

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street

Worcester, MA 01605-2629

508-752-9666 – Fax: 508-752-9494

April 1, 2024

Sturbridge Conservation Commission
Sturbridge Town Hall
301 Main St, Sturbridge, MA 01566

RE: Notice of Intent under the Massachusetts Wetlands Protection Act and the Town of Sturbridge Wetlands Protection Bylaw for Proposed Construction of a Garage, Stormwater Management System and driveway at 176 Podunk Road.
Owner/Applicant: Thomas Buell

To the Commission:

Enclosed please find two (2) copies of the Notice of Intent filed under the Massachusetts Wetlands Protection Act (“WPA”) and Town of Sturbridge Wetlands Protection Bylaw and Bylaw Regulations for the above-referenced project. Also enclosed please find two checks made payable to the Town of Sturbridge: (1) 262.50 (for category 2.g.) to cover the town share of the filing fee under the WPA; and (2) \$150.00 (for accessory to a single-family house) to cover the filing fee under the Bylaw. EcoTec, Inc. (Scott Jordan; 508-752-9666 ext. 226) will pay the Legal Notice fee promptly upon notification of the cost of the advertisement. This filing is comprised of:

1. This cover letter with project narrative, below;
2. The Town of Sturbridge Conservation Commission Notice of Intent Application Coversheet/Checklist;
3. WPA Form 3, Notice of Intent Form with Fee Transmittal Form and Copies of filing fee checks;
4. Sturbridge Wetland Protection By-Law and Regulations Wetlands Filing Fee Calculation Worksheet;
5. Certified Abutters List;
6. Town of Sturbridge Tax Form Sign-Off;
7. Wetland Resource Evaluation Report by EcoTec dated December 5, 2023, including:
 - USGS Map, with site indicated;
 - Flood Insurance Rate Map FIRMette, with site indicated;
 - NHESP Atlas, with site indicated; and
 - BVW delineation field forms.
8. Site Plan titled: “Proposed Site Plan- 176 Podunk Road, Sturbridge, MA” by Tauper Land Survey, Inc. dated March 29, 2024.

Project Narrative

The proposed project consists of the construction of a stormwater management basin within the 100-foot Buffer Zone and a garage, driveway and stormwater management swale within the

Sturbridge Conservation Commission
Re: 176 Podunk Road
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Sturbridge Bylaw 200-foot Buffer Zone. Although not required, stormwater management is provided to convey runoff from Podunk Road in a westerly direction while maintaining existing hydrologic conditions at the driveway culvert. A copy of the stormwater report has been appended to the NOI application. Alternative site locations were examined and the proposed location was determined to be the feasible location with the least impacts to the state and local resource areas and Buffer Zones. An upland area along the northerly side of the existing driveway would require that the project be built closer to resource areas. Extensive wetlands and steep slopes restrict potential development on the westerly side of the existing driveway crossing. The proposed garage has been located as far from wetlands as possible, while maintaining required zoning setbacks. The wetland resource areas will be protected during construction of silt fence and straw wattles or bales and a stone tire scrubbed is proposed at the site entrance to prevent tracking onto Podunk Road.

One copy of this filing and payment of \$237.50 have been submitted by certified mail, return receipt requested to the Central Regional Office of the Department of Environmental Protection and the MassDEP Lockbox, respectively. Documentation of all payments is included in the filing.

Per Sturbridge Conservation Commission policy, please provide EcoTec with the Abutter Notification Letter upon receipt of the filing. EcoTec will then notify abutters and provide the Commission with proof of notification and an Affidavit of Service.

We look forward to meeting with the Commission regarding this filing. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.



Scott Jordan
Senior Environmental Scientist

CC: MassDEP Central Regional Office
Thomas Buell



**Town of Sturbridge
Conservation Commission
Notice of Intent Application Coversheet/Checklist**

Date 4/1/24

in all white cells completely

Parcel	<i>176 Podunk Road</i>	Applicant name	<i>Thomas Buell</i>
Address		Address	<i>176 Podunk Rd</i>
Assessors		Email	<i>Sturbridge, MA 01566</i>
Map/Plat	<i>520-00841-176</i>	Phone	<i>buell@ll.mit.edu</i>
Book & Page	<i>32552 / 14</i>		<i>781-879-7179</i>
Owner name	<i>Same</i>	Representative	<i>Scott Jordan</i>
Address		Address	<i>Ecotec</i>
Email		Email	<i>102 Grove St., Suite 110</i>
Phone		Phone	<i>Worcester, MA 01605</i>
			<i>s.jordan@ecotecinc.com</i>
			<i>508-752-9666 x226</i>

File

Wetland type	<i>BZ only</i>	sf/cf affected		Relevant Perf. Standards	10. _____
Wetland type		sf/cf affected		Relevant Perf. Standards	10. _____
Wetland type		sf/cf affected		Relevant Perf. Standards	10. _____

Components of a Complete NOI Application

State Form: NOI Form 3	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Engineered Plan	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Proof of Mailing to DEP	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Narrative	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Proof that all relevant perf. standards are met	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
TOPO Map identifying locus with scale	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
FIRM Map identifying locus with scale	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Natural Heritage Map with WH, PH, & VP data	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Included? <input checked="" type="checkbox"/>
Delineation lines (backup material)	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Tax Form	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Fees	
★ Fee Transmittal form	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
★ Filing Fee Worksheet	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
★ Town portion of state filing fee	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
★ Sturbridge local filing fee \$ _____	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Abutter Information	
★ Certified abutters list (within 200')	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
★ Abutter notification form	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
★ Affidavit & proof -- bring to hearing	<i>Present them at the hearing</i>
Other Attachments, e.g.	
Confirmation of submission to NHESP	Included? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Planting Plan	Included? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Floodplain analysis	Included? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable
Stormwater analysis	Included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Applicable

