# ABBREVIATED NOTICE OF RESOURCE AREA DELINEATION

# 121 Grove Street Map 295, Lot 1 & Map 294, Lot 7 Franklin, Massachusetts



#### **SUBMITTED TO:**

Town of Franklin Conservation Commission 355 East Central Street Franklin, Massachusetts 02038

#### PREPARED BY:

Lucas Environmental, LLC 500A Washington Street Quincy, Massachusetts 02169

#### PREPARED FOR:

Fairfield Residential Company LLC 5 Burlington Woods Suite 203 Burlington, Massachusetts 01803

#### IN ASSOCIATION WITH:

SHIPE Consulting RJO'Connell & Associates, Inc.



**REPORT DATE: November 18, 2022** 



November 18, 2022

Town of Franklin Conservation Commission 355 East Central Street Franklin, Massachusetts 02038

Re: Notice of Intent

121 Grove Street

Map 295, Lot 1 & Map 294, Lot 7 Franklin, Massachusetts 02038

Members of the Franklin Conservation Commission:

On behalf of Fairfield Residential Company LLC, and in association with SHIPE Consulting and RJO'Connell & Associates, Inc., LLC, Lucas Environmental, LLC is pleased to submit this Abbreviated Notice of Resource Area Delineation (ANRAD) to confirm the delineation and identification of wetland resource areas for the subject property located at 121 Grove Street (Map 295, Lot 1 & Map 294, Lot 7) in Franklin, Massachusetts. This ANRAD is submitted in order to confirm the boundaries of wetland resource areas on the site that are regulated under the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.), and the Town of Franklin Wetlands Protection Bylaw (Chapter 181).

Enclosed please find one (1) original and one (1) copy of the ANRAD submittal and full-size plan, and six (6) copies of the reduced 11x17 plans. The ANRAD application package includes the WPA Form 4A, existing conditions narrative, figures, photographic documentation, abutter notification, filing fees, MassDEP data forms, and Existing Conditions Site Plan (1 sheet). A link to an electronic copy of the pdf file of the ANRAD application and supporting documentation will be provided concurrently with this submittal via email. We respectfully request that you place this matter on your agenda for the December 8, 2022, Public Hearing.

If you have any questions, please do not hesitate to contact me at 617.405.4140 or <a href="mailto:com/cml/cma

Sincerely,

LUCAS ENVIRONMENTAL, LLC

Christopher M. Lucas, PWS, CWS, RPSS

Environmental Consultant/Wetland & Soil Scientist

cc: Bryn Smith – Owner (electronic copy)

Fairfield Residential Company LLC – Applicant (electronic copy)

R.J. O'Connell & Associates, Inc. (electronic copy)

MassDEP - CERO



# **TABLE OF CONTENTS**

SE	ECTION I – FORMS					
SE	SECTION II – NARRATIVE					
	1.0	INTRODUCTION1				
	2.0	EXISTING CONDITIONS				
	3.0	ENVIRONMENTAL RESOURCE AREAS				
	3.1	Inland Bank – 310 CMR 10.54				
	3.2	Bordering Vegetated Wetlands – 310 CMR 10.55				
	3.3	Resource Area Descriptions4				
	4.0	SUMMARY6				
SE	SECTION III – FIGURES					
SECTION IV – APPENDICES						
APPENDIX A						
PHOTOGRAPHIC DOCUMENTATION						
APPENDIX B						
ABUTTER INFORMATION						
APPENDIX C						
FILING FEE INFORMATION						
APPENDIX D						
WETLAND DELINEATION FIELD DATA FORMS						
	APPE	NDIX E				
	STREAMSTATS DOCUMENTATION					



# SECTION I - FORMS



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

#### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

# WPA Form 4A – Abbreviated Notice of Resource Area Delineation

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

Provided	by	MassDEP:

