Reforestation Plan Narrative
Forestry Incentives Program (FIP)

OBJECTIVE
Goal is to establish a pine forest on the planting area indicated on the attached map. Treatment areas will be properly prepared, if needed, to facilitate the planting operation. Necessary steps and practices outlined below will be taken to ensure seedling survival and growth is optimal.

LOCATION
See attached tract map for treatment area location(s).

WOODY RELEASE/TIMBER STAND IMPROVEMENT- see attached one-pager for more information.

- **Aerial Application**- The treatment area is in need of a woody release operation by helicopter to free an existing stand of pine trees from competition with various species of woody trees, brush, and vines. This application should be conducted during the months of (Aug-Oct) when targeted species are translocating food reserves from their leaves to the roots.

- **Basal Spray**- The treatment area is in need of a woody release operation to free an existing stand of pine trees from competition with various species of woody trees, brush, and vines. This application should be conducted during the months of (Aug-Oct) when targeted species are translocating food reserves from their leaves to the roots. The lower 12-14 inches of the trunk on trees less than 4 inches in diameter should be sprayed with the chemical mixture to the point of runoff.

- **Individual Stem Injection**- The treatment area is in need of a woody release operation to free an existing stand of pine trees from competition with various species of woody trees, brush, and vines. This application should be conducted during the months of (Aug-Oct) when targeted species are translocating food reserves from their leaves to the roots. Stem injections should not be applied to trees or saplings less than 2 inches in diameter.

WOODY SITE PREPARATION- see attached one-page description(s) for more information.

- **Mowing**- The planting acreage is in need of mowing (shredding) prior to planting to facilitate the planting job. This operation should be conducted prior to planting with emphasis on preventing re-growth of the vegetation before planting occurs.

- **Spot Tillage**- The planting acreage is in need of spot tillage prior to planting to create favorable micro sites for planting of pine seedlings. Spot tillage should mix up logging debris and topsoil within a 4-5 foot diameter spot approximately 24-36 inches deep.

- **Disking**- The planting acreage is in need of diskng prior to planting to ameliorate surface soil compaction caused by harvest, chopping, or shearing and piling. This practice is also needed on compacted soils of old heavily grazed or farmed fields and gravel pits. Disking should break a minimum of 6-8 inches of soil and should be conducted at least 3 months prior to planting to allow enough time for the soil to settle.

- **Bedding**- The planting acreage is in need of bedding prior to planting to form a more or less continuous mound of soil. The purpose of this practice is to elevate the seedlings above standing water enough to allow planting, ensure survival, and promote proper growth and development of the seedlings. Beds should be oriented to channel excess water away from the site and operations should be conducted fairly close to planting season (July-Sept) to prevent excessive settling of the beds.

- **3-in-1 Plow**- The planting acreage is in need of mechanical site preparation to prepare the site for planting. Following a harvest, a broadcast burn or other method is needed to reduce logging slash and enhance the plowing operation. Once accomplished, the plowing operation may be conducted in conjunction with a front mounted v-blade to push large debris
to either side of the plowed area. Plowing cultivates, fractures, subsoils, and beds the treatment area in one pass. Plowing is normally conducted between the months of June-Nov.

**Mulching** - The planting acreage is in need of mechanical site preparation to prepare the site for planting. Mulching the site in its entirety or in strips is recommended to facilitate the planting job, reduce the potential for soil erosion, and improve the growth and survival of planted seedlings by increasing the available moisture and nutrients on the site. This practice is best suited for late summer to early winter (July-Nov) with adequate ground conditions for operation of the machinery. It is recommended to line up the services of a vendor as soon as possible due to the limited availability of vendors capable of conducting this activity.

**Drum Chopping** - The planting acreage is in need of mechanical site preparation to prepare the site for planting. Drum chopping the entire treatment area during the summer months (June-Aug) is recommended to facilitate the planting job. At least 60 days following this operation or upon browning of the vegetation, the treatment area should be burned (Aug-Oct) to control competing vegetation.

**Aerial Application** - Broadcast spray to be carried out in mid to late summer (Aug-Oct) to control competing species of woody trees, brush, and vines. The herbicide application may be followed by a controlled burn or mulching at least 60 days afterward, prior to planting season. Great care should be taken to avoid application to non-target areas and operations should cease when wind speeds are in excess of 10mph. It is recommended to have a guarantee on chemicals and contract with the vendor should control of unwanted species be unsuccessful.

**Fall Combination Spray** - Broadcast spray to be carried out in mid to late summer (Aug-Oct) to control competing species of woody and herbaceous material. The herbicide application may be followed by a controlled burn or mulching at least 60 days afterward, prior to planting season. Great care should be taken to avoid application to non-target areas and operations should cease when wind speeds are in excess of 10mph. It is recommended to have a guarantee on chemicals and contract with the vendor should control of unwanted species be unsuccessful.

