INLAND WETLANDS COMMISSION Telephone (203) 563-0180 Fax (203) 563-0284



TOWN HALL 238 Danbury Road Wilton, Connecticut 06897

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY

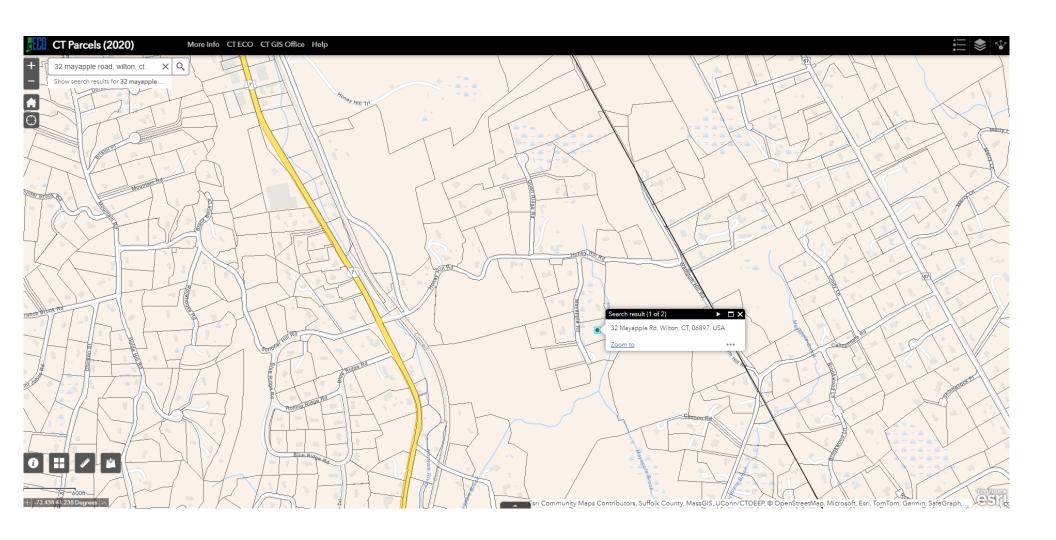
For Office Use Only:	WET#
Filing Fee \$	Wilton Land Record Map#
Date of Submission	Volume # Page #
Date of Acceptance	Assessor's Map #Lot#
APPLICANT IN	FORMATION:
Applicant <u>Taylor Witt</u>	Agent (if applicable)
Address 32 Mayapple Road	Address
Wilton, CT 06897	
Telephone 203-571-2978	Telephone
Email thw0011@gmail.com	Email
PROJECT INF	ORMATION:
Property Address 32 Mayapple Road, Wilton, CT	Site Acreage 2.22 AC
Acres of altered Wetlands On-Site <u>0.71 AC</u>	Cu. Yds. of Material Excavated <u>70 Cu Yds±</u>
Linear Feet of Watercourse <u>210'±</u>	Cu. Yds. of Material to be Deposited <u>120 Cu Yds±</u>
Linear Feet of Open Water <u>0 SF</u>	Acres of altered upland buffer <u>0.06 AC</u>
Sq. Ft. of proposed and/or altered impervious coverage 392 SF	Sq. Ft. of disturbed land in regulated area <u>2,440 SF</u>
APPLICATION R	EQUIREMENTS:
Is The Site Within a Public Water Supply Watershed Boundary? NO <u>X</u> YES*	Is The Site Within 500 Feet of a Town Boundary? NO _X YES*

^{*} If the answer is yes, then the applicant is responsible for notifying the appropriate water authority and/or adjoining community's Wetlands Department. Instructions for notification are available at the office of the commission.

