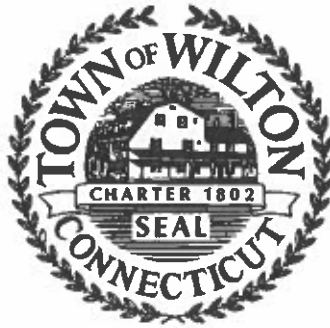


INLAND WETLANDS
COMMISSION
Telephone (203) 563-0180
Fax (203) 563-0284



TOWN HALL
238 Danbury Road
Wilton, Connecticut 06897

RECEIVED

MAR 07 2024

APPLICATION FOR AN INTERMEDIATE REGULATED ACTIVITY

For Office Use Only:

Filing Fee \$ N/A
Date of Submission 3-7-24
Date of Acceptance 3-14-24
WET# 2931
Wilton Land Record Map# N/A
Volume # N/A Page # N/A
Assessor's Map # N/A Lot# N/A

APPLICANT INFORMATION:

Applicant Town of Wilton - DPW
Address 238 Danbury Road
Wilton, CT 06897
Telephone 203-563-0152
Email N/A

Agent (if applicable) Keegan O. Elder
Address 87 Holmes Road
Newington, CT 06111
Telephone 860-667-9624
Email kelder@wmcengineers.com

PROJECT INFORMATION:

Property Address Br. 04980-Middlebrook Farm Rd
Acres of altered Wetlands On-Site 0.025 AC
Linear Feet of Watercourse 282 FT
Linear Feet of Open Water 24 FT
Sq. Ft. of proposed and/or altered impervious coverage 0 AC

Site Acreage 0.196 AC
Cu. Yds. of Material Excavated 5 CY
Cu. Yds. of Material to be Deposited 5 CY
Acres of altered upland buffer 0.094 AC
Sq. Ft. of disturbed land in regulated area 5,171 SF

APPLICATION REQUIREMENTS:

Is The Site Within a Public Water Supply
Watershed Boundary? NO ☒ YES* ☐

Is The Site Within 500 Feet of a Town Boundary?
NO ☒ 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.

Project Description and Purpose: Preservation is required due to the current traffic safety features & superstructure being in a state of moderate deterioration. Proposed construction features; installation of DOT approved guide rail system, repair the concrete wingwalls & abutments, repair concrete beams with spalls, mill the existing overlay & apply membrane waterproofing, and pave the bridge.

In addition, the applicant shall provide nine (9) collated copies of the following information as well as an electronic submission via email to mike.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
 - b. the alternatives considered
 - c. impacts
 - d. proposed mitigation measures
- ☒ G. Soils Report prepared by a Certified Soil Scientist and Wetlands Map prepared by a Registered Land Surveyor
- ☒ H. 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 and eight (8) copies

****Application materials shall be collated and copies of documents more than two pages in length shall be double sided.**

See Section 7 of the Wetlands and Watercourses Regulations of the Town of Wilton for a more detailed description of applications requirements.

The Applicant or his/her agent certifies that he is familiar with the information provided in this application and is aware of the penalties for obtaining a permit through deception, inaccurate or misleading information.

By signing this application, permission is hereby given to necessary and proper inspections of the subject property by the Commissioners and designated agents of the Commission or consultants to the Commission, at reasonable times, both before and after a final decision has been rendered.

Applicant's Signature: Toni Bouchen Date: 3/5/2024

Agent's Signature (if applicable): _____ Date: _____

WILTON PUBLIC WORKS
DEPARTMENT

(203) 563-0152



TOWN HALL ANNEX
238 Danbury Road
Wilton, Connecticut 06897

March 4, 2024

Inland Wetlands Commission
Town of Wilton
238 Danbury road
Wilton, CT 06897
Attention: Mike Conklin – Director of Environmental Affairs

RE: Old Mill Road & Middlebrook Farm Road – Application for Regulated Activity

Dear Commission,

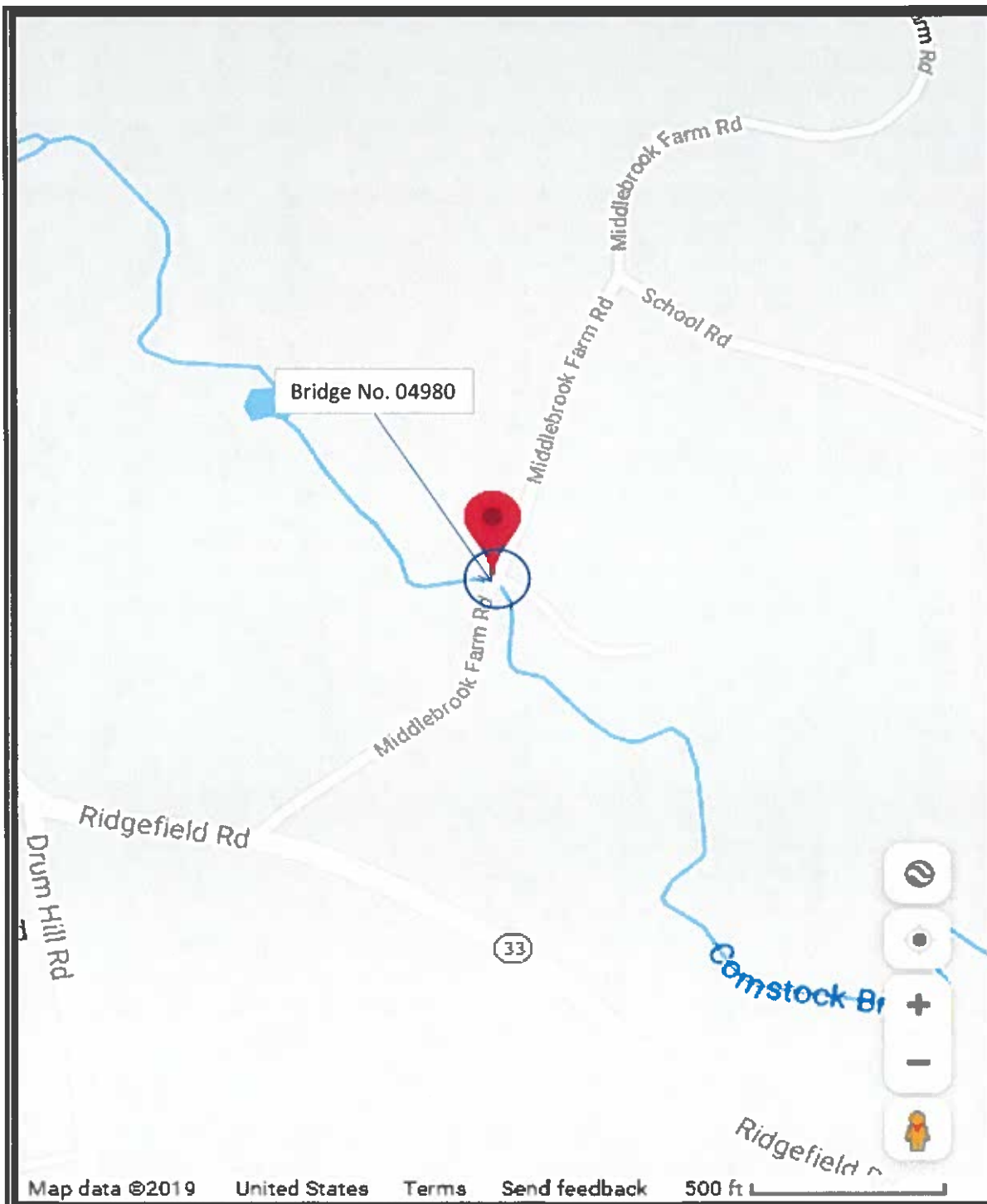
Attached is an Application for Regulated Activity associated with the Preservation of the bridges at Old Mill Road and Middlebrook Farm Road. Included is the application back up information. Please review and if you have any questions, do not hesitate to call us.

Thank You,

Stephen Santacroce, PE
Senior Civil Engineer

Enclosures

q:\bridges\lovers lane bridge\iwwa transmit\letter 8-22-22.doc



Wengell, McDonnell & Costello
-Consulting Engineers-
87 Holmes Road
Newington, Connecticut 06111

THE TOWN OF WILTON

MIDDLEBROOK FARM ROAD BRIDGE

Over

COMSTOCK BROOK

Bridge No. 04980

Location Map

**SCHEDULE OF PROPERTY OWNERS
LOTCIP PROJECT #L161-0002
ROAD: MIDDLEBROOK FARM ROAD
OVER THE COMSTOCK BROOK
Bridge No. 04980
TOWN OF WILTON**

List of Abutters:

- 1. Gerhard George R III & Sarah A
(Address: 20 Middlebrook Farm Wilton CT 06897)**
- 2. Anspach David R
(Address: 33 Middlebrook Farm Wilton CT 06897)**
- 3. Wilton Land Conservation Trust
(Address: PO Box 77 Wilton CT 06897)**
- 4. Sachs Zachary & Ruth
(Address: 25 Middlebrook Farm Wilton CT 06897)**
- 5. Rath William E & Nicole K
(Address: 47 Middlebrook Farm Wilton CT 06897)**
- 6. Packman Glenn A & Biggs William M
(Address: 44 Middlebrook Farm Wilton CT 06897)**
- 7. Second Taxing District City of N
(Address: 164 Water St SO Norwalk CT 06854)**

LOTICIP Project No. L161-0002 Preservation of Bridge No. 04980
Middlebrook Farm Road over Comstock Brook:

Project Description

The Town of Wilton initiated design work for miscellaneous repairs to the bridge on Middlebrook Farm Road (Bridge No. 04980 - supports Middlebrook Farm Road over the Comstock Brook). WMC Consulting Engineer began preliminary design. The original bridge was built in 1944.

The bridge consists of cast-in-place concrete tee beams with an integrated concrete deck slab. The proposed work is the following: (1) Replace the existing bridge rail with TL-3 rated steel bridge rail; (2) Replace the approach rail system to DOT approved steel-backed timber guide rail; (3) Remove rust from exposed rebar and patch spalls under bridge deck and on beams; (4) Mill the existing overlay and apply a membrane waterproofing on the existing deck slab; (5) Pave the bridge; (6) Patch cracks on both abutments and wingwalls. These preservation efforts will aim to increase the lifespan of the bridge and ensure that it meets current design and crash testing standards.

To mitigate as much impact as possible, best management practices will be used to handle sedimentation control. Inland wetlands/regulated area impacts from use of temporary water handling or scaffoldings will be kept to a minimum, and disturbed areas during construction will be restored upon completion.

For this project there were no alternatives considered. The only alternative is to not repair the bridge.

As per CTDOT Form 818: Specifications for Roads, Facilities, and Incidental Construction –

M.02.01 --- Granular Fill: For this purpose, the material shall consist of broken or crushed stone, gravel, reclaimed miscellaneous aggregate or a mixture thereof.

1. Broken or crushed stone shall be the product resulting from the artificial crushing of rocks, boulders, or large cobblestones, substantially all faces of which have resulted from the crushing operation. Broken or crushed stone shall consist of sound, tough, durable stone, reasonably free from soft, thin, elongated, laminated, friable, micaceous, or disintegrated pieces, mud, dirt, or other deleterious material and shall be sized to meet the requirements of grading "A," M.02.06.

2. Bank or crushed gravel shall consist of sound, tough, durable particles of crushed or uncrushed gravel, free from soft, thin, elongated, or laminated pieces and vegetable or other deleterious substances. It shall meet Grading "A" and the requirements for plasticity and resistance to abrasion indicated in M.02.06. Crushed gravel shall be the manufactured product resulting from the deliberate mechanical crushing of gravel with at least 50% of the gravel retained on the No. 4 sieve having at least 1 fractured face.

3. Reclaimed Miscellaneous Aggregate material shall consist of sound, tough, durable particles of crushed reclaimed waste. It shall be free of soft disintegrated pieces, mud, dirt, glass, or other injurious materials and contain no more than 2% by weight of asphalt cement. This reclaimed miscellaneous material shall meet Grading

As per CTDOT Form 818: Specifications for Roads, Facilities, and Incidental Construction -

M.02.05 --- Pervious Structure Backfill: Pervious structure backfill shall consist of broken or crushed stone, broken or crushed gravel, or reclaimed miscellaneous aggregate containing no more than 2% by weight of asphalt cement or mixtures thereof. Materials for this work shall conform to the following requirements:

1. Broken or crushed stone shall consist of sound, tough, durable stone, reasonably free from soft, thin, elongated, friable, laminated, micaceous or disintegrated pieces, mud, dirt, or other deleterious material and shall be sized to meet the requirements of Grading "B," M.02.06. It shall meet the requirements of loss on abrasion indicated in M.02.02-2(a).

2. Bank or crushed gravel shall consist of sound, tough, durable particles of crushed or uncrushed gravel free from soft, thin, elongated, or laminated pieces and vegetable or other deleterious substances. It shall meet Grading "B."

3. Reclaimed Miscellaneous Aggregate shall consist of sound, tough, durable particles of crushed reclaimed waste. It shall be free of soft disintegrated pieces, mud, dirt, glass, or other injurious material, and contain no more than 2% by weight of asphalt cement. It shall meet Grading "B."

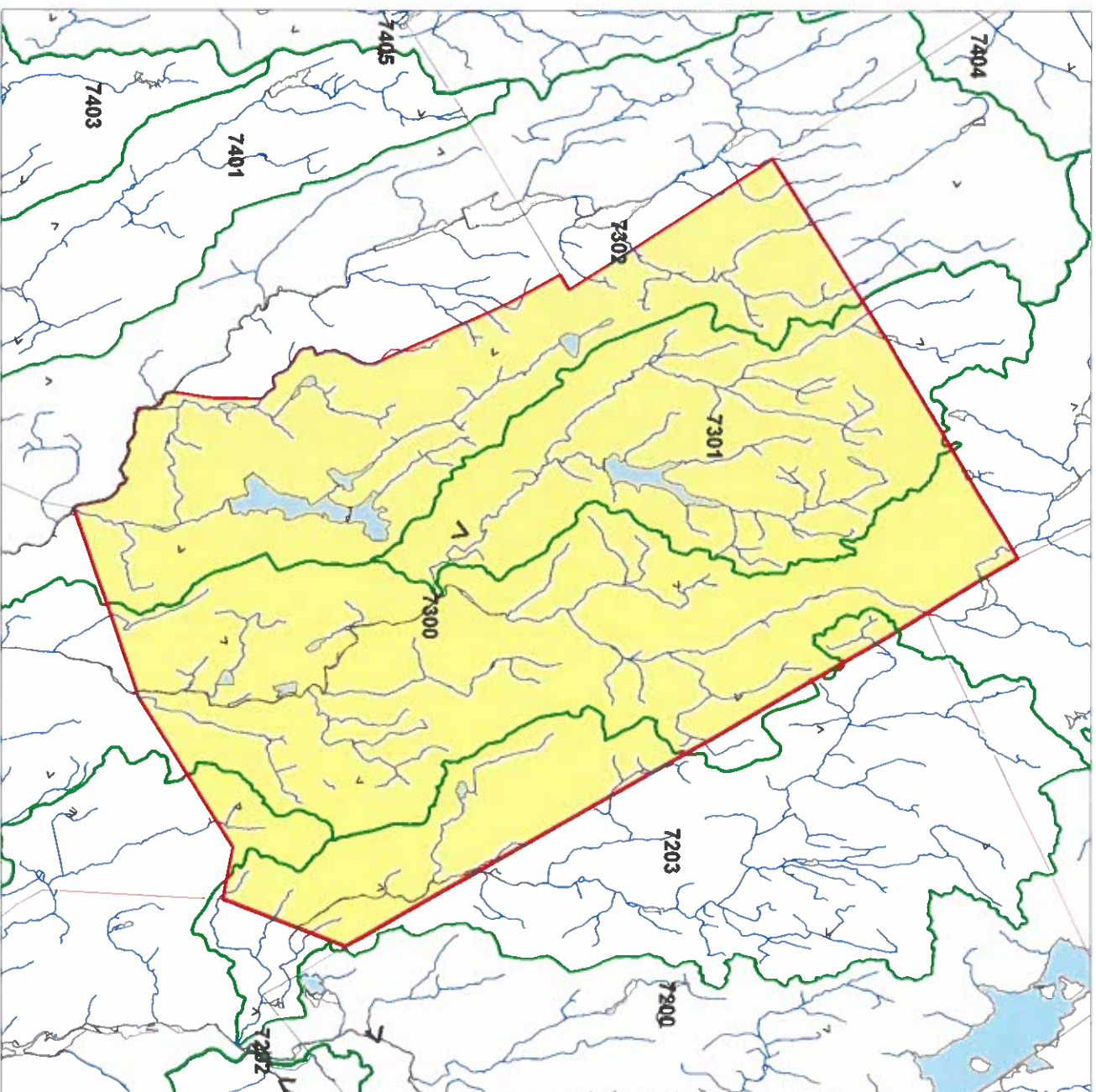
WILTON CONNECTICUT SUBREGIONAL BASINS AND SURFACE WATER FLOW DIRECTIONS

Explanation

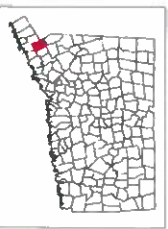
- Town Boundary
- Subregional Watershed Boundary
- Subrg. Basin ID# - as designated by CTDEP
- Watercourse
- Open Water
- Basin Outlet
- Surface Water Flow Direction

The table provides statistics for each subregional basin. Shown are the areas of the basin within the town, the percentage for that area, and the percent of the town covered by each basin.

