

February 16, 2021

Mr. Joseph Carta, Chairman
Inland Wetlands and Watercourses Agency
City of Middletown
245 DeKoven Street, Suite 202
Middletown, CT 06457

RE: Inland Wetlands Application Review
Application No. W2021-1
Ameritage, LLC
97 Poplar Road

Dear Mr. Carta:

LandTech has conducted a review of application documents pertaining to pond maintenance activities at 97 Poplar Road. Reviewed application documents include:

- Completed City of Middletown Inland Wetlands and Watercourses Agency Application for Inland Wetlands and Watercourses Activity dated January 27, 2021.
- Letter from Provost & Rovero, Inc, to Thaddeus Bysiewicz dated January 25, 2021.
- Plan titled *Temporary Erosion Control Measures Founders Ridge – Phase 2* prepared by Provost & Rovero, Inc. dated January 25, 2021.
- Letter from REMA to City of Middletown Inland Wetlands and Watercourses Agency dated January 25, 2021.

The application was submitted to the Agency in response to a December 21, 2020 Cease & Desist order issued to Ted Bysiewicz by the City of Middletown Department of Planning, Conservation & Development. The order was in response to sedimentation impacts to a pond and wetlands at 97 Poplar Road.

Brief History

According to the owners of 97 Poplar Road, Founders Ridge - Phase 2 construction began impacting the regulated area on their property in the spring of 2019, soon after the clearing of wetlands and the placement of a culvert within the existing stream bed. See attached Pond Timeline **Exhibit A**. Aerial photos evidence an unvegetated open water body on 97 Poplar decades before and leading up to the beginning of Phase-2 construction versus an aerial photo taken in September of 2019 after construction began on the roadway fill embankment and wetland filling. See **Exhibit A**. In the fall of 2020, measures were taken by the property owner to obtain photo documentation of storm

events causing sediment transport from the Founders Ridge development, with the first documented event occurring on October 13, 2020. See Storm Events **Exhibit B**. Photos of a storm event taken on December 5, 2020 show further sediment transport from the Founders Ridge development. See **Exhibit B**.

The above-mentioned Cease & Desist letter dated December 21, 2020 ordered Founders Ridge to immediately halt all activity due for violating Section 11.5 - Illegal Work in a Regulated Area and to make application to the Middletown IWWA. Although added erosion and sediment control measures were reportedly made on or before that date, a December 25, 2020 storm event resulted in continued sediment transport from the Founders Ridge development. See **Exhibit B**. At the January 6, 2021 Middletown IWWA meeting, the Commission was informed of further erosion and sediment control measures made by Founders Ridge. Ten days later, a January 16, 2021 storm event resulted in continued sediment transport from the Founders Ridge development to the impacted 97 Poplar Rd regulated area. See **Exhibit B**.

Application Review: Soil Erosion and Sediment Control

Our main concern with the application is that it does not, in our professional opinion, remedy continuing sedimentation impacts from the existing development. All sources of sediment from the development site must be eliminated before any pond or wetland remediation measures can be considered. It is our concern that the proposed erosion and sediment control plan modifications are not sufficient to prevent further transport of sediments from the Founders Ridge development site to down-gradient wetlands. In addition to the proposed Erosion and Sediment Control plan modifications, we believe additional measures are required as stated below. Since we have not conducted a thorough evaluation of the Founders Ridge site, there are likely additional measures beyond these recommendations that will be needed to prevent additional soil erosion and sedimentation impacts.

1. There is a large area of unstabilized soil south of the existing detention basin. Much of this area is steeply sloped and shows evidence of severe gully and scour erosion. Additional measures are needed to stabilize this area and prevent further erosion and sedimentation, including measures to control stormwater runoff, temporary diversions/slope breaks, regrading of existing gullies/scour channels, additional filtering practices such as silt fence reinforced with sediment filter logs or hay bales, additional sediment traps and temporary stabilization measures. The approved erosion and sediment control plan states that seeding with a temporary seed mixture is required within 7 days after the suspension of grading work or where the suspension of grading work is expected to be more than 30 days.