MassDEP File Number

**Document Transaction Number** 

Franklin	
City/Town	

#### A. General Information

1.	Project Location (Note: electronic filers will clie	ck on button for GIS locator):			
	•	Franklin	02038		
	121 Grove Street a. Street Address	b. City/Town	c. Zip Code		
	u. Otrock/Address	42° 4' 36.5" N	71° 25' 21.55" W		
	Latitude and Longitude:	d. Latitude	e. Longitude		
	Map 294 & 295	Lots 7 & 1	0.956.47.0		
	f. Assessors Map/Plat Number	g. Parcel /Lot Number			
2.	Applicant:				
	Robert	Hewitt			
	a. First Name	b. Last Name			
	Fairfield Residential Company LLC				
	c. Organization				
	5 Burlington Woods, Suite 203				
	d. Mailing Address		0.4000		
	Burlington	MA	01803		
	e. City/Town	f. State	g. Zip Code		
	781.572.7712	rhewitt@ffres.com			
	h. Phone Number i. Fax Number	j. Email Address	7 W L LPC T		
3.	Property owner (if different from applicant):		Check if more than one owner (attach additional sheet with names and contact information)		
		Smith	itact information)		
	Bryn a. First Name	b. Last Name	ř		
	a. I list walle	S. Edot Hamo			
	c. Organization	ā			
	106 Mendon Street				
	d. Mailing Address				
	Bellingham	MA	02019		
	e. City/Town	f. State	g. Zip Code		
	508.523.3496	bryn@thenicecompany.con	n		
	h. Phone Number i. Fax Number	j. Email Address			
4	Panracontative (if any):				
4.	Representative (if any):				
	Christopher	Lucas			
	a. Contact Person First Name	b. Contact Person Last Name			
	Lucas Environmental, LLC				
	c. Organization				
	500A Washington Street				
	d. Mailing Address	B 4 A	00400		
	Quincy	MA	02169		
	e. City/Town	f. State	g. Zip Code		
	617.405.4140 617.405.4465	cml@lucasenviro.com j. Email Address			
	h. Phone Number i. Fax Number	j. ⊏mali Address			

Fees will be calculated for online users.

Note: Before completing this form consult your

local Conservation Commission regarding any municipal bylaw or ordinance.

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

 \$2,000.00
 \$987.50
 \$1,012.50

 a. Total Fee Paid
 b. State Fee Paid
 c. City/Town Fee Paid



#### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

# WPA Form 4A – Abbreviated Notice of Resource Area Delineation

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

Provided by Ma	assl	ノニト
----------------	------	-----

|--|

**Document Transaction Number** 

Franklin City/Town

3. A	Area(s) Delineated				
1.	Border	ring √	egetated Wetland (BVW)	6,818 Linear Feet of Boundary Deline	eated
2.	Check	all m	nethods used to delineate the Bord	ering Vegetated Wetland (B	VW) boundary:
	а. 🛚	Ма	ssDEP BVW Field Data Form (atta	iched)	
	b. 🗌	Oth	ner Methods for Determining the B\	√W boundary (attach docum	entation):
1. 50% or more wetland indicator plants					
	2. Saturated/inundated conditions exist				
	3.		Groundwater indicators		
	4.		Direct observation		
	5. Hydric soil indicators				
	6.		Credible evidence of conditions p	rior to disturbance	
3.	Indica	ıte an	y other resource area boundaries t	that are delineated:	
In	Inland Bank of Intermittent Streams 4,345				
	a. Resource Area b. Linear Feet Delineated				
ls	olated V	/egeta	ated Wetland - Local Only		253
_	c. Resource Area			*	d. Linear Feet Delineated

#### C. Additional Information

Applicants must include the following plans with this Abbreviated Notice of Resource Area Delineation. 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. ANRAD (Delineation Plans only)
- 2. 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.)
- 3. Plans identifying the boundaries of the Bordering Vegetated Wetlands (BVW) (and/or other resource areas, if applicable).
- 4.  $\boxtimes$  List the titles and final revision dates for all plans and other materials submitted with this Abbreviated Notice of Resource Area Delineation.

Existing Conditions Site Plan, prepared by Guerriere & Halnon, Inc. dated November 16, 2022

#### D. Fees



# **Massachusetts Department of Environmental Protection**Bureau of Resource Protection - Wetlands

# WPA Form 4A – Abbreviated Notice of Resource Area Delineation

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

Pro	Provided by MassDEP:		
	MassDEP File Number		
	Document Transaction Number		
	Franklin		

	Trankiii		
	City/Town		
The fees for work proposed under each Abbreviated Notice of Resource Area Delineation must be calculated and submitted to the Conservation Commission and the Department (see Instructions and Wetland Fee Transmittal Form).			
1. Tee 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 add Form) to confirm fee payment:	ition to the attached Wetland Fee Transmittal		
3844	November 17, 2022		
2. Municipal Check Number	3. Check date		
3845	November 17, 2022		
4. State Check Number	5. Check date		
Lucas Environmental, LLC			
6. Payor name on check: First Name	7 Payor name on check: Last Name		

# E. Signatures

I certify under the penalties of perjury that the foregoing Abbreviated Notice of Resource Area Delineation and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I



#### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

# WPA Form 4A - Abbreviated Notice of **Resource Area Delineation**

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

Provided	by	MassDEP:

MassDEP File Number

Document Transaction Number

Franklin City/Town

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 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.

I hereby grant permission, to the Agent or member of the Conservation Commission and the Department of Environmental Protection, to enter and inspect the area subject to this Notice at reasonable hours to evaluate the wetland resource boundaries subject to this Notice, and to require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

I acknowledge that failure to comply with these certification requirements is grounds for the Conservation Commission or the Department to take enforcement action.

P== 2/= >	11/16/22
1. Signature of Applicant	2. Date
3. Signature of Property Owner (Indifferent)	4. Date
(1) - (1) - (4)	November 16, 2022
5. Signature of Replesentative (if any)	6. Date

For Conservation Commission:

Two copies of the completed Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; two copies of the ANRAD Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

One copy of the completed Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; one copy of the ANRAD Wetland Fee Transmittal Form; and a copy of the state fee payment must be sent to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery. (E-filers may submit these electronically.)

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.

## **Town of Franklin Conservation Commission**

#### PROPERTY ACCESS SIGNATURE FORM

I hereby request that the Franklin Conservat	ion Commission review this ANRAL
application. I (we) grant authority to the Frankl	
and agents to go onto my (our) property solel	
inspection and approval of this application and for	follow-up compliance with the permit
conditions.	
Brynom	11/15/22
Signature of Property Owner	Date



# SECTION II - NARRATIVE



#### 1.0 INTRODUCTION

On behalf of Fairfield Residential Company LLC, and in association with SHIPE Consulting and RJO'Connell & Associates, Inc. (RJOC), LLC, Lucas Environmental, LLC (LE) is pleased to submit this Abbreviated Notice of Resource Area Delineation (ANRAD) to confirm the delineation and identification of wetland resource areas for the subject property located at 121 Grove Street (Map 295, Lot 1 & Map 294, Lot 7) in Franklin, Massachusetts. This ANRAD is submitted in order to confirm the boundaries of wetland resource areas on the site that are regulated under the Massachusetts Wetlands Protection Act (WPA; M.G.L. Ch. 131, Section 40) and implementing regulations (310 CMR 10.00 et seq.), and the Town of Franklin Wetlands Protection Bylaw (Chapter 181).

Professional Wetland Scientists (PWS) and Registered Professional Soil Scientists (RPSS) from Lucas Environmental, LLC (LE) conducted site investigations at the property located at 121 Grove Street in Franklin, Massachusetts on April 12<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup>, 2022. An additional site inspection was conducted by two PWS/RPSS on October 27, 2022.

The wetland investigation was completed in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40) and regulations (310 CMR 10.00 et seq.); Section 404 of the Clean Water Act (33 U.S.C. 1344); Massachusetts Department of Environmental Protection (MassDEP) publication "Delineating Bordering Vegetated Wetlands" under the Massachusetts Wetlands Protection Act (1995); the U.S. Army Corp of Engineers (USACE) Wetland Delineation Manual (1987); the Northcentral and Northeast Regional Supplement (2012); and the Town of Franklin Wetlands Protection Bylaw and Regulations.

The site inspection identified the following wetland resource areas at the site:

- Two Bordering Vegetated Wetland (BVW);
- One Isolated Vegetated Wetland (IVW); and
- Inland Bank to three Intermittent Streams.

