

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

Project Title: Gate 39 Powerline South

DWSP Harvest Permit Number: 3161A
DWSP Proposal ID: PT-19-05 09
DCR Forest Cutting Plan File Number: 204-11096-19

Site Information

Watershed: Quabbin	Town(s): Petersham
Acres: 42.8	Nearest Road: Dugway Road
Natural Heritage Atlas overlap?: No	Public Drinking Water Supply Watershed?: Yes
Forest Types: oak-hardwood, white pine-hardwood, hemlock-hardwood	ACEC?: No
Soils: Montauk-Scituate-Canton association, extremely stony, 3-15% slopes; Charlton-Chatfield association, extremely stony, 3-15% slopes; Charlton-Chatfield-Hollis association, very rocky, 15-45% slopes; and Ridgebury-Whitman association, extremely stony, 0-8% slopes.	
Wetland Resources: There are wooded wetlands with associated intermittent streams outside the harvest boundaries to the south, east and west.	
Vernal Pools: none	

Harvest Information

Harvest Start Date: 11/1/2019	Harvest End Date: 1/15/2020
Number of Wetland Crossings: none	Number of Stream Crossings: none

Best Management Practices Applied

Stream Crossings	none
Filter Strips	Variable width filter strip on an intermittent stream connecting two wetlands outside the harvest boundary.
Wetland Crossings	none
Harvesting in Wetlands	none

DWSP Foresters supervising this harvest

Name	Helen Johnson
Forester License #	383
Phone #	617-733-2937
Email	Helen.Johnson@mass.gov

NARRATIVE

General Description/Forest Composition/History

Lot 3161A inside Quabbin Gate 39 at the intersection of Dugway Road and Mary Tamplin Road, and is bordered by a high tension powerline right of way to the north, and by an unnamed DCR access road and wetlands to the south.

The eastern portion of the harvest is a triangle enclosed between the three roads, with a hill in the center that is not being harvested due to its steep slopes. The remainder of the lot is west of Dugway Road and is irregularly shaped in order to avoid the numerous wetlands and intermittent streams in this area.

The eastern triangle is dominated by red, black and white oak, with diverse associates including red maple, sugar maple, black birch, paper birch, black cherry, white ash, American beech, hickory, hemlock, white pine, and scattered red pine. The species mix to the west is similar, but with a lower proportion of oaks, a higher proportion hemlock, maples, and other hardwoods, and red spruce rather than red pine. Large diameter white pine is common along the powerline, and large, coarse hardwoods are common along the roads. Tree regeneration is spotty and sparse, with black birch and white pine most prevalent; other species from the overstory are present but uncommon, as are striped maple and American chestnut stump sprouts. Understory species include huckleberry, low bush blueberry, partridgeberry, wintergreen, clubmoss, woodfern, and limited hay scented fern, as well as cinnamon fern and goldthread in transition zones near wetlands.

Forest health on this site is generally fair. The most serious health issue is red pine scale, which has already begun to attack the red pine and is likely to cause 100% mortality within a few years; however red pine is only a small component of the stand. Most of the other species are living with low-grade damage and depletion from endemic insects and diseases, such as white pine weevil, spongy moth, beech bark disease, sugar maple borer, hemlock woolly adelgid, and hemlock elongate scale. In addition, shade intolerant species (black cherry, paper birch, white ash) are declining in part because they're gradually being shaded out as the forest matures, resulting in a decline in forest diversity.

Site Selection

This site was chosen for a regeneration harvest because of its low age class diversity. Vigorous young trees have the ability to secure the soil and retain site integrity if a large portion of the overstory is lost in a major windstorm (tornado, hurricane, microburst, etc.) or other natural disturbance.

Silvicultural Objectives

The primary objective is to create a new age class of vigorous young trees of all species through small group selection, with openings up to two acres. Openings will be irregular in shape, and will be located where there are clusters of trees that are diseased, declining, or have unstable stem structure. Five to ten square feet per acre of basal area of sawlog- and pole-sized trees will be retained in openings $\geq \frac{1}{2}$ acre.

In addition, all red pine will be removed in anticipation of mortality due to red pine scale. The healthiest trees of all species other than red pine will be retained.