Components of a Complete NOI Application

Conservation Commission Wetland Permit Process

NOI	Process
1	Obtain a Certified list of all abutters within 200' of property lines from the Assessor's Office. <i>(may take 10 business days)</i>
2	Obtain a Tax Form Sign-Off by the Finance Department
3	<p>Submit applications (see bullets below) by noon of the Tuesday deadline (16 days before the desired hearing):</p> <p>a. <u>To Sturbridge Conservation Commission</u>: 301 Main St., Sturbridge, MA 01566</p> <ul style="list-style-type: none"> • This coversheet (1 paper copy) • Complete application -- see the checklist on the other side of this page (2 paper copies and 1 pdf) <ul style="list-style-type: none"> • <i>Plans must be stamped by an engineer if any component of the project requires engineering.</i> • Checks <p>b. <u>To Mass DEP Central Regional Office</u>: 8 New Bond Street, Worcester, MA 01606</p> <ul style="list-style-type: none"> • Complete application -- see the checklist on the other side of this page (1 paper copy) • Photocopy of the two state checks • Email a complete application to CERO_NOI@mass.gov <p>c. <u>To DEP Lock Box</u>: Box 4062, Boston MA 02211</p> <ul style="list-style-type: none"> • Check for state portion of the state fee • Fee transmittal form
4	<i>Upon receipt of a complete application, the Conservation Agent will schedule a Public hearing/meeting.</i>
5	Once you are provided the date and time of the hearing, notify all abutters within 200' of the property line using the Town's "Notification to Abutters Form" by certified mail, certificate of mailing, or hand delivery with signatures 7 business days prior to the Hearing. (Present proof of notification prior to the beginning of the public hearing.)
6	<i>The Conservation Agent will place a legal ad in a local newspaper and the Applicant will be billed for the ad.</i>
7	Stake the project. 2 weeks in advance of the public hearing, stake all proposed structures, erosion control barriers, stormwater systems, etc. within Con Com jurisdiction. (See SWB Regulations)
8	<i>The Conservation Commission and/or Agent will perform a site visit before the public hearing to confirm existing conditions and proposed work. If you wish to be informed of the time of the visit, please contact the Con Com office.</i>
9	<p>Attend the public hearing/meeting. The applicant or representative is required to provide proof of abutter notification (including Affidavit of Service), proof of legal advertisement, briefly present the project, and answer any questions about possible impacts on wetlands. At the end of the hearing, the Con Com will either:</p> <ul style="list-style-type: none"> • Issue an Order of Conditions (OOC) approving or denying the project, or • Approve a continuation of the public hearing to allow time for additional information to be provided.
10	Receive and read the decision and understand the conditions. Contact the Con Com if you have any questions. Some conditions are temporary (such as maintaining erosion controls), and some are perpetual (such as maintaining restoration planting areas or limiting the use of fertilizers).
11	Wait-out the 10-Day appeal period. A decision of the Con Com can be appealed by MassDEP or by any abutter, applicant, or 10-citizen group within 10 business days of the decision.
12	Record the Order at the Registry of Deeds. Provide proof of recording to the Conservation office along with signed Certificates of Understanding.
13	Install MassDEP file number sign and erosion controls.
14	Schedule and attend a pre-construction site visit. Contact the Conservation office to schedule the site visit.
15	Execute the project. The project must be completed within 3 years, unless an extension of the permit is issued; extensions must be requested at least 30 days prior to the expiration of the permit.
16	Request a Certificate of Compliance (COC). Once the project is complete and all conditions have been satisfied, request a COC from the Conservation office by submitting at least: (1) DEP Form 8a , (2) a stamped as-built plan , and (3) a letter from the engineer stating that everything is in substantial compliance with the approved plans and OOC. The Con Com will perform a site visit to ensure compliance and will issue a COC if appropriate.
17	Record the Certificate of Compliance (COC) at the Registry of Deeds to remove the cloud from the title. Provide proof of recording to the Conservation office.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sturbridge

City/Town

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



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

176 Podunk Road	Sturbridge	01566
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	42.15588	-72.04185
	d. Latitude	e. Longitude
520-00841	176	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

Thomas	Buell	
a. First Name	b. Last Name	
c. Organization		
176 Podunk Road		
d. Street Address		
Sturbridge	MA	01566
e. City/Town	f. State	g. Zip Code
781-879-7179	buell@ll.mit.edu	
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

a. First Name	b. Last Name	
c. Organization		
d. Street Address		
e. City/Town	f. State	g. Zip Code
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

Scott	Jordan	
a. First Name	b. Last Name	
EcoTec, Inc.		
c. Company		
102 Grove Street, Suite 110		
d. Street Address		
Worcester	MA	01605
e. City/Town	f. State	g. Zip Code
508-752-9666 x226	sjordan@ecotecinc.com	
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

\$500	\$237.50	\$262.50
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

The applicant proposes to construct a stormwater management basin within the 100 Buffer Zone to a BVW. The applicant also proposes to construct a driveway, stormwater swale, and garage within the Sturbridge Bylaw 200-foot Buffer Zone.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> Other | |

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Worcester

a. County

32552

c. Book

b. Certificate # (if registered land)

14

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Bank	1. linear feet _____	2. linear feet _____
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet _____	2. square feet _____
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet _____	2. square feet _____
	3. cubic yards dredged _____	

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet _____	2. square feet _____
	3. cubic feet of flood storage lost _____	4. cubic feet replaced _____
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet _____	
	2. cubic feet of flood storage lost _____	3. cubic feet replaced _____

- f. Riverfront Area
1. Name of Waterway (if available) - **specify coastal or inland** _____
2. Width of Riverfront Area (check one):
- 25 ft. - Designated Densely Developed Areas only
 - 100 ft. - New agricultural projects only
 - 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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Provided by MassDEP:

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City/Town _____

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	
4. <input type="checkbox"/> Restoration/Enhancement	If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.	
	_____	_____
	a. square feet of BVW	b. square feet of Salt Marsh
5. <input type="checkbox"/> Project Involves Stream Crossings		
	_____	_____
	a. number of new stream crossings	b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No

If yes, include proof of mailing or hand delivery of NOI to:

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

12/5/2023

b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); OR complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:

(a) within wetland Resource Area

percentage/acreage

(b) outside Resource Area

percentage/acreage

2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following

1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

- c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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C. Other Applicable Standards and Requirements (cont'd)

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
- a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
- a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
- a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
- a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 2. A portion of the site constitutes redevelopment
 3. Proprietary BMPs are included in the Stormwater Management System.
- b. No. Check why the project is exempt:
1. Single-family house
 2. Emergency road repair
 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Proposed Site Plan - 176 Podunk Road, Sturbridge, MA

a. Plan Title

Tauper Land Survey, Inc.

