October 17, 2024

Littleton Conservation Commission
Attn: Amy Green, Conservation Agent
37 Shattuck Street
PO Box 1305
Littleton, MA 01460

Subject: Abbreviated Notice of Resource Area Delineation, 550 Newtown Road, Littleton, MA

Dear Amy:

As you are aware, our office submitted an Abbreviated Notice of Resource Area Delineation (ANRAD) on behalf of the applicant, SROA 550 Newtown MA, LLC, to confirm the extent of jurisdictional wetland resource areas on a portion of the above referenced property. We have had one public hearing and a site visit to date.

During the public hearing, Commission members had a question about Riverfront Area (RA), and whether RA exists on the portion of the property behind the building, upgradient of the A-Series BVW that is the subject of the ANRAD. We explained that there is a mapped perennial stream, Long Pond Brook, that flows under Omega Way but explained that it was almost 900 feet from our delineated Bordering Vegetated Wetland (BVW) boundary, and that any RA extending from Long Pond Brook would fall well short of the A-Series BVW boundary. We also mentioned that there were two other streams, one shown on the current USGS Map as intermittent, and one not shown at all.

According to 310 CMR 10.58:

A river or stream shown as perennial on the current United States Geological Survey (USGS) or more recent map provided by the Department is perennial.

A river or stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size greater than or equal to one square mile, is perennial.

A stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size less than one square mile, is intermittent unless:

> The stream has a watershed size of at least ½ (0.50) square mile and has a predicted flow rate greater than or equal to 0.01 cubic feet per second at the 99% flow duration using the USGS Stream Stats method. The issuing authority shall find such streams to be perennial.

The stream that is not shown on the USGS Map is located southwest of the subject property and flows under Newtown Road from the Newtown Hill Conservation Area, through 564 Newtown Road, and into the A-Series BVW. Even though this stream is not shown on the USGS Map, it does have a digitized centerline in USGS StreamStats which allowed us to run it through the StreamStats program to determine if its watershed was large enough for it to be classified as perennial. A point was chosen in the stream channel just before it enters the A-Series BVW. The attached StreamStats analysis shows that the drainage area is 0.14 square miles, which is less than what is required for the stream to be classified as perennial. It is also our understanding that a recent conservation filing for 562 Newtown Road determined the stream to be intermittent.

The other stream mentioned above, that is shown on the current USGS Map, also has a digitized centerline in the StreamStats program. This stream system is located just south of the delineated A-Series BVW and appears to be three streams that converge into one, just before entering Fort Pond. A point was chosen in the stream channel, below the convergence, just before it enters Fort Pond. The attached StreamStats analysis shows that the drainage area is 0.05 square miles, which is less than what is required for the stream to be classified as perennial.

Following the submittal of the ANRAD it was discovered that an impoundment that was delineated as part of the A-Series BVW was in fact an infiltration basin that was designed and permitted as part of a Notice of Intent (NOI) application in 2003. The 2003 NOI narrative states that the Littleton Planning Board requested that the prior owner improve the stormwater management conditions on the site. This is the same area described as an impoundment by the owners of 3 Omega Way at the public hearing.

According to the Wetlands Protection Act Regulations, 310 CMR 10.02(2)(c), Notwithstanding the provisions of 310 CMR 10.02(1) and (2)(a) and (b), stormwater management systems designed, constructed, installed, operated, maintained, and/or improved as defined in 310 CMR 10.04 in accordance with the Stormwater Management Standards as provided in the Stormwater Management Policy (1996) or 310 CMR 10.05(6)(k) through (q) do not by themselves constitute Areas Subject to Protection under M.G.L. c. 131, § 40 or Buffer Zone provided that:

1. the system was designed, constructed, installed, and/or improved as defined in 310 CMR 10.04 on or after November 18, 1996; and

2. if the system was constructed in an Area Subject to Protection under M.G.L. c. 131, § 40 or Buffer Zone, the system was designed, constructed, and installed in accordance with all applicable provisions in 310 CMR 10.00.

We had a discussion with the Massachusetts Department of Environmental Protection (MassDEP) analyst assigned to this project and were able to confirm that MassDEP does not consider the infiltration basin a jurisdictional wetland resource area, even though it is not currently being maintained and appears to have been constructed slightly lower than the approved design plan.

