



April 24, 2024

Breeka Li Goodlander, Agent  
Town of Franklin Conservation Commission  
355 East Central Street  
Franklin, MA 02038

**RE: Louise Drive Extension – Franklin, MA  
MassDEP File No. 159-1290  
Abbreviated Notice of Resource Area Delineation Peer Review  
Project #: 3343-001**

Dear Ms. Goodlander:

DiPrete Engineering has received peer review comments from Beta Group, Inc. (BETA) dated April 10<sup>th</sup>, 2024. We have reviewed these comments and offer the following in response. The original comments are provided in italics with responses in bold.

## **PEER REVIEW COMMENTS:**

- W1. *BETA provides the following administrative and plan comments after conducting a review of the submitted application and plan set based on generally accepted existing conditions plan standards and the applicable plan requirements per the Bylaw Regulations:*
- a) *MassDEP File No. 159-1290 has been assigned to the project with the following technical comments:  
“The narrative provided documents the presence of a narrow channel that would be best classified as an intermittent stream off-site between flags AWE-B21 and B15. MassDEP recommends that the Commission confirm whether the defined channel extends onto the project site between flags B14 and B41. If so, MassDEP recommends the applicant submit a revised site plan and WPA form 4A to MassDEP and the Commission showing Bank resource area. MassDEP recommends the Commission confirm if a hydrologic connection exists between the A-series wetland and the B-series wetland as, at the closest point, there appears to be 40 feet of distance between flags A22 and B2. All boundaries and flags confirmed under this ANRAD should be accurately located in the field by the Commission.”*
  - b) *The Applicant should provide a reference for the north arrow on the plans.*
  - c) *The Applicant should provide a survey benchmark on the plans.*
- a.) **DiPrete Engineering requests that a representative from the Town and BETA meet on site to discuss the extent of the defined channel and the centerline of the stream. DiPrete Engineering and BETA did not find a hydrologic connection between A-series wetland and the B-series wetland.**
  - b.) **The plan has been revised to reflect a reference for the north arrow.**
  - c.) **A survey benchmark has been added to the plans.**

W2. *BETA observed water-stained leaves, a saturated soil surface, and depleted soils with redoximorphic concentrations at 6 inches below grade approximately 10 feet upgradient of flags B37 and B38. These flags appear to be located offsite; however, the Applicant could revise their location to accurately project Buffer Zone onto the Site. As noted in Comment W6, approval of offsite flagging under the Order of Resource Area Delineation (ORAD) is not recommended.*

**DiPrete Engineering requests that a representative from the Town and BETA meet on site with a DiPrete Engineering representative to address this comment. DiPrete Engineering will revise the specified flags prior to meeting on site.**

W3. *BETA observed a stream internal to the B-Series BVW. This stream was observed to be a shallow, concave channel with well-defined Banks consisting of scoured soils, and leaf litter upgradient of Flag B35 and downgradient of flag B32. Between flags B32 and B3, the stream becomes braided but maintains a hydraulic gradient sloping down to the northwest. Consistent with MassDEP's comments, BETA recommends that the Applicant submit a revised plan and WPA Form 4A to MassDEP and the Commission seeking the approval of Bank and Land Under Water associated with this stream, and document whether it qualifies as perennial or intermittent.*

**As described in the ANRAD Submission Narrative, DiPrete Engineering concurs that there is a stream interior of the B Series Wetland. No surface water flow was observed within the channel during the initial site visit on October 4, 2023. At that time, groundwater levels at the Southborough, MA USGS monitoring well (Well ID MA-SSW 12) were above normal, near the 90<sup>th</sup> percentile. High groundwater levels, a visual observation of a lack of flowing water within the channel, and overall topography (the wetland is a groundwater seep along the backslope of Oak Hill) supported the determination that the waterbody is an intermittent stream.**

**Section 10.58 of 310 CMR provides guidelines for determining whether a flowing body of water is an intermittent or perennial stream. The stream on the subject property is not depicted on current USGS maps. In addition, current data layers available on MassMapper do not depict the stream or any other hydrologic connection. As such, The USGS StreamStats methodology was used to make a final determination on this stream. The attached StreamStats report calculates a drainage area for this basin of 0.00137 square miles. This area is below the 0.50 square mile basin threshold required for further consideration as to whether the stream is perennial. It is therefore our conclusion that the stream is an intermittent stream. Based on site observations at the time of resource area delineation, there was no Land Under Waterbodies or Waterways, as there was no surface water within the banks of the intermittent stream.**

**The centerline of the intermittent stream will be flagged prior to the on-site meeting and depicted on revised site plans. If necessary, based on the on-site meeting, the stream bank will also be delineated and depicted on revised site plans. A revised WPA Form 4A accounting for linear feet of Bank will be submitted.**

W4. *BETA generally agrees with the delineation of the A Series IVW with the exception of the following:*

- a) *Portions of the IVW boundary could not be reviewed due to flags being absent in the field. Missing flags include A1 through A4, A6, A7, and A9-A11. No flagging "stubs" were observed.*
- b) *BETA observed hydric soils indicators (i.e., histosol) with sparse vegetative coverage 5 to 7 feet upgradient of flag A16. The applicant should reassess the area directly upgradient of flag A16 and adjust the wetland boundary as necessary.*

**DiPrete Engineering requests that a representative from the Town and BETA meet on site with a DiPrete Engineering representative to address this comment. DiPrete Engineering will revise the specified flags prior to meeting on site.**

W6. *BETA recommends that the Commission excludes the approval of flags located outside of the Site boundaries in the ORAD. These flags include B36 to B39 and AWE-B15 to AWE-B27.*

**The plans have been revised to remove off-site flagging, but depict approximate wetland buffers from approximate off-site wetland delineations that may impact site development.**

Please, feel free to contact me if you have any further questions regarding this matter.