Subrg. Basin ID#	Area within Town (Acres)	Percent of Town Area	Percent of Town Area
7200	318.81	1.0	1.8
7203	1777.93	23.3	10.2
7300	6609.70	31.7	37.8
7301	4046.03	86.1	23.1
7302	4738.74	32.9	27.1



Town Area: 17491 Acres



Digital layers provided by the CTDEP.
Map composed by the NEMO project.
For educational purposes only.



- Ecology
- Soil & Wetland Studies
- Water Quality Monitoring • GPS
- Environmental Planning & Management
- Ecological Restoration & Habitat Mitigation
- Aquatic, Wildlife and Listed Species Surveys
- Application Reviews • Permitting & Compliance

July 29, 2022

VIA EMAIL

Wengell, McDonnell & Castello, Inc.
87 Holmes Road
Newington, CT 06111

ATTN: Keegan O. Elder, P.E., Vice President

RECEIVED

MAR 07 2024

WILTON INLAND WETLAND
COMMISSION

RE: **WETLANDS REPORT**

Bridge Preservation/Rehabilitation Project (State Project No.: L161-0002), Wilton, CT

REMA Job No.: 21-2479-WLT8

Dear Mr. Elder:

At your request, REMA Ecological Services, LLC (REMA) presents herein our findings during inland wetland and jurisdictional (federal) delineations, and resource characterizations associated with the above-referenced bridge preservation/rehabilitation project. The five bridges that are included in this local transportation capital improvements program (LOTICIP) are as follows:

1. Old Mill Road Bridge (ConnDOT Bridge No. 04985) over Norwalk River
2. Old Ridgefield Road Bridge (ConnDOT Bridge No. 04978) over Norwalk River
3. Middlebrook Farm Road Bridge (ConnDOT Bridge No. 04980) over Comstock Brook
4. River Gate Drive (a.k.a., Stonebridge Road) Bridge (ConnDOT Bridge No. 04355) over West Branch Saugatuck River
5. Seeley Road Bridge (Bridge No. 04982) over Norwalk River

1.0 INTRODUCTION

This *Wetlands Report*, represents the effort by REMA, to conduct wetland delineations and resource characterizations on the subject site ("the site," "the study area"), on January 28th, 2022. This effort included the in-field delineation of regulatory and jurisdictional wetlands and watercourses, based on both State Statutes and Federal guidelines.



Attachment A, includes a site locus and a recent aerial photograph of study area, as well as a State GIS aerial with topography, showing the wetland delineations (i.e., Figures 1 through 5, Figures A1 through A5, and Figures B1 through B5). Attachment B provides representative annotated photographs of each bridge site (i.e., Photos 1 through ?) taken during the 2022 fieldwork. Attachment C provides the USDA-NRCS Web Soil Survey, showing the mapped soil at each bridge site and its immediate vicinity, as well as the USGS StreamStats for the stream or river at each of the five sites, providing some watershed characteristics.

2.0 STUDY AREAS SETTING

The study areas (or “sites”), for the five bridges included in this report are all within the Town of Wilton. Three of the bridge sites are associated with the Norwalk River, one with the West Branch of the Saugatuck River, and one with Comstock Brook, which is a tributary of the Norwalk River. The dominant land uses in the vicinity of the study areas include medium-density residential (i.e., suburban), as well as commercial.

3.0 WETLAND DELINEATIONS & DOMINANT SOIL TYPES

Prior to the fieldwork at each site, REMA conducted an initial desktop study and analyses of existing secondary-source data, including, but not limited to, U.S. Geological Survey (USGS) topographic quadrangle maps, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, U.S. Department of Agriculture/Natural Resources Conservation Service (USDA/NRCS) Soil Survey data, most recent color aerial photographs (leaf-off), and other data layers available from the Connecticut Department of Energy and Environmental Protection’s (CTDEEP) GIS data depot (i.e., Connecticut Environmental Conditions Online; CTECO).

Wetland delineations were conducted in accordance with the Connecticut General Statutes governing inland wetlands (i.e., CGS Sec. 22a-36 through 22a-45). Federal jurisdictional wetlands were delineated pursuant to the Regional Supplement to the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987): *Northcentral and Northeast Region*, Version 2.0 (January 2012). It should be noted that in some cases the “Connecticut wetlands” and the “Federal wetlands” were coincident, but in most cases, due to the inclusion of “non-hydric” soils of alluvial origin, the State wetland boundary was delineated topographically upgradient of federal jurisdictional wetlands.

We should note that pursuant to the Connecticut State Statutes, a wetland is defined as “*land, including submerged land...which consists of poorly drained, very poorly drained, alluvial and floodplain soils as defined by the National Cooperative Soils Survey.*” Alluvial (i.e., floodplain) soils are regulated as inland wetlands whether or not they meet the criteria of a poorly drained soil.



The observed wetland soil types within the study areas were derived from predominately from alluvial (i.e., stratified sand and silt), and glaciofluvial (i.e., stratified sand and gravel) deposits. However, at one bridge (i.e., Middlebrook Farm Road bridge over Comstock Brook; Bridge No.: 04980), observed wetland soils within the study area were also derived from glacial till deposits (i.e., unstratified sand, silt & rock). The following soil series were observed:

Rippowam fine sandy loam (103). The Rippowam series consists of deep, poorly drained soils formed in loamy, alluvial sediments. They are nearly level soils on floodplains. The soils formed in recent alluvium derived mainly from schist, gneiss or granite. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 5 inches thick. The subsoil from 5 to 27 inches is dark grayish brown, mottled fine sandy loam and sandy loam. From 27 to 60 inches the substratum is dark gray and grayish brown, loose stratified, loamy sand and very gravelly sand. This soil was formerly mapped in Connecticut as **Rumney**.

Pootatuck fine sandy loam (102). This series consists of deep, moderately well drained soils formed in coarse-loamy, alluvial sediments. They are nearly level soils on floodplains of rivers and major streams. The soils formed in recent alluvium derived mainly from schist, gneiss or granite. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 5 inches thick. The subsoil from 5 to 30 inches is dark yellowish brown fine sandy loam in the upper subsoil and dark brown, mottled sandy loam in the lower subsoil. From 30 to 60 inches the substratum is dark brown and grayish brown, mottled gravelly sand.

Walpole sandy loam (13). This series consists of deep, poorly drained soils formed in sandy water deposited glacial outwash materials. They are nearly level to gently sloping soils on glaciofluvial landforms, typically in shallow drainage ways and low-lying positions on stream terraces and outwash plains. The soils formed in loamy over stratified sandy and gravelly outwash derived from a variety of acid rocks. Typically, these soils have a very dark brown sandy loam surface layer 6 inches thick. The subsoil from 6 to 23 inches is mottled, grayish brown sandy loam. The substratum from 23 to 60 inches is mottled, light brownish gray, gravelly loamy sand and gravelly sand.

Ridgebury fine sandy loam (3). This soil series consists of deep, poorly and somewhat poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level to moderately steep soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a black sandy loam surface layer 6 inches thick. The mottled subsoil from 6 to 16 inches is olive gray sandy loam. The mottled substratum from 16 to 60 inches is a light olive brown and olive, very firm and brittle gravelly sandy loam.

Leicester fine sandy loam (3). This series, which is some Connecticut counties is found only in complex with the Ridgebury and Whitman series, consists of deep, poorly drained loamy soils formed in friable glacial till on uplands. They are nearly level to gently sloping



soils in drainage ways and low lying positions on till covered uplands. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of black fine sandy loam 6 inches thick. The subsoil from 6 to 23 inches is grayish brown, mottled fine sandy loam. The substratum from 26 to 60 inches or more is dark yellowish brown, mottled, friable, gravelly fine sandy loam.

Whitman fine sandy loam (3). This series, which is some Connecticut counties is only mapped in complex with the Ridgebury and Leicester series, consists of deep, very poorly drained soils formed in a coarse-loamy mantle underlain by firm, compact glacial till on uplands. They are nearly level and gently sloping soils on till plains, low ridges and drumloidal landforms. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a black fine sandy loam surface layer 8 inches thick. The mottled subsoil from 8 to 15 inches is gray sandy loam. The mottled substratum from 15 to 60 inches is firm, olive gray to gray dense glacial till.

The observed upland soil types within the study areas were both disturbed and undisturbed. The undisturbed soils are the:

Haven silt loam (703). The Haven series consists of deep, well drained soils formed in a coarse-loamy mantle underlain by sandy water deposited glacial outwash materials. They are level to very steep soils on outwash plains and high stream terraces. The soils formed in loamy over stratified sandy and gravelly glacial outwash derived mainly from a variety of acid crystalline rocks. Typically, these soils have a dark grayish brown silt loam surface layer 8 inches thick. The subsoil from 8 to 26 inches is strong brown and light olive brown silt loam. The substratum from 26 to 60 inches is brown to reddish brown is stratified sand and gravel.

Ninigret fine sandy loam (21). This series consists of very deep moderately well drained soils formed in a coarse-loamy mantle underlain by sandy water deposited glacial outwash materials. They are nearly level to gently sloping soils on glaciofluvial landforms, typically in slight depressions and broad drainage ways. The soils formed in loamy over stratified sandy and gravelly outwash derived from a variety of acid rocks. Typically, these soils have a very dark grayish brown fine sandy loam surface layer 8 inches thick. The subsoil from 8 to 26 inches is yellowish brown fine sandy loam with mottles below 16 inches. The substratum from 26 to 60 inches is mottled, pale brown, loose, stratified loamy sand.

Hinckley gravelly sandy loam (38). This series consists of very deep, excessively drained soils formed in a shallow, loamy sand mantle underlain by gravelly sand, water deposited glacial outwash materials. They are level to very steep soils on outwash plains, terraces, deltas, kames and eskers. The soils formed in loamy over stratified sandy and gravelly glacial outwash derived mainly from crystalline rocks. Typically, these soils have a very dark grayish brown loamy sand surface layer 7 inches thick. The subsoil layers from 7 to 15 inches are strong brown and yellowish brown gravelly loamy sand. From 15 to 18 inches the



subsoil is yellowish brown gravelly sand. The substratum from 18 to 60 inches is light olive brown stratified sand, gravel and cobblestones.

Charlton very stony fine sandy loam (73). This series consists of very deep, well drained coarse-loamy soils formed in friable, glacial till on uplands. They are nearly level to very steep soils on till plains and hills. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. In tilled areas, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 26 inches is yellowish brown fine sandy loam and sandy loam. The substratum from 26 to 60 inches or more is grayish brown gravelly fine sandy loam.

Chatfield loam (73). This series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 0 to 70 percent. Crystalline bedrock is at depths of 20 to 40 inches. Permeability is moderate or moderately rapid. In tilled areas, these soils have a surface layer that is very dark to dark grayish brown loam up to 8 inches thick. The subsoil from 8 to 26 inches is brown, flaggy silt loam.

Sutton stony fine sandy loam (50). This series consists of deep, moderately well drained loamy soils formed in friable, glacial till on uplands. They are nearly level to steeply sloping soils on till plains, low ridges and hills, being typically located on lower slopes and in slight depressions. The soils formed in acid glacial till derived mainly from schist, gneiss or granite. Typically, these soils have a surface layer of dark brown fine sandy loam 8 inches thick. The subsoil from 8 to 28 inches is yellowish brown, mottled fine sandy loam and sandy loam. The substratum from 28 to 60 inches or more is light olive brown fine sandy loam.

The disturbed upland soils within the study area are associated with sandy fill, mostly associated with elevated roadway embankments. These are mapped as:

Udorthents (308). This soil mapping unit consists of well drained to moderately well drained soils that have been altered by cutting, filling, or grading. The areas either have had two feet or more of the upper part of the original soil removed or have more than two feet of fill material on top of the original soil. *Udorthents* or Made Land soils can be found on any soil parent material but are typically fluvial on glacial till plains and outwash plains and stream terraces.

4.0 SURFACE WATER RESOURCES & WETLANDS

4.1 Introduction

The study areas' wetlands and surface waters were first characterized by examining Federal and State wetlands maps and by conducting detailed site investigations of vegetation, soils, and hydrology, to demarcate inland wetland (State) and jurisdictional (federal) boundaries.



Attachment A of this *Wetland Report*, provides a 2016 aerial photograph, for each site, with 2016 State GIS topography, and with annotation showing each of the wetland segments delineated in January 2022 (i.e., Figures B1 through B5). Also provided are figures of each study area on a 4/22/2018 aerial photograph (Google Earth) (i.e., Figures A1 to A5), and the National Wetlands Inventory (NWI) mapping (i.e., Figures C1 to C5). Attachment B provides representative annotated photographs of the regulated resource areas at each of the five bridge sites (e.g., Photos A1 to A4). This report section briefly describes the overall inland wetland resources associated each of the study area, following the sequence of the field visits.

4.2 Stonebridge Road Bridge over West Branch Saugatuck River (Bridge No. 04355)

4.2.1 Overview

This bridge is located very near the municipal boundary with Weston, in the southeastern corner of Wilton (see Figure 4, Attachment A). The site's perennial watercourse is classified as a *riverine, unknown perennial, unconsolidated bottom, permanently flooded* resource (R5UBH)¹, per the National Wetlands Inventory (NWI) classification system (see Figure C4, Attachment A). According to USGS StreamStats report (see Attachment D), the river's watershed at the subject bridge is approximately 10.2 square miles (i.e., 6,528 acres). The in-stream habitat at the site is characterized by a low-gradient channel (i.e., riffle/run). The river substrate is dominated by boulders, cobbles, sand, and silt, consistent with the wetland type soils observed within the study area. The CT DEEP conducted a finfish and macroinvertebrate bioassessments in 2015 and in 1990, respectively at this very location, immediately downriver of the bridge. The finfish population is moderately robust and is dominated by American eel, bluegill sunfish, cutlips minnow, longnose dace, redbreast sunfish, and tessellated darter.

The benthic bioassessment in 1990 indicated a robust aquatic insect community with many genera intolerant of pollution. This is consistent with the assumed water quality classification of this surface waterbody (i.e., Class A), and low percentage of urbanization and impervious surfaces within its watershed, that is, 15 percent and 2.83 percent, respectively (see Attachment D).

4.2.2 Wetland Communities

The wetland vegetated cover types associated with the riparian corridor are dominated by wooded swamp, classified as *palustrine, forested, broad-leaved deciduous, seasonally flooded/seasonally saturated* (PFO1E) per NWI (see Photos A1 to A6, Attachment B).

¹ It is unclear as to why the NWI calls the known Norwalk River as "unknown perennial." This nomenclature continues for all of the perennial streams at the five bridges.



Dominant or common overstory vegetation within the wooded swamp or at the edge of the river itself, included red maple, tulip tree, American beech, hop hornbeam, red oak black gum, yellow birch, speckled alder, green ash, eastern hemlock, ironwood, and gray birch. The woody understory included such species as winterberry, Japanese barberry, multiflora rose, firebush, privet, spicebush, and silky dogwood. Due to the winter season, the inventory of herbaceous plants was limited. However, the following were noted: wood ferns, poison ivy, Christmas fern, Laxiflora sedges, asters, goldenrods, grasses, white avens, cinnamon fern, skunk cabbage, and stout wood reedgrass. Lianas observed were green briar, fox grape, poison ivy, Japanese honeysuckle, and Asiatic bittersweet.

4.3 Old Ridgefield Road Bridge over Norwalk River (Bridge No. 04978)

4.3.1 Overview

This bridge is located just south of the Wilton Town Center (see Figure 3, Attachment A). Old Ridgefield Road is the access road to Schenck's Island Park, a municipal park. The site's perennial watercourse, namely the Norwalk River, is classified as a *riverine, unknown perennial, unconsolidated bottom, permanently flooded* resource (R5UBH), per the National Wetlands Inventory (NWI) classification system (see Figure C3, Attachment A). According to USGS StreamStats report (see Attachment D), the river's watershed at the subject bridge is approximately 25.9 square miles (i.e., 16,576 acres). The in-stream habitat at the site is characterized by a low-gradient channel (i.e., riffle/run). The river substrate is dominated by boulders, cobbles, sand, and silt, consistent with the wetland type soils observed within the study area. The CT DEEP conducted a finfish and macroinvertebrate bioassessments in the 1990s, and more recently in 2013, at several stations along the Norwalk River, both upriver and downriver of the site. Generally, the fishery is moderately robust, includes both warm-water and cold-water fish species, and has been stocked for both brook trout and brown trout over the years.