**Ground Application** - Broadcast spray to be carried out in mid to late summer (Aug-Oct) to control competing species of woody trees, brush, and vines. The herbicide application may be followed by a controlled burn or mulching at least 60 days afterward, prior to planting season. Great care should be taken to avoid application to non-target areas and operations should cease when wind speeds are in excess of 10mph. It is recommended to have a guarantee on chemicals and contract with the vendor should control of unwanted species be unsuccessful.

**Prescribed Burning** - The planting acreage should have firelines properly constructed and should be burned in late summer to early fall (Jul-Oct) to facilitate the planting operation, reduce or eliminate competing vegetation 3 inches or less in diameter, and promote seedling growth and survival. Successful burning for site preparation will depend on the fuel type, fuel moisture, method of burning, topography, and weather conditions.

**Shear and Pile** - The planting acreage will be prepared for planting by a dozer shearing remaining trees and shrubs at the ground line followed by raking all debris into windrows or piles. Windrows or piles may or may not be burned according to landowner objectives and weather conditions. When windrows are prepared, they must be as narrow as possible and openings of at least 20 feet should be made every 150 feet of windrow. Ends of windrows must be at least 66 feet from property boundaries and residual stands.

**Rake Only** - The planting acreage will be prepared for planting by a dozer raking all debris into windrows or piles. Windrows or piles may or may not be burned according to landowner objectives and weather conditions. When windrows are prepared, they must be as narrow as possible and openings of at least 20 feet should be made every 150 feet of windrow. Ends of windrows must be at least 66 feet from property boundaries and residual stands.

**Shear Only** - The planting acreage will be prepared for planting by a dozer shearing remaining trees and shrubs at the ground line. Most often, the shearing is done on anticipated planting row centers. This could take one or two passes depending on the amount of debris present.

**Subsoiling** - Operations should be conducted to a minimum depth of at least 18 inches. Subsoiling to fracture the rooting zone will be accomplished in late summer or early fall (July-Oct) when the soil is dry and crumbly. Avoid subsoiling when there is excessive soil moisture. Adequate rainfall must follow subsoiling in order to settle the soil in the ripped areas prior to planting. Allow 2-4 months for settling before conducting the planting operation.

**All vendors to be selected by the landowner or landowner’s agent. All practices must be completed to TFS specifications. Comparable practices may be substituted for above recommendations only upon notification to and**
approval by the TFS Forester. All practices should be conducted along the contours unless otherwise noted to prevent present and future erosion problems. Great care should be taken to avoid soil compaction on clayey soils and on wet sites.

SEEDLINGS AND PLANTING
Loblolly pine seedlings will be planted on a 6X9 foot spacing (807 per acre) by a hand or machine planting vendor selected by the landowner. Seedlings should be purchased from TFS or other source as soon as possible to reserve your order. All planting should be conducted during the winter months of Dec-Mar. Great care should be taken on sloping areas to conduct all operations, including the planting, on the contours to reduce the potential for present and future erosion problems. Seedlings should not be exposed to extreme high or low temperatures and roots should be protected from drying out at all times. All work to meet TFS specifications.

HERBICIDE APPLICATION—see attached one-page description(s) for more information.

- **Banding**— In the spring (Feb-May), following planting, an approved herbicide mix will be sprayed over the planted rows (3-4 foot wide bands) to kill herbaceous weeds and grasses in competition with the pine promoting seedling growth and survival.

- **Spot Treatment**— In the spring (Feb-May), following the planting job, the site should be treated with an acceptable herbicide to control competing weeds and grasses in an area no less than 18-24 inches in diameter. Spraying should be conducted when root development of competition is in its early stages.

- **Herbaceous Weed Control**— Following the planting job, the site should be treated with an acceptable herbicide to control competing weeds and grasses. The application should be conducted during the months of Feb-May when root development of competition is in its early stages.

**Vendor to be selected by the landowner and all work to meet TFS specifications. Great care should be taken to avoid application to non-target areas and operations should cease when wind speeds are in excess of 10mph. It is recommended to have a guarantee on chemicals and contract with the vendor should control of unwanted species be unsuccessful.**

SPECIAL CONSIDERATIONS (PESTS)
For **cutover** sites harvested within 6 months of the planting season should be planted with Pounce treated seedlings to reduce the threat of mortality caused by the Pales Weevil. Significant town ant colonies should be treated by the landowner or his agent prior to planting to eliminate them stripping seedlings of their needles. Landowners should contact the TFS for treatment information.

For **openland** sites revealing significant potential of gopher or town ant problems, the planting acreage should be treated prior to completion of the above practices. The landowner will be responsible for carrying out the successful eradication of these potential pests. Landowners should contact the TFS for treatment information.

**PROTECTION**
Firelanes should be plowed around the planted acreage and should be maintained each year by disking to reduce the threat of wildfires. Cattle should be excluded from the property for at least 5 years following the planting operation allowing trees to become established and preventing damage or destruction from grazing.

**DEADLINE**
Completion deadline for all practices: