

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

**Project Title: Red Pine Patches 122 to 62**

DWSP Harvest Permit Number: 4398

DWSP Proposal ID: WR-19-19-1

DCR Forest Cutting Plan File Number: 021-9787-19

***Site Information***

Watershed: Ware River Watershed

Town(s): Barre

Acres: 10

Nearest Road: Old Worcester Rd, and Granger Rd

Natural Heritage Atlas overlap?: Yes, seasonal restrictions on part of harvest

Public Drinking Water Supply Watershed?: Yes

Forest Types: Red Pine

Area of Critical Environmental Concern (ACEC)?: No

Soils: 253B and E Hinckley loam sand, 254 A and C Merrimac fine sandy loam, 925 E Charlton-Chatfield-Hollis, and 910C Woodbridge-Paxton association

Wetland Resources: Several streams and a wetland are in the harvest area.

Vernal Pools: None known

***Harvest Information***

Harvest Start Date: 5/13/19

Harvest End Date: 12/19/19

Number of Wetland Crossings: None

Number of Stream Crossings: 2

***Best Management Practices Applied***

Stream Crossings: There are two stream crossings.

Filter Strips: There is 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 number: 431

Phone number: 857 274 7090

Email: [Kenneth.canfield@mass.gov](mailto:Kenneth.canfield@mass.gov)

## **Narrative**

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

The harvest area is located in the town of Barre. It consists of several patches of mature roadside red pine scattered from Rt 62 and Granger Rd, south down Granger Rd, to Old Worcester Rd. The red pine was planted in old fields in the late 1930's.

Tree species present are red pine in the overstory, along with some red maple and red oak. The understory consists of red and white oak, eastern white pine, hemlock, black birch, red maple, and black cherry.

Glossy buckthorn and Japanese barberry are present, particularly along Old Worcester Rd. Some invasive shrubs were hand-pulled during the marking of this lot. Harvesting trees in patches puts enough sunlight on the ground to create conditions that will help native tree species out-compete invasive shrubs over time.

The soil is mostly 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.

This area was chosen because red pine is susceptible to mortality caused by insects and disease. Mortality is already present in several patches.

### ***Silvicultural Objectives***

Remove mature red pine from these patches, while retaining healthy overstory trees of other species. There are ten patches that are 3.5, 2.0, 0.7, 0.7, 0.6, 0.6, 0.5, 0.5, 0.4, and 0.1 acres in size. The understory regeneration will be protected as much as possible.

### ***Cultural Resources***

Standard practice dictates that every effort is made to avoid disturbing stone walls and other cultural resources. Several roadside walls may be affected by the removal of these trees.

### ***Rare or Endangered Species***

MA DFW's Natural Heritage Endangered Species Program (NHESP) has placed operational restrictions on the 3.5 acre patch located at the intersection of Rt 62 and Granger Rd. Harvesting equipment can only be operated in that stand from 11/15 to 3/15 of any year.

## Figures

- Figure 1 Final Forest Cutting Plan
- Figure 2 (A-B) Pre-Harvest photos taken on 7/3/19
- Figure 3 (A-B) Post-Harvest photos taken on 4/2/20
- Figure 4 (A-B) After 3 Growing Seasons photos taken on 8/16/22

Figure 1 Final Forest Cutting Plan

FEB 26 2019

# 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 021-9187-19 Case No. —  
Date Rec'd 2.26.19 Nat. Hert. YES  
Earliest Start 3.13.19 Pub. Dr. Wat. YES  
River Basin CHICOOEE ACEC NO  
Gen. Obi. LT Nat. Hert. Impact? YES

Site Information

## Location

Town Barre  
Road Old Worcester Rd & Granger Rd  
Acres 9.7 Proposed Start Date 3/19  
Vol. MBF 127.8 Vol. Cds. 9 Vol. Tons 110

## Plan Preparer

Name Kenneth W. Canfield  
Address 578 Old Turnpike Rd  
Town, State, Zip Oakham, MA 01068  
Phone (508) 882-3636  
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 KING TIMBER HARVESTING  
Address 15 RAGGED HILL ROAD  
Town, State, Zip HUBBARDSTON, MA 01452  
Phone (978) 928-4422  
Mass. Lic. Harvester # 2019-267128  
\*\*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	CU	CU		
Existing Structure	YES	YES		
Type of Bottom	ST	MU		
Bank Height (ft)	1-2'	<1'		
Stabilization	SE	SE		

