NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE CONSTRUCTION SPECIFICATION

DIVERSION

CODE 362

1. SCOPE

This work shall consist of installing a diversion as shown on the drawings. The type of work required shall be commensurate with the type of diversion to be installed.

2. SITE PREPARATION

Site preparation (mobilization and demobilization, clearing and grubbing, structure removal, pollution control, and water for construction) shall be in accordance with Construction Specification 587.

No formal construction stake-out will be made for gully plugs, road bars, or similar minor diversion structures. Location of end stakes may be set.

3. MATERIALS FOR NET WIRE DIVERSIONS

Galvanized wire and fencing with vertical stays spaced not farther than seven inches apart shall be used.

Juniper posts with a minimum top dimension of three inches, treated wood posts with a minimum top dimension of four inches, standard steel posts, or Schedule 40 steel pipe of at least 1¼-inch inside diameter may be used. Posts may be new or high quality used material. Wood posts shall be all solid wood without signs of rot or insect attack.

4. INSTALLATION OF NET WIRE DIVERSIONS

Posts shall be placed on a spacing of ten feet, or closer if the terrain is very rough, and to a depth in the ground of at least 2½ feet. The wire shall be installed on the upstream or uphill side of the post. The net wire shall be secured at the top and bottom of the posts. Staples or galvanized tie wire shall be used on wooden posts and galvanized tie wire shall be used on steel posts or pipe. The diversion shall be constructed at the location and with the alignment shown on the drawings.

5. FOUNDATION WORK

Foundation work (diverting surface water, dewatering the construction site, dewatering borrow areas, and foundation preparation) shall be in accordance with Construction Specification 587 and at least the top six inches of topsoil shall be removed, stockpiled, and subsequently spread over all disturbed areas of the finished subgrade to facilitate re-vegetation. The sides of all gullies or depressions to be crossed by the diversion shall be sloped to a 1:1 or flatter slope.

6. EARTHFILL

Earthwork (common excavation and earthfill) shall be in accordance with Construction Specification 587 except unless otherwise shown on the drawings, compaction obtained through normal equipment routing shall be considered adequate when the moisture requirement is met. In addition to any borrow areas that may be designated, fill material shall be obtained from the upstream channel. All fill material shall be suitable for making compacted fills.

7. CONSTRUCTION TOLERANCES

Diversions shall be installed to the neat lines and grades shown on the drawings within the following tolerances:

- All cross-sections of the completed diversion shall equal or exceed the neat lines as shown on the design.
- The as-built ridge elevation shall equal or exceed the neat line elevation shown on the design.

- All constructed side slopes of the diversion ridge shall be full-bodied; i.e., straight or convex, from the edge of the crest to the toe of the slope. Slopes designed at 2:1 shall have no slope length steeper than 1½:1. Slopes designed at 3:1 shall have no slope length steeper than 2½:1. All side slopes of the constructed diversion channel shall be equal to or flatter than the design channel side slopes.
- When constructed as a channel type diversion the elevation channel shall not be more than 0.1 foot above grade.
- The surface of the finished diversion shall be reasonably smooth.

8. MEASUREMENT

Site Preparation

There is no measurement for mobilization and demobilization, structure removal, pollution control, or water for construction.

The area cleared and grubbed shall be measured to the nearest 0.1 acre.

Foundation Work

There is no measurement for diverting surface water, dewatering the construction site, or foundation preparation.

Earthwork

The volume of excavation shall be measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas.

The earthfill volume shall be measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas.

The drainfill volume shall be measured within the specified limits and computed to the nearest cubic yard by the method of average cross-sectional end areas.

Certification Length

The length of diversion to be certified shall be measured to the nearest 1.0 foot along the channel centerline if designed as a channel diversion or along the ridge centerline if designed as a ridge-type diversion.