Hesketh



Civil & Traffic Engineers • Surveyors • Planners • Landscape Architects

F. A. Hesketh & Associates, Inc.

F. A. HESKETH & ASSOCIATES, INC.

6 Creamery Brook East Granby, CT 06026 (860) 653-8000 (860) 844-8600(Fax) email: ghesketh@fahesketh.com

MEMORANDUM

To: East Granby IWWA

Date: March 28, 2024

From: Guy Hesketh, P.E.

Subject:East Granby Meadows – IWWC Application NarrativeOur File:22082

Please find below narratives related to the subject application before the IWWC.

Item 1: Narrative to address Application Requirements under Section 7.6 of the East Granby Inland Wetlands and Watercourses Regulations.

- 7.6 At the discretion of the Commission or its agent, or when the proposed activity involves a significant impact, additional information, based on the nature and anticipated effects of the activity, including but not limited to the following, is required:
 - a. site plans for the proposed activity and the land which will be affected thereby which show existing and proposed conditions, wetland and watercourse boundaries, land contours, boundaries of land ownership, proposed alterations and uses of wetlands and watercourses, and other pertinent features of the land and the proposed activity, prepared by a professional engineer, land surveyor, architect or landscape architect licensed by the state, or by such other qualified person;

Comprehensive site plans, prepared by a professional engineer, licensed land surveyor and licensed landscape architect have been submitted with the application. The plans include existing and proposed conditions, wetland and watercourse boundaries, land contours, boundaries of land ownership, proposed alterations and uses of wetlands and watercourses, and other pertinent features of the land and the proposed activity.

MEMORANDUM

 engineering reports and analyses and additional drawings to fully describe the proposed activity including any filling, excavation, drainage or hydraulic modifications to watercourses and the proposed erosion and sedimentation control plan;

Comprehensive site plans include detailed Grading and Drainage Plans (Sheet GR-1 and GR-2) to graphically depict proposed grading changes and show areas of cuts and fills. There is no direct impact to wetlands resources or watercourses.* No fill or excavation will take place within a wetland or watercourse. There are no proposed hydraulic modifications to any watercourses.

* It should be noted that the plan set depicts a linear wetland feature extending east-west just south of the unit at 22 Briarwood Circle. This area was delineated as wetlands in 2006 and is shown as the "historic" wetlands limits on the plan set. Development activities between 2009 and 2010 resulted in disturbance and filling of this wetlands, per the previously-approved site plan. The current project soil scientist confirmed that this linear feature no longer qualifies as a wetland resource. (See subsection c below, and the Site Observation Report in <u>Attachment A</u>)

A comprehensive drainage analysis was submitted with the application materials (Included in memorandum to Tom Grimaldi dated March 30, 2024). The analysis provides information on storm drainage design and modifications to peak rates and volumes of runoff from the site due to the proposed development. Comprehensive Soil Erosion and Sediment Control Plans, narratives, and details are provided in the Site Plan set (See Sheets EC-1, EC-2, SD-1, NT-1).

c. mapping of soil types consistent with the categories established by the National Cooperative Soil Survey of the U.S. Natural Resources Conservation Service; the wetlands shall be delineated in the field by a soil scientist and the soil scientist's field delineation shall be depicted on the site plans;

Soil types mapped by the NRCS and found on the Soil Web Survey are included in the memorandum to Tom Grimaldi dated March 30, 2024.

A more detailed, on the ground wetlands soil delineation was conducted by Henry Moeller on May 5, 2005. These wetland resources are described in a report entitled "On-site soils investigation of property west side on east street owned by William H. Wilson in East Granby, Connecticut", dated June 2,

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2005. A copy of this report is included in <u>Attachment A</u>. These delineated wetlands were approved by the East Granby IWWA at its August 3, 2005 meeting, through application for a Wetlands Boundary Amendment. A copy of the maps depicting the wetlands boundaries and boundary change approval letter are also included in <u>Attachment A</u>. The wetlands boundaries presented on the original site plan for The Bramble Bush Village (2008) and those presented on the current site plan (and subject of this application), are these official inland wetland boundaries.

On December 12, 2023, Anthony Zemba, a certified soil scientist visited the parcel to review and confirm the wetlands delineation done by Mr. Moeller. Mr. Zemba confirmed that the wetlands delineations done by Mr. Moeller and depicted on the current site plan are substantially correct, but that some areas had been filled during the initial development activities circa 2009 to 2010. A copy of Mr. Zemba's investigation report is included in <u>Attachment A</u>.

d. a description of the ecological communities and functions of the wetlands or watercourses involved with the application and the effects of the proposed activity on these communities and wetland functions;

The wetland limits on the western end of the site are clearly defined by the steep bank leading down to a Red Maple palustrine forested broad-leaved deciduous seasonally flooded/saturated wetland on what appears to be a floodplain of Sanborn Brook. The wetlands are dominated by Red Maple (Acer rubrum) and Pin Oak (Quercus palustris) in the tree layer; Northern Spicebush (Lindera benzoin), in the shrub layer; and Reed Canary Grass (Phalaris arundinacea) and Sensitive Fern (Onoclea sensibilis) in the herbaceous layer.