Cultural Resources

There are stone walls in the southeastern corner of the lot, as well as along Mary Tamplin Road; they will be flagged, avoided and protected. There are no other known cultural features in the project area.

Rare or Endangered Species

NHESP has not identified any rare or endangered species in the project area.

Figure 1: Forest Cutting Plan

Received 8/26/19

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)

Final (3/20)

Amendment 1

For DCR Use Only:

File Number	234-11096-19	Case No.	-
Date Rec'd	6-5-19	Nat. Hert.	No /
Earliest Start	6-20-19	Nat. Hert. Imp.	N/A
River Basin	Chicopee	Pub. Dr. Wat.	N/A
Gen. Obj.	LT	ACEC	N/A

Site Information

Location

Town Petersham **Quabbin Lot 3161A**
 Road Dugway Road (Quabbin Gate 39)
 Acres 42.8 Proposed Start Date Sept. 2019
 Vol. MBF 121.4 Vol. Cds. 121 Vol. Tons 274

Plan Preparer

Name Helen Johnson
 Address DCR-DWSP Quabbin Forestry
485 Ware Road
 Town, State, Zip Belchertown, MA 01007
 Phone 617-733-2937
 Type of Preparer LF
 *Mass. Forester License # 383
 *Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name DCR-DWSP Quabbin Forestry
 Mailing Address 485 Ware Road
Helen.Johnson@mass.gov
 Town, State, Zip Belchertown, MA 01007
 Phone 617-733-2937
 Ch61 61A 61B Stew *Case #
 CR CR Holder

Licensed Timber Harvester**

Name Conkey and Sons Logging
 Address 621 Daniel Shays Highway
 Town, State, Zip Belchertown, MA 01007
 Phone 413-883-2931
 Mass. Lic. Harvester # 2620-079

**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)	VA			

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

**Amend 1 - Change Lot Name to 3161A -
 - Increase Acreage - Increase total volume -
 - Add skid roads - change landing location -
 - Change 'Type of Cut' to SA - Adjust field
 work to reflect changes - AR
 *Corrected Town to Petersham - originally Fitch
 for New Salem - AR*

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* Quabbin Lot 3161A (FCP Amendment 1)

Table with columns: Species, Mbfs/Cds, Mbfs/Cds. Rows include White Pine, Red Pine, Pitch Pine, Hemlock, Spruce, Other Sftwd., White Ash, Beech, White Birch, B & Y Birch, Black Cherry.

*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

Table with columns: Indicate location on map, ST-1, ST-2, ST-3, ST-4. Rows include Forest Type, Acres, Landowner Objective, Designation of Trees, Type of Cut, Source of Regeneration.

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.

[X] 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.

Handwritten signature of landowner(s)

Handwritten date: 8-26-19

Signature of landowner(s)

Date

Service Forester

Determination and Status

Form with checkboxes for Approved, Disapproved, Expires, Extension, Amendment. Includes handwritten dates and signatures.

Final Report and Comments

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

Handwritten signature and date: 3-2-20

Signature of Service Forester/Director's Agent

Date

Codes

Table with columns: Forest Types, Designation of Trees, Type of Cut, Source of Regeneration. Lists various codes and their corresponding tree types or treatments.

*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: 1/1/04)

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 Petersham

File Number 234-11096-19

Quabbin Lot 3161A (FCP Amendment 1)

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.

OBJECTIVES: salvage dead and dying trees (oak d/t gypsy moth, red pine d/t RP scale, hemlock d/t various insects) and badly weevilled white pine; remove trees at risk of falling on roads and power lines; create openings of various sizes to provide habitat and regenerate a diverse mix of species.

This was accomplished by selection of groups up to 2 ac. where trees of poor health/form are concentrated, and gypsy moth salvage between groups.

CHANGES IN AMENDMENT 1: added acreage, volume, landings, and skid roads; added SA to type of cut; additional explanation of objectives (above) and paint and flagging symbology (moved to separate page); changed DWSP lot name from 3161 to Lot 3161A.

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.

