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

Project Title: Marsh Lane

DWSP Harvest Permit Number: WR 4385	
DCR Forest Cutting Plan File Number: 134-1647-15	

Site Information

Watershed: Ware River	Town(s): Oakham			
Acres: 35	Nearest Road: Marsh Lane, Rt 122			
Natural Heritage Atlas overlap?: Yes	Public Drinking Water Supply Watershed?: Yes			
Forest Types: Oak – Mixed, Dry	ACEC?: No			
Soils: Most of the lot is on 253C Hinckley loamy sand, excessively drained. There is also 927C Montauk-Scituate-				
Canton association, extremely stony, well drained.				
Wetland Resources: Lot is adjacent to wetlands.				
Vernal Pools: No				

Harvest Information

Harvest Start Date: 7/1/15	Harvest End Date: 6/13/16
Number of Wetland Crossings: None	Number of Stream Crossings: None

Best Management Practices Applied

Stream Crossings	There are no stream crossings.
Filter Strips	Filter strips will comply with MA BMP manual variable width.
Wetland Crossings	There are no wetland crossings.
Harvesting in Wetlands	There is no harvesting in wetlands.

DWSP Forester supervising this harvest				
Name: Kenneth W. Canfield				
Forester License #: 431				
Phone #: 508-882-3636 ext.1603				

NARRATIVE

General Description/Forest Composition/History:

This area is mainly pine-oak and pine-hemlock, with a small section of mixed oak. Species present are white pine, red, black, white, and scarlet oak, red maple, hemlock, shagbark hickory, and pitch pine. The overstory health is generally good, though low quality. The understory is made up of white pine and red maple with some oaks, chestnut sprouts, and hemlock. The harvest area is adjacent to a 17 acre overstory removal harvest that was completed in 2001. There has been little recent harvesting within the harvest area.

Invasive shrubs, glossy buckthorn and Japanese barberry, are lightly present on the lot. Hemlock woolly adelgid was also observed on the lot.

The soil is an excessively drained sandy loam.

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. In order to achieve this, DWSP has determined that the forest should contain a diversity of species in various stages of development (seedlings through large mature trees). In addition, the forest should be vigorous; actively growing and regenerating. Forests in this condition are resilient to and quickly recover from small and large scale disturbances such as disease, insect infestation, ice storms and hurricanes.

Silvicultural Objectives:

The main purpose of this harvest is to diversify and regenerate the forest. Small (up to 1/3rd of an acre) groups of trees will be removed, generally in areas where the trees have the lowest vigor and poorest form. In between groups, some thinning will be done to remove low vigor trees. Most snags and trees with stick nests, dens or unusual wildlife habitat characteristics will be retained.

This treatment should increase the diversity of species and will increase the age and structural diversity of the forest as a whole.

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. There are multiple walls on this lot but it is anticipated that none will need to be crossed.

Wildlife/Rare or Endangered Species:

There are no known vernal pools adjacent to the harvest area. There are NHESP critical habitats adjacent to the lot, but NHESP has determined that the harvest will not result in any significant impacts on that habitat. A variety of wildlife such as deer, turkey, coyote and moose are known to frequent the lot and beaver and otter are in adjacent wetlands.

FIGURES

Figure 1 Final Forest Cutting Plan

- Figure 2 A & B Pre-Harvest photographs from marked points 1 and 2 taken 7/2/15
- Figure 3 A & B Post-Harvest photographs from marked points 1 and 2 taken 6/6/16
- Figure 4 A & B After one growing season photographs from marked points 1 and 2 taken 7/17/17

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						****	220322300		
Town Oakham, lot	WR 4385			 	Name <u>DCR</u> , Divis	ion of Wa	ter Suppl	y Protect	ior
Road Worcester R	d (Rt122)				Mailing Address 485	Ware Rd.			
Acres35	Propose	ed Start D	ate <u>5/1</u>	5					
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Plan Preparer					Ch61 🗌 Ch61A [] Stew [*Ca	se #	
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or	Other	ΟŤ	Other	HB OT	Bay Bales Other	OT	Other	Consult MA Forestry BMP Manual for furt	her information.
	If Othe	r (OT) is used i	n any e	ategory an exp	anation must d	e given on	an attached narrative page	pg 3 of 5