The hydrology of this resource appears to be supported by groundwater discharge from the adjacent upland areas and from flooding events from Sanborn Brook.

Functions and values of the brook and adjacent wetlands include flood flow alteration and nutrient absorption. The dense herbaceous cover provides for wildlife habitat for various songbirds and small mammals, and the wetlands, brook and associated shallow farm ponds provide habitat for waterfowl and shore birds, as well as other obligate and facultative wetlands fauna (i.e., various turtles, frogs and snake species, and various small mammals and songbirds).

Drainage design plans limit direct runoff to the brook or its adjacent wetlands. Runoff from adjacent upland areas include only clean roof runoff

MEMORANDUM

and runoff from adjacent lawn areas. This runoff, however, will not be directly discharged to the brook or its adjacent wetlands, but will be intercepted by vegetated swales and directed to one of two water quality basins. Additionally, all runoff from paved roadways, driveways, and parking areas (runoff that has a higher potential for pollutant conveyance) are directed away from these resource areas and routed through the water quality basins for capture and treatment prior to discharge.

Per the CT DEEP Natural Diversity Data Base (NDDB) Area Maps, there are no state or Federal Listed Species or Critical Habitat areas within proximity of the site. A copy of the NDDB map is included in <u>Attachment B</u>.

The proposed activities will have a di minimis impact on the ecological communities and wetlands functions. There are no proposed direct impacts to the wetlands resources, only activities within the 100-foot Upland Review Areas. And those activities are, with the exception of work associated with improvements to water quality basins, typically limited to areas at least 50 feet or more from wetlands resources. During construction activities, implemented erosion and sediment control measures will protect these resources from negative impacts. Following construction, the post-construction stormwater management plan will ensure stormwater maintenance facilities are kept properly functioning and properly treating the stormwater prior to its discharge. The schedule and description of responsibility for maintenance of the on-site storm water system is included on Sheet NT-1.

Plans also call for a vegetative buffer between wetland resource areas and residential uses. Lawn areas adjacent to wetlands will only be manicured within a maximum of 50 feet from the rear of building units. The balance of the areas between the buildings and wetlands will be left in its current vegetated state, or if disturbed, planted in conservation mix. These areas will only be mowed semi-annually (in late summer or early fall) to control woody vegetation, thus maintaining habitat for songbirds and small mammals, especially during the spring season and unmolested hibernation habitat for other fauna. The Landscape Plan shows these vegetative, no-mow buffers. (See Sheets LS-1 through LS-5), dated March 22, 2024). In addition, all lawn care professionals that will follow all state and federal requirements for use of lawn and landscape maintenance products, using only minimum quantities of fertilizers and other care chemicals.

In addition, the large undeveloped area along the southwest area of the site will be left in its natural state and dedicated as a conservation easement to

MEMORANDUM

maintain the area in its natural, undisturbed state for perpetuity. Any areas within this conservation easement area that are disturbed during construction will be topsoiled and seeded with conservation seed mix and NOT be subject to semi-annual mowing, but left to natural processes of vegetation restoration.

These measures will adequately protect adjacent wetlands and watercourses and their associated ecological communities and wetlands functions.

e. a description of how the applicant will change, diminish, or enhance the ecological communities and functions of the wetlands or watercourses involved in the application and each alternative which would cause less or no environmental impact to wetlands or watercourses, and a description of why each alternative considered was deemed neither feasible nor prudent;

A majority of the infrastructure installation and rough grading of the site was completed over a decade ago. This included installation of sanitary sewer service mains and laterals, water service main and laterals, storm drainage improvements, including catch basins, yard drains manholes and construction of two water quality basins and their outfall structures and outfall piping. Electric and telephone infrastructure have also been installed. The roadway section was substantially constructed, minus the bituminous pavement. Previous rough grading of the parcel included preparation of building sites adjacent to the roadway infrastructure extending approximately 125 feet from the curb line.

The proposed development will utilize the existing infrastructure that is currently in place, including existing sanitary and water services, and electric and communications services. Proposed building construction and associated earth disturbance will be limited to areas previously rough graded (within approximately 125 feet of the roadway). The existing storm drainage systems currently in place will remain and continue to be utilized, with the exception of a length of the system between Units 19 and 20 and Water Quality Basin #4. About 200 linear feet of piping will be removed and replaced to accommodate a change in unit layout.

The proposal includes upgrades to the existing volumetric capacity and storage/treatment volume of one of the existing water quality basins WQ Basin #4). This existing basin will be enlarged to facilitate the current design standard recommended by CT DOT, using updated rainfall intensity data from the NOAA sources.

