

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

**Project Title:**

<b>DWSP Harvest Permit Number:</b> 3150
<b>DWSP Proposal ID:</b> PR-16-26B
<b>DCR Forest Cutting Plan File Number:</b> 204-8836-17

**Site Information**

<b>Watershed:</b> Quabbin	<b>Town(s):</b> New Salem
<b>Acres:</b> 36.5	<b>Nearest Road:</b> Hunt Road
<b>Natural Heritage Atlas overlap?:</b> No	<b>Public Drinking Water Supply Watershed?:</b> Yes
<b>Forest Types:</b> White Pine/Hardwood   White Pine/Oak   Oak/Hardwood	<b>ACEC?:</b> No
<b>Soils:</b> Millsite-Woodstock complex, Millsite-Chichester complex, and Montauk, Chichester, Metacomet, and Scituate fine sandy loams.	
<b>Wetland Resources:</b> There are no wetland resources within lot. There is an intermittent stream adjacent to the lot, immediately to the north.	
<b>Vernal Pools:</b> none	

**Harvest Information**

<b>Harvest Start Date:</b> 4/18/2019	<b>Harvest End Date:</b> 11/12/2019
<b>Number of Wetland Crossings:</b> none	<b>Number of Stream Crossings:</b> none

**Best Management Practices Applied**

<b>Stream Crossings</b>	none
<b>Filter Strips</b>	The filter strip shown on the Forest Cutting Plan protects an intermittent stream outside the lot. There will be no cutting and no skid trails within the filter strip.
<b>Wetland Crossings</b>	none
<b>Harvesting in Wetlands</b>	none

**DWSP Forester supervising this harvest**

<b>Name:</b> Richard G MacLean   Helen Johnson
<b>Forester License #:</b> 383 (Johnson)
<b>Phone #:</b> 413.323.6921 ext 553   <b>978.544.6343</b>
<b>Email:</b> richard.maclea@state.ma.us   helen.johnson@state.ma.us

## **NARRATIVE**

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

Lot 3150 is located inside DCR-DWSP Gate 18 at the end of Hunt Road in New Salem, just east of Lot 3144, which was completed in 2016. The main forest types in the harvest area are White Pine/Oak, White Pine/Hardwood, and Oak/Hardwood, with most of the cutting to occur in areas where the canopy is dominated by white pine overtopping black birch saplings and poles.

The goals for the harvest are to increase the age and species diversity of the forest through group selection with retention. Areas targeted for cutting have poorly formed and unhealthy white pine over a near monoculture of black birch saplings and poles. Oaks and other species of hardwoods were retained as seed sources in order to encourage a more diverse regeneration response.

There are no streams or wetlands in the harvest area. The dominant soil types are Millsite-Woodstock complex, Millsite-Chichester complex, and Montauk, Chichester, Metacomet, and Scituate fine sandy loams.

### **Site Selection:**

This harvest is intended to help improve species and age diversity of the forest to achieve DWSP goals for forest age class and species diversity. Historically, intense browse reduced the species diversity of tree regeneration for several decades within the Quabbin, where hunting was not allowed and natural predators were absent. Deer, and more recently moose, preferentially browsed some species (such as oaks and maples) while leaving others (primarily white pine and black birch), resulting in low understory species diversity, as is the case in this lot. This harvest is a first step in reversing that process and restoring native biodiversity.

### **Silvicultural Objectives:**

This harvest will open up new regeneration opportunities, both by stimulating seed production and by providing light for new and existing seedlings and saplings to grow. In order to increase species diversity, individuals of the most common species (white pine and black birch) have been prioritized for removal, while locally uncommon hardwood species have been prioritized for retention. Maximum opening size is 2 acres, large enough to allow regeneration of even shade intolerant species such as black cherry. Smaller (½ to 1 acre) openings were located on the steeper slopes in the oak-hardwood stand. Groups have been located where overstory trees have poor form and vigor and understory diversity is low. Advance regeneration is being retained and protected wherever possible.

### **Cultural Resources:**

This lot contains stone walls both in the interior and along the lot boundaries. Additionally there is an old stone-lined well located adjacent to the lot, but outside of any area of harvest activity.

All cultural features are being protected and avoided as much as possible. Existing barways (breaks in walls) are being utilized in order to minimize damage to walls.

