

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

Project Title: Whitehall/MCRT Pitch Pine/Oak Barren Restoration

DWSP Harvest Permit Number: 4399
DCR Forest Cutting Plan File Number: 257-10909-19

Site Information

Watershed: Ware River Watershed	Town(s): Rutland
Acres: 19.5	Nearest Road: Whitehall Rd
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes
Forest Types: white pine/pitch pine, white pine/hardwood	ACEC¹?: No
Soils: 254 B Merrimac fine sandy loam, 927 C Montauk-Scituate-Canton association	
Wetland Resources: Several streams and a wetland are near the harvest area.	
Vernal Pools present or within 200 feet of harvest : None known	

Harvest Information

Harvest Start Date: 1/14/20	Harvest End Date: 2/11/20
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings	There are no stream crossings.
Filter Strips	There is no harvesting in a filter strip.
Wetland Crossings	There are no wetland crossings.
Harvesting in Wetlands	There is no harvesting in wetlands.

DWSP Forester supervising this harvest
Name: Ken Canfield
Forester License # 431
Phone #: 508-882-3636 X 1603
Email: kenneth.canfield@state.ma.us

¹ACEC: Area of Critical Environmental Concern

NARRATIVE

General Description/Forest Composition/History:

The harvest area is located in Rutland, south of Whitehall Rd and north of the Mass Central Rail Trail (MCRT).

Stand 1 is a 15 acre white pine/pitch pine stand adjacent to the MCRT. The 1938 aerial photos show this area as very open with patches of young trees and shrubs. We believe the area was historically heavily affected by frequent fires. A shelterwood harvest that removed low quality white pine and scots pine was completed in 1992.

Tree species present are eastern white pine, pitch pine, white oak, red oak, scots pine, red maple, black cherry, eastern hemlock, and aspen.

Stand 2 is white pine/hardwood stand. Mature, low quality eastern white pine dominates most of this stand. Red maple, black cherry, red and white oak, and pitch pine are also present. The stand was thinned in 1991.

Invasive shrubs are not prevalent, though glossy buckthorn is present. Some invasive shrubs were hand-pulled during the marking of this lot

The soil is excessively well drained.

Site Selection:

The primary goal of the watershed forest management program is to create and maintain a forest that provides high quality drinking water to current users and future generations. A healthy and resilient forest is comprised of diverse native tree and shrub species and multiple age classes of trees.

Stand 1 was chosen because of the well drained soils, the presence of pitch pine, and the history of fire in the stand. It is the southern most section of a potential barren restoration area that was identified in DWSP's Comprehensive Land Management Plan. This harvest will be the first step in restoring the barren. This type of management will increase the diversity of species and habitat on DWSP land.

Stand 2 was chosen because it is dominated by low quality, mature pasture white pine. These stands are relatively low in diversity of species and ages of trees. Removing the mature overstory trees will release the more diverse natural regeneration that already exists in the understory and establish a more diverse young forest that will be left to grow for decades.

Silvicultural Objectives:

In Stand 1 the objective is to establish a pitch pine/white oak barren. All species of trees except for pitch pine and large healthy white oak will be removed. The result will be a relatively open barren, with scattered overstory pitch pine and white oak. Prescribed fire will be used in the future to maintain the barren.

In stand 2 the objective is to remove low quality, mature, old pasture white pine and expand the 9.4 acre opening that was created in 2007.

Cultural Resources:

Standard practice dictates that every effort is made to avoid disturbing stone walls and other cultural resources.

Wildlife/Rare or Endangered Species:

Several vernal pools are present adjacent to the harvest area. They will be buffered and protected.

