

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

Project Title: Dodge Hill
DWSP Harvest Permit Number: 2055
DWSP Proposal ID: PE-18-06
DCR Forest Cutting Plan File Number: 230.11188.19

Site Information

Watershed: Quabbin
Town(s): Pelham
Acres: 33
Nearest Road: Packardville Road
Natural Heritage Atlas overlap?: No
Public Drinking Water Supply Watershed?: Yes
Forest Types: white pine, white pine/oak
Area of Critical Environmental Concern (ACEC)?: No
Soils: Canton fine sandy loam and Charlton-Hollis-rock outcrop
Wetland Resources: none
Vernal Pools: none known

Harvest Information

Harvest Start Date: 11/12/2020
Harvest End Date: 12/4/2020
Number of Wetland Crossings: none
Number of Stream Crossings: none

Best Management Practices Applied

Stream Crossings: no crossings
Filter Strips: a single variable width filter strip determined by slope as directed by Massachusetts Best Management Practices
Wetland Crossings: none
Harvesting in Wetlands: no wetlands

DWSP Forester supervising this harvest

Name: Richard MacLean & Herm Eck
Forester License number: 63 (Eck)
Phone number: 413-323-6921 x 553
Email: richard.maclean@mass.gov

Narrative

General Description/Forest Composition/History

The lot is predominately white pine/oak with some white pine/hardwood and a small section of regenerating white pine. Moving from north to south the lot climbs Davis hill and wraps around a red pine plantation removal harvested in 2003.

At the landing and north the forest cover is white pine/hardwood with near monoculture sections of white pine with some healthy white pine regeneration available for release. There is some seed source available for a diversity of hardwoods including pole to saw log sized northern red oak, yellow birch, red maple, and paper birch. There are some scattered large saw log sized northern red oak, primarily along the eastern edge on the cover type change/lot boundary. White pine/oak cover dominates the southern end and is well to densely stocked (~110 ft² sawlog / ac average). Hardwoods are being preferred for retention, with some white pine retained along the edge of regeneration openings as well. Regeneration openings throughout the lot have some portion covered in early white pine regeneration ready for release, with some hardwood (especially red oak) advanced regeneration present as well.

Prior harvests include several harvests of the red pine before the final removal in 2003, some thinning in 1981 and 1982 in the north and central section, and a small patch selection harvest in 1994 in the southern end. This harvest will further diversify the age structure of the northwesterly adjacent 30+ year old patches and 20+ year old southern patches.

Site Selection

The primary goal of harvesting on the watershed is to create and maintain a forest that is resilient to and can quickly recover from small and large scale disturbances such as diseases, insect infestations, ice storms and hurricanes, all of which are becoming increasingly common. The ideal way to achieve this is to have a diversity of species in various stages of development (seedlings through large legacy trees) that are actively growing and regenerating. This combination of structural and species diversity builds resistance and resilience into the forest.

This harvest aims to increase the species diversity of the area by removing the monoculture white pine stands and favoring oak and tall/well-formed white pine for the edge and interior retention. Finally, this harvest will improve quality and overall vigor of the forest by removing poorly formed white pine. Advanced white pine and oak seedlings will be released by the white pine removal. The white pine in the northern section contains a large amount of coarse multi-stemmed individuals.

Silvicultural Objectives

The silvicultural objectives at this site will focus on species diversity and disturbance resilience. The first goal will be to increase species diversity by treating the monoculture white pine with large green retention openings (approaching 2 acres for the white pine stands). Removal of poorly formed white pine will also help improve disturbance resiliency regarding large storm events. The poorly formed white pine will be replaced by shorter more vigorous mixed species regeneration. There was an abundant oak seed catch two years ago that will provide opportunity for oak regeneration in the pine stands. Additionally, the opening placed in the white pine stands have > 10 sq ft of basal area green tree retention to provide further seed for regeneration.

Cultural Resources

Existing cultural resources, including the foundations of the home and barn of William Cabot, have been flagged and will be avoided during harvest. Existing barways (breaks in walls) were utilized where feasible in order to minimize damage.

Rare or Endangered Species

The lot contains no known rare or endangered species.

