



Town of Reading
16 Lowell Street
Reading, MA 01867-2683

Fax: (781) 942-5441
Website: www.readingma.gov

PUBLIC WORKS
(781) 942-9077

September 17, 2024

Brian Bowe, Chair
Reading Conservation Commission
16 Lowell Street
Reading, MA 01867

RE: Request for Waiver of Fee

Dear Mr. Bowe and Members of the Commission:

I respectfully request a waiver of the application fee for the attached Request for Determination of Applicability for the Forest Cutting Plan.

Sincerely,

Michael B. Kessman
Assistant Director of Public Works
Town of Reading



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Town Forest Committee / Michael Kessman

Name
16 Lowell Street

Mailing Address
Reading

City/Town
781-942-6686

Phone Number

TownForest@ci.reading.ma.us

Mkessman@ReadingMA.gov

E-Mail Address

MA 01867

State Zip Code

Fax Number (if applicable)

2. Representative (if any):

Firm

Contact Name

E-Mail Address

Mailing Address

City/Town

State Zip Code

Phone Number

Fax Number (if applicable)

B. Determinations

1. I request the Town of Reading make the following determination(s). Check any that apply:
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Town of Reading, MA

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



WPA Form 1- Request for Determination of Applicability
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

Off Strout Ave.	Reading, MA
Street Address	City/Town
43, 49, 50	(43) 33,43 ; (49) 1, 5-7 ; (50) 20
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

See narrative.

c. Plan and/or Map Reference(s):

Reading Town Forest prepared by Philip B. Benjamin, CF Benjamin Forestry Services, Inc.	May 12, 2010
Title	Date
Reading Town Forest prepared by Phillip B. Benjamin, CF Phillip Benjamin Forestry	June 24, 2022
Title	Date
Town Forest Cutting Plan - Resource Areas	SEPT. 17, 2024
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

See attached narrative.



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Town of Reading	
Name	
16 Lowell Street	
Mailing Address	
Reading	
City/Town	
MA	01867
State	Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

<i>Michael B Kessman</i>	9-17-24
Signature of Applicant	Date

_____	_____
Signature of Representative (if any)	Date

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	<u>246.42839.25</u>	Case No.	<u>246-8860</u>
Date Rec'd	<u>07/05/2024</u>	Nat. Hert.	<u>yes</u>
Earliest Start	<u>07/22/2024</u>	Nat. Hert. Imp.	<u>yes</u>
River Basin	<u>LT</u>	Pub. Dr. Wat.	<u>no</u>
Gen. Obi.	<u>ACEC</u>		<u>no</u>

Site Information

Location

Town Reading
 Road off Strout Road
 Acres 5.10 Proposed Start Date 01/03/2025
 Vol. MBF 0 Vol. Cds. 90 Vol. Tons 0

Plan Preparer

Name Philip Benjamin, CF
 Address 151 Depot Street
 Town, State, Zip South Easton MA 02375
 Phone 508-238-0422
 Type of Preparer LF
 *Mass. Forester License # 15
 *Required for land under Ch61, Ch61A or Forest Stewardship

Landowner

Name Town of Reading
 Mailing Address 16 Lowell Street
 Town, State, Zip Reading MA 01867
 Phone 781-942-6685
 Ch61 61A 61B Stew *Case # 246-8860
 FSC CR CR Holder

Licensed Timber Harvester**

Name _____
 Address _____
 Town, State, Zip MA
 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	OT			
Existing Structure	Yes			
Type of Bottom	GR			
Bank Height (ft)	1.00			
Stabilization	ST			

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)	50	50	50	

Harvesting in Wetlands

Indicate location on map	HW-1	HW-2	HW-3	HW-4
Forest Type (see pg 2)	RM			
Acres to be Harvested	0.10			
Resid. Basal Area (>50%?)	Yes			

Service Forester Comments

- See restrictions on attached NHESP letter
- Notify Service Forester when harvesting begins

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		Red Maple	
Red Pine		Sugar Maple	
Pitch Pine		Red Oak	
Hemlock		Black Oak	
Spruce		White Oak	
Other Sftwd.		Other Hdwd	
White Ash		Total Mbf	0.000
Beech		Cordwood (Cds)	90.000
White Birch		SW Pulp (Tons)	
B & Y Birch		HW Pulp (Tons)	
Black Cherry		Chips (Tons)	

*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	OH	OII	WII	RM
Acres	2.000	2.400	0.600	0.100
Landowner Objective	LT	LT	LT	LT
Designation of Trees	CT	SB	CT	CT
Type of Cut	SA	SA	SA	SA
Source of Regeneration	AD,SE	SE,AD	AD,SE	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 and values (Ch6I 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.

Matt Krauneli
 Signature of landowner(s)

6/25/24
 Date

Service Forester

Determination and Status

246.42839.25

Final Report and Comments

Approved Disapproved Expires 07-25-26

Cutting Plan

[Signature] 9/5/24
 Signature of Service Forester/Director's Agent Date

Extension 1 2 Expires _____ Ser. For Ints _____

Amendment App 1 Dis 1 App 2 Dis 2

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

Codes

Forest Types	Designation of Trees	Type of Cut	Source of Regeneration
WP White Pine	HK Hemlock	OM Mixed Oak	CT Intermediate Harvest
WK WP/Hdw	BH Hein/Hdw	RM Red Maple	CT Commercial Thin
WH WP/Hdw	BC Black Cherry	BE Beech	NI Non-Comp Thin
WO WP/Oak	BB Beech/Map	SF Spruce/Fir	CC Clear Cut
RP Red Pine	OH Oak/Hdw	SM Sugar Maple	SE Selection
SR Red Spruce	OR N Red Oak	P2 Pitch Pine	SA Salvage
			SN Sustain
			AD Advanced
			SB Natural Seed
			PL Plant
			CG 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

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 Town of Reading

Town Reading

File Number 246.42839.25

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.

