WATER AND SEDIMENT CONTROL BASIN (Code 638)

1. SCOPE

The work shall consist of constructing a water and sediment control basin at the location shown on the drawings or as staked in the field.

2. FOUNDATION PREPARATION

The foundation shall be stripped to remove vegetation, topsoil, frozen soil, and other unsuitable materials as specified.

Foundation surfaces shall be graded to remove surface irregularities and loosened to a minimum depth of 2 inches. The loosened material shall meet the moisture and compaction requirements described in Section 5 as it is bonded with the first layer of earthfill.

3. RIDGE HEIGHT

The top of the constructed ridge shall be constructed to the design height plus overfill for settlement as shown on the drawings or staked in the field.

If an auxiliary spillway is not planned, an earthfill crown should be considered so that large storm events do not overtop the ridge.

4. BASIN CHANNEL

The channel shall be constructed to the elevations specified on the drawings or staked in the field. The channel shall be constructed on a positive grade without depressions. If an underground outlet is planned, the channel shall be graded to the riser intake(s).

5. BORROW

Topsoil from the foundation shall be stripped and stockpiled. Spreading of

topsoil shall not be done when the ground or topsoil is frozen, excessively wet, or in a condition detrimental to the work. Finished borrow areas shall be free draining with a natural appearance.

6. RIDGE PLACEMENT

Earthfill for the ridge shall be placed in horizontal layers not exceeding 9 inches in thickness prior to compaction. The moisture content of the earthfill shall be sufficient to form a moist, firm ball that will not readily separate. Compaction shall be obtained with 3 passes of rubber-tired hauling equipment or 200 psi sheepsfoot roller so that the entire surface of each layer is traversed by not less than one tread track traveling in a direction parallel to the main axis of the fill. Other approved methods shall be specified in Section 7.

7. TILE OUTLET

The riser intake shall be installed as shown on the drawings. The riser openings shall extend to ground level or below to allow for surface water removal.

With the exception of the top basin in a series, the riser intake shall be offset at least eight feet from the main line to prevent surface damage from affecting main line capacity, and to allow a vertical rotation or orientation of the riser.

The bottom width of the conduit trench shall extend one foot beyond each side of the conduit. Side slopes of the trench shall be 1:1 or flatter. Native material shall be used as backfill unless otherwise specified in Section 8. Earthfill placed within 2 feet of a conduit or intake shall be compacted with a manually-directed power tamper in 4 inch lifts.

Heavy equipment including backhoe-mounted power tampers, vibrating compactors, and manually-directed vibrating rollers shall not be operated within two feet of a conduit or intake. The passage of heavy equipment shall not be allowed over a conduit until backfill has been placed above the conduit to a height of two feet.

8. CONSTRUCTION DETAILS