Figures

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: 3/15/16)

Site Information	Location					
	Town	Pelham				
	Road	Packardville Rd - Quabbin Lot 2055				
	Acres	33	Proposed Start Date	Summer 2019		
	Vol. MBF	55.7	Vol. Cds.	31		
	Vol. Tons	166				
	Plan Preparer					
	Name	Herm Eck & Richard MacLean				
	Address	DCR DWSP- Quabbin Reservoir 485 Ware Road				
	Town, State, Zip	Belchertown, MA 01007				
Phone	(413) 213-7950					
Type of Preparer	Mass Licensed Forester					
*Mass. Forester License # 63						
*Required for land under Ch61, Ch61A or Forest Stewardship						
Best Management Practices	Stream Crossings					
	Indicate location on map	SC-1	SC-2	SC-3		
	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						
Codes	Filter Strips					
	Indicate location on map	FS-1	FS-2	FS-3		
	Width (50', 100', or VA)	VA				
	FS-4					
	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.
	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		

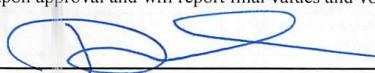
If Other (OT) is used in any category an explanation must be given on an attached narrative page

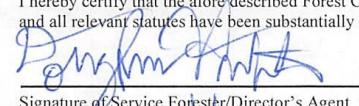
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Figure 1a: Forest Cutting Plan pg. 1.

Products to be Harvested*			
Species	Mbf/Cds		Mbf/Cds
White Pine	51	Red Maple	1.1
Red Pine	.7	Sugar Maple	
Pitch Pine		Red Oak	1.4
Hemlock		Black Oak	
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	55.7
Beech		Cordwood (Cds)	31
White Birch		SW Pulp (Tons)	166
B & Y Birch	1.6	HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

Stand Treatment	Cutting Standards			
Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WO	WH	WP	
Acres	24.6	7.5	.9	
Landowner Objective	LT	LT	LT	
Designation of Trees	CT	CT	CT	
Type of Cut	SE	SE	SE	
Source of Regeneration	AD	AD	AD	

Landowner Signature	
<p>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.</p>	
<p><input checked="" type="checkbox"/> 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.</p>	
<p><input type="checkbox"/> 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.</p>	
<p>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.</p>	
	
<p>6-6-19</p>	
<p>Signature of landowner(s)</p>	
<p>Date</p>	

Determination and Status: 230-11188-19		Final Report and Comments																																																																
Approved	Disapproved	Expires																																																																
<input checked="" type="checkbox"/> Cutting Plan 		6/12/21																																																																
<input type="checkbox"/> Signature of Service Forester/Director's Agent SITE VISIT 6/18/19		6/19/19																																																																
Extension	1 <input type="checkbox"/> 2 <input type="checkbox"/>	Expires	Ser. For. Ints.																																																															
Amendment	App 1 <input type="checkbox"/> Dis 1 <input type="checkbox"/> App 2 <input type="checkbox"/> Dis 2 <input type="checkbox"/>	/	/																																																															
<p>Codes</p> <table border="1"> <thead> <tr> <th colspan="2">Forest Types</th> <th colspan="2">Designation of Trees</th> <th>Type of Cut</th> <th>Intermediate Harvests:</th> <th>Source of Regeneration</th> </tr> </thead> <tbody> <tr> <td>WP</td> <td>White Pine</td> <td>HK</td> <td>Hemlock</td> <td>CT</td> <td>Cut Tree</td> <td>AD Advanced</td> </tr> <tr> <td>WK</td> <td>WP/Hem</td> <td>HH</td> <td>Hem/Hdwd</td> <td>ST</td> <td>Shelterwood</td> <td>SE Natural Seed</td> </tr> <tr> <td>WH</td> <td>WP/Hdwd</td> <td>BC</td> <td>Blck Cherry</td> <td>LT</td> <td>Leave Tree</td> <td>PL Plant</td> </tr> <tr> <td>WO</td> <td>WP/Oak</td> <td>BB</td> <td>Bee/Bir/Map</td> <td>SB</td> <td>Stand Boundary</td> <td>CO Coppice</td> </tr> <tr> <td>RP</td> <td>Red Pine</td> <td>OH</td> <td>Oak/Hdwd</td> <td>OT</td> <td>Other</td> <td>DS Direct Seed</td> </tr> <tr> <td>SR</td> <td>Red Spruce</td> <td>OR</td> <td>N Red Oak</td> <td>Landowner Objective</td> <td>SA Salvage</td> <td>OT Other*</td> </tr> <tr> <td></td> <td></td> <td>PP</td> <td>Pitch Pine</td> <td>LT</td> <td>Highgrade*</td> <td></td> </tr> <tr> <td></td> <td></td> <td>ST</td> <td>Short-term Har.</td> <td>SN</td> <td>Diameter Limit*</td> <td></td> </tr> </tbody> </table>		Forest Types		Designation of Trees		Type of Cut	Intermediate Harvests:	Source of Regeneration	WP	White Pine	HK	Hemlock	CT	Cut Tree	AD Advanced	WK	WP/Hem	HH	Hem/Hdwd	ST	Shelterwood	SE Natural Seed	WH	WP/Hdwd	BC	Blck Cherry	LT	Leave Tree	PL Plant	WO	WP/Oak	BB	Bee/Bir/Map	SB	Stand Boundary	CO Coppice	RP	Red Pine	OH	Oak/Hdwd	OT	Other	DS Direct Seed	SR	Red Spruce	OR	N Red Oak	Landowner Objective	SA Salvage	OT Other*			PP	Pitch Pine	LT	Highgrade*				ST	Short-term Har.	SN	Diameter Limit*		<p>I hereby certify that the afore-described Forest Cutting Plan and all relevant statutes have been substantially complied with.</p> <p> SITE VISIT 12/1/20</p>	
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*If Other (OT) or a non-standard system is used an explanation must be given on attached narrative page

