

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

**Project Title: Oak Hill**

<b>DWSP Harvest Permit Number: 4391A</b>
<b>DCR Forest Cutting Plan File Number: 257-8344-17</b>

**Site Information**

<b>Watershed:</b> Ware River Watershed	<b>Town(s):</b> Rutland
<b>Acres:</b> 14.0	<b>Nearest Road:</b> Oak Hill Rd
<b>Natural Heritage Atlas overlap?:</b> No	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> White Pine/Hardwood	<b>ACEC?:</b> No
<b>Soils:</b> 910 CWoodbridge-Paxton, moderately well drained, 902E Charlton-Paxton, well drained	
<b>Wetland Resources:</b> Wetlands present adjacent to but outside of harvest area.	
<b>Vernal Pools present or within 200 feet of harvest :</b> None Known	

**Harvest Information**

<b>Harvest Start Date:</b> 8/2/19	<b>Harvest End Date:</b> 11/18/19
<b>Number of Wetland Crossings:</b> None	<b>Number of Stream Crossings:</b> None.

**Best Management Practices Applied**

<b>Stream Crossings</b>	There are no stream crossings.
<b>Filter Strips</b>	There is no harvesting in filter strips.
<b>Wetland Crossings</b>	There are no wetland crossings.
<b>Harvesting in Wetlands</b>	There is no harvesting in wetlands.

<b>DWSP Forester supervising this harvest</b>
<b>Name:</b> Ken Canfield
<b>Forester License #</b> 431
<b>Phone #:</b> 508-882-3636 X 1603
<b>Email:</b> <a href="mailto:kenneth.canfield@state.ma.us">kenneth.canfield@state.ma.us</a>

## **NARRATIVE**

### **General Description/Forest Composition/History:**

This area was used as pasture land until the 1930's. The 1938 aerial photos show that white pine was already established on areas with a little bit of slope, while the flat areas are completely open. The white pine started under these conditions is very low quality.

Overstory tree species diversity is relatively low. The harvest area is dominated by low quality "old pasture" white pine trees that are 80+ years old. Although there are scattered red, black, and white oak, red and sugar maple, and black and yellow birch trees, they make up a very low percentage of overstory trees. Advanced regeneration of all species is present, and is much more balanced in terms of diversity.

### **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. DWSP recognizes that wildlife habitat management and restoration of rare habitats are important secondary goals, where they are compatible with maintaining high quality drinking water.

This area was specifically targeted because there is a 30 + acre stand dominated by poorly formed pasture white pine. That type of stand is relatively low in diversity of overstory tree species. The white pine trees that are present are also more prone to windthrow in a wind event because they are tall and multi-stemmed. The abundant advanced regeneration present consists of a more balanced species mix, and makes it more likely that the resulting stand will be established quickly and will be more diverse.

### **Silvicultural Objectives:**

The silvicultural objective for this lot is to regenerate 14 acres of old pasture white pine stand to a more diverse stand with a higher percentage of dominant or co – dominant hardwood species, especially oak. This will be done in six groups that range in size from 1.4 acres to 4.7 acres, with five of the six groups being 2.0 acres or less.

### **Cultural Resources:**

This land has been determined to not be culturally or archeologically sensitive based on a review by the DCR Archaeologist. Standard practice dictates that every effort is made to avoid disturbing stone walls and other cultural resources. Stonewalls that are present will be crossed using existing barways established in past harvests wherever feasible.

### **Wildlife/Rare or Endangered Species:**

No known vernal pools are present within the lot or within 200 feet of the boundary of the lot.

## **FIGURES**

Figure 1. Final Forest Cutting Plan

Figure 2 A-F. Pre-Harvest Photographs from marked photo points 1 (A-C) and 2 (D-F) taken 9/27/16

Figure 3 A-E: Post-Harvest Photographs taken from marked photo points 1 (A-C) and 2 (D-E) taken 10/15/19

Figure 4 A-E: After 1 growing Season Photographs taken from marked photo points 1 (A-C) and 2 (D-E) taken 8/19/20

Figure 1: Final 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 **AUG 29 2016**  
(Effective Date: 1/1/04)

**For DCR Use Only:**

File Number 257-8344-17 Case No. \_\_\_\_\_  
 Date Rec'd 8/29/16 Nat. Hert. No  
 Earliest Start 9/13/16 Nat. Hert. Imp. N/A  
 River Basin Chicopee Pub. Dr. Wat. Yes  
 Gen. Obj. LT ACEC No

