#### User Guide to Bridge Standard Detail Sheets

# Section 17 – Underground Structures

# CIP Bottomless Culvert: Footings on Soil

# XS Sheet Numbers XS17-052

#### **Description of Component**

The Cast-In-Place bottomless culverts with Footings on Soil are shown in the plan. These underground structures with footing on soil can have earth cover with a range from 0 feet (exposed to ground) to 20 feet (maximum). The spans range from 12 feet to 20 feet. The wall heights range from 6 feet to 15 feet.

#### Standard Drawing Features

There is one single plan sheet: Piles/Footings on Soil. It shows the reinforcement details for the walls and top slabs.

#### Design/General Notes

See User Guide for XS17-050 for details.

#### Additional Drawings Needed to Complete PS&E

District plans of highway drainage design

XS17-050-1: General Configurations, XS17-050-2: Walls, Slab and Pile Details and

XS17-050-3: Foundation Details

# Contract Specifications

Standard Specification Sections 49, 51, 52, 90

#### Restrictions on Use of Standard Drawings

See User Guide for XS17-050 for details.

# **Special Considerations**

See User Guide for XS17-050 for details.