## 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	VA	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

\*SEE ATTACHED NHESP LETTER\*  
• PLEASE NOTIFY DCR SERVICE FORESTER AT START OF OPERATION  
• BUFFER STRIP EXEMPTION APPLIED  
• STREAM CROSSINGS ARE EXISTING  
• EXISTING SKID ROADS  
• REVIEWED UNDER SNOW COVERED GROUND CONDITIONS  
• APPROVAL DELAYED FOR BUFFER STRIP EXEMPTION  
\*AMENDMENT #1 ADDS LANDING, SEE MAP #3

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



## Products to be Harvested\*

Species	Mbf/Cds		Mbf/Cds
White Pine		Red Maple	2 Cds
Red Pine	127.8 Mbf	Sugar Maple	
Pitch Pine		Red Oak	
Hemlock		Black Oak	
Spruce		White Oak	
Other Sftwd.		Other Hdwd.	
White Ash		Total Mbf	127.8 Mbf
Beech		Cordwood (Cds)	9
White Birch		SW Pulp (Tons)	110
B & Y Birch	2 Cds	HW Pulp (Tons)	
Black Cherry	5 Cds	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.

## Cutting Standards

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	RP	RP		
Acres	3.5	6.2		
Landowner Objective	LT	LT		
Designation of Trees	CT	CT		
Type of Cut	CC	SE		
Source of Regeneration	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 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 2/26/21

Cutting Plan ☒ ☐ 3/19/19

Signature of Service Forester/Director's Agent [Signature] Date

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

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 [Signature]

Date 12/23/19

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	Blk 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 Barre

File Number 021-9787-19

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.

This harvest is comprised of several patch cuts to remove sawlog size Red Pine plantations. The largest patch (ST -1 ) is 3.5 acres and is located at the intersection of Rt 62 and Granger Rd. There are also patches (ST -2) of 0.7, 0.6, 0.4, and 0.6 acres located further south adjacent to Granger Rd. There are patches (St -2) of 0.5, 0.1, 0.7, 0.5, and 2.0 acres located adjacent to Old Worcester Rd. A forwarder will be used to forward wood across the two existing culverted road crossings to access roadside landings.

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

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




Rt 62, Granger Rd, & Old Worcester Rd,  
Barre, MA  
Lot # 4398  
9.7 Acres  
MA DCR

Division of Water Supply Protection  
Prepared by Kenneth W Canfield 2/19/19  
Data Sources: MassGIS, DCR & EOEEA