#### 2.0 EXISTING CONDITIONS

The Study Area is comprised of two parcels totaling approximately 31.2 acres of land at 121 Grove Street in Franklin, Massachusetts (See Figure 1 – USGS and Figure 2 – Aerial Map). The parcels are identified as follows:

- 121 Grove Street (Parcel ID 295-001-000-000 or Map 295, Lot 1) totaling approximately 26.26 acres of land. The parcel is partially developed and contains a three-family house, parking areas, sheds, fields, woodlands, and wetlands.
- 0 Grove Street (Parcel ID 294-007-000-000 or Map 294, Lot 7) is an undeveloped, approximate 4.96-acre parcel located south of the 121 Grove Street parcel.



The Study Area is bounded by electric transmission right-of-way (ROW) to the south, Grove Street to the east, and the Franklin State Forest to the west and north. Typical tree species within forested upland areas of the site include red oak (*Quercus rubra*), white oak (*Quercus alba*), black cherry (*Prunus serotina*), white pine (*Pinus strobus*), and sassafras (*Sassafras albidum*). Common upland shrubs include witch hazel (*Hamamelis virginiana*), multiflora rose (*Rosa multiflora*), glossy buckthorn (*Frangula alnus*), and shrub forms of the overstory. Common herbaceous species in the upland include Canada mayflower (*Maianthemum canadense*), poison ivy (*Toxicodendron radicans*), teaberry (*Gaultheria procumbens*), bracken fern (*Pteridium aquilinum*), and seedlings of the overstory.

The remainder of the Study Area consists of lawn areas, mowed fields, meadows, and older apple and pear trees. Common vegetation within the fields includes graminoids, goldenrods (*Solidago sp.*), autumn olive (*Elaeagnus umbellata*), multiflora rose, Oriental bittersweet (*Celastrus orbiculatus*), and wild onion (*Allium canadense*).

According to the July 17, 2012 FEMA Flood Insurance Rate Map (FIRM) for Norfolk County, Massachusetts, Map Number 25021C0308E, the Study Area is located within Zone X, which is classified as areas determined to be outside the 0.2% annual chance floodplain (500-year floodplain). Therefore, Bordering Land Subject to Flooding (100-year floodplain) does not exist within the Study Area (See Figure 3).

A review of the current MassGIS data layer for the Massachusetts Natural Heritage Atlas (effective August 1, 2021) under the Natural Heritage and Endangered Species Program (NHESP) indicates that no portion of the site is located within Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species. No Certified or Potential Vernal Pools under the jurisdiction of the Wetlands Protection Act Regulations (310 CMR 10.00 et seq.) or the Massachusetts Endangered Species Act (321 CMR 10.00 et seq.) occur within the Study Area (See Figure 4 – NHESP Map).

The Study Area is not located within an Area of Critical Environmental Concern (ACEC), Outstanding Resource Water (ORW), or Watershed Protection Area. The northeast corner of the Study Area is located within an approved MassDEP Zone II Wellhead Protection Area, which is considered a Critical Area under 310 CMR 10.04 and the Massachusetts Stormwater Management Standards.

#### 3.0 ENVIRONMENTAL RESOURCE AREAS

Wetland resource areas delineated within the Study Area include two separate areas of Bordering Vegetated Wetlands (BVW) associated with three separate intermittent streams, and a small Isolated Vegetated Wetland (IVW).

The site investigation was limited to wetland areas within 100 feet and perennial streams within 200 feet of the parcel boundaries (i.e., Study Area). Off-site areas were not delineated.

Wetland resource areas are described below. Resource areas are identified on the attached Existing Conditions Site Plan prepared by Guerriere & Halnon, Inc., dated May 20, 2022. Photographic documentation (Appendix A) has been included for the wetland resource areas described below MassDEP Wetland Delineation Field Data Forms are included in Appendix D.



The following data sources were examined prior to the site investigation:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps;
- United States Geological Survey Topographic Quadrangle;
- MassGIS MassDEP Wetland and Hydrography Datalayers;
- MassGIS Natural Heritage Atlas Datalayers; and
- United States Department of Agriculture, Natural Resources Conservation Service (USDA-NRCS) Soil Survey.

Under the Massachusetts Wetlands Protection Act and Bylaw, the wetlands near the site are regulated as described below.

#### 3.1 Inland Bank - 310 CMR 10.54

Section 310 CMR 10.54 of the WPA defines a Bank as the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and a vegetated bordering wetland and adjacent flood plain, or, in the absence of these, it occurs between a water body and an upland. The upper boundary of a Bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a Bank is the mean annual low flow level.