**Rare or Endangered Species:**

This 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: 1/1/04)

### For DCR Use Only:

File Number	<u>204-883617</u>	Case No.	<u>—</u>
Date Rec'd	<u>5/26/17</u>	Nat. Hert.	<u>NO</u>
Earliest Start	<u>6/13/17</u>	Nat. Hert. Imp	<u>N/A</u>
River Basin	<u>Chicopee</u>	Pub. Dr. Wat.	<u>Quabbin</u>
Gen. Obj.	<u>LT</u>	ACEC	<u>NO</u>

Extension #1 (6/1) Final (11/19)

Site Information

### Location

Town New Salem | Lot 3150  
 Road Hunt Rd. | Quabbin Gate 18  
 Acres 36.5 Proposed Start Date Summer 2017  
 Vol. MBF 81.2 Vol. Cds. 80 Vol. Tons 49

### Plan Preparer

Name Richard MacLean & Helen Johnson  
 Address DCR-DWSP Quabbin Section  
485 Ware Road  
 Town, State, Zip Belchertown, MA 01007  
 Phone 413 323-6921 x 553  
 Type of Preparer Mass. Licensed Forester  
 \*Mass. Forester License # 383 (Helen Johnson)  
 \*Required for land under Ch61, Ch61A or Forest Stewardship

### Landowner

Name DCR-DWSP Quabbin Section  
 Mailing Address 485 Ware Road  
Richard.MacLean@state.ma.us|Helen.Johnson@state.ma.us  
 Town, State, Zip Belchertown, MA 01007  
 Phone (413) 323-6921 x553 | (978) 544-6343  
 Ch61  61A  61B  Stew  \*Case #  
 CR  CR Holder

### Licensed Timber Harvester\*\*

Name TBD  
 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 No 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 No 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)	<u>VA</u>			

### Harvesting in Wetlands None

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

Forest Products

**Products to be Harvested\***

Species	Mbf/Cds		Mbf/Cds
White Pine	73.3	Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	3.1
Hemlock		Black Oak	0.3
Spruce		White Oak	0.3
Other Strwd.		Other Hdwd.	
White Ash		<b>Total Mbf</b>	81.2
Beech		<b>Cordwood (Cds)</b>	80
White Birch		<b>SW Pulp (Tons)</b>	49
B & Y Birch	4.1	<b>HW Pulp (Tons)</b>	
Black Cherry		<b>Chips (Tons)</b>	

\*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.

Stand Treatment

**Cutting Standards**

Indicate location on map	ST-1	ST-2	ST-3	ST-4
Forest Type	WH	WO	OH	BB
Acres	8.3	13.6	12.1	2.5
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	CT	CT	CT
Type of Cut	SE	SE	SE	SE
Source of Regeneration	AD/SE	AD/SE	AD/SE	AD/SE

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 specie

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)

5-25-17  
Date

Service Forester

**Determination and Status** 204-8836-17

Approved  Disapproved  Expires 5/26/19  
 Cutting Plan 6/5/2017  
 Signature of Service Forester/Director's Agent Date

**Final Report and Comments**

I hereby certify that the afore described Forest Cutting Plan and all relevant statutes have been substantially complied with.

11-25-19  
 Signature of Service Forester/Director's Agent Date

Extension  Expires 5-26-20 Ser. For. Ints.   
 Amendment App 1  Dis 1  App 2  Dis 2

Codes

Forest Types	Designation of Trees	Type of Cut	Intermediate Harvests:	Source of Regeneration
WP White Pine	CT Cut Tree	SH Shelterwood	CT Commercial Thin	AD Advanced
WK WP/Hem	LT Leave Tree	ST Seed Tree	NT Non Com Thin	SE Natural Seed
WH WP/Hdwd	SB Stand Boundary	CC Clear Cut	NS Non-Standard Systems*	PL Plant
WO WP/Oak	OT Other	SE Selection	SA Salvage	CO Coppice
RP Red Pine	Landowner Objective	SA Salvage	SN Sanitation	DS Direct Seed
SR Red Spruce	LT Long-term Mgt.	DL Diameter Limit*	OT Other*	OT Other
	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

Landowner DCR-DWSP Quabbin

## Narrative Page (Effective Date: 1/1/04)

Town New Salem | Lot 3150

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

File Number 204-8836-17

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.