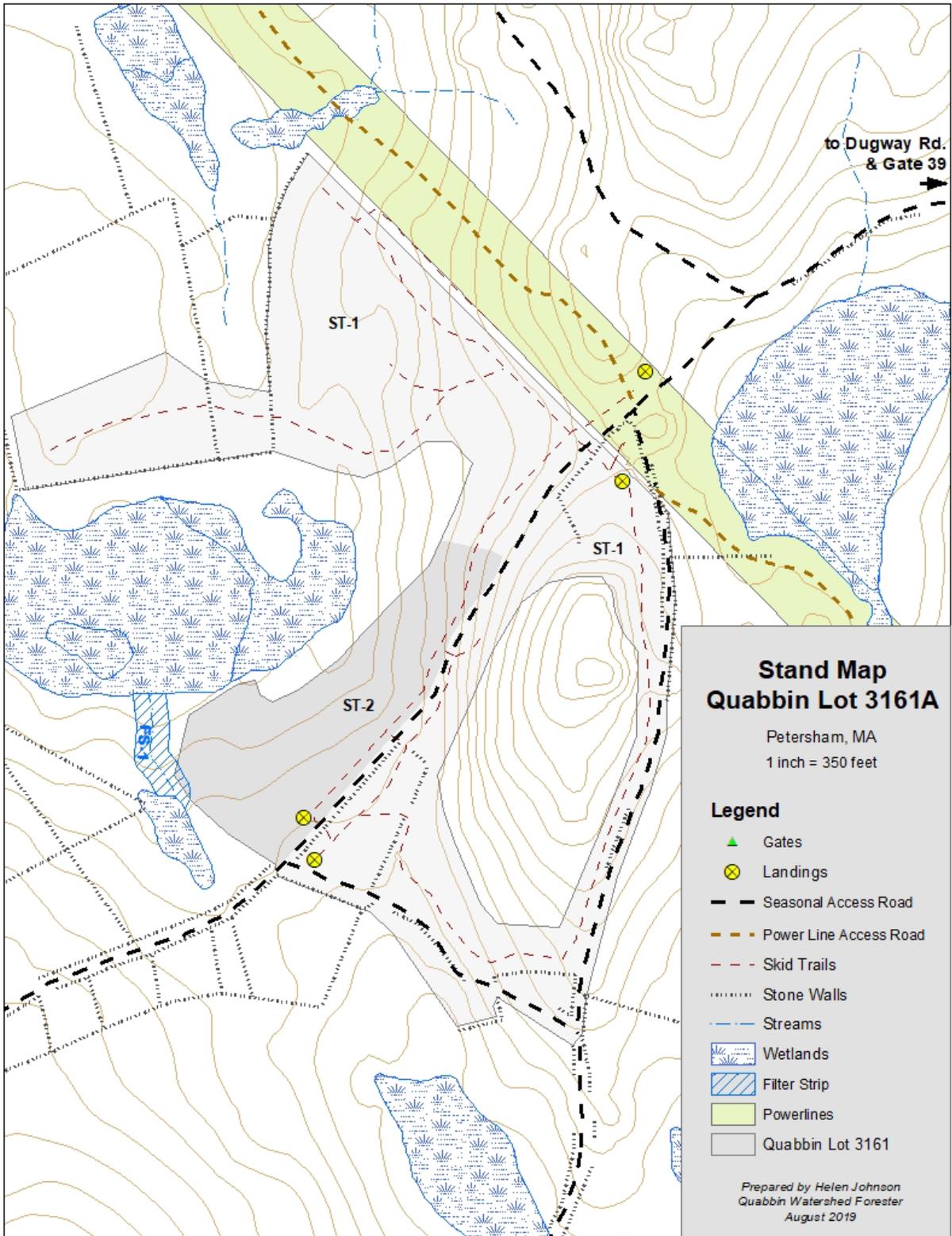
Stand No.	Describe Trees to be Cut			Describe Trees to be Left			% BA/AC	
	Species	Size	Quality	Species	Size	Quality	Cut	Left

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





dcf



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

FILE # 234.11096.19

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 DCR-DWSP 485 Ware Rd, Btown, 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 361A lot.

Approval Date 6/25/19

Director's Agent Andrew Rawcliffe

DCR Phone No. 617.549.1677

ISSUED BY:

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