The benthic bioassessment in 2013, upriver of the site, indicated a robust aquatic insect community with a few genera at least moderately intolerant of pollution, but mostly with somewhat tolerant. This is consistent with the assumed water quality classification of this surface waterbody (i.e., Class B), and moderate percentage of urbanization and low impervious surfaces within its watershed, that is, 22.4 percent and 5.26 percent, respectively (see Attachment D).

4.3.2 Wetland Communities

The wetland vegetated cover types associated with the riparian corridor are dominated by wooded swamp to the southwest and northwest of the bridge, classified as *palustrine, forested, broad-leaved deciduous, seasonally flooded/seasonally saturated* (PFO1E) per NWI (see Photos B1 to



B5, Attachment B). To the northeast the delineated wetland boundary is almost coincident with the steep river bank at this location, while to the southeast there is a level higher floodplain, dominated by moderately well drained alluvial soils, within the study area.

Dominant or common overstory vegetation within the wooded swamp sections or at the edge of the river itself, included red maple, Norway maple, cottonwood, American sycamore, sugar maple, bigtooth aspen, tree of heaven, and green ash. The woody understory included such species as firebush, silky dogwood, multiflora rose, Morrow's honeysuckle, wineberry, and willows. Due to the winter season, the inventory of herbaceous plants was limited. However, the following were noted: poison ivy, mugwort, asters, goldenrods, grasses, sedges, ostrich fern, and Joe pye weeds. Lianas observed were poison ivy and Japanese honeysuckle.

4.4 Seeley Road Bridge over Norwalk River (Bridge No. 04982)

4.4.1 Overview

This bridge is located in the northeastern section of Wilton, just east of the intersection of Seeley Road with Danbury Road (US Route 7) (see Figure 5, Attachment A). The Penn Central railroad lines are less than two hundred feet to the east of the bridge. The site's perennial watercourse, namely the Norwalk River, is classified as a *riverine, unknown perennial, unconsolidated bottom, permanently flooded* resource (R5UBH), per the National Wetlands Inventory (NWI) classification system (see Figure C5, Attachment A). According to USGS StreamStats report (see Attachment D), the river's watershed at the subject bridge is approximately 15.2 square miles (i.e., 9,728 acres). The in-stream habitat at the site is characterized by a low-gradient channel (i.e., riffle/run). The river substrate is dominated by boulders, cobbles, sand, and silt, consistent with the wetland type soils observed within the study area. The CT DEEP conducted a finfish and macroinvertebrate bioassessments in the 2000s, and more recently in 2007, upriver of the subject site. Generally, the fishery is moderately robust, includes mostly warm-water fish species, including American eel, blacknose dace, cutlips minnow, fathead minnow, and white sucker.

The benthic bioassessment in 2013, upriver of the site, indicated a robust aquatic insect community with a few genera at least moderately intolerant of pollution, but mostly with somewhat tolerant ones. This is consistent with the assumed water quality classification of this surface waterbody (i.e., Class B), and moderate percentage of urbanization and low impervious surfaces within its watershed, that is, 25.7 percent and 6.3 percent, respectively (see Attachment D).



4.4.2 Wetland Communities

The wetland vegetated cover types associated with the riparian corridor are dominated by wooded swamp to the southeast and northwest of the bridge, classified as *palustrine, forested, broad-leaved deciduous, seasonally flooded seasonally saturated* (PFO1E) per NWI (see Photos C1 to C5, Attachment B). To the northeast the delineated wetland boundary is almost coincident with the steep river bank at this location, which includes some formal native landscaping by the property owner of the residence immediately to the east, which the while to the southwest, at least which 100 feet or so of the bridge the wetland boundaries (i.e., State and Federal) are associated with a steep bank. We should note that an intermittent watercourse flows to the river at the northwestern quadrat, and includes some roadway drainage. The dominant wetland-type soils associated with this riparian corridor belong to the poorly drained Rippowam (103) fine sandy loam soil series.

Dominant or common overstory vegetation within the wooded swamp sections or at the edge of the river itself, included red maple, cottonwood, American sycamore, sugar maple, gray birch, sassafras, American elm, and black birch. The woody understory included such species as firebush, privet, Japanese barberry, spicebush, shadblow (planted), and spiraeas (planted). Due to the winter season, the inventory of herbaceous plants was limited. However, the following were noted: poison ivy, asters, goldenrods, grasses, garlic mustard, Christmas fern, sensitive fern, and stout wood reedgrass. Lianas observed were poison ivy and Virginia creeper.

4.5 Middlebrook Farm Road Bridge over Comstock Brook (Bridge No. 04980)

4.5.1 Overview

This bridge is located in the central section of Wilton, northwest of Town Center (see Figure 1, Attachment A). Middlebrook Lane, serving a residential subdivision is located just north of the subject bridge. The study area is completely within land set aside as open space.

The site's perennial watercourse, namely Comstock Brook, a tributary of the Norwalk River, is classified as a *riverine, unknown perennial, unconsolidated bottom, permanently flooded* resource (R5UBH), per the National Wetlands Inventory (NWI) classification system (see Figure C5, Attachment A). According to USGS StreamStats report (see Attachment D), the river's watershed at the subject bridge is approximately 6.68 square miles (i.e., 4,275 acres). The in-stream habitat at the site is characterized by a low- to moderate gradient channel, mostly riffle habitat. The stream substrate is dominated by boulders, cobbles, sand, and some silt, consistent with the wetland type soils observed within the study area. The CT DEEP conducted a finfish and macroinvertebrate bioassessments both upstream and downstream of the subject site. The



downstream station included stocked brown trout (2006), while the upstream included wild brown trout (2014). Generally, the fishery is moderately robust, and also includes mostly warm-water fish species, including American eel, blacknose dace, cutlips minnow, creek chub, and white sucker.

The benthic bioassessment in 2013, upstream of the site, indicated a robust aquatic insect community with a few genera at least moderately intolerant of pollution, including stoneflies, but mostly with somewhat tolerant ones. This is consistent with the assumed water quality classification of this surface waterbody (i.e., Class A), and a relatively low percentage of urbanization and low impervious surfaces within its watershed, that is, 12.7 percent and 1.85 percent, respectively (see Attachment D).

4.5.2 Wetland Communities

The wetland vegetated cover types associated with the riparian corridor include wooded swamp to the southeast of the bridge, but just outside of the study area, classified as *palustrine, forested, broad-leaved deciduous, seasonally flooded/seasonally saturated* (PFO1E) per NWI (see Photos D1 to D4, Attachment B). Generally, the vegetated wetland communities are a narrow fringe along the stream channel, to the northwest and west of the bridge (upstream), as well as to the southeast (downstream). To the east regulated wetlands extend into a maintained moist meadow, dominated by soils derived from alluvial deposits, namely the moderately well drained Pootatuck (102) fine sandy loam soil series.

Dominant or common overstory vegetation within the delineated wetland fringe, the moist meadow, or at the edge of the brook itself, included red maple, green ash, ironwood, sugar maple, gray birch, flowering dogwood, red oak, and shagbark hickory. The woody understory included such species as firebush, Morrow's honeysuckle, multiflora rose, Japanese barberry, privet, silky dogwood, European viburnum, elderberry, and blackberry. Due to the winter season, the inventory of herbaceous plants was limited. However, the following were noted: poison ivy, asters, goldenrods, grasses, sedges, mugwort, sensitive fern, and purple willowherbs. Lianas observed were poison ivy, Asiatic bittersweet, Japanese honeysuckle, and fox grape.

4.6 Old Mill Road Bridge over Norwalk River (Bridge No. 04985)

4.6.1 Overview

This bridge is located in the northeastern section of Wilton (see Figure 2, Attachment A), immediately to the east of the intersection of Old Mill Road and Danbury Road (i.e., US Route 7). The study area is completely within land set aside as open space, namely the Norwalk River Park.



The site's perennial watercourse, namely the Norwalk River, is classified as a *riverine, unknown perennial, unconsolidated bottom, permanently flooded* resource (R5UBH), per the National Wetlands Inventory (NWI) classification system (see Figure C2, Attachment A). According to USGS StreamStats report (see Attachment D), the river's watershed at the subject bridge is approximately 14.4 square miles (i.e., 9,216 acres). The in-stream habitat at the site is characterized by a moderate gradient channel, predominately riffle habitat. The stream substrate is dominated by boulders, cobbles, sand, and some silt, consistent with the wetland type soils observed within the study area. The CT DEEP conducted a finfish and macroinvertebrate bioassessments at this river site in 2007 and 2013, respectively. Generally, the fishery is moderately robust, and also includes American eel, blacknose dace, cutlips minnow, fathead minnow, and white sucker, and rainbow trout (stocked).

The benthic bioassessment in 2013, upstream of the site, indicated a robust aquatic insect community with some genera that are moderately intolerant of pollution. This is consistent with the assumed water quality classification of this surface waterbody (i.e., Class B), and a moderate percentage of urbanization and low-moderate impervious surfaces within its watershed, that is, 25.9 percent and 6.34 percent, respectively (see Attachment D).

4.6.2 Wetland Communities

The wetland vegetated cover types associated with the riparian corridor include wooded swamp to the northeast and northwest of the bridge, classified as *palustrine, forested, broad-leaved deciduous, seasonally flooded/seasonally saturated* (PFO1E) per NWI (see Photos E1 to E6, Attachment B). To the south of the bridge (downriver), the vegetative communities include a narrow riverbank fringe to the west, which transitions into a wet, man-made drainage ditch receiving roadway runoff, and a riverbank wooded fringe and mowed athletic fields to the east. Generally, the vegetated wetland communities are a narrow fringe along the stream channel, to the Wetland type soils associated with the study area are dominated by soils derived from alluvial deposits, and include the poorly drained Rippowam (103) fine sandy loam, specifically to the northeast of the bridge, and the moderately well drained Pootatuck (102) fine sandy loams, to the southeast of the bridge.

Dominant or common overstory vegetation within the delineated wetland fringe and wooded swamps, included red maple, sugar maple, American sycamore, black birch, American elm, gray birch, and shagbark and bitternut hickories. The woody understory included such species as firebush, Morrow's honeysuckle, multiflora rose, privet, Japanese knotweed, and spicebush. Due to the winter season, the inventory of herbaceous plants was limited. However, the following were noted: poison ivy, asters, goldenrods, grasses, sedges, and garlic mustard. Lianas observed were poison ivy, Asiatic bittersweet, and fox grape.



5.0 WETLAND-WATERCOURSE FUNCTIONS AND VALUES

Wetland/watercourse functions and values² were assessed, using the rationales of a standardized evaluation methods (e.g., US Army Corps of Engineers' *Descriptive Approach* (1995)), and best professional judgment. Wetland and upland baseline data provide the basis for the assessment, and includes "off-site" contiguous wetland habitat which was also inventoried, in part, for this assessment.

The wetland assessment unit includes contiguous wetland and watercourse habitat both upstream and downstream of the each of the five study areas. The extent of the assessment units were also determined using State GIS data (i.e., CTECO), as well as the National Wetlands Inventory (NWI) and the USDA-NRCS Web Soil Survey. For the most part, the assessment of the wetland/watercourse functions and values was greatly influenced by the presence of a perennial watercourse at each of the sites, but also by other factors, such as the ecological integrity of the resources, the presence and extent of disturbance, the diversity of wetland classes and subclasses, the diversity of hydrophytic vegetation, the presence and extent of invasive plant species, interspersed water and vegetative cover types, and more.

Table 1: Summary of Wetland Function-Value Assessment

Function/Value	Stonebridge Road Bridge	Old Ridgefield Road Bridge	Seeley Road Bridge	Middlebrook Farm Road Bridge	Old Mill Road Bridge
1. Groundwater Recharge/ Discharge	Y	N	Y	N	Y
2. Floodflow Alteration	P	Y	Y	Y	P
3. Fish and Shellfish Habitat	P	P	P	P	P
4. Sediment/Toxicant/ Pathogen Retention	Y	N	Y	Y	Y
5. Nutrient Removal/Retention/Transformation	Y	N	Y	Y	Y
6. Production Export	P	Y	Y	Y	Y
7. Sediment/Shoreline Stabilization	Y	Y	Y	Y	Y
8. Wildlife Habitat	P	Y	P	Y	Y
9. Recreation (Passive, Active)	P	P	Y	P	P
10. Educational/Scientific Value	Y	Y	Y	Y	Y
11. Uniqueness/Heritage	Y	N	N	N	N
12 Visual Quality/Aesthetics	P	Y	Y	Y	Y
13. Endangered (Listed) Species Habitat	N	N	N	N	N
14. Fish & Shellfish habitat (Marine)	n/a	n/a	n/a	n/a	n/a

Notes: P = Principal function; Y = function present; N = function not appreciably present

² Functions are those provided by a given wetland/watercourse that are intrinsic to the resource. That is, they would present regardless of society (e.g. wildlife habitat, nutrient removal/transformation). Values are those services that society benefits from (e.g., floodflow alteration, recreation, educational/scientific value. Some "functions" also benefit society, such as sediment/toxicant/pathogen retention.

Mr. Keegan O. Elder, P.E.

RE: Wetlands Report – Five Preservation Rehabilitation Bridges, Wilton, Ct

July 29, 2022

Page 13



Please feel free to contact us with any questions on the above.

Respectfully submitted,

REMA ECOLOGICAL SERVICES, LLC

A handwritten signature in black ink, reading "George T. Logan". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

George T. Logan, MS, PWS, CSE

Registered Soil Scientist/Professional Wetland Scientist

Certified Senior Ecologist

Attachments: A: Figures
 B: Annotated photographs
 C: USDA-NRCS Web Soil Surveys
 D: USGS StreamStats reports

Attachment A

Figures
for Five Bridges Study Areas
(1 through 5f)

FIGURE 1: SITE LOCUS
Middlebrook Farm Road Bridge
over Comstock Brook, Wilton, CT