The "stream crossing" is actually a very long-used dike between two shrub swamps. The dike was fortified for the first phase of the red pine salvage that was carried out in the Reading Town Forest in early 2020. It was used for the two subsequent salvage operations without incident. The dike will only be used when dry or frozen. As was the case during the earlier salvage operations, additional stones and/or gravel will be added as needed.

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
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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
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ST-1	see attached Narrative Page
ST-2	see attached Narrative Page
ST-3	see attached Narrative Page
ST-4	see attached Narrative Page

Forest Cutting Plan

Narrative Page (Continued)

Landowner Reading Town Forest
Town Reading
File Number 246-42839-24

This project is the fourth phase of a salvage operation designed to remove dead and dying red pines from the Reading Town Forest. Approximately 4.5 acres were salvaged in early 2020 as described in the Chapter 132 Forest Cutting Plan, File # 246-22541.20, 4.55 acres were salvaged in early 2022 under Forest Cutting Plan File # 246-32539.22, and 4.80 acres were salvaged in early 2023 under Forest Cutting Plan File # 246-33940.22. As was the case in the previous projects, all hazard trees within the treatment areas are targeted for removal as are very infrequent trees whose removal will benefit the young white pines and mixed hardwoods that began to flourish with the loss of the dense red pine overstory.

It is crucial to note that some of the red pines marked for removal have been marked at a height indicating that the tree will be topped and NOT felled. These particularly marked red pines are either within the 50' filter strips present in the project area or scattered along some of the steeply-sloped eskers. The portions that remain standing will serve as snags, enhancing the opportunities for those species of wildlife that use snags for feeding, nesting, or roosting. In addition, virtually all of the trees marked within Forest Type 2 will be felled and bucked parallel to the slope of the eskers, as low to the ground as possible to enable the logs to slowly decay back into the soil. The felled trees scattered through the treatment areas will also help discourage mountain bike riders from venturing from the established trails and destroying the existing vegetation. Due to the steep slopes and the lack of motorized equipment access into Forest Type 2, the marked red pines there will be felled by hand.

Based on past experiences on this property, the logger will be required to process the entire trees at the landings rather than limb and top them in the treatment areas.

Continued from the incomplete boxes on Page 3.

St - 1 - Desired Future Condition - This stand will consist of varying densities of mixed oak and occasional mixed hardwood poles and sawlogs and occasional white pine poles and sawlogs as well as a strong component of white pine and occasional mixed oak saplings and small poles that should begin to flourish with the added sunlight. In addition, the understory will also include modest amounts of mixed shrubs and herbaceous species, as well as mixed oak, red maple, and white pine seedlings. Improving the opportunity for the natural regeneration of the desired tree species as well as the growing conditions of all ages of tree species in this stand will increase the resiliency of this forest.

St - 2 - Desired Future Condition - This stand will consist of varying densities of mixed oak and occasional mixed hardwood and occasional white pine saplings, poles, and sawlogs. With the added sunlight resulting from the removal of the dead and dying planted red pines, the understory will include modest to strong amounts of mixed shrubs and herbaceous species, as well as mixed oak, red maple, and white pine seedlings. Improving the opportunity for the natural regeneration of the desired tree species as well as the growing conditions of all ages of tree species in this stand will increase the resiliency of this forest. A number of dead red pines scattered through this forest type have been marked for topping. These will be topped by hand cutting.

BMPS

Forest Cutting Plan

Narrative Page (Continued)

Landowner Reading Town Forest
Town Reading
File Number 246-42839-24

BMPs (continued)

ST - 3 - Desired Future Condition - This stand will consist of varying densities of white pine poles and sawlogs, fair to excellent form, and occasional mixed oak and infrequent mixed hardwood saplings, poles, and sawlogs and occasional sparser openings. With the added sunlight resulting from the removal of the dead and dying planted red pines, the understory will include modest amounts of mixed shrubs and herbaceous species, as well as mixed oak, red maple, and white pine seedlings. Improving the opportunity for the natural regeneration of the desired tree species as well as the growing conditions of all ages of tree species in this stand will increase the resiliency of this forest.

ST - 4 - Desired Future Condition - This stand is actually a fringe of red maple poles and sawlogs that is in the northern portion of an extensive deep marsh. Several red pines had been planted along the driest portions of the red maple fringe, but died out along with the other red pines on the property. These dead red pines have been marked for topping. The red pines will be topped by hand cutting or with the use of a long boom with a cutter head on a harvester parked on the adjoining carriage road. The understory will continue to thicken with the additional sunlight.

It should be noted that, with the exception of Forest Type 4, will lend themselves to subsequent plantings with either tree species that are predicted to better survive a warming climate and/or plants selected for attracting and retaining pollinators.