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The re-use of the previously-constructed, existing infrastructure allows development of the parcel with significantly lesser site impacts than other development alternatives that would include removal of the existing roadway, utility infrastructure, stormwater management systems, etc. and redesign and reconstruction of new infrastructure. An alternative that included removal, redesign and reconstruction of existing infrastructure would not be prudent and would have potentially more impact to adjacent wetlands than development options that leave the existing roadway improvements, existing infrastructure, etc. in place.

Measures to protect the wetlands under the current redevelopment proposal include:

- Temporary erosion control measures proposed during construction (i.e., silt fence erosion control, erosion control blankets, sediment logs, inlet protection silt sacks, construction exits, etc.),
- Permanent erosion control measures that will remain following completion of construction (i.e. rip rap erosion controls, check dams, vegetated swales, flared-end sections, etc.).
- A long-term inspection and maintenance program for site storm water management systems, and
- Preservation and re-creation (in limited areas that are disturbed) of a vegetated buffer within approximately 50 feet of wetland resources to provide habitat for fauna.
- Use of landscape professionals for lawn and landscape care.

These measures will protect wetland resources and watercourses and will result in no net detrimental impact to adjacent wetlands and watercourses or their associated ecological communities or wetlands functions.

f. analysis of chemical or physical characteristics of any fill material; and

Both existing, on-site materials and imported clean fill materials (meeting the CT DEEP definition of clean fill) will be used as fill. Imported fill materials will meet CT DOT specifications for granular fill, for fill used as general film, or the CT DOT definition of processed aggregate for fill when used as materials for base for roadway, sidewalk and concrete slab construction. Existing on-site stockpiled topsoil materials will be used for topsoil.

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g. management practices and other measures designed to mitigate the impact of the proposed activity.

Soil Erosion and Sediment Control Plans (Sheets EC-1, EC-2, SD-1 and NT-1) following the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control were developed and will be followed during construction. In addition, the site will be registered for a General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities and construction activities will follow the GP-required site-specific Stormwater Pollution Control Plan.

Following construction, the Owner will follow the long-term inspection and maintenance program for site stormwater management systems presented on Sheet NT-1 and will have all lawn care and landscape maintenance performed by a licensed landscape professional following all requisite state and federal requirements.

Regarding previous concerns that the parcel, or portions of the parcel were historically used for tobacco production and the potential concern for former use of pesticides/herbicides, we offer the following:

The issue of past use of chemicals related to production of tobacco was addressed as part of the original application and approval process for East Granby Meadows (PZC 06-09) and Bramble Bush Village (PZC 06-10). Records in the PZC files related to these development proposals include memoranda from Charlie Francis (Town Engineer) indicating that subsequent to the previous approvals, the former owner, William Wilson, implemented a program to remediate any residual contamination following CT DEP Protocol under the direction of a Licensed Environmental Professional and that the site was properly remediated. No further action is deemed necessary. Copies of the memoranda are included in <u>Attachment C</u>.

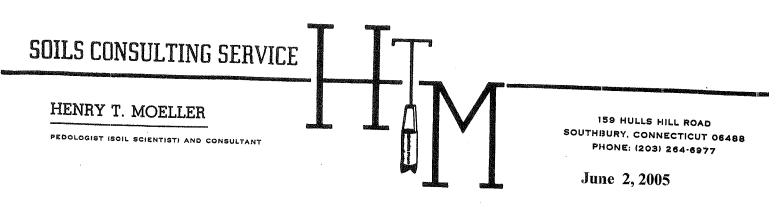
ATTACHMENT A

WETLANDS DELINEATION REPORT (MOELLER June 2, 2005)

WETLANDS BOUNDARY MAP AMENDMENT APPROVAL (IWWA August 4, 2005)

WETLANDS BOUNDARY AMENDMENT APPROVED MAPS (May 25, 2005)

SITE OBSERVATION REPORT (LANDTECH MARCH 26, 2024)



ON-SITE SOILS INVESTIGATION OF PROPERTY WEST SIDE ON EAST STREET OWNED BY WILLIAM H. WILSON IN EAST GRANBY, CONNECTICUT

I have conducted an on-site soils investigation of lot 42B and 43 located on East Street in East Granby, Connecticut. Lot 42B consists of 17.969+ acres and lot 43 consists of 30.056+ acres. The field work was completed on May 5, 2005. The principal purpose of this soils investigation was to locate and flag in the field all poorly drained and very poorly drained soils or "wetlands" as defined under the state inlands wetlands regulations. The flags were located by survey and plotted onto the property map. In this soils investigation and report, the classifications of the soils, soil textures, descriptive terms, and drainage classifications follow the guidelines and criteria of the National

FINDINGS----

The property lies on a nearly level to gently sloping plain. The upland soils were not of concern in this soils investigation. The soils have been cultivated for many years. In the Hartford County Soil Survey, the upland soils are complex and have developed in both sand and gravel outwash deposits and in silt and clay lacustrine deposits. The soils are also developed in a combination of sand over fine lacustrine deposits.