Page 2 Applicatio	n for an Intermo	ediate Regula	ted Activity
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		escription and Purpose: The proposed activities include the installation of a shed, a short extension of the existing the short extension of the extension of the existing the short extension of the existing the existing the existing the existing the extension of the existing the existing the existing the existing the extension of the existing
	<u>iveway,</u> atercour	and the installation of subsurface storm water management. No work is proposed in the wetlands / rses.
_		
		ne applicant shall provide nine (9) collated copies of the following information as well as an electronic submission nike.conklin@wiltonct.org & elizabeth.larkin@wiltonct.org **
()	A.	Written consent from the owner authorizing the agent to act on his/her behalf
()	B.	A Location Map at a scale of 1" = 800'
()	C.	A Site Plan showing existing and proposed features at a scale not to exceed $1'' = 40'$
()	D.	Sketch Plans depicting the alternatives considered
()	E.	Names and addresses of adjoining property owners
()	F.	A narrative describing, in detail
		a. the proposed activity c. impacts b. the alternatives considered d. proposed mitigation measures
()	G.	Soils Report prepared by a Certified Soil Scientist and Wetlands Map prepared by a Registered Land Surveyor
()	Н.	Description of the chemical and physical characteristics of fill material to be used in the Regulated Area
()	I.	Description and maps detailing the watershed of the Regulated Area
()	J.	One original application form and eight (8) copies
**Ap _] sided	_	on materials shall be collated and copies of documents more than two pages in length shall be double
		7 of the Wetlands and Watercourses Regulations of the Town of Wilton for a more detailed description of requirements.
		t or his/her agent certifies that he is familiar with the information provided in this application and is aware of for obtaining a permit through deception, inaccurate or misleading information.
Comn	nissione	is application, permission is hereby given to necessary and proper inspections of the subject property by the ers and designated agents of the Commission or consultants to the Commission, at reasonable times, both before nal decision has been rendered.
Appli	cant's Sig	gnature: Date:
Agent	r's Signat	ture (if applicable) Date:

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY – Section B – A Location Map at a scale of 1'' = 800'



WILLIAM KENNY ASSOCIATES LLC

SOIL SCIENCE ECOLOGICAL SERVICES LAND USE PLANNING LANDSCAPE ARCHITECTURE

August 28, 2007

Ms. Gail M. Hanny 32 Mayapple Road Wilton, CT 06897

Re:

Wetland and Watercourse Delineation 32 Mayapple Road, Wilton, Connecticut

Dear Ms. Hanny:

As requested, I visited your referenced property to determine the presence or absence of wetlands and/or watercourses, to demarcate (flag) the boundaries of wetlands and watercourses identified, and to identify onsite soil types. This letter includes the methods and results of my investigation, which I completed today, August 28, 2007. In summary, two inland wetland and watercourse systems were identified and delineated. The systems which are located along the eastern and western boundaries of the property are woodland wetlands. The western system is primarily a depressional system with a surface outlet that drains to the north through a culvert below the property driveway. The eastern system is a small perennial stream and adjacent woodland wetlands.

Regulatory Definitions

The Inland Wetlands and Watercourses Act (Connecticut General Statutes §22a-38) defines inland wetlands as "land, including submerged land...which consists of any soil types designated as poorly drained, very poorly drained, alluvial, and floodplain." Watercourses are defined in the act as "rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private, which are contained within, flow through or border upon the state or any portion thereof." The Act defines Intermittent Watercourses as having a defined permanent channel and bank and the occurrence of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation.

Ms. Gail M. Hanny

Re: 32 Mayapple Road, Wilton, Connecticut

The <u>Tidal Wetlands Act</u> (Connecticut General Statutes §22a-28) defines <u>wetlands</u> as those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marsh, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing hydrophytic vegetation as identified in the Statutes.

Methodology

A second order soil survey in accordance with the principles and practices noted in the USDA publication *Soil Survey Manual* (1993) was completed at the subject site. The classification system of the National Cooperative Soil Survey was used in this investigation. Soil map units identified at the project site generally correspond to those included in the *Soil Survey of the State of Connecticut* (USDA 2005).

Wetland determinations were completed based on the presence of poorly drained, very poorly drained, alluvial, or floodplain soils and submerged land (e.g. a pond). Soil types were identified by observation of soil morphology (soil texture, color, structure, etc.). To observe the morphology of the property's soils, test pits and/or borings (maximum depth of two feet) were completed at the site.

<u>Tidal wetland</u> determinations were completed based on the presence of a predominance of tidal wetland vegetation and physical markings or water laid deposits resulting from tidal action.

<u>Intermittent watercourse</u> determinations were made based on the presence of a defined permanent channel and bank and two of the following characteristics: A) evidence of scour or deposits of recent alluvium or detritus, B) the presence of standing or flowing water for a duration longer than a particular storm incident, and C) the presence of hydrophytic vegetation.

Onsite wetland and watercourse boundaries were demarcated (flagged) with pink surveyor's tape (hung from vegetation) or small flags (on wire stakes) labeled "William Kenny Associates" that are generally spaced a maximum of every 50 feet. Complete boundaries are located along the lines that connect these sequentially numbered flags. The wetland and watercourse boundaries are subject to change until adopted by local, state, or federal regulatory agencies.

The weather on the day of the review was sunny with temperatures in the 80's $^{\rm o}$ F. The upland soil was dry and the wetland soil was dry to saturated.