Stand Map 1

Stand Map 2

Stand Map 3

#### Legend

- Harvest Areas
- Property Boundary
- USA Topo Maps



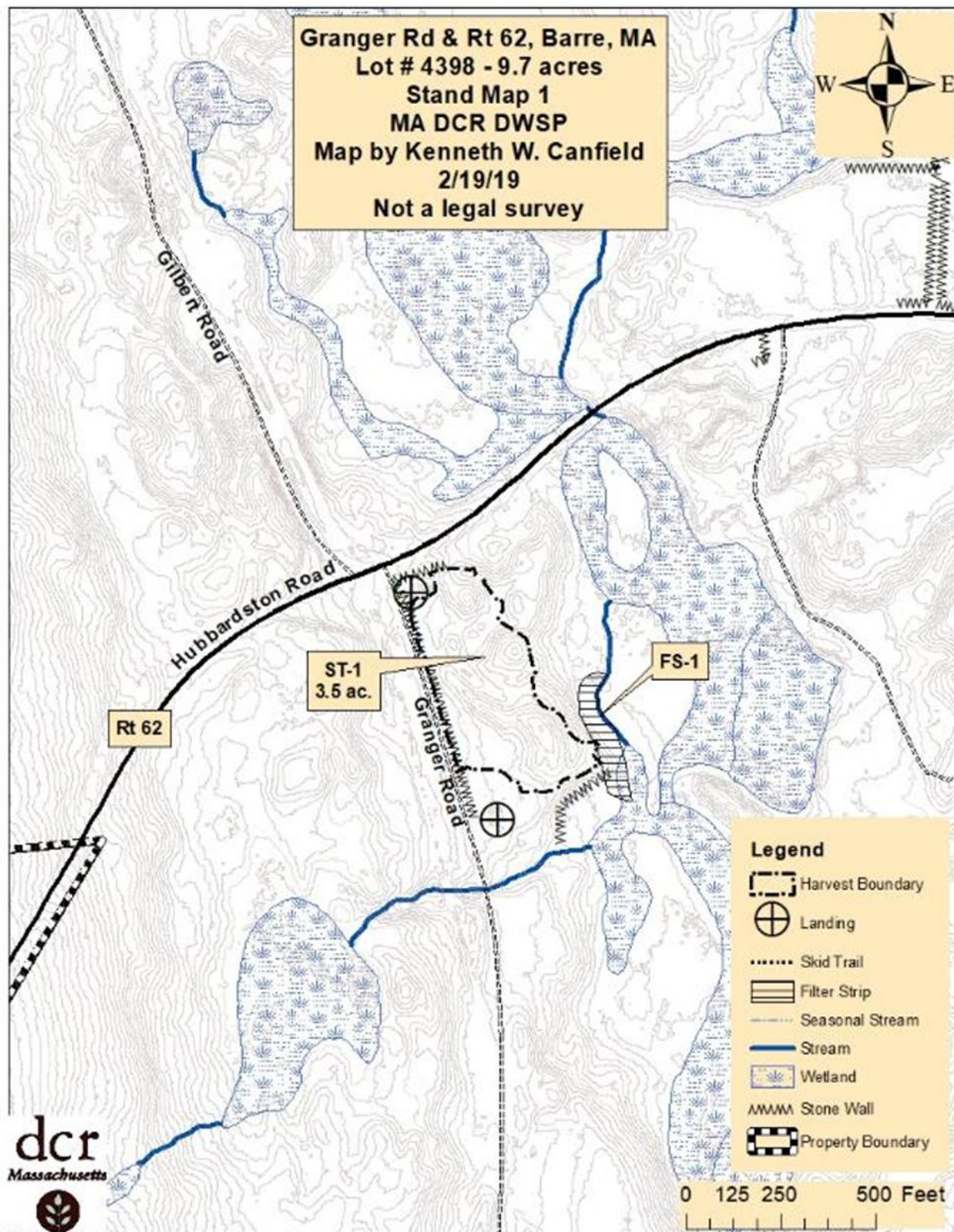
Department of Conservation & Recreation

1 Inch = 2,000 Feet

0 800 1,600 2,400 3,200 4,000 Feet



Granger Rd & Rt 62, Barre, MA  
Lot # 4398 - 9.7 acres  
Stand Map 1  
MA DCR DWSP  
Map by Kenneth W. Canfield  
2/19/19  
Not a legal survey





Granger Rd Barre, MA  
Lot # 4398 - 9.7 acres  
Stand Map 2  
MA DCR DWSP  
Map by Kenneth W. Canfield  
2/19/19  
Not a legal survey



Granger Rd

ST-2  
0.6 ac

ST-2  
0.4 ac

FS-2

SC-1

FS-3

ST-2  
0.7 ac.