Mikael Lassila, PE

b. Prepared By

c. Signed and Stamped by

3/29/24

20

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

2183

2. Municipal Check Number

3/28/24

3. Check date

2184

4. State Check Number

3/28/24

5. Check date

Thomas & Patricia

6. Payor name on check: First Name

Buell

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 3 – Notice of Intent
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

1. Signature of Applicant
[Handwritten Signature]

3. Signature of Property Owner (if different)
[Handwritten Signature]

5. Signature of Representative (if any)

2. Date
03/25/2024

4. Date
4/1/24

6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a copy of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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



A. Applicant Information

1. Location of Project:

176 Podunk Road Sturbridge
 a. Street Address b. City/Town

c. Check number d. Fee amount

2. Applicant Mailing Address:

Thomas Buell
 a. First Name b. Last Name

c. Organization

176 Podunk Road
 d. Mailing Address

Sturbridge MA 01566
 e. City/Town f. State g. Zip Code

781-879-7179 buell@ll.mit.edu
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

a. First Name b. Last Name

c. Organization

d. Mailing Address

e. City/Town f. State g. Zip Code

h. Phone Number i. Fax Number j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
2.g. _____	1 _____	\$500 _____	\$500 _____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Step 5/Total Project Fee: \$500 _____

Step 6/Fee Payments:

Total Project Fee:	\$500
State share of filing Fee:	\$237.50
City/Town share of filing Fee:	\$262.50

a. Total Fee from Step 5
 b. 1/2 Total Fee **less** \$12.50
 c. 1/2 Total Fee **plus** \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

STURBRIDGE WETLANDS PROTECTION BY-LAW AND REGULATIONS

WETLANDS FILING FEE CALCULATION WORKSHEET

Application Type	Qty	Town Filing Fee	TOTAL
Notice of Intent (NOI):			
Residential – Single Family:			
Accessory (Deck, Shed, Pool Septic)	<u>1</u>	\$150	<u>\$150</u>
Shoreline Work	_____	\$150	_____
New Construction	_____	\$300	_____
Residential – Other:			
Subdivision/Multi-Unit	_____	\$750	_____
Commercial/Industrial:			
New	_____	\$1500	_____
Redevelopment	_____	\$1000	_____
Limited Project (as defined in SWB & WPA)	_____	Equal to full WPA fee	_____
Alterations – located within Riverfront Area	_____	Additional 50% of Fee	_____
Application filed after Enforcement Order	_____	Double the Municipal fee	_____
Request for Amended Order of Conditions	_____	50% of initial fee	_____
Request for Determination of Applicability (RDA):			
No Wetland Boundary Confirmation Residential:	_____	\$100	_____
No Wetland Boundary Confirmation All Other:	_____	\$200	_____
For Wetland Boundary Confirmation File ANRAD or NOI	_____		_____
Abbreviated Notice of Resource Area Delineation (ANRAD):			
Residential – Single Family:	_____	\$100	_____
All Other:	_____		_____
Base Review	_____	\$300	_____
Resource Area Boundary	_____		_____

Certificate of Compliance (COC):

Residential:

Single Family _____ \$50 _____

Subdivision or Multi-Unit _____ \$150 _____

Commercial or Industrial: _____ \$150 _____

If Order of Conditions has Expired _____ Add an additional \$150 _____

OOC Extension Request _____ \$50 _____

Emergency Certification _____ \$50 _____
(NOI may be required to be filed following issuance of Emergency Cert)

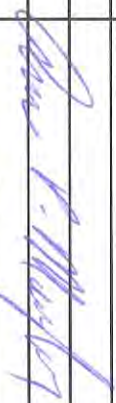
Local Bylaw Fee (includes Town Filing Fee) \$ 150

State Filing Fee (from DEP Wetland Transmittal Form) \$ 262.50

Total Payable to "Town of STURBRIDGE" \$ 412.50

*Additional Consultant Fee may be required for reasons which may include:

- Significant amount of wetland impact;
- Extensive resource areas on a site;
- Lack of information supplied;
- Incomplete plans, reports, forms submitted;
- Supplemental information submitted.

Parcel ID	Owner	Owner Address	Owner City	State	Zip	Property Address
520-00831-198	MOYNAGH ROBERT J	181 PODUNK ROAD	STURBRIDGE	MA	01566	198 PODUNK ROAD
520-00841-184	CHANG JIMMY J	184 PODUNK ROAD	STURBRIDGE	MA	01566	184 PODUNK ROAD
183-01217-049	DONALDSON DAVID C	49 BUSHNELL ROAD	STURBRIDGE	MA	01566	49 BUSHNELL ROAD
183-01215-045	HERTING AMBER N TRUSTEE	125 PELHAM ISLAND ROAD	SUDBURY	MA	01776	45 BUSHNELL ROAD
183-01218-057	HILLMAN REED V	57 BUSHNELL ROAD	STURBRIDGE	MA	01566	57 BUSHNELL ROAD
520-00851-170	MCCUE RYAN	170 PODUNK ROAD	STURBRIDGE	MA	01566	170 PODUNK ROAD
520-00851-173	QUARLES RYAN HARRISON	173 PODUNK ROAD	STURBRIDGE	MA	01566	173 PODUNK ROAD
520-00831-181	MOYNAGH KATHLEEN M	181 PODUNK ROAD	STURBRIDGE	MA	01566	181 PODUNK ROAD
520-00842-177	SUPRENANT GERALD ROY	177 PODUNK RD	STURBRIDGE	MA	01566	177 PODUNK ROAD
520-00851-175	VANDERHOOF KARL J	175 PODUNK ROAD	STURBRIDGE	MA	01566	175 PODUNK ROAD
	BOARD OF ASSESSORS					
Above persons listed are record owners as they appear on the most recent applicable tax list.						
Assessors are not responsible for errors or omissions. RE: M.G.L. - Chapter 40A, Section 11						
Abutters List -	Conservation Commission - 200'					
	RE: 176 PODUNK ROAD					
Certified Copy						
Assessor:						
Date:	3-25-24					



