

DELAWARE CONSTRUCTION SPECIFICATION

EXCAVATION & BACKFILL OF TRENCHES FOR CONDUITS & PIPELINES CS13

1. **SCOPE**

This specification applies when trench excavation work is necessary for installation of conduit and pipeline for spillways, irrigation systems, drainage systems, animal waste systems and other installations where liquid is conveyed in an underground conduit.

2. **EXCAVATION**

All excavation shall be sloped, braced, and supported to safeguard the work and workmen for insuring that the ground adjacent to the excavation will not slide, settle or damage adjacent improvements. When such bracing and supporting is required, the width of the excavation shall be adjusted to allow space for sheeting, bracing or other supporting installations. The Contractor shall furnish, place, and subsequently remove such supporting installations.

The bottom width, side slopes, and gradeline of the trench excavation shall be to the dimensions shown on the drawings or designated by the technician.

3. **BACKFILL**

- a. When working in water, the initial backfill shall be DEL DOT #57. It shall be placed to an elevation that is 6 inches above existing water in the trench. If the trench is dry, backfill shall be from the excavated trench material.
- b. Backfill shall be placed and compacted in accordance with Delaware Construction Specification 15 – STRUCTURAL BACKFILL. The pipe shall be loaded sufficiently during backfilling around the sides to prevent its being lifted from the bedding.
- c. Backfill material shall contain no frozen soil, sod, brush, roots, or other perishable material.
- d. Rock fragments greater than 3 inches shall not be placed within two feet of the pipe.