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 Rd.
Natural Heritage Atlas overlap?: No	**Public Drinking Water Supply Watershed?:** Yes
Forest Types: White Pine, White Pine/Oak	**ACEC?:** No
Soils: The dominant soil types are: Canton fine sandy loam and Charlton-Hollis-Rock outcrop.	
Wetland Resources: none present.	
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 stream 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	None

DWSP Forester supervising this harvest
Name: Richard MacLean & Herm Eck
Forester License #: 63 (Eck)
Phone #: 413-323-6921 x 553
Email: richard.maclean@state.ma.us

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 ft^2 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)

For DCR Use Only:

File Number	230-11188-19	Case No.	
Date Rec'd	6.12.19	Nat. Hert.	N
Earliest Start	6.27.19	Pub. Dr. Wat.	QUABBIN
River Basin	CHICOPEE	ACEC	N
Gen. Obj.	LT	NAT. HER. IMPACT	N

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

Landowner

Name: DCR-DWSP Quabbin Ware Region
Mailing Address: 485 Ware Rd
Town, State, Zip: Belchertown, MA 01007
Phone: (413)213-7950 | (413)213-7949
Ch61☐ 61A☐ 61B☐ Stew☐ *Case #
FSC☐ CR☐ CR Holder

Licensed Timber Harvester**

Name: TBD pls provide to DCR
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				
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)	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

Codes

Type of Preparer		Type of Crossing		Stabilization		Mitigation		Type of Bottom	
LF	Mass. Lic. For.	CU	Culvert	SE	Seed	FR	Frozen	LE	Ledge
TH	Lic. Tim. Har	BR	Bridge	MU	Mulch	DR	Dry	ST	Stony
TB	Timber Buyer	FO	Ford	CO	Corduroy	OT	Other	MU	Mud
LO	Landowner	PO	Poled	ST	Stone			GR	Gravel
OT	Other	OT	Other	HB	Hay Bales			OT	Other
				OT	Other				

Note:
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.

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

Figure 1a: Forest Cutting Plan pg. 1.

Forest Products

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)**	

*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	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

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) — Date: 6-6-19

Service Forester

Determination and Status 230-11188-19

	Approved	Disapproved	Expires
Cutting Plan	☒	☐	6/12/21

Signature of Service Forester/Director's Agent — Date: 6/19/19

SITE VISIT 6/18/19

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

	App 1	Dis 1	App 2	Dis 2	
Amendment	☐	☐	☐	☐	/

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 — Date: 12/15/20

SITE VISIT 12/1/20

Codes

Forest Types

WP	White Pine	HK	Hemlock	OM	Mixed Oak
WK	WP/Hem	HH	Hem/Hdwd	RM	Red Maple
WH	WP/Hdwd	BC	Blck Cherry	BE	Beech
WO	WP/Oak	BB	Bee/Bir/Map	SF	Spruce/Fir
RP	Red Pine	OH	Oak/Hdwd	SM	Sugar Maple
SR	Red Spruce	OR	N Red Oak	PP	Pitch Pine

Designation of Trees

CT	Cut Tree
LT	Leave Tree
SB	Stand Boundary
OT	Other

Landowner Objective

LT	Long-term Mgt.
ST	Short-term Har.

Type of Cut

SH	Shelterwood	**Intermediate Harvests:**	
ST	Seed Tree	CT	Commercial Thin
CC	Clear Cut	NT	Non Com Thin
SE	Selection	**Non-Standard Systems:***	
SA	Salvage	HG	Highgrade*
SN	Sanitation	DL	Diameter Limit*
		OT	Other*

Source of Regeneration

AD	Advanced
SE	Natural Seed
PL	Plant
CO	Coppice
DS	Direct Seed
OT	Other

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

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 or 4.

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

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.

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.

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.

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

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

Figure 1c: Forest Cutting Plan pg 3.

