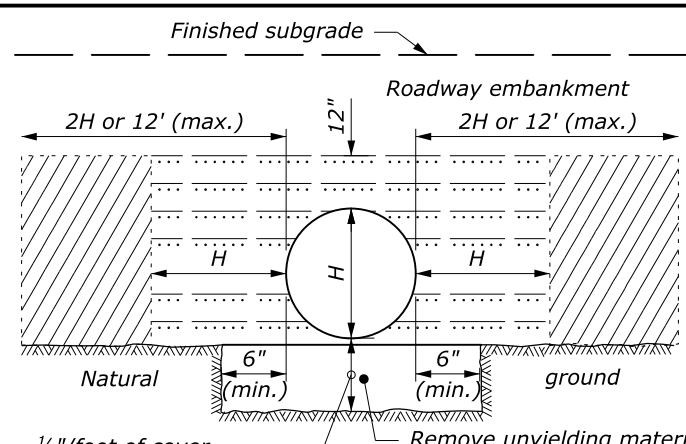
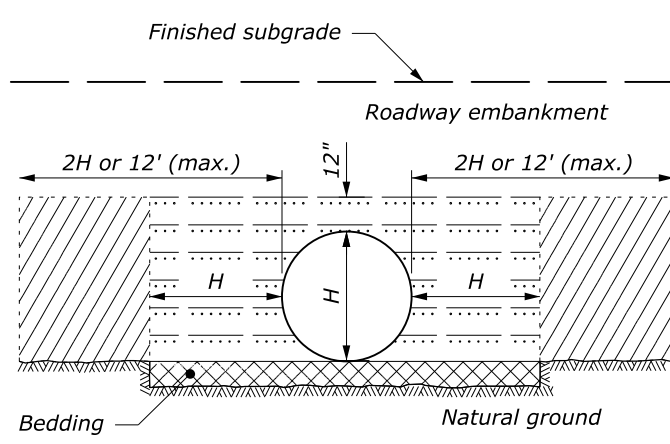


