(21-000813)
Application #: 21-1527
Date Submitted: 7/9/21
Date of Receipt by Comm.: 7/12/2
Fee: (60:00
Staff Initials: TL
TERCOURSES COMMISSION APPLICATION \$100.00 per lot, whichever is greater) plus \$20.00 state fee 90). THIS FEE IS NON-REFUNDABLE. Checks or of Killingly. Public hearing fee: \$225.00 required in ired by the commission(s) and not already included.
PLEASE PRINT
Evening Phone #: 461- 441-8699
epachet RI 028/4 prepared)
prepared)
Phone # :
the property owner:
Block: Lot:/9-8
: 16.71 acres Lot Frontage: 51,851
ched
activity, including a list of all proposed regulated activities:

<	County wetland soil types and areas of each type: See attached Soil survey
Tion	USDA, Soil scientist report, and printed application
Vatercour	se(s) - type (pond, stream, marsh, bog, drainage ditch, etc.), manmade or natural, and area of each
ist alterna	ATIVES: tives considered by the applicant and state why the proposal to alter wetlands as set forth in the is necessary and was chosen:
Sec	attached printed response
	volume (cubic yard) and nature of materials to be deposited and/or extracted: attached printed response
ITIGAT ist measur	IVE MEASURES: es to be taken to minimize or avoid any adverse impact on the regulated area;
ist measur	es to be taken to minimize or avoid any adverse impact on the regulated area: cttacked printed response and soil such hist regat

DALLE LAND	SITE	PL	A	N	*
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Scale 1"=40' showing existing and proposed conditions in relation to wetlands and water courses to include, but not be limited to:

Contours

Buildings

Wells

Driveways

Septic Systems

Drainage Systems (Including Culverts, Footing and Curtain Drains)

Erosion and Sedimentation controls

Wetlands

Watercourses

Areas of Excavation and /or Material Deposit

*Refer to Section 6.0 — Application Information Requirements and Section 7.0 — Application Evaluation Criteria of the Killingly Inland Wetlands & Watercourses Commission Regulations for information the Commission may require. Professionally prepared plans (Licensed Land Surveyor/Professional Engineer registered in the State of Connecticut, Soil Scientist) may be required for significant activities.

ADDITIONAL INFORMATION:

List additional information submitted by the applicant:

KWP	Assessors	man. Co.	1 5 + +	<i>. . .</i>		2.		91	
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		1 .				110-1	2 10 11	2011	Sport

The applicant understands that this application is to be considered complete only when all information and documents required by the Commission have been submitted. The undersigned warrants the truth of all statements contained herein and in all supporting documents according to the best of his/her knowledge and belief. Permission is granted to the Town of Killingly, Killingly Inland Wetlands & Watercourses Commission, and its agent (s) to walk the land, at reasonable times, and perform those tests necessary to properly review the application, both before and after a final decision has been issued.

Applicant's Signature: Br T. Legice	Date:	7/8/21	
Owner of Record: Br T. Jegne	Date:	7/8/11	

PROJECTS WITHIN A PUBLIC WATER SUPPLY WATERSHED OR AQUIFER AREA

"As required by Sections 8-3i and 22a-42f of the Connecticut General Statutes, ALL APPLICANTS, before a Town Board for any project within a public water supply aquifer and/or watershed area are required to notify a water company of any such proposed project by <u>certified mail</u> NO LATER THAN SEVEN (7) DAYS after the date of the application..."

For those within a Connecticut Water Company watershed, they need to file the attached updated Project Notification Form, which is required for applications for projects within their aquifer or watershed areas.

Said form is to be mailed, certified mail return receipt, to the following:

Jessica Demar, Environmental & Regulatory Compliance Coordinator Connecticut Water Company 93 West Main Street Clinton, CT 06413

(Office) 860.669.8636 (Fax) 860.669.9326 (Customer Service) 800.286.5700

Killingly Wetlands & Watercourses Commission Application

Applicant Name: Brian Lejeune and Katherine Zeigler (owners)

Day/Evening phone: 401-441-8699

Mailing Address: 564 Cooper Road Chepachet, RI 02814

Location of Property:

House number and street: 88 Stone Road Killingly, CT 06241

<u>Tax map #: Block:</u> <u>Lot:</u> 19-8

Zoning District: Lot Size: 16.71 Acres Lot Frontage: 51.85'

Easements and/or deed restrictions: See attached

<u>Purpose</u>

The purpose of the proposed activity is for a permanent crossing of an intermittent watercourse, to allow access using an existing logging road to the rear of the property at 88 Stone Road for reforestation efforts, and preparation of the land for orchard and lumber tree planting in subsequent years. Eventually the goal is to have the land designated as an orchard or sustainable tree farm and remediate some of the damage done during previous logging. The proposed activity will include installing a stone-lined drainage ditch and two drainage pipes to allow for a stable crossing over a previously delineated intermittent watercourse on the property. The proposed crossing will be approximately 100 feet long and 12 feet wide to allow access for a farm truck and tractor. No additional clearing is needed beyond the extent of the existing logging road. No structures, wells, or sewage systems will be installed within 200' of the delineated intermittent watercourse or proposed crossing.

On-site wetlands and watercourses

<u>Windham county wetland Soil types and areas of each type:</u> (within 200' of the proposed activity). Please refer to the attached USDA NRCS Web Soil Survey report. The area specified in the soil survey report encompasses the entire property and some of the adjacent properties. The soil types within 200' of the proposed wetlands crossing are 52C - Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony (coarse-loamy, mixed, superactive, mesic Aquic Dystrudepts) classified as moderately well drained and 73C – Carlton-Chatfield complex, 0 to 15 percent slopes, very rocky (Coarse loamy, mixed, superactive, mesic Typic Dystrudepts) classified as well drained.

Watercourse(s) – type (pond, stream, marsh, bog, drainage ditch, etc), manmade or natural, and area of each

- Natural intermittent watercourse within 100' wide wetlands boundary
- Proposed manmade stone-lined drainage ditch and 2 pipes for water flow

Alternatives

Since the intermittent watercourse designated as wetlands bisects the entire property there is no alternative to access the rear of the property but to cross it. The proposed crossing was chosen at a narrow point to minimize disturbing the wetlands area. Because of the length of the section of wetlands required to cross (100 feet) a bridge is not an economical solution and the potential need for heavy tractors and trucks to cross makes a bridge more challenging than the proposed solution.

Materials

- 1. **(26) Double-staked hay bales** will be used as a soil/silt retainer down-gradient of the proposed crossing to be removed only after final inspection
- 2. **(2) 12" diameter cement pipes** will be installed to provide for unrestricted flow and drainage of intermittent water
- 3. (100 CY) Crushed stone to surround pipes and to bring roadway grade 1' above pipe level. Stone will also be used within proposed drainage ditch

Mitigative Measures

- Work in the intermittent watercourse shall commence only under no-flow conditions.
- The work shall be completed within 48 hours after commencing.
- The weather forecast shall be checked prior to starting work. No work shall commence if any rain is predicted in the following 48 hours.
- Prior to commencing work, double-staked hay bales shall be installed down gradient of the proposed crossing as shown on the plan.
- All disturbed soils shall be seeded with a mix recommended by the United Stated Department of Agriculture (U.S.D.A.) Natural Resources Conservation Service (N.R.C.S.) and covered lightly with hay mulch.
- Sediment controls shall remain in place until permission to remove them has been obtained from the agent for the Killingly Inland Wetlands and Watercourses Commission.

Biological evaluation

The area of the proposed intermittent watercourse crossing is a forested palustrine zone consisting of mainly red maple, black birch, and northern red oak with lowbush and highbush blueberries and witch hazel. The understory consists of partridge berry, sedges, interrupted fern, upland ferns, dewberry, and mosses (but no sphagnum moss. The function of the intermittent watercourse is to provide seasonal and storm water drainage from the adjacent higher elevation property to the north down to the low lying areas in adjacent properties and beyond which lie to the south. The proposed intermittent watercourse crossing and installation of a culvert, (2) 12" pipes, and depositing of crushed stone is designed to minimize the potential impact by allowing water flow to remain unrestricted and for organisms to easily traverse the crossing. The choice to use crushed stone rather than fill or gravel will minimize contamination of flowing water with sediments and act as an additional erosion control measure.

A more detailed description of vegetation, the intermittent watercourse, its function and values, wetlands disturbance, and potential habitat disturbance are provided in the attached report prepared by Margaret Washburn, Registered Professional Soil Scientist.

Site Plan

See attached. Notes from site plan are listed below.

Notes:

¹Margaret Washburn, Registered Professional Soil Scientist (Washburn Wetland Consulting LLC), has made recommendations regarding the timing of the proposed site work as follows:

- The crossing is proposed at a narrow point on an intermittent watercourse that is not shown on the United States Geological Service (U.S.G.S.) topographic map for the subject property.
- Prior to commencing work, double-staked hay bales shall be installed down gradient of the proposed crossing as shown on the plan.
- Work in the intermittent watercourse shall commence only under no-flow conditions.
- The work shall be completed within 48 hours after commencing.
- The weather forecast shall be checked prior to starting work. No work shall commence if any rain is predicted in the following 48 hours.
- Sediment controls shall remain in place until permission to remove them has been obtained from the agent for the Killingly Inland Wetlands and Watercourses Commission.
- All disturbed soils shall be seeded with a mix recommended by the United Stated Department of Agriculture (U.S.D.A.) Natural Resources Conservation Service (N.R.C.S.) and covered lightly with hay mulch.