Under the Bylaw, Bank is defined as the land area which normally abuts and confines a water body; the lower boundary being the mean annual low flow level, and the upper boundary being the fist observable break in the slope or the mean annual flood level, whichever is **higher**.

The Inland Bank associated with the unnamed intermittent streams are further described below.

#### 3.2 Bordering Vegetated Wetlands – 310 CMR 10.55

Section 310 CMR 10.55 of the WPA defines BVW as freshwater wetlands which border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. 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. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species That Occur in Wetlands: Massachusetts (Fish & Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.

The delineated BVWs are described below.



#### 3.3 Resource Area Descriptions

Wetland resource areas field delineated include two areas of BVW identified as Wetlands A and B. The IVW is identified as Wetland C. The stream segments are identified as Streams 1, 2, and 3. Each is described below. Note that a wetland was not delineated off-site to the south, within 100 feet of the property line.

#### Wetland A

Wetland A is a large BVW associated with an intermittent stream, described as "Stream 2" below. The wetland bisects the Study Area from west to east and was delineated with pink survey tape numbered sequentially from WFA-1 to WFA-146. Wetland A is a large, forested Palustrine Forested Wetland (PFO) vegetated with red maple (*Acer rubrum*), sweet pepperbush (*Clethra alnifolia*), highbush blueberry (*Vaccinium corymbosum*), sensitive fern (*Onoclea sensibilis*), and skunk cabbage (*Symplocarpus foetidus*). The portions of wetland within the field area are also vegetated with gray birch (*Betula populifolia*), speckled alder (*Alnus rugosa*), pussy willow (*Salix discolor*), soft rush (*Juncus effusus*), and steeplebush (*Spirea tomentosa*). Common vegetation in the adjacent upland includes American beech (*Fagus grandifolia*), red oak, white oak, white pine, multiflora rose, autumn olive, crab apple (*Malus* sp.), and Japanese barberry (*Berberis thunbergii*).

Soils within the wetland are sandy loam with deep dark A-horizon and a depleted matrix with redoximorphic features. The wetland/upland boundary corresponds with a topographic break in slope or the transition to a non-hydrophytic plant community and absence of hydric soils/wetland hydrology. Indicators of wetland hydrology include shallow saturation and drainage patterns.

#### Wetland B

Wetland B is a BVW located along the southern portion of the Study Area and was delineated with pink survey tape numbered sequentially from WFB-1 to WFB-48; WFB-49 to WFB-69; and WFB-70 to WFB-92. Wetland B is a forested wetland (PFO) associated with an intermittent stream, described as "Stream 1" below. Portions of the wetland extend into the mowed field area (i.e. WFB-1 to WFB-24) where indicators of wetland hydrology (saturation to the surface), and hydric soil indictors were used to delineate the wetland boundary. Common vegetation within the wetland includes red maple, yellow birch (*Betula alleghaniensis*), black tupelo (*Nyssa sylvatica*), sweet pepperbush, highbush blueberry, and skunk cabbage.

Soils within the wetland are sandy loam with deep dark A-horizon and a depleted matrix with redoximorphic features. The wetland/upland boundary corresponds with a topographic break in slope or the transition to a non-hydrophytic plant community and absence of hydric soils/wetland hydrology. Indicators of wetland hydrology include drainage patterns, shallow soil saturation and inundation.

Portions of Wetland B near flags WFB-72 to WFB-76 were ponded with approximately four to six inches of water during the site visit. The area was investigated to determine if the area was being used as breeding habitat by vernal pool indicator species on April 12<sup>th</sup> and April 20<sup>th</sup>. No evidence of breeding by vernal pool indicator species was observed on either date, and the area appears too shallow to support a breeding amphibian population.



#### Wetland C

Wetland C is an IVW located within the mowed field area and was delineated with pink survey tape numbered sequentially from WFC-1 to WFC-16. Wetland C is a small emergent wet meadow wetland (PEM)/groundwater seep area within a mowed field. It does not have well defined topography and does not contain or store surface or groundwater. Common vegetation within the wetland includes sensitive fern, soft rush, woolgrass (*Scirpus cyperinus*), and some grasses that could not be identified due to the seasonal constraints.