2. There is a significant amount of unstabilized construction sediment within and adjacent to the wetlands east of the detention basin and the unvegetated slope south of the basin. During rainfall events, this sediment continues to be transported to the culvert and onto 97 Poplar Road. The sediment needs to be removed and the area stabilized to prevent further transport and wetland/watercourse impacts.



3. There is an eroded scour channel from the detention basin outlet to the culvert under the Founders Ridge access roadway. The channel needs to be armored or stabilized to prevent additional soil erosion and downstream sediment impacts.



4. According to the owners of 97 Poplar Road, recent storm events have resulted in overtopping of the pond outlet with overflow threatening to impact their house. They have stated that pond overflow had not occurred prior to the start of development of the Founders Ridge site. While stormwater management measures are included in the approved development plans, not all of the measures have yet to be installed and are not fully functional. It is our opinion that additional temporary measures are needed during the construction phase to manage stormwater runoff from the site. We concur with the additional recommended measures included in the January 25, 2021 Provost & Rovero, Inc. letter, but recommend that one or more additional sediment traps or basins be constructed to treat runoff from those portions of the development site that do not discharge to the existing basin.
5. Based on our site observations, it is our professional opinion that the site's erosion and sediment controls have not been adequately maintained and not all measures are in compliance with the approved erosion and sediment control plan or the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control. For example, the approved plans state that large cut and fill slopes should be stabilized as soon as practical, temporary vegetative cover is to be provided until a permanent cover can be applied, all catch basin inlets shall be protected with silt-sacks or equivalent measures until the site has been permanently stabilized with vegetation, and that inspections of sediment control measures shall be made once per week and within 24 hours of the end of a rainfall amount of 0.5 inches or greater.

The applicant's own *Wetlands Assessment: Summary of Findings* report included in the Founders Ridge Phase 2 application states that the potential for adverse impacts from erosion and sedimentation is considered *moderate to high*. They state that the site's soils have an erosion factor K of 0.43. K factors range from 0.02 to 0.69 with the higher values being more susceptible to erosion. The report further states that "diligent maintenance monitoring of erosion and sediment controls are necessary to ensure the downgradient regulated resources are protected during the construction phase". Based on our findings, the measures have not been adequately monitored or maintained resulting in sediment impacts to downgradient regulated resources. See **Exhibit C** Founders Ridge Development Photos. It is likely that impacted regulated resources include not only the pond at 97 Poplar Road but other wetland and watercourse resources downstream of 97 Poplar Road.

The applicant's *Wetlands Assessment: Summary of Findings* report also recommends that woodchip berms be utilized as a secondary perimeter control, to be installed behind the primary control (silt fence). No such secondary perimeter controls were observed on the development site.

6. To ensure that erosion and sediment control measures are installed and maintained in accordance with the approved plans and 2002 CT Guidelines, we recommend that an independent third party qualified professional provide weekly inspections of the control measures and provide written reports to the Middletown Department of Planning, Conservation & Development

Pond Rehabilitation/Maintenance Plan

As stated above, it is our opinion that prior to any pond rehabilitation measures, the discharge of sediments from the Founders Ridge must cease. As seen in **Exhibit B**, significant amounts of suspended sediments discharge from the culvert under the Founders Ridge access road during every storm event, including most recently on January 16, 2021.

We strongly disagree with the findings of the REMA letter that the "finer sediments" below the "two or three inches of coarse sediment" have been slowly filling the pond for the past 3 to 4 decades. There is ample evidence that these materials have been recently deposited within the pond since the beginning of construction of the Founders Ridge development. The appended aerial photos from 2004 through 2016 and one site photo from March 29, 2016 clearly show an unvegetated open water body prior to start of development of the Founders Ridge site. See **Exhibit A**.