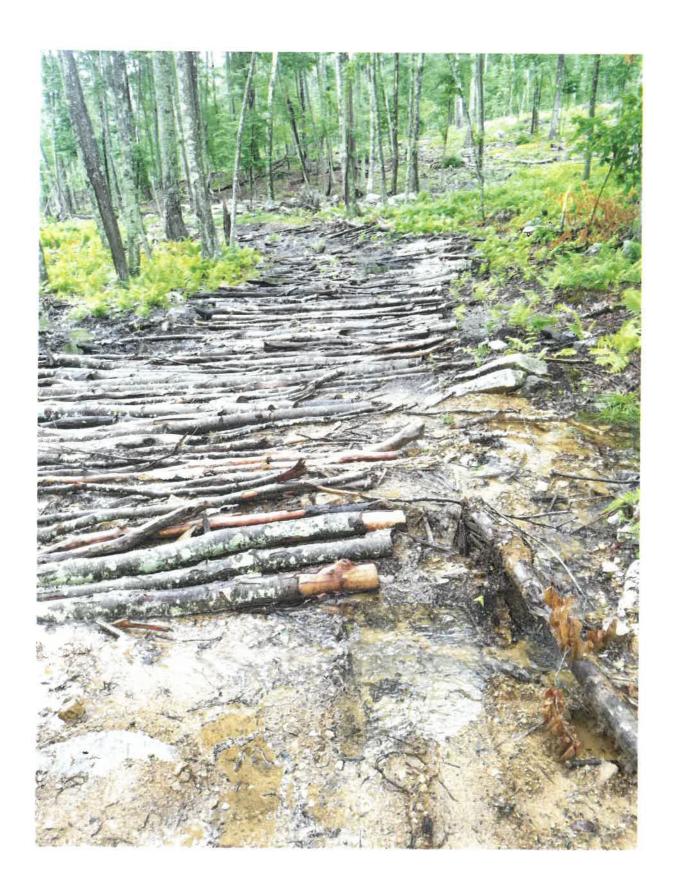
²Limits of clearing do not exceed 12' designated roadway which was previously cleared for logging ³No structures, wells, or sewage systems will be installed within 200' of the delineated intermittent watercourse or proposed crossing.

⁴Any changes within 200' of wetlands or watercourses must be resubmitted to Killingly Inland Wetlands and Watercourses Commission's agent after all erosion and sediment control measures are installed prior to any construction or excavation on the property

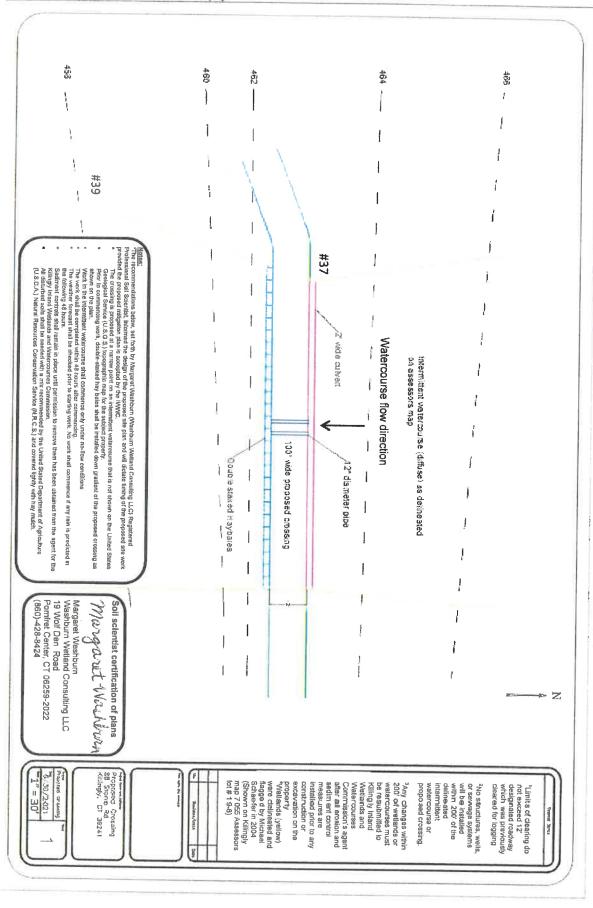
Additional information

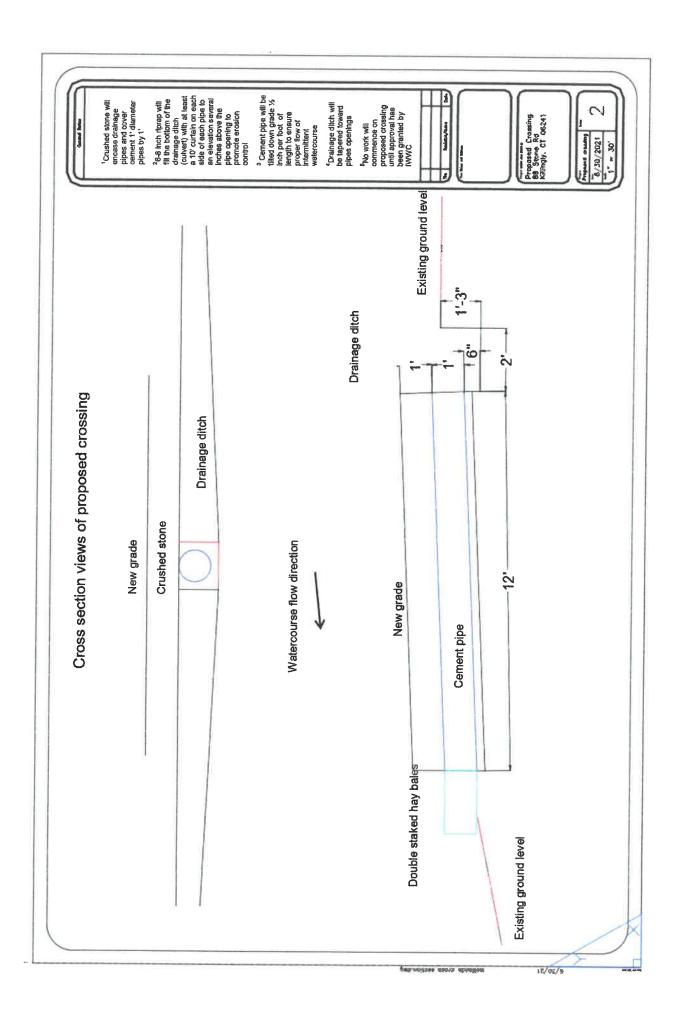
The KWP assessors map, Soil Scientist report, current driveway easement, and deed restrictions are provided along with the IWWC application.

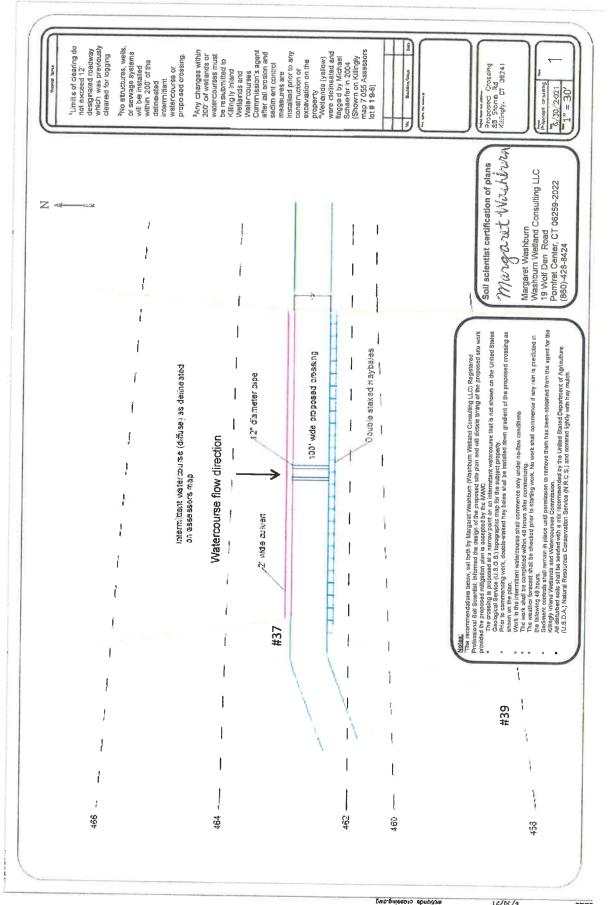


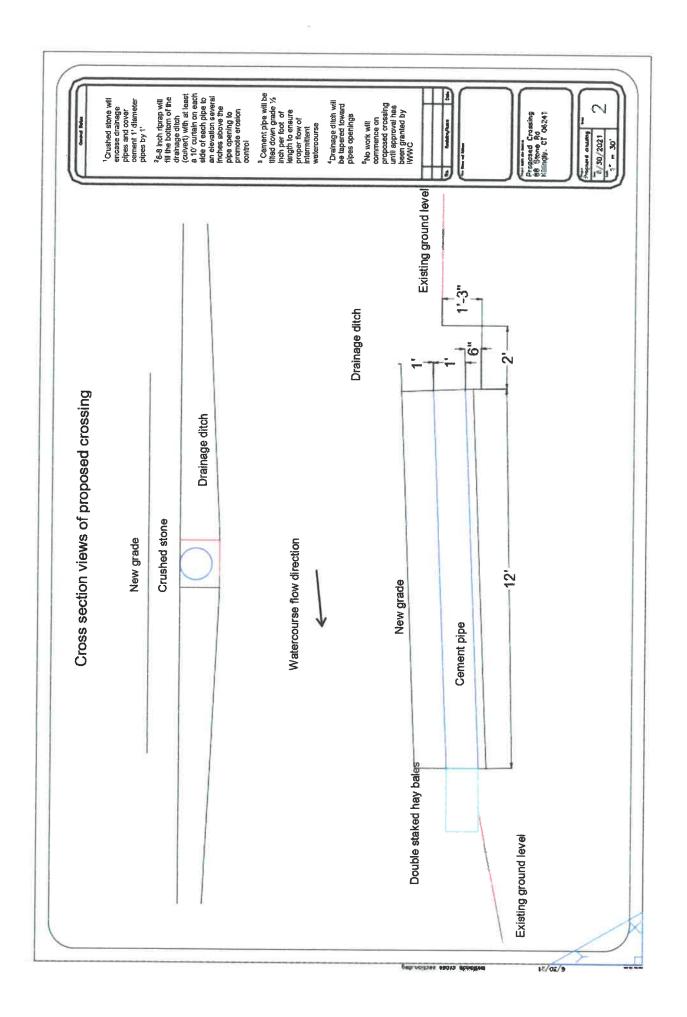












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WASHBURN WETLAND CONSULTING LLC

19 Wolf Den Road • Pomfret Center, Connecticut 06259-2022 Telephone (860) 428-8424 • washburnwetland@gmail.com

Brian Lejeune 564 Cooper Road Chepachet, RI 02814

July 4, 2021

Dear Brian,

At your request, on June 11 and July 2, 2021, I conducted a site investigation at 88 Stone Road (Assessors Map ID: Map 9/Lot 116) in Killingly, CT. The purposes of the site investigations were to advise you on mitigation for your proposed wetlands crossing and evaluate the wetlands functions and values, potential wetlands disturbance and potential habitat disturbance. At your request, I did not delineate any wetlands on the subject property.