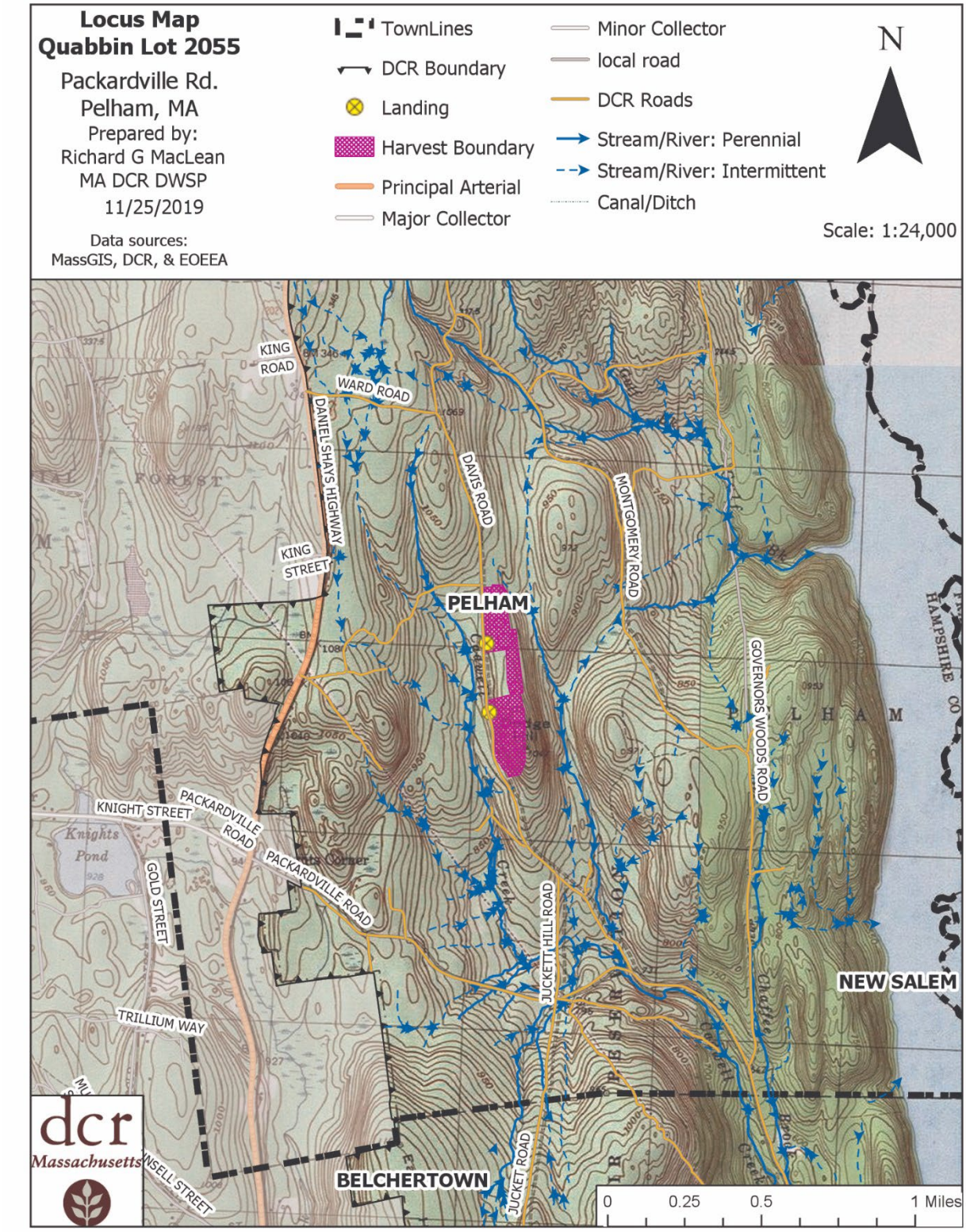


Figure 1d: Forest Cutting Plan pg. 4.

