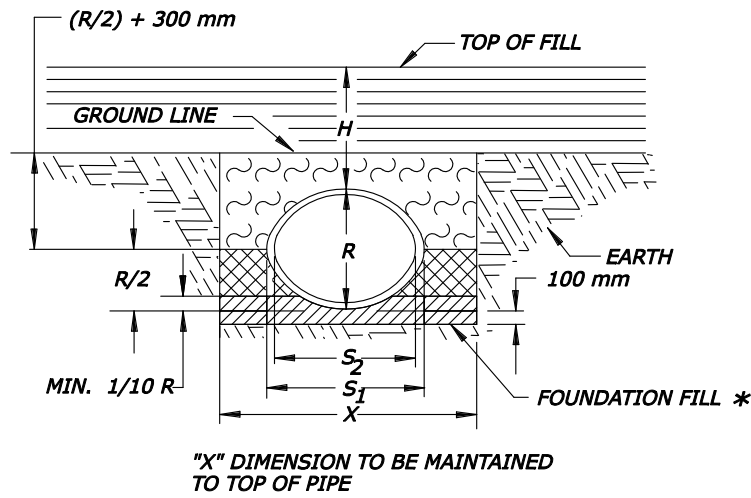
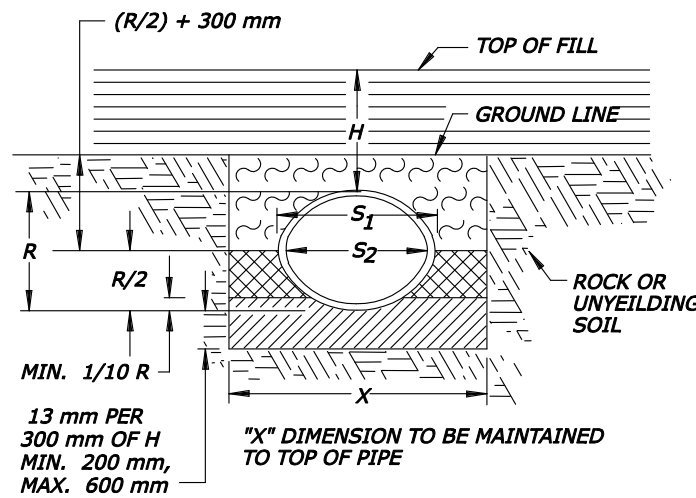


