

Massachusetts Department of Conservation and Recreation
Division of Water Supply Protection, Office of Watershed Management
Forest Management Project Summary

Project Title:

DWSP Harvest Permit Number: 5301
DCR Forest Cutting Plan File Number: 241-33986-23

Site Information

Watershed: Wachusett	Town(s): Princeton
Acres: 59.3	Nearest Road: Houghton Road
Natural Heritage Atlas overlap?:	Public Drinking Water Supply Watershed?: Yes
Forest Types: White pine/hardwood, mixed hardwood	ACEC?: No
Soils: Montauk-Scituate-Canton, Paxton and Woodbridge tills	
Wetland Resources: An intermittent stream flows from north to south along a bench in the topography in the middle of this sale area.	
Vernal Pools: None	

Harvest Information

DWSP Permit Start Date: 9/6/2022	DWSP Permit End Date: 12/12/2024
Number of Wetland Crossings: 3	Number of Stream Crossings: 1

Best Management Practices Applied

Stream Crossings	SC-1 will be bridged or poled depending on conditions.
Filter Strips	No cutting will occur in the filter strips.
Wetland Crossings	The wetland crossings will be corduroyed.
Harvesting in Wetlands	No harvest in wetlands will occur.

DWSP Forester supervising this harvest
Name: Greg Buzzell
Forester License #: 025
Phone #: 774-261-1841

NARRATIVES

General Description/Forest Composition/History:

This property was acquired in 1996 and was previously owned by U.S. Farms Inc. The land was managed by Forester Joe Lee between 1978-1996. Just before the property was purchased in February of 1996, Joe Lee oversaw a shelterwood harvest that covered a larger portion of U.S. Farms land and only a couple sections of this specific area. The harvest resulted in some small stands of young mixed hardwoods and other areas with very advance hardwood and pine regeneration under a mature canopy. There are also sections of interfering mountain laurel on the drier sites, while witch-hazel is more prevalent along the stream. Some sections have no regeneration including areas with mature hemlock which is slowly dying or has died from the hemlock woolly adelgid. White pine is the dominant species within the area and is of fair quality with a lot of multi-stemmed or burly trees. The remaining species on the site are red oak, white oak, black oak, white ash, elm, paper birch, black birch, yellow birch, bigtooth aspen, hemlock, American beech, hophornbeam. Blue beech and black gum are along the stream with pitch pine on the hilltop. Pine snags are prevalent on this site with no stick nests noted. There are several uprooted trees down along the Stillwater River. The site conditions are variable with dry uplands and benches with leaky hillsides followed by very damp lowlands.

The age structure is as follows; 0% 0-20 years old, 4% 21-40 years old, 10% 41-60 years old, 2% 61-80 years old, 84% 81-100 years old and 0% >100 years old.

Site Selection:

The ideal watershed protection forest is one which best serves the function of the land as a producer of high quality drinking water in both short- and long-term. This forest must be vigorous and diverse in tree species and ages, be actively accumulating biomass and actively regenerating. Such a forest will be ideally suited to be resilient to and quickly recover from small- and large-scale disturbances such as diseases, insect infestations, ice storms and hurricanes.

Silvicultural Objectives:

With advance regeneration in some areas and small pockets of a second age class established, this would be an excellent opportunity to create a new well-defined age class within this forest. This will be done by releasing the advance regeneration in some areas and expanding/defining a younger age class around these current small openings. To that end, 7 openings in the overstory will be created, giving the space and light the young trees need to continue to grow and thrive. The openings cover a combine 8.5 acres and range in size from 0.4 to 1.95 acres. Partial overstory removal will happen in 3.3 acres in the south east corner of the sale area. This area has a thick mountain laurel understory so the goal will be to damage the mountain laurel and encourage the establishment of young trees.

Cultural Resources:

This operation was reviewed by the DCR Archeologist. No known or significant historic or archeological resources are currently documented in the project parcel. Any cultural resource features located before or during the forestry project will be protected according to guidelines set forth in the current DWSP's Land Management Program and indicated on harvest maps accordingly.

Wildlife/Rare or Endangered Species:

There are no critical habitats or known rare or endangered plants or wildlife.