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Figure 1b: Forest Cutting Plan pg. 2.

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

Landowner DCR-DWSP QUARRIN
Town PELHAM
File Number 230-11188-19

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.

Cut trees in blue, horizontal line is a sawlog, dot is pulp/cordwood, X is a cull. Orange is retention/edge of opening. In regeneration openings orange line with a dot denotes opening edge, a horizontal line alone always represents save trees. Skid roads marked in blue vertical line or blue flagging. An orange and blue x is a cull to be girdled or felled and left.

BMPs

Designation of Trees

Regeneration & Future Condition

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.

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

Stand No

Desired Future Condition

Desired Future Condition

Describe what the stand is expected to look like five years from the harvest, including the condition of the overstory & understory

Describe what the state is expected to look like 175 years from the survey, including the condition of the roadway, infrastructure, and environment.

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Figure 1c: Forest Cutting Plan pg 3.

**Locus Map
Quabbin Lot 2055**

Packardville Rd.

Pelham, MA

Prepared by:

Richard G MacLean

MA DCR DWSP

11/25/2019

Data sources:
MassGIS, DCR, & EOEEA

TownLines

DCR Boundary

Landing

Harvest Boundary

Principal Arterial

Major Collector

Minor Collector

local road

DCR Roads

Stream/River: Perennial

Stream/River: Intermittent

Canal/Ditch

N



Scale: 1:24,000

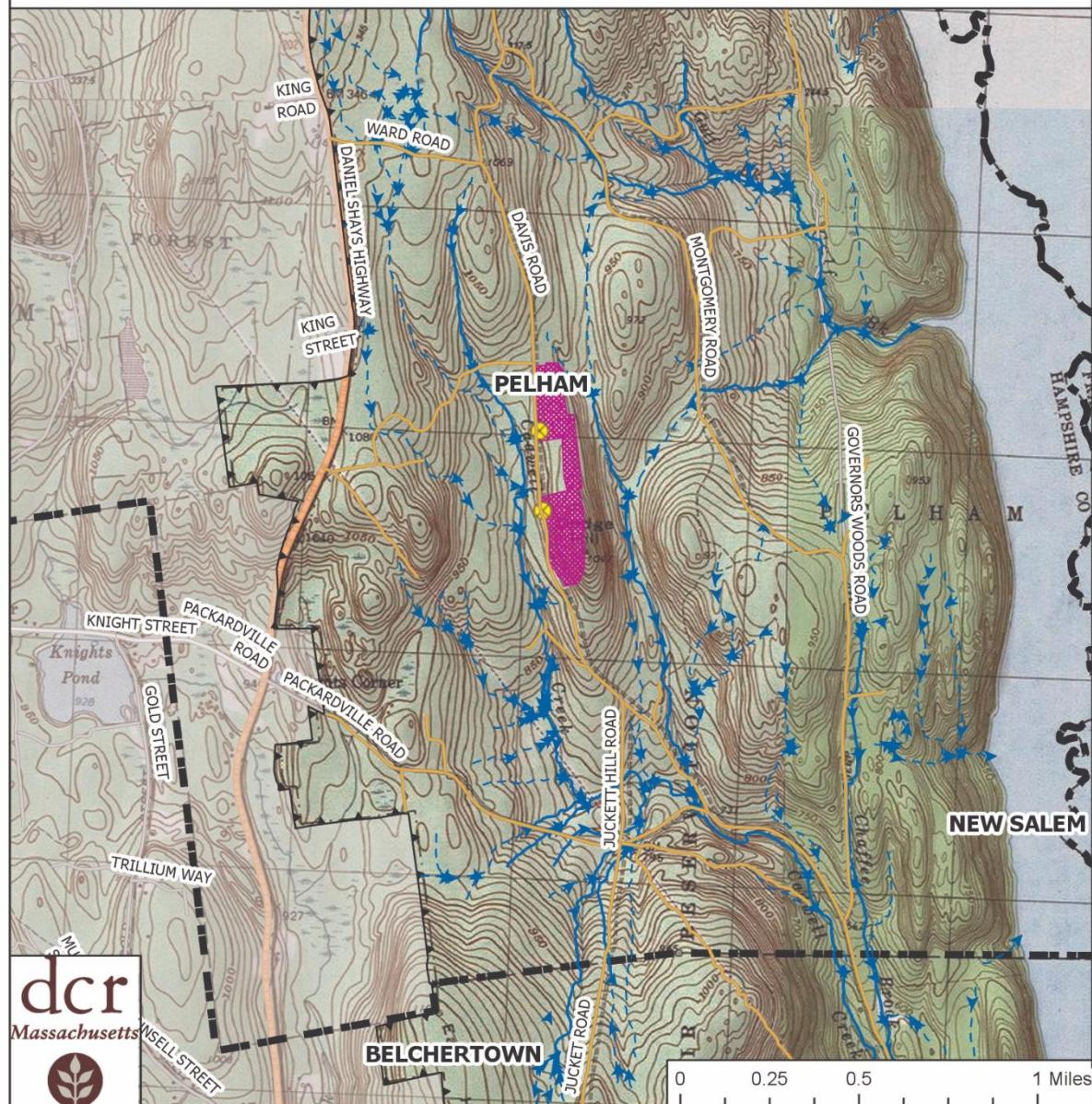


Figure 1d: Forest Cutting Plan pg. 4.

Stand Map Quabbin Lot 2055

Packardville Rd.
Pelham, MA
Prepared by:
Richard G MacLean
MA DCR DWSP

11/25/2019
Data sources:
MassGIS, DCR, & EOEEA

Scale: 1:5,400

- Landing
- Proposed Skid Trail
- Existing Skid Trail
- ▨ group opening
- ▨ group with green retention
- ▨ Sale Boundary
- ST-1 WO
- ST-2 WH
- ST-3 WP
- ▨ Filter Strip
- Stream/River: Perennial
- Stream/River: Intermittent
- ▨ Wetland
- QRL_HistoricSites
- Stone Walls
- DCR Road
- Utility ROW