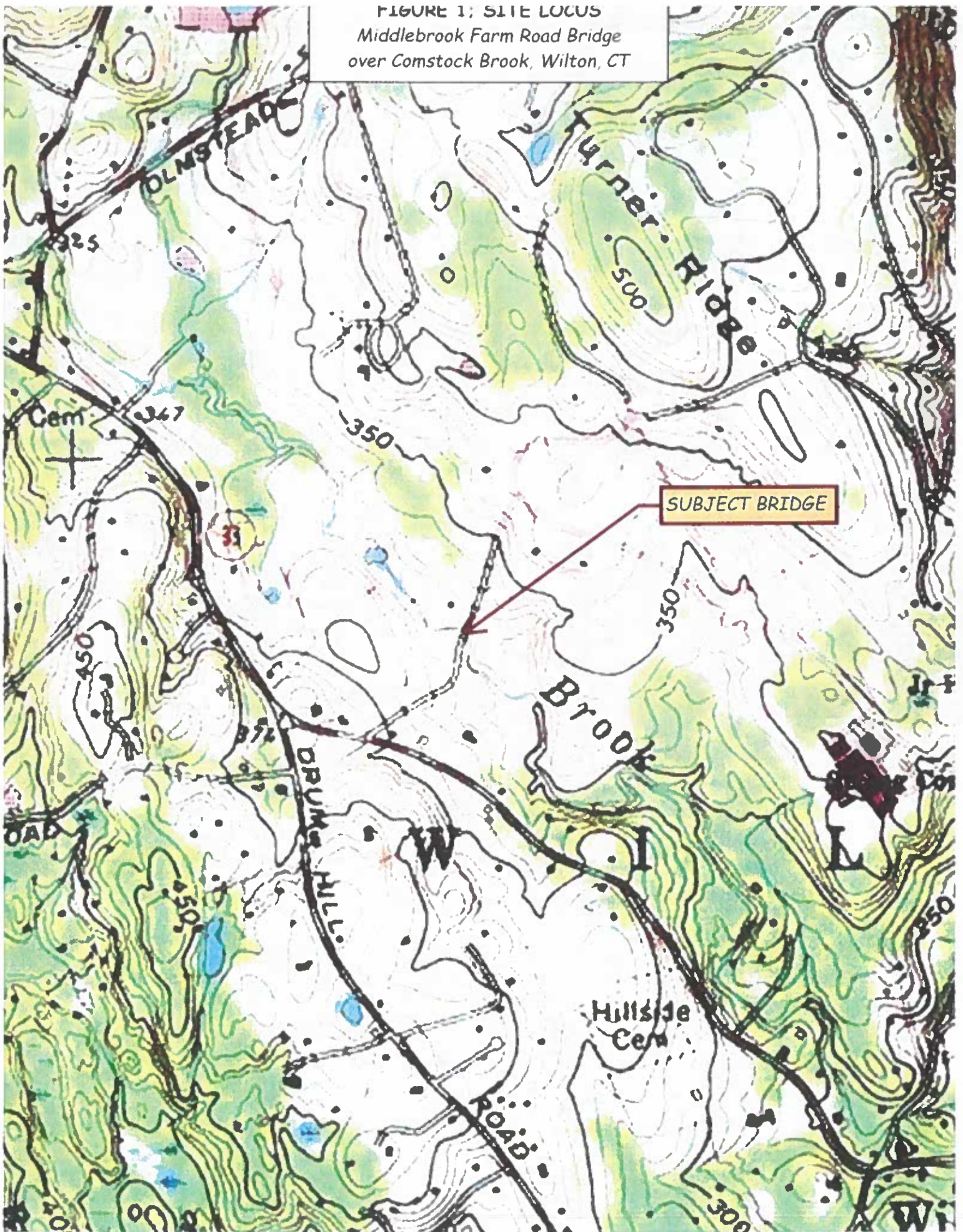


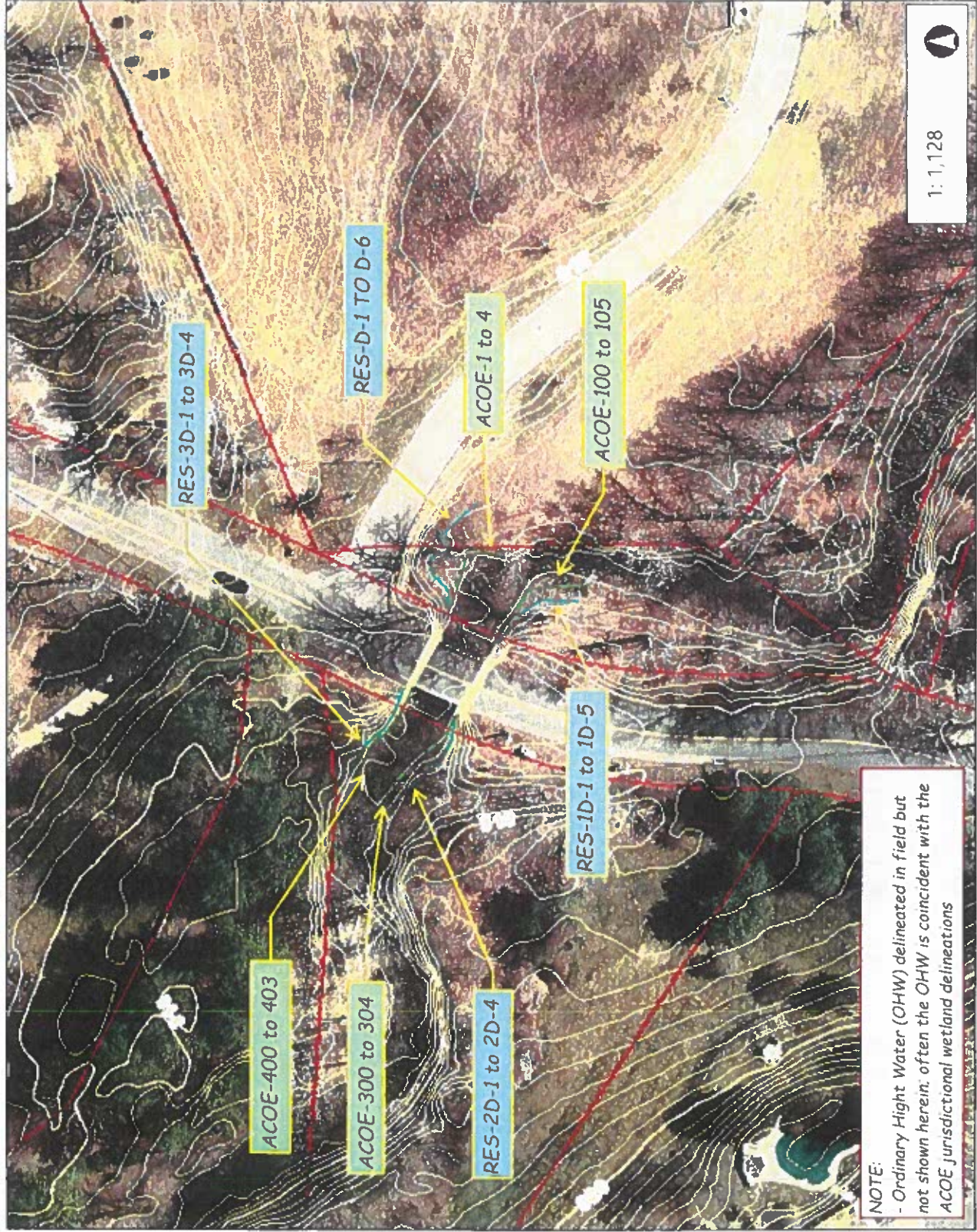
FIGURE A1:

WETLAND DELINEATIONS STUDY AREA

Middlebrook Farm Road Bridge over Comstock Brook
(Bridge N. 04980), Wilton, CT
(as seen on a 4/22/2018 aerial photograph)



FIGURE B1: WETLAND DELINEATIONS SKETCH MAP
Middlebrook Farm Road Bridge over Comstock Brook, Wilton, CT



NOTE:
- Ordinary High Water (OHW) delineated in field but not shown herein; often the OHW is coincident with the ACOE jurisdictional wetland delineations

0.0 0.02 0.0 Miles

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Connecticut Environmental Conditions Online

1: 1,128



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Notes

Legend

- Parcels for Protected Open Sp
- Light Gray Canvas Base



U.S. Fish and Wildlife Service

National Wetlands Inventory

Middlebrook Farm Road Bridge, Wilton, CT

FIGURE C1



January 31, 2022

Wetlands

- | | | | |
|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Lake |
|  | Estuarine and Marine Wetland |  | Other |
| | |  | Riverine |
|  | Freshwater Emergent Wetland | | |
|  | Freshwater Forested/Shrub Wetland | | |
|  | Freshwater Pond | | |

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FIGURE 2: SITE LOCUS
Old Mill Road Bridge
over Norwalk River, Wilton, CT



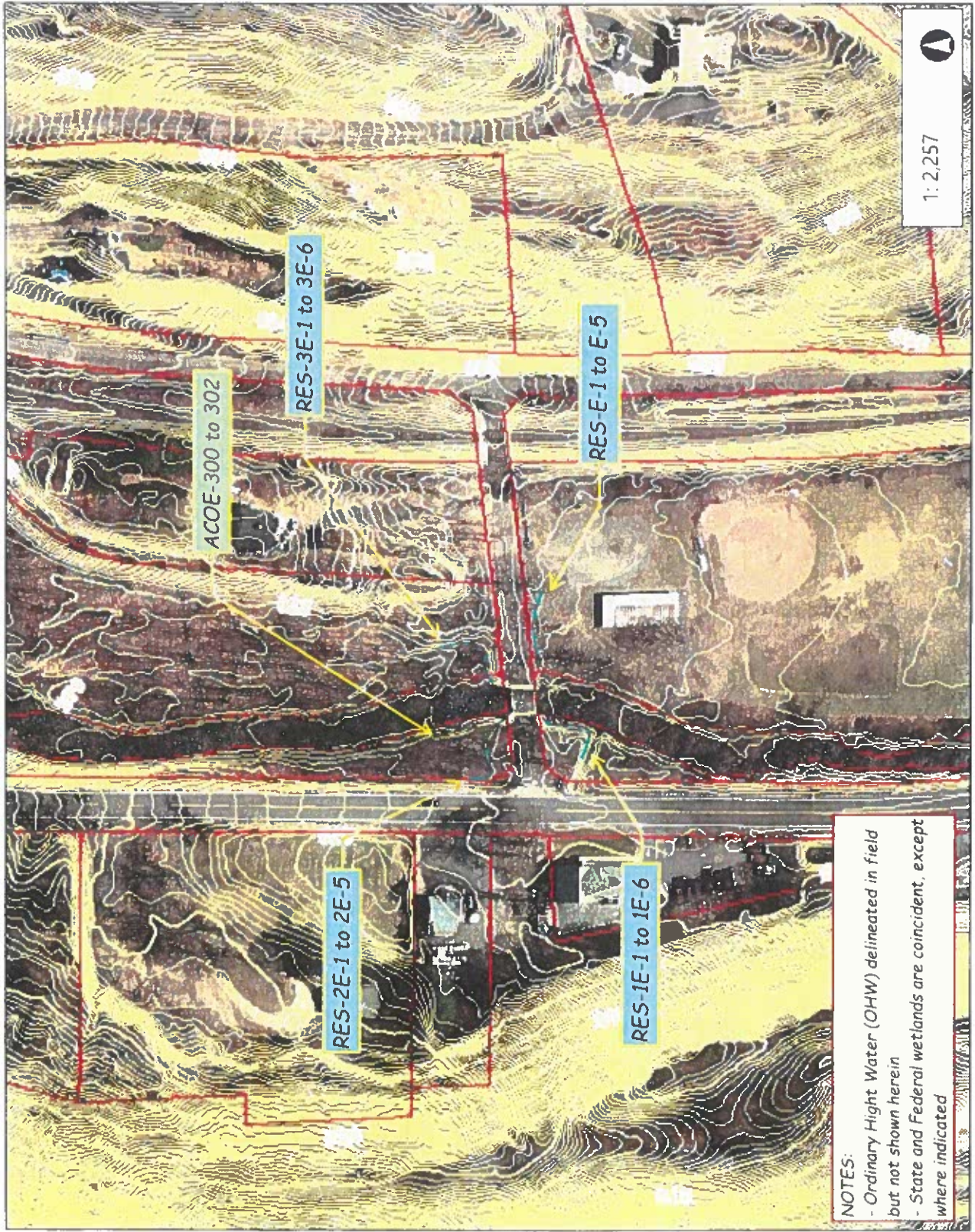
FIGURE A2:

WETLAND DELINEATIONS STUDY AREA
Old Mill Road Bridge over Norwalk River
(Bridge N. 04985), Wilton, CT
(as seen on a 4/22/2018 aerial photograph)





FIGURE B2: WETLAND DELINEATIONS SKETCH MAP
Old Mill Road Bridge over Norwalk River, Wilton, CT



NOTES:

- Ordinary High Water (OHW) delineated in field but not shown herein
- State and Federal wetlands are coincident, except where indicated

0.1

0

0.04

0.1 Miles

1: 2,257



Notes

Legend



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U.S. Fish and Wildlife Service

National Wetlands Inventory

Old Mill Road Bridge, Wilton, CT



January 31, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

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FIGURE 3: SITE LOCUS
Old Ridgefield Road Bridge
over Norwalk River, Wilton, CT

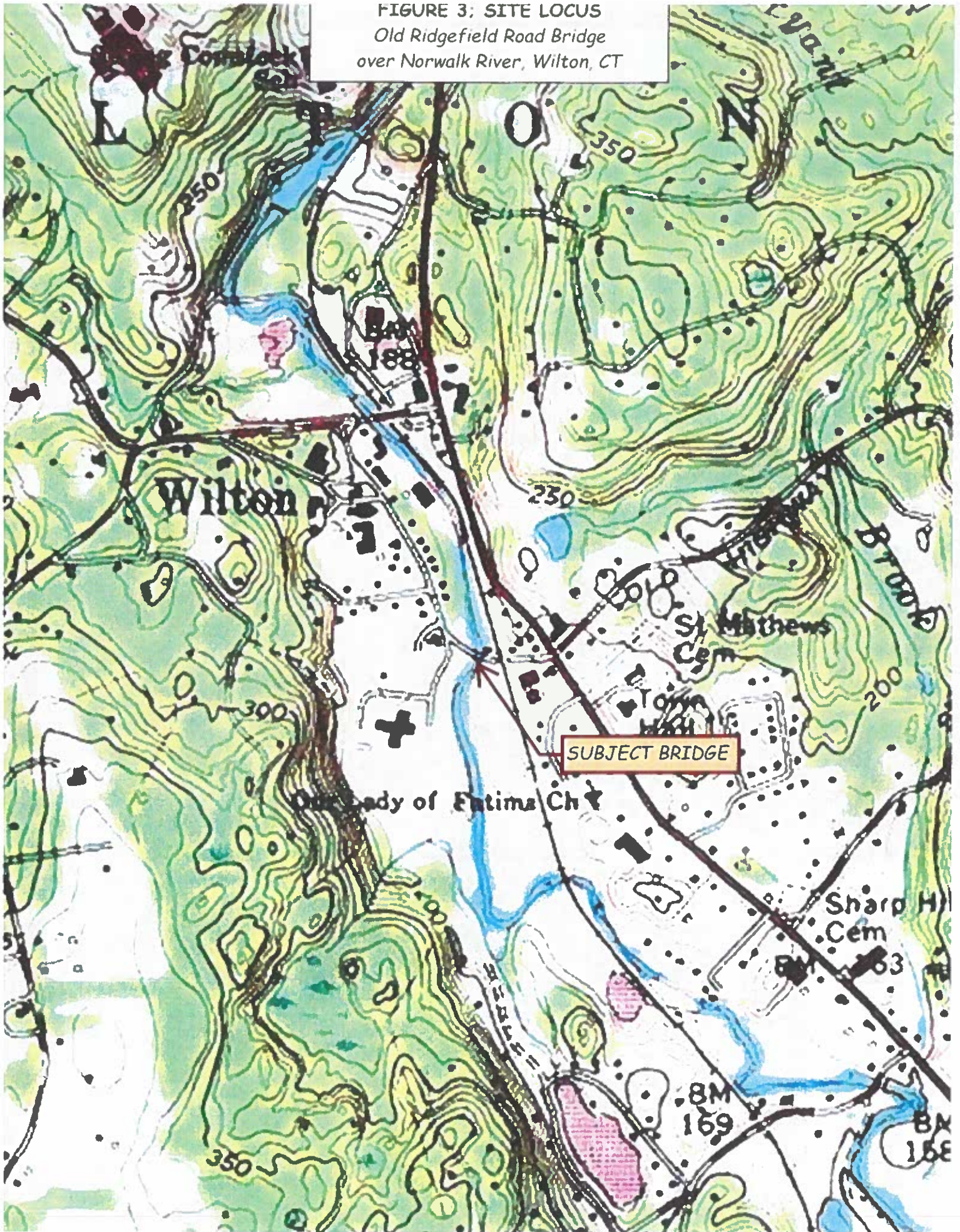
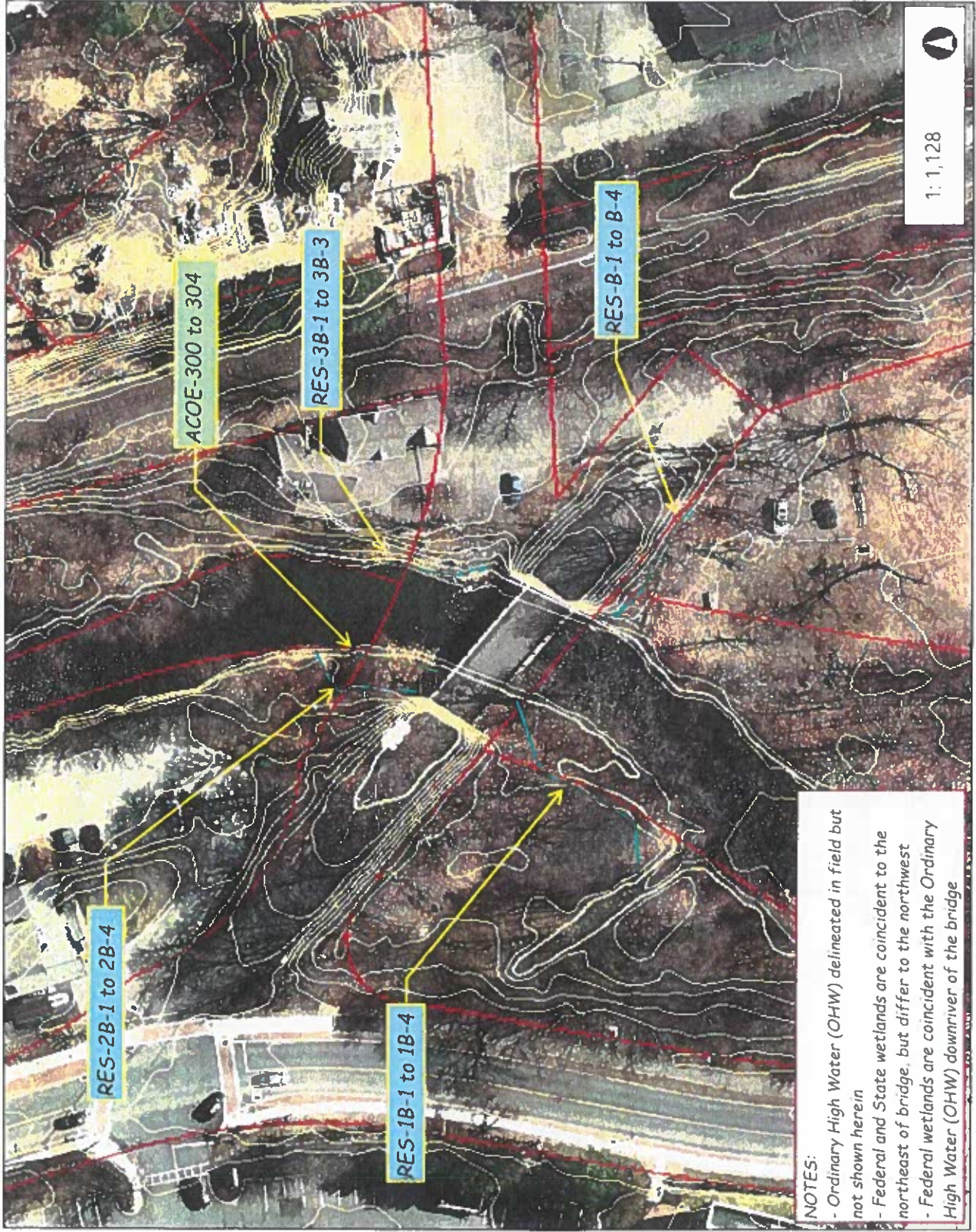


