PLAN VIEW OF TYPICAL STANDARD SUBDRAIN INSTALLATIONS

**TYPE 1 INSTALLATION**
- Bench Drain
- Subdrain Outlet (DR-304)
- Granular Material for Blanket (Uncompacted)
- Porous Backfill (Uncompacted)
- Perforated Subdrain (Polyethylene Corrugated Tubing)

**TYPE 2 INSTALLATION**
- Granular Blanket (place granular material adjacent to culvert and in direct contact with engineering fabric as indicated hereon).
- 4" Weep Hole (by culvert contractor)
- Box Culvert
- Subdrain Outlet (DR-305)
- Subdrain Outlet (DR-306)
- Possible Contract Items:
  - Standard Subdrain
  - Trench Drain
  - Granular Material for Blanket and Subdrain

**TYPE 3 INSTALLATION**
- Trench Drain
- Subdrain Outlet (DR-305)

**TYPE 4 INSTALLATION**
- Standard Subdrain
- Trench Drain
- Granular Material for Blanket and Subdrain

**SECTION A-A**
- Buried Culvert
- Fore slope
- Granular Backfill
- Weep Hole
- Subdrain

**SECTION B-B**
- Subdrain
- Granular Blanket
- Fore slope
- Weep Hole
- Box Culvert
- Pavement

**SECTION C-C**
- Embankment
- Granular Material

**SECTION D-D**
- Subdrain
- Granular Blanket

**SECTION E-E**
- Subsoil Drainage
- Embankment

**TUBING PLACEMENT DETAIL**
- All Types

For specific information for individual locations, refer to the detail project plans, soils survey sheets, and tabulations of subdrains.

Dispose of material excavated from trenches for subdrain as directed by the Engineer. No extra compensation will be made for such disposal.

Cap blind ends of subdrains with a metal cap or by other methods approved by the Engineer. Install all perforated pipe with the perforations centered on flowline of the bottom side of the subdrain.

Place Granular Material for Blankets as indicated on the plans.

- 1. Perforated Subdrain (Polyethylene Corrugated Tubing).
- 2. Granular Material for Blanket (Uncompacted).
- 4. For Subdrain outlet construction details, see DR-305 and DR-306.
- 5. 10 inches for 4 inch subdrain; 12 inches for 6 inch subdrain.

Possible Contract Items:
- Standard Subdrain
- Perforated Subdrain (Polyethylene Corrugated Tubing)
- Granular Material for Blanket and Subdrain
- Trench Drain
- Subsoil Drainage

Possible Tabulations:
- 104-5C