Sincerely,  
DiPrete Engineering Associates, Inc.

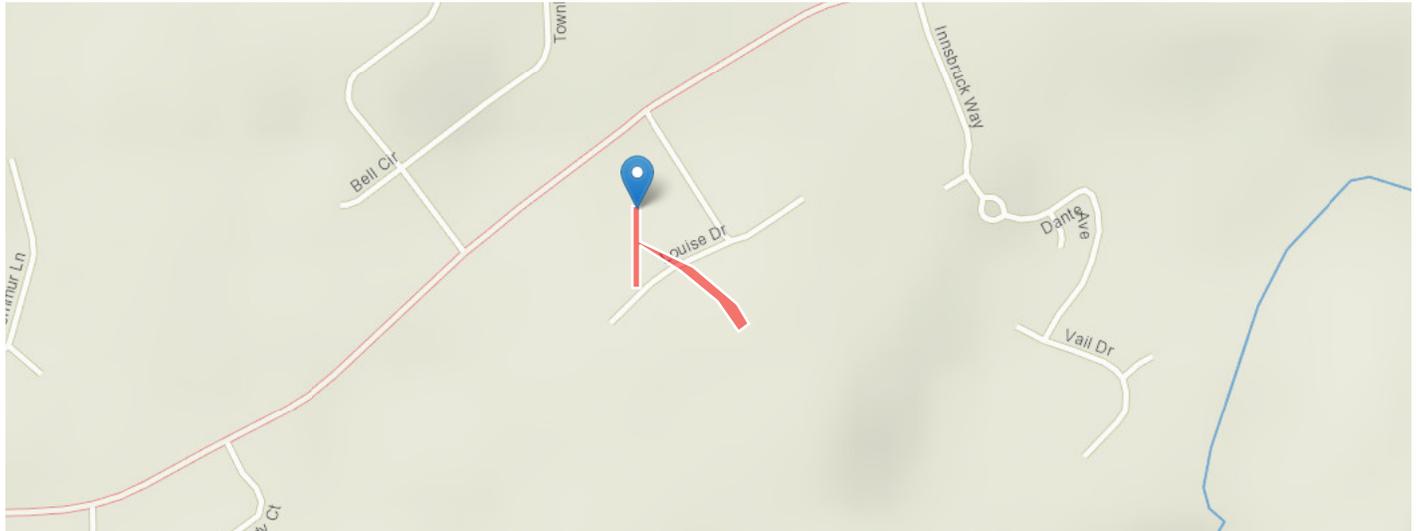


Timothy Twohig  
Wetland Biologist  
ttwohig@diprete-eng.com

*Enclosure: StreamStats Report (dated 4/18/2024)*

# StreamStats Report

Region ID: MA  
Workspace ID: MA20240418195334226000  
Clicked Point (Latitude, Longitude): 42.03950, -71.44977  
Time: 2024-04-18 15:54:23 -0400



[+ Collapse All](#)

## Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.00137	square miles
ELEV	Mean Basin Elevation	379	feet
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	0	percent

## General Disclaimers

This watershed has been edited, computed flows and basin characteristics may not apply. For more information, submit a support request from the 'Help' button in the upper-right of the screen, attach a pdf of this report and request assistance from your local StreamStats regional representative.

## ➤ Peak-Flow Statistics

### Peak-Flow Statistics Parameters [Peak Statewide 2016 5156]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.00137	square miles	0.16	512
ELEV	Mean Basin Elevation	379	feet	80.6	1948
LC06STOR	Percent Storage from NLCD2006	0	percent	0	32.3

## Peak-Flow Statistics Disclaimers [Peak Statewide 2016 5156]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

## Peak-Flow Statistics Flow Report [Peak Statewide 2016 5156]

Statistic	Value	Unit
50-percent AEP flood	0.254	ft <sup>3</sup> /s
20-percent AEP flood	0.463	ft <sup>3</sup> /s
10-percent AEP flood	0.644	ft <sup>3</sup> /s
4-percent AEP flood	0.919	ft <sup>3</sup> /s
2-percent AEP flood	1.15	ft <sup>3</sup> /s
1-percent AEP flood	1.42	ft <sup>3</sup> /s
0.5-percent AEP flood	1.7	ft <sup>3</sup> /s
0.2-percent AEP flood	2.14	ft <sup>3</sup> /s

### *Peak-Flow Statistics Citations*

**Zarriello, P.J., 2017, Magnitude of flood flows at selected annual exceedance probabilities for streams in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2016–5156, 99 p. (<https://dx.doi.org/10.3133/sir20165156>)**

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Application Version: 4.20.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1