Site Information

**Location**

Town Rutland  
 Road Oak Hill Rd  
 Acres 14 Proposed Start Date 9/16  
 Vol. MBF 9.6 Vol. Cds. 184 Vol. Tons 1062

**Plan Preparer**

Name Kenneth W. Canfield  
 Address 578 Old Turnpike Rd  
 Town, State, Zip Oakham, MA 01068  
 Phone (508) 882-3789 X 1603  
 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 Berkshetown, MA 01007  
 Phone (413) 323-6921  
 Ch61 ☐ 61A ☐ 61B ☐ Stew ☐ \*Case # \_\_\_\_\_  
 CR ☐ CR Holder \_\_\_\_\_

**Licensed Timber Harvester\*\***

Name TIM ROBINSON  
 Address \_\_\_\_\_  
 Town, State, Zip BARRE, MA 01005  
 Phone \_\_\_\_\_  
 Mass. Lic. Harvester # 719  
 \*\*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				
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**

Notify DCR Service Forester when harvest begins

Codes

Type of Preparer	Type of Crossing	Stabilization	Mitigation	Type of Bottom	Note:
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. Some forestry activities, such as prescribed burning and pesticide or fertilizer application may require additional permits. Consult MA Forestry BMP Manual for further information.
DI - Lic. Tim. Har.	BR - Bridge	MU - Mulch	DR - Dry	SE - Stony	
TD - Timber Buyer	FO - Fod	CO - Contour	OT - Other	MU - Mud	
LO - Landowner	PO - Pole	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.



## Products to be Harvested\*

Species	Mbf/Cds		Mbf/Cds
White Pine	6.8 M	Red Maple	1.5 M
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	0.4 M
Hemlock		Black Oak	0.3 M
Spruce		White Oak	
Other Sfwld.		Other Hdwld.	
White Ash		Total Mbf	9.6
Beech		Cordwood (Cds)	184
White Birch		SW Pulp (Tons)	
B & Y Birch	0.7 M	HW Pulp (Tons)	
Black Cherry		Chips (Tons)	1062

\*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. Mbf = thousand board feet.

## Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WH	WH		
Acres	93	4.7		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	SE	CC		
Source of Regeneration	SE	SE		

## 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 (Ch61 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.

Signature of landowner(s)

Date

## Determination and Status

Approved Disapproved Expires

Cutting Plan ☒ ☐ 9/29/18

9/12/16  
Signature of Service Forester/Director's Agent Date

Extension ☒ ☐ Expires 8/21/19 Ser. For. Ints CC

Amendment App 1 ☒ Dis 1 ☐ App 2 ☐ Dis 2 ☐ CC

## Final Report and Comments

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

11/20/19  
Date

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

\*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: 1/1/04)

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

Landowner MA DCR, DWSP

Town Rutland

File Number 257-8344-17

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 white pine/hardwood stand dominated by low quality overstory white pine. Five group selection cuts of 1.4, 1.9, 2, 2, and 2 acres will be harvested, retaining 5 to 10 square feet of basal area per acre of co-dominant hardwoods, mostly white, red, and black oaks. Stand 2 is a white pine hardwood stand that is dominated by low quality overstory white pine. A clearcut of 4.7 acres will be harvested, retaining 5 to 10 square feet of basal area per acre of co-dominant hardwoods, mostly white, red, and black oaks.

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.

