NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

BEDDING, (ACRE)

Code 310

DEFINITION

Plowing, blading, or otherwise elevating the surface of flat land into a series of broad, low ridges separated by shallow, parallel channels with positive drainage.

PURPOSE

This practice may be applied as part of a resource management system to improve the drainage of surface water.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to areas with flat to nearly flat topography and with poorly drained soils.

CRITERIA

All planned work shall comply with all Federal, State, and local laws and regulations.

Bedding shall run in the direction of the available land slope.

The velocity of water in the channels shall be slow enough to prevent erosion during storm events. Beds shall be shaped and cross-row ditches provided where required to provide free movement of water from the crown to the dead furrow.

Crowns shall provide a cross slope of not less than 0.3 percent.

Soils must be of sufficient depth to provide a satisfactory root zone after bedding.

Crown height, width, and maximum length of beds shall be determined on the basis

of site conditions and crop requirements using procedures outlined in National Engineering Handbook Part 650 Engineering Field Handbook, Chapter 14, Water Management (Drainage).

Parallel channels shall be shallow with minimum side slopes at 8:1.

Parallel channels shall be graded toward an outlet.

An outlet, natural or constructed, must have sufficient capacity and depth to provide for removal of water from the parallel channels.

PLANS AND SPECIFICATIONS

Plans and specifications for shall identify the area where the practice will be applied, the direction of the channel drainage, the crown height, side slope, width, and length of the bed cross section, and location of the outlet. If beds are formed with on-farm equipment, it may take 2 to 3 years to complete beds to the required height.

CONSIDERATIONS

In planning this practice, consider its effects on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, deep percolation, and ground water recharge.

Areas where the rooting depth may limit plant growth after construction of the beds should be identified on the plan map.

Consider practices that will mitigate offsite water quality impacts (i.e. wetland

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treatment areas, filter strips, buffer strips, etc.).

If the bedding will exceed the depth of prior disturbance, this activity could affect significant cultural resources.

OPERATION AND MAINTAINENCE

The beds shall be maintained to the planned height. Remove sediment from the channels as necessary to facilitate drainage and to prevent ponding.

Maintain the outlet in a stable condition.