FIGURES

Figure 1. Forest Cutting Plan

Figure 2. Maps of harvest area showing approximate boundary, proposed openings and other features

Figure 3. General locus map showing the location of the proposed timber harvest

Figure 4. Pre-Harvest Photographs, A-B

Figure 1. Forest Cutting Plan

Forest Cutting Plan

and Notice of Intent under M.G.L.
Chapter 132 - The Forest Cutting
Practices Act, 304 CMR 11.00
(Effective Date: 1/1/04)

For DCR Use Only:

File Number: 241-33486-23 Case No.
Date Rec'd: 7-29-22 Nat. Hist. NO
Harvest Start: 8-15-22 Nat. Hist. Imp. NO
River Basin: NASHUA Pub. Dr. Wtd. WACHUSETT
Gen. Obj.: LT ALEC NO

Site Information

Location

Town: Princeton Lot: 5301
Road: Houghton Road
Acres: 36.2 Proposed Start Date: 7/15/22
Vol. MBF: 82.8 Vol. Cos.: 136 Vol. Tons: 68

Plan Preparer

Name: Russell Wilcox
Address: 185 Bennett St.

Town, State, Zip: West Boylston, MA, 01583
Phone: 508-792-7800 Ext 312

Type of Preparer: Mass. Licensed Forester

*Mass. Forester License # 426

*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name: OXFORD WSP/OWM Wadsworth/Sandburg
Mailing Address: 80 Beaman St.

Town, State, Zip: West Boylston, MA 01583
Phone: 508-792-7806

Ch61 ☐ Ch61A ☐ Stew ☐ *Case #

Est. Stumpage Value:

Licensed Timber Harvester**

Name: Will be provided when known
Address:

Town, State, Zip:
Phone:

Mass. Lic. Harvester #

** This information may be supplied after the plan is approved, but before work begins

Best Management Practices

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing	DIPLO			
Existing Structure	YES	ST		
Type of Bottom	ML			
Bank Height (ft)	SL			
Stabilization	CO			

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing	NO	30'	20'	
Mitigation	OT	OT	OT	
Stabilization	CO	CO	CO	

Filter Strips

Indicate location on map	FS-1	FS-2	FS-3	FS-4
Width (50', 100', or V.A.)	V.A.			

Harvesting in Wetlands

Indicate location on map	HW-1	HW-2	HW-3	HW-4
Forest Type (see pg 2)				
Acres to be Harvested				
Resid. Basal Area (250000)				

Service Forester Comments

*PLEASE NOTIFY OUR SERVICE FORESTER
AT START OF HARVEST OPERATION
*SKID ROPS AND CROSSING LOCATIONS
PRE-EXISTING

Codes

Type of Property	Type of Crossing	Substrate	Mitigation	Type of Bottom	Note
LF: Mass. Lic. For	C-1: Cutover	SE: Sand	FR: Frozen	LV: Live	App. must be provided DCR with all relevant information before plan may be approved and cutting may begin
LF: Lic. Int. Har	CR: Bridge	ML: Mud	DR: Dry	SL: Stone	Some forest types may require additional permits or other special measures
TR: Timber Rights	FO: Fuel	CO: Cutover	OT: Other	ML: Mud	Consult MA Forestry DAP Manual for further information
LF: Landowner	FO: Fuel	SL: Stone		HR: Stone	
OT: Other	OT: Other	HB: Haystack		OT: Other	
		OT: Other			

If Other (OT) is used in any category an explanation must be given on an attached narrative page

pg 1 of 5

Products to be Harvested*

Species	Mb/Cds	Mb/Cds
White Pine	71	Red Maple
Red Pine		Sugar Maple
Pitch Pine		Red Oak
Hemlock		Black Oak
Spruce		White Oak
Other Softw.		Other Hardw.
White Ash		Total Mb
Beech		Cordwood (Cds)
White Birch		SW Pulp (Lons)
B & Y Birch		NW Pulp (Lons)
Black Cherry		Chips (Tons)

*Note: Volumes and values indicated in the Plan are as reported by the plan preparer and have not been independently verified by the service forester upon approval. Mb = thousand board feet.

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WH	RM		
Acres	49	19		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SH	SH		
Source of Regeneration	ADSE	ADSE		

Landowner Signature

The most important information on a cutting plan is the Landowner's objective, as this will determine which trees will be harvested and which will remain; this decision will also determine the future condition of the forest for decades to come. After having read the Massachusetts Forest Cutting Plan Information Sheet on page one, indicate your objective by checking the appropriate box below.