FIGURES

Figure 1 Final Forest Cutting Plan

Figure 1 Final Forest Cutting Plan

Final

Forest Cutting Plan

and Notice of Intent under M.G.L. Chapter 132 – The Forest Cutting Practices Act, 304 CMR 11.00 MAY 23 2019
(Effective Date: 3/15/16)

For DCR Use Only:

File Number: <u>257-10409-19</u>	Case No. _____
Date Rec'd: <u>5-23-19</u>	Nat. Hert. _____
Earliest Start: <u>6-10-19</u>	Pub. Dr. Wat. <u>YES</u>
River Basin: <u>CHICPEE</u>	ACEC _____
Gen. Obi. <u>LT</u>	_____

Location

Town Rutland

Road Whitehall Rd

Acres 19.5 Proposed Start Date 8/19

Vol. MBF 83.7 Vol. Cds. 89 Vol. Tons 864

Plan Preparer

Name Kenneth W. Canfield

Address 578 Old Turnpike Rd

Town, State, Zip Oakham, MA 01068

Phone (857) 274-7090

Type of Preparer LF

*Mass. Forester License # 431

*Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR Division of Water Supply Protection

Mailing Address 485 Ware Rd

Town, State, Zip Belchertown, MA 01007

Phone (413) 323-6921

Ch61 61A 61B Stew *Case # _____

FSC CR CR Holder

Licensed Timber Harvester**

Name PIRNER LOGGING & LAND CLEARING

Address 152 WILLIAMSVILLE ROAD

Town, State, Zip HUBBARDSTON, MA 01452

Phone (978) 270-9916

Mass. Lic. Harvester # 2020-587, 2242, 2416, 2417

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

Stream Crossings

Indicate location on map	SC-1	SC-2	SC-3	SC-4
Type of Crossing				
Existing Structure				
Type of Bottom				
Bank Height (ft)				
Stabilization				

Wetland Crossings

Indicate location on map	WC-1	WC-2	WC-3	WC-4
Length of Crossing				
Mitigation				
Stabilization				

Filter Strips

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

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 (>50%)				

Service Forester Comments

*PLEASE NOTIFY DCR SERVICE FORESTER AT START OF OPERATION

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom	Notes:
LF Mass. Lic. For.	CU Culvert	SE Seed	FR Frozen	LE Ledge	Applicant must provide DCR with all relevant information before plan may be approved and cutting may begin.
TH Lic. Tim. Har	BR Bridge	MU Mulch	DR Dry	ST Stony	Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits.
TB Timber Buyer	FO Ford	CO Corduroy	OT Other	MU Mud	Consult MA Forestry BMP Manual for further information.
LO Landowner	PO Poled	ST Stone		GR Gravel	
OT Other	OT Other	HB Hay Bales		OT Other	
		OT Other			

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

pg 3 of 5

Forest Products

Products to be Harvested*

Species	Mbf/Cds		Mbf/Cds
White Pine	79 Mbf	Red Maple	41 Cds
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	4 Mbf
Hemlock		Black Oak	0.7 Mbf
Spruce		White Oak	3 Cds
Other Sftwd.		Other Hdwd.	35 Cds
White Ash		Total Mbf	83.7
Beech		Cordwood (Cds)	89
White Birch		SW Pulp (Tons)	
B & Y Birch		HW Pulp (Tons)	
Black Cherry	9 Cds	Chips (Tons)	864

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

Stand Treatment

Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WH	WP	WH	
Acres	14.8	3.7	1.0	
Landowner Objective	LT	LT	LT	
Designation of Trees	LT	CT	CT	
Type of Cut	OT	SE	SE	
Source of Regeneration	OT	SE	SE	

Landowner

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 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.

Signature of landowner(s)

