United States Department of Agriculture

NRCS Natural Resources Conservation Service

Windbreak/Shelterbelt Establishment

Conservation Practice Job Sheet FL-380-JS

Natural Resources Conservation Service, Florida May 2011

Slash pine and red cedar at Florida Dep. Agric. and Consumer Services foundation grove in Dundee.

Windbreaks or shelterbelts made up of single or multiple rows of trees, shrubs, or tall grasses planted in a linear pattern, usually along the edge of a field or around a structure. This type of arrangement is designed to reduce damage to other plants from the wind and enhance growth by altering the microenvironment in the crop area. When planted around a structure or in a farmstead situation, windbreaks or shelterbelts provide shelter to buildings, livestock, and people. They can also provide noise and visual screens; improve air quality by intercepting air borne particles, disease organisms (e.g., citrus canker bacteria), chemicals, and odors; and simply mark property or field boundaries. Secondary benefits to most windbreak or shelterbelt plantings include enhanced wildlife habitat and increase carbon storage.

Windbreaks or shelterbelts can be used anytime a linear plantings of woody or tall, herbaceous perennial plants are desired and suited for controlling wind, noise, and visual resources. They are "environmental buffers" that are planted in a variety of settings such as cropland, pasture, rangeland, along roads, farmsteads, feedlots, and in urban areas. They normally are established concurrently with other conservation practices as part of a conservation management system. These practices may include conservation crop rotation, nutrient and pest management, residue management, and waste utilization.

Plans and specifications for windbreak/shelterbelt establishment are prepared in accordance with the NRCS Field Office Technical Guide and are designed to meet the resource needs and the producer's objectives. The following components need to be included: (1) Proper selection of vegetation is essential; (2) Follow recommended planting rates, planting dates, and planting depths; (3) Select plants on the basis of species characteristics, site and soil conditions, planned use, maintenance of the treated area, method of planting, time of the year to be planted, and the needs and desires of the land user; (4) Plants that benefit wildlife species are recommended; and (5)Mechanical or hand planting is permitted.

Trees and shrubs in the windbreak or shelterbelt will need periodic maintenance and, later on, possible renovation (see Tree/Shrub Pruning, Code 660). Wind-breaks may need supplemental water for successful establishment (see Irrigation System, Sprinkler, Code 442, and Irrigation System, Microirrigation, Code 441)

This practice can be certified by completing the applied columns and the certification section on the last page of this document..

FL- 380 - Site Specific Sheet - 2

Natural Resources Conservation Service, Florida May 2011

Landowner_____ Field number_____

Purpose (check all that apply)			
☑	Reduce soil erosion from wind	☐	Provide living visual screens
☐	Protect plants from wind-related damage	☐	Provide living barriers against air-borne chemical drift
☐	Alter microenvironment for enhancing plant growth	☐	Delineate property and field boundaries
☐	Control windborne plant pathogens	☐	Improve irrigation efficiency
☐	Provide shelter for structures, livestock, and recreational areas	☐	Enhance aesthetics
☐	Enhance wildlife habitat by providing travel corridors	☑	Increase carbon storage
☐	Provide living noise screens		

Location and Layout	
Width (feet; include widths of maintenance areas next to outer rows): 25	
Length (feet): 100	Area (acres):
Total area of zone protected/sheltered (acres; based on length of windbreak planting multiplied by a linear distance equal to 10 times expected mature height at 20 yrs downwind plus 2 times mature height upwind):	
Additional requirements: If needed, attach an aerial view or a side view of the practice to this job sheet. Indicate how linear distances and area were determined.	

Plant Materials Information								
Species/cultivar by row number:	Row 1 Species:				Row 2 Species:			
	Planned		Applied		Planned		Applied	
Kind of Stock[1]		Other info:		Other info:		Other info:		Other info:
Planting Date:								
Distance between plants within row (ft):								
Total number of plants for row:								
Distance (ft) from this row to next row[2]								

[1]BAreroot or COntainer; include size, caliper, height, and age as applicable.
[2]Adjusted for width of maintenance equipment.

Plant Materials Information								
Species/cultivar by row number:	Row 3 Species:				Row 4 Species:			
	Planned		Applied		Planned		Applied	
Kind of Stock[1]		Other info:		Other info:		Other info:		Other info:
Planting Date:								
Distance between plants within row (ft):								
Total number of plants for row:								
Distance (ft) from this row to next row[2]								

[1]BAreroot or COntainer; include size, caliper, height, and age as applicable.
[2]Adjusted for width of maintenance equipment.

Temporary Storage Instructions

Planting stock that is dormant may be stored temporarily in a cooler or protected area. Additional requirements:

Site Preparation

Remove debris and control competing vegetation to allow enough spots or sites for planting and planting equipment. Prepare supplemental moisture materials for installation if required by trees and/or shrubs. Additional requirements:

Planting Methods

For container and bareroot stock, plant stock to a depth even with the root collar in holes deep and wide enough to fully extend the roots. Pack the soil firmly around each plant. Additional requirements:

Operation and Maintenance

Inspect windbreak/shelterbelt components periodically and protect from damage so proper function is maintained. Replace dead or dying tree/shrub stock and continue control of competing vegetation to allow proper establishment. Install and begin supplemental irrigation if required. Additional requirements:

Additional Specifications and Notes:

Planner/Technical Service Provider:

_____ _____
Designed by Date

_____ _____
Approved by Date

Certification

This practice(s) as applied **meets** or exceeds NRCS standards and specifications for Forage and Biomass Planting, Code 612.

_____ _____
Planner/Technical Service Provider Date