Soils within the wetland are altered and contain a depleted matrix with redoximorphic features. The wetland/upland boundary is diffuse and not well defined. Indicators of wetland hydrology include shallow surface saturation.

IVWs are not regulated under the WPA per se. However, if an IVW ponds a sufficient volume of water, it would be regulated under the WPA as Isolated Land Subject to Flooding (ILSF). The WPA defines ILSF as an area which at least once a year confines standing water to a volume of at least ½ acre-feet and to an average depth of at least six inches. Based upon field observations, Wetland C would not meet the definition of ILSF due to its small size and it does not have the physical characteristic of being a confined basin capable of storing surface water.

#### Stream 1 – Unnamed Intermittent Stream

Stream 1 is an unnamed intermittent stream which is not shown on the current USGS Topographic Map. Stream 1 was delineated with blue survey tape numbered sequentially from BF1-1 to BF1-41. The stream originates in Wetland B and appears to have been excavated or ditched in order to drain surface flows and groundwater to a catch basin on Grove Street. The stream channel measures approximately two to four feet wide at the upper portions of the channel. As the stream flows downgradient, it enters a maintained field area where the channel is more diffuse, poorly defined, and lacks typical stream bed and bank morphology. There was approximately four to six inches of water flowing at the time of the site visits.

#### Stream 2 - Unnamed Intermittent Stream

Stream 2 is an unnamed intermittent stream which is not shown on the current USGS Topographic Map and was delineated with blue survey tape numbered sequentially from BF2-1 to BF2-118. The stream originates as a headwater seep in Wetland A at an old possible well, and flows east, and then northward where it continues off-site. A small secondary channel ties into the upper portion of Stream 2 delineated with blue survey tape numbered sequentially from BF1-100 to BF1-110. A portion of the stream is culverted within the mowed field. The stream channel measures approximately two to four feet wide at the upper portions of the channel. The Banks are well vegetated with a mix of herbaceous vegetation such as skunk cabbage, speckled alder, pussy willow, multiflora rose, highbush blueberry, and sweet pepperbush.



Stream 3 – Unnamed Intermittent Stream

Stream 3 is an unnamed intermittent stream which is not shown on the current USGS Topographic Map and was delineated with blue survey tape numbered sequentially from BF3-1 to BF3-13. The stream is located within Wetland B and is very narrow and contains minimal flows.

Stream Status

The streams identified in the Study Area are not shown on the current USGS map. Per Section 310 CMR 10.58(2)(a)1.c. of the WPA, "a stream shown as intermittent on the current USGS map...that has a watershed size of less than one square mile is characterized under the State Wetlands Protection Act as "intermittent" unless the stream has a watershed size of at least one-half square mile and has a predicted flow rate greater than or equal to 0.01 cubic feet per second (cfs) at the 99% flow duration using the USGS StreamStats method...".

The WPA employs the USGS StreamStats model to determine affected watershed area jurisdiction.

The watershed area for the reach of the stream within Stream 1 was determined using required regulatory methods to be 0.03 square miles. The StreamStats program could not calculate the 99% flow duration due to the small size of the watershed.

The watershed area for the reach of Stream 2 was determined using required regulatory methods to be 0.11 square miles. The StreamStats program could not calculate the 99% flow duration due to the small size of the watershed. This is well below the threshold values required to show that a stream with less than one square mile watershed shown as intermittent by USGS is actually perennial: a 0.5 square mile and 0.01 cubic feet per second flow rate at the 99% flow duration.

Stream 3 was not evaluated due to the visual observations and extremely small length of the channel, as it clearly does not convey perennial flows.

Therefore, all three streams are confirmed as intermittent, and no Riverfront Area occurs within the Study Area. StreamStats documentation is included in Appendix E.