The <u>first</u> wetland is located in the northeast corner of lot 43 next to East Street. These soils are poorly drained and form a gradual boundary with moderately well drained and well drained upland soils. These soils consist of the **ScA** Scantic silt loam, 0 to 2 percent slopes. These soils consist of fine sandy loam to silt loam over silt and clay lacustrine deposits. On the property the soils have been disturbed through plowing, drainage, and other agricultural activities. This wetland is part of a larger wetland that continues north off the property. Most of this wetland is in dense shrub vegetation.

The <u>second</u> wetland is part of a floodplain for Shelden Brook. It begins in the northwest corner of lot 43 and continues south into lot 42B on the west side. These soils are alluvial along the flagged wetland boundary and consist of the (Rp) Rippowam fine sandy loam, 0 to 5 percent slopes (Old Rumney series). These soils consist of fine sandy loam and have been subject to sedimentation from erosion of the uplands in the past. Farther into the wetland the soils change to deep organic soils consisting of the (Ce) Carlisle muck, 0 to 1 percent slopes (Peats and mucks). This wetland also includes a manmade pond located off the property on the west side.

SOIL MAPPING

SOILS INVESTIGATION OF LOTS 42B & 43---2

Just off this <u>second</u> wetland there are two small branches that go into the open fields. One area has been plowed in the past and is part of any open field. The soils consist of the ScA Scantic silt loam, 0 to 2 percent slopes. It forms a gradual transition into the main wetland and floodplain along Shelden Brook. This wetland is simply a low area which is slow draining.

There is also a broad ditch that begins in the open field and continues west to the main or second wetland along Shelden Brook as described above. This ditch goes along a high manmade berm that extends into the main wetland. The soils within this broad ditch are highly disturbed and are best classified as (AQ) AQUENTS [FORMERLY (UDW) Udorthents, wet]. This ditch appears to have been dug for both drainage and as a borrow area for the berm which intrudes into the main wetland. Purpose of the berm is not known.

The wetlands located in the west and southwest corner of lot 42B are part of the large wetland along Shelden Brook. These soils form a relatively abrupt boundary along the uplands. These soils also consist mainly of the (Ce) Carlisle muck, 0 to 1 percent slopes(Peats and mucks). This wetland continues to the south to Connecticut Route 20. For more detailed information on the above named wetland soils, see the last section of this report.

If there are any questions, please do not hesitate to contact me.

Respectfully submitted,

-T. Wheelle Henry . Moeller

WETLAND SOIL DESCRIPTIONS----

(AQ) AQUENTS [FORMERLY (UDW) Udorthents, wet].

These mapping units consist of disturbed soils in which no natural soil profile or solum can be recognized. The drainage classification ranges from poorly drained to very poorly drained based on vegetation, topography, presence of a recently developed thin organic surface, location on the landscape, and other factors. There may be inclusions of piles of soil material that may not be poorly drained but is too small in area. In other areas the soils were graded, filled, or completely removed down to the undeveloped substratum material. In filled areas there may be a perched water table or an impervious layer that creates an aquic moisture regime. The textures of the soil material include silt loam, fine sandy loam, sandy loam, silt, sand, and gravelly sandy loam.

(Ce) Carlisle muck, 0 to 1 percent slopes (Peats and mucks).

This mapping unit consists of organic deposits of muck thicker than 51 inches over a mineral soil material ranging from sand to clay. These deposits are the remains of reeds and sedges, sphagnum moss, or trees and shrubs which grew in these wet areas. Muck is a decomposed organic material which can no longer be identified as to type of plant from which it was derived. The material may also be brown in color upon excavation, but it turns black upon exposure to air. The water table is usually at or near the surface most of the

SOILS INVESTIGATION OF LOTS 42B & 43---3

year and flooding may occur during the winter and after heavy periods of rain any time of the year. The Carlisle series is classified as euic, mesic Typic Medisaprists.