Species	Mbf/Cds		Mbf/Cds
White Pine	47.5M	Red Maple	0_5M
Red Pine	ĺ	Sugar Maple	
Pitch Pine		Red Oak	9.9M
Hemlock	0.2M	Black Oak	-
Spruce		White Oak	1.1M
Other Sftwd.		Other Hdwd.	0.2M
White Ash		Total Mbf	59.7
Beech		Cordwood (Cds)	150
White Birch		SW Pulp (Tons)	369
B & Y Birch	0.3M	HW Pulp (Tons)	
Black Cherry		Chips (Tons)	1

*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 wo WK E D 27.9 63 Acres Landowner Objective LT LT Designation of Trees CTCT Type of Cut SE SE Sta Source of Regeneration SE AD/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.

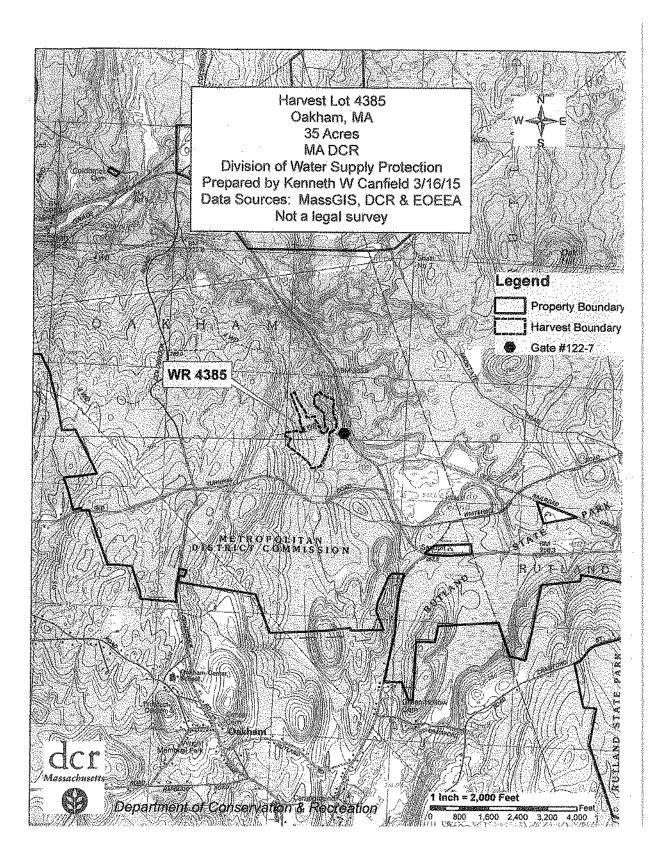
I (we) hereby certify that I (we) have the legal authority to carry out the operation described above.