Please find attached a revised ANRAD Plan that shows the BVW line adjusted to eliminate the infiltration basin from the delineated BVW boundary. Wetland flags A14A & A14B were added in between wetland flags A25 & A14. Wetland flags A24 to A15 have been eliminated, and the applicable buffer zones have been adjusted accordingly.

We look forward to discussing with you and your Commission at the continued public hearing scheduled for October 22, 2024. In the meantime, If you have any questions regarding this information, please do not hesitate to contact me at 978.461.6218 or via email at ghochmuth@epsilonassociates.com.

Thank you.

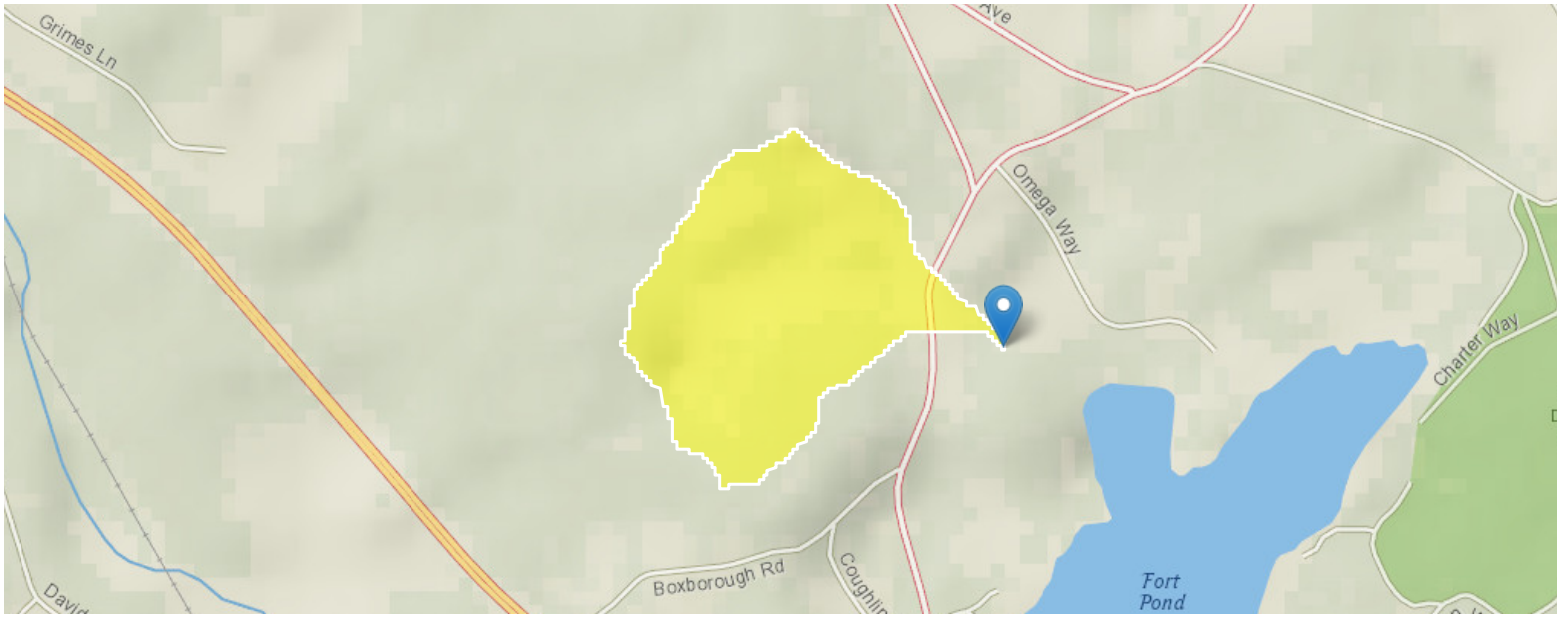
Sincerely,
EPSILON ASSOCIATES, INC.