Locus Map

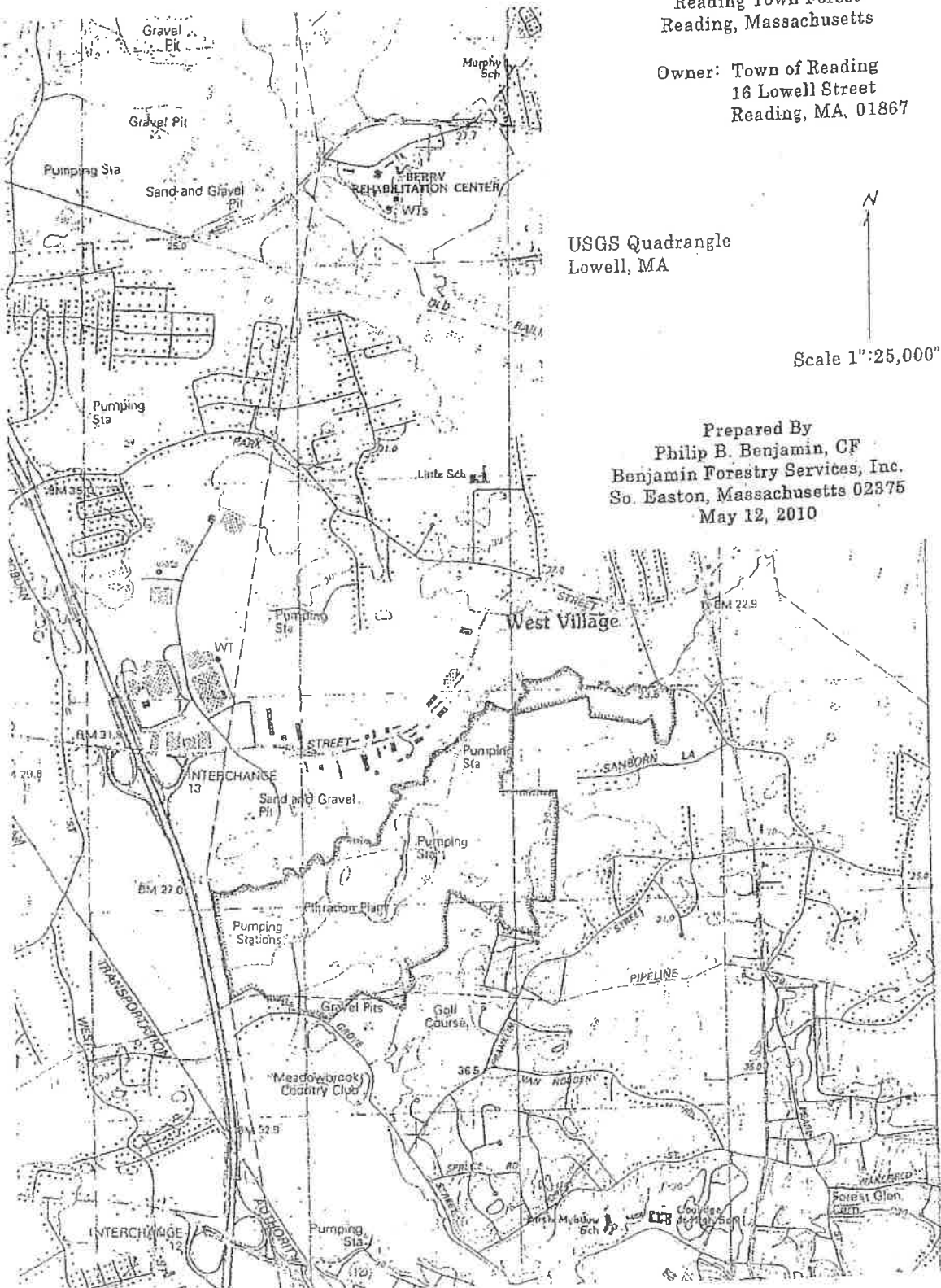
Reading Town Forest
Reading, Massachusetts

Owner: Town of Reading
16 Lowell Street
Reading, MA, 01867

USGS Quadrangle
Lowell, MA

N
Scale 1"=25,000"

Prepared By
Philip B. Benjamin, CF
Benjamin Forestry Services, Inc.
So. Easton, Massachusetts 02375
May 12, 2010



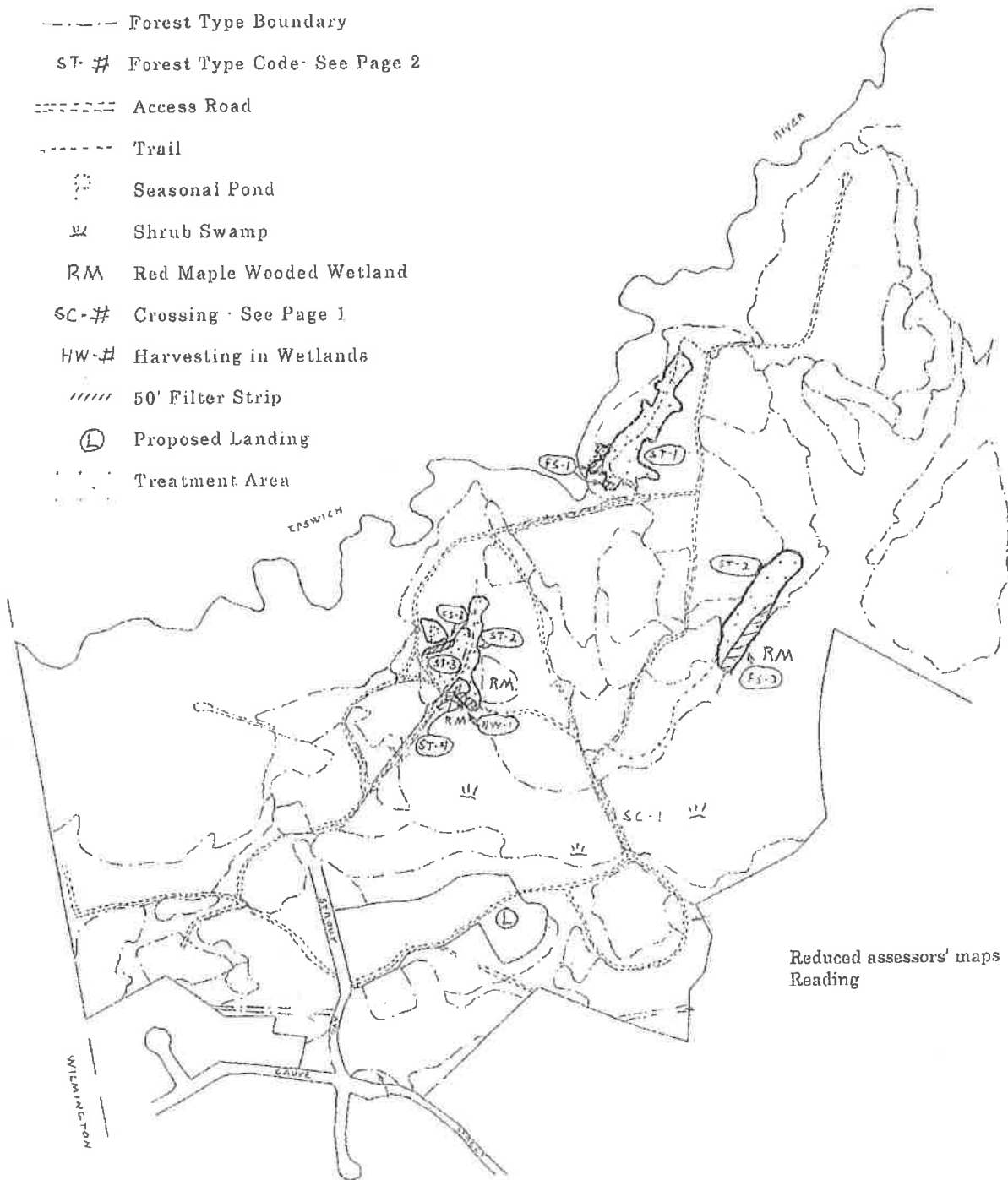
Reading Town Forest
Reading, Massachusetts