Results

The approximate 2.3-acre residential property is located at 32 Mayapple Road in Wilton, Connecticut. Mayapple Road borders the western property boundary. Property improvements include a single-family residence, a septic system and an asphalt driveway. The vegetative cover in the central portion of the property is lawn with other ornamentals and shade trees. A broadleaved deciduous woodland is present in the western and eastern portions of the property.

Two inland wetland and watercourse systems were identified and delineated. The systems which are located along the eastern and western boundaries of the property are woodland wetlands. The western

Re: 32 Mayapple Road, Wilton, Connecticut

system is primarily a depressional system with a surface outlet that drains to the north through a culvert below the property driveway. The eastern system is a small perennial stream and adjacent woodland wetlands. The system extends off the site to the north and south and drains and extends south to north through the property. Wetland soils are primarily poorly drained fine sandy loams that formed from glacial till deposits. The approximate locations of the systems are shown on the attached map. The boundaries of these systems were marked at the site with flags numbered 1 to 29, 40 to 45 and 50 to 51.

Four soil map units were identified on the property (one wetland and three upland). Each map unit represents a specific area on the landscape and consists of one or more soils for which the unit is named. Other soils (inclusions that are generally too small to be delineated separately) may account for 10 to 15 percent of each map unit. The mapped units are identified in the following table by name and symbol and typical characteristics (parent material, drainage class, high water table, depth to bedrock, and slope). These characteristics are generally the primary characteristics to be considered in land use planning and management. A description of each characteristic and their land use implications follows the table. A complete description of each soil map unit can be found in the *Soil Survey of the State of Connecticut* (USDA 2005), and at

http://soils.usda.gov/technical/classification/osd/index.html. The approximate location of the mapped wetlands and soil map units at the project site are shown on the attached wetland map.

	<u>Map Unit</u>	Parent <u>Material</u>	Slope (%)	Drainage <u>Class</u>	High Water Table			Depth To Bedrock (in)
<u>Sym</u> .	<u>Name</u>	H=1.11 = 11			<u>Depth</u> (ft)	<u>Kind</u>	Mos.	
L	Ipland Soil							
51	Sutton very stony fine sandy loam	Loose Glacial Till	3-8	Moderately Well Drained	1.5-3.5	Apparent	Nov-Apr	>60
61	Charlton very stony fine sandy loam	Loose glacial Till	3-8 8-15	Well Drained	>6.0			>60
306	Udorthents -	Excavated or Filled Soil (>2 feet)	0-45	Well Drained to Somewhat Poorly Drained	1.5->6.0)Apparent	Nov-May	>60
	Urban Land Complex	Pavement & struct		count for 85% or more quired to determine o			ional inv	estigations
Ī	Wetland Soil							
3	Ridgebury	Compact Glacial Till	0-8	Poorly Drained	0.0-1.5	Perched	Nov-May	>60
	Leicester Whitman extremely stony fine sandy loam		0-3 0-3	Poorly Drained Very Poorly Drained		Apparent Perched		

Ms. Gail M. Hanny
Re: 32 Mayapple Road, Wilton, Connecticut
Page 4

Parent material is the unconsolidated organic and mineral material in which soil forms. Soil inherits characteristics, such as mineralogy and texture, from its parent material. Glacial till is unsorted, nonstratified glacial drift consisting of clay, silt, sand, and boulders transported and deposited by glacial ice. Glacial outwash consists of gravel, sand, and silt, which is commonly stratified, deposited by glacial melt water. Alluvium is material such as sand, silt, or clay, deposited on land by streams.

Organic deposits consist of decomposed plant and animal parts.

A soil's texture affects the ease of digging, filling, and compacting and the permeability of a soil. Generally sand and gravel soils, such as outwash soils, have higher permeability rates than most glacial till soils. Soil permeability affects the cost to design and construct subsurface sanitary disposal facilities and, if too slow or too fast, may preclude their use. Outwash soils are generally excellent sources of natural aggregates (sand and gravel) suitable for commercial use, such as construction sub base material. Organic layers in soils can cause movement of structural footings. Compacted glacial till layers make excavating more difficult and may preclude the use of subsurface sanitary disposal systems or increase their design and construction costs if fill material is required.

Generally, soils with steeper slopes increase construction costs, increase the potential for erosion and sedimentation impacts, and reduce the feasibility of locating subsurface sanitary disposal facilities.