#### 4.0 SUMMARY

The Applicant is seeking to confirm the accuracy of the characterization and delineation of the wetland resource areas delineated within the Study Area. The Applicant requests confirmation of the resource areas as shown on the Existing Conditions Site Plan, which include:

- Inland Bank as delineated by flags BF1-1 to BF1-41, BF2-1 to BF2-118, BF1-100 to BF1-110, and BF3-1 to BF3-13;
- Confirmation that the three intermittent streams (BF1, 2 & 3) are not perennial, and Riverfront Area does not exist on the site;

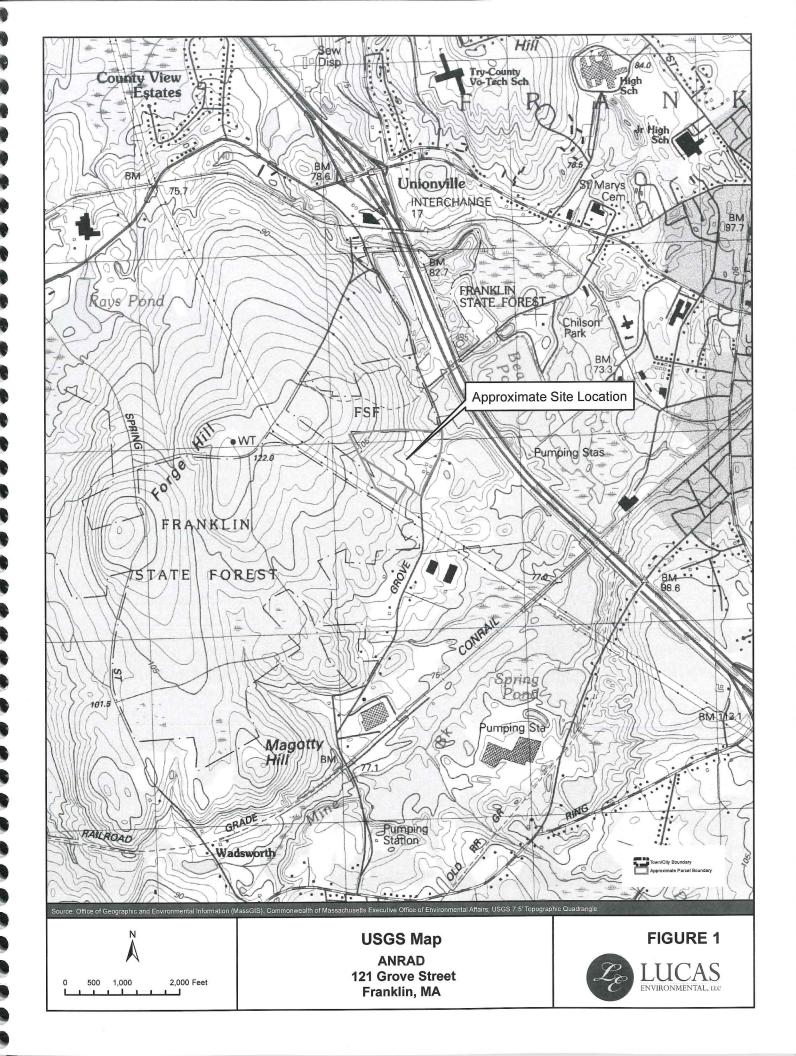


- Bordering Vegetated Wetlands as delineated by flags WFA-1 through WFA-146, and WFB-1 to WFB-48; WFB-49 to WFB-69; and WFB-70 to WFB-92;
- Isolated Vegetated Wetland C as delineated by flags WFC-1 to WFC-16; and
- No other resource areas are present on the site.

The Applicant respectfully requests that the Conservation Commission issue an Order of Resource Area Delineation under the Wetlands Protection Act and the Town of Franklin Wetlands Protection Bylaw confirming the accuracy of the characterization and delineation of the areas noted above as described in this ANRAD application and shown on accompanying Existing Conditions Site Plan.