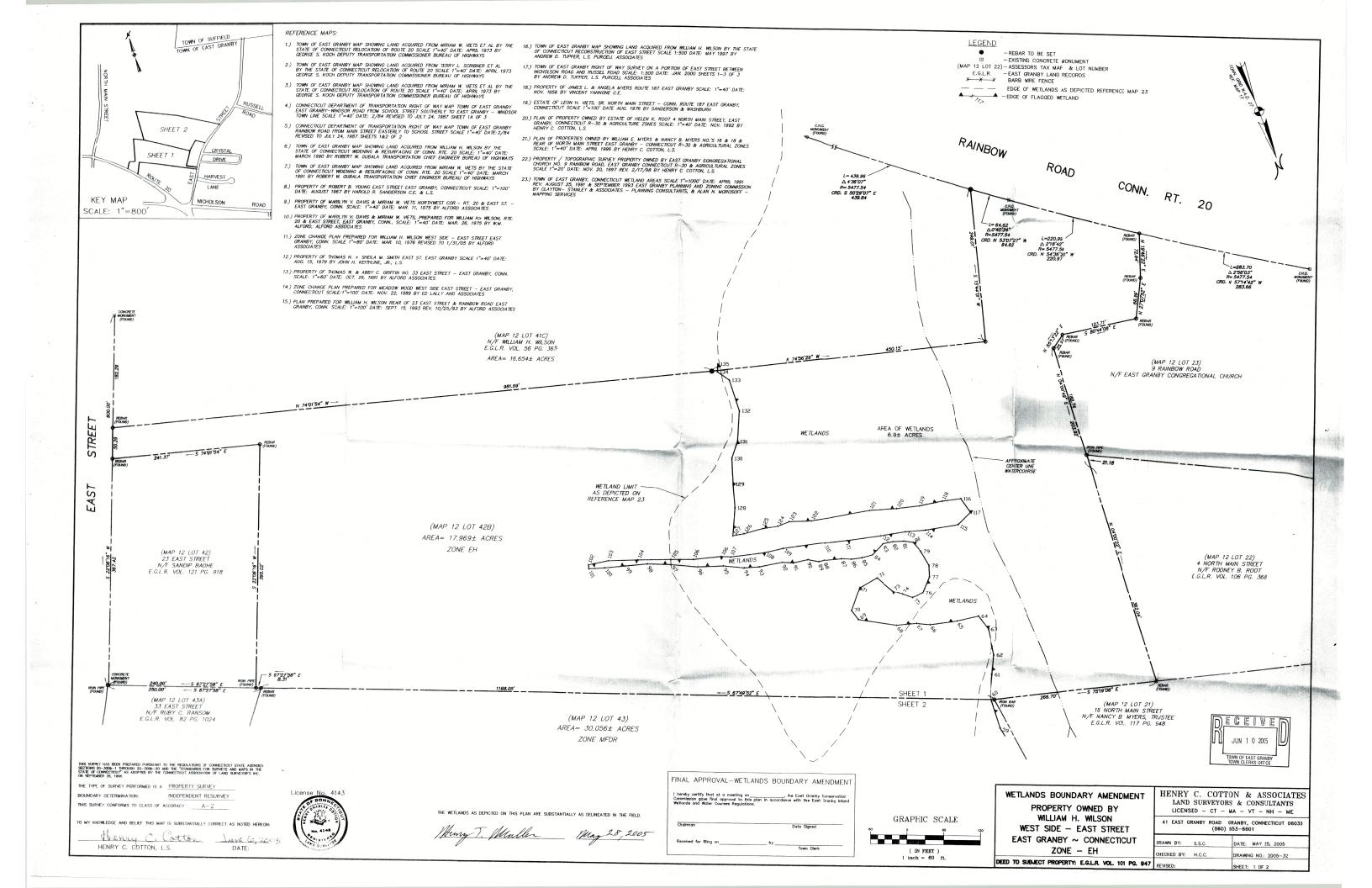
(Rp) Rippowam fine sandy loam, 0 to 5 percent slopes (Old Rumney series).