The subject property is located on an area of gently sloping to sloping (3 to 15 percent slopes) soils formed in glacial till uplands. References used in the soil identification process included *Soil Survey of Windham County Connecticut* (USDA Soil Conservation Service, December 1981), the U.S.G.S. topographic map for the subject property, the Survey Plan prepared for River Investment Company & Richard J. Schad, Stone Road, Killingly, Connecticut, dated 3/22/2004 and stamped by Bruce Woodis, Land Surveyor, as well as Northeast CT Connecticut Council of Governments (NECCOG) GIS maps. The wetlands in the area of the proposed wetlands crossing were delineated by Michael G. Schaefer in 2004. Please refer to the KWP Survey Plan for further details regarding the wetlands delineation.

Soils

According to Map 27 of the *Soil Survey*, in the area of the wetlands delineation, the upland soils consist of Canton and Charlton extremely stony fine sandy loams. The *Soil Survey* shows no wetlands soils in the area of the proposed crossing. Although I did not delineate the wetlands soils shown on the survey plan, from interpreting the data in the *Soil Survey*, including Figure 1 on page 4, it is likely that they consist of a complex of Ridgebury, Leicester and Whitman extremely stony fine sandy loams.

The area where the wetlands crossing is proposed has already been disturbed when small logs (corduroy) were placed across the driveway in the wetlands to allow equipment to cross the wetlands while minimizing soil disturbance. Therefore, my description of the wetland functions and values and potential habitat disturbance are based on the adjacent undisturbed wetlands upstream and downstream of the existing corduroy wetlands crossing. It should also be noted that the subject property was logged in recent years, a temporary disturbance that appears to have followed appropriate best management practices for the renewable resource of timber.

Vegetation

The wetlands in the adjacent undisturbed wetlands upstream and downstream of the existing corduroy crossing consist of an intermittent watercourse draining through a wooded

swamp. Whether due to recent logging practices or heavy browse by deer, the shrub layer is scanty, consisting of highbush blueberry, lowbush blueberry and witch hazel. An herbaceous layer consisting of partridge berry, sedges, interrupted fern, upland ferns, dewberry, and mosses (but no sphagnum moss) was observed. Saplings and trees consisting of red maple, black birch and northern red oak were observed.

The Intermittent Watercourse

The intermittent watercourse in the adjacent undisturbed wetlands upstream and downstream of the corduroy crossing consists of a series of braided channels running through extremely stony, wooded terrain. Due to the 3 to 15 percent slopes on the subject property, the water flowing through during stream events is highly oxygenated, important for native brook trout and other fish species in larger downstream watercourses. The water in the braided channels is cooled by the shade from the overhanging hardwood canopy, also important for native brook trout and other fish species in larger downstream watercourses. The braided channels range from two to 'eight inches in width, and average one to three inches in depth. Small ponded areas occur during storm events. Scouring and the deposition of detritus were observed in the braided channels.

Functions and Values

The following functions and values may be attributed to the wetlands in the adjacent undisturbed wetlands upstream and downstream of the corduroy crossing:

Protection of public and private water supply
Protection of groundwater supply
Flood control
Storm damage prevention
Prevention of pollution
Water quality improvement
Aquatic Productivity
Erosion control
Harvesting of natural products
Protection of land containing shellfish and fisheries (the nearby Five Mile River)
Protection of wildlife habitat
Recreation and aesthetics

Wetlands Disturbance

Approximately 1,200 square feet of wetlands disturbance will result from the proposed wetlands crossing. The existing corduroy crossing will not be suitable long-term for the proposed agricultural pursuits on the subject property. It is advisable to construct a crossing that will hold up to farm vehicle traffic while minimizing soil disturbance. The following mitigation plan will minimize wetlands impacts during construction of the proposed crossing.

Potential Habitat Disturbance

Approximately 1,200 square feet of wildlife habitat disturbance will result from the proposed wetlands crossing. Because the wetlands are wooded, wildlife such as birds and squirrels will still be able to use the canopy over the crossing for nesting, cover and food. Small terrestrial organisms such as rodents, snails and toads will be able to crawl or hop over the driveway crossing. Invertebrates and insects will be able to pass through the pipes under the driveway, or cross over the driveway surface. The following mitigation plan will help to minimize siltation of the downstream wetlands during construction of the proposed crossing.

Mitigation Plan

The crossing is proposed at a narrow point on an intermittent watercourse that is not shown on the United States Geological Service (U.S.G.S.) topographic map for the subject property.

Work in the intermittent watercourse shall commence only under no-flow conditions.

The work shall be completed within 48 hours after commencing.

The weather forecast shall be checked prior to starting work. No work shall commence if any rain is predicted in the following 48 hours.

Prior to commencing work, double-staked hay bales shall be installed down gradient of the proposed crossing as shown on the plan.

All disturbed soils shall be seeded with a mix recommended by the United Stated Department of Agriculture (U.S.D.A.) Natural Resources Conservation Service (N.R.C.S.) and covered lightly with hay mulch.

Sediment controls shall remain in place until permission to remove them has been obtained from the agent for the Killingly Inland Wetlands and Watercourses Commission.

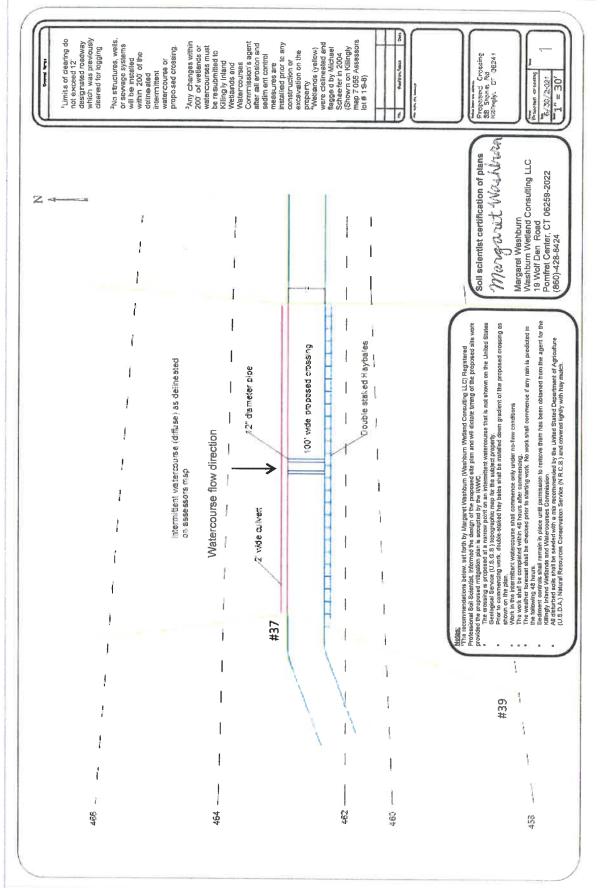
Conclusion

It has been a pleasure working for you on this site. Please feel free to call me if I may be of further assistance.

Sincerely,

Margaret Washbrum, M.J.
Margaret Washburn, M.S.

Registered Professional Soil Scientist



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3. Charlton-Canton-Leicester

Nearly level to steep, well drained and poorly drained, loamy soils on broad ridges and hillsides of glacial till uplands

This map unit makes up about 32 percent of the survey area. The unit is about 25 percent Charlton soils, 20 percent Canton soils, 10 percent Leicester soils, and 45 percent soils of minor extent (fig. 1).

The unit consists of broad, steep ridges and hills that extend mostly in a north-south direction. Slopes range from 3 to 35 percent.

The Charlton soils are well drained. They are mostly on broad hills and ridges. Typically, the surface layer of the soils is fine sandy loam, the subsoil is fine sandy loam and sandy loam, and the substratum is sandy loam.

The Canton soils are well drained. They are mostly on broad hills and ridges. Typically, the surface layer of the soils is fine sandy loam, the subsoil is fine sandy loam, gravelly fine sandy loam, and gravelly sandy loam, and the substratum is gravelly loamy sand.

The Leicester soils are poorly drained. They are in narrow drainageways and small depressions. Typically, the surface layer of the soils is fine sandy loam, the subsoil is fine sandy loam, and the substratum is sandy loam.

The soils of minor extent mainly are excessively drained Gloucester soils and somewhat excessively drained Hollis soils on steep side slopes of hills, well drained Paxton soils and moderately well drained Woodbridge soils on rounded hills, moderately well drained Sutton soils on concave slopes and in slight depressions, poorly drained Ridgebury soils and very poorly drained Whitman soils along narrow drainageways, and very poorly drained Adrian, Palms, and Carlisle soils in depressions.

Most areas of this unit are in woodland. Some areas, mainly the gently sloping to moderately steep areas that have been cleared of stones, are used for farming or community development. A seasonal high water table in some areas is the major limitation. The steep areas of the unit are better suited to trees and wildlife habitat than to most other uses.