Owner: Town of Reading
16 Lowell Street
Reading, MA 01867



Legend

- Forest Type Boundary
- ST-# Forest Type Code- See Page 2
- ==== Access Road
- - - - Trail
- ⊙ Seasonal Pond
- ≡ Shrub Swamp
- RM Red Maple Wooded Wetland
- SC-# Crossing - See Page 1
- HW-# Harvesting in Wetlands
- //// 50' Filter Strip
- Ⓛ Proposed Landing
- ⋯ Treatment Area



Reduced assessors' maps
Reading

Prepared By
Philip B. Benjamin, CF
Philip Benjamin Forestry
So. Easton, Massachusetts 02375
June 20, 2024

al Pond

Swamp

ple Wooded Wetland

ig - See Page 1

ting in Wetlands

er Strip

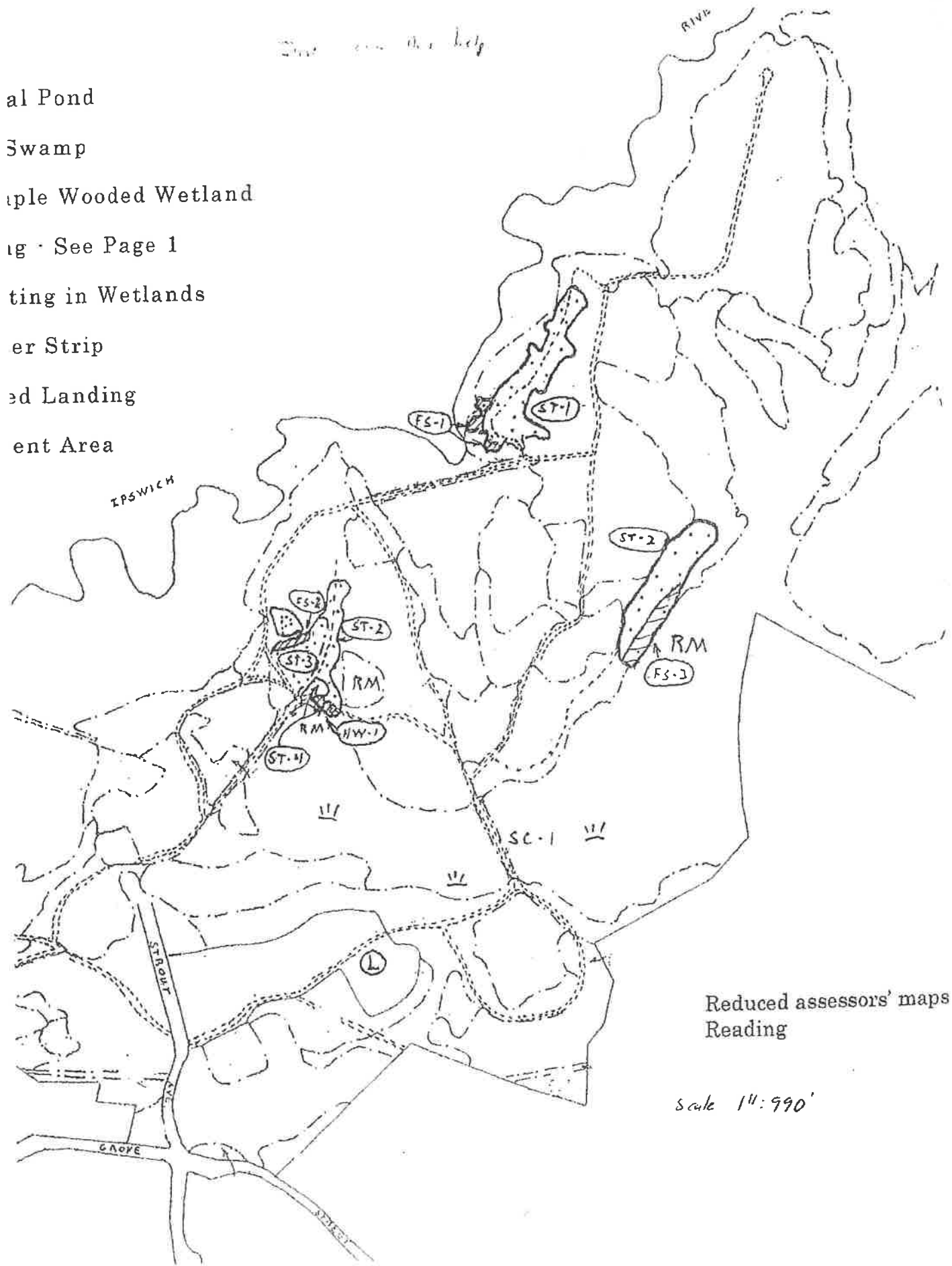
ed Landing

ent Area

See also the key

RIVER

IPSWICH



Reduced assessors' maps
Reading

Scale 1" = 990'

DCR



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

FILE # 246.42839.25

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 Town of Reading, MA in accordance with the
(Name of Owner) (Address)

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
off Street Rd. lot.

Approval Date 9/5/24

Director's Agent Chris Prior

DCR Phone No. 857-327-2360

ISSUED BY: 

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



MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

Chris Pryor
District 3

Cutting Plan No.	246-42839.25
NHESP Tracking No.	24-18754 (formerly 19-39072)
Town	Reading
Road	Strout Road
Landowner	Town of Reading
Preparer	Philip B. Benjamin
Date	August 16, 2024

Dear Chris,

The Natural Heritage and Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries and Wildlife (the Division) has completed its review of the above-referenced Forest Cutting Plan (hereinafter "the Plan") pursuant to the special approval procedures of the Forest Cutting Practices Regulations (304 CMR 11.04(6)). Based on details of the Plan, and information in the NHESP database, the Division has determined that there is potential for activities proposed in the Plan to result in a "Take" (as defined in 321 CMR 10.02) of Blue-spotted Salamander (*Ambystoma laterale*), listed as Special Concern which is protected pursuant to the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00).

Blue-spotted salamander is a member of the mole salamander family. Upland habitat requirements of this species include predominantly closed-canopy forest with abundant leaf litter and coarse woody debris. Individuals spend the majority of the year in sub-surface retreats, but they also occur at the ground surface during breeding migrations, juvenile dispersal, and favorable foraging conditions. Blue-spotted salamanders breeding migrations occur during late winter–spring, and juvenile dispersal from natal wetlands occurs during mid-summer through fall. Availability of cool, moist microhabitats with abundant small-mammal tunnels and burrows is critical to the survival of blue-spotted salamanders during their times of above-ground movement.

