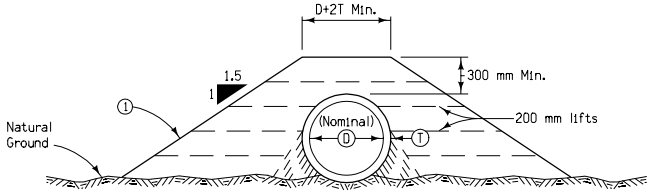
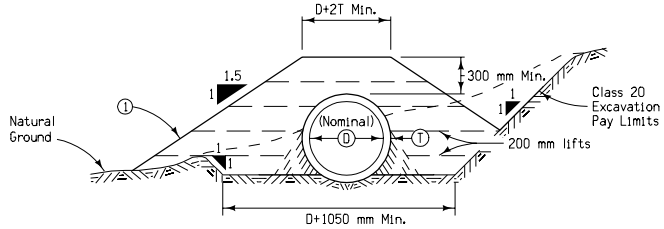
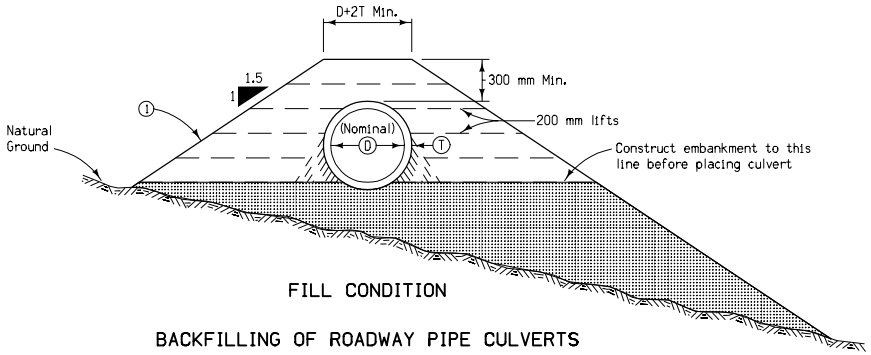


NORMAL CONDITION

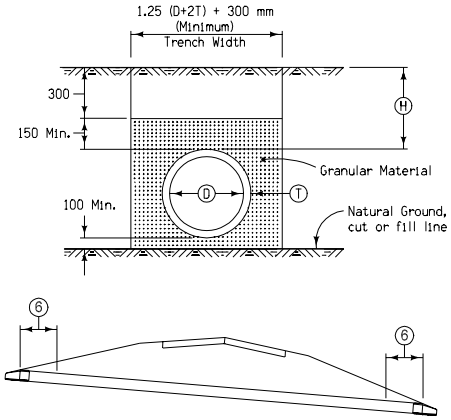


CUT CONDITION



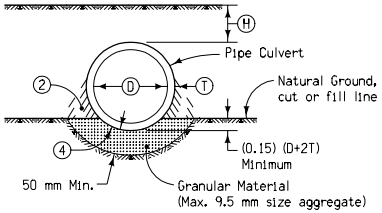
FILL CONDITION

BACKFILLING OF ROADWAY PIPE CULVERTS

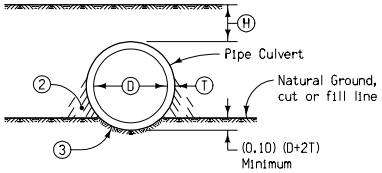


CLASS 'A' BEDDING

(Trench Installation)



CLASS 'B' BEDDING



CLASS 'C' BEDDING

Where a corrugated metal pipe culvert requiring elongation is to be installed, such elongation if to be accomplished by means approved by the Engineer. Elongation may be developed either as part of shop fabrication or field installation.

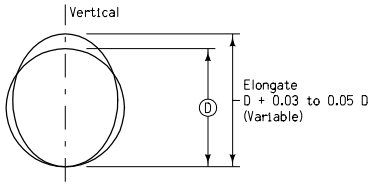
Minimum and maximum allowable cover for pipe culverts shall be as shown on the appropriate Standard Road Plans for the particular kind of culvert, as follows:

RF-31	Depth of Cover Tables for Concrete Pipe
RF-32	Depth of Cover Tables for Corrugated Pipe
RF-33	Depth of Cover Tables for Corrugated Pipe

Minimum and maximum allowable cover for polyethylene pipe culverts shall be 0.6 meters and 4.5 meters, respectively.

Tabulation: 104-3

1. The backfill adjacent to and above the pipe culvert may be placed in conjunction with normal embankment construction. The embankment within the limits shown shall be thoroughly tamped.
2. Extra care shall be taken to ensure complete and satisfactory tamping of backfill material in the area immediately adjacent to the lower portion of pipe.
3. The excavation below groundline shall be carefully made with a template or shaped by other means and checked with a template conforming to the actual dimension and shape of the pipe.
4. The granular material shall be carefully shaped with a template conforming to the shape of the pipe.
5. 50 millimeter minimum required for metal pipes.
   100 millimeter minimum required for polyethylene pipes.
6. For Class 'A' Bedding, place 1.0 meter to 1.5 meters of cohesive soil plug at the inlet and outlet, around the culvert, to prevent seepage and erosion, respectively.



ELONGATED PIPE

All dimensions given in millimeters unless noted.

M

METRIC VERSION

Iowa Department of Transportation
Highway Division

STANDARD ROAD PLAN **RF-30A**

REVISION: Change granular material depth for Class 'A' bedding.

REVISION NO.	REVISION DATE
6	04-18-06

Deanna Maifield
APPROVED BY DESIGN METHODS ENGINEER

PIPE CULVERT
INSTALLATION DETAILS
(BEDDING AND BACKFILL)