

**Massachusetts Department of Conservation and Recreation
Bureau of Forest Fire Control and Forestry
Forest Management Proposal
Name: Erving Red Pine - HQ**

Date Posted: March 6, 2020
End of Comment Period: April 20, 2020

Region: Central
Recreation District: CT Valley
Forest Management District: Eastern CT Valley
State Forest: Erving State Forest
Closest Road: Rt.2
Town: Erving

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Overview:

This 12.5 acre parcel is located between Route 2 and Route 2A in the town of Erving, north of the Millers River. The parcel was initially contiguous to the larger Erving State Forest located north of Route 2, but was isolated when Route 2 was rerouted. The red pine (*Pinus resinosa*) present was planted by the Civilian Conservation Corps in the 1930s and was subsequently thinned in 1984 and again in 1995. Red Pine Scale (*Matsucoccus resinosea*) was identified in the red pine stand just north of Route 2 in November of 2019 and appears to be present in this stand. It is expected that infected red pine will decline rapidly; ultimately resulting in large scale mortality within the next 2 years.

This project aims to remove as much of the failing plantation as possible with the intent of minimizing hazardous conditions that accompany standing dead overstory trees, while also releasing advanced regeneration present in the understory. An overstory removal will be implemented across the 10.7 acre red pine stand, which will focus on the removal of red pine and the retention of native overstory trees as reserves.

Project Area Description:

Stand Information

The only portion of the 12.5 acre project area subject to forest management activities will be the 10.7 acre red pine stand. The remaining 1.8 acres is classified as administrative areas, includes parking lots, Erving State Forest headquarters building, garage buildings which are all heavily used

by DCR operations staff. This 10.7 acre red pine stand has been subject to multiple forest management projects in the past, one in 1984 and again in 1995. It is estimated that approximately 30 thousand board feet (MBF) was removed in 1984 with diameters ranging from 8" to 12". In 1995, approximately 60 MBF was removed with the majority of removals being between 10"-13" dbh. These entries focused on removal of select overstory trees with the intent of encouraging native regeneration and increasing growth rates of residual overstory trees.

Currently, the overstory is dominated by red pine with inclusions of eastern white pine (*Pinus strobus*) and occasional various hardwood trees. Understory regeneration ranges in height from several inches to 15-20 feet tall and is dominated by a mix of eastern white pine, red oak (*Quercus rubra*), black oak (*Quercus velutina*), black birch (*Betula lenta*), red maple (*Acer rubrum*), and American beech (*Fagus grandifolia*). Glossy buckthorn (*Frangula alnus*) was identified on the eastern portion of the stand during preliminary reconnaissance and is expected to be present throughout the stand. Invasive species control measures will be implemented in association with this proposed forest management.

Topography and Soils

The USGS topographic maps indicate that this site is on a slight south facing slope. Portions of the stand have been heavily disturbed in the past which has resulted in the presence of several unnatural landforms including trenches and berms. Soils present on this site include Windsor and Merrimac Soils, Hinckley loamy sand, Merrimac fine sandy loam, and Windsor loamy sand. All of these soils are described as being quite deep (more than 80" to a restrictive feature) and somewhat excessively drained or excessively drained.

Aesthetics, Recreation, Wetlands, Cultural, Rare Species and Wildlife Considerations:

Aesthetics: The appearance of this site will be altered dramatically as the majority of the current overstory vegetation will be removed through harvesting operations. Scattered retention trees will be left across the project area. The Massachusetts Department of Transportation will be contacted in regards to the removal of red pine within the public right of way along both Route 2 and 2A. Some of these roadside removals may exceed 50% basal area retention in order to remove potentially hazardous trees.

Recreation: This 12.5 acre parcel sees limited recreation throughout the year. Erving State Forest Headquarters is located within the parcel along with several out buildings and other infrastructure. There are no trails located within the project area and hunting is limited due to the close proximity to dwellings and public roads. DCR operations staff will be consulted in regards to possible recreational conflicts.

Wetlands: No wetlands have been identified within the project area. The Millers River is located several hundred feet south of the project area.

Cultural Resources: Two stone foundations have been identified in the southern portion of the project area, located along Route 2A. Work is anticipated to occur within close proximity to these

structures. Care will be taken in order to prevent any damage to them. At this point no other cultural resources have been identified. Prior to implementation, this project will be reviewed by DCR Archeology staff.

Rare and Endangered Species: According to the most recent Natural Heritage and Endangered Species Program (NHESP) layer available at www.mass.gov/mgis, there are no current concerns regarding "Priority Habitat." This project will be reviewed by NHESP prior to implementation.