The wetlands, marshes, vernal pools, and the upland forest surrounding these wetland features, are classified as known habitats of Blue-spotted Salamander. The Division is concerned that timber harvests in these locations may cause direct mortality of individual salamanders (e.g., as a result of crushing by motorized vehicles) as well as the loss of habitat for the salamanders (e.g., as a result of opening the canopy). **Therefore, to avoid prohibited Take of Blue-spotted Salamander, the Division requests that the following language be added to the Plan prior to its approval:**

1. **Time of Year** - Off-road motorized vehicles shall be operated only during the time periods beginning May 15 –February 28, of any year.

MASSWILDLIFE

2. **Wetland and Vernal Pool no-cut Buffer** – A 50' no cut buffer zone around all vernal pools and identified wetlands shall be field delineated with tape or marking paint and inspected by DCR Service Forestry or the Division prior to the start of tree harvesting operations. Trees shall not be cut within the 50' no cut buffer zone. (See Figure 1, 2)
 - a. ~~An exception to this condition applies to red pine trees proposed for topping (not felling) located within the proposed filter strips. Areas where the red pine trees have been topped must be allowed to regenerate back to native tree species.~~
 - b. All red pines proposed for removal must be marked ahead of harvest and be inspected by DCR Service Forestry or the Division prior to removal.

3. **Canopy Retention Requirements** – A 450' buffer zone around all vernal pools and identified wetlands shall be field delineated with tape or marking paint and inspected by DCR Service Forestry or the Division prior to the start of tree harvesting operations (see attached image: FCP# 246-32539-22, NHESP# 19-39072, 2 maps). (See Figure 1, 2)
 - i. Timber harvesting within the 450' buffer zone shall maintain $\geq 70\%$ of the area with $\geq 65\%$ canopy cover, or equivalent basal area, of trees $> 30'$ in height. (see attached image: basal area equivalent chart).
 - ii. All trees to be harvested within the 450' buffer zone shall be marked prior to start of tree harvesting operations.

4. **Skid Roads and Landing Locations** – New forestry roads and log landings shall be located at least 100' away from any vernal pool or identified wetland

Please copy the Division on any proposed amendment, extension and on the approved Plan for the site. If you have any questions about this letter, please contact Nikolis Gualco at nikolis.a.gualco@mass.gov or (508) 389-6375.