It is our professional opinion that most of the sediments that have resulted in filling of the pond are from soil erosion from the upstream development site. The appended photos of the Founders Ridge development site provide evidence of past and ongoing soil erosion and sediment transport. See Founders Ridge Development Photos **Exhibit C**. These photos include large areas of unvegetated, unstabilized soils on steep slopes, collapsed un-maintained silt fence, sediment accumulation within and adjacent to wetlands, unstabilized scour channels, rill erosion on the roadway embankment, and over-topped/buried silt fence at the base of the steep roadway fill embankment. See **Exhibit C**.

The application documents suggest that some sedimentation impacts are likely the result of power line improvements within the adjacent Eversource right-of-way (R.O.W.). The appended

documents from Eversource include a May 27, 2020 photo of the 97 Poplar Road pond and wetland area documenting significant sediment impact from Founders Ridge before it began any work, including laying temporary construction matting on the adjacent (R.O.W.) See Eversource Documents **Exhibit D**. The Eversource letter represents that they employed best management practices including temporary construction matting and conducted weekly inspections during site work. They further state that the BMP's were maintained and no soil erosion or sediment issues were noted related to the Eversource work. See **Exhibit D**.

According to the Inland Wetlands application, only 6-14" of sediment is proposed to be removed from the pond. We find this proposal to be totally inadequate. It will not restore the pond to its condition prior to the start of the Founders Ridge development and will do little to enhance the wetlands functions and values. We believe the applicant should be required to remove as much sediment as needed to restore a viable pond habitat. We are in agreement with the other proposed pond repair recommendations including pond side slopes no steeper than 3:1, providing an aquatic bench and stabilization of disturbed areas above the water line with appropriate seed mix and mulch.

Yours truly,

Land-Tech Consultants



Christopher P. Allan

Certified Soil Scientist

Certified Professional in Erosion and Sediment Control

Professional Wetland Scientist

CC: Thaddeus Bysiewicz
Cori Rose, U.S. Army Corps of Engineers (via email)
Brian Golembiewski, CT DEEP LWRD (via email)
Neal Williams, CT DEEP (via email)

Attachments:

Exhibit A: Pond Timeline Photos

Exhibit B: Storm Event Photos

Exhibit C: Founders Ridge Development Site Photos

Exhibit D: Eversource Documents

Exhibit A: Pond Timeline



Pond

2004



Pond

2008



Pond

2012



Pond

Founders Ridge
Phase 1

-72.692 41.574 Degrees

UConn/CTDEEP, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

POWERED BY
esri



Pond

2016



Pond

2016



March 29, 2016



Founders Ridge
Phase 1

Culvert

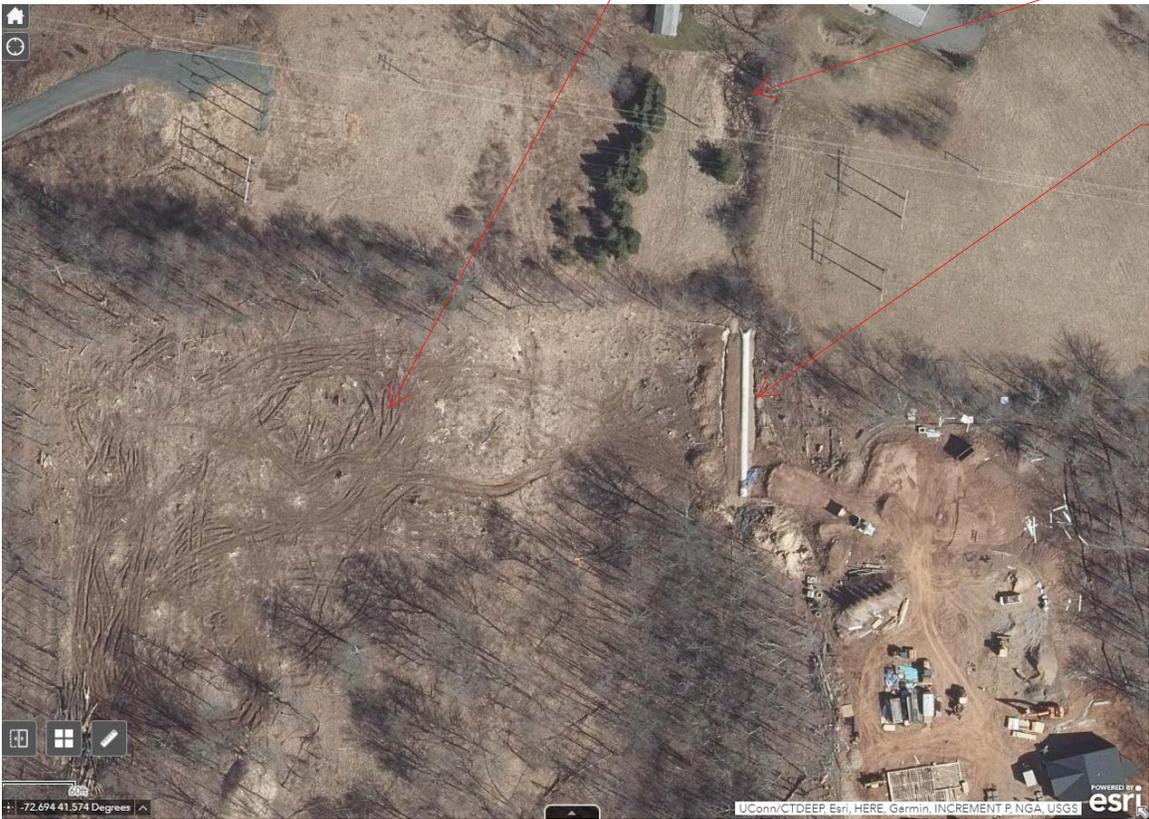
Pond

Spring 2019



Pond

Spring 2019



Founders Ridge Phase 2

Pond

Culvert

Founders Ridge - Spring 2019



Founders Ridge
Roadway Fill
Embankment

Culvert

Pond

September 2019



Pond

September 2019

Exhibit B: Storm Events

October 13, 2020



Stream from Founders Ridge



Pond

December 5, 2020



Stream from Founders Ridge



Pond

December 25, 2020



Stream from Founders Ridge



Pond

January 16, 2021



Stream from Founders Ridge



Pond

Exhibit C: Founders Ridge Development Photos

12/28/2020



Unstabilized soil

Collapsed silt fence

Sediments



Sediments

Unstabilized soil on steep slope

Gully erosion



Detention Basin Outlet

Scoured channel

Sediments

Collapsed silt fence



Culvert

Collapsed silt fence



Sediments

Culvert

Rill Erosion on
Roadway Fill
Embankment

Buried silt fence

December 8, 2020



Rill Erosion on
Roadway Fill
Embankment

Buried silt fence

Accumulated Sediments
at Base of Roadway Fill
Embankment



Buried silt fence at base of
roadway fill embankment





Buried silt fence at base of roadway fill embankment



56 Prospect Street
P.O. Box 270
Hartford, CT 06103

Kathleen M. Shanley
Manager – Transmission Siting
Tel: (860) 728-4527

February 8, 2021

Ms. Melanie Bachman, Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: **SUB-PETITION NO. 1293 - BMM-01 (Berlin, Middletown and Middlefield)** – Eversource Energy declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for all transmission facility asset condition maintenance improvements statewide to comply with the updated National Electrical Safety Code clearance requirements.

Dear Ms. Bachman:

I am in receipt of the letter you forwarded to Eversource Energy (“Eversource”), dated February 3, 2021, prepared by LANDTECH, alleging that ongoing maintenance work along Eversource’s 1765/1766 Transmission Line directly to the south of 97 Poplar Road in Middletown potentially contributed to a pre-existing erosion and sediment control issue within a small pond on the property upgradient from Eversource’s work. Thank you for forwarding the letter as, though named in LANTECH’s letter, Eversource was not provided a courtesy copy and appreciates the opportunity to provide a response.