Wildlife: Minimal wildlife sign was observed during preliminary reconnaissance. It is anticipated that several upland wildlife species may be present at any given time. The DCR Management Guidelines document states that the following wildlife habitat considerations are implemented with each forest management project:

- Retention of at least 1 to 3 large diameter trees (where possible >18" dbh) and 4 live 10"-12" dbh trees per acre that have the potential to serve as cavity and den trees and future snags.
- Retention of all dead snags and stubs in the harvest area as safe operating conditions allow.
- Retention of on average one of the oldest, largest diameter, well-formed dominant trees (where possible > 18" dbh) per acre in harvest area to serve as legacy trees.
- Maintain a minimum of 256 cubic feet per acre of coarse woody material (CWM) within the harvest area

Sale Layout and Harvesting Limitations:

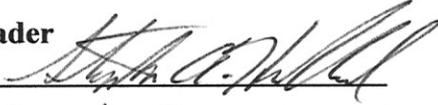
This project will be limited to the use of a fixed head cut to length harvester and forwarder. Care will be given to protect all existing regeneration, except in areas designated by the forester. Operations will only occur in dry, frozen, or otherwise stable ground conditions. Access to the site will be off of Route 2A.

Silviculture:

An overstory removal will be implemented across the entire red pine stand (stand 1). Retention trees will be scattered throughout the project area with densities meeting the minimum retention guidelines (as stated in the "Wildlife" section of this document) with the exception of areas where existing infrastructure is within one and half tree length from current overstory trees. The overstory removal will result in a predominantly even aged stand composed of seedlings and saplings with the several legacy trees retained through the project area. Release of advanced regeneration will allow for increased resources and ultimately increased growth rates. Care will be given to protect existing regeneration. Future silvicultural recommendations may include pre-commercial thinning and invasive plant management.

District Forester: 

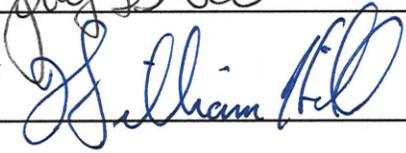
Date: 3/5/2020

Field Operations Team Leader
Or Park Supervisor: 

Date: 3/5/2020

Regional Director: 

Date: 3/5/2020

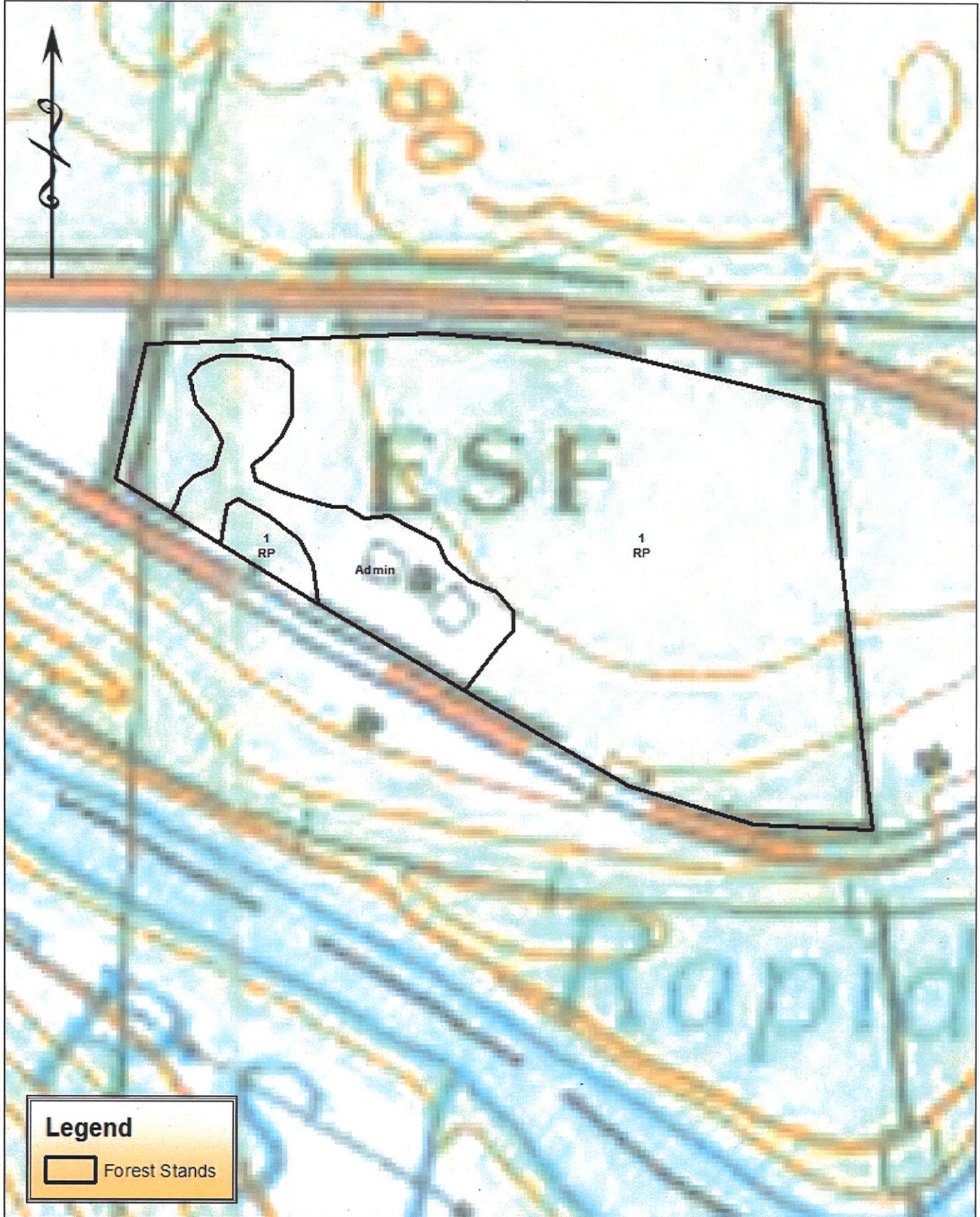
Management Forestry
Program Supervisor: 

