

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE GENERAL SPECIFICATIONS**

TERRACE

(Ac.)

CODE 600

SCOPE

The work shall consist of completing all construction operations for the installation of the terrace channels, ridges, and filling and shaping as required.

Construction operations shall be carried out in such a manner that erosion and air and water pollution are minimized and held within reasonable and legal limits. State and local laws concerning pollution abatement must be followed. The completed job shall present a workmanlike finish and shall conform to the lines, grades, and elevations shown in the drawings and as staked in the field.

All operations shall be carried out in a safe and skillful manner. Safety and health regulations shall be observed and appropriate safety measures used.

LOCATION

The location of the terrace or terrace system shall be as shown on furnished drawings or as staked in the field.

PUBLIC AND PRIVATE UTILITIES

Utilities are defined to be public or private, overhead and underground power or communication lines, and any pipelines. The landowner\operator\contractor shall conduct their own search and discovery for utilities in order to lessen or avoid potential damages, injuries or loss of life. Prior to construction, the landowner\operator should complete an OK-ENG-45 UTILITIES INVENTORY FORM to document known utilities in order to comply with State law prior to any ground disturbance and return it to a USDA-NRCS representative.

QUALITY CONTROL

Quality Control of all materials and construction procedures is the responsibility of the landowner\operator and contractor. NRCS will make periodic review(s) of the work for the benefit of the agency which will include the final construction check.

SITE PREPARATION

All dead furrows, ditches, or gullies shall be filled before constructing the terrace or shall be part of the construction. All old terraces, fence rows, hedge rows, trees, and other obstructions shall be removed, as necessary, to install a farmable system. The banks of gullies and ditches to be crossed shall be sloped to a minimum of 1.5:1 before the fill is made.

MATERIALS

Materials for earthfills shall be obtained from excavation in the channel or other designated areas, and shall be free of objectionable materials as brush, roots, and rock particles that endanger the performance of the terrace.

EARTHWORK

The terraces shall be constructed to planned alignment, grade, and cross section with the specified overfill for settlement and for graded terraces, the channel graded to drain reasonably well.

Any ditch or depression at the bottom of the back slope shall be filled and smoothed so that drainage will be away from the terrace and not parallel to it.

The entire cross section of the channel and ridge shall be uniform, full bodied, and smooth to the extent that farming operations may be accomplished with regular farm equipment.

The slopes on excavated areas shall be approximately equal to the ridge slopes. The openings at the outlet end of the terrace shall have a cross section at least equal to that specified for the terrace channel. End closures, where specified, shall be made before the terrace is considered complete.

The channel grade shall be constructed to such uniformity that unnecessary water impoundment will not be caused by blocks in the channel. Channel blocks or "highs" of 0.2 feet will be allowed in erosion resistant and average soils, 0.3 feet in easily eroded soils, where such tolerance does not affect the minimum height requirements. For level terraces, variations in grade may be undulating so that the average grade will approach zero.

Where terraces are to be constructed across field ditches and gullies, channel lows will be permitted at these locations when the original ditch or gully is deeper than the normal cut to construct the terrace. Such lows will, therefore, not be used when checking terrace channel grade. An additional 10% earthfill height shall be added to the terrace ridge across these lows for settlement. The terrace ridge height shall be maintained across these lows in order to meet minimum height requirements. Additional compaction by machinery routing or other suitable means may be required to insure proper function of the terrace.

Acceptable average grades for terraces are those within ± 0.10 feet per 100 feet of design grade as long as there is positive grade. This average grade shall be figured for the terrace length excluding 100 feet on each end. A tolerance of ± 0.20 feet per 100 feet may be allowed for not more than 300 feet consecutive length even though the average grade is within the specified tolerance of the design grade. A constructed grade of 0.6 feet is allowed on the last 100 feet of the spill end.

If necessary, top soil shall be stockpiled and spread over excavations and other areas to facilitate restoration of productivity.

OUTLETS

Provisions shall be made to prevent piping if conduits for underground outlets are located under terrace ridges. Mechanical compaction, water packing, trench sidewall sloping, and installation and backfill of conduit trenches early enough to allow adequate settlement are methods that can be used. The conduit shall be placed deep enough to prevent damage by machinery for both present and future conditions. In no case shall the conduit have less than 2 feet of cover.

VEGETATION

If vegetation is required, refer to Oklahoma NRCS Conservation Practice Standard, *Critical Area Planting (342)* and/ or the *Oklahoma Plant Materials Technical Note 21* for seeding criteria and as needed, use the criteria in Oklahoma NRCS Conservation Practice Standard, *Mulching (484)*. Vegetation must be in accordance with the recommendations documented in the Vegetative Data Worksheet (OK-ECS-4) for the given field location and conservation plan, or according to specifications developed for the project.

ADDITIONAL CONSTRUCTION DETAILS

Refer to the appropriate approved design plans for site specific additional items of work and construction details.

NRCS OK

September 2015