☒ LT - Long-term Forest Management

Planned management of the forest to achieve one or more of the following objectives: produce immediate and maximize long-term income, enhance wildlife habitat, improve recreational opportunities, protect soil and water quality, or produce forest specialty products.

☐ ST - Short-term Harvest

Harvest of trees with the main intention of producing short-term income with minimal consideration given to improving the future forest condition, which often results in a forest dominated by poor quality and low value species.

I (we) have read the Massachusetts Cutting Plan Information Sheet, and am aware of my (our) management options.

I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

I (we) certify that I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two hundred feet of the area to be harvested.

I (we) understand that the volumes and values (Cds only) in this plan have not been independently verified by the service forester upon approval and will report final values and volumes to the Director or his/her agent if the final figures differ from those reported.

Kelley Freida

Signature of Landowner(s)

7/26/22

Date

Determination and Status *241-33986-23* Final Report and Comments

Approved ☒ Disapproved ☐ Expires *7/29/24*

Chris Lopez *8/9/22*
Signature of Service Forester/Director's Agent Date

I hereby certify that the above described Forest Cutting Plan and all relevant statutes have been substantially complied with.

Signature of Service Forester/Director's Agent Date

Extension: ☐ 1 ☐ 2 Expires *1* Ser. Con. Ints. *1*

Amendment: App 1 ☐ Dis 1 ☐ App 2 ☐ Dis 2 ☐ *1*

Forest Type	Designation of Trees	Type of Cut	Source of Regeneration
WP White Pine	CT Canopy	SH Shelterwood	AD Advanced
WK White Pine	CT Canopy	ST Seed Tree	SE Natural Seed
WH White Pine	CT Canopy	CC Clear Cut	NE Non-Standard System
WC White Pine	CT Canopy	SE Selection	CS Commercial
RP Red Pine	CT Canopy	SA Salvage	DS Direct Seed
SR Red Spruce	CT Canopy	SN Sanitation	OT Other
HK Hemlock	CT Canopy		
HE Hemlock	CT Canopy		
BC Black Cherry	CT Canopy		
BB Black Birch	CT Canopy		
OT Other	CT Canopy		
OM Mixed Oak	CT Canopy		
RM Red Maple	CT Canopy		
BE Beech	CT Canopy		
SE Spruce	CT Canopy		
SM Sugar Maple	CT Canopy		
PP Pitch Pine	CT Canopy		

* If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page

Forest Cutting Plan

Narrative Page

Use only if further explanation is required of information on pages one or two or if "other" was used in any category.

Landowner:

Dar/DWSP

Town:

Princeton

File Number:

241-33986-26

BMPs	<p><u>All haul roads and crossings are pre-existing.</u></p> <p><u>One stream crossing will occur within the second wetland crossing. The stream is an intermittent small stream covered by rocks in an otherwise bare mud section. The rocks maintaining the stream's integrity will be protected through the project. The first wetland crossing is on the transcontinental underground cable route and will be corduroyed accordingly. The third wetland crossing is 20' past the second wetland crossing and the shortest length of the three, it will also be corduroyed.</u></p>
Silviculture	<p><u>In order to release advance regeneration, 7 openings in the overstory are being created, covering 8.5 acres. These openings range from .4 acre to 1.95 acres in size with an average of 1.2 acres. They are well distributed throughout the area taking advantage of the advance regeneration comprised of white pine, oaks and other hardwoods.</u></p> <p><u>Thinning will occur in one area in between the openings covering about 3.5 acres. The thinned area has dense mountain laurel and little to no regeneration.</u></p>
Objectives	<p><u>The main objective of this operation is to diversify the age structure of the forest by removing the overstory in patches thereby releasing the advance regeneration. The current age structure is limited with an insufficient component of young forest.</u></p> <p><u>A secondary objective is to create some ground disturbance and sunlight in the thinned area where regeneration can then take hold and remaining trees can fill in with more space.</u></p>
Other	<p><u>Large pines marked G are to be girdled. Large pines marked CL are to be cut and left.</u></p> <p><u>FS-1 & FS-2 No cutting will take place.</u></p>

dc



COMMONWEALTH OF MASSACHUSETTS
Department of Conservation and Recreation
Division of State Parks and Recreation

FILE # 241.33986.23

W

FOREST CUTTING PLAN CERTIFICATE

Post this in a conspicuous place within the area in which the harvesting operation is to take place.

