

March 29, 2021

Ms. Tessa Dowling, Land Use Clerk
Shutesbury Conservation Commission
Town Hall
P.O. Box 276
1 Cooleyville Road
Shutesbury, MA 01072

Re: Abbreviated Notice of Resource Area Delineation (ANRAD)
Leverett Road West
Shutesbury, MA
(Parcel ID ZF-15)
Wetland Consultant Peer Review Proposal

Dear Ms. Dowling and Commissioners:

Per your request, Stockman Associates LLC has performed a wetland consultant peer review of an Abbreviated Notice of Resource Area Delineation (ANRAD) submitted by TRC Companies on behalf of their client, W.D. Cows, Inc., for the review of delineated resource area boundaries located within a specific study area of the property located off Leverett Road (Parcel ID ZF-15) in Shutesbury, MA. Based on the ANRAD submittal prepared by TRC Companies dated October 26, 2020, the boundaries of Bordering Vegetated Wetlands (BVW), Isolated Vegetated Wetlands (IVW), Bank and Mean Annual High Water Line (MAHWL) were reviewed. In addition, the entire 25- acre study area was inspected to evaluate the potential presence of additional protected wetland resource areas.

Materials Reviewed

- Site Plans "*Leverett West Project Shutesbury, MA Wetland Delineation*" prepared by TRC Companies (Sheets 1 through 8). Dated September 2020.
- ANRAD submittal "*Leverett West Project, Leverett Road, Shutesbury, Massachusetts*" prepared by TRC Companies dated October 2020.

Site Visit

- On March 24, 2021, a site visit was made by Ms. Emily Stockman (Stockman Associates LLC), Mr. Greg Russo (TRC) and Mr. Liam Cregan (SCC).

Review Comments

- 1) Based on observations made during the site visit, TRC made the following flag revision in the field-
 - a. Inland Bank flags 48.1, 49.1, 148.1, and 149.1 were placed in the field to accurately demarcated the boundary of inland Bank of intermittent stream S-1.

- b. BVW flags W-1 36 to 42 were placed in the field to accurately demarcate the boundary of a newly identified BVW within the northeast corner of the study area.
 - c. The upstream braided reach of Roaring Brook (perennial stream S-2) closest to the study area was delineated. New flag S-2-1 was placed at the upstream point closest to the study area. New flags were added, consecutively, along the southerly MAHWL to flag S-2-10. Previously hung flags were then relabeled S-2-11 to S-2-29 to maintain consecutive labelling along the brook.
 - d. Flags 33.1 and 35 were added to the BVW W-1 boundary. Previously placed flag 34 was re-located with GPS to correct the position on the mapping.
- 2) The green color-coding for the easterly side of BVW W-1 should extend northerly (to S-1 Bank flag 139) to fully depict that the wetland extends to the study area boundary.
 - 3) W-3 is a Bordering Vegetated Wetland. A culvert was observed along the southwesterly boundary of the BVW which conveys flow to a downgradient open stream channel.
 - 4) Based on the size, location, landform, and extent of inundation BVW W-3 has the physical characteristics of a vernal pool. The site visit occurred too early in the season to observed biological indicators.
 - 5) BVW flags W-1 1 through 3 and 10 through 14 were not reviewed as these flags are located outside of the study area and do not project Buffer Zone into the study area. We recommend removing these flags from the site plans.
 - 6) Inland Bank flags S-1 115 through 122 were not reviewed as these flags are located outside of the study area and do not project Buffer Zone into the study area. We recommend removing these flags from the site plans.
 - 7) Wetland Determination Data forms have been reviewed. We do not concur with all data presented on forms W-GAR-1-PFO, W-GAR-2-PFO, W-GAR-2-UPL, W-GAR-3-PFO, and W-GAR-3-UPL. However, these areas were reviewed, and we do concur with the ultimate designations as UPL and PFO, respectively.
 - 8) Site plans should be revised to reflect the flagging placed and amended during the March 24, 2021 site visit. The Riverfront Area boundary associated with Roaring Brook (S-2) must be revised based on the updated MAHWL flagging.
 - 9) Per 310 CMR 10.54(2), the legends should be revised to reflect "Bank" flag rather than "Stream" flag. Similarly, the delineated line should be revised to reflect "inland Bank" of intermittent stream.
 - 10) Per 310 CMR 10.58(2), the legends should be revised to reflect a new symbol for "MAHWL" flag for the perennial stream S-2. Similarly, the delineated line should be revised to reflect "MAHWL" of perennial stream.
 - 11) Per 310 CMR 10.55(2), the legends should be revised to reflect "Delineated Bordering Vegetated Wetland Boundary". There are no isolated wetlands within the study area (see comment 3 regarding wetland W-3).
 - 12) Per the Town of Shutesbury, Massachusetts General Wetlands Protection areas subject to protection under the bylaw include:


- a. any freshwater wetland, isolated wetland, marsh, wet meadow, bog or swamp; within 100 feet of any freshwater wetland, isolated wetland, marsh, wet meadow, bog or swamp;
- b. any lake, river, pond or stream (whether surface or subsurface); within 100 feet of any lake, river, pond or stream (whether surface or subsurface); any land under said waters;
- c. any land subject to flooding or inundation by groundwater, surface water, storm flowage, or within a 100-year flood plain.

For review and approval under the local bylaw, the site plans should be revised to depict the boundary of the resource areas stated above.

- 13) A final revision date should be added to the site plans.
- 14) The delineation report states that handheld GPS data was post-processed to achieve sub-meter accuracy. The Commission may request supporting documentation regarding the GPS accuracy to ensure that all plans accurately describe the site and the resource area boundaries. Inaccuracies with sub-meter GPS mapping have presented issues with previous projects.

I trust that the above comments will assist the Commission in their review of the previously referenced ANRAD application. Please do not hesitate to contact me with any questions.

Sincerely,



Emily Stockman, M.S., P.W.S.
Senior Scientist/Principal
Stockman Associates LLC