Town of Sturbridge

Barbara A. Barry, Finance Director

Department/Board/Committee: Conservation

Please verify outstanding tax/fee status for the following property owner:

Property Owner: Thomas Buell

Property Location: 176 Podunk Road

- The license/permit may be released.
 The license/permit may not be released.

for Meghan Backes
Finance Director

5/28/24
Date

EcoTec, Inc.
ENVIRONMENTAL CONSULTING SERVICES
102 Grove Street, Suite 110
Worcester, MA 01605-2629
508-752-9666 – Fax: 508-752-9494

December 5, 2023

Thomas Buell
176 Podunk Road
Sturbridge, MA 01566

RE: Wetland Resource Evaluation, 176 Podunk Road, Sturbridge, Massachusetts

Dear Mr. Buell:

On November 17, 2023, EcoTec, Inc. inspected the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the “Act”) and its implementing regulations (310 CMR 10.00 *et seq.*; the “Regulations”); (2) the U.S. Clean Water Act (i.e., Section 404 and 401 wetlands); and (3) the Town of Sturbridge Wetlands Protection Bylaw and regulations. **Scott Morrison, PWS** conducted the inspection.

The subject site consists of the southeasterly corner of the property. This area is located to the south of the driveway, west of Podunk Road, and easterly of an intermittent stream. The upland portions of the site consist of existing forested area and former log landing for a timber harvesting operation. Plant species observed include northern red oak (*Quercus rubra*), eastern white pine (*Pinus strobus*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), and black birch (*Betula lenta*) trees and/or saplings; poison ivy (*Toxicodendron radicans*) climbing woody vines; American witch-hazel (*Hamamelis virginiana*), and American hazel-nut (*Corylus americana*), shrubs; and tree clubmoss (*Lycopodium obscurum*), trailing clubmoss (*Lycopodium complanatum*), bracken fern (*Pteridium aquilinum*), hayscented fern (*Dennstaedtia punctilobula*), teaberry (*Gaultheria procumbens*), partridge-berry (*Mitchella repens*), feather false-Solomon’s-seal (*Smilacina racemosa*), and wild-lily-of-the-valley (*Maianthemum canadense*) ground cover. The wetland resources observed on the site are described below.

Methodology

The site was inspected, and areas suspected to qualify as wetland resources were identified. The boundary of Bordering Vegetated Wetlands or, in the absence of Bordering Vegetated Wetlands, Bank was delineated in the field in accordance with the definitions set forth in the regulations at 310 CMR 10.55(2)(c) and 310 CMR 10.54(2). Section 10.55(2)(c) states that “The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated

conditions exist.” Section 10.54(2)(c) states that “The upper boundary of Bank is the first observable break in the slope or the mean annual flood level, whichever is lower.” The methodology used to delineate Bordering Vegetated Wetlands is further described in the *Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands*, Second Edition, produced by the Massachusetts Department of Environmental Protection, dated September 2022. As recommended by the Department, the plant taxonomy used in this letter is based on the *National List of Plant Species that Occur in Wetlands: Massachusetts* (Fish and Wildlife Service, U.S. Department of the Interior, 1988). Federal wetlands were presumed to have boundaries conterminous with the delineated Bordering Vegetated Wetlands. One set of *Bordering Vegetated Wetland Determination Forms* completed for observation plots located in the wetlands and uplands near flag A-7 is attached. The table below provides the Flag Numbers, Flag Type, and Wetland Types and Locations for the delineated wetland resources.

Flag Numbers	Flag Type	Wetland Types and Locations
Start A1 to A14 Stop (Culvert between A8 & A9)	Blue Flags	Boundary of Bordering Vegetated Wetlands located in the northern portion of the site that is associated with an intermittent stream.

Findings

Wetland A (i.e., flags A1 to A14) consists of a forested swamp located in the southern portion of the site that is associated with an intermittent stream. Plant species observed include red maple (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), swamp white and American elm (*Ulmus americana*) trees and/or saplings; poison ivy (*Toxicodendron radicans*) climbing woody vines; highbush blueberry (*Vaccinium corymbosum*), common winterberry (*Ilex verticillata*), arrow-wood (*Viburnum dentatum*), and northern spicebush (*Lindera benzoin*) shrubs; and sheep-laurel (*Kalmia angustifolia*), bristly blackberry (*Rubus hispidus*), cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Onoclea sensibilis*), Massachusetts fern (*Thelypteris simulata*), spinulose woodfern (*Dryopteris spinulosa*), skunk-cabbage (*Symplocarpus foetidus*), Alaska goldthread (*Coptis trifolia*), spotted touch-me-not (*Impatiens capensis*), shining clubmoss (*Lycopodium lucidulum*), and sphagnum moss (*Sphagnum sp.*) ground cover. Evidence of wetland hydrology, including hydric soils, high groundwater, saturated soils, and drainage patterns, was observed within the delineated wetland. This vegetated wetland borders an intermittent stream; accordingly, the vegetated wetlands would be regulated as Bordering Vegetated Wetlands and the intermittent stream would be regulated as Bank under the Act and Bylaw. A 100-foot Buffer Zone extends horizontally outward from the edge of Bordering Vegetated Wetlands and Bank under the Act and Bylaw.

Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Section 10.57(2)(a)3. states that “The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will

176 Podunk Road, Sturbridge

December 5, 2023

Page 3.

theoretically result from the statistical 100-year frequency storm.” Based upon a review of the Flood Insurance Rate Map, Worcester County, Massachusetts, Map Number 25027C0766F, Effective Date June 21, 2023, the site is mapped as Other Areas: Zone X, which is defined as areas located outside of the 0.2% annual chance flood (i.e., outside of 500-year floodplain). The project engineer should evaluate the most recent National Flood Insurance Program flood profile data to determine if Bordering Land Subject to Flooding occurs on the site. Bordering Land Subject to Flooding would occur in areas where the 100-year flood elevation is located outside of or upgradient of the delineated Bordering Vegetated Wetlands or Bank boundary. Bordering Land Subject to Flooding does not have a Buffer Zone under the Act.

The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. Based upon a review of the current USGS Map (attached) and observations made during the site inspection, a stream that is not shown on the USGS Map is located in the western portion of the inspection area. The watershed area for this stream at the site was determined to be 0.067 square miles, which is substantially less than 0.5 square miles (see attached watershed calculations). As such, the stream would be designated intermittent under the Massachusetts Wetlands Protection Act regulations. Furthermore, based upon a review of the current USGS Map and observations made during the site inspection, there are no other mapped or unmapped streams located within 200 feet of the site. Accordingly, Riverfront Area would not occur on the site. Riverfront Area does not have a Buffer Zone under the Act.

The Regulations require that no project may be permitted that will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures set forth at 310 CMR 10.59. Based upon a review of the *Massachusetts Natural Heritage Atlas*, 15th edition, Priority Habitats and Estimated Habitats from the NHESP Interactive Viewer, valid from August 1, 2021, and Certified Vernal Pools from MassGIS, there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)], Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; “MESA”) and MESA Regulations (321 CMR 10.00 *et seq.*)], or Certified Vernal Pools on or in the immediate vicinity of the site. A copy of this map is attached.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. A brief description of my experience and qualifications is attached. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.



Scott M. Morrison, PWS
Senior Environmental Scientist

17/E/SturbridgePodunk176Report

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street

Worcester, MA 01605-2629

508-752-9666 – Fax: 508-752-9494

Scott M. Morrison, PWS, CERP, RPSS, SE **Senior Environmental Scientist**

Scott Morrison is a Senior Environmental Scientist with EcoTec, Inc. Since joining EcoTec in 2000, Mr. Morrison's project experience include wetland resource evaluation, delineation, and permitting at the local, state, and federal levels; wildlife habitat evaluation; pond and stream evaluation; vernal pool evaluation, monitoring, and certification; wetland replacement, replication, and restoration area design, construction, and monitoring; soil evaluations to determine infiltration rates and seasonal high groundwater elevations for detention basin construction; environmental sampling and analysis tasks, including soil and groundwater sample collection and handling; and expert testimony preparation. He has conducted rare species habitat assessments for the eastern box turtle, wood turtle, Blanding's turtle, spotted turtle, and marbled salamander. He has participated in rare species studies for rare species including the marbled salamander, piping plover, eastern box turtle, and northern diamondback terrapin and developed mitigation strategies for the marbled salamander, spotted turtle, eastern box turtle and wood turtle. He has participated in visual preconstruction sweeps for the wood turtle and both preconstruction and research projects for the eastern box turtle. He has served as a consultant to municipalities, conservation commissions, engineering and survey firms. He has completed numerous wetland related projects including environmental impact assessments for proposed development, erosion control and environmental monitoring for subdivisions, commercial developments, golf courses and landfills. He has prepared Massachusetts Environmental Policy Act (MEPA) documentation, including Environmental Notification Forms (ENFs), Notice of Project Changes (NPCs), and Draft and Final Environmental Impact Reports (EIRs) including Green House Gas Assessments for various projects including subdivisions, commercial buildings, and dredging projects. Prior to joining EcoTec, Inc. Mr. Morrison worked for the Massachusetts Department of Environmental Management (currently the Department of Conservation and Recreation) where he was involved with the monitoring and protection of endangered species and rare old growth forest. He was an active member of the Spencer Conservation Commission from 1998 to 2000 where he provided oversight of proposed wetland replication projects and review of projects submitted for wetland permitting. His educational background includes courses in forestry, ecology, chemistry, soils, and natural resource policy. His prior research experience includes research on forest succession and field research on nesting piping plovers, an endangered coastal shore bird.

Education:

Graduate Soil Science Certificate Program
University of Massachusetts at Amherst, 2006
Bachelor of Science: Natural Resource Studies
University of Massachusetts at Amherst, 1998
Associate of Science: Business Administration
Quinsigamond Community College, 1996

Professional Affiliations:

Registered Professional Soil Scientist, Society of Soil Scientists of
Southern New England (SSSSNE)
Massachusetts Association of Conservation Commissioners
Association of Massachusetts Wetland Scientists
Society of Wetland Scientists
Society for Ecological Restoration-

Certifications:

Society of Wetlands Scientists Professional Wetland Scientist,
Certification Number 2583
Massachusetts Department of Environmental Protection Soil Evaluator,
Certification Number SE 13766
Society for Ecological Restoration-Certified Ecological Restoration Practitioner
Certification Number 0648
OSHA Health and Safety Training, 40-Hour, 29 CFR 1910.120
University of Massachusetts Extension, Invasive Species Management



176 Podunk Road, Sturbridge



NHESP Estimated Habitats of Rare Wildlife



NHESP Priority Habitats of Rare Species



Map Features for Imagery

National Flood Hazard Layer FIRMette

72°2'54"W 42°9'35"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*

Future Conditions 1% Annual Chance Flood Hazard *Zone X*

Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*

Area with Flood Risk due to Levee *Zone D*

OTHER AREAS OF FLOOD HAZARD

OTHER AREAS

NO SCREEN

Area of Minimal Flood Hazard *Zone X*

Effective LOMR

Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

OTHER FEATURES

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

MAP PANELS

Digital Data Available

No Digital Data Available

Unmapped

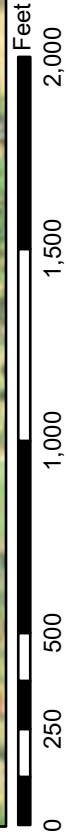


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/20/2023 at 10:38 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