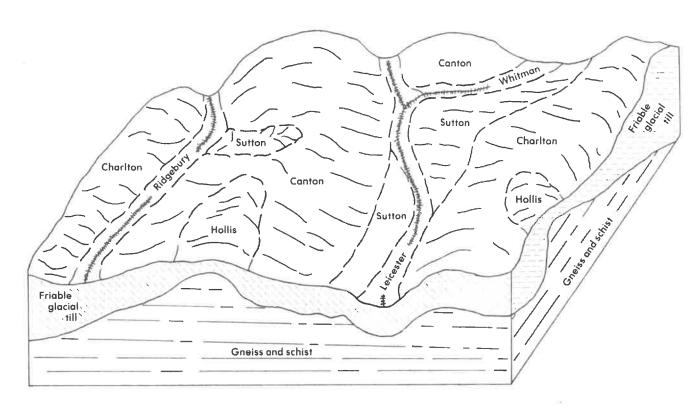
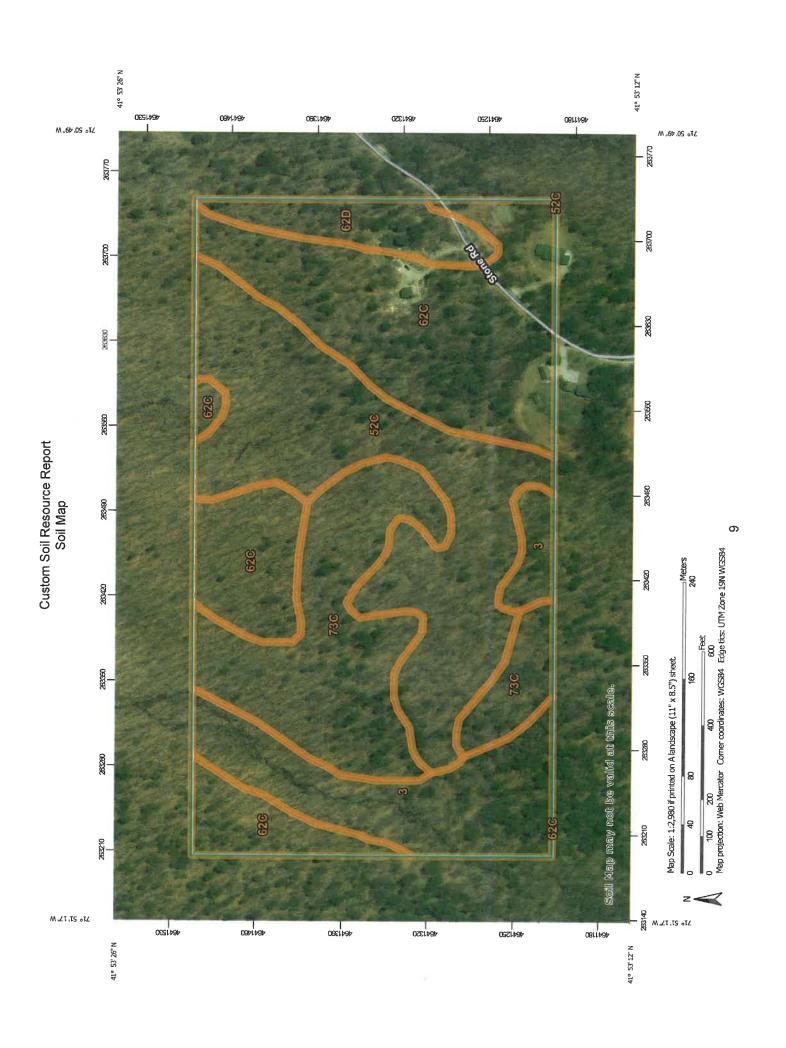
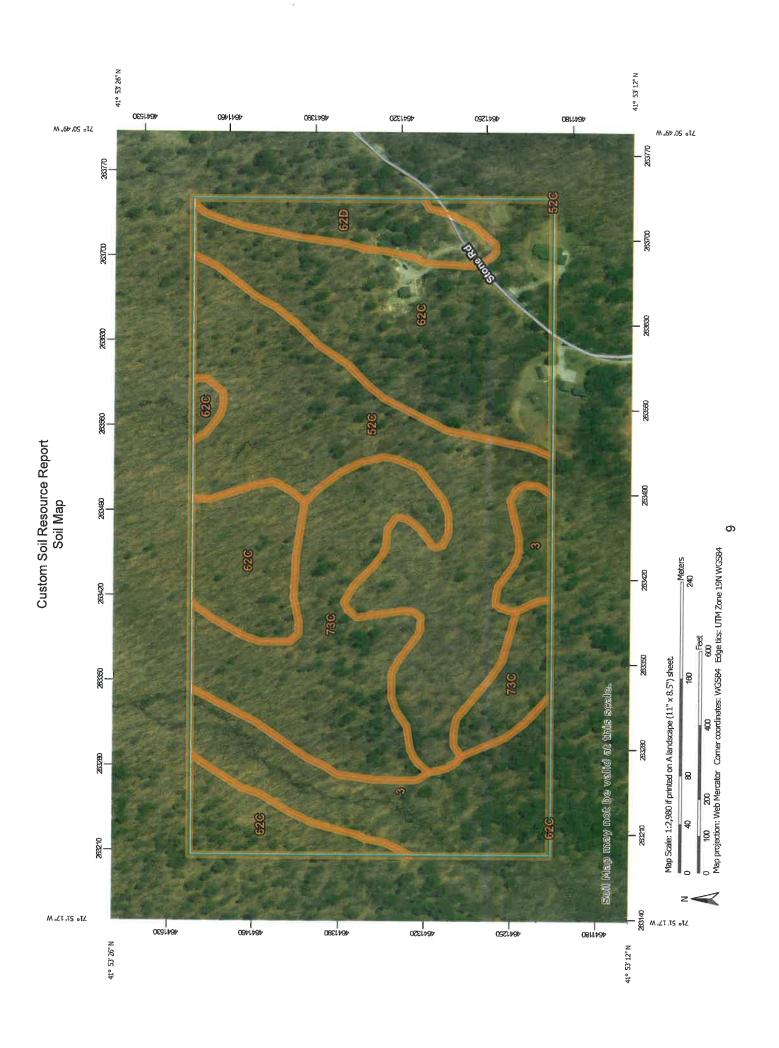


Figure 1.—Typical pattern of soils and underlying material in the Charlton-Canton-Leicester association.







NRCS

Natural Resources Conservation Service A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for State of Connecticut



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

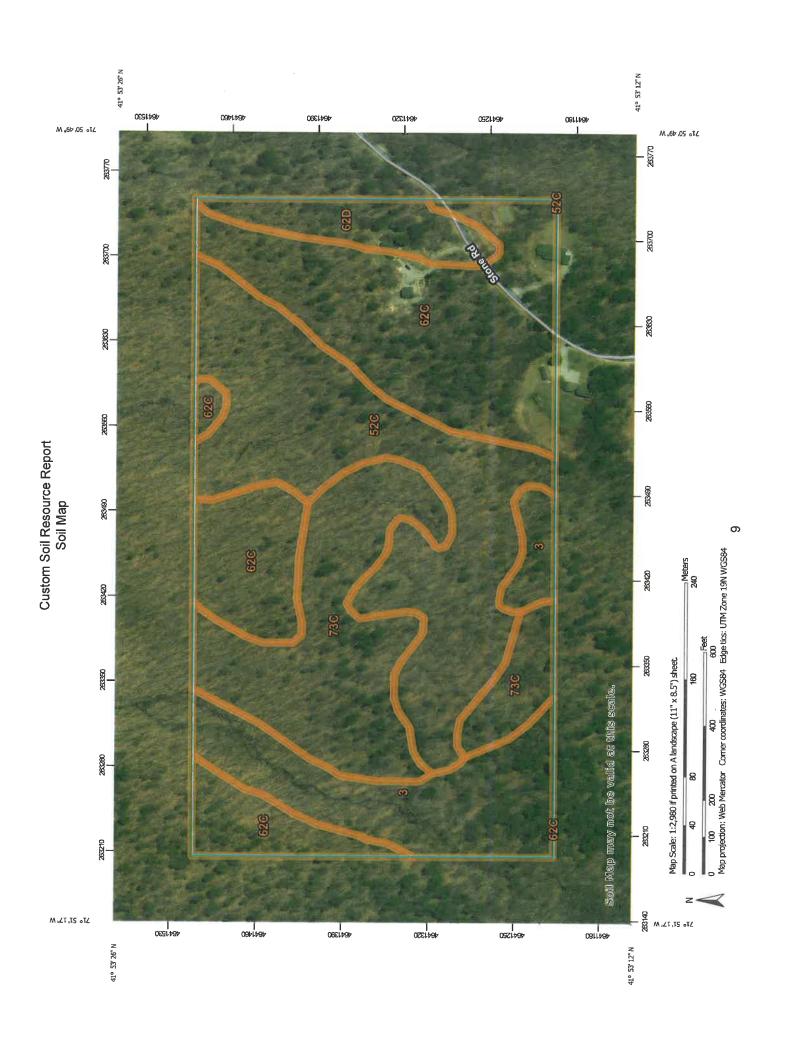
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.



This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator Date(s) aerial images were photographed: Apr 14, 2011—Aug 27, 2016 line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background Enlargement of maps beyond the scale of mapping can cause projection, which preserves direction and shape but distorts Soil map units are labeled (as space allows) for map scales Source of Map: Natural Resources Conservation Service Albers equal-area conic projection, should be used if more imagery displayed on these maps. As a result, some minor The soil surveys that comprise your AOI were mapped at Please rely on the bar scale on each map sheet for map accurate calculations of distance or area are required. Coordinate System: Web Mercator (EPSG:3857) MAP INFORMATION Warning: Soil Map may not be valid at this scale. shifting of map unit boundaries may be evident. Soil Survey Area: State of Connecticut Survey Area Data: Version 20, Jun 9, 2020 Web Soil Survey URL: 1:50,000 or larger. measurements. 1:12,000, Special Line Features Streams and Canals Interstate Highways Aerial Photography Very Stony Spot Major Roads Local Roads Stony Spot US Routes Spoil Area Wet Spot Other Rails Water Features Transportation Background MAP LEGEND ‡ Soil Map Unit Polygons Severely Eroded Spot Area of Interest (AOI) Miscellaneous Water Soil Map Unit Points Soil Map Unit Lines Closed Depression Marsh or swamp Perennial Water Mine or Quarry Rock Outcrop **Gravelly Spot** Special Point Features Saline Spot Slide or Slip Sandy Spot Borrow Pit Sodic Spot **Gravel Pit** Lava Flow Clay Spot Area of Interest (AOI) Sinkhole Blowout Landfill 9 Soils

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	5.7	14.5%
52C	Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony	10.8	27.4%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	12.8	32.5%
62D	Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony	2.0	5.0%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	8.1	20.5%
Totals for Area of Interest		39.4	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor

components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An undifferentiated group is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

State of Connecticut

3—Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 2t2qt Elevation: 0 to 1,480 feet

Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Ridgebury, extremely stony, and similar soils: 40 percent Leicester, extremely stony, and similar soils: 35 percent Whitman, extremely stony, and similar soils: 17 percent

Minor components: 8 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ridgebury, Extremely Stony

Setting

Landform: Drumlins, depressions, drainageways, hills, ground moraines

Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope, head slope

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 6 inches: fine sandy loam
Bw - 6 to 10 inches: sandy loam

Bg - 10 to 19 inches: gravelly sandy loam Cd - 19 to 66 inches: gravelly sandy loam

Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent Depth to restrictive feature: 15 to 35 inches to densic material

Drainage class: Poorly drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.14 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: F144AY009CT - Wet Till Depressions

Hydric soil rating: Yes

Description of Leicester, Extremely Stony

Setting

Landform: Ground moraines, depressions, drainageways, hills Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave, linear Across-slope shape: Concave

Parent material: Coarse-loamy melt-out till derived from gneiss, granite, and/or

schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material

A - 1 to 7 inches: fine sandy loam
Bg - 7 to 18 inches: fine sandy loam
BC - 18 to 24 inches: fine sandy loam

C1 - 24 to 39 inches: gravelly fine sandy loam C2 - 39 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 0 to 8 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B/D