As outlined more fully below, Eversource was very aware of erosion and sedimentation issues at the pond prior to initiating the maintenance activities. Eversource routinely employs erosion and sedimentation control best management practices (“BMPs”) that include laying down temporary construction matting to cross a resource area. Eversource also performs weekly inspections during the execution of the work to ensure that these BMPs are maintained and that there are no issues. Any deviation from the expected performance of its BMPs is corrected immediately. Following receipt of this letter, Eversource’s Senior Environmental Specialist again visited the site on February 4, 2021 and identified no areas of immediate concern associated with Eversource’s work at this location. Snow covering the ground surface on this site visit impeded direct soil observations. However, the wetland resource crossing appeared to be functioning as intended. Please see below for detail regarding Eversource’s activities in this regard:

Pre-Construction

During Eversource's pre-construction walkdown (May 2020) for the ongoing 1765/1766 Project, which involves replacement of existing aged transmission structures, sediment buildup in the pond was observed and documented. The sedimentation in the pond was discussed with the landowner who acknowledged that this was a pre-existing issue resulting from upstream impacts. Photographs taken on May 27, 2020 (attached) depict the pond located at 97 Poplar with substantial sediment within the basin. The second photograph attached, taken facing south, depicts an active construction site completely unrelated to Eversource's work containing soil piles and excavation equipment located upslope of and off Eversource's' ROW.

Construction BMPs and Monitoring

All work by Eversource contractors is conducted in accordance with Eversource's Best Management Practices Manual for Massachusetts and Connecticut (September 2016), a document the Connecticut Siting Council is familiar with. This work was also conducted in accordance with Department of the Army General Permit for the State of Connecticut, for which a Self-Verification Notification Form was submitted on June 30, 2020.

Construction on the 1765/1766 Project was initiated during the week of August 7, 2020. Temporary timber matting was installed per the BMPs (laid across the water course and not dug into the bank) and has been employed specifically to avoid excavation and grading for access road and work pad areas that are required to facilitate the passage of heavy machinery used during the installation of the new transmission structures. Placement of the temporary matting is routinely used to span small water courses, as was the case at this location where the timber matting effectively spans the (south-north flowing) drainage channel, located central to the wetland. No excavation occurred in the wetland. The nearest "excavation" associated with 1765/1766 Project was for installation of the structure anchors located approximately 65-feet east of the wetland. The structures these anchors support are located an additional 10-feet further away from the wetland, to the east. Temporary anchoring-related excavation was previously backfilled in November 2020 with no evidence of sediment migration.

Weekly inspections of the 1765/1766 Project are performed by Eversource's contractor who is a Certified Professional in Erosion and Sediment Control. No erosion control or sedimentation issues have ever been identified at this location. Representative photos from two of these inspections are also attached. These photos were taken facing east and southeast at the single wetland crossing that is located less than 100-feet upslope of the impacted pond.

Installation of the two new structures proximal to the wetland has been completed and supporting anchors and other final work involving heavy machinery at this location, will be completed in the next 2-3 weeks. At this time temporary timber matting will be removed as part of standard demobilization. This will include the following measures to protect the wetland resource:

Kathleen M. Shanley
Manager – Transmission Siting
Tel: (860) 728-4527

- Environmental Inspector monitoring of this location will be conducted after each rain event to observe any issues related to erosion control and provided management of any concerns immediately with the civil contractor's support;
- Environmental Inspector oversight during temporary matting removal; and,
- Applicable erosion controls (e.g. haybales, silt fence, straw wattles) to control any sediment that may be released locally during matting removal. Sediment release is not anticipated but measures will be employed.

Should you have any questions regarding this submission, please do not hesitate to contact me at via email at kathleen.shanley@eversource.com or telephone at 860-728-4527.

Sincerely,



Enclosures

cc (via email): Mr. Brendan Schain, DEEP Office of Adjudications
Mr. Brian Thompson, Director, DEEP Land and Water Resources Division
The Honorable Benjamin Florsheim, Mayor, City of Middletown
Mr. Christopher P. Allan, LANDTECH

Client Name: Eversource

Site Location: Middletown, CT

Project No.: 42627.02

Photo No.: 16 **Date:** 01/13/21

Description:

View facing east of Michel's crew working on structure 6-214 located off Poplar Road in Middletown. No issues noted.