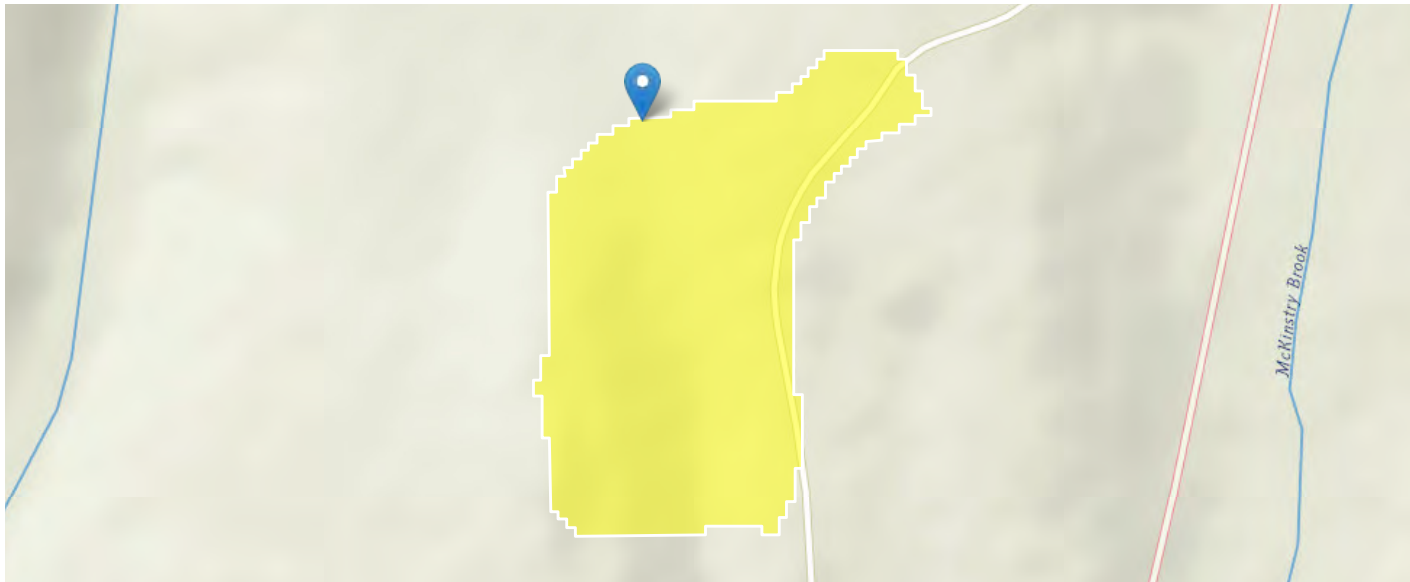


72°2'17"W 42°9'19"N

Basemap Imagery Source: USGS National Map 2023

StreamStats Report

Region ID: MA
Workspace ID: MA20231120154702042000
Clicked Point (Latitude, Longitude): 42.15935, -72.04358
Time: 2023-11-20 10:48:32 -0500



[+ Collapse All](#)

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0665	square miles

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.18.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: 176 Podunk Road City/Town: Sturbridge Sampling Date: 11/17/23

Applicant/Owner: _____ Sampling Point or Zone: Upland

Investigator(s): _____ Latitude / Longitude: _____

Soil Map Unit Name: _____ NWI or DEP Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks)

Are Vegetation , Soil , or Hydrology significantly disturbed? (If yes, explain in Remarks)

Are Vegetation , Soil , or Hydrology naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soils criterion met?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetlands hydrology present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks, Photo Details, Flagging, etc.:					

HYDROLOGY

Field Observations:			
Surface Water Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches) _____
Water Table Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches) _____
Wetland Hydrology Indicators			
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water	
<input type="checkbox"/> Water-stained leaves <input type="checkbox"/> Evidence of aquatic fauna <input type="checkbox"/> Iron deposits <input type="checkbox"/> Algal mats or crusts <input type="checkbox"/> Oxidized rhizospheres/pore linings <input type="checkbox"/> Thin muck surfaces <input type="checkbox"/> Plants with air-filled tissue (aerenchyma) <input type="checkbox"/> Plants with polymorphic leaves <input type="checkbox"/> Plants with floating leaves <input type="checkbox"/> Hydrogen sulfide odor	<input type="checkbox"/> Hydrological records <input type="checkbox"/> Free water in a soil test hole <input type="checkbox"/> Saturated soil <input type="checkbox"/> Water marks <input type="checkbox"/> Moss trim lines <input type="checkbox"/> Presence of reduced iron <input type="checkbox"/> Woody plants with adventitious roots <input type="checkbox"/> Trees with shallow root systems <input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Direct observation of inundation <input type="checkbox"/> Drainage patterns <input type="checkbox"/> Drift lines <input type="checkbox"/> Scoured areas <input type="checkbox"/> Sediment deposits <input type="checkbox"/> Surface soil cracks <input type="checkbox"/> Sparsely vegetated concave surface <input type="checkbox"/> Microtopographic relief <input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)	
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):			