FIGURE A3:

WETLAND DELINEATIONS STUDY AREA

Old Ridgefield Road Bridge over Norwalk River
(Bridge N. 04978), Wilton, CT
(as seen on a 4/22/2018 aerial photograph)





NOTES:

- Ordinary High Water (OHW) delineated in field but not shown herein
- Federal and State wetlands are coincident to the northeast of bridge, but differ to the northwest
- Federal wetlands are coincident with the Ordinary High Water (OHW) downriver of the bridge

0.0 0.02 0.0 Miles

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1:1,128



Notes

Legend

- Parcels for Protected Open Sp
- Light Gray Canvas Base



U.S. Fish and Wildlife Service

National Wetlands Inventory

Old Ridgefield Road Bridge, Wilton, CT



FIGURE 5: SITE LOCUS
Seeley Road Bridge
over Norwalk River, Wilton, CT

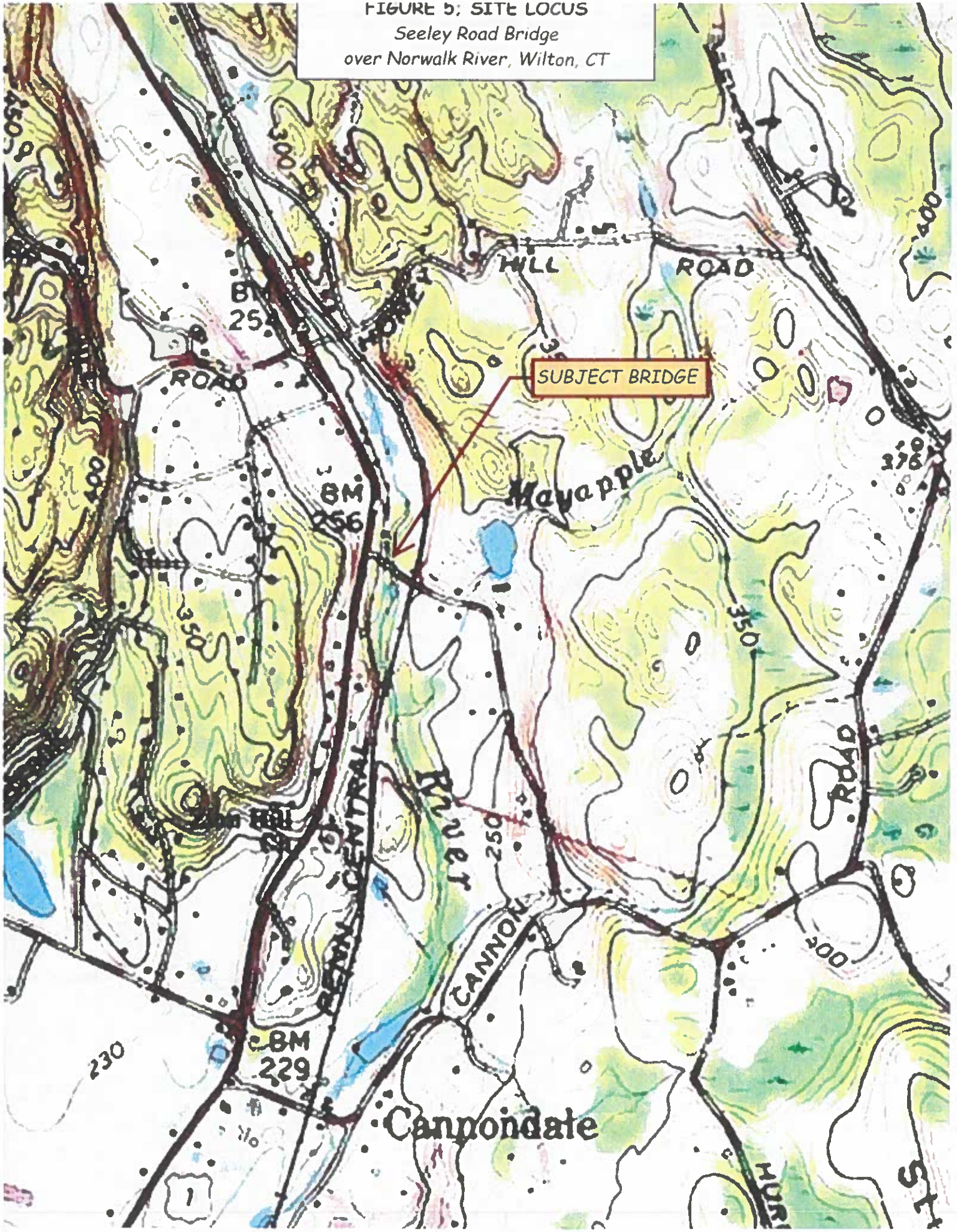
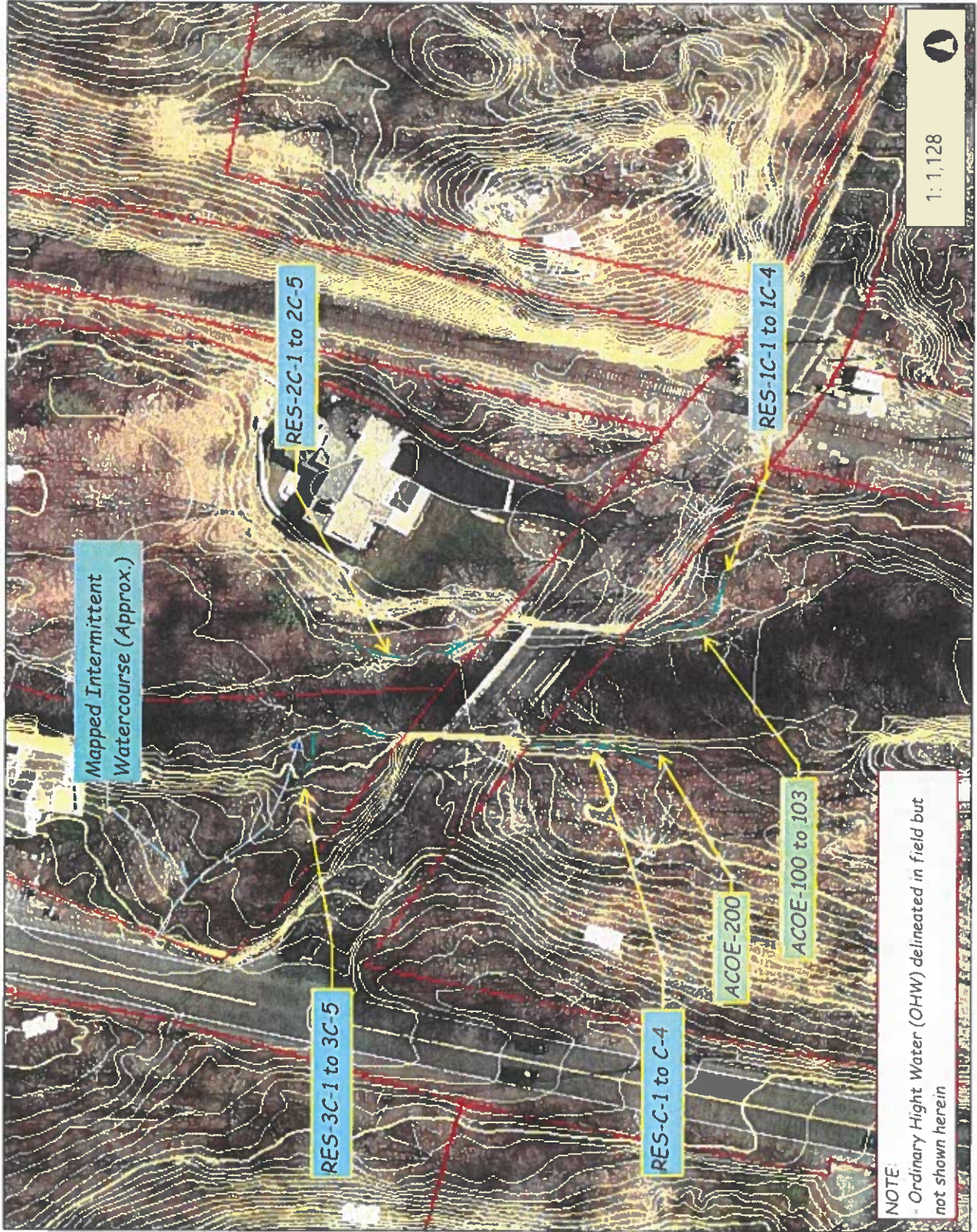


FIGURE A5:

WETLAND DELINEATIONS STUDY AREA
Seeley Road Bridge over Norwalk River
(Bridge N. 04982), Wilton, CT
(as seen on a 4/22/2018 aerial photograph)





NOTE:
- Ordinary High Water (OHW) delineated in field but not shown herein

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1:1,128

Legend
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Notes



U.S. Fish and Wildlife Service

National Wetlands Inventory

Seeley Road Bridge, Wilton, CT

FIGURE C5



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January 31, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

FIGURE 4; SITE LOCUS
Stonebridge Road Bridge over
W. Branch Saugatuck River, Wilton, CT

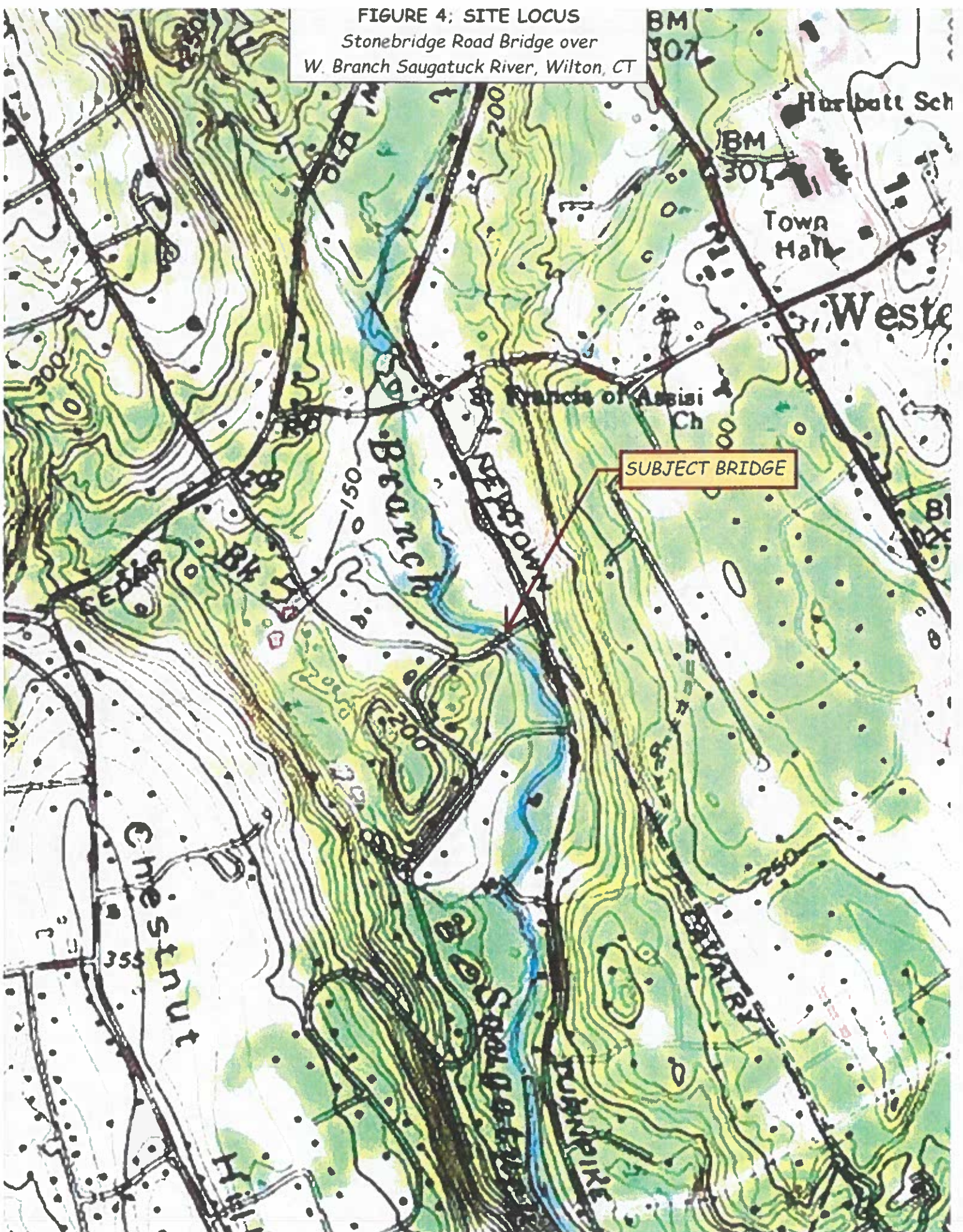


FIGURE A4:

WETLAND DELINEATIONS (STATE/FEDERAL) STUDY AREA

Stonebridge Road Bridge over W. Branch Saugatuck River
(Bridge N. 04355), Wilton, CT
(as seen on a 4/22/2018 aerial photograph)

Stonebridge Waterfowl Preserve

Stonebridge Rd

Newtown Turnpike

Rivergate Rd

Google Earth

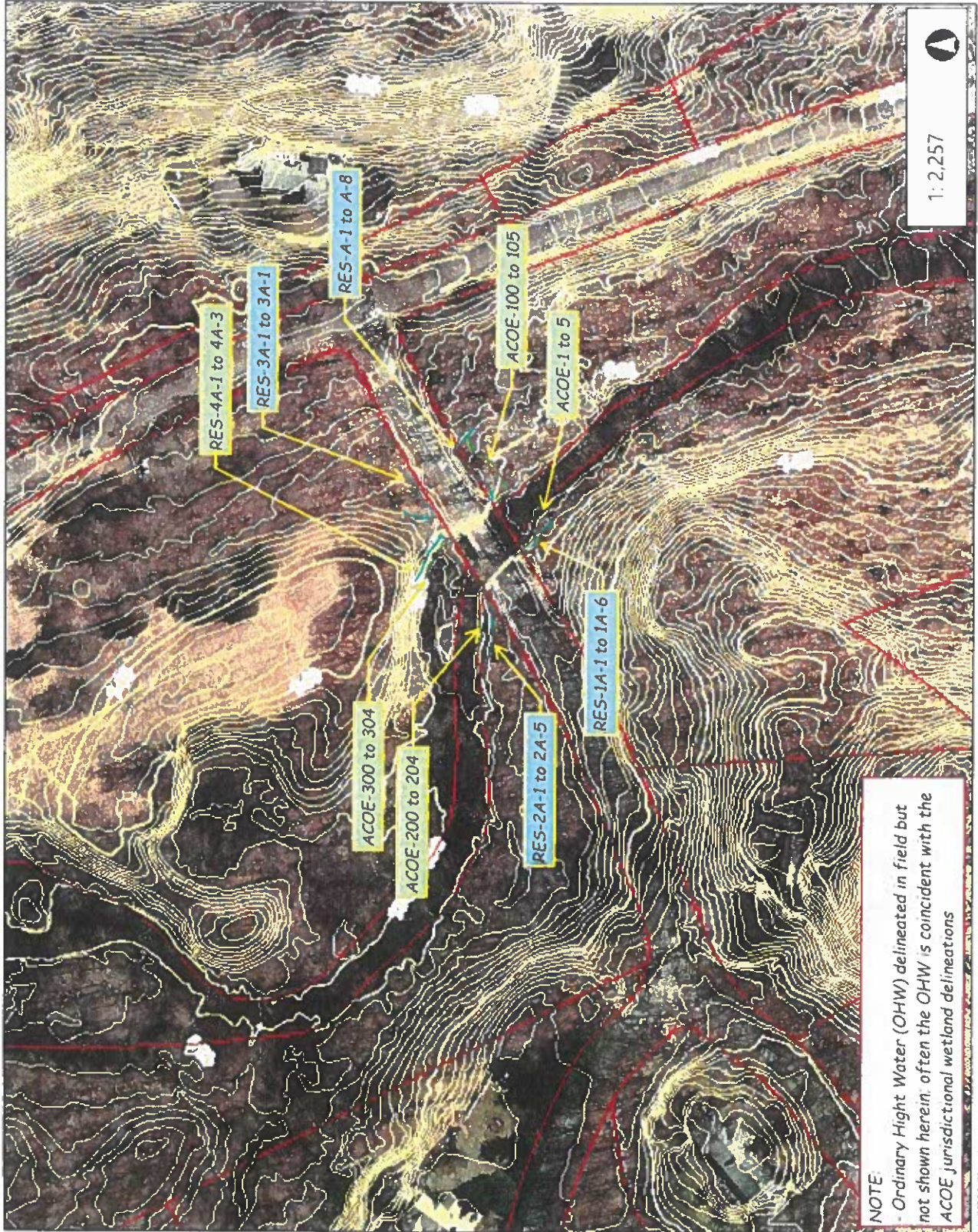
500 ft

N





FIGURE B4: WETLAND DELINEATIONS SKETCH MAP
Stoneridge Road Bridge over W. Branch Saugatuck River, Wilton, CT