Ecological site: F144AY009CT - Wet Till Depressions

Hydric soil rating: Yes

Description of Whitman, Extremely Stony

Setting

Landform: Depressions, drainageways, hills, ground moraines, drumlins

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Oi - 0 to 1 inches: peat

A - 1 to 10 inches: fine sandy loam

Bg - 10 to 17 inches: gravelly fine sandy loam

Cdg - 17 to 61 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: 7 to 38 inches to densic material

Drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.14 in/hr)

Depth to water table: About 0 to 6 inches

Frequency of flooding: None Frequency of ponding: Frequent

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: F144AY009CT - Wet Till Depressions

Hydric soil rating: Yes

Minor Components

Woodbridge, extremely stony

Percent of map unit: 6 percent

Landform: Ground moraines, drumlins, hills

Landform position (two-dimensional): Backslope, footslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Swansea

Percent of map unit: 2 percent Landform: Swamps, bogs Down-slope shape: Concave Across-slope shape: Concave

Hydric soil rating: Yes

52C—Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 2xffj Elevation: 10 to 760 feet

Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 145 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Sutton, extremely stony, and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sutton, Extremely Stony

Setting

Landform: Hills, ground moraines

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear

Parent material: Coarse-loamy melt-out till derived from gneiss, granite, and/or

schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 7 inches: fine sandy loam
Bw1 - 7 to 19 inches: fine sandy loam
Bw2 - 19 to 27 inches: sandy loam
C1 - 27 to 41 inches: gravelly sandy loam
C2 - 41 to 62 inches: gravelly sandy loam

Properties and qualities

Slope: 2 to 15 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Runoff class: Very high

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: About 12 to 27 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water capacity: Moderate (about 8.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B/D

Ecological site: F144AY008CT - Moist Till Uplands

Hydric soil rating: No

Minor Components

Woodbridge, extremely stony

Percent of map unit: 7 percent

Landform: Drumlins, hills, ground moraines

Landform position (two-dimensional): Backslope, footslope

Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Linear Hydric soil rating: No

Charlton, extremely stony

Percent of map unit: 5 percent

Landform: Hills, ground moraines, ridges

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear, convex Across-slope shape: Convex

Hydric soil rating: No

Canton, extremely stony

Percent of map unit: 5 percent Landform: Hills, moraines, ridges

Landform position (two-dimensional): Shoulder, summit, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear, convex Across-slope shape: Convex

Hydric soil rating: No

Leicester, extremely stony

Percent of map unit: 3 percent

Landform: Depressions, hills, drainageways, ground moraines Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear, concave Across-slope shape: Concave

Hydric soil rating: Yes

62C—Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 2wks7

Elevation: 0 to 1,310 feet

Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Canton, extremely stony, and similar soils: 50 percent Charlton, extremely stony, and similar soils: 35 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canton, Extremely Stony

Setting

Landform: Ridges, hills, moraines

Landform position (two-dimensional): Shoulder, backslope, summit Landform position (three-dimensional): Side slope, crest, nose slope

Down-slope shape: Convex, linear Across-slope shape: Convex

Parent material: Coarse-loamy over sandy melt-out till derived from gneiss,

granite, and/or schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: fine sandy loam Bw1 - 5 to 16 inches: fine sandy loam

Bw2 - 16 to 22 inches: gravelly fine sandy loam 2C - 22 to 67 inches: gravelly loamy sand

Properties and qualities

Slope: 3 to 15 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent Depth to restrictive feature: 19 to 39 inches to strongly contrasting textural

stratification

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Charlton, Extremely Stony

Setting

Landform: Hills, ground moraines, ridges

Landform position (two-dimensional): Backslope, shoulder, summit

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Linear, convex Across-slope shape: Convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 4 inches: fine sandy loam

Bw - 4 to 27 inches: gravelly fine sandy loam C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 15 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Leicester, extremely stony

Percent of map unit: 5 percent

Landform: Depressions, drainageways, hills, ground moraines Landform position (two-dimensional): Toeslope, footslope Landform position (three-dimensional): Base slope

Down-slope shape: Linear, concave Across-slope shape: Concave Hydric soil rating: Yes

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Sutton, extremely stony

Percent of map unit: 5 percent Landform: Ground moraines, hills

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Chatfield, extremely stony

Percent of map unit: 5 percent

Landform: Hills, ridges

Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

62D—Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 2w81r

Elevation: 0 to 1,640 feet

Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 145 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Canton, extremely stony, and similar soils: 55 percent Charlton, extremely stony, and similar soils: 30 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canton, Extremely Stony

Setting

Landform: Ridges, hills, moraines

Landform position (two-dimensional): Backslope, summit, shoulder Landform position (three-dimensional): Side slope, crest, nose slope

Down-slope shape: Convex, linear Across-slope shape: Convex

Parent material: Coarse-loamy over sandy melt-out till derived from gneiss,

granite, and/or schist

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material

A - 2 to 5 inches: fine sandy loam Bw1 - 5 to 16 inches: fine sandy loam

Bw2 - 16 to 22 inches: gravelly fine sandy loam 2C - 22 to 67 inches: gravelly loamy sand

Properties and qualities

Slope: 15 to 35 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent Depth to restrictive feature: 19 to 39 inches to strongly contrasting textural

stratification

Drainage class: Well drained Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Charlton, Extremely Stony

Setting

Landform: Hills, ground moraines, ridges

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Linear, convex Across-slope shape: Convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 4 inches: fine sandy loam

Bw - 4 to 27 inches: gravelly fine sandy loam C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 15 to 35 percent

Surface area covered with cobbles, stones or boulders: 9.0 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Chatfield, extremely stony

Percent of map unit: 5 percent

Landform: Hills, ridges

Landform position (two-dimensional): Summit, backslope, shoulder Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Hollis, extremely stony

Percent of map unit: 5 percent

Landform: Hills, ridges

Landform position (two-dimensional): Shoulder, backslope, summit Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Sutton, extremely stony

Percent of map unit: 5 percent Landform: Hills, ground moraines

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

73C—Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky

Map Unit Setting

National map unit symbol: 2w698

Elevation: 0 to 1,550 feet

Mean annual precipitation: 36 to 71 inches Mean annual air temperature: 39 to 55 degrees F

Frost-free period: 140 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Charlton, very stony, and similar soils: 50 percent Charlield, very stony, and similar soils: 30 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton, Very Stony

Setting

Landform: Hills, ridges

Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Linear, convex Across-slope shape: Convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material

A - 2 to 4 inches: fine sandy loam

Bw - 4 to 27 inches: gravelly fine sandy loam

C - 27 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high

(0.14 to 14.17 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm) Available water capacity: Moderate (about 8.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Chatfield, Very Stony

Settina

Landform: Ridges, hills

Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

A - 1 to 2 inches: fine sandy loam

Bw - 2 to 30 inches: gravelly fine sandy loam

2R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 3 to 15 percent

Surface area covered with cobbles, stones or boulders: 1.6 percent

Depth to restrictive feature: 20 to 41 inches to lithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00

in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Sutton, very stony

Percent of map unit: 5 percent Landform: Ground moraines, hills

Landform position (two-dimensional): Footslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Rock outcrop

Percent of map unit: 5 percent

Hydric soil rating: No

Hollis, very stony

Percent of map unit: 5 percent

Landform: Ridges, hills

Landform position (two-dimensional): Backslope, shoulder, summit Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Leicester, very stony