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>30' Radius</u>		Indicator Status	Absolute/ Relative % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name*	Scientific name						
1. red maple	<i>Acer rubrum</i>	FAC	30	Yes	Yes		
2. white ash	<i>Fraxinus americana</i>	FACU	20	Yes	No		
3. white pine	<i>Pinus strobus</i>	FACU	20	Yes	No		
4.							
5.							
6.							
7.							
8.							
9.							
			<u>70</u> = Total Absolute Cover				
<u>Shrub/Sapling Stratum</u>		Plot size <u>15' Radius</u>		Indicator Status	Absolute/ Relative % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name*	Scientific name						
1. eastern hemlock	<i>Tsuga canadensis</i>	WET	20	Yes	Yes		
2. winterberry	<i>Ilex verticillata</i>	FACW	20	Yes	Yes		
3.							
4.							
5.							
6.							
7.							
8.							
9.							
			<u>40</u> = Total Absolute Cover				
<u>Herb Stratum</u>		Plot size <u>5' Radius</u>		Indicator Status	Absolute/ Relative % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name*	Scientific name						
1. christmas fern	<i>Polystichum acrostichoides</i>	FACU	30	Yes	No		
2. sensitive fern	<i>Onoclea sensibilis</i>	FACW	40	Yes	Yes		
3. garlic mustard	<i>Alliaria petiolata</i>	NL	20	Yes	No		
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
			<u>90</u> = Total Absolute Cover				

* 1988 Plant List

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size <u>30' Radius</u>		Indicator Status	Absolute/ Dominant? Relative % (yes/no) Cover	Wetland Indicator? (yes/no)
Common name*		Scientific name				
1.						
2.						
3.						
4.						
						_____ = Total Absolute Cover

* 1988 Plant List

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	= 0.0
	FACW species		X 2	= 0.0
	FAC species		X 3	= 0.0
	FACU species		X 4	= 0.0
	UPL species		X 5	= 0.0
	Column Totals	(A) 0.0		(B) 0.0
Prevalence Index		B/A = 0.0	Is the Prevalence Index ≤ 3.0? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Wetland vegetation criterion met?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Definitions of Vegetation Strata

- Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height
- Shrub / Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall
- Herb - All herbaceous (non-woody plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall
- Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: 176 Podunk Road City/Town: Sturbridge Sampling Date: 11/17/23

Applicant/Owner: _____ Sampling Point or Zone: A-7

Investigator(s): Scott Morrison Latitude / Longitude: _____

Soil Map Unit Name: _____ NWI or DEP Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks)

Are Vegetation , Soil , or Hydrology significantly disturbed? (If yes, explain in Remarks)

Are Vegetation , Soil , or Hydrology naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soils criterion met?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Wetlands hydrology present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Remarks, Photo Details, Flagging, etc.:			

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> Depth (inches) <u>0</u>
Water Table Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> Depth (inches) <u>0</u>
Saturation Present (including capillary fringe)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> Depth (inches) <u>0</u>
Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology <input checked="" type="checkbox"/> Water-stained leaves <input type="checkbox"/> Evidence of aquatic fauna <input type="checkbox"/> Iron deposits <input type="checkbox"/> Algal mats or crusts <input checked="" type="checkbox"/> Oxidized rhizospheres/pore linings <input type="checkbox"/> Thin muck surfaces <input type="checkbox"/> Plants with air-filled tissue (aerenchyma) <input type="checkbox"/> Plants with polymorphic leaves <input type="checkbox"/> Plants with floating leaves <input type="checkbox"/> Hydrogen sulfide odor	Indicators that can be Reliable with Proper Interpretation <input type="checkbox"/> Hydrological records <input checked="" type="checkbox"/> Free water in a soil test hole <input checked="" type="checkbox"/> Saturated soil <input type="checkbox"/> Water marks <input type="checkbox"/> Moss trim lines <input type="checkbox"/> Presence of reduced iron <input type="checkbox"/> Woody plants with adventitious roots <input type="checkbox"/> Trees with shallow root systems <input type="checkbox"/> Woody plants with enlarged lenticels	Indicators of the Influence of Water <input type="checkbox"/> Direct observation of inundation <input type="checkbox"/> Drainage patterns <input type="checkbox"/> Drift lines <input type="checkbox"/> Scoured areas <input type="checkbox"/> Sediment deposits <input type="checkbox"/> Surface soil cracks <input type="checkbox"/> Sparsely vegetated concave surface <input type="checkbox"/> Microtopographic relief <input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

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VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>30' Radius</u>		Indicator Status	Absolute/ Relative % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name*	Scientific name						
1. white pine	<i>Pinus strobus</i>	FACU	30	Yes	No		
2. red maple		FAC	20	Yes	Yes		
3.							
4.							
5.							
6.							
7.							
8.							
9.							
			50 = Total Absolute Cover				
<u>Shrub/Sapling Stratum</u>		Plot size <u>15' Radius</u>		Indicator Status	Absolute/ Relative % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name*	Scientific name						
1. winterberry	<i>Ilex verticillata</i>	FACW	60	Yes	Yes		
2. witch-hazel	<i>Hamamelis virginiana</i>	FAC-	20	No	Yes		
3.							
4.							
5.							
6.							
7.							
8.							
9.							
			80 = Total Absolute Cover				
<u>Herb Stratum</u>		Plot size <u>5' Radius</u>		Indicator Status	Absolute/ Relative % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name*	Scientific name						
1. spinulose wood fern	<i>Dryopteris spinulosa</i>	FAC+	80	Yes	Yes		
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
			80 = Total Absolute Cover				

* 1988 Plant List

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size <u>30' Radius</u>		Indicator Status	Absolute/ Dominant? Relative % (yes/no) Cover	Wetland Indicator? (yes/no)
Common name*		Scientific name				
1.						
2.						
3.						
4.						
						_____ = Total Absolute Cover