NOTE:

- Ordinary High Water (OHW) delineated in field but not shown herein; often the OHW is coincident with the ACOE jurisdictional wetland delineations



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1:2,257



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Notes

Legend

- ☐ Parcels for Protected Open Sp
- ☐ Light Gray Canvas Base



U.S. Fish and Wildlife Service

National Wetlands Inventory

Stonebridge Road Bridge, Wilton, CT

FIGURE C4



January 31, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Attachment A

Figures for Five Bridges Study Areas (1 through 5f)



Photo A1: Bridge structure, downriver view, facing northeasterly

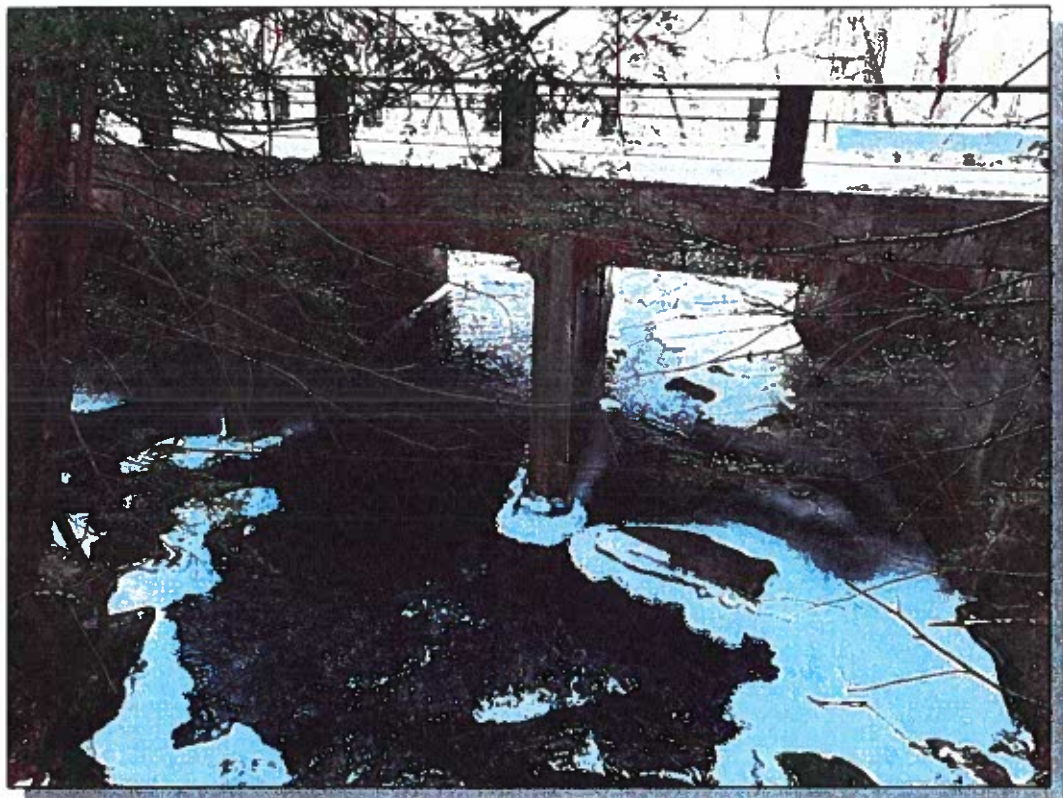


Photo A2: Bridge structure, upriver view from pedestrian bridge, facing southerly



Photo A3: Downriver view from bridge, facing southerly



Photo A4: Upriver view from pedestrian bridge, facing northwesterly



Photo A5: Wooded swamp/wetland, upriver of bridge, facing southeasterly



Photo A6: Wooded swamp, downriver; facing southwesterly



Photo B1: Bridge structure, downriver view, facing northwesterly



Photo B2: Bridge structure, downriver view, with wooded wetland fringe, facing northeasterly

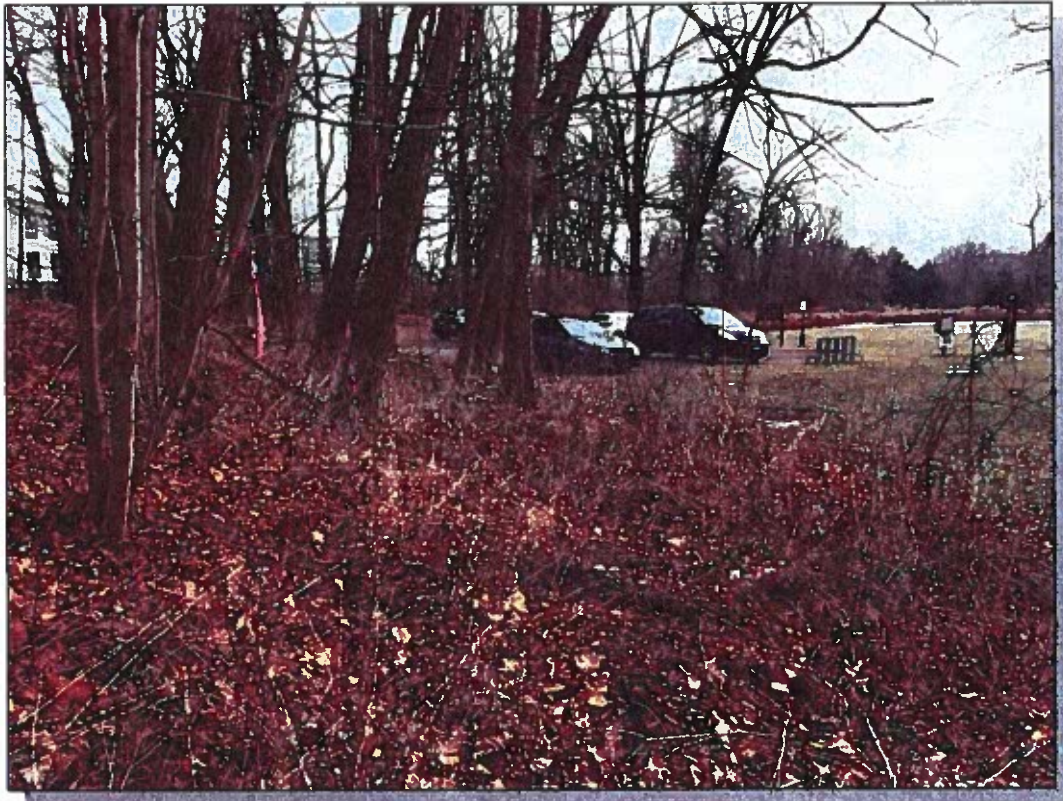


Photo B3: Park within the active floodplain of the Norwalk River; facing southerly



Photo B4: East bank of river, downriver; facing northerly

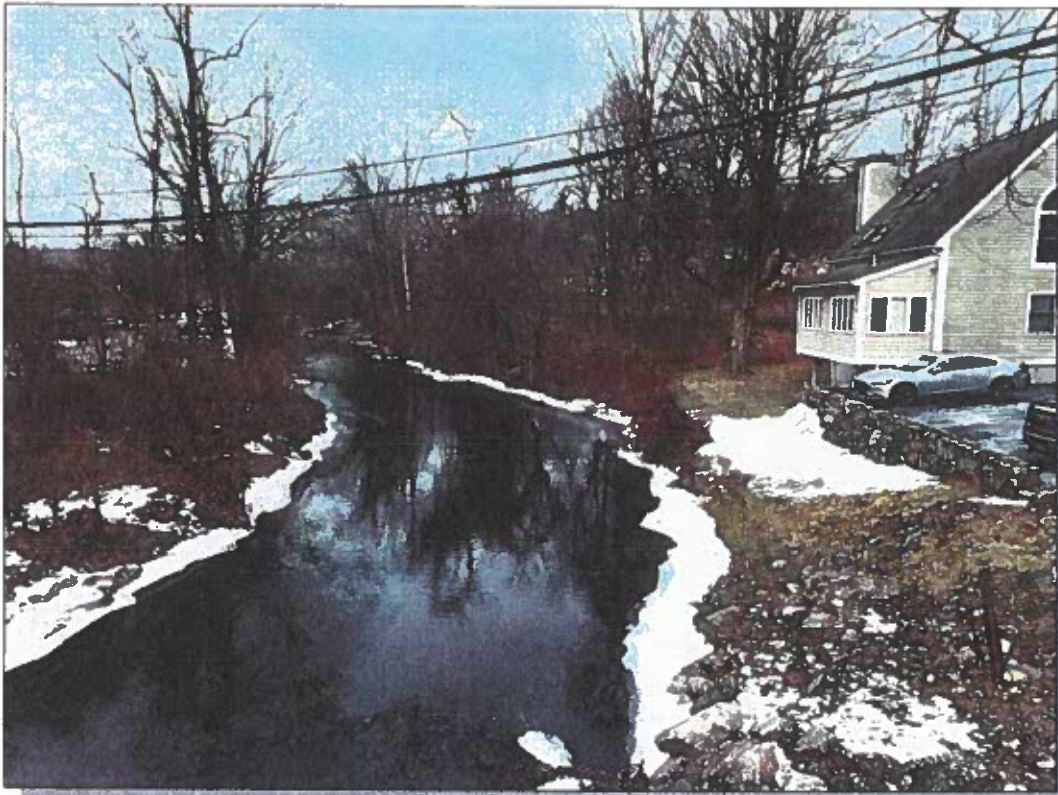


Photo B5: Norwalk River, upstream of bridge, facing northerly



Photo C1: Bridge structure, upriver view, facing southwesterly



Photo C2: Downriver view from bridge, with wooded wetland fringe; facing southerly

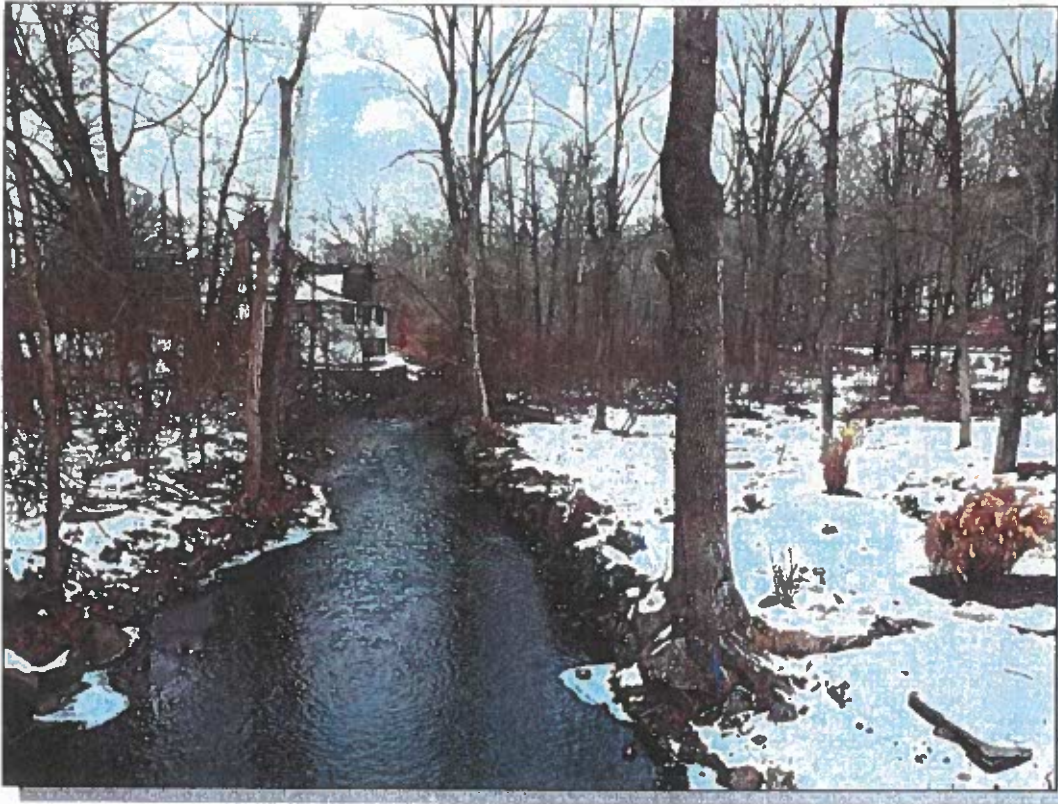


Photo C3: Upriver view from bridge, facing northerly



Photo C4: Downriver view of wooded wetland fringe, facing southeasterly



Photo C5: Intermittent watercourse; northwest quadrant of study area; facing northwesterly



Photo D1: Bridge structure, downstream view, facing northwesterly



Photo D2: Upstream view from bridge, with wooded wetland fringe, facing southeasterly



Photo D3: Comstock Brook downstream of bridge, facing southerly



Photo D4: Upstream view of Comstock Brook, with wooded wetland fringe; facing westerly