Sincerely,



Jesse Leddick
Assistant Director

cc: Reading Conservation Commission

Attach: Figure 1: Blue-spotted Salamander Protection Zone
Figure 2: Blue-spotted Salamander Protection Zone (Topo)
Basal Area Equivalent Chart

Draft residual basal area levels of trees >4 inches dbh sampled with a BAF-10 prism for 65% canopy cover within the Mole Salamander life zone. Residual trees should be greater than or equal to 30 feet in height*

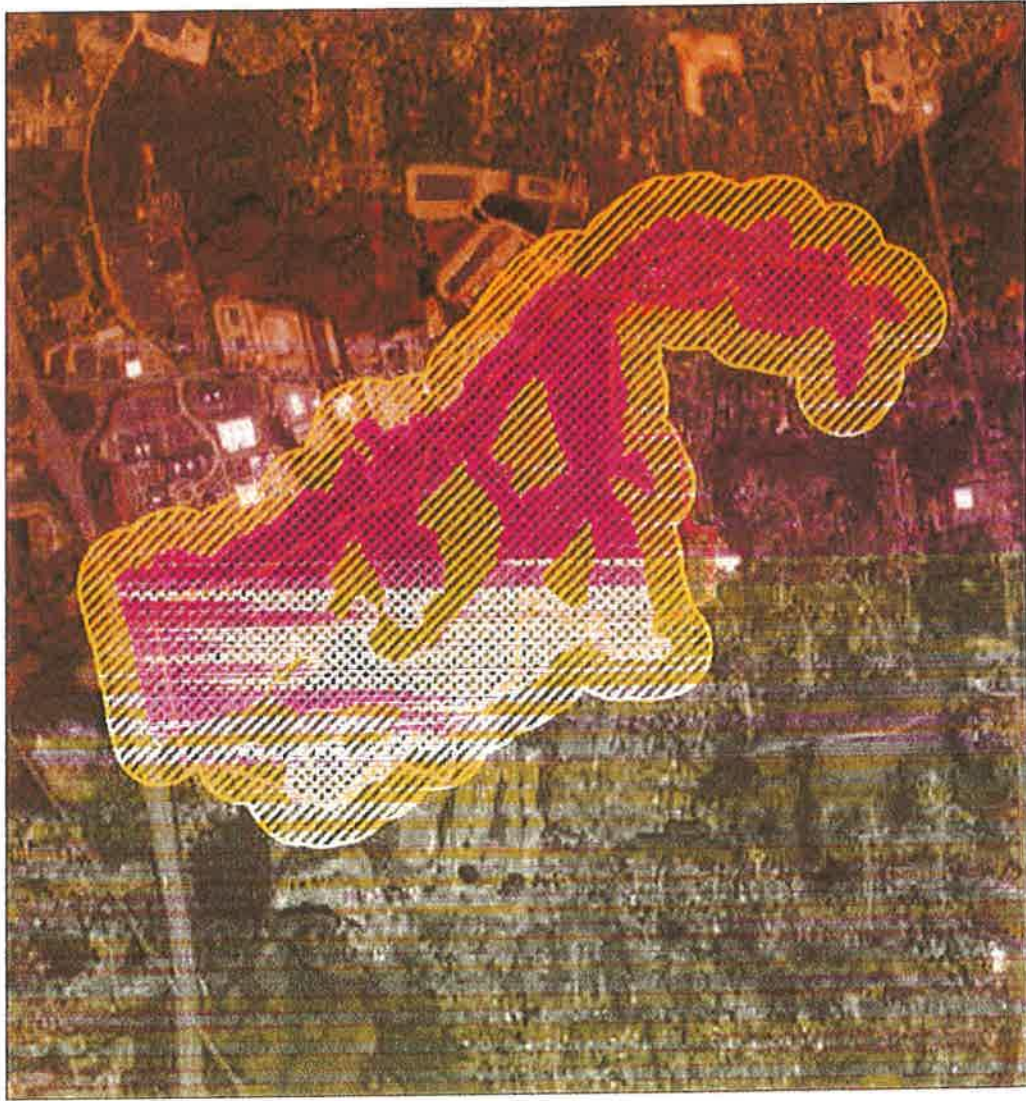
Average Stand dbh (inches)	Basal Area of Residual Trees, by Forest Type					
	WP, WK, RP, SR, PP, HK, TK, CD, SF	WH, HH	BW, RM, BC, BB, SM, BM, BE	WO, PO	OH	OR, OM
4	50	40	25	20	15	10
5	50	50	35	30	15	10
6	60	55	35	30	25	20
7	70	55	40	35	20	15
8	75	60	45	30	25	20
9	80	60	45	40	25	20
10	85	65	50	35	30	25
11	85	65	50	45	30	25
12	90	70	55	40	35	30
13	95	75	55	50	35	30
14	100	80	60	45	40	35
15	100	80	60	55	40	35
16	105	85	55	50	45	40
17	110	85	65	60	45	40
18	110	90	60	55	50	45
19	110	90	60	65	50	45
20	115	95	65	60	55	50
21	115	95	65	70	55	50
22	115	100	70	65	60	55
23	115	100	70	65	60	55
24	120	105	70	75	70	65
25	120	105	75	70	65	60
26	120	110	80	75	70	65

* Residual basal area required for 70% of the life zone (remaining 30% of life zone has 10 square feet/acre residual basal area requirement).