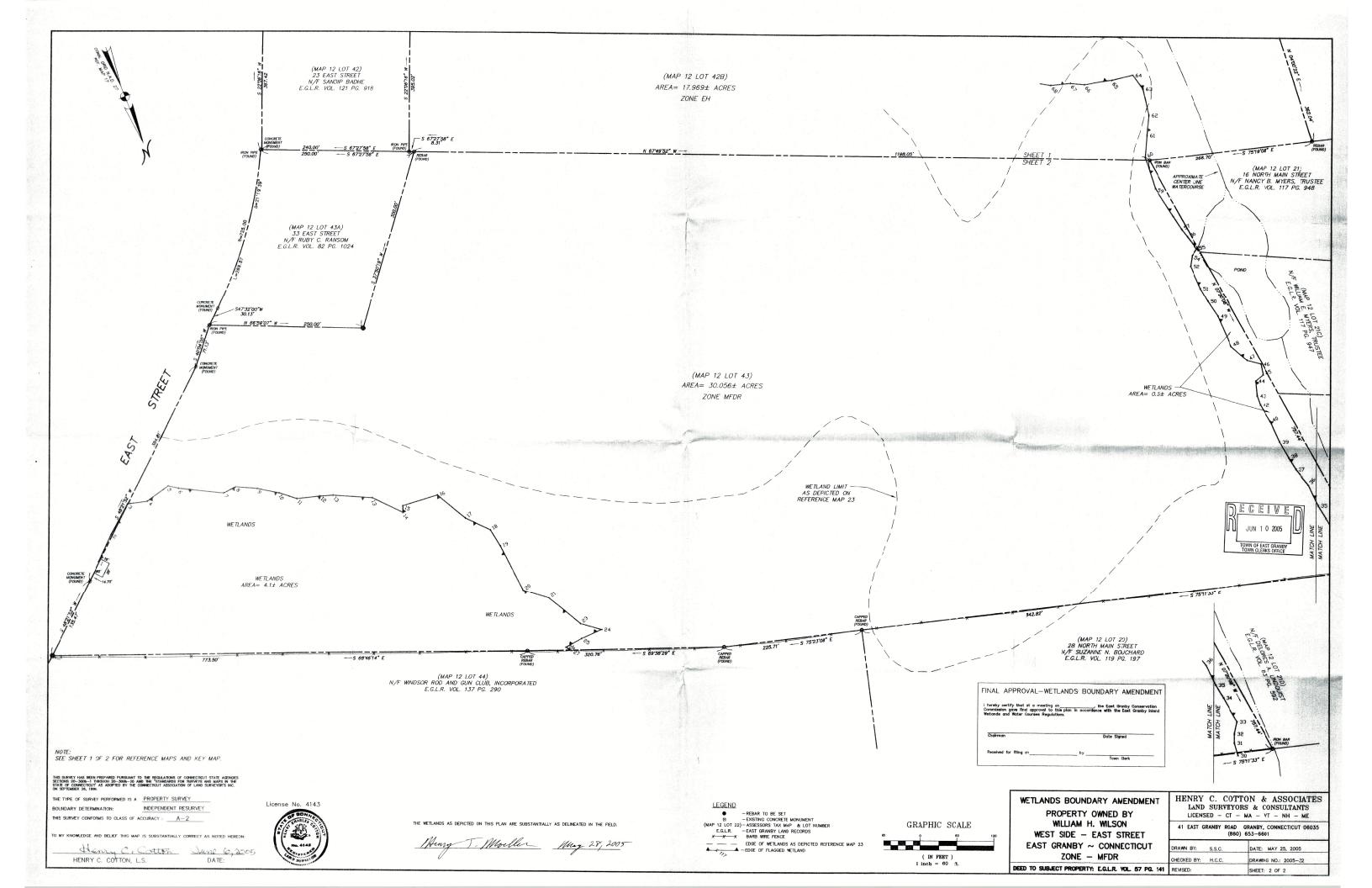
This soil is a poorly drained alluvial soil developed primarily on floodplains or depressions subject to sedimentation. The topsoil ranges from 20 to 40 inches or more in thickness and consists of very dark grayish brown fine sandy loam to sandy loam. Textures of the surface are highly variable and may include sand deposits. The underlying gray subsoil and substratum ranges from fine sandy loam to sand. The ground water table is at or near the surface from late fall through early spring. This soil is frequently flooded or ponded. The Rippowam series is classified as coarse-loamy, mixed, nonacid, mesic Aeric

ScA Scantic silt loam, 0 to 2 percent slopes.

This soil is poorly drained and developed in reddish colored silt and clay deposits. They have a dark colored silt loam surface horizon over gray and reddish mottled silty clay subsoils. The underlying substratum consists of red silty clay. The permeability is very slow. Ground water table is at or near the surface from late fall to early spring and during wet periods in summer.







C'U 05-05



TOWN OF EAST GRANBY

INCORPORATED 1858

CONSERVATION COMMISSION PO BOX 1858 9 CENTER ST EAST GRANBY, CONNECTICUT 06026 PHONE 1-860-653-3444 FAX 1-860-653-4017

August 4, 2005

Mr. William H. Wilson 411 Copper Hill Rd. West Suffield, CT 06093

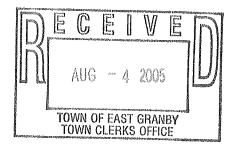
Re: Conservation Commission Application CC-05-05 Wetlands Boundary Amendment Property of William H. Wilson Assessor Map Parcels 12-42B and 12-43, East Street

Dear Mr. Wilson:

At its meeting on August 3, 2005 the East Granby Conservation Commission in its capacity as the Inland Wetlands and Water Courses Agency of the Town voted to approve this application for a for a Wetlands Boundary Change in accordance with the drawings and reports as listed and dated in the Town Engineer's report dated June 22, 2005.