Photo E1: Bridge structure, downriver view, facing northeasterly

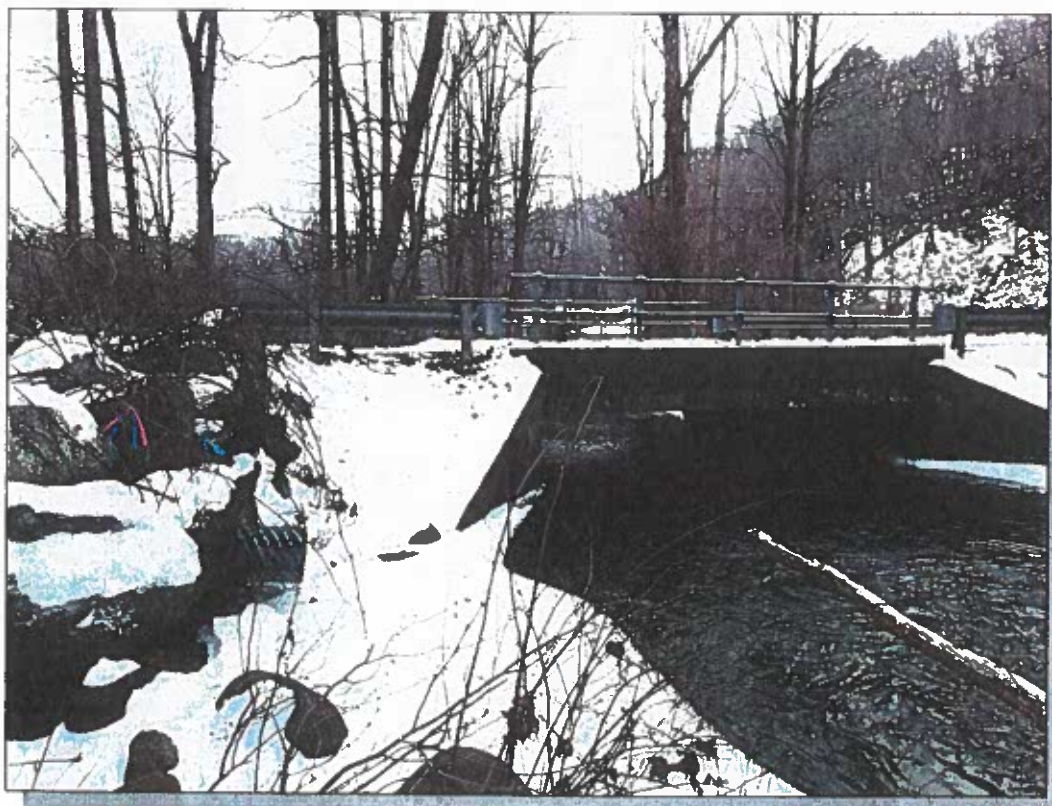


Photo E2: Bridge structure, upriver view, facing southwesterly



Photo E3: Drainage ditch, southwesterly quadrat of study area, facing westelry



Photo E4: Upriver view from bridge; note ice jam dam; facing northerly

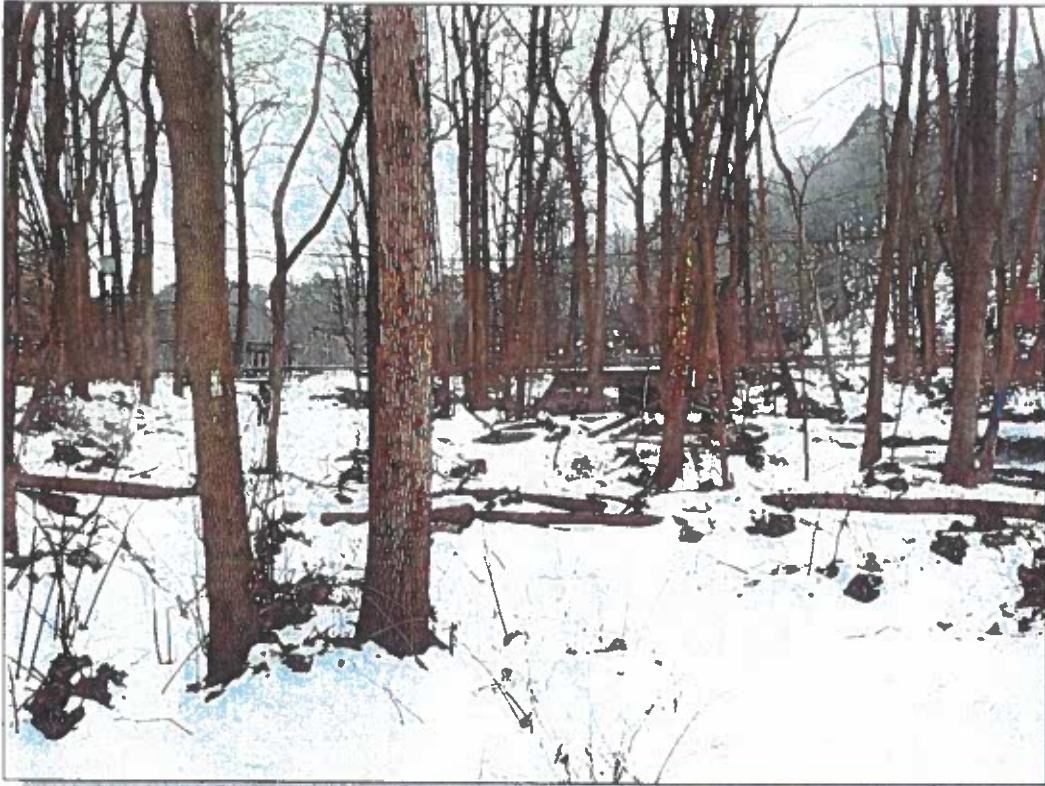


Photo E5: Poorly drained wooded swamp, northeastern quadrat of study area (upriver); not dead green ash trees in foreground; facing southwesterly



Photo E6: Upriver view of wetland fringe, facing northwesterly

Attachment C

USDA-NRCS Soil Surveys for Five Bridges Study Areas

Soil Map—State of Connecticut
(Middlebrook Farm Road Bridge, Wilton, CT)



Map Scale: 1:2,380 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2022
Page 1 of 3

MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Water Features
 Borrow Pit	 Streams and Canals
 Clay Spot	 Transportation
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	 Background
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 21, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

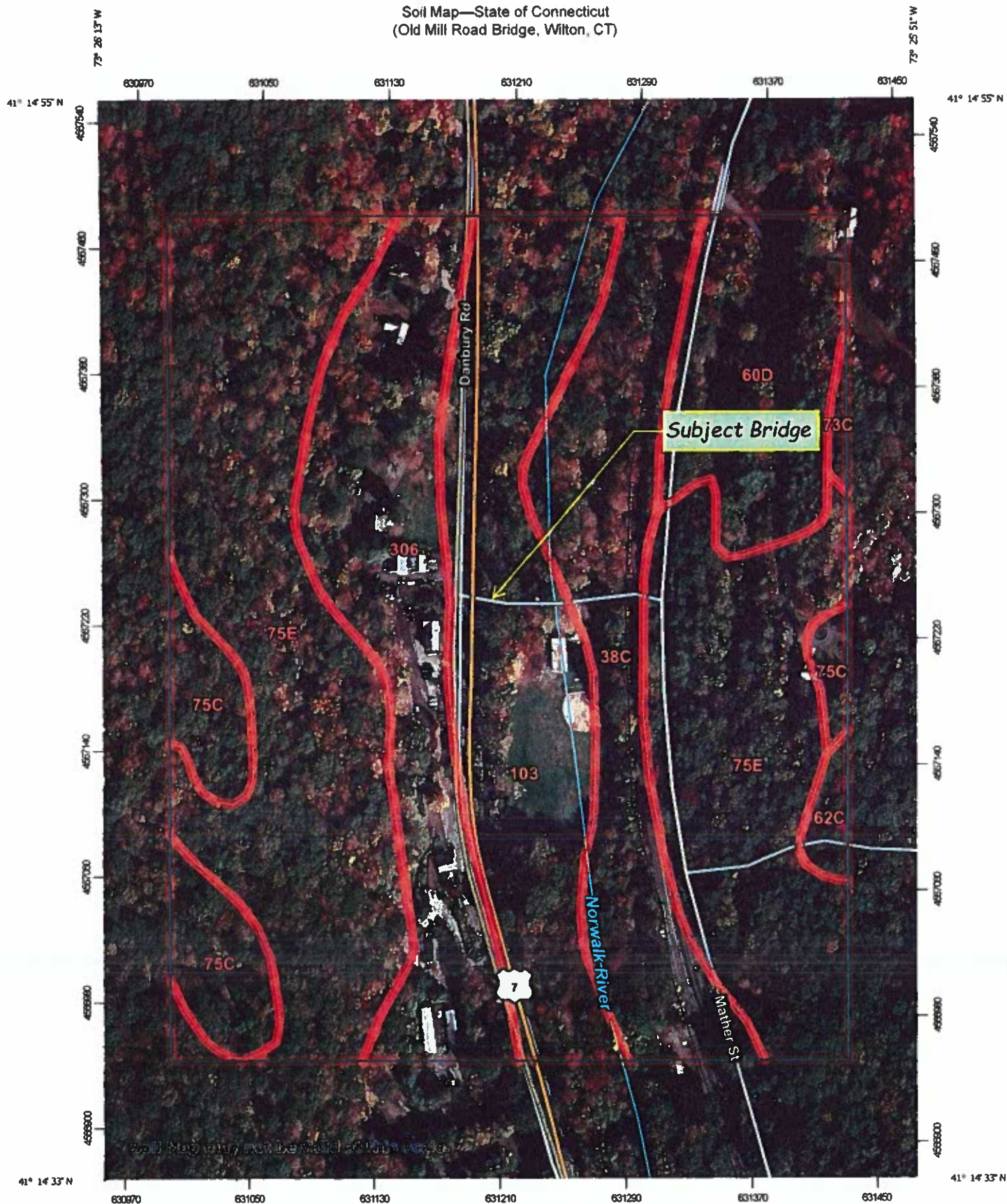
Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ridgebury fine sandy loam, 0 to 3 percent slopes	1.9	6.7%
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	2.7	9.6%
50B	Sutton fine sandy loam, 3 to 8 percent slopes	4.0	14.2%
60B	Canton and Charlton fine sandy loams, 3 to 8 percent slopes	8.1	28.6%
60C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes	4.5	15.9%
102	Pootatuck fine sandy loam	7.1	25.0%
Totals for Area of Interest		28.4	100.0%

Soil Map—State of Connecticut
(Old Mill Road Bridge, Wilton, CT)



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2022
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)		Area of Interest (AOI)		Soils			Soil Map Unit Polygons			Soil Map Unit Lines			Soil Map Unit Points			Special Point Features			Blowout			Borrow Pit			Clay Spot			Closed Depression			Gravel Pit			Gravelly Spot			Landfill			Lava Flow			Marsh or swamp			Mine or Quarry			Miscellaneous Water			Perennial Water			Rock Outcrop			Saline Spot			Sandy Spot			Severely Eroded Spot			Sinkhole			Slide or Slip			Sodic Spot																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <https://websoilsurvey.sc.egov.usda.gov/>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 21, Sep 7, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
38C	Hinckley loamy sand, 3 to 15 percent slopes	7.8	13.5%
60D	Canton and Charlton soils, 15 to 25 percent slopes	5.1	8.8%
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	0.5	0.9%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	0.2	0.4%
75C	Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes	3.3	5.7%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	22.2	38.5%
103	Rippowam fine sandy loam	9.8	17.1%
306	Udorthents-Urban land complex	8.8	15.2%
Totals for Area of Interest		57.6	100.0%

Soil Map—State of Connecticut
(Old Ridgefield Road Bridge, Wilton, CT)



Map Scale: 1:2,310 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2022
Page 1 of 3

MAP LEGEND

	Area of Interest (AOI)		Spoil Area
	Soils		Stony Spot
	Soil Map Unit Polygons		Very Stony Spot
	Soil Map Unit Lines		Wet Spot
	Soil Map Unit Points		Other
	Special Point Features		Special Line Features
	Blowout		Streams and Canals
	Borrow Pit		Rails
	Clay Spot		Interstate Highways
	Closed Depression		US Routes
	Gravel Pit		Major Roads
	Gravelly Spot		Local Roads
	Landfill		Aerial Photography
	Lava Flow		
	Marsh or swamp		
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: State of Connecticut
Survey Area Data: Version 21, Sep 7, 2021

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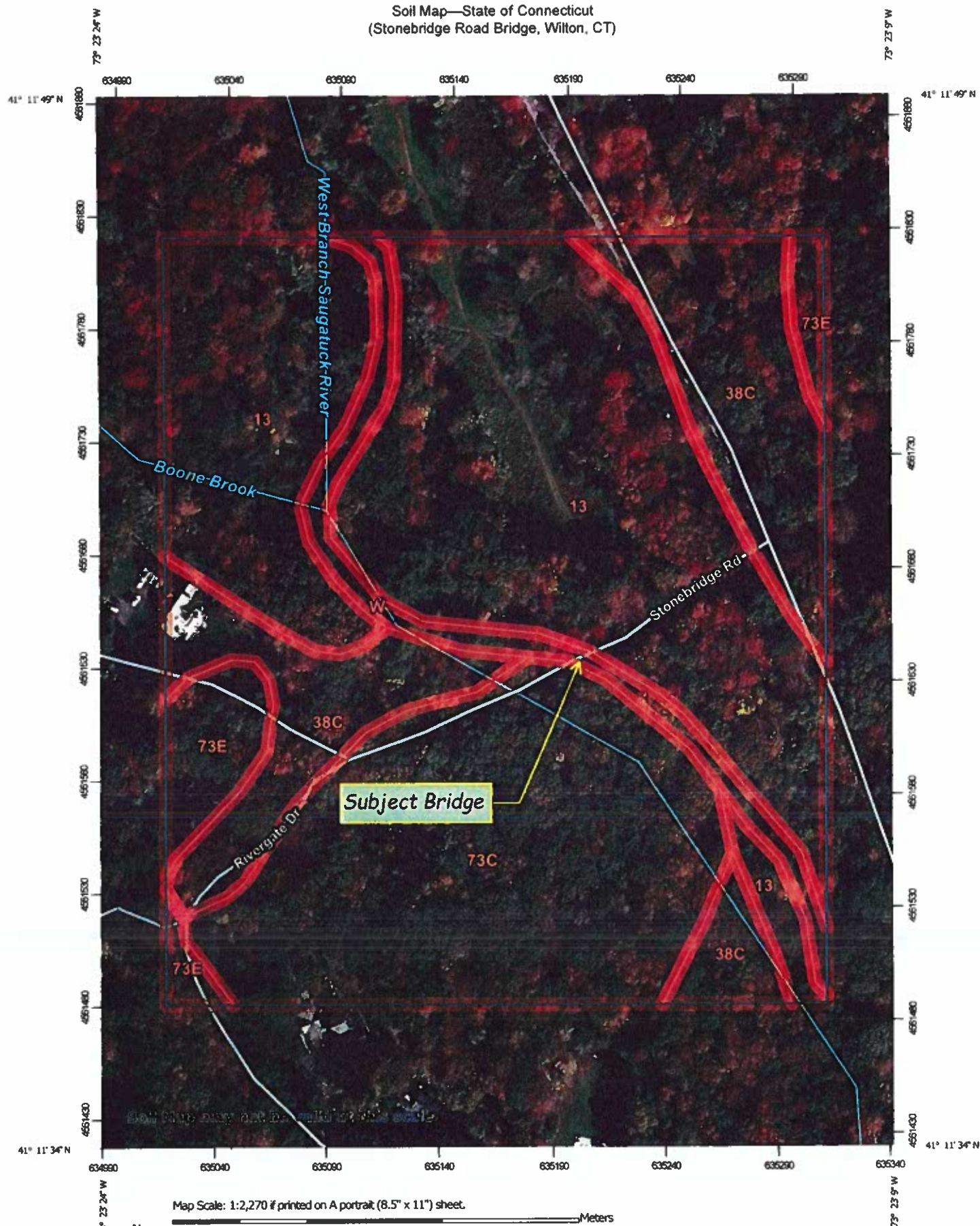
Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	1.2	4.5%
102	Pootatuck fine sandy loam	5.8	22.6%
232B	Haven-Urban land complex, 0 to 8 percent slopes	4.9	19.1%
306	Udorthents-Urban land complex	5.5	21.3%
307	Urban land	3.4	13.2%
701A	Ninigret fine sandy loam, 0 to 3 percent slopes	2.2	8.6%
703B	Haven silt loam, 3 to 8 percent slopes	2.0	7.7%
W	Water	0.8	3.0%
Totals for Area of Interest		25.6	100.0%

Soil Map—State of Connecticut
(Stonebridge Road Bridge, Wilton, CT)



MAP LEGEND

Area of Interest (AOI)	Area of Interest (AOI)	Spoil Area
Soils	Soil Map Unit Polygons	Stony Spot
	Soil Map Unit Lines	Very Stony Spot
	Soil Map Unit Points	Wet Spot
		Other
Special Point Features		Special Line Features
Blowout		
Borrow Pit		Water Features
Clay Spot		Streams and Canals
Closed Depression		Transportation
Gravel Pit		Rails
Gravelly Spot		Interstate Highways
Landfill		US Routes
Lava Flow		Major Roads
Marsh or swamp		Local Roads
Mine or Quarry		Background
Miscellaneous Water		Aerial Photography
Perennial Water		
Rock Outcrop		
Saline Spot		
Sandy Spot		
Severely Eroded Spot		
Sinkhole		
Slide or Slip		
Sodic Spot		

MAP INFORMATION

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Coordinate System: Web Mercator (EPSG:3857)

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Survey Area Data: Version 21, Sep 7, 2021