0 250 500 Feet

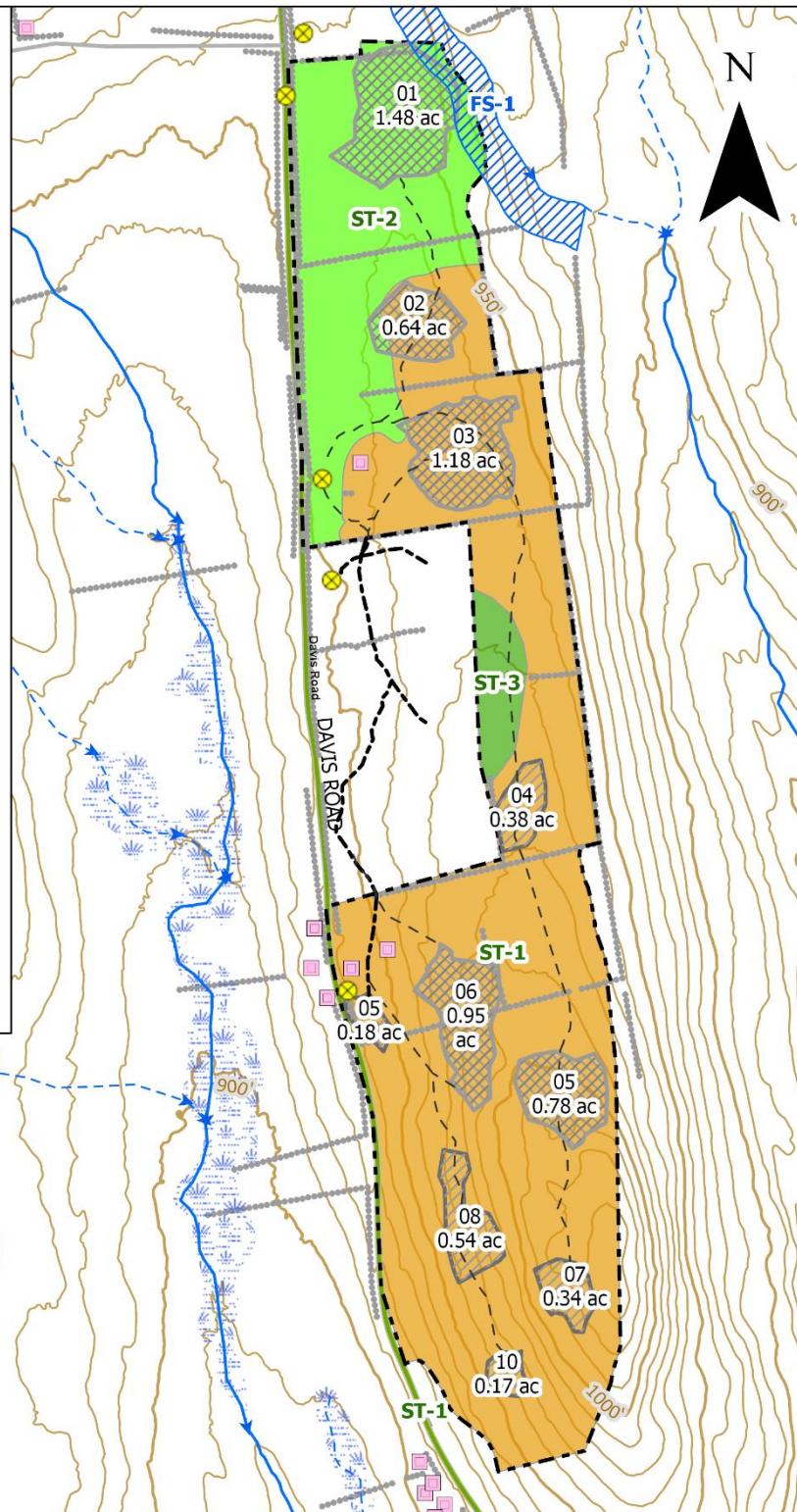


Figure 1e: Forest Cutting Plan pg. 5.



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

FILE # 230-11188-19

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 DCP-DNSP Quabbin 485 Ware Rd, Belchertown, in accordance with the
(Name of Owner) (Address) MA 01007

provision of M.G.L. Chapter 132, Section 40-46, filed in Amherst F.O. with the Dept. of Conservation
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the
Quabbin 2055 lot, Packardville Rd, Pelham, MA

Approval Date 6/19/19
Director's Agent Doug Hutcheson
DCR Phone No. 413-545-7020 (o)
413-237-9713 (c)

ISSUED BY:


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

Figure 1f: Forest Cutting Plan pg. 6

Figure 2. *Post Harvest Pictures*



Figure 2a: Photo Point post-harvest, 10/2021



Figure 2b: Photo Point one year post harvest, 8/2022



Figure 2c: Photo Point two years post-harvest, 8/2023.



Figure 2c: Photo Point three years post-harvest, 8/2024.