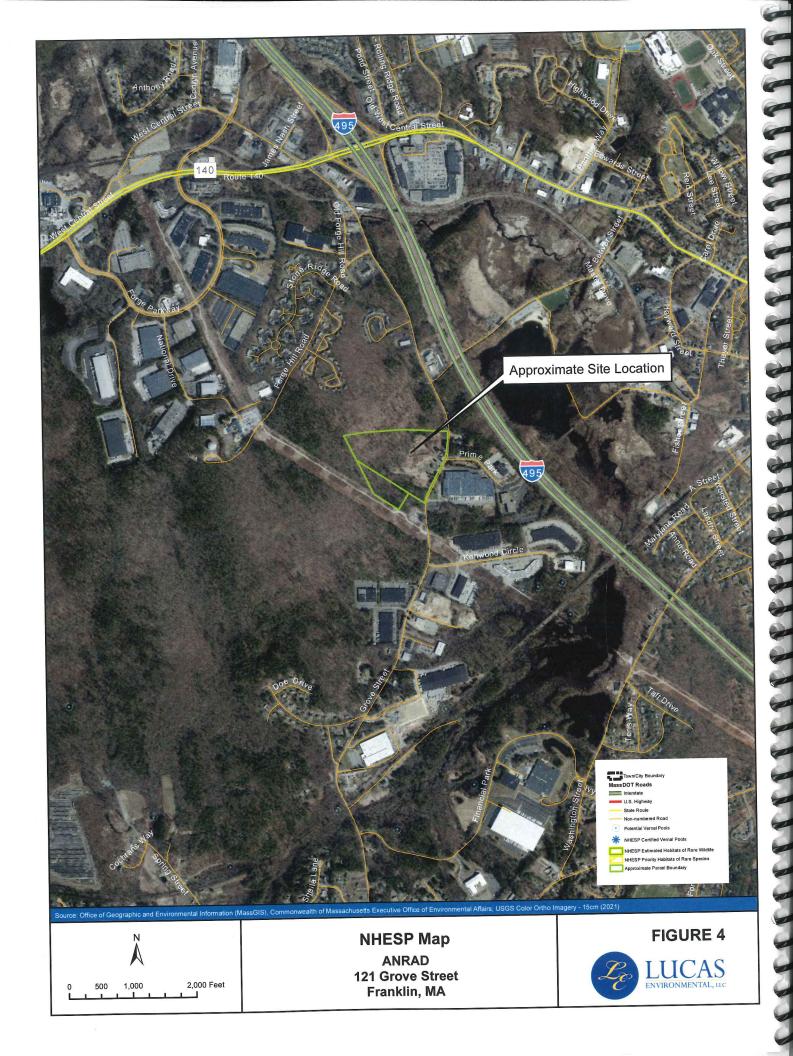


# **SECTION III – FIGURES**







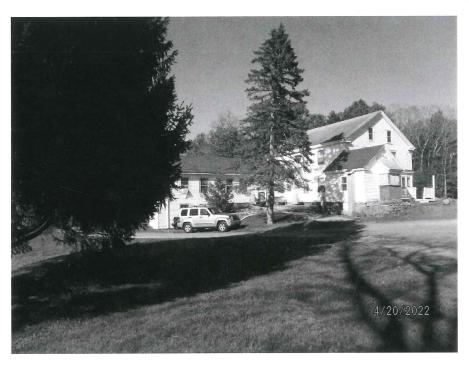




# **SECTION IV – APPENDICES**







Photograph 1: Existing building on the site, taken from the edge of the field.



Photograph 2: Typical view of upland agricultural fields.





Photograph 3: Wetland A, near flag WFA-20, facing east.



Photograph 4: Wetland A/Stream 2, near flag WFA-35 and BF2-38, showing 90° bend in stream channel, facing north.





Photograph 5: Wetland A/Stream 2, near flag WFA-49 and BF2-48, facing east.



<u>Photograph 6:</u> Wetland A/Stream 2, near flag WFA-98 and BF2-63/64, showing possible old well with seepage at start of Stream 2, facing south.





Photograph 7: Wetland A, near flag WFA-138, showing wetland hydrology.



<u>Photograph 8:</u> Wetland A/Stream 2 at the property line, near flag BF2-1/118, facing south.





Photograph 9: Wetland B/Stream 1, near flag BF1-5, facing west.



<u>Photograph 10:</u> Wetland B/Stream 1, near flag WFB-6, showing hydrology and intermittent flows, facing east.





<u>Photograph 11:</u> Wetland B/Stream 1, near Grove Street, showing hydrology and intermittent flows, facing northwest.



<u>Photograph 12:</u> View of off-site ROW near flag WFB-69, showing saturated ground conditions, facing southeast.





Photograph 13: Isolated Wetland C, near flag WFC-9, facing north.



Photograph 14: Isolated Wetland C, near flag WFC-9, showing saturated surface, facing west.