protruding 1/2" in max. (8'-0" min. length typical)

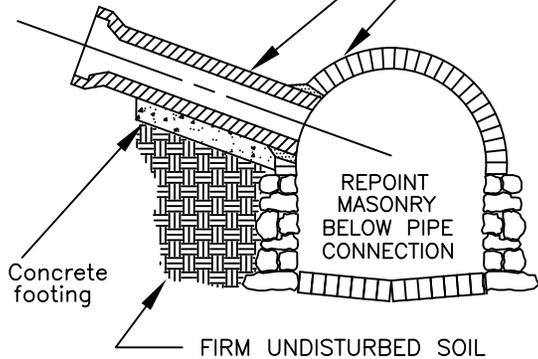


MAINLINE PIPE SECTION

NO SCALE

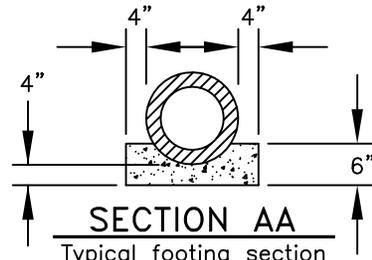
The connecting pipe shall be cut, before insertion, so as to match the inside surface of the brick arch culvert and shall be flush or protruding in 1/2" max. (8'-0" min. length typical)

The connecting pipe shall intersect the arch culvert in the brick arch and not in the stone walls, whenever possible.



BRICK ARCH CULVERT SECTION

NO SCALE



SECTION AA
Typical footing section
NO SCALE

NOTES

1. THE CONNECTING PIPE SHALL INTERSECT THE MAIN LINE PIPE OR CULVERT ABOVE THE SPRINGLINE WHEN POSSIBLE AND SHALL BE A MINIMUM LENGTH OF 8'-0". THERE SHALL BE A MINIMUM OF 12" BETWEEN THE CONNECTING PIPE AND MAINLINE PIPE JOINTS.
2. THE OUTSIDE DIAMETER OF THE CONNECTING PIPE SHALL NOT BE GREATER THAN 1/2 THE INSIDE DIAMETER OF THE MAIN LINE PIPE. CONNECTING PIPE WITH AN INSIDE DIAMETER GREATER THAN 24" MUST ENTER THE MAINLINE AT A STRUCTURE, REFER TO PLATE SD-042 AND PLATE SD-043.
3. THE HOLE CUT INTO THE MAINLINE PIPE OR CULVERT SHALL BE NO MORE THAN 4" LARGER THAN THE OUTSIDE DIAMETER OF THE CONNECTING PIPE AND THIS GAP SHALL BE SEALED WITH HYDRAULIC CEMENT.
4. A CONCRETE FOOTING SHALL BE PLACED UNDER THE CONNECTING PIPE TO FIRM UNDISTURBED SOIL SUBGRADE, 6" MIN. THICKNESS AND 4 FEET LONG. REFER TO SECTION AA FOR THE WIDTH AND ADDITIONAL INFORMATION. CONCRETE SHALL BE MD DEPT. OF TRANS. S.H.A. MIX NO. 2 (3,000 P.S.I.).
5. ALL RELATED WORK, MATERIAL, AND APPURTENANCES REQUIRED SHALL BE INCIDENTAL TO THE CONNECTING PIPE INSTALLATION.



CITY OF HAGERSTOWN, MARYLAND – ENGINEERING AND INSPECTIONS DEPARTMENT

**STORM DRAIN STANDARD DETAIL
PIPE CONNECTIONS TO
BOX CULVERT, BRICK ARCH, AND PIPE DRAINS**

ISSUE DATE: 01-01-03

REVISIONS

Plate SD-041