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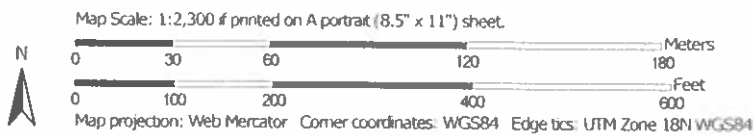
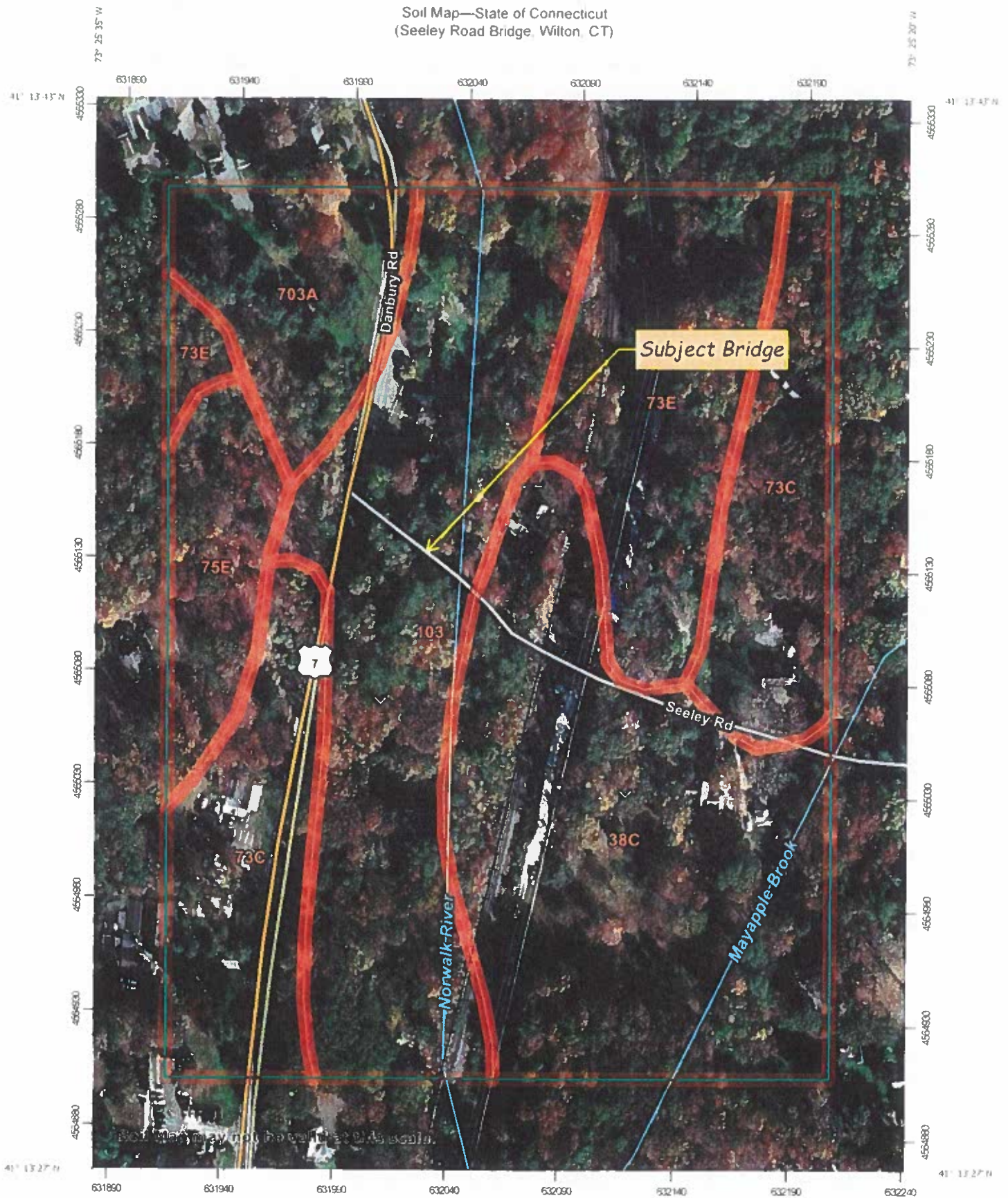
Date(s) aerial images were photographed: Oct 8, 2020—Oct 14, 2020

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
13	Walpole sandy loam, 0 to 3 percent slopes	11.3	45.7%
38C	Hinckley loamy sand, 3 to 15 percent slopes	4.6	18.7%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	6.5	26.5%
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	1.1	4.6%
W	Water	1.1	4.5%
Totals for Area of Interest		24.7	100.0%

Soil Map—State of Connecticut
(Seeley Road Bridge, Wilton, CT)



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

1/27/2022
Page 1 of 3

MAP LEGEND

 Area of Interest (AOI)	 Area of Interest (AOI)	 Spoil Area
 Soils	 Soil Map Unit Polygons	 Stony Spot
 Soil Map Unit Lines	 Soil Map Unit Lines	 Very Stony Spot
 Soil Map Unit Points	 Soil Map Unit Points	 Wet Spot
 Special Point Features	 Special Point Features	 Other
 Blowout	 Blowout	 Special Line Features
 Borrow Pit	 Borrow Pit	 Streams and Canals
 Clay Spot	 Clay Spot	 Transportation
 Closed Depression	 Closed Depression	 Ralls
 Gravel Pit	 Gravel Pit	 Interstate Highways
 Gravelly Spot	 Gravelly Spot	 US Routes
 Landfill	 Landfill	 Major Roads
 Lava Flow	 Lava Flow	 Local Roads
 Marsh or swamp	 Marsh or swamp	 Background
 Mine or Quarry	 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	 Miscellaneous Water	
 Perennial Water	 Perennial Water	
 Rock Outcrop	 Rock Outcrop	
 Saline Spot	 Saline Spot	
 Sandy Spot	 Sandy Spot	
 Severely Eroded Spot	 Severely Eroded Spot	
 Sinkhole	 Sinkhole	
 Slide or Slip	 Slide or Slip	
 Sodic Spot	 Sodic Spot	

MAP INFORMATION

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Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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Survey Area Data: Version 21, Sep 7, 2021

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
38C	Hinckley loamy sand, 3 to 15 percent slopes	7.9	27.5%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	5.4	19.0%
73E	Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	4.1	14.4%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	1.7	5.9%
103	Rippowam fine sandy loam	7.2	25.3%
703A	Haven silt loam, 0 to 3 percent slopes	2.3	7.9%
Totals for Area of Interest		28.6	100.0%

Attachment D

USGS StreamStats Reports for Five Bridges Study Areas

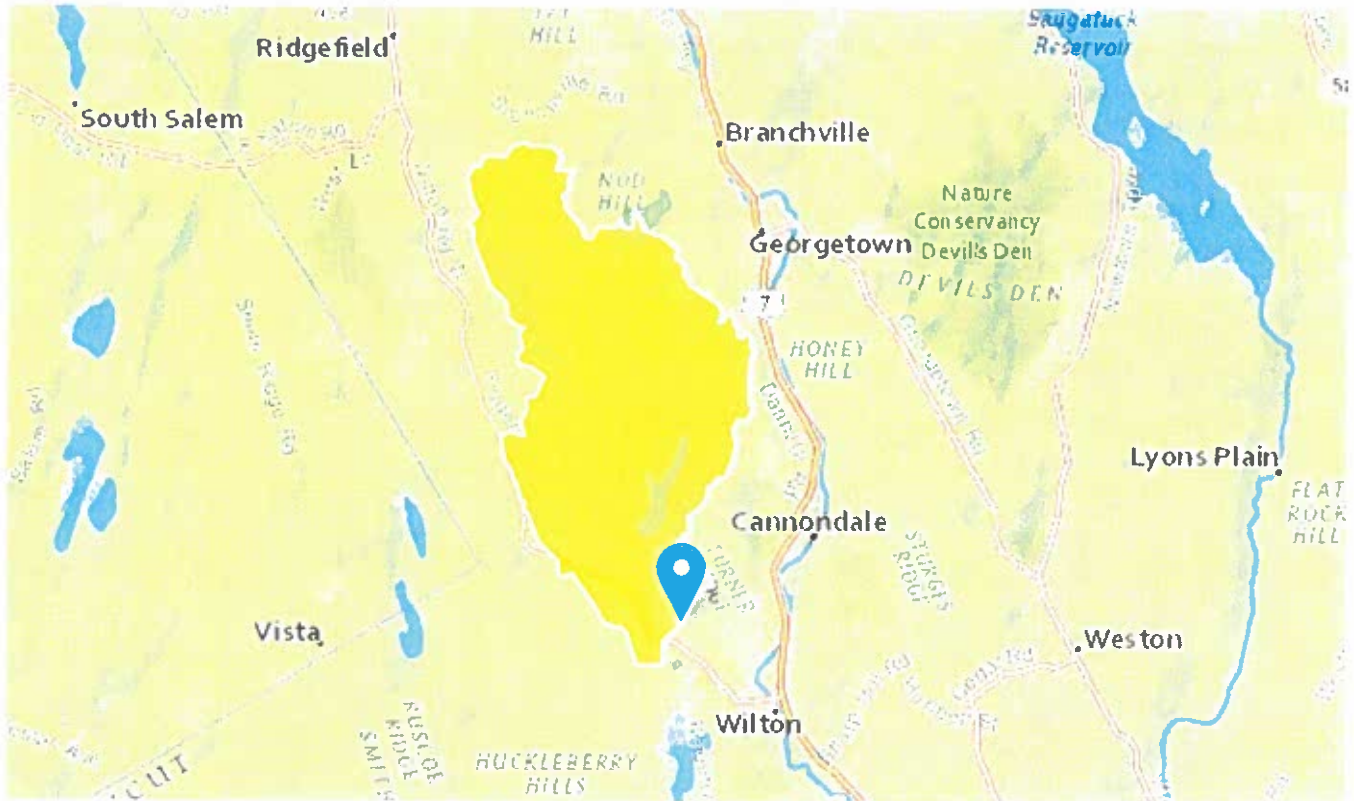
StreamStats Report - Middlebrook Farm Road Bridge

Region ID: CT

Workspace ID: CT20220130231847347000

Clicked Point (Latitude, Longitude): 41.20518, -73.44830

Time: 2022-01-30 18:19:08 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	6.68	square miles
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	12.7	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	1.85	percent
WETLAND	Percentage of Wetlands	0.97	percent

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Application Version: 4.6.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2

StreamStats Report - Old Mill Road Bridge

Region ID: CT
Workspace ID: CT20220130231203364000
Clicked Point (Latitude, Longitude): 41.24590, -73.43412
Time: 2022-01-30 18:12:24 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	14.4	square miles
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	25.9	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	6.34	percent
WETLAND	Percentage of Wetlands	0.53	percent

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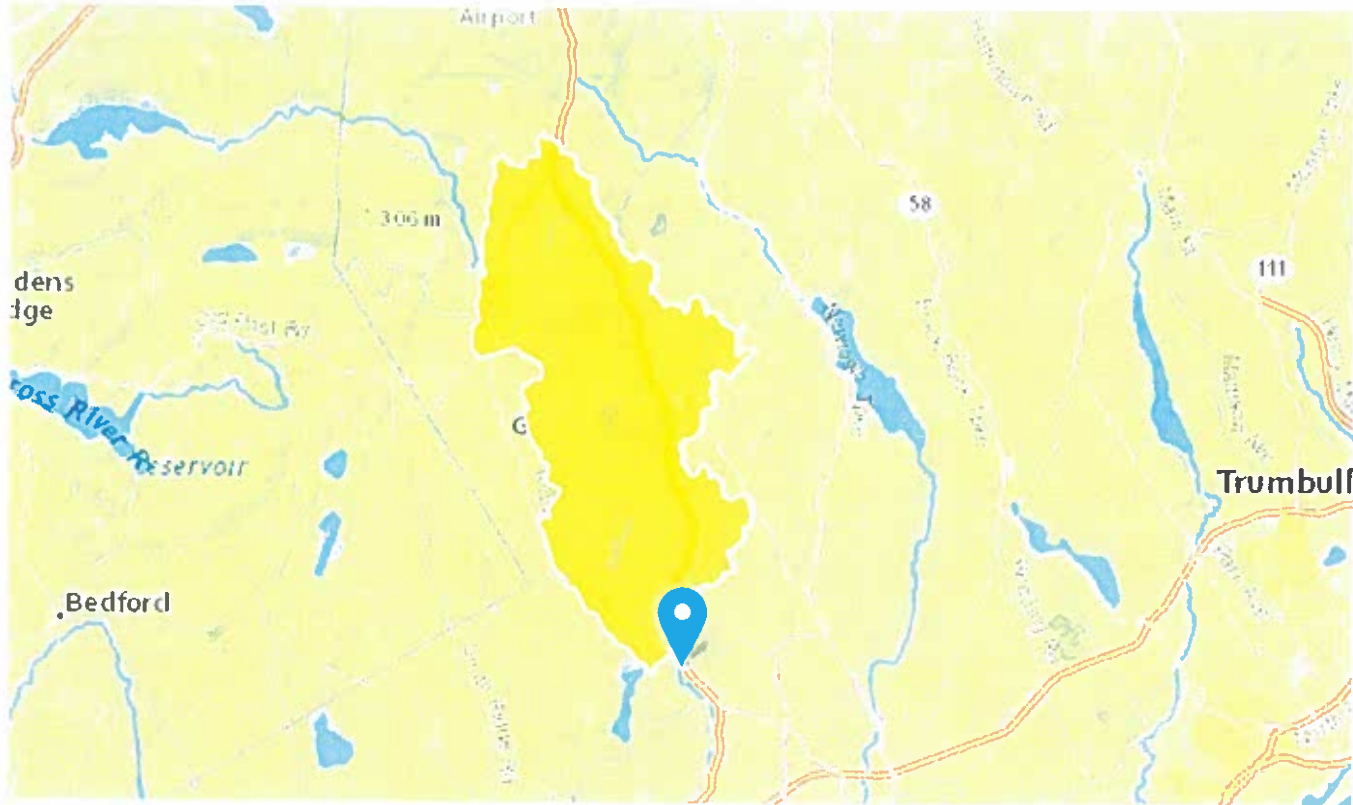
Application Version: 4.6.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2

StreamStats Report - Old Ridgefield Road Bridge

Region ID: CT
Workspace ID: CT20220130232503436000
Clicked Point (Latitude, Longitude): 41.19096, -73.42957
Time: 2022-01-30 18:25:24 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	25.9	square miles
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	22.4	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	5.26	percent
WETLAND	Percentage of Wetlands	0.61	percent

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Application Version: 4.6.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2

StreamStats Report - Stonebridge Road Bridge

Region ID: CT

Workspace ID: CT20220130231552278000

Clicked Point (Latitude, Longitude): 41.19485, -73.38784

Time: 2022-01-30 18:16:13 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	10.2	square miles
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	15	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	2.83	percent
WETLAND	Percentage of Wetlands	0.53	percent

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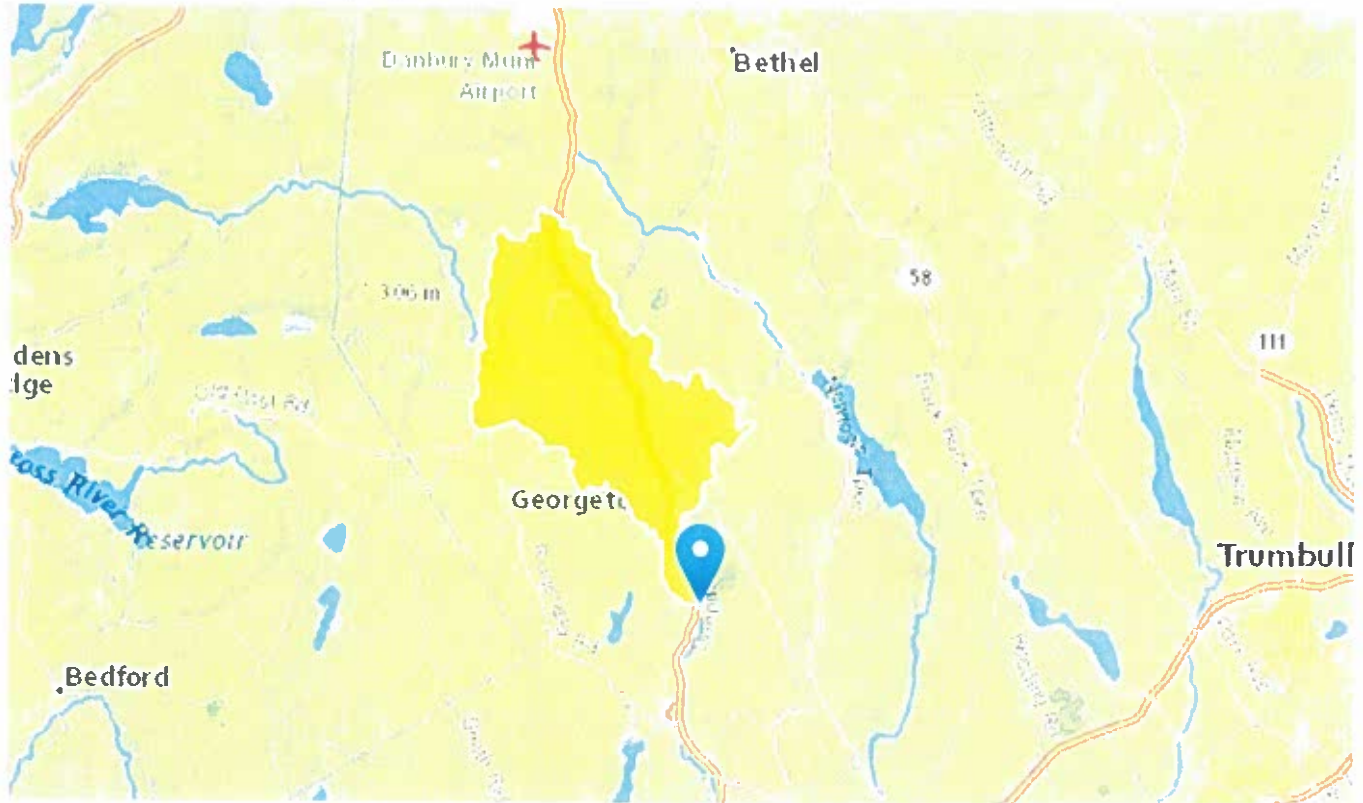
Application Version: 4.6.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2

StreamStats Report - Seeley Road Bridge

Region ID: CT
Workspace ID: CT20220130232213280000
Clicked Point (Latitude, Longitude): 41.22676, -73.42459
Time: 2022-01-30 18:22:34 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	15.2	square miles
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	25.7	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	6.3	percent
WETLAND	Percentage of Wetlands	0.5	percent

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