

**NATURAL RESOURCES CONSERVATION SERVICE  
PACIFIC ISLANDS AREA**

**CONSERVATION PRACTICE SPECIFICATION**

**GRASSED WATERWAY (412)**

**SCOPE**

The work shall consist of the construction of a waterway to the location, lines, grades, elevations, and cross-sections as shown on the drawings or as staked in the field.

**SAFETY**

Landowners or operators, sponsoring organizations, and contractors, shall be liable for damage to utilities and damage resulting from disruption of service caused by construction activities. The Natural Resources Conservation Service makes no representation on the existence or non-existence of any utilities. Absence of utilities on the drawings is not assurance that no utilities are present at the site.

It is the responsibility of the landowner or operator to determine if there are buried or overhead utilities in the vicinity of the proposed work. They should take proper procedures to insure that the utilities shall not be jeopardized and that equipment operators and others will not be injured during construction operations.

**CONSTRUCTION OPERATIONS**

Construction operations shall be carried out in such a manner and sequence that erosion and air and water pollution are minimized and held within legal limits.

The owner, operator, contractor, or other persons will conduct all work and operations in accordance with proper safety codes for the type of construction being performed with due regards to the safety of all persons and property.

**INSTALLATION**

**Site Preparation.** The foundation area shall be cleared of all trees, stumps, roots, brush, boulders, sod, debris, and other objectionable material.

All topsoil shall be removed and stockpiled until needed for spreading over areas requiring vegetative cover. Small irregularities, gullies, ditches, or depressions within the foundation area shall be filled and compacted after the area has been cleared.

**Disposal.** All trees, brush, stumps, and other obstructions shall be disposed of in a manner consistent with environmental concerns, and such that no interference with excavating, shaping, compaction, smoothing, or proper functioning of the waterway occurs.

**Shaping.** The waterway shall be shaped to the lines and grades set in the field or to the dimensions shown on the drawings.

**Compaction.** Acceptable compaction, prior to spreading of the topsoil, may be accomplished by passage of the excavating equipment. The wheels or tracks of the excavating equipment must pass over 90 percent of the surface of each lift, and compacted to the approximate density as the adjacent undistributed earth.

**Smoothing.** Waterways shall be smoothed sufficiently to allow seedbed preparation to proceed without further grading. Stockpiled topsoil shall be re-spread where necessary to provide a seedbed for the grass.

**Excavation and fill.** All soil removed and not needed in construction of the waterway shall be spread or disposed of where it will not interfere with flow into the waterway. Material spread on fields shall be

smoothed to blend with the existing ground. The filling of gullies shall be compacted in layers of 4-6 inches to prevent unequal settlement.

**Vegetation.** Waterways shall be established to grass as soon as practicable after construction. Grass species, planting time and method, and nutrient application shall be as shown on the plans. If irrigation is recommended in the design for the establishment of vegetation, it should be continued until the vegetation is well established, but for no more than 6 months.

If necessary, excess water shall be diverted away until vegetation is established. Any protective works shall then be removed, and the disturbed areas that are not farmed shall be seeded to permanent grass.

Every reasonable effort shall be made to protect the waterway outlet. If a vegetated outlet is already established, equipment movement in the outlet during construction shall be restricted

#### **WORKMANSHIP**

All construction shall be performed in a workmanlike manner, and the job site shall have a neat appearance when finished.

All disturbed areas not graveled or paved shall be vegetated to control erosion.

#### **BASIS OF ACCEPTANCE**

The acceptability of this practice shall be determined by inspections to insure compliance with all the provisions of this specification and to the drawings.