Drainage class refers to the frequency and duration of periods of soil saturation or partial saturation during soil formation. Seven classes of natural drainage classes exist. They range from excessively drained, where water is removed from the soil very rapidly, to very poorly drained, where water is removed so slowly that free water remains at or near the soil surface during most of the growing season. Soil drainage affects the type and growth of plants found in an area. When landscaping or gardening, drainage class information can be used to assure that proposed plants are adapted to existing drainage conditions or that necessary alterations to drainage conditions (irrigation or drainage systems) are provided to assure plant survival.

High water table is the highest level of a saturated zone in the soil in most years. The water table can affect the timing of excavations; the ease of excavating, constructing, and grading; and the supporting capacity of the soil. Shallow water tables may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

The depth to bedrock refers to the depth to fixed rock. Bedrock depth affects the ease and cost of construction, such as digging, filling, compacting, and planting. Shallow depth bedrock may preclude the use of subsurface sanitary disposal systems or increase design and construction costs if fill material is required.

Ms. Gail M. Hanny August 28, 2007 Page 5

Re: 32 Mayapple Road, Wilton, Connecticut

Conclusions

Today, I investigated your property at 32 Mayapple Road in Wilton, Connecticut and identified and delineated two onsite inland wetland and watercourse systems. Thank you for the opportunity to assist you. If you should have any questions or comments, please do not hesitate to contact me.

Sincerely,

William L. Kenny CPWS, ASLA

Soil Scientist

Enclosure

Ref. No. 1343

UPLAND:

SUTTON FINE SANDY LOAM

UDORTHENTS URBAN LAND COMPLEX CANTON AND CHARLTON SOILS 306 61

WETLAND:

wkassociates net

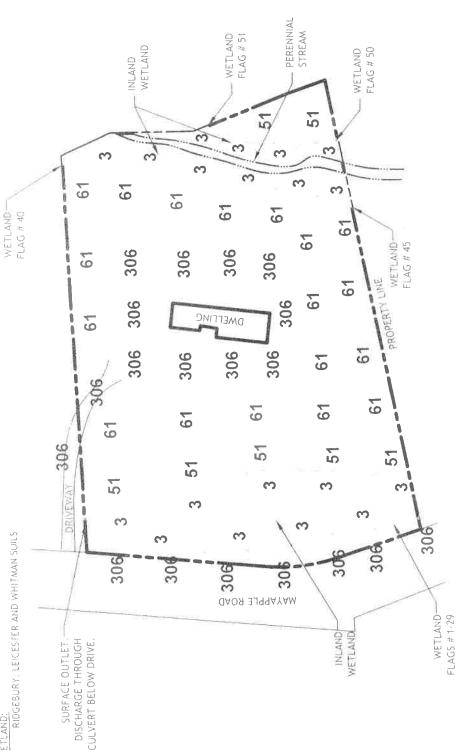
217 WEBB ROAD LAIRERED C1 06825

COLOGICAL VERVICES OF ANNIXOR

UANDSCAPI ARCHITICER RI

WILLIAM KINN

ASSOCIVIESTIC



WETLAND & WATERCOURSE MAP

32 MAYAPPLE ROAD WILTON, CT

DATE: AUGUST 28, 2007 SCALE: NOT TO SCALE

SUBSTANTIALLY REPRESENTS THE SOILS

OTHER INFORMATION TAKEN FROM A DRAWING PROVIDED BY GAIL HANNY.

WETLAND AND SOIL INFORMATION PROVIDED BY WILLIAM KENNY ASSOC.

INFORMATION SHOWN ON THIS DRAWING, INCLUDING THE WETLAND

NOTES:

BOUNDARY, IS APPROXIMATE. THE BOUNDARY IS NOT A SURVEYED

REPRESENTATION OF WHAT WAS FIELD MARKED (FLAGGED).

DELINEATION REPORT FOR THE SOIL MAP UNIT NAMES AND ADDITIONAL

RELATED INFORMATION

51, 61, 306 AND 3 ARE SOIL MAPPING UNIT SYMBOLS. SEE WETLAND

THIS DRAWING IS NOT FOR CONSTRUCTION USE.

AND WETLANDS MAPPED IN THE FIELD I CERTIFY THAT THIS WETLAND MAP

Ref. No.: 1343

NORTH

LIAM L. KENNY

WETLAND BOUNDARIES , POND & LAKE MANAGEMENT , CONSTRUCTION FEASIBILITY CONSULTATIONS , ENVIRONMENTAL STUDIES

Biological Narrative 32 Mayapple Road, Wilton, CT

Date: April 1, 2024

By: Steven Danzer Ph.D.