Percent of map unit: 5 percent

Landform: Drainageways, depressions

Down-slope shape: Linear Across-slope shape: Concave

Hydric soil rating: Yes

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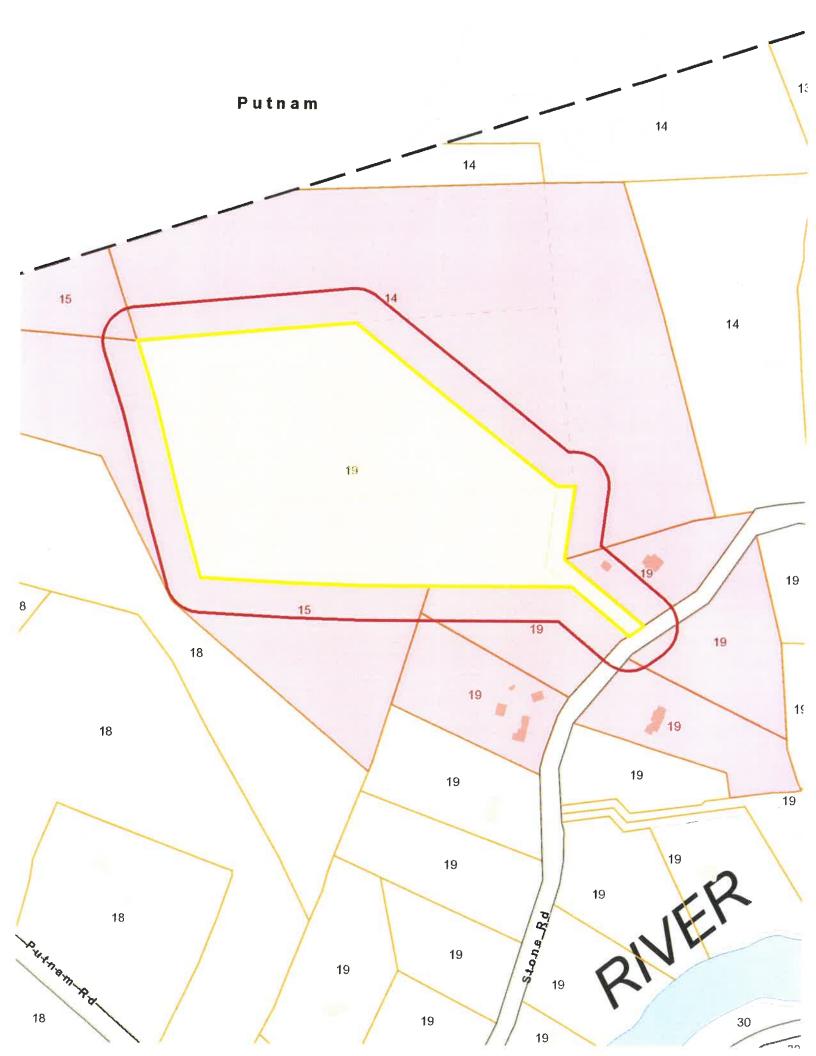
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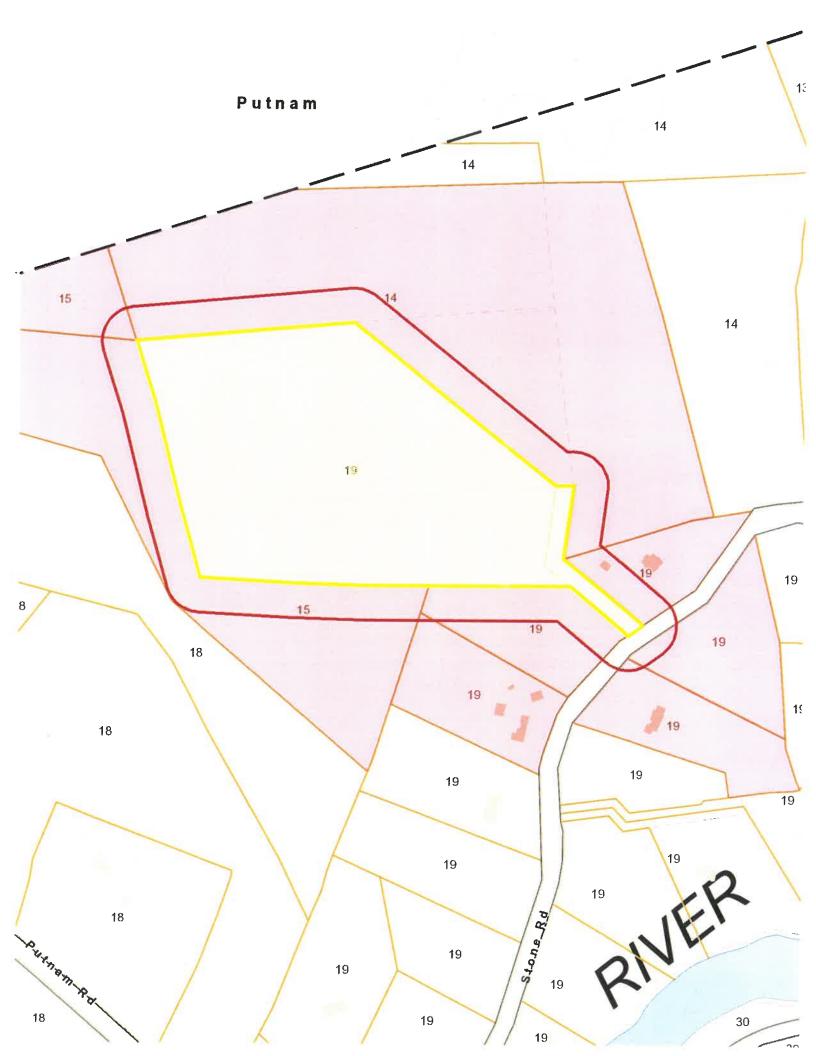
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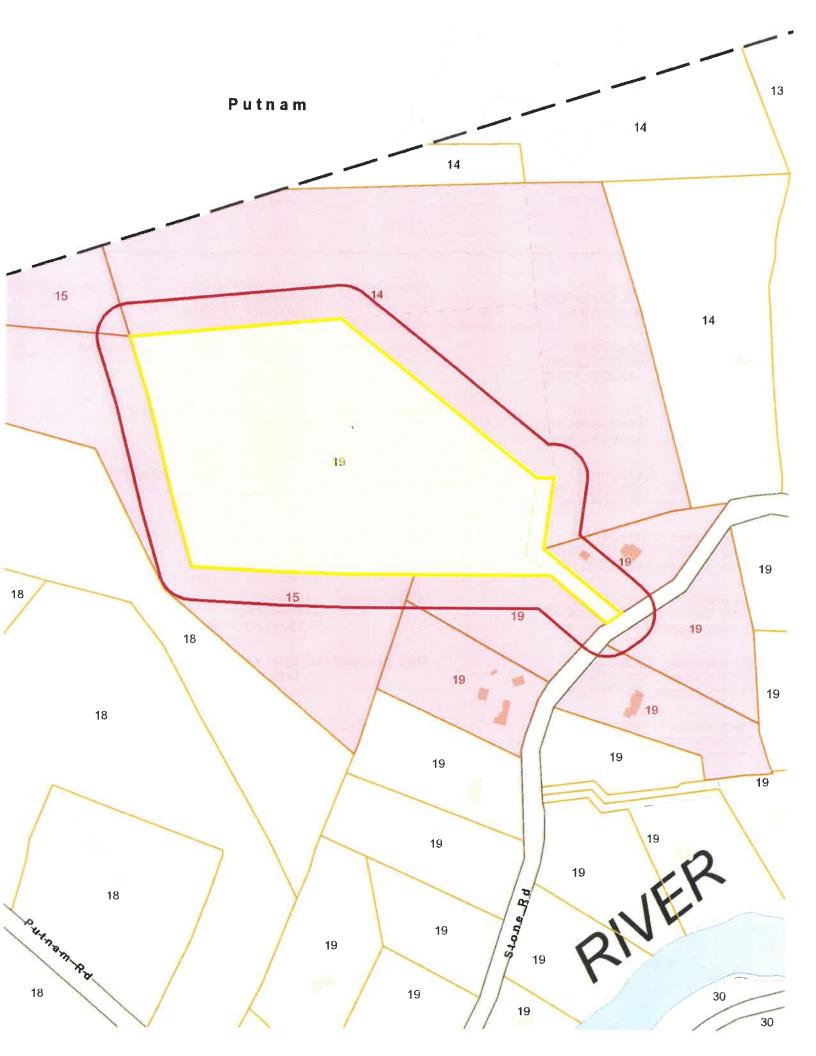
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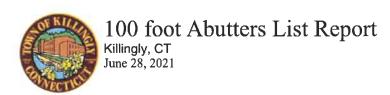
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Subject Property:

Parcel Number: CAMA Number: 019-008-000

019-008-000-000

Property Address: 88 STONE RD

Mailing Address: ROBIN STEPHEN E & ALEXANDRA L

22 MAYHEW DR

KILLINGLY, CT 06241

Abutters:

Parcel Number: CAMA Number: 014-001-000

Property Address: 90 STONE RD

014-001-000-000

Parcel Number:

015-003-000

CAMA Number: Property Address: 015-003-000-000

134 PUTNAM RD

Parcel Number:

015-004-000

CAMA Number:

015-004-000-000

Property Address: 140 PUTNAM RD

Parcel Number:

019-006-000

CAMA Number:

019-006-000-000

Property Address: 74 STONE RD

Parcel Number:

019-007-000

CAMA Number:

019-007-000-000 Property Address: 82 STONE RD

Parcel Number:

019-009-000

CAMA Number:

019-009-000-000

Property Address:

94 STONE RD

Parcel Number: **CAMA Number:** 019-012-000

Property Address: 95 STONE RD

019-012-000-000

Parcel Number: CAMA Number: 019-013-000

Property Address: 79 STONE RD

6/28/2021

019-013-000-000

Mailing Address:

OKEEFE DAVID & SUSAN

61 GOLOSKIE RD

CHEPACHET, RI 02814

Mailing Address:

VAN DER SWAAGH DANA M & PATRICIA

R

PO BOX 388

KILLINGLY, CT 06241

Mailing Address:

CORDEN FRANCIS L JR & JULIE

DAGOSTINO 4 SHORE DR

WOODSTOCK, CT 06281

Mailing Address:

ELLIOTT BURT W & GARCIA MARCEL

74 STONE RD

KILLINGLY, CT 06241

Mailing Address:

NGUYEN THIEN-NGA & CHANG WEN-

RUFY

406 NO LIVINGSTON ST ARLINGTON, VA 22203

Mailing Address:

MORRIS ROBERT M & LAURA J

VINEYARD HAVEN, MA 02568

94 STONE RD

KILLINGLY, CT 06241

Mailing Address:

WEBER LYNN S

PO BOX 4767

Mailing Address: WANDYES WAYNE & SUSAN

79 STONE RD

KILLINGLY, CT 06241

DECLARATION OF COMMON DRIVEWAY AND UTILITY EASEMENT

WHEREAS, RIVER INVESTMENT COMPANY, INC., a Connecticut corporation having an office in Pomfret, Connecticut, and acting herein by its duly authorized President, Richard J. Schad, (hereinafter the "Declarant") is the owner of two (2) certain pieces or parcels of land located on the northerly side of Stone Road, in the Town of Killingly, Connecticut, which certain pieces or parcels of land are known as combined Lots 19-8, and 14-1, on a certain plan to be filed herewith in the Killingly Town Clerk's Office entitled, "Survey Plan Prepared for RIVER INVESTMENT COMPANY & RICHARD SCHAD, Stone Road, Killingly, Connecticut, Scale: 1" = 100', Dated: 3/22/2004, Revised to: 9/10/2015, KWP Associates, Surveying and Engineering Site Planning", (the "Plan") and to which further reference may be had; and

WHEREAS, the Declarant wishes to establish certain common driveway access and maintenance easement rights and obligations for the future owners of said Lots 19-8, and 14-1 (the "Property Owners"), and certain easement rights for the placement and maintenance of utilities, with the Areas as depicted as a fifty (50') foot wide 'Right of Way' on said Plan, (the "Easement Area"),

NOW, THEREFORE, the Declarant hereby declares the following Easements:

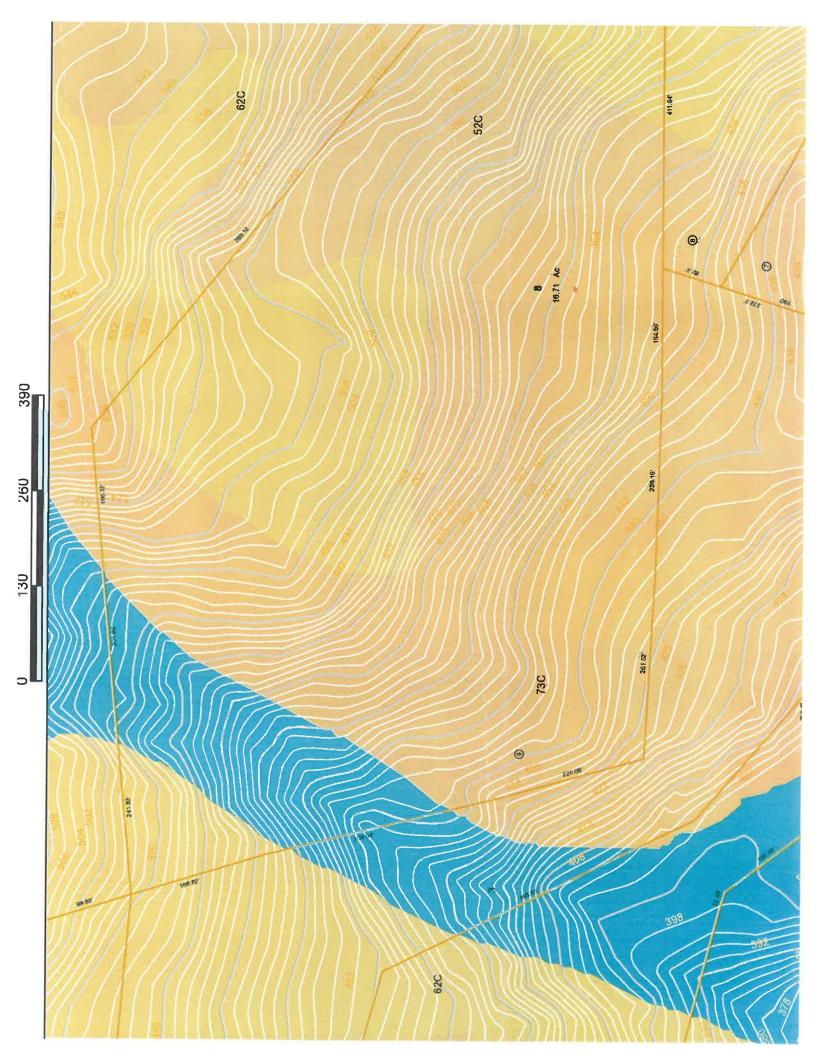
- 1. Common Driveway Easement. There is hereby created a perpetual easement over the Easement Area, as shown on said Plan, in favor or, and for the benefit of the Property Owner of Lot 14-1 for the use, maintenance, and enjoyment; in common with the Property Owner of Lot 19-8; of the driveway to be constructed across Lot 19-8 within said Easement Area, for purposes of ingress and egress from Stone Road. This easement shall bind the Property Owners, and their respective successors and assigns in title. Construction of the Common Driveway, and installation of utilities within said Easement Area shall be in conformance with the applicable provisions of the Town of Killingly Subdivision Regulations.
- 2. <u>Use and Maintenance of the Common Driveway.</u> Said Easement Area shall not be used by the Property Owners in a manner that will obstruct or interfere with the mutual use thereof for ingress and egress. No vehicles or equipment shall be parked or stored in the driveway area to be established within the Easement Area. The Property Owners shall be equally responsible for the costs of improvement, maintenance and repair of said driveway within the Easement Area, including snow removal. The costs for the installation of the common driveway in said Easement Area shall be shared equally by the owners of Lot 14-1 and Lot 19-8, and shall take place when either Property Owner commences home construction. The first Property Owner to begin home construction shall be solely responsible for snow removal until such time as the other Property Owner begins home construction All improvements, repairs and maintenance of the common driveway within the Easement Areas shall be decided upon mutually by the Property Owners, provided, however, that the owners of both parcels shall be obligated at all times to:
 - a. Maintain the surface of the common driveway reasonably flat and smooth; and
 - Keep the common driveway cleared of dangerous accumulations of ice and snow (which, for purposes of this agreement, shall be considered to be 3 inches or more of accumulation) by plowing and/or sanding as is necessary; and
 - c. Keep the common driveway free from all kinds of obstacles so that persons legally entitled to use it, including emergency vehicles, are free to do so.

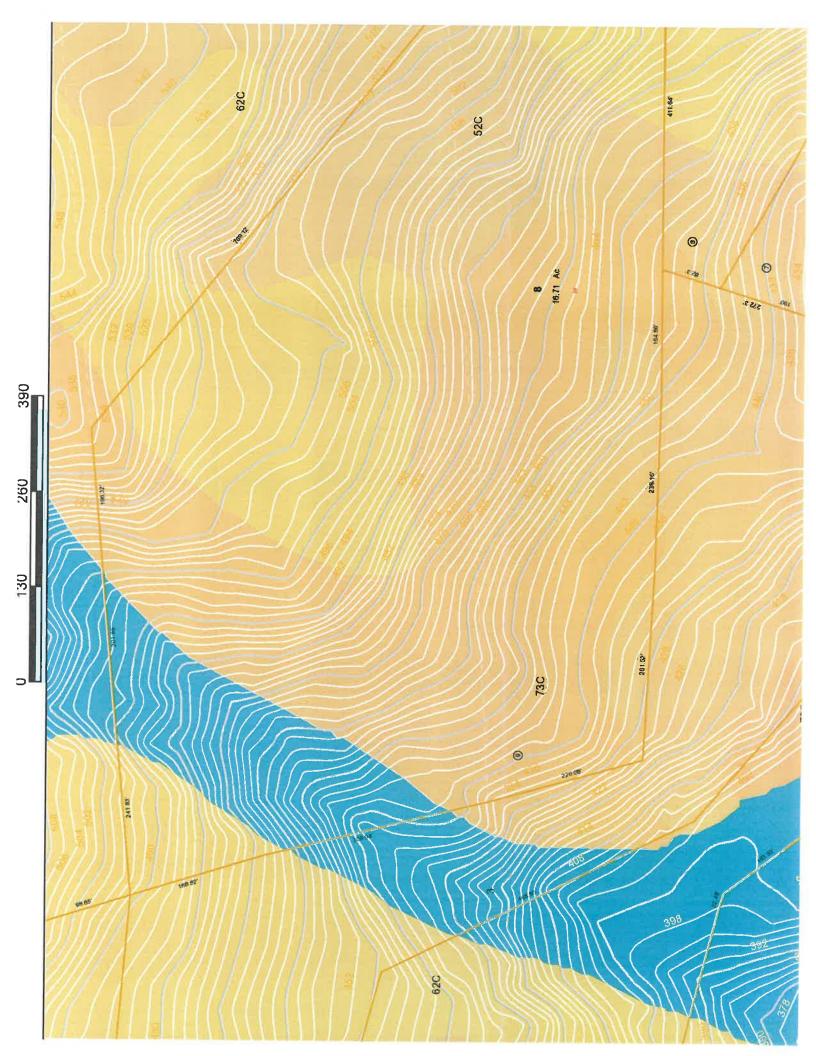
- 3. Utility Easement. The Property Owner of Lot 14-1 shall also have easement rights, within the Easement Area, to install and maintain all necessary and desirable utilities to serve any residence constructed on Lot 14-1. These easement rights shall be perpetual and non-exclusive and any utilities installed shall be generally located in an area outside of the location of any established driveway within the Easement Area. Included within these utility easement rights, is the right, in favor of the Property Owner of Lot 14-1, to convey and grant such utility easements to third party utility service providers, and any third party mortgages granted by the Property Owner of Lot 19-8 will be subordinate and subject to these easement rights in favor of the Property Owner of Lot 14-1. The Property Owner of Lot 19-8 shall sign any and all documents necessary to grant utility easements to third party utility providers. Both Property Owners of Lot 14-1 and Lot 19-8 shall install the underground utilities before, or at the same time as, installation of the common driveway, at their sole cost, respectively.
- 4. Indemnification. The Property Owners shall be deemed to hold one another free and harmless from any claim for loss or injury to person or property suffered or incurred in connection with the use of the driveway within the Easement Area, or any of their agents or invitees on the respective parcels, save for any such loss or injury resulting from the wanton or willful misconduct on the part of either Property Owner. A Property Owner incurring the costs or expenses of any improvement, maintenance or repair of the common driveway in accordance with this Declaration in excess of their respective share shall be entitled to prompt reimbursement from the non-contributing Property Owner, including, but not limited to, attorney's fees and costs incurred in any civil proceedings instituted to recover the same, plus interest at the statutory rate, from such non-contributing Property Owner.
- 4. <u>Enforceability.</u> The rights, privileges and easements herein set forth shall run with the land, and shall inure the benefit of, and be binding upon and be enforceable by, the Property Owners and their respective heirs, successors and assigns.

If either Property Owner fails to carry out its obligations under this Declaration of Common Driveway and Utility Easement, that Property Owner shall be considered in "default", and the defaulting Property Owner shall be subject to enforcement action by the non-defaulting Property Owner, including a right to reimbursement for all attorney fees and costs relating to said enforcement action.

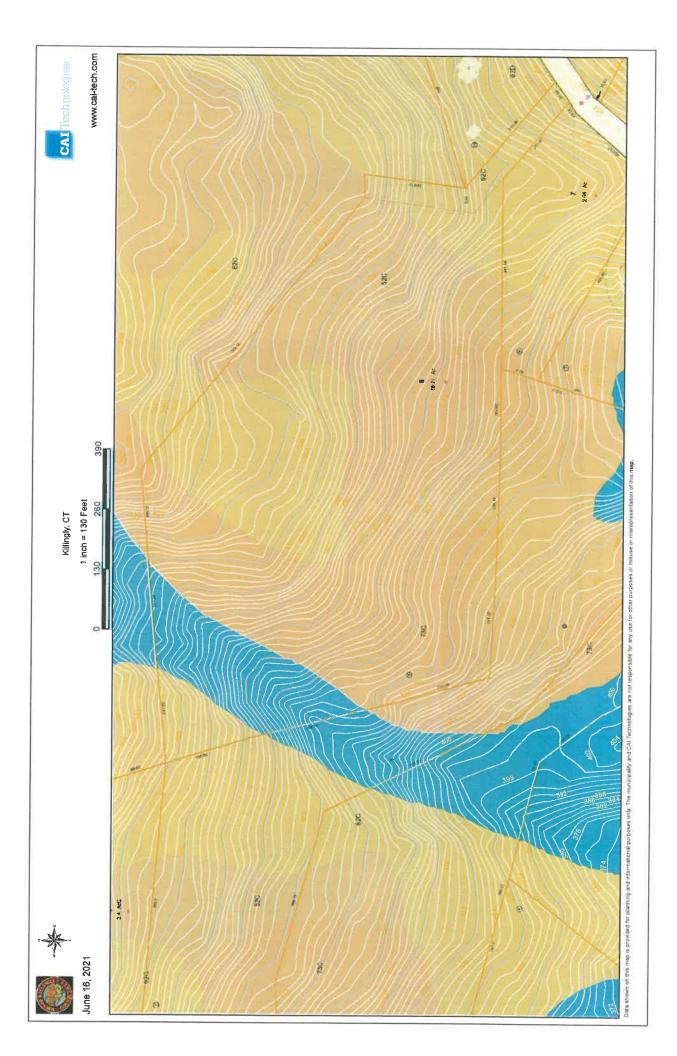
IN WITNESS WHEREOI 2018.	I have hereunto set my hand and seal this day of October,					
	River Investment Company, Inc.					
	Ву:					
Edwin C. Higgins, III	Richard J. Schad, President					
STATE OF CONNECTICUT)					
) ss Putnam					
COUNTY OF WINDHAM)					
officer, personally appeared Richar River Investment Company, Inc., as	ober 2018, before me, Edwin C. Higgins, III, the undersigned d J. Schad, who acknowledged himself to be the President of ad that he as such officer, being authorized so to do, executed purposes therein contained, by signing the name of the cer					
IN WITNESS WHEREOF	, I hereunto set my hand and official seal.					
	Edwin C. Higgins, III					
	Commissioner of the Superior Court					