** Refer to Ch. 132 Forest Cutting Plan form for definition of forest types.

Figure 1: Blue-spotted Salamander Protection Zone

Blue-spotted Salamander Buffer Zone
DCR File# 246-32539-22, NHESP# 19-39072

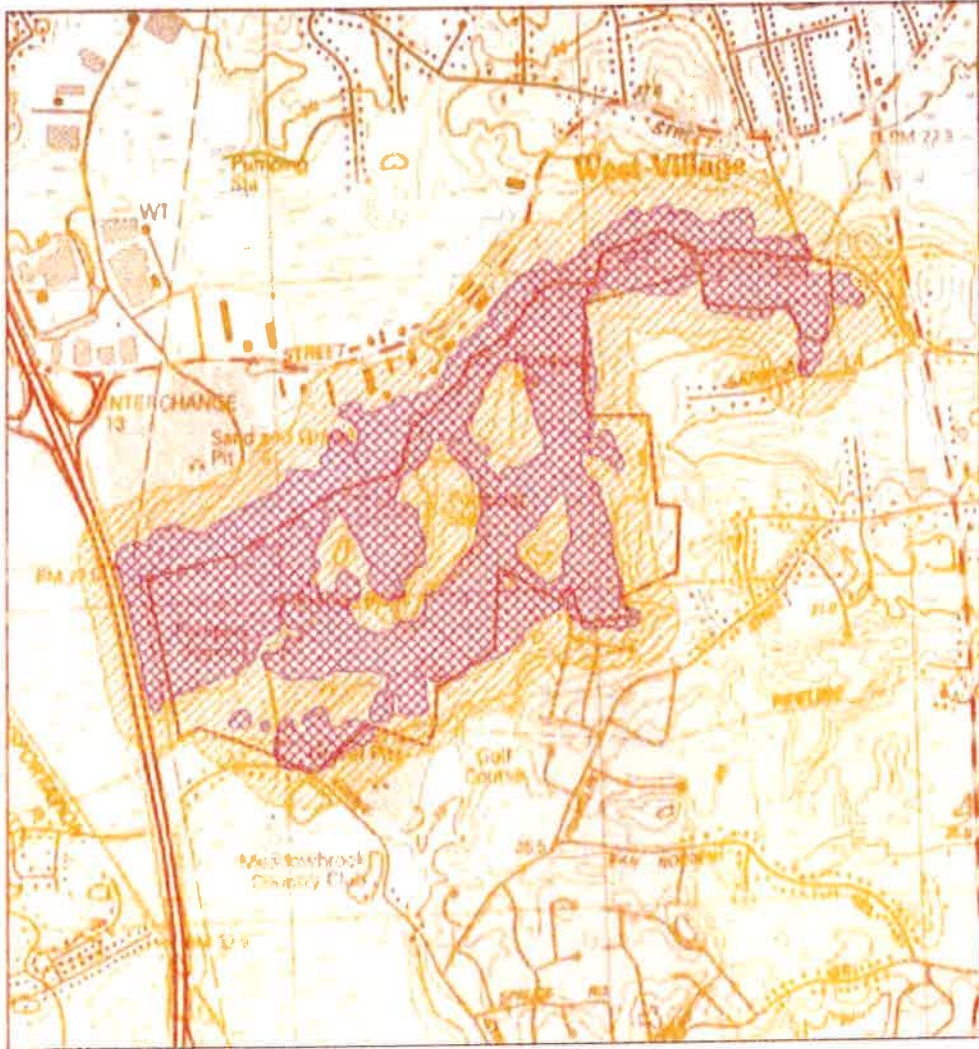


Legend

- 50ft Buffer
- 450ft Buffer
- Property Boundary

Figure 2: Blue-spotted Salamander Protection Zone, Topo

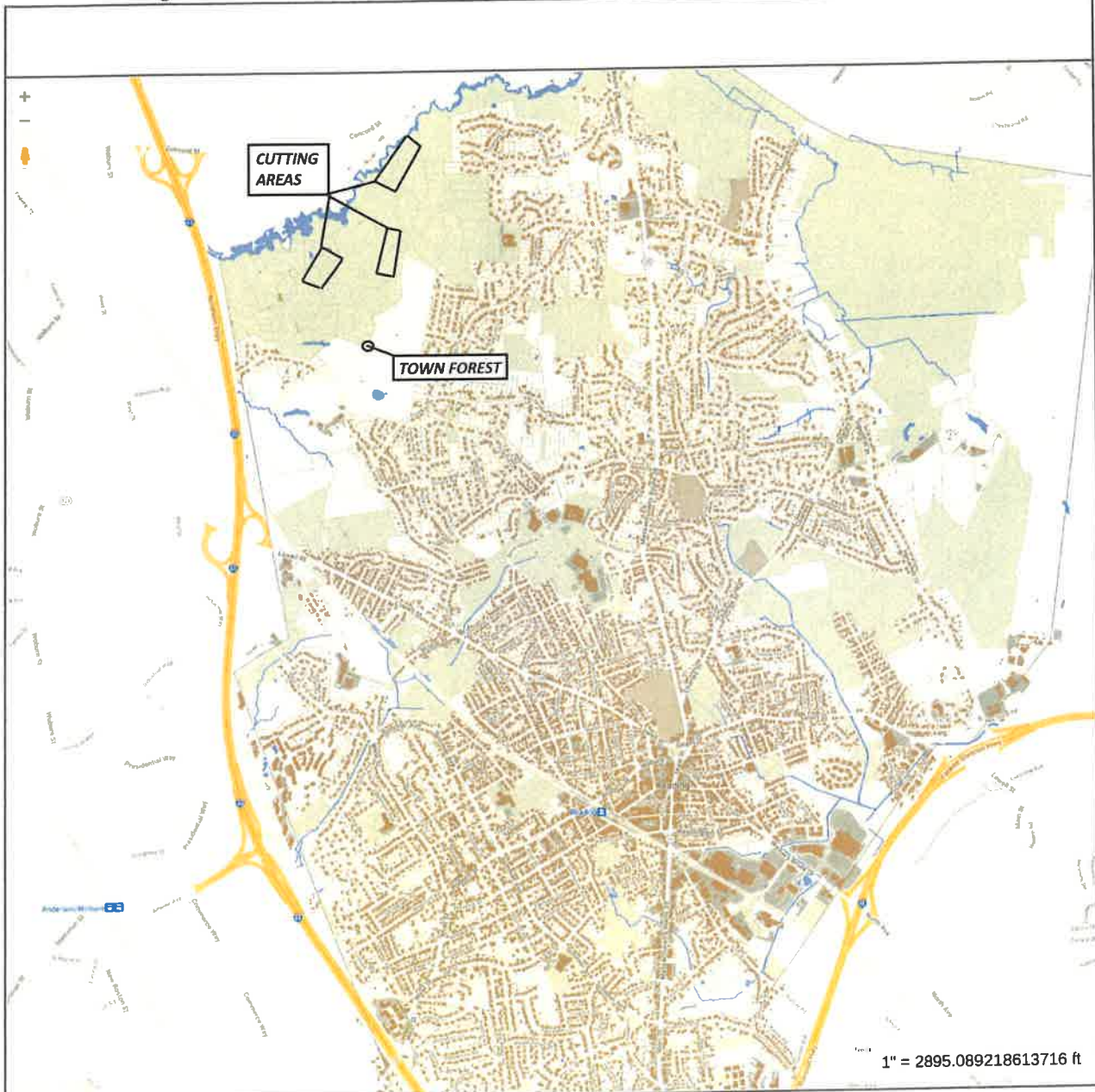
Blue-spotted Salamander Buffer Zone, Topo
DCR File# 246-32539-22, NHESP# 19-39072