5-20-19
Date

Service Forester

Determination and Status 257-10909-19 Final Report and Comments

Approved Disapproved Expires 5/23/21

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

Signature of Service Forester/Director's Agent

6/4/19
Date

Signature of Service Forester/Director's Agent

2/12/20
Date

Extension 1 2 Expires / Ser. For. Ints. /

Amendment App 1 Dis 1 App 2 Dis 2 /

Codes

Forest Types				Designation of Trees		Type of Cut		Source of Regeneration					
WP	White Pine	HK	Hemlock	OM	Mixed Oak	CT	Cut Tree	SH	Shelterwood	Intermediate Harvests:	AD	Advanced	
WK	WP/Hem	HH	Hem/Hdwd	RM	Red Maple	LT	Leave Tree	ST	Seed Tree	CT	Commercial Thin	SE	Natural Seed
WH	WP/Hdwd	BC	Blck Cherry	BE	Beech	SB	Stand Boundary	CC	Clear Cut	NT	Non Com Thin	PL	Plant
WO	WP/Oak	BB	Bee/Bir/Map	SF	Spruce/Fir	OT	Other	SE	Selection	Non-Standard Systems:*		CO	Coppice
RP	Red Pine	OH	Oak/Hdwd	SM	Sugar Maple	<u>Landowner Objective</u>		SA	Salvage	HG	Highgrade*	DS	Direct Seed
SR	Red Spruce	OR	N Red Oak	PP	Pitch Pine	LT	Long-term Mgt.	SN	Sanitation	DL	Diameter Limit*	OT	Other
						ST	Short-term Har.			OT	Other*		

*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page pg 4 of 5

Forest Cutting Plan

Narrative Page (Effective Date: 3/15/16)

Use this page to provide further explanation or if Other (OT) was used in any category on pages 3 or 4.

Landowner DCR - DWSP

Town Rutland

File Number 257-10909-19

BMPs

Use this Section to provide further explanation or if Other (OT) was used in any category in the Best Management Practices Section on Page 3.

Stand 1 is a pitch pine/white oak barren restoration harvest. All species except pitch pine and healthy overstory white oak will be removed. Trees to be retained have been marked with orange paint. The post harvest stand will resemble a seed tree harvest with approximately 27 square feet of basal area per acre of desirable overstory species retained on average throughout the stand. Desirable species are not distributed evenly throughout the stand however, so post harvest basal area will range from 0 to 60+ square feet on any given acre. It is the intent of DWSP to use prescribed fire and/or mowing in the future to maintain the barren. Stands 2 and 3 are group selection harvests. Trees will be removed in groups of 1.8 and 1.9 acres in stand 2 and 1.0 acre in stand 3.

Designation of Trees

Use this Section to describe the types of trees to be harvested and/or retained if Other (OT) was used for "Designation of Trees" in the Stand Treatment Section on page 4. Additional narrative description may be added on a separate page.

Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

Regeneration & Future Condition

Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DL, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

Stand No.	Source of Regeneration (ex. AD, SE)	How will Regeneration be obtained/protected?
		If using AD - Describe the species present and how the regeneration will be protected If using SE - Describe the source of the seed and the number of seed trees/acre
1	OT	The purpose of the harvest in this stand is to remove undesirable species in order to restore a pitch pine/white oak barren. DWSP intends to use prescribed fire and/or mowing to control the regeneration of undesirable species in the future.

Stand No. **Desired Future Condition**
Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory

1	The desired future condition of this stand is a pitch pine/white oak barren. This type of habitat is relatively open. The overstory will consist of scattered, healthy, large pitch pine and white oak stems. The understorey will be dominated by ericaceous species such as lowbush blueberry and huckleberry, with some taller shrubs, such as high bush blueberry, serviceberry, and scrub oak scattered sparsely.

Whitehall Rd Rutland, MA
Lot # 4399 - 19.5 acres
MA DCR DWSP
Map by Kenneth W. Canfield
5/15/19
Not a legal survey

WHITEHALL ROAD











ST-1
14.8 acres

ST-2
1.9 acres

ST-2
1.8 acres

ST-3
1.0 acres

Legend

-  Harvest Area
-  Landing
-  Existing Road
-  MA Central Rail Trail
-  Skid Trail
-  Stone Wall
-  Seasonal Stream
-  Stream
-  Wetland
-  Property Boundary