- Soil Scientist Certified Nationally by the Soil Science Society of America (#353463).
 Registered with the Society of Soil Scientists of Southern New England.
- Senior Professional Wetland Scientist PWS #1321, Society of Wetland Scientists.
- Arborist CT DEEP License S-5639; ISA Certified NE-7409A.
- Ph.D. in Renewable Natural Resource Studies.

INTRODUCTION

Regulated activities are proposed at the property located at 32 Mayapple Road, Wilton, Connecticut. The proposed activities include the installation of a shed, extension of existing driveway, and stormwater management, all as indicated by plans prepared by Shevlin Land Surveying, LLC.

The purpose of this report is to document existing conditions and to assess impact to the wetland resources due to the proposed activities.

LANDSCAPE CONTEXT

The 2.23 acre site is located on the east side of Mayapple Road in Wilton, CT. Land-use within the adjoining neighborhood is residential, with similar sized lots also predominantly wooded. The site is located within the DEEP Basin **7300-10**, within the Norwalk River Subregional Basin. The site itself drains into Mayapple Brook, a tributary of the Norwalk River. The Norwalk River is located roughly 3500 feet (0.66 miles) southwest of the site. The 40 acre forested Belknap Preserve is located directly east of the property.

WETLAND RESOURCES

Wetland resources on site include a watercourse located in a small forested valley parallel to the eastern property boundary, draining southerly. A second wooded wetland corridor is located parallel to the Mayapple Road frontage. A third area of forested wetlands is located immediately offsite to the north, adjacent to the driveway, along the northern property boundary.

The wetlands throughout the site were originally delineated by William Kenney Associates in 2007. Wetland soils were classified by Kenney as within the Ridgebury, Leicester and Whitman soil mapping unit, a mapping unit that is characterized by being deep and poorly drained, and formed in glacial till. Upland soils were classified as a mixture of Sutton fine sandy loam mapping unit, Canton and Charlton soil mapping unit, and Udorthents-Urban land complex mapping unit. Udorthents are soils altered by cutting and/or filling.

The wetland line as depicted on the survey was re-examined by Steven Danzer Ph.D. on 1/5/24 and determined to still be substantially accurate. Additionally, the wetland line in closest proximity to the proposed shed was reflagged to enable project review by the Town.

Dominant vegetation growing within the wetland/watercourse area in proximity to the proposed shed (**photos 1 and 2**), as observed during the field investigation by Steven Danzer Ph.D. included Red maple, Skunk cabbage, Tussock sedge, Cinnamon fern, Highbush blueberry, Spice Bush, Sweet pepperbush, Multiflora rose (an invasive), Winged Euonymus (and invasive), Microstegium (an invasive), Multiflora rose (an invasive) and Asiatic bittersweet (an invasive). Dominant woody vegetation within the adjacent upland included Black birch, Yellow birch, Tulip Tree, Cherry, Red maple, Ironwood, and Beech. The woody and herbaceous understory within the upland contained Euonymus (an invasive), Multiflora Rose (an invasive), and Christmas fern.

The existing functions and values of the wetland area in proximity of the proposed shed were evaluated using the New England Army Corp Highway Methodology Descriptive Approach, as modified for application to local conditions. This methodology has been proven useful in similar projects intended for review by municipal wetland commissions, and was chosen as the most appropriate methodology for the assessment of the area due to the assessment's descriptive emphasis. The functions and values of the system are described below.

Wetland/watercourse functions and values performed by the watercourse and adjacent wetlands include a very modest level of *Floodflow Alteration* due to the hydric soils and the modest detention and storage capacity of the watercourse system, *Wildlife Habitat* due to its proximity to the contiguous wooded area to the east,

Sediment/Toxicant/Pathogen Retention due to the wetland system's ability to detain and mitigate pollutants from the neighboring residentially developed area, Nutrient Removal/Retention/Transformation due to its vegetation and its overall potential for sediment trapping, and Groundwater discharge/recharge. The offsite wetland area located north of the property itself may be suitable as vernal habitat and/or reasonably expected to host amphibians, though the amount and quality of the adjacent upland habitat is limited on the southern side due to the existing driveway and residence.

PROPOSED ACTIVITIES, ANALYSIS OF IMPACT

The proposed activities include the installation of a shed, a short extension of the existing driveway, and the installation of subsurface stormwater management.

No work is proposed in the wetlands/watercourses.

The shed will be located on existing lawn (**photos 3,4,and 5**). The closest portion of the shed to the wetland line will be in the northeastern corner, which will be 62 feet from the wetlands. The edge of grading will be 58 feet from the wetlands.