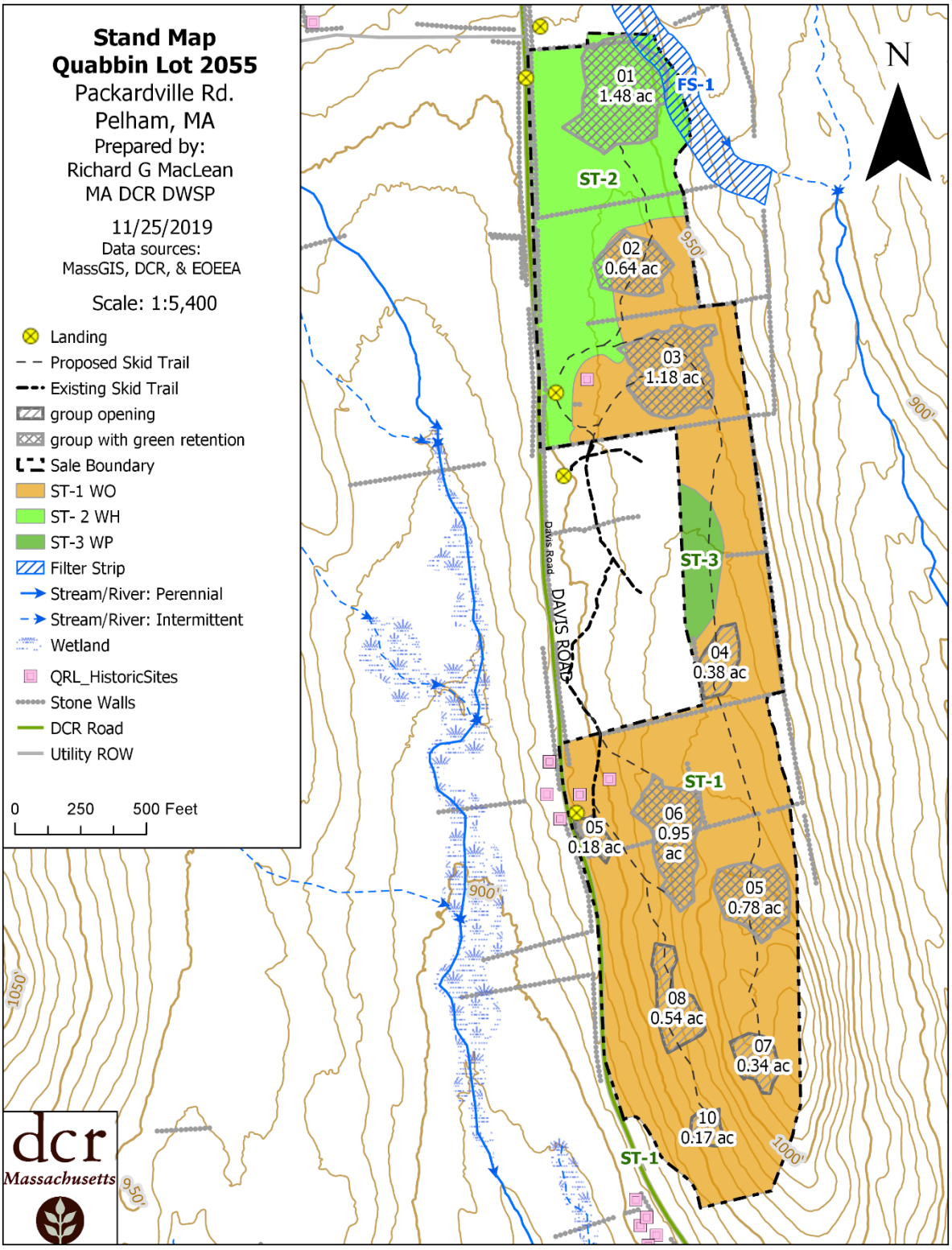
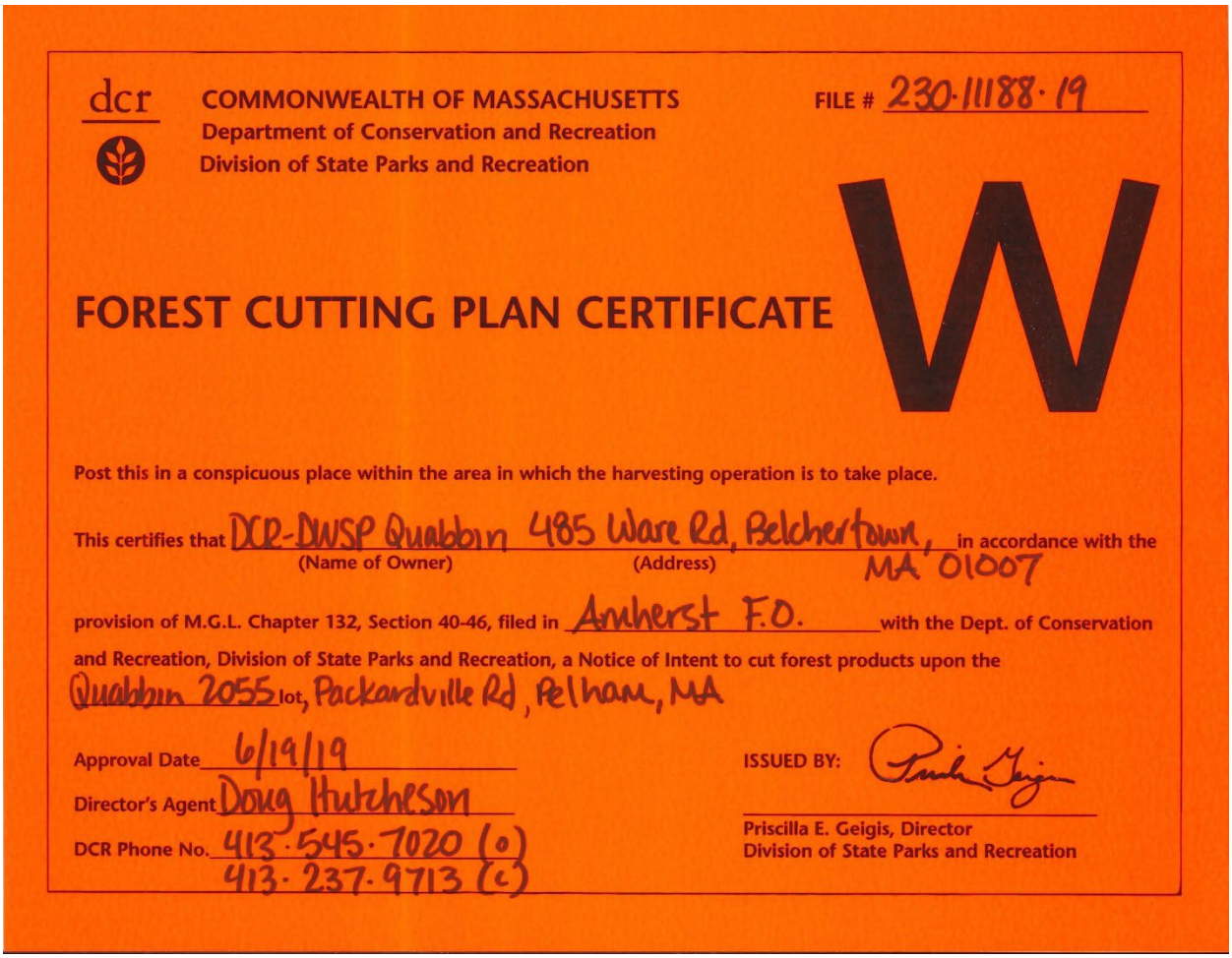


Figure 1e: Forest Cutting Plan pg. 5.



dcr

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

FILE # 230-11188-19

FOREST CUTTING PLAN CERTIFICATE

W

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

This certifies that DCR-DWSP Quabbin 485 Ware Rd, Belchertown, MA 01007 in accordance with the
(Name of Owner) (Address)

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 2a: Photo Point 1 post harvest, 10/2021

Figure 2b: Photo Point 1 one year post harvest, 8/2022