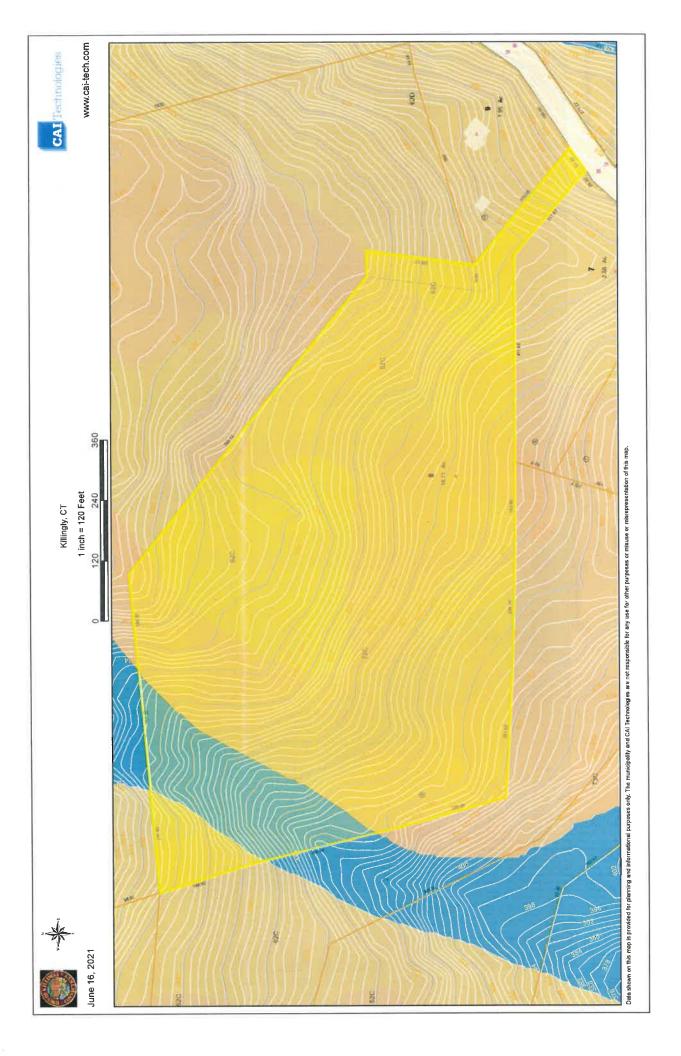
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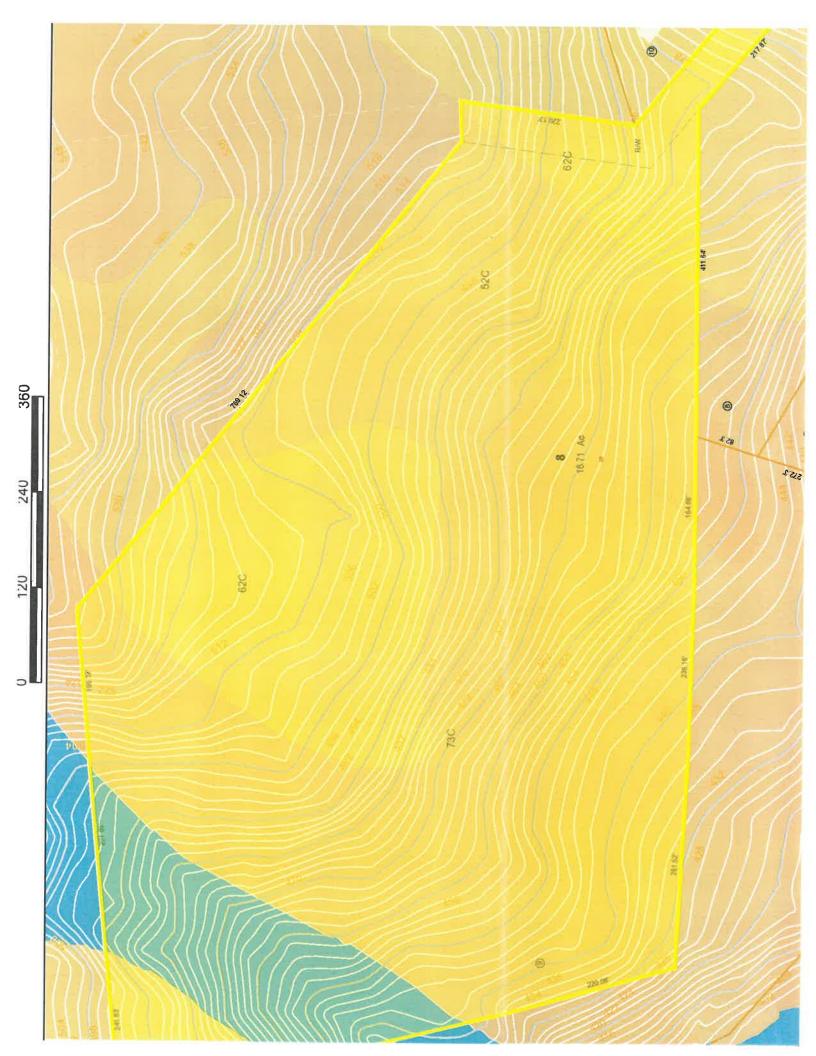


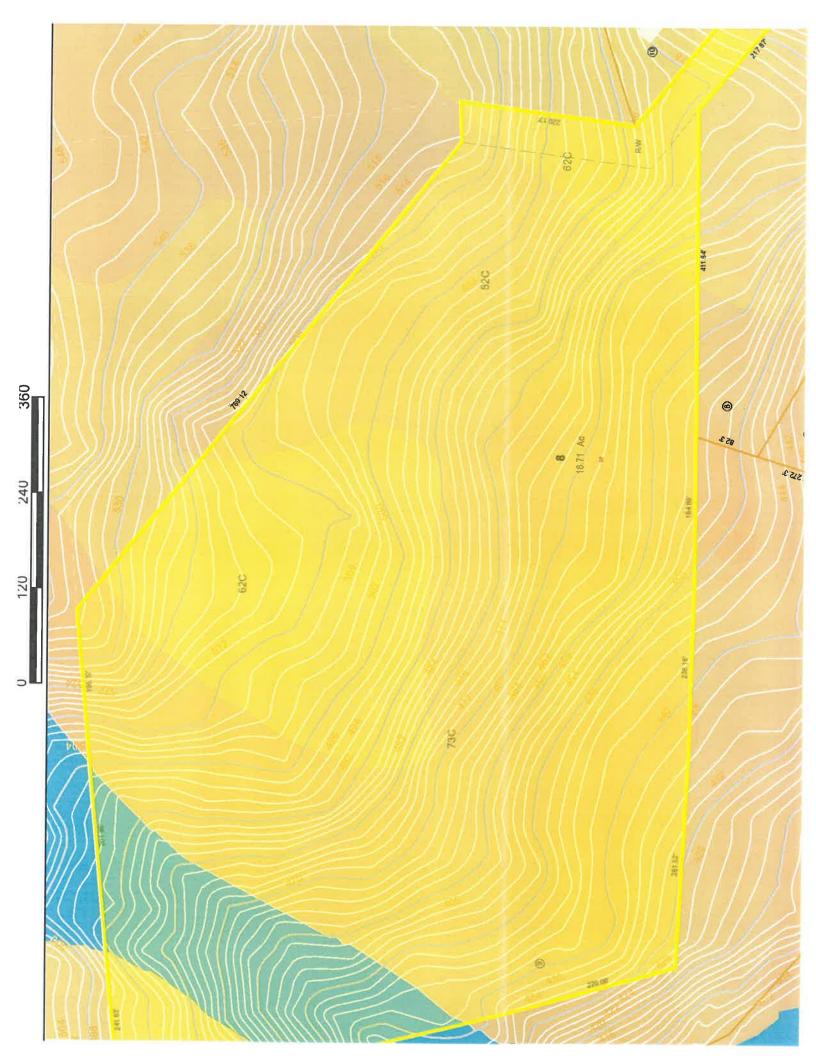


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DECLARATION OF RESTRICTIONS AND COVENANT

PARY A PREAMBLE

WHEREAS, Patter Auction and Land Corporation, a Massachusetts Corporation with its principal place of business in the Town of Brooklyn, County of Windham, and State of Connecticut, is the owner of lots Nos. "N/F Howard". 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, C, 0, inclusive, on a map entitled "Subdivision Plan Prepared for Patten Corporation-Putnam Road, Stone Road & River road-Killingly, Connecticut-Scale 1"=100'-8/18/87, Revised to 10/12/1988-Kieltyka, Woodis & Pike, land Surveyors", which maps are on file in the killingly Town Clerk's Office, to which maps reference is hereby made and may be had for a more particular description and location of said premises; and

PART 8. AREA OF APPLICATION

The residential area covenants in Part C shall apply in their entirely to lots Ros. "H/F Howard", 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, C, D, inclusive, as shown on said map.

PART C. RESIDENTIAL AREA COVENANTS

- C-1 All of said parcels shall be known and described as residential lots. One (1) single-family dwelling is permitted per parcel. Such dwelling shall be constructed of wood, brick or stone and shall be of either an unrefined, earthy color or white. Construction with man-made synthetic material is prohibited.
- C-2 Ho dwelling shall be permitted on any parcal unless its living area is One Thousand Eight Hundred (1,800) square feet or larger.
- C-3 No noxious or offensive trade or activity shall be carried out upon any parcel nor shall anything be done thereon which may be or become an ennoyance or nulsance to the neighborhood.
- C-4 Without limiting the generality thereof, no mobile homes or structures in the nature thereof shall be allowed to be placed or remain on any of the lots.
 - C-5 No poultry of any kind shall be raised, bred or kept on any parcel, except that dogs, cats or other household pets may be kept, provided that they are not kept, bred or maintained for any commercial purposes. No farm animals shall be permitted to be kept on any parcel.

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