One tree will be removed for the shed. Another Oak tree will be removed from the upland review area to accommodate the subsurface stormwater galleries.

The project was reviewed to determine if there were any significant impacts to the wetland resources, pursuant to the criteria enumerated in the Inland Wetland and Watercourse Regulations for the Town of Wilton under Section 2.1(z)3 (Significant Regulated Activity).

It is my understanding that under the Regulations, the project will likely be an Intermediate Activity due to activities occurring within the upland review area. However, the activity will not substantially change the natural channel or inhibit the natural dynamics of any watercourse system, nor diminish the natural capacity of the system to support existing functions, or cause substantial turbidity, siltation, sedimentation or thermal pollution, nor cause a substantial change of flow, nor cause pollution, nor destroy unique wetlands, watercourses or regulated areas having demonstrable scientific or educational value.

As per the above definition, the project is not expected to cause significant impacts to the wetlands or watercourses for the following reasons:

- There will be no work in the wetlands or watercourse area.
- Erosion controls are proposed during the course of construction to prevent sediments from washing towards the wetlands.

- The shed will be located in existing lawn and will not require removal of any existing vegetation other than grass and an Oak. Another Oak, located within the upland review, will be removed to accommodate the stormwater galleries.
- A stormwater detention system has been designed to mitigate any additional runoff due to impervious coverage.

With the above considerations in mind, it is my opinion that there will be no significant impacts to the wetlands due to the proposed activities. Nor will there be any significant or detrimental alteration to existing wetland functions or values.

Alternative locations were considered during the course of planning for the project. The current placement was selected to minimize tree removal and because the location will not result in significant or otherwise detrimental alterations to the wetland resources or its function. The location is the most logical with regard to access and needs of the homeowner, and with regard to the existing configuration of the property.

SUMMARY

The proposed activities include the installation of a shed, extension of existing driveway, and stormwater management. It is my professional opinion that the proposed activities will not significantly impact, or negatively change, diminish, or otherwise detrimentally alter the ecological communities or the functions or values of any of the wetland areas located on or adjacent to the property.

Thank you for the opportunity to comment.

Respectfully submitted,

Ster Dager

Signed,

Steven Danzer Ph.D.

Professional Wetland Scientist, Soil Scientist, Arborist,

Ph.D. in Renewable Natural Resource Studies



Photos



Photo 1. Watercourse corridor nearest to proposed shed. Looking south, down stream. 1/5/24.



Photo 2. Watercourse corridor at southern property boundary. Looking south, down stream. 1/5/24.

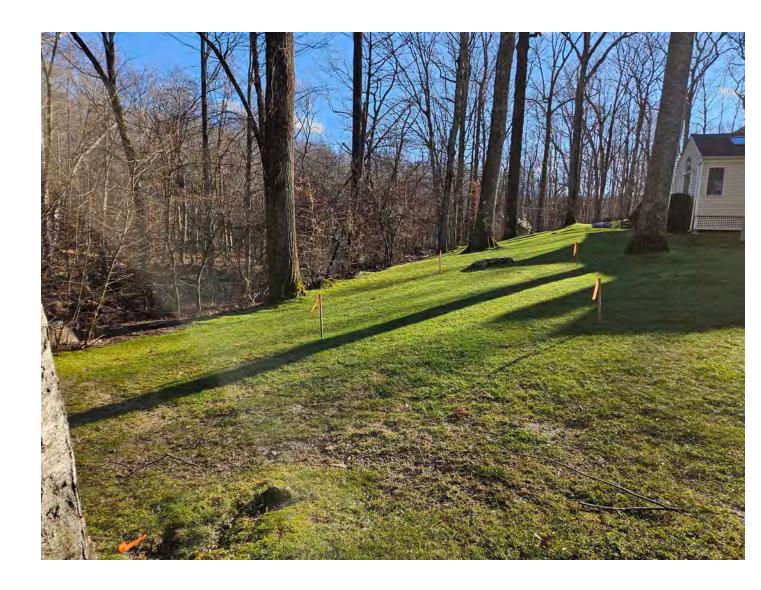


Photo 3. Proposed shed to be located in existing lawn. Looking south. 1/5/24.



Photo 4. Proposed shed to be located in existing lawn. Looking north. 1/5/24.



Photo 5. Proposed shed to be located in existing lawn. Looking east towards forested watercourse corridor. 1/5/24.

