

**NATURAL RESOURCES CONSERVATION SERVICE
PACIFIC ISLANDS AREA
CONSERVATION PRACTICE SPECIFICATION
OPEN CHANNEL (582)**

SCOPE

The work shall consist of excavation and placement of earth materials for the construction of an open channel to the lines, grades, elevation, and cross-sections as shown on the drawings or as staked in the field.

SAFETY

Ridges, especially those with steep back slopes, can be very hazardous. All cut slopes and fills that are to be farmed must be no steeper than that on which farm equipment can operate safely. Any hazards must be brought to the attention of the responsible person.

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.

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 gullies, ditches or depressions within the foundation area shall be filled and compacted after the area has been cleared.

EXCAVATION

The channel shall be excavated to the lines and grades shown on the drawings and/or as staked in the field. Excavated materials shall be used in the channel construction or spread to selected locations. Other fill material shall be obtained at locations specified or as shown on the drawings.

EARTH FILL

Material. All suitable fill material obtained from the excavated channel can be used to construct other components of the channel. Fill material containing brush, roots or other perishable or unsuitable material

shall not be used. Cobbles and rock fragments having a maximum dimension of more than six inches will be removed from the material. Gravel and sand will not be used to construct the fill unless mixed with clay material approved by the Engineer.

Soil Moisture. The moisture content of the soil shall be sufficient so that the material will maintain a firm ball shape when squeezed in the hand.

Placement. The channel shall be constructed by placing earth fill in lifts not exceeding 6 inches before compaction. The surface of the finished channel shall be graded and smooth. When specified, topsoil shall be stockpiled and spread over fills and over areas to facilitate re-vegetation. The top of the constructed fill shall not be lower at any point than the design elevation.

The surface of the finished channel shall be reasonably smooth and present a workmanlike appearance.

Every effort shall be made to protect the channel outlet. If a vegetated outlet is already established, heavy equipment movement in the outlet during construction shall be closely controlled.

Compaction. Acceptable compaction 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 same or higher density as the adjacent undisturbed earth.

VEGETATIVE COVER

Channels designed for vegetative cover shall be established to grass as soon as practicable after construction on all channel slopes, berms, spoil, and other disturbed areas according to the Pacific Islands Area Conservation Practice Standard 342, Critical Area Planting.

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 will be vegetated to control erosion.

BASIS OF ACCEPTANCE

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