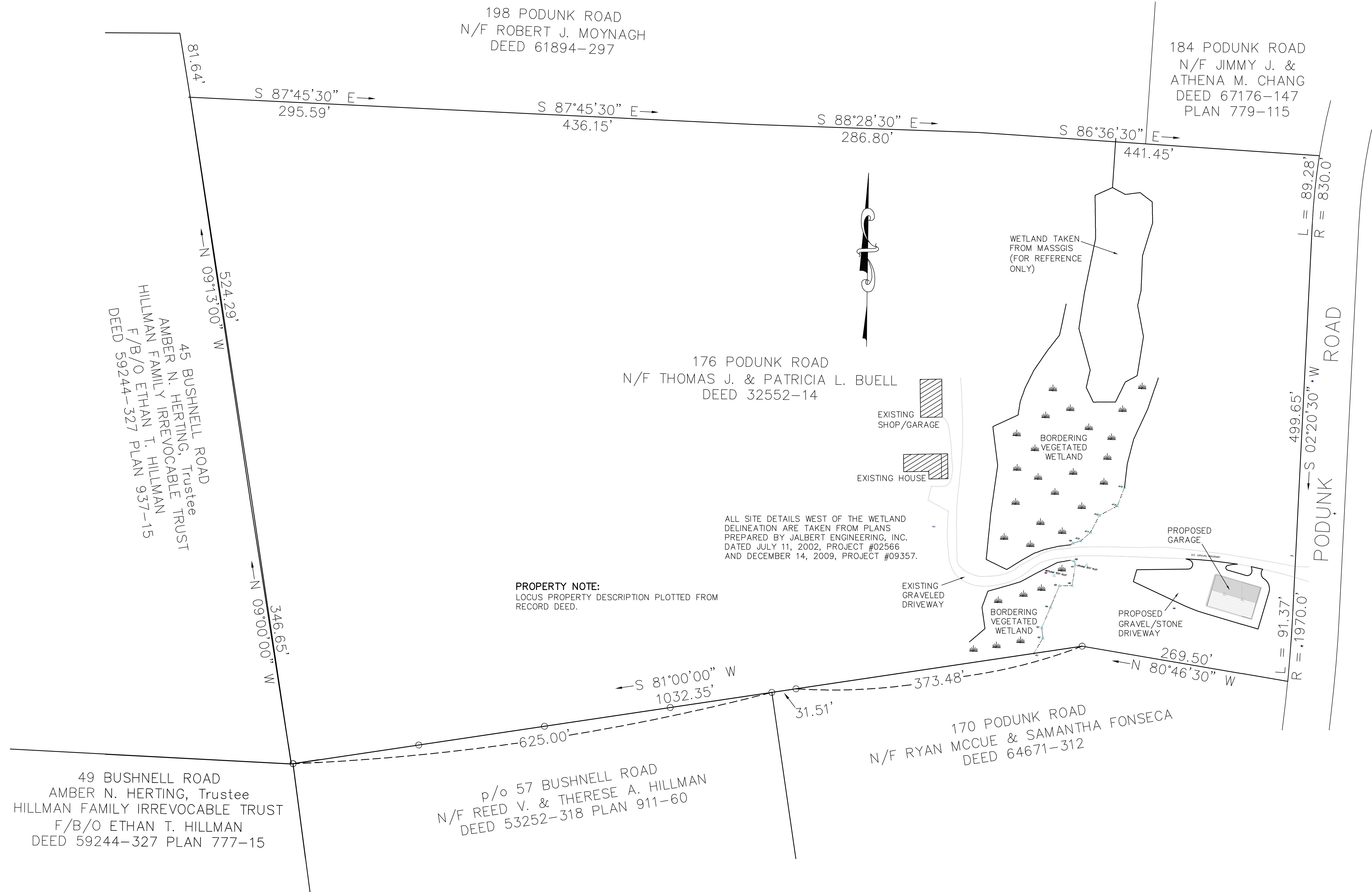
* 1988 Plant List

Rapid Test: Do all dominant species have an indicator status of OBL or FACW?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Dominance Test:	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Prevalence Index:		Total % Cover (all strata)	Multiply by:	Result
	OBL species		X 1	= 0.0
	FACW species		X 2	= 0.0
	FAC species		X 3	= 0.0
	FACU species		X 4	= 0.0
	UPL species		X 5	= 0.0
	Column Totals	(A) 0.0		(B) 0.0
Prevalence Index		B/A = 0.0	Is the Prevalence Index ≤ 3.0? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Wetland vegetation criterion met?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

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51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

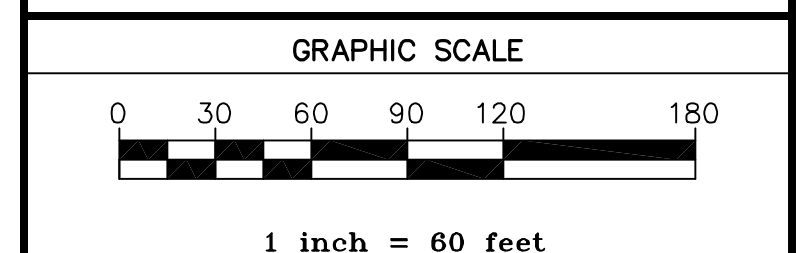


PROPERTY NOTE:
 LOCUS PROPERTY DESCRIPTION PLOTTED FROM
 RECORD DEED.

ALL SITE DETAILS WEST OF THE WETLAND
 DELINEATION ARE TAKEN FROM PLANS
 PREPARED BY JALBERT ENGINEERING, INC.
 DATED JULY 11, 2002, PROJECT #02566
 AND DECEMBER 14, 2009, PROJECT #09357.

REVISIONS		
REV.	DATE	DESCRIPTION

PROJECT NO.	24-100
DESIGNED BY	SMB
REVIEWED BY	MAL
DATE	03/29/24
CAD FILE	BUELL_176 Podunk...w/Drainage.dwg



PREPARED BY:
TAUPER LAND SURVEY INC.
 710 MAIN STREET,
 NORTH OXFORD, MA 01537
 TEL. 508-987-8713

PROPOSED SITE PLAN
176 Podunk Road
Sturbridge, Massachusetts

PREPARED FOR: OWNER/APPLICANT
 THOMAS J. & PATRICIA L. BUELL
 176 PODUNK ROAD
 STURBRIDGE, MA 01566

LEGAL
 WORCESTER DISTRICT REGISTRY (SOUTH)
 DEED BOOK 32552, PAGE 14
 ASSESSORS: 520-00841-176

SHEET TITLE
OVERVIEW PLAN
 MARCH 29, 2024 SHEET 1 OF 2

SHEET NO.
C-1.0