Date: 3/5/2020

1 inch = 180 feet

Erving State Forest - Red Pine HQ
Stand Map

January 2020



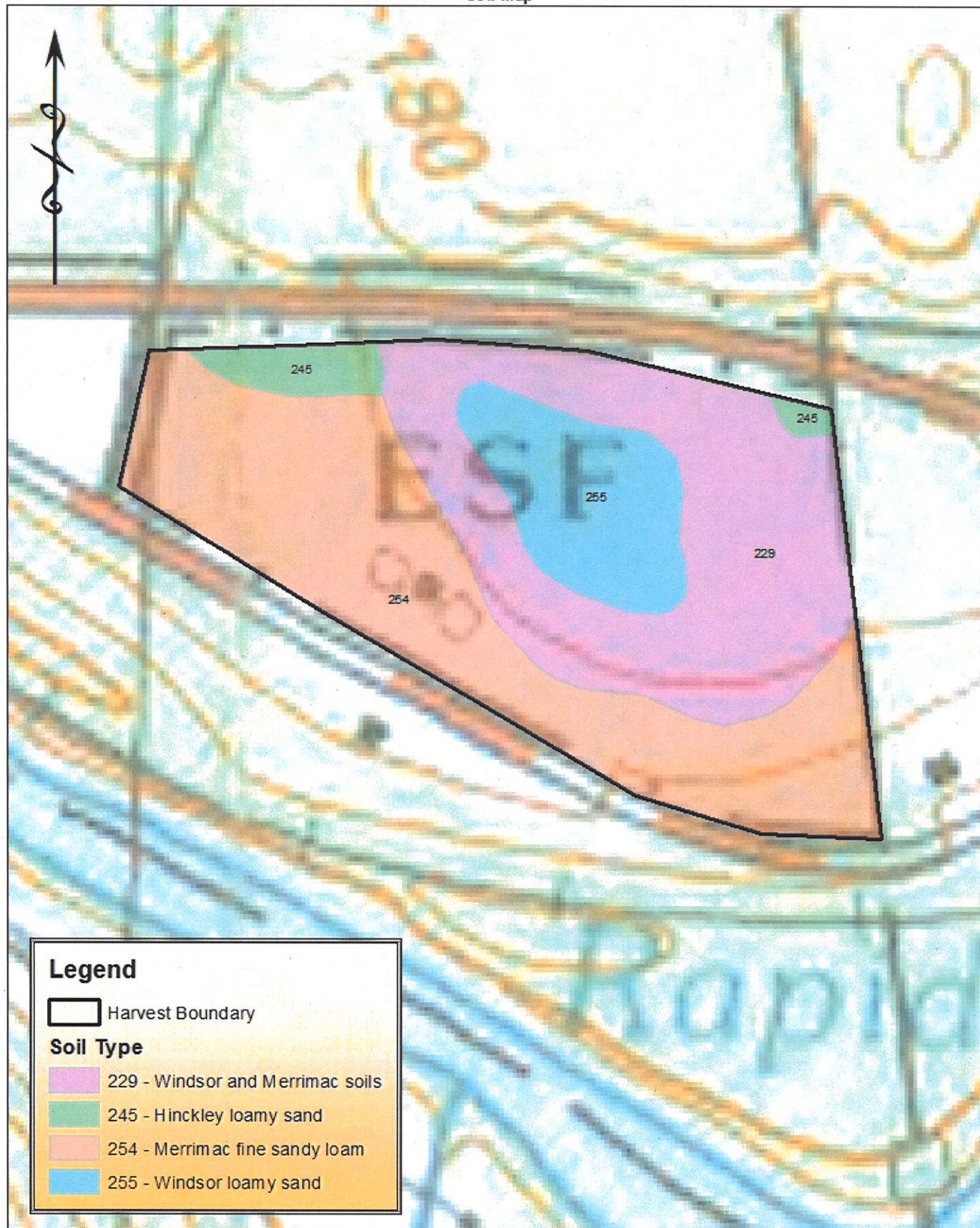
Legend

 Forest Stands

1 inch = 180 feet

Erving State Forest - Red Pine HQ Soil Map

January 2020



1 inch = 2,000 feet

Erving State Forest - Red Pine HQ Locus Map

January 2020