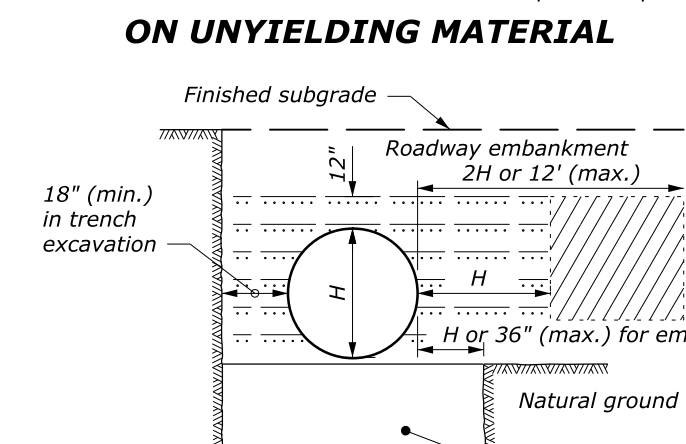
**ABOVE NATURAL GROUND**



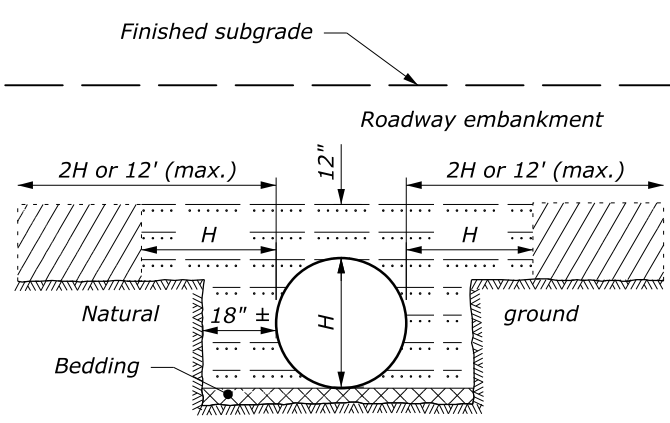
**ON UNYIELDING MATERIAL**



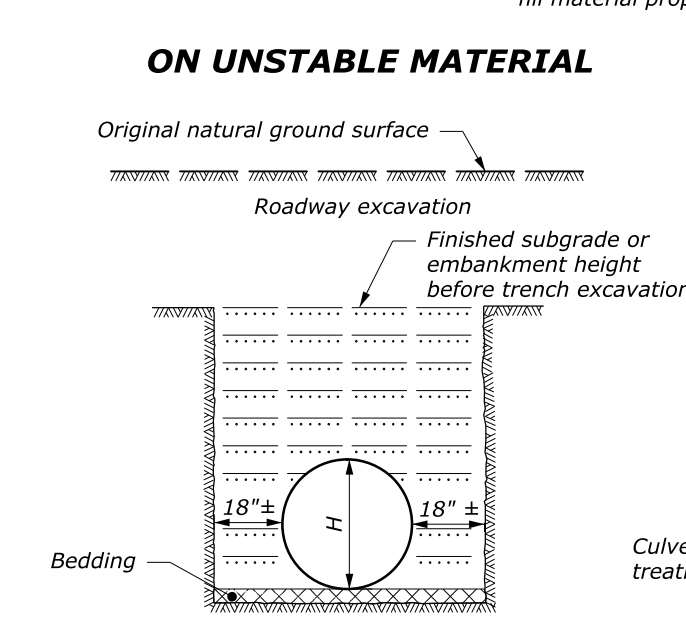
**ON NATURAL GROUND**



**ON UNSTABLE MATERIAL**



**ABOVE AND BELOW NATURAL GROUND**

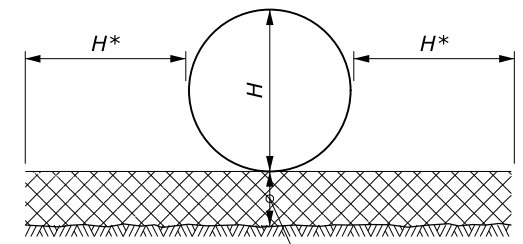


**BELOW NATURAL GROUND OR TRENCH EXCAVATION IN EMBANKMENT**

BEDDING DEPTH	
PIPE SIZE (H)	DEPTH
12" to 54"	4"
> 54"	6"

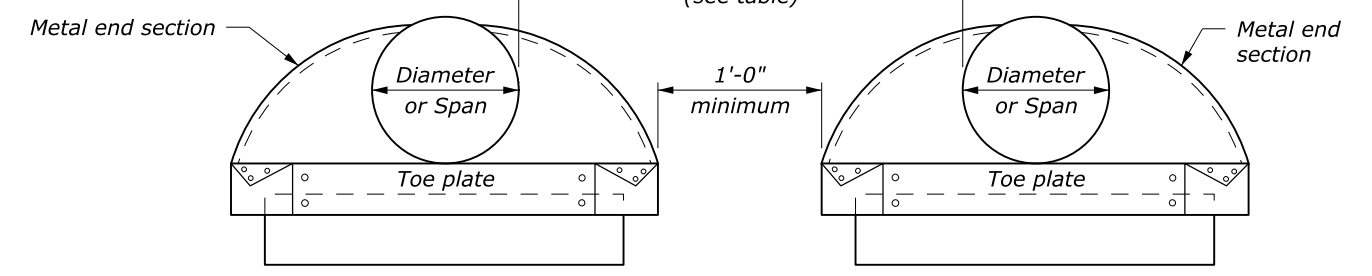
**NOTE:**

1. When directed, camber pipe culverts upward from a chord through the inlet and outlet inverts an ordinate amount equal to 1% of the pipe length. Develop camber on a parabolic curve. If the midpoint elevation on the parabolic curve as designed exceeds the elevation of the inlet invert, reduce the amount of camber or increase the pipe culvert gradient.
2. H equals the diameter of all round pipe culverts or the rise dimension of all pipe arch culverts.
3. See Section 704 for bedding and backfill requirements.



**PIPE BEDDING**

MINIMUM SPACING	
DIAMETER or SPAN	SPACING
UP to 48"	24"
48" and UP	Half diameter or span or 36", whichever is less

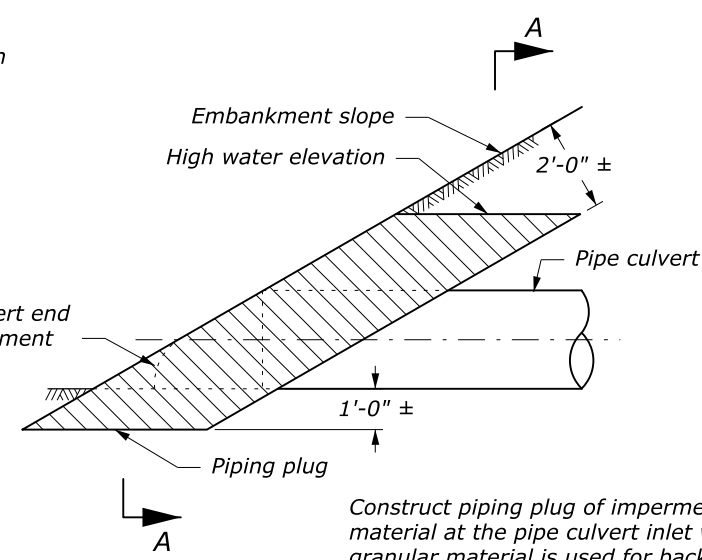


**ELEVATION**

**MULTIPLE PIPE INSTALLATION**

**LEGEND:**

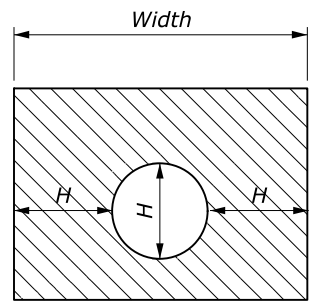
- Bedding material (uncompacted)
- Embankment material placed in layers not exceeding 6" compacted depth.
- Compacted backfill material placed in layers not exceeding 6" compacted depth; or lean concrete backfill in accordance with Section 614.
- Impermeable backfill material.



**PIPING PLUG**

Construct piping plug of impermeable backfill material at the pipe culvert inlet where granular material is used for backfill. Width may be adjusted to tie into impervious material.

NO SCALE



**SECTION A-A**

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

U.S. CUSTOMARY STANDARD

**METAL AND PLASTIC  
 PIPE CULVERT BEDDING**

STANDARD APPROVED FOR USE 12/1993  
 REVISED: 4/1994 6/2005  
 DRAFT: 10/2017

STANDARD  
 602-3