CONSTRUCTION SPECIFICATION

ND-2 TERRACES

1. SCOPE

The work shall consist of excavating, filling and shaping for the construction of the terraces.

2. LOCATION

Location of the terrace system shall be as shown on drawings or as staked in the field.

3. SITE PREPARATION

All furrows, ditches, and gullies shall be filled prior to or as a part of construction. Old terraces, fence rows, brush, and tall standing vegetation shall be removed from the area occupied by the staked terraces and their borrow areas. Unsuitable materials shall be disposed at locations shown on the drawings or as approved by the Soil Conservation Service Representative (SCSR) and/or Cooperator.

4. EXCAVATION

Excavation shall be to the lines and grades shown on the drawings or as staked in the field. To the extent that they are needed, all suitable materials removed from the specified excavations shall be used in the construction of the terrace. All surplus or unsuitable material shall be disposed of in a manner that will not interfere with the terrace function. The location shall be designated by the cooperator and approved by the Soil Conservation Service Representative (SCSR).

5. EARTH FILL

All material shall be obtained from the required excavations and/or from designated borrow areas. The fill material shall be free from frozen particles, brush, roots, sod or other objectionable material and rocks larger than 6 inches. Slopes shall be 2:1 or flatter and scarified to insure bonding with the fill being placed. Fill shall be placed in approximately uniform horizontal layers not more than 9 inches thick. The moisture content of the fill material should be such that, when kneaded in the hand, the soil forms a ball which does not readily separate. If the moisture does not meet the approval of the Soil Conservation Service Representative (SCSR) the terrace will not be built.

a. All Terraces

Terraces shall be constructed to the dimensions specified on the drawings, or as staked in the field. All stations of the terrace shall be built to the full cross section specified. Terrace ridges constructed across gullies or depressions shall be compacted by machinery travel to insure proper density. The terrace channels,

side slopes, ridges, cut areas and fill areas shall be finished to a smoothness so the surface can be readily traveled upon by farm type equipment.

All fill sections shall be compacted by either:

(1) Routing the hauling and spreading equipment over the fill in such a manner that the entire surface of each layer of fill will be traversed by not less than one tread track of the equipment, or

(2) Equivalent methods approved by the SCSR.

Any ditch or channel made at the bottom edge of the back slope while moving earth from the back slope into the terrace ridge shall be shaped, as necessary, so that drainage from the back slope of the terrace will not flow parallel to it.

b. Level Terraces

Partial or complete end closures and channel blocks, when specified, shall be in place before the terrace is considered complete.

The terrace ridge shall be constructed to produce a level top so that runoff in excess of the design frequency will overtop not causing a concentrated flow in the low areas.

6. TOPSOILING

Topsoil shall be stripped, stockpiled, and spread on disturbed areas to restore soil productivity, when specified in the construction details, drawings or as staked in the field. Depth and extent shall be shown on the construction details, drawings or as staked in the field.

7. APPURTENANT STRUCTURES

Appurtenant structures such as pipe outlets shall be installed at locations shown on the drawings or as staked in accordance with specifications furnished for those items.

8. VEGETATION

A protective cover of vegetation shall be established on all terraces that are not farmed. Seeding shall comply with appropriate standards and specifications.

9. MEASUREMENT

Method 1: For items of work for which specific unit prices are established, the quantity for terraces constructed shall be determined as the measured length. Method 1 shall be used unless specified otherwise in the specification notes or on Form ND-ENG-3, 4 or 5.

Method 2: The volume of fill shall be measured and computed to the nearest cubic yard by the method of average cross-sectional end areas. The lower limit for fill shall be the original ground surface or as specified on Form ND-ENG-3, 4 or 5.