dc
Massachusetts

125 250 500 Feet

Rt 122

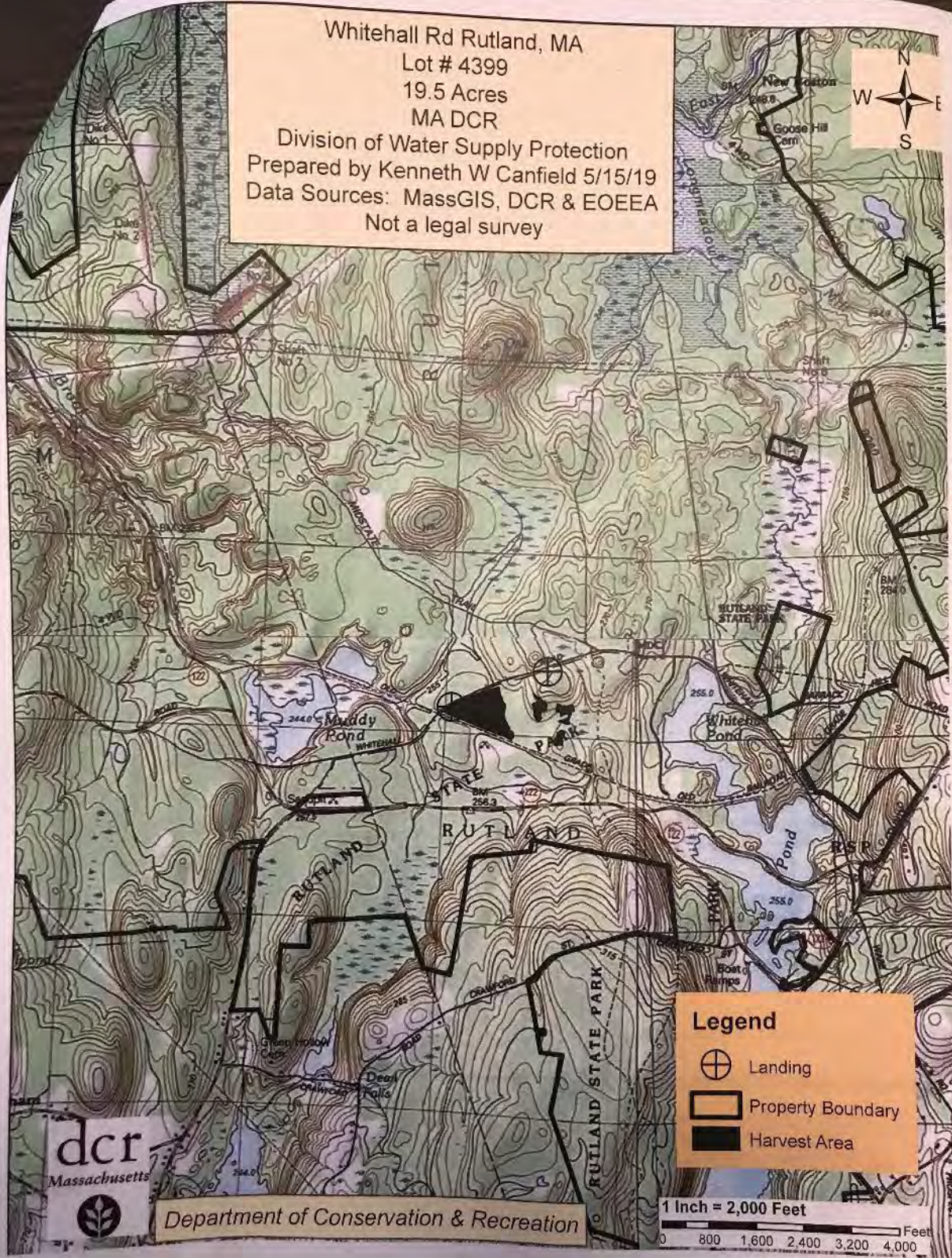
Whitehall Rd Rutland, MA

Lot # 4399

19.5 Acres

MA DCR

Division of Water Supply Protection
Prepared by Kenneth W Canfield 5/15/19
Data Sources: MassGIS, DCR & EOEEA
Not a legal survey



Department of Conservation & Recreation

Legend

- Landing
- Property Boundary
- Harvest Area





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

FILE # 257-10909-19

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 485 WARE ROAD,
(Name of Owner) BELCHERTOWN, MA in accordance with
(Address) 01007

provision of M.G.L. Chapter 132, Section 40-46, filed in CLINTON with the Dept. of Conserva
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the

WHITEHALL RD. lot.

Approval Date 6/4/19
Director's Agent CHRIS CARONE
DCR Phone No. (857) 406-0175

ISSUED BY:

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