Date & Time: Wed Jan 13 15:11:20 EST 2021
 Position: 041.57501°N / 072.69356°W
 Altitude: 190ft
 Datum: WGS-84
 Azimuth/Bearing: 096° S04E 1707mils (True)
 Zoom: 1X
 1765/1766 Line Project
 Middletown, CT



Wetland/Drainage Channel

Pond located ~ 100ft downslope

Client Name: Eversource

Site Location: Middletown, CT

Project No.: 42627.02

Photo No.: 47 **Date:** 01/30/21

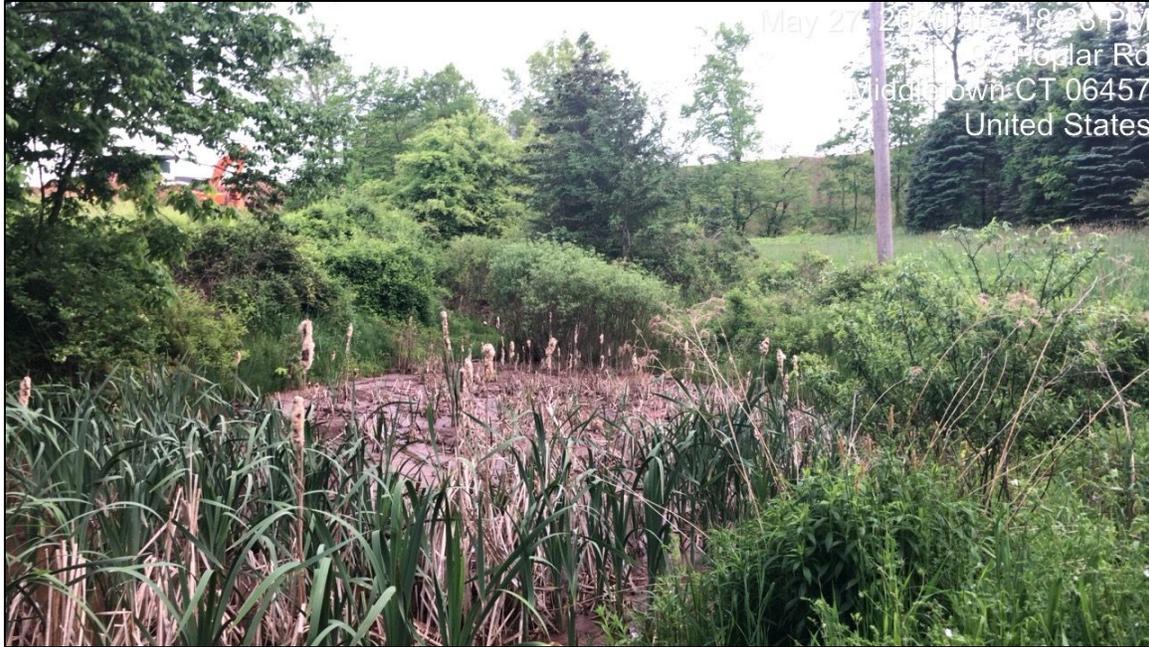
Description:

View facing southeast of Michel's crew working at Structure 6-214 located off Poplar Road in Middletown. No issues noted.

Date & Time: Sat Jan 30 08:55:48 EST 2021
 Position: 041.57499°N / 072.69365°W
 Altitude: 198ft
 Datum: WGS-84
 Azimuth/Bearing: 109° S71E 1938mils (True)
 Zoom: 1X
 1765/1766 Line Project
 Middletown, CT



Note: yellow arrow depicting location of temporary construction (timber) matting crossing wetland.



May 27, 2020 at 7:18:23 PM
97 Poplar Rd
Middletown CT 06457
United States



May 27, 2020 at 7:03:41 PM
97 Poplar Rd
Middletown CT 06457
United States