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY

Section E - Names and addresses of adjoining property owners

The adjoining neighbors are as follows:

- Steven & Veena Dzik
 Mayapple Road
- 2) Town of Wilton

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY - Section H - Description of the chemical and physical characteristics of fill material to be used in the Regulated Area D

Note: Received from Devine Bros in Norwalk - see ¾ Process spec below

	CON			Type of stone: T	rap Rock					
	Magnesium Su	agnesium Sulfate Soundness:		0.55			LA Abrasion: LA Abrasion:		AASHTO T-96 ASTM C-535	
			PLAN	NT #7					PLANT #55	
aterial	2" ASTM #3 2020	1 1/4" ASTM #4	3/4" ASTM #6 2020	1/2" ASTM #67	3/8" ASTM #8	1/4"		1/2" ASTM #67		1/4"
2 1/2"		2020	2020	2020	2020	2020	2 1/2"	2020	2020	2020
2"	100 98.7	100					2"			
1 1/2"	46.7	93.4					1 1/2"			
1 1/4"	17.6	71.9					1 1/4"			
1"	3.5	39.1	100				1"			
3/4"	1.1	7.8	93.3	100			3/4"	100		
1/2"	0.8	1.3	28.2	88.8	100		1/2"	82.5	100	100
3/8"	0.0	1.1	6.9	28.7	92	100	3/8"	38.8	92.1	99.9
1/4"			1.5	2.8	40.3	99.3	1/4"	5.1	30.2	96.1
4			1.1	1.7	13.2	88.1	4	1.8	8.1	63.2
1/8"						18.2	1/8"			13.9
8				1.4	1,2	3,3	8	1.5	2	3.3
16					8.0		16		1.5	
100					0.7		100		-1.3	
Bulk Spg:	2.922	2.948	2.902	2.9	2.877	2.777		2.908	2.907	2.90
lk@SSD	2.942	2.962	2.93	2.933	2.924	2.825		2.949	2.951	2.94
Apparent	2.982	2.988	2,983	2.999	3.014	2.919		3.033	3.041	3.03
absorption	0.691	0.446	0.934	1.14	1.703	1.75		1,419	1.522	1.50
Jnit Weight ons / cubic										
yard 1	1.32	1.33	1.32	1.33	1.31	1.30		1.42	1.36	1.24
Moisture Content	0.7%	0.9%	1.2%	1.3%	1.3%	1.8%		0.5%	0.5%	1.2%
oarse Agg Angularity (5:1 ratio)	3%	6%	5%	7%	6%			3%	0%	
Fractured	100/100	100/100	100/100	100/100						

Note 1: This information has been developed using a modified AASHTO T19 method. The conversion factors shown represent the unit weight of material in a truck, railroadcar, or on a scow. These factors are not compactd weight conversions

Note 2: First number will be One Fractured Face and the Second number is Two or more Fractured Faces ie: 90/80 means 90% has 1 fractored face and 80% has two or more fractured faces