Greg J. Hochmuth, PWS, CWS, RS
Senior Wetland Scientist/Project Manger

CC: SROA 550 Newtown MA, LLC
MassDEP-CERO

StreamStats Report: flowing from Newtown Hill Conservation Area

Workspace ID: MA20240829133927394000
Region ID: MA
Clicked Point (Latitude, Longitude): 42.51153, -71.47133
Time: 2024-08-29 09:39:50 -0400



Collapse All

Basin Characteristics

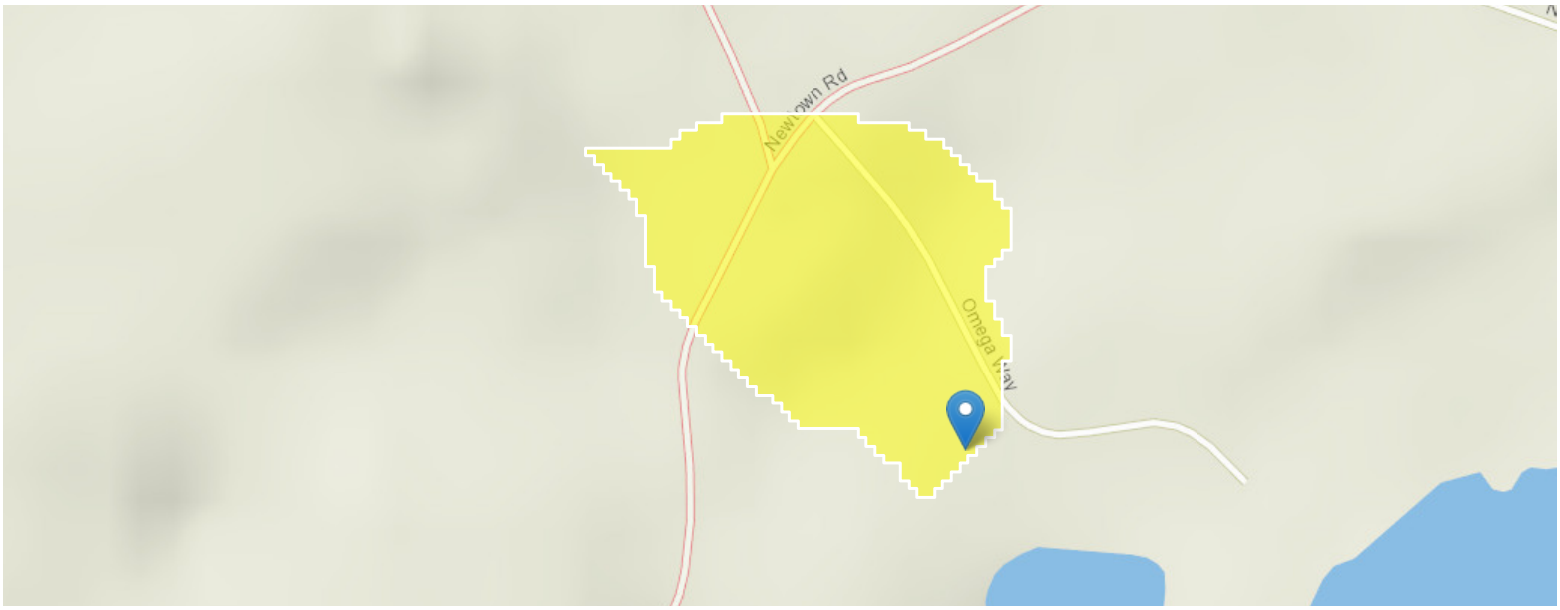
Parameter Code	Parameter Description	Value	Unit
ACRSDFT	Area underlain by stratified drift	0	square miles
BSLDEM10M	Mean basin slope computed from 10 m DEM	9.097	percent
BSLDEM250	Mean basin slope computed from 1:250K DEM	4.446	percent
CAT1ROADS	Length of interstates lmtd access highways and ramps for lmtd access highways, includes cloverleaf interchanges (USGS Ntl Transp Dataset)	0	miles
CAT2ROADS	Length of sec hwy or maj connecting roads; main arteries & hwys not lmtd access, usually in the US Hwy or State Hwy systems (USGS Ntl Transp Dataset)	0	miles
CAT3ROADS	Length of local connecting roads; roads that collect traffic from local roads & connect towns, subdivisions & neighborhoods (USGS Nat Transp Dataset)	0	miles
CAT4ROADS	Length of local roads; generally paved street, road, or byway that usually have single lane of traffic in each direction (USGS Ntnl Transp Dataset)	0.28	miles
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	201838.8	meters
CENTROIDY	Basin centroid vertical (y) location in state plane units	917987.7	meters
CROSCOUNT1	Number of intersections between streams and roads, where the roads are interstate, limited access highway, or ramp (CAT1ROADS)	0	dimensionless
CROSCOUNT2	Number of intersections between streams and roads, where the roads are secondary highway or major connecting road (CAT2ROADS)	0	dimensionless
CROSCOUNT3	Number of intersections between streams and roads, where roads are local conecting roads (CAT3ROADS)	0	dimensionless
CROSCOUNT4	Number of intersections between streams and roads, where roads are local roads (CAT4ROADS)	0	dimensionless
CRSDFT	Percentage of area of coarse-grained stratified drift	0	percent

Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	152	feet per mi
DRFTPERSTR	Area of stratified drift per unit of stream length	-100000	square mile per mile
DRNAREA	Area that drains to a point on a stream	0.14	square miles
ELEV	Mean Basin Elevation	333	feet
FOREST	Percentage of area covered by forest	50.56	percent
LAKEAREA	Percentage of Lakes and Ponds	0.56	percent
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	21.36	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	2.48	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	1.22	percent
LFPLENGTH	Length of longest flow path	0.72	miles
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless
MAXTEMPC	Mean annual maximum air temperature over basin area, in degrees Centigrade	15	degrees C
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	202355	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	917885	feet
PCTSNDGRV	Percentage of land surface underlain by sand and gravel deposits	0	percent
PRECPRIS00	Basin average mean annual precipitation for 1971 to 2000 from PRISM	46.7	inches
STRMTOT	total length of all mapped streams (1:24,000-scale) in the basin	0	miles
WETLAND	Percentage of Wetlands	24.37	percent

Application Version: 4.23.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats Report

Region ID: MA
Workspace ID: MA20240829134844372000
Clicked Point (Latitude, Longitude): 42.51174, -71.46940
Time: 2024-08-29 09:49:06 -0400



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Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
ACRSDFT	Area underlain by stratified drift	0	square miles
BSLDEM10M	Mean basin slope computed from 10 m DEM	7.263	percent
BSLDEM250	Mean basin slope computed from 1:250K DEM	5.807	percent
CAT1ROADS	Length of interstates lmtd access highways and ramps for lmtd access highways, includes cloverleaf interchanges (USGS Ntl Transp Dataset)	0	miles
CAT2ROADS	Length of sec hwy or maj connecting roads; main arteries & hwys not lmtd access, usually in the US Hwy or State Hwy systems (USGS Ntl Transp Dataset)	0	miles
CAT3ROADS	Length of local connecting roads; roads that collect traffic from local roads & connect towns, subdivisions & neighborhoods (USGS Nat Transp Dataset)	0	miles
CAT4ROADS	Length of local roads; generally paved street, road, or byway that usually have single lane of traffic in each direction (USGS Ntnl Transp Dataset)	0.48	miles
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	202363.3	meters
CENTROIDY	Basin centroid vertical (y) location in state plane units	918121.4	meters
CROSCOUNT1	Number of intersections between streams and roads, where the roads are interstate, limited access highway, or ramp (CAT1ROADS)	0	dimensionless
CROSCOUNT2	Number of intersections between streams and roads, where the roads are secondary highway or major connecting road (CAT2ROADS)	0	dimensionless
CROSCOUNT3	Number of intersections between streams and roads, where roads are local conecting roads (CAT3ROADS)	0	dimensionless
CROSCOUNT4	Number of intersections between streams and roads, where roads are local roads (CAT4ROADS)	0	dimensionless
CRSDFT	Percentage of area of coarse-grained stratified drift	0	percent

Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	300	feet per mi
DRFTPERSTR	Area of stratified drift per unit of stream length	0	square mile per mile
DRNAREA	Area that drains to a point on a stream	0.0543	square miles
ELEV	Mean Basin Elevation	268	feet
FOREST	Percentage of area covered by forest	39.05	percent
LAKEAREA	Percentage of Lakes and Ponds	0	percent
LC06STOR	Percentage of water bodies and wetlands determined from the NLCD 2006	34.35	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	15.6	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	7.7	percent
LFPLENGTH	Length of longest flow path	0.49	miles
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless
MAXTEMPC	Mean annual maximum air temperature over basin area, in degrees Centigrade	15.1	degrees C
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	202515	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	917915	feet
PCTSNDGRV	Percentage of land surface underlain by sand and gravel deposits	0	percent
PRECPRIS00	Basin average mean annual precipitation for 1971 to 2000 from PRISM	46.6	inches
STRMTOT	total length of all mapped streams (1:24,000-scale) in the basin	0.19	miles
WETLAND	Percentage of Wetlands	32.5	percent

Application Version: 4.23.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1