

# Terraces

Alabama Job Sheet No. AL600



## Definition

A terrace is an earth embankment, channel, or a combination ridge and channel constructed across a slope.

Terraces are used on sloping cropland to conserve rainfall, safely conduct runoff water from the land, and help control erosion. Terraces should serve as guides for good row layout in the field. They are an essential part of a water disposal system for sloping fields used to grow row crops.

## Design

Designing and laying out a farmable erosion control system, including terraces, is a highly skilled job. Therefore, always utilize the local soil and water conservation district to provide the technical help needed to do this job.

## Terrace Types

Terraces can be designed and constructed in many different types and configurations such as broad based, steep-back, grass-back, ridge, gradient, level, tile outlet, and others. The type terrace utilized should fit the type of management and machinery used on the farm. The conservation technician can help determine the best type terrace to use.

## Outlets

Grassed waterways and water disposal areas are to be shaped and well established to grass prior to construction of the terrace system. This allows for the terraces to have a stable outlet when finished.

Tile outlet (storage) terraces which store runoff water and slowly discharge the water through underground outlets should be designed to discharge the water to grassed filter areas prior to the water entering streams.

## Location

The location of terraces is determined by the slopes, soils, erosion and management conditions, and farm equipment used for tillage. Terraces should normally drain from ridges in the field toward the draws. The ends of gradient terraces should remain open to dispose of the runoff water into a grassed waterway or water disposal area. Storage terraces with underground outlets can be installed concurrently with the terrace system.

If possible, terrace systems should be laid out so that the terraces are parallel which will allow the system to be farmed easily (see illustration on next page).

However, these systems are not possible on all fields. The best laid out terrace system on irregular fields will still often result in some short rows when the terraces are used as guides for row layout. Multiple row patterns are often necessary in irregular fields with terrace systems.

## Grade

The grade in terrace channels is based on field conditions such as soil type, spacing, and length of terrace. Grades that are too steep will erode in the channel bottom, and grades that are too flat will result in the terrace being overtopped with runoff water.

## Construction

Construct and maintain terraces so that the front and back slopes are not steep and will permit the use of farm equipment. In construction of the terrace, the soil may be moved either up or down the slope. Topsoil should be salvaged to be spread on the constructed terrace to maintain soil fertility.

## Maintenance

Ridge terraces or grass-back terraces should be established and maintained in good vegetative cover.

The capacity of the terrace system to control the runoff must be maintained annually with proper plowing techniques. Always place emphasis on

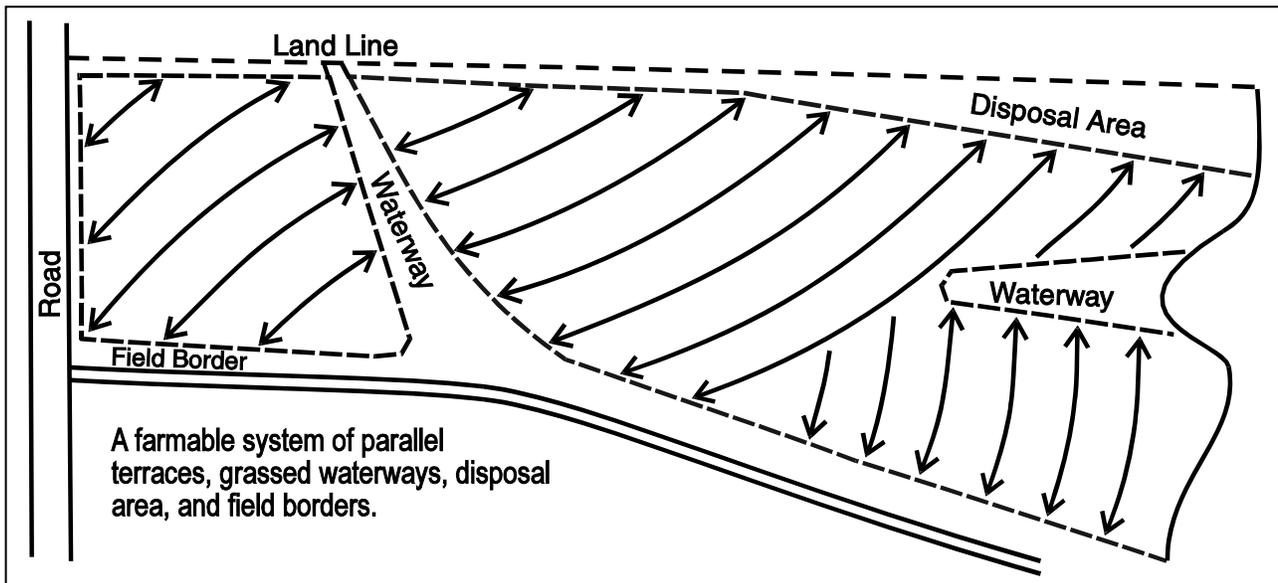
maintaining the channel and not the ridge, and always protect the grassed waterway or outlet.

Terraces serve as guides for contour farming and should be used as such. Vary land preparation from year to year to maintain desired shape of terraces and the land between terraces.

## References

NRCS AL Conservation Practice Standard  
Code - 600, Terraces  
Code - 620, Underground Outlet

NRCS AL Guide Sheet No. AL 412 -  
Grassed Waterway



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