This certifies that DCR-DWSP WEST BOYLSTON in accordance with the
(Name of Owner) (Address)

provision of M.G.L. Chapter 132, Section 40-46, filed in CLINTON with the Dept. of Conservation
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the
Houghton Rd. lot. (Lot 9301)

Approval Date

8/9/22

Director's Agent

CHRIS CAPONE

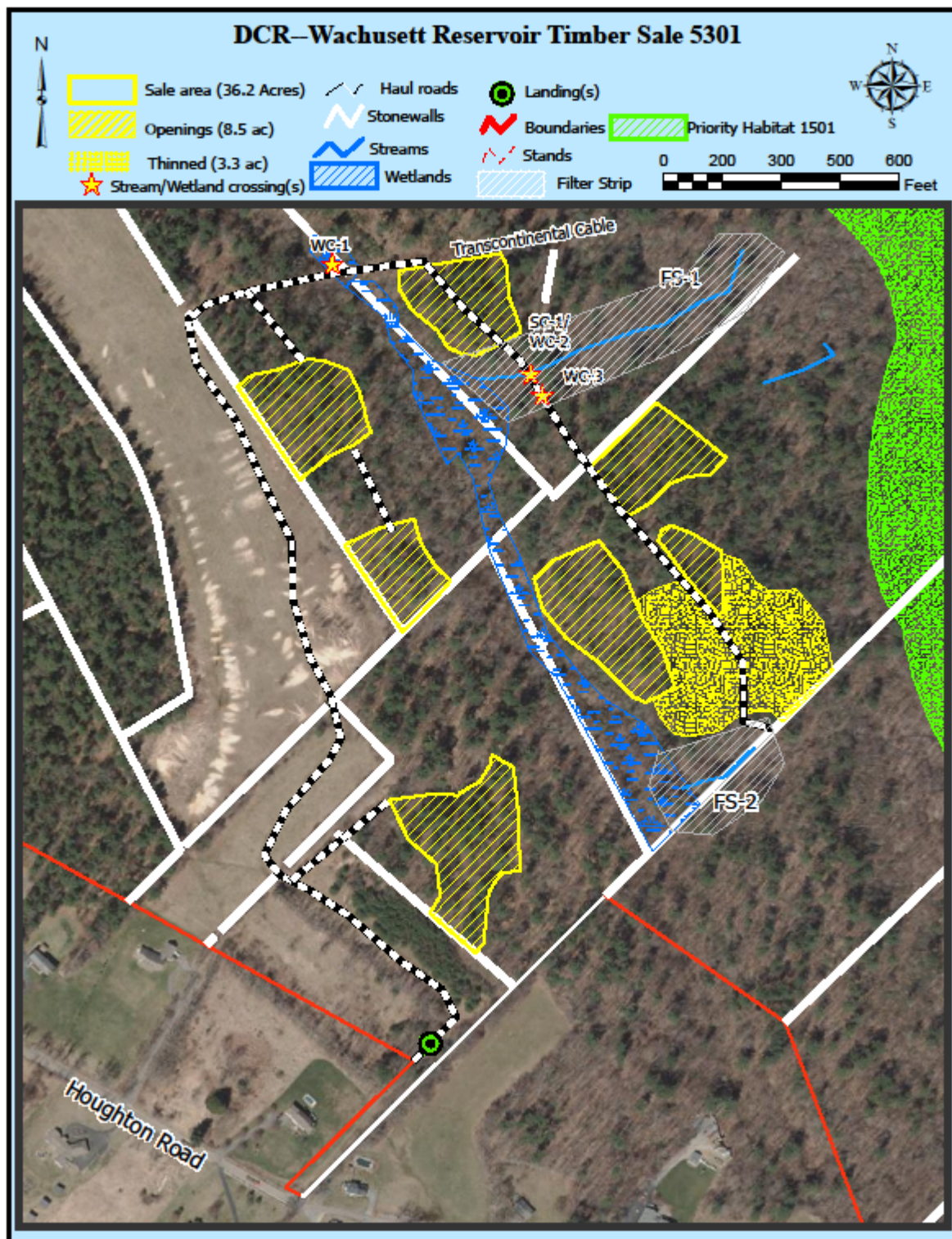
DCR Phone No.

