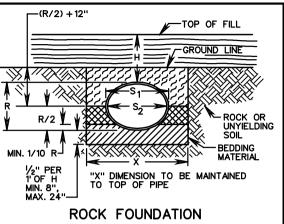
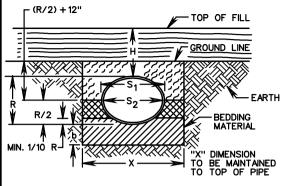


NORMAL EARTH FOUNDATION

## NO PROJECTION OF PIPE ABOVE GROUND LINE -(R/2) + 12"





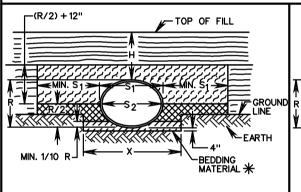
FOUNDATION SOFT, YIELDING, OR OTHERWISE UNSUITABLE MATERIAL

TOP OF FILL

GROUND

EARTH

## PIPE PROJECTION ABOVE GROUND LINE



NORMAL EARTH FOUNDATION

CULVERTS LESS THAN S1 - 36"

CULVERTS WHERE S1 = 36" AND OVER

WHEN H IS LESS THAN OR EQUAL TO 30'

 $X = S_2 + 24$ "

 $X - S_2 + 36$ "

AS SHOWN ON TABLES

FLEXIBLE PIPE

(R/2) + 12"TOP OF FILL GROUND ROCK OR UNYIELDING MIN. 1/10 R → Ş SOIL 1/2" PER 1' OF H BEDDING MATERIAL MIN. 8". MAX. 24"— ROCK FOUNDATION

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

S1 - 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.

R/2

MIN. 1/10 R 1

-(R/2) + 12"

BEDDING MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.

OTHERWISE UNSUITABLE MATERIAL

**BEDDING** 

FOUNDATION SOFT, YIELDING, OR

MATERIAL

CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.

CLASS I BACKFILL MATERIAL IN ACCORDANCE WITH SECTION 302 OF THE ROAD AND BRIDGE SPECIFICATIONS.



**EMBANKMENT** 

SHEET 2 OF 4 SPECIFICATION

MAY BE ELIMINATED UNDER ENTRANCE PIPE WHERE DIRECTED BY THE ENGINEER.

METHOD "A" PIPE BEDDING SHALL BE USED AS

FOLLOWS UNLESS OTHERWISE NOTED ON PLANS:

## INSTALLATION OF PIPE CULVERTS AND STORM SEWERS ELLIPTICAL PIPE BEDDING AND BACKFILL - METHOD "A"

VIRGINIA DEPARTMENT OF TRANSPORTATION

REFERENCE 302 303

107.02