FLAGGING: Pink "Do Not Cut" = trees to be protected | Blue = skid road | Orange = Edge of opening

BLUE PAINT: Dot = cordwood or pulp | Three vertical dots = edge of stand.

Horizontal line = sawlog

Vertical line = TSI

"X" = cull

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, 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.
ST-1		
ST-2		
ST-3		
ST-4		

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

ST-1	
ST-2	
ST-3	
ST-4	



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

FILE # 204-8836-17



# FOREST CUTTING PLAN CERTIFICATE

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

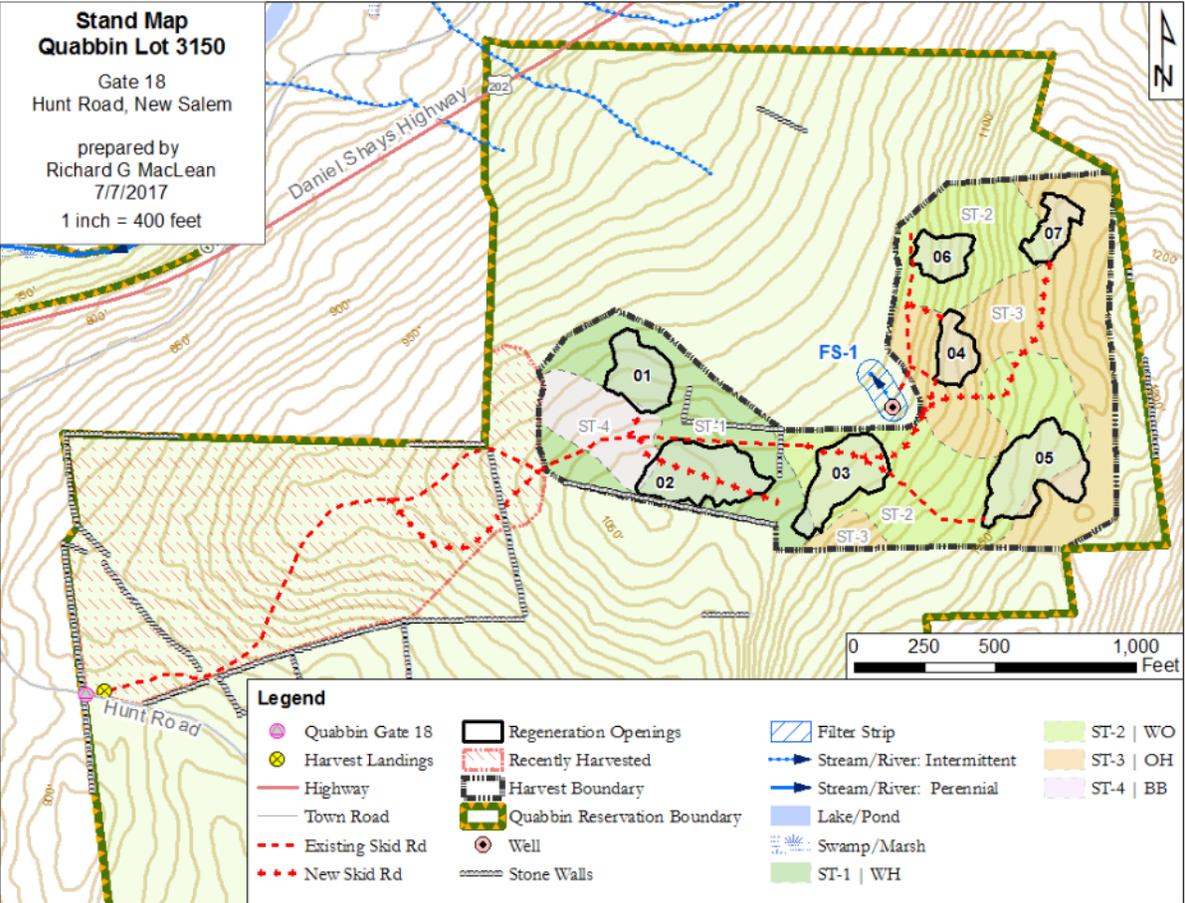
This certifies that DCR-DWSP Quabbin 485 Ware Rd, Belchertown in accordance with the  
(Name of Owner) (Address)