FOR THE COMMISSION Charles V. Francis, P.E. Town Engineer/Planner

Cc: Clifford Amirault, Chair Bill Hoerle, Secretary Town Clerk Lincoln White, Inland Wetlands Agent



SITE OBSERVATION REPORT			
LANDTECH	REPORT NO: 1	Page 1	
	PROJECT No:	Date: March 26 th , 2024	
	PROJECT: East Granby Meadows Phase 2		
	LOCATION: East Granby, CT		
ATTACHMENTS: Aerial Photo depicting Roadways and formerly delineated wetlands			
Weather: Sunny and clear	Reported by: Anthony J. Zemba		

INTRODUCTION

On December, 12th 2023, LANDTECH ecologist and soil scientist Anthony Zemba visited the abovereferenced site to conduct a wetland edge verification. The wetlands on site had been previously delineated by others as part of an original subdivision approval. Following receipt of subdivision approval, construction of the subdivision commenced at the site circa 2009 or 2010 with the construction of the road surface, installation of electric, potable water utilities and the stormwater management system. The latter included the construction of detention basins at the northwest, and southwest corners of the property. The wetland limits lie outside of these stormwater system appurtenances and remain vegetated with hydrophytic vegetation. The originally delineated wetland limits are depicted on the attached figure.

FINDINGS

The wetland limits on the western end of the site are clearly defined by the steep bank leading down to a Red Maple palustrine forested broad-leaved deciduous seasonally flooded/saturated wetland on what appears to be a floodplain of Sanborn Brook. The wetlands are dominated by Red Maple (*Acer rubrum*) and Pin Oak (*Quercus palustris*) in the tree layer; Northern Spicebush (*Lindera benzoin*), in the shrub layer; and Reed Canary Grass (*Phalaris arundinacea*) and Sensitive Fern (*Onoclea sensibilis*) in the herbaceous layer. I did not encounter the linear portion of the wetland that, under the former delineation, extended eastward away from the floodplain forest treeline.

CONCLUSIONS

Through the observation of various soil cores obtained with a Dutch auger, I was able to locate the edge of the wetland limits on site and their position in relation to site features. Using the limits of the roadway, the topography created by the site preparation and the location of the stormwater detention basins on the site, all of which are depicted on the plan, I was able to verify that the edge of the wetland depicted on the plan was substantially correct with the possible exception of a narrow linear portion that extends eastward toward the intersection of Briarwood Circle and Old Deerfield Circle, perhaps representing a drainage swale. The eastern half (e.g., the portion that extends east beyond the tree line of the wetland) of this narrow strip of wetland appears to have been graded, and thus no longer meets the criteria of a wetland.

LANDTECH

Questions regarding the information provided herein can be directed to the undersigned.

Respectfully Submitted,

LANDTECH CONSULTANTS

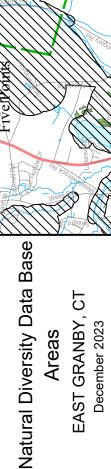
Anthony J. Zemba

Anthony Zemba Professional Soil Scientist



ATTACHMENT B

NATURAL DIVERSITY DATA BASE AREAS EAST GRANBY, CT (December 2023)



Z State and Federal Listed Species **Critical Habitat**

Town Boundary

locations of species have been buffered to NOTE: This map shows known locations species is collected and compiled by the of State and Federal Listed Species and Critical Habitats. Information on listed from a variety of data sources . Exact Natural Diversity Data Base (NDDB) produce the generalized locations.

boundaries and any additional affected areas ezFile https://filings.deep.ct.gov/DEEPPortal/ Request. To use the map, locate the project Site Assessment. More detailed instructions are provided along with the request form on If the project is within a hatched area there preliminary screening tool for conducting a Data Base State Listed Species Review or species. For more information, use DEEP to submit a Request for Natural Diversity may be a potential conflict with a listed Vatural Diversity Data Base Review This map is intended for use as a our website.

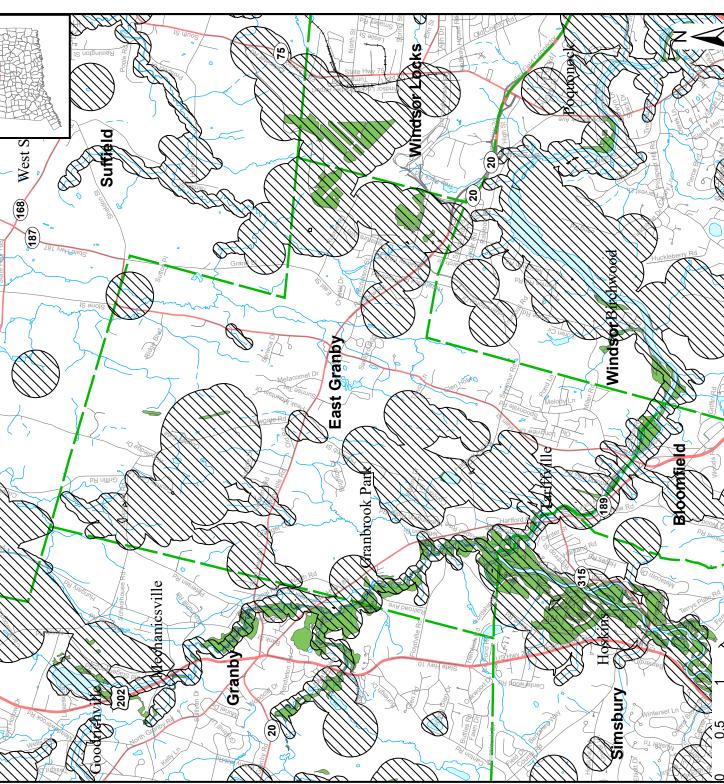
https://portal.ct.gov/deep-nddbrequest

at http://cteco.uconn.edu to more precisely Use the CTECO Interactive Map Viewers search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP) email: deep.nddbrequest@ct.gov Phone: (860) 424-3011 79 Elm St, Hartford, CT 06106