(857) 406-075

ISSUED BY:

Priscilla E. Geigis, Director
Division of State Parks and Recreation

Figure 2. Maps of harvest area showing approximate boundary, proposed openings and other features



DCR-Wachusett Reservoir Timber Sale 5301

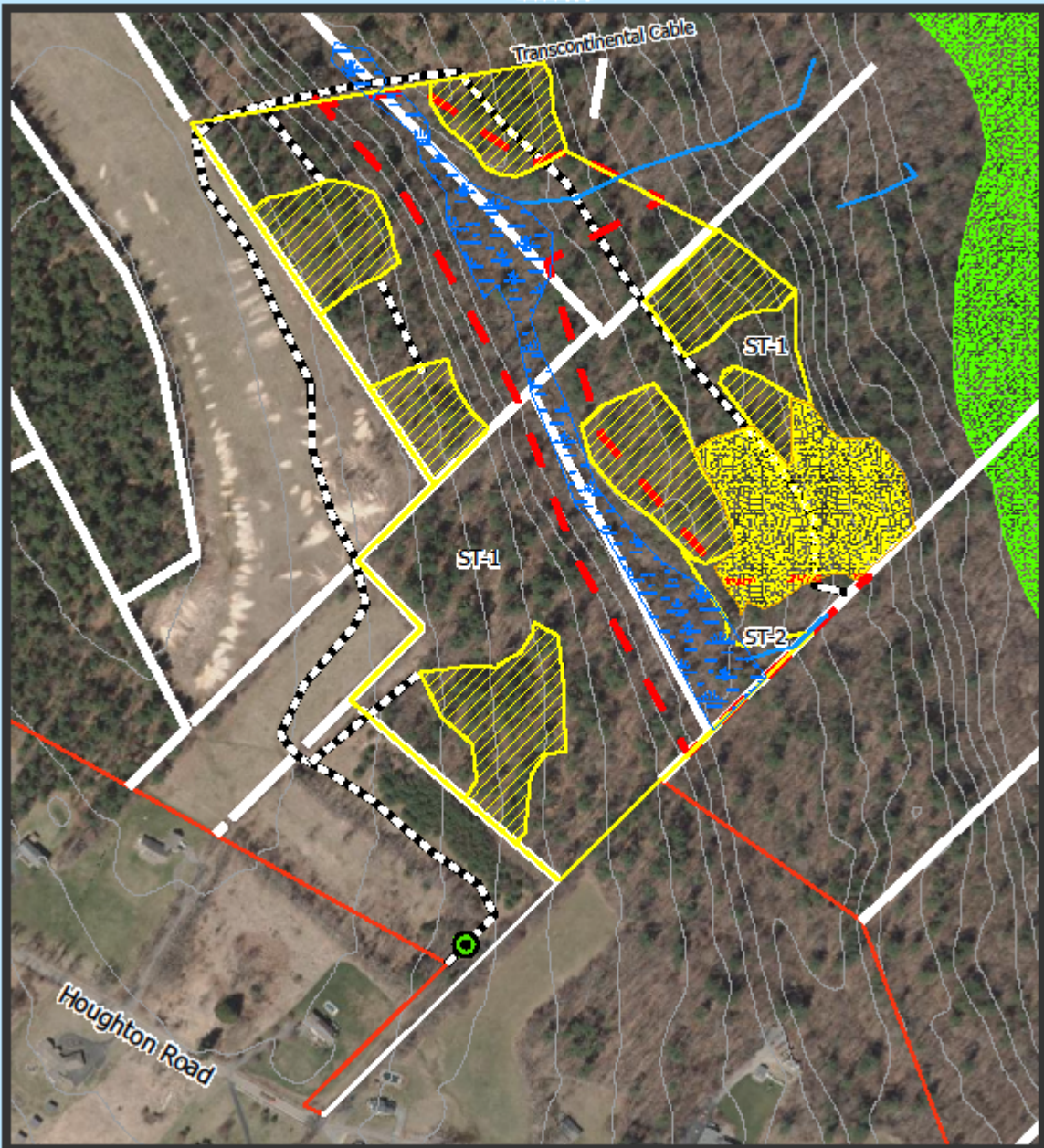


Figure 3. General locus map showing the location of the proposed timber harvest