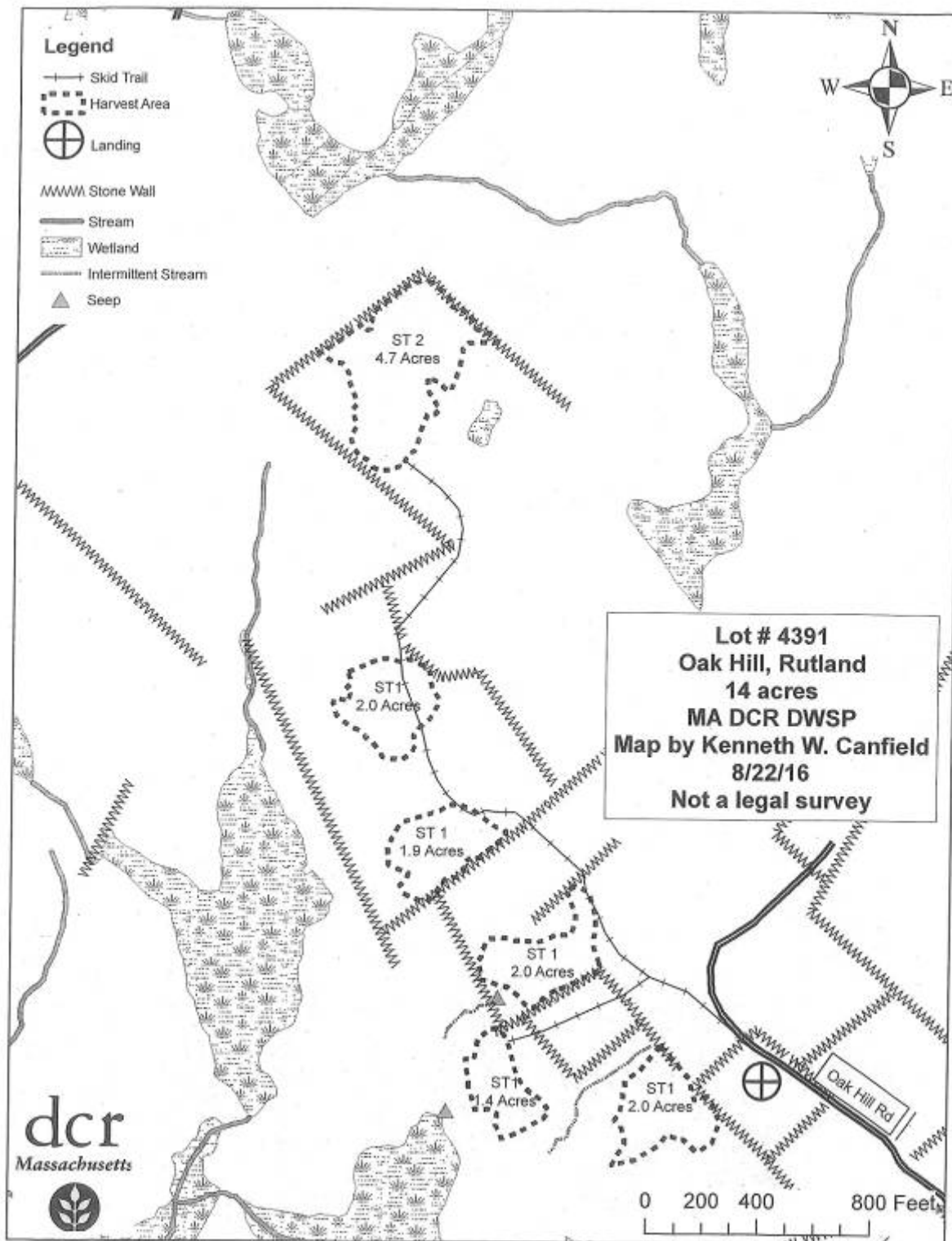
Stand No.	Species to be Cut	Size of Trees to be Cut	Quality of Trees to be Cut	% BA/Acre Removed

