

Wetland Strategies, Inc.

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MEMORANDUM

TO: Nancy Rufo, Administrator
Duxbury Conservation Commission

FROM: Lenore White, PWS

DATE: December 27, 2023

SUBJECT: Professional Wetland Services
Notice of Intent Review
50 Railroad Ave.
Duxbury, MA
Memo 2

Wetland Strategies, Inc. (WSI) is in receipt of additional information regarding the subject project. The following information has been received via email.

- Correspondence from John Zimmer of South River Environmental (SRE) dated November 22, 2023, including a letter and photographs of the disputed stream.
- A letter report from Brad Holmes, of Environmental Consulting and Restoration (ECR) dated December 12, 2017.
- Additional letter from SRE dated December 7, 2023, submitted to the Duxbury Zoning Board of Appeals.
- Several emails from Attorney Matt Walsh including a YouTube video, and an attached Superior Court Civil Action case.

Pursuant to a review of these relevant documents, WSI offers the following qualified opinion regarding the hydrological regime of the disputed stream. WSI notes that the disputed stream is NOT shown on the project plans, and thus the following analysis lacks a clear reference point on the project plans.

In SRE's correspondence, the author has concluded that the disputed stream is intermittent. Proof of this conclusion is partly due to numerous photos attached to the SRE Nov. 22, 2023, letter. These photos show the level of water in the stream relative to the Inland banks of the stream. There are no dry areas shown on any of the submitted photos. The photos do not clearly display a lack of flow but rather, show a full stream. On November 20, 2023, WSI and the Conservation Commission Administrator observed flow at the culvert which flows from the project area and under Alden Street.

Moreover, SRE's subsequent letter dated December 7, 2023, includes drawing of various stream regimes sourced from USGS. Here too, the information is not sufficient to overcome the presumption of a perennial stream as shown on the USGS topographic map. While the USGS stream depictions are useful, there is no site-specific data or other photos which prove there are no pools/riffles. In comparison, WSI's site observations show a stream which appears to be similar enough to the depiction of a "pool" (see Photo 1).

ECR also evaluated a stream in the vicinity of the subject project. His report dated December 15, 2017, was used to evaluate a different project on a different parcel. There is not enough information in ECR's report to conclude that the stream evaluated by ECR is the same stream in dispute here. As observed by WSI and SRE, there are several streams in the vicinity of the project site (see Photo 2). There is no reference point on the project plans to determine where ECR made their evaluation and thus any conclusion about ECR's finding is premature.

Based on the above, WSI maintains that there is a perennial stream, with a 200-foot Riverfront Area, within the vicinity of the project. This opinion is based on clear reading of the regulations and site-specific observations. The disputed stream is shown as perennial on the most recent USGS map and is therefore presumed perennial. The applicant (and others) has submitted additional information to overcome the presumption, but the evidence is not sufficient to render an alternative finding. The photos do not depict a lack of flow, and flow has been observed downstream from the site at Alden Street. SRE's depictions from USGS have not been compared to actual site conditions, and WSI finds the USGS drawing of a "pool" closely resembles the disputed stream. ECR's report lacks specificity as to its location relative to the proposed project location.

In sum, WSI recommends the Commission find that a perennial stream occurs within the vicinity of the proposed project. Photos submitted with this report show two streams to the west of the site. There are clear differences between the two streams shown on Photos 1 and 3 including:

- Only one stream is shown on the USGS map.
- Distinct differences in Inland Bank height and shape.
- Floating leaf litter on one stream only (see Photo 3) By comparison Photo 1 of the disputed stream shows a lack of any leaf litter which is likely due to flowing conditions.
- Difference in channel widths.
- Visual evidence of flow by WSI and others at the Alden Street culvert.

These observation and other findings are the basis for WSI's finding.

Conclusion:

WSI's Memo dated 11.20.2023 requested the following additional information and WSI recommends the Commission also request the following:

1. Demonstrate that the proposed work complies with the Riverfront Area performance standards found at 310 CMR 10.58. An alternative analysis is required, and for the creation of a subdivision, the scope of the alternatives analysis includes available lands within the municipality.
2. Revise the plans to show all wetland resource areas, including all jurisdictional areas. Inland Banks and Land Under Waterways and Waterbodies are wetland resource areas.
3. Address the Town of Duxbury's wetland regulations, specifically Section 22.0 which sets out the performance standards for work within a regulatory Buffer Zone.

Photo 1 showing second stream located west of site at flag IB 5



PHOTOGRAPHIC DOCUMENTATION

50 Railroad Avenue
Duxbury, Massachusetts
Photographs Documented November 27, 2023
Wetland Strategies, Inc.

Photo 2 at flag IB1 at confluence of 3 streams.



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