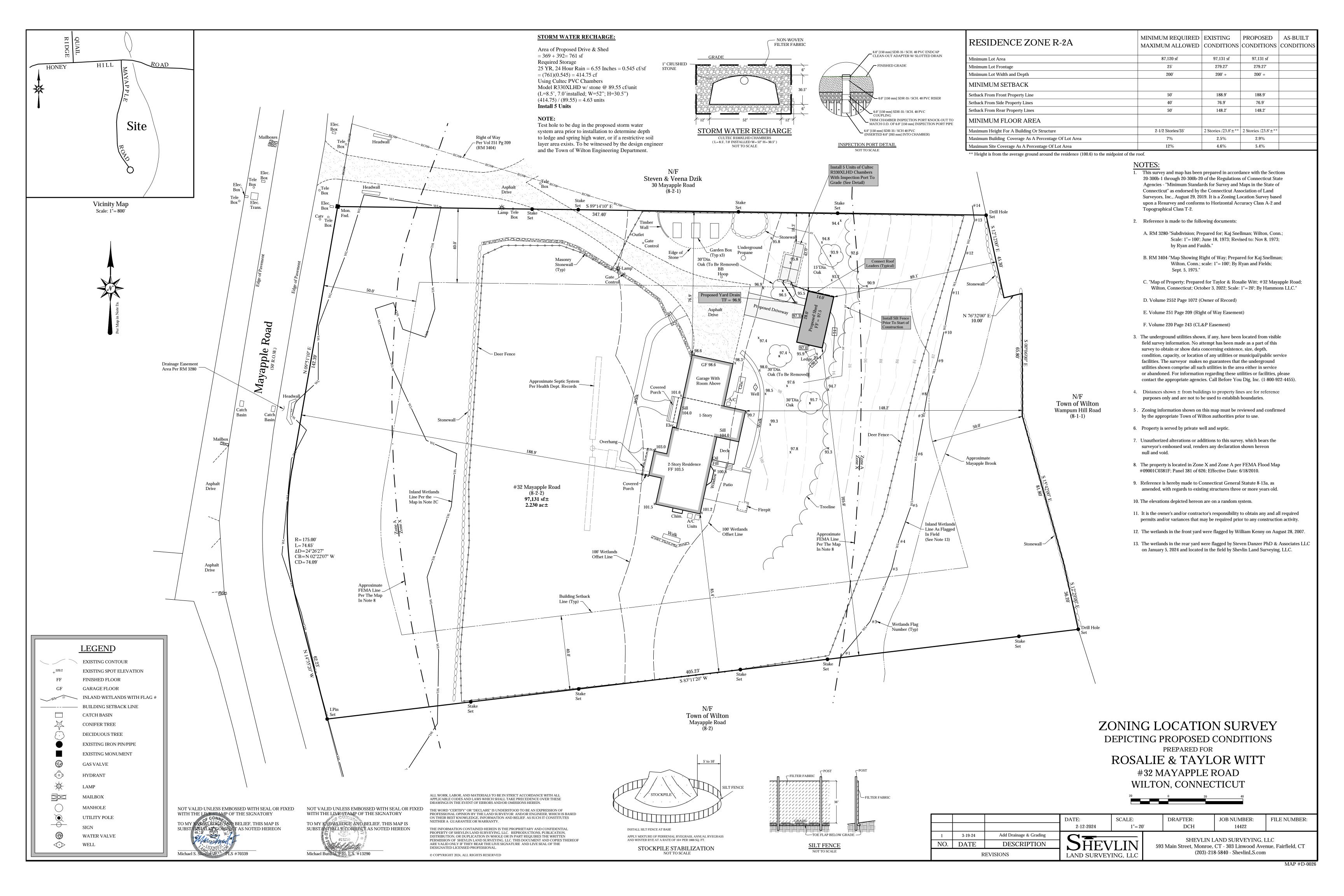
Note 3: All Gradations are tested in accordance with AASHTO T27

	Magnesium S	Sulfate Soundness:	0.55				orasion: orasion:	13.60% 9.50%	AASHTO T-96 ASTM C-535	
		PLANT #7		Plant	#55			Proce	SS	
aterial	Stone Sand Wet		Screenings	Stone Sand			2"	1 1/4		
	2020		2020	2020			2020	2020	2020	
2 1/2"						2 1/2"	100			
2"						2*	98.7	100		
1 1/2"						1 1/2"	78.5	99.7	100	
1"						1 1/4"				
3/4"						1"				
1/2"						3/4"	60.4	67.4	94.4	
3/8"						1/2"			72.3	
1/4"	100		100	100		3/8"			60.8	
4	99.9		99.5	99.9		1/4"	39.4	41.4	46.4	
8	76.1		77.3	81		4		38.2		
10						10	17.7	21.8	28	
16	45.8		55	45.3		40	3.5	7.6	11.5	
30	28.2		40.2	23.6		100	2	3.8	5.9	
40 50						200	1.4	2.1	3.2	
100	17.3 8.7		30.2 19.9	12.1 6.7						
200	2.69		10.37	4.11						
	2.00		10.31	100						
Bulk Spg:	2.854		2.845	2.843						
k@SSD	2.912		2.851	2.9						
Apparent	3.03		3.006	3.015						
bsorption	2.041		2:796	1.999						
nit Weight										
yard 1	1.3		1,343	1.13			1.62	1.57	1.48	
Moisture Content	1.70%		1.70%	1.73%		Optimum Moisture	6.40%	6.60%	6 8.90%	
- omani	1.70%		117070	101379		oistule	0:40%	6.607	0.90%	
Sand										
quivalent	85		59	82					Per Cubic Foot	
Fine							145.9	147.9	144	
Aggregate										
ngularity	48.91		47.91	49.85						

Note 1: This information has been developed using a modified AASHTO T19 method. The conversion factors shown represent the unit weight of material in a truck, railroadcar, or on a scow. These factors are not compactd weight conversions

Note 2: This information has been developed using AASHTO T 99 and AASHTO T 224. This weight represents the pounds per cubic foot at 100% compaction.

Note 3: All Gradations are tested in accordance with AASHTO T27



APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY – Section D - Sketch Plans depicting the alternatives considered Location not chosen due to existing site conditions.