Regeneration & Future Condition

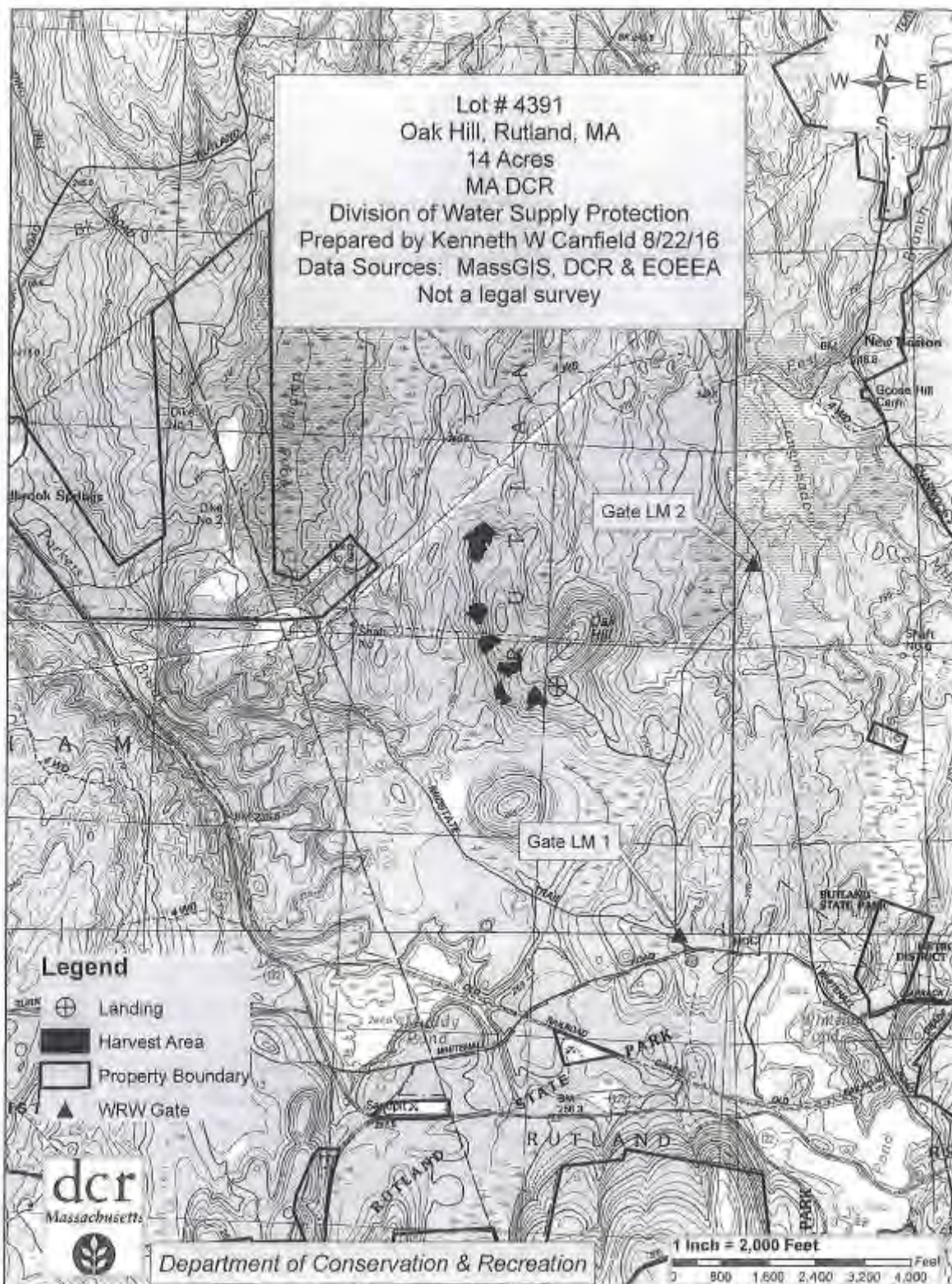
Use this Section to describe how Chapter 132 requirements will be met if a non standard system (HG, DE, or OT) was used for the "Type of Cut" in the Cutting Standards Section on page 4.

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

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







der



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

FILE # 257-8344-17

## 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 DWSP 485 Ware Rd  
(Name of Owner) Belchertown, MA 01021 (Address) in accordance with the

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  
Oak Hill lot.

Approval Date: 9/12/16  
Director's Agent: Kate Margolis  
DCR Phone No. 413-992-8734

ISSUED BY:

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

**Figure 2 A-F: Pre-Harvest Photographs taken from marked photo points 1 (A-C) and 2 (D-F) taken 9/27/16**

A. Point 1 taken 9/27/16





B. Point 1 taken 9/27/16





C. Point 1 taken 9/27/16



D. Point 2 taken 9/27/16





E. Point 2 taken 9/27/16





F. Point taken 9/27/16



**Figure 3 A-E: Post-Harvest Photographs taken from marked photo points 1 (A-C) and 2 (D-E) taken 10/15/19**

A. Point 1 taken 10/15/19





B. Point 1 taken 10/15/19





C. Point 1 taken 10/15/19



D. Point 2 taken 10/15/19





E. Point 2 taken 10/15/19





Figure 4 A-E: After 1 Growing Season Photographs taken from marked photo points 1 (A-C) and 2 (D-E) taken 8/19/20

A. Point 1 taken 8/19/20



B. Point 1 taken 8/19/20





C. Point 1 taken 8/19/20



D. Point 2 taken 8/19/20





E. Point 2 taken 8/19/20