21



- Legend**
- 50ft Buffer
 - 400ft Buffer
 - Property Boundary



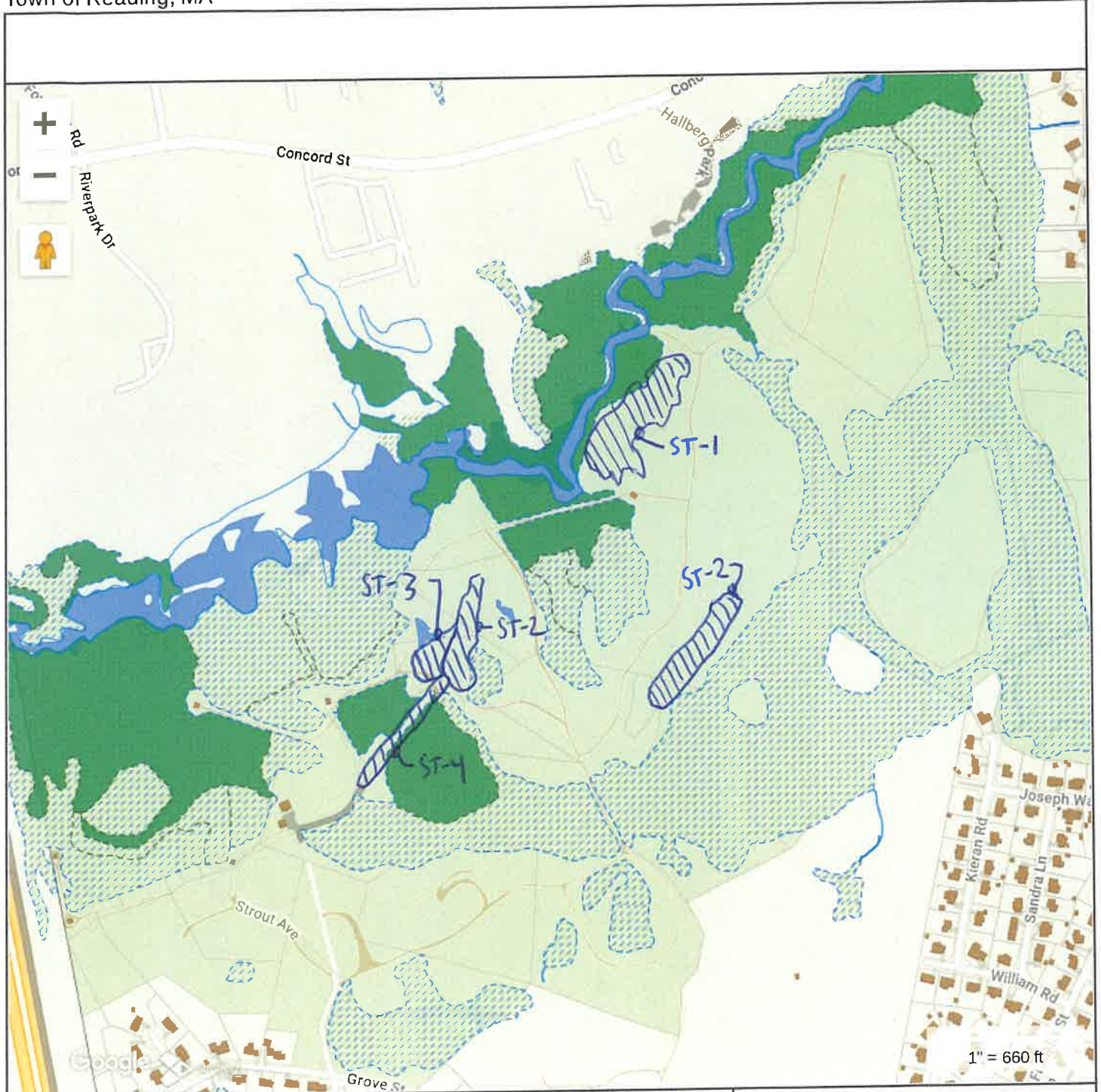
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Geometry updated 2/22/2023
Data updated 2/22/2023

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

9-17-24



Property Information

Property ID 047.0-0000-0015.0
 Location 0 HAVERHILL ST
 Owner TOWN OF READING CONS.



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