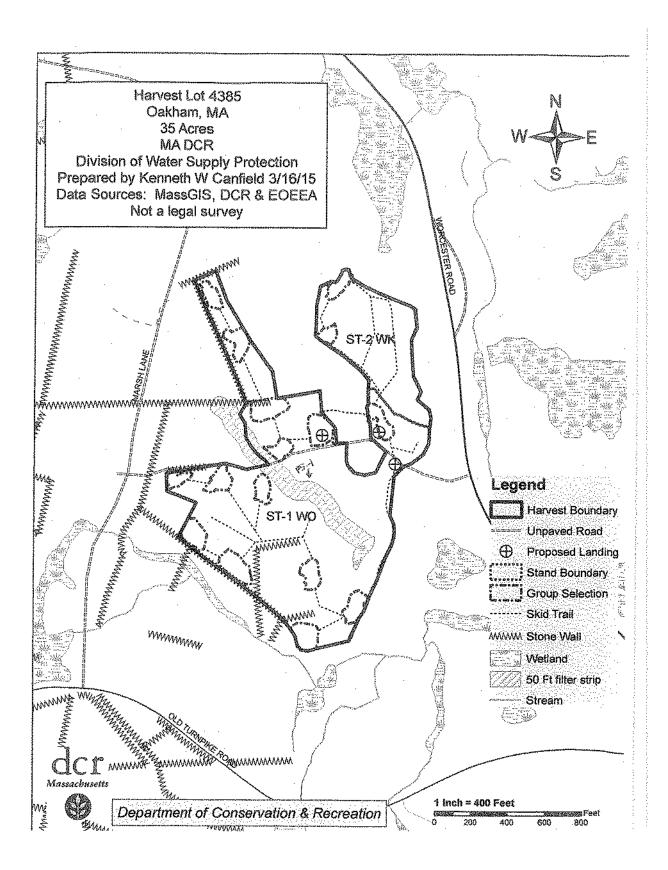
I (we) certify that I (we) have notified the Conservation Commission in the town in which the operation is to take place and the abutters of record within two hundred feet of the area to be harvested.

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.

	Determi	nation ar	nd Status		Final Report and Comments
orester	Cutting Plan	Approved		Expires	I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.
ervice F			r/Director's Ager	n Date	Signature of Service Forester/Director's Agent Date Ints.
ð	Extension	1	4		
Ser	Amendmeni			Dis 2	

andowner





Commonwealth of Massachusetts



Jack Buckley, Acting Director

Kate Marquis

Department of Conservation and Recreation 355 West Boylston St. Clinton, MA 01510

Cutting Plan No.	134-1647-15
NHESP Tracking No	. 15-34302
Town	Oakham
Road	Worcester Road
Landowner	DCR Watershed
Preparer	Kenneth W. Canfield
Date	April 10, 2015

Dear Kate,

The Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife (the Division) has reviewed the above-referenced Forest Cutting Plan (hereinafter "the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(6)). Based on details of the Plan and information in the NHESP database, the Division does not expect activities proposed in the Plan to negatively impact Estimated Habitat or result in "Take" (as defined in 321 CMR 10.02) of plant or animal species protocted under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). Therefore, the Division does not require that the Plan be modified at this time.

Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact Brent Powers at (508) 389-6354.

Sincerely,

Thomas W. French, Ph.D. Assistant Director

Co: Conservation Commission (via e-mail)

page 1 of I

www.mass.gov/nhesp



Natural Heritage & Endangered Species Program 1 Rabbit Hill Road Westborough, Ma 01581 Tel: (508) 389-6360 Fax: (508) 389-7890

dcr COMMONWEALTH OF MASSACHUSETTS Department of Conservation and Recreation Division of State Parks and Recreation	FILE # 134-1647-15
FOREST CUTTING PLAN CERT	
Post this in a conspicuous place within the area in which the harvest This certifies that DCR DWSP 475 W (Name of Owner) (Add	ing operation is to take place. LINE. Red Betecher Tomin accordance with the iress)
and Recreation, Division of State Parks and Recreation, a Notice of I	with the Dept. of Conservation
Approval Date 4/14/2015 Director's Agent Kate Marguts DCR Phone No. (413) 992 - 8734	ISSUED BY: Quile Juger Priscilla E. Geigis, Director Division of State Parks and Recreation

Figure 2 A & B Pre-Harvest photographs from marked points 1 and 2 taken 7/2/15

A. From point 1 taken 7/2/15



B. From point 2 taken 7/2/15



Figure 3 A & B Post-Harvest photographs from marked points 1 and 2 taken 6/6/16

A. From point 1 taken 6/6/16



B. From point 2 taken 6/6/16



Figure 4 A & B After one growing season photographs from marked points 1 and 2 taken 7/17/17

A. From point 1 taken 7/17/17



B. From point 2 taken 7/17/17