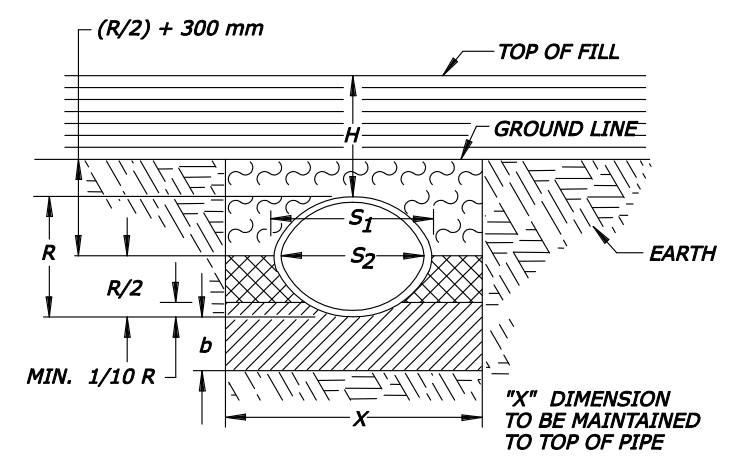
NO PROJECTION OF PIPE ABOVE GROUND LINE



NORMAL EARTH FOUNDATION

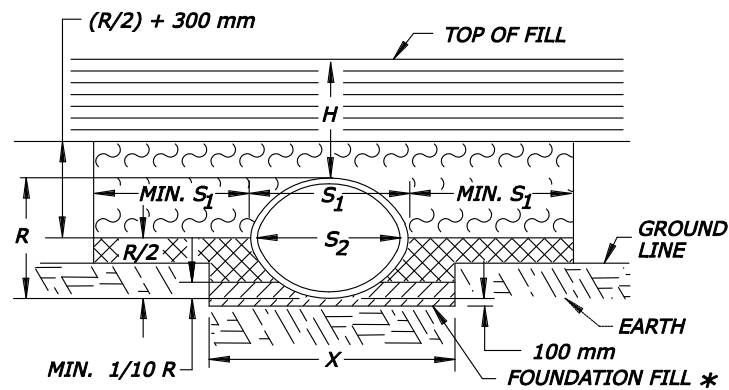


ROCK FOUNDATION

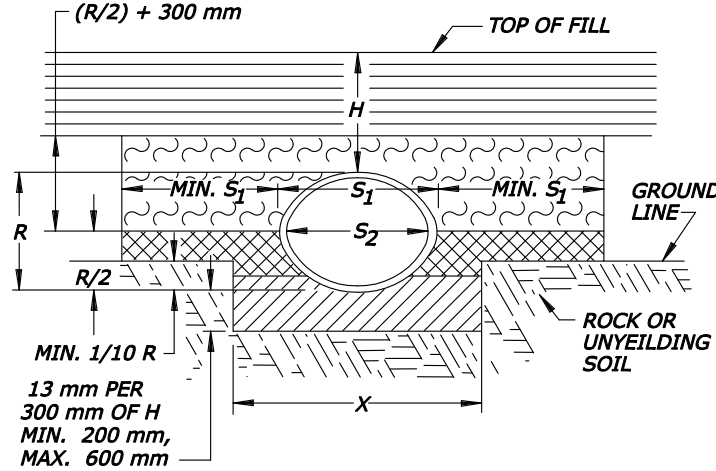


FOUNDATION SOFT, YIELDING, OR OTHERWISE UNSUITABLE MATERIAL

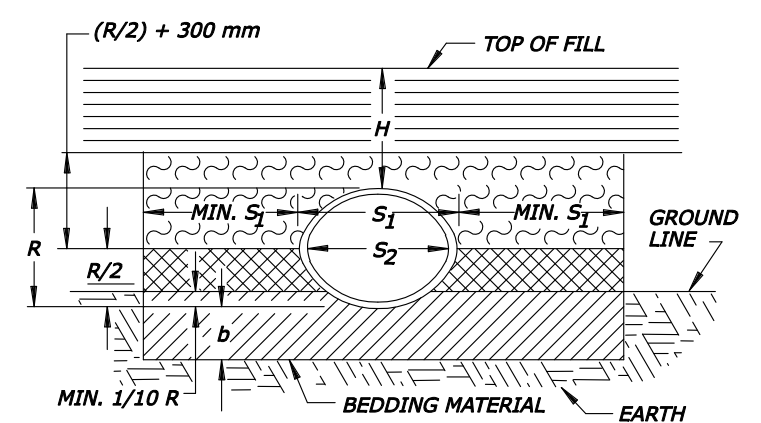
PIPE PROJECTION ABOVE GROUND LINE



NORMAL EARTH FOUNDATION



ROCK FOUNDATION



FOUNDATION SOFT, YIELDING, OR OTHERWISE UNSUITABLE MATERIAL

CULVERTS LESS THAN $S_1 = 0.9$ m
 $X = S_2 + 0.6$ m

CULVERTS WHERE $S_1 = 0.9$ m AND OVER
 $X = S_2 + 0.9$ m

METHOD "A" PIPE BEDDING SHALL BE USED AS FOLLOWS UNLESS OTHERWISE NOTED ON PLANS:

RIGID PIPE
 WHEN H IS LESS THAN OR EQUAL TO 9 m

FLEXIBLE PIPE
 AS SHOWN ON TABLES

* MAY BE ELIMINATED UNDER ENTRANCE PIPE WHERE DIRECTED BY THE CO.

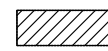
H = HEIGHT OF COVER MEASURED FROM TOP OF DRAINAGE STRUCTURE TO FINISHED GRADE.

S_1 = OUTSIDE SPAN OF PIPE.

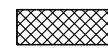
S_2 = INSIDE SPAN OF PIPE.

R = OUTSIDE RISE OF PIPE.

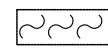
b = DEPTH AS SHOWN ON PLANS OR TO FIRM BEARING SOIL.



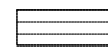
FOUNDATION FILL MATERIAL IN ACCORDANCE WITH SUBSECTIONS 209 AND 704.01



BACKFILL MATERIAL IN ACCORDANCE WITH SUBSECTIONS 209.10 AND 704.03



SUITABLE ROADWAY EXCAVATION OR UNCLASSIFIED BORROW MATERIAL IN ACCORDANCE WITH SUBSECTION 209.10



EMBANKMENT

NO SCALE

ADOPTED FROM:
 VIRGINIA DEPARTMENT OF TRANSPORTATION
 STANDARD PB-1, PAGE 107.02

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 EASTERN FEDERAL LANDS DIVISION

METRIC DETAIL

**ELLIPTICAL CONCRETE PIPE
 CULVERT INSTALLATION**

DETAIL APPROVED FOR USE
 REVISED: 03/03 04/07

DETAIL
 EM602-09