

**NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION**

IA-638 WATER AND SEDIMENT CONTROL BASIN

1. SCOPE

The work consists of furnishing materials, installing all components, and performing all clearing and grubbing, excavations, shaping, grading, and earthfill required to construct the Water and Sediment Control Basin (WASCoB) as shown on the drawings or as staked in the field.

It is the land user's responsibility to locate any existing subsurface drains that may be under, along, or crossing the WASCoB prior to construction. The NRCS is not responsible for any subsurface drains damaged during construction.

2. MATERIALS

Cuts and fills should be made in such a manner that topography will be enhanced. Unless otherwise shown on the plans or specified in Section 7, all earth materials used in constructing the earthfill portions of the WASCoBs shall be suitable material obtained downslope from the WASCoB or from other approved sources as shown on the plans, described in Section 7, or approved by the Inspector. The fill material shall be free from brush, roots, frozen material, sod, and stones over 6 inches in diameter, or other objectionable material.

Borrow areas shall be finished so they are suitable for the planned use after construction is completed. If needed, topsoil shall be stockpiled and spread over excavations and other areas to facilitate establishment of vegetation.

Pipe, pipe sizes, fittings, and other necessary pipe material shall be as specified on the drawings, Construction Specification IA-620, Underground Outlets, or in Section 7, when applicable.

Other required materials shall be as shown in the drawings, specified in Construction Specification IA-620, Underground Outlets, or in Section 7 of this specification.

3. FOUNDATION PREPARATION

All areas within 25 feet of the footprint of the structure shall be cleared and grubbed unless otherwise shown on the plans or directed by NRCS. All trees, stumps, brush, and debris shall be removed from the site and disposed of so that they will not interfere with construction or proper functioning of the WASCoB. Burning shall comply with all applicable state and local regulations.

All earthfill and borrow areas shall be stripped a minimum of 6 inches to remove vegetation and other unsuitable materials.

All channel banks and sharp breaks shall be sloped to no steeper than 1.5:1 in the foundation area under the embankment.

All dead furrows, ditches, or gullies shall be filled before construction begins or shall become part of the construction. All fill shall meet the requirements of Section 4, Placement.

4. PLACEMENT

The water and sediment control basin shall be constructed according to planned alignment, grade, and cross section with the specified overfill for settlement and the channel graded to promote positive drainage. Any ditch or depression at the bottom of the back slope shall be filled and smoothed so that drainage will be away from the embankment and not parallel to it.

Fill shall not be placed until the required foundation preparation is complete. Smooth surfaces where fill material is to be placed shall be scarified to insure bonding. Fill shall not be placed upon a frozen surface.

The moisture content of the fill material shall be adequate for obtaining the required compaction. Material that is too wet shall be dried to meet this requirement, and material that is too dry shall have water added and mixed until the requirement is met. The application of water to the fill materials shall be accomplished at the borrow areas insofar as possible.

The moisture content of the fill material shall be such that a ball formed with the hands does not crack or separate when struck sharply with a pencil and will easily ribbon out between the thumb and finger.

The placing and spreading of fill material shall be started at the lowest point of the foundation. Fill shall be placed in approximately uniform horizontal layers of not more than 9 inches in thickness. Compaction shall be obtained by routing the hauling and spreading equipment over the fill in such a manner that the entire surface of each layer will be traversed by not less than one tread track of the loaded equipment, or equivalent methods approved by the Inspector.

The finished surface shall be reasonably smooth and present a workmanlike finish.

5. PIPE INSTALLATION

The pipe(s) and appurtenances shall be installed as shown on the plans. Trench excavation, pipe installation, and trench backfill shall be in accordance with Construction Specification IA-620, Underground Outlets, or appropriate specification listed in Section 7.

6. SEEDING

A protective cover of vegetation shall be established on all surfaces of the areas disturbed by construction as shown on the plans or staked in the field. Seeding and mulching shall be performed in accordance with the IA-CPA-4, Seeding Plan, and Construction Specification IA-6, Seeding and Mulching for Protective Cover.

7. SPECIAL SPECIFICATIONS