Contour Orchard And Other Fruit Areas

North Carolina Practice Job Sheet 331

Prepared for: _____

Prepared by: _____

Farm: _____ Tract: _____ Date: _____

Orchard laid out on the contour and well-maintained in vegetation will have minimal soil and water losses.

Access roads are a key feature of any orchard. They serve as a guide for installation of structural measures for runoff and erosion control.

DEFINITION

Planting orchards, vineyard, or small fruits so that all cultural operations are done on the contour.

PURPOSE

- ☐ Reduce soil erosion.
- ☐ Reduce water loss.
- ☐ Increase infiltration.
- ☐ Improve the efficiency and safety of equipment operations.
- ☐ Improve plant productivity.
- ☐ Provides sites for pollinator species.
- ☐ Provides wildlife food and habitat.

CONDITION WHERE PRACTICE APPLIES

This practice applies on sloping land where orchards, vineyards, small fruit or nut crops are to be established. This practice is most effective on slopes between 2 and 10 percent.

CRITERIA

Minimum Row Grade. The crop rows shall have sufficient grade to ensure that runoff water does not pond and cause unacceptable crop damage.

Maximum Row Grade. The maximum row grade shall not exceed 2 percent or one half of the up and down hill slope percent used for erosion prediction whichever is less. Up to 3 percent row grade may be permitted within the upper 150 feet of the row.

Up to a 25% deviation from the design row grade is permitted within 150 feet of a stable outlet.

When the row grade reaches the maximum allowable design grade, a new baseline shall be established up or down slope from the last contour line and used for layout of the next contour pattern.

Sites that are gullied or have rolling topography with a high degree of slope irregularity are not well suited. Where topography will permit, smooth or level the surface to improve tree row alignment.

Vegetation should be established as soon as possible and maintained in vigorous condition. This will be the primary means of runoff and erosion control.

Overland flow from adjacent fields will be diverted as necessary to ensure the proper functioning of this practice.

Any farm roads installed in conjunction with this practice will meet the criteria for Access Road, code 560. Access can be established within grassed areas, such as field borders or grassed waterways, but care must be exercised to maintain the vegetation.

Install adequate runoff disposal systems such as terraces, grassed waterways, or diversions to control runoff and soil erosion.

CONSIDERATIONS

Uniform topographic conditions are desirable.

Soils selected should be adapted to the crops being planned.

Stay within grade limits in the arrangement of the maximum number of long rows, placed as nearly parallel as possible. Distances between rows may need to be adjusted to eliminate inside point rows.

OPERATION AND MAINTENANCE

Maintenance needed for this practice includes:

- Performing all cultural operations on the contour between tree or vine rows.
- Periodic inspection and repairs to runoff water outlets.
- Protecting uphill and downhill farm roads from erosion.
- Maintaining adequate vegetative cover to control erosion.

Additional Operation and Maintenance requirements specific to this Plan:

_____

_____

_____

_____

PLANS AND SPECIFICATIONS

Contour Orchard and Other Fruit Areas will be prepared for each planning unit according to criteria. Specifications will be recorded using North Carolina specification sheets, job sheets, narrative statements in conservation plans, or other acceptable documents.

Client Name:		Farm #:	
County:		Tract #:	
Program:		Field(s):	
Date:			

Purpose (Check all that apply):	
☐ Reduce soil erosion.	☐ Reduce water loss.
☐ Increase infiltration.	☐ Provides sites for pollinator species.
☐ Improve plant productivity.	☐ Provides sites for pollinator species.
☐ Improve the efficiency and safety of equipment operations.	

Field (s)				
Plant Species				
Percent Slope				
Row Grade				
Stable Outlets				

Reset Form