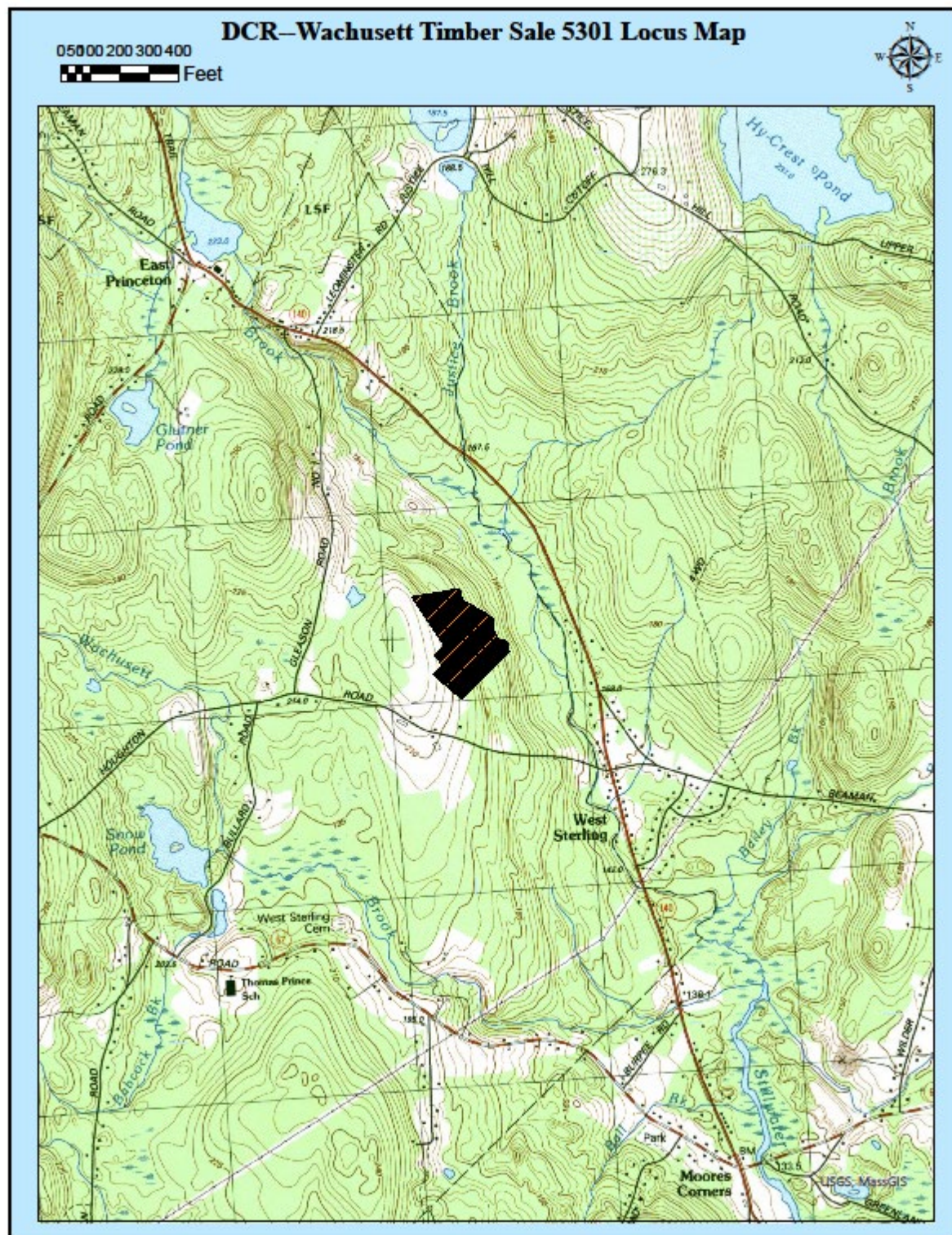


Figure 4. Pre-Harvest Photographs, A-B



A. Looking north within a 1.25-acre overstory removal openings. There is good pine and hardwood regeneration in place that needs more sunlight in order to continue to thrive.



B. Looking southerly through the smallest opening of 0.4 acres.