



Tree/Shrub Site Preparation

Conservation Practice Job Sheet

Code 490

Natural Resources Conservation Service, Texas

March 2007

Landowner: _____ Assisted By: _____

Tract No(s). _____ Field(s) Number(s): _____ Acres: _____

Purpose of Planting: _____



Site Conditions

Cover: Number or check appropriate box(es)

Grass / Herbaceous Low Value Brush &/or Trees Newly Clearcut / Cutover

Previously Cutover Excessive Debris Other: _____

Soil / Site: Number or check appropriate box(es)

Compacted Soils Dense Clay Within 10" of Surface Wetness From Flooding / Saturation

Steep Slopes Clayey or Deep Sand Other: _____

Site Prep Methods: To address the numbered or checked condition(s) above, use the following site prep method

Harvesting Trees Roller Chopping 3- in – 1 Plowing

Mowing / Shredding Blading / Dozing Bedding

Burning Shearing & Piling Aerially Broadcasting Herbicides

Disking Subsoiling/ Ripping Ground Applying Herbicides

Individual Stem Treatment Other: _____

Notes / Explanation:

Site preparation is treating land to facilitate tree planting and encourage the growth of seedlings. The method, intensity and timing of site preparation should suit the specific site. The type and intensity of site preparation varies according to site, species, ground cover and soils.



Bedding - Bedding is creating a raised bed of soil on which to plant seedlings. It improves soil drainage, reduces plant competition and makes planting easier. It is usually done on poorly drained sites. Locate beds so as to not obstruct drainage.



Roller Chopping– Chopping is pulling a rolling drum chopper over brush and small diameter trees (<5” diameter), to crush it. It minimizes soil loss and is acceptable on sites with moderate to severe erosion. A disadvantage is re-sprouting of woodies.

Blading / Dozing - Blading removes vegetation with a straight blade bulldozer. The disadvantage with this system is that it removes topsoil, damaging the site and increasing erosion.



Shearing-Shearing prepares sites where vegetation is 8-inches dbh or more. Blades that are angled or V-shaped are used; serrated edges have the best cutting action. Debris may be left in place, piled or windrowed.

Disking – Site relatively clear of trees and logging debris may be disked to loosen soil and expose roots of undesired vegetation. Limit disking to flatter slopes. Disk to a depth of at least 8”. Allow time for settling before planting.



Subsoiling / Ripping – Subsoiling opens up furrows to a depth of 18 – 24” to increase aeration and water-holding capacity of soils, and breaks up root-constricting hard pans and traffic pans. Rip when soil is dry.

Harvesting / Logging - Harvesting any marketable timber can off-set the cost of further site preparation and tree planting. Logging may expose mineral soil to erosion. Generally, used in combination with other methods to control residual vegetation.

Herbicides - Herbicides are site specific based on the species to be controlled, soils, proximity to streams and sensitivity of adjacent vegetation. They may be broadcast by air or on the ground. They may also be applied to individual trees by injection or basal spray.

Mowing/ Shredding- Any type of rotary cutting device such as a bush-hog is used to cut standing herbaceous vegetation to a height of less than 2” to prepare a site for tree planting. Usually requires chemical follow-up.



Three-in-one combination plow: A three-in-one combination plow or Savannah plow is pulled behind a large bulldozer with a V-blade to clear debris, subsoil and prepare beds in one pass. Allow enough time between plowing and planting to ensure settling of the beds.

Prescribed burning - Prescribed fire is fire applied in a skillful manner for a specific purpose, under exacting weather conditions. It is an economically sound practice on most pine sites, usually in conjunction with some other mechanical or chemical method of site preparation.

General Guidelines:

- Operate heavy site prep equipment on the contour to minimize the potential for erosion.
- Keep soil disturbance to a minimum.
- Protect the SMZs by limiting disturbance within them and not pushing debris into them.
- Always follow label instructions when using herbicides.
- Follow TCEQ regulations and prepare a burn plan when using prescribed burning.
- Consider wildlife needs and aesthetics when choosing site prep extent and methods.

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