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

Hunt Rd/Gate 18 lot. (Lot 3150), New Salem

Approval Date 6/5/17  
Director's Agent Fletcher Clark  
DCR Phone No (413) 262-2367

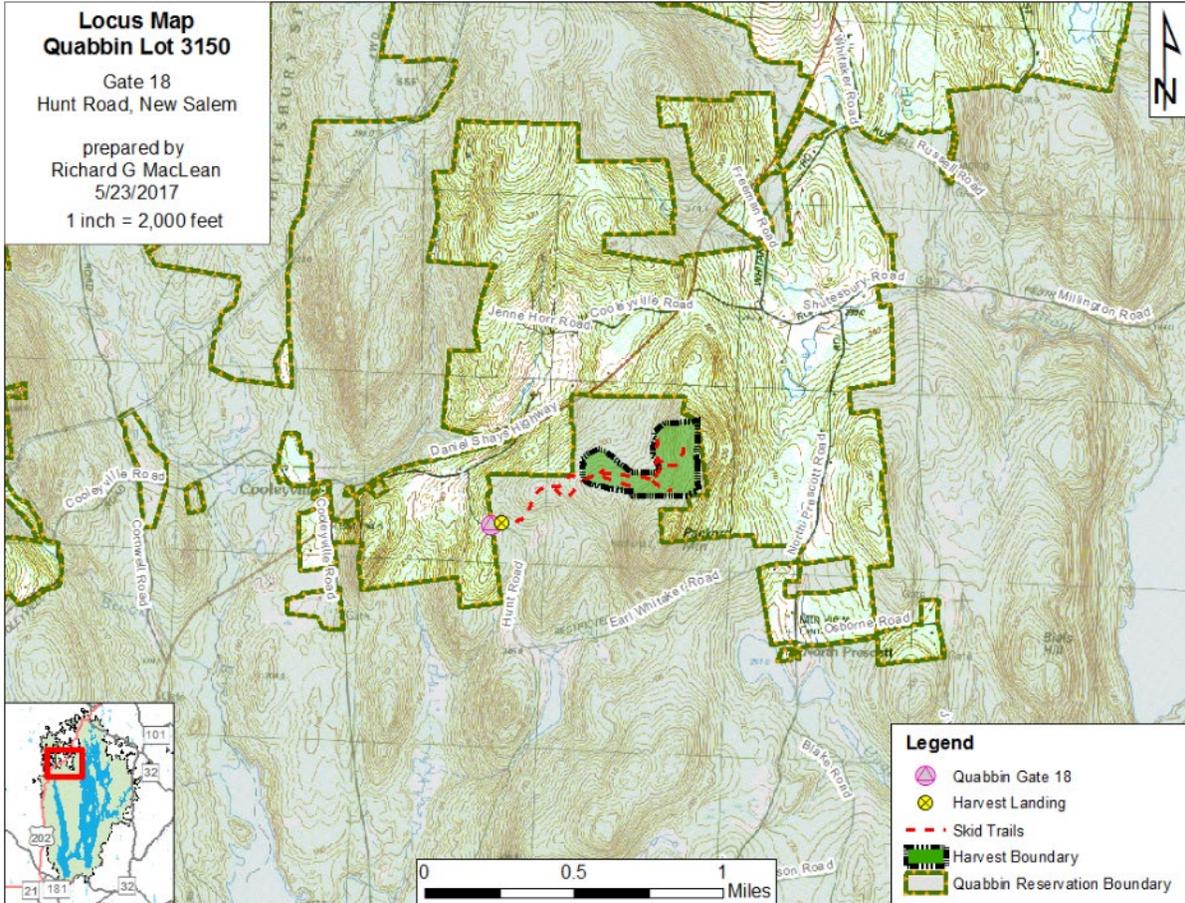
ISSUED BY:   
Priscilla E. Geigis, Director  
Division of State Parks and Recreation



**Locus Map  
Quabbin Lot 3150**

Gate 18  
Hunt Road, New Salem

prepared by  
Richard G MacLean  
5/23/2017  
1 inch = 2,000 feet



**Legend**

- Quabbin Gate 18
- Harvest Landing
- Skid Trails
- Harvest Boundary
- Quabbin Reservation Boundary