

104-4 Drainage Structures by Culvert Contractor

(This section last updated 07-02-15)

The Floodable Backfill columns on this tab normally will not contain values. Normally, culverts are let a year in advance of the paving and backfilled according to the Compaction Adjacent to Structures specifications.

Occasionally, the pavement above the culvert will be constructed in the same year as the culvert. In these cases, flooded backfill is often used to prevent pavement issues caused by settlement of this material.

Designers should keep in mind that although a project may be graded one year and paved the next, the timing of the grading and paving projects may result in less than a full calendar year between the grading and paving. In cases such as these, designers may still want to consider using flooded backfill.

Use of flooded backfill should be discussed at a PMT meeting to ensure the District is in agreement.

Pipe Culverts

When flooded backfill is used, add a note in the remarks column stating "Backfill according to DR-101" and fill in the quantities on the tab. The Office of Contracts will include the Supplemental Specifications for Backfilling and Compaction of Pipe and Reinforced Box Culverts by Flooding when the bid item for flooded backfill is included.

Equivalent diameters for arch and elliptical pipes can be found on [DR-202](#).

Box Culverts

When flooded backfill is used, add a note in the remarks column stating "Backfill according to DR-111" and fill in the quantities on the tab. Backfill consists of a combination of flooded backfill and suitable material, see [DR-111](#). Flooded backfill is used to the top of culvert for culvert heights of 5 feet or less, with the remaining backfill consisting of suitable backfill material. For culvert heights of more than 5 feet, flooded backfill is used up to a height of 5 feet, with the remaining backfill consisting of suitable backfill.

The Office of Contracts will include the Supplemental Specifications for Backfilling and Compaction of Pipe and Reinforced Box Culverts by Flooding when the bid item for flooded backfill is included.