☐ Miles



ATTACHMENT C

MEMORANDA RELATED TO REMEDIATION OF RESIDUAL AGRICULTURAL CHEMICALS

CHARLIE FRANCES TO GARY HAYNES (January 21,2011)

CHARLIE FRANCES TO PZC (July 6, 2010)

TOWN OF EAST GRANBY

PLANNING and ENGINEERING 1-860-653-3444 FAX 1-860-653-4017

MEMORANDUM

Date: January	21,	2011	
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To: Gary Haynes

Cc: Rosalie McKenney

From: Charlie Francis

Re: Soil Remediation Report (PZC 06-09 for file purposes only) Lot 1 -William H. Wilson West side of East Street

Under PZC Applications 06-09 (East Granby Meadows, Lot 2) and 06-10 (Bramble Bush Village, Lot 3) my reports included a provision to have a report demonstrating successful remediation of residual agricultural chemicals as a precedent condition to issuance of the first Certificate of Occupancy.

Not part of either of the above applications but submitted for Commission information was a Concept Plan for future commercial development of Lot 1 as identified on the plans prepared by EcoDesign, LLC.

All three parcels had been historically used for the raising of various agricultural products including shade tobacco production. Prior to submitting the applications Mr. Wilson commissioned an investigation of the total property and elevated residual levels of chlorinated pesticides were discovered. Mr. Wilson then undertook a program of remediation efforts including dilution by periodic deep roto-tilling and application of bio-remediation soil activator agents following by periodic sampling against a test plot to determine the progress and efficacy of the remediation.

ARCADIS-US, Inc., a Connecticut Licensed Environmental Professional (LEP) firm provided soil sampling and analysis services on Lot 1 according to the protocols of the Connecticut Department of Environmental Protection (DEP) Remediation Standard Regulations (RSR) guidance document for former agricultural properties. Compliance with these state standards is not actually required but used as accepted criteria and Best Management Practice (BMP). The RSR has multiple standards based on intended land use, the most stringent of which are the Residential Direct Exposure Criteria (RDEC) used for Lots 2 and 3. For consistency with the overall remediation Mr. Wilson elected to also use the RDEC for Lot 1 as well.

ARCADIS, in their "Soil Sampling Summary Report" dated December 2010, identifies the site as Lot 1, East Street. A total of 37 soil samples were taken between May 2006 and March 2010 and analyzed by ARCADIS and found in compliance with the RDEC on a statistical basis since the 95% upper confidence level of the data is below the RSR.

Successful remediation has been completed on all three lots and no further remediation is required.

TOWN OF EAST GRANBY

PLANNING and ENGINEERING 1-860-653-3444 FAX 1-860-653-4017

MEMORANDUM

Date:	July 6, 2010
To:	Planning and Zoning Commission
Cc:	Gary Haynes, Dinesh Patel, Rosalie McKenney Bill Wilson
From:	Charlie Francis
Re:	Planning and Zoning Application 06-10 Bramble Bush Village by William H. Wilson West side of East Street

My 9/19/06 report on the Bramble Bush Village (BBV) project included a provision to have a report demonstrating successful remediation of agricultural chemicals as a precedent condition to issuance of the first Certificate of Occupancy.

The BBV parcel was formerly used for shade tobacco production and was found to have elevated residual levels of chlorinated pesticides.

Remediation efforts have been on-going on the BBV site and include dilution by periodic deep rototilling and application of bio-remediation soil activator agents.

ARCADIS-US, Inc., a Connecticut Licensed Environmental Professional (LEP) firm has been providing soil sampling and analysis services on the BBV site. The project is not governed by Connecticut Department of Environmental Protection (DEP) Remediation Standard Regulations (RSR), however DEP has published a guidance document for former agricultural properties recommending use of the RSR's as a comparison standard and ARCADIS has used this criteria in their analyses.

ARCADIS, in their report dated June 2010 and placed in the BBV file, identifies the site as Lot 3. A total of 66 soil samples were taken between March 2008 and March 2010 and analyzed by ARCADIS and found in compliance with the RSR on a statistical basis since the 95% upper confidence level of the data is below the RSR.

The approval condition to allow issuance of certificates of occupancy on BBV has been satisfied and no further remediation is required.