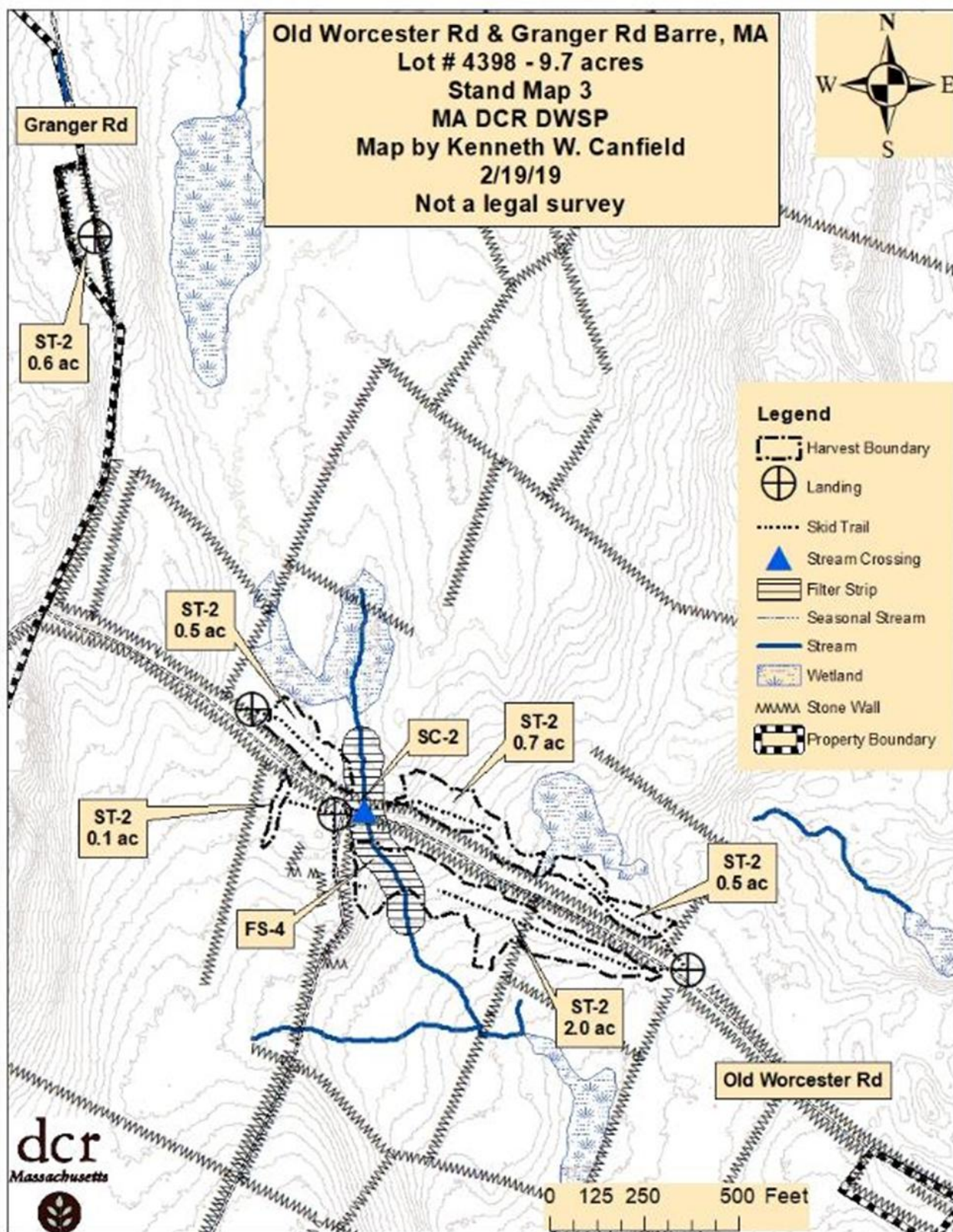
**Legend**

- Harvest Boundary
- Landing
- Skid Trail
- Stream Crossing
- Filter Strip
- Seasonal Stream
- Stream
- Wetland
- Stone Wall
- Property Boundary



0 125 250 500 Feet







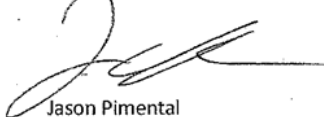
441 Wheelright Rd  
Barre, MA 01005  
3/18/19

Kenneth Canfield  
Watershed Forester  
MA DCR DWSP  
578 Old Turnpike Rd  
Oakham, MA 01068

Dear Ken:

I recommend that you remove all the roadside red pine on your upcoming timber harvest (file # 021-9787-19) on Granger and Old Worcester Rd. in Barre. Leaving trees in the visual buffer that will succumb to insects and disease only poses a hazard to public safety.

Sincerely,

A handwritten signature in black ink, appearing to read 'JP', is written over the printed name 'Jason Pimental'.

Jason Pimental

Superintendent

Town of Barre Highway Division



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

FILE # 021-9787-19

## 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 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 CLINTON with the Dept. of Conservation  
and Recreation, Division of State Parks and Recreation, a Notice of Intent to cut forest products upon the  
GRANGER RD. lot.

Approval Date 3/19/19  
Director's Agent CHRIS CAPONE  
DCR Phone No. (857) 406-0175

ISSUED BY:

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



**Figure 2 A-B**

**Pre-Harvest Photos taken from Granger Rd on 7/3/19**

**2A Photo from Granger Rd on 7/3/19 to the NE**



**2B Photo from Granger Rd on 7/3/19 to the SE**





**Figure 3 (A-B)**

**Post-Harvest photos taken From Grenager Rd on 4/2/20**

**3A Photo from Granger Rd on 4/2/20 to the NE**



**3B Photo from Granger Rd on 4/2/20 to the SE**





**Figure 4 (A-B)**

***After 3 Growing Seasons photos taken From Granger Rd on 8/16/22***

***4A Photo from Granger Rd on 8/16/22 to the NE***



***4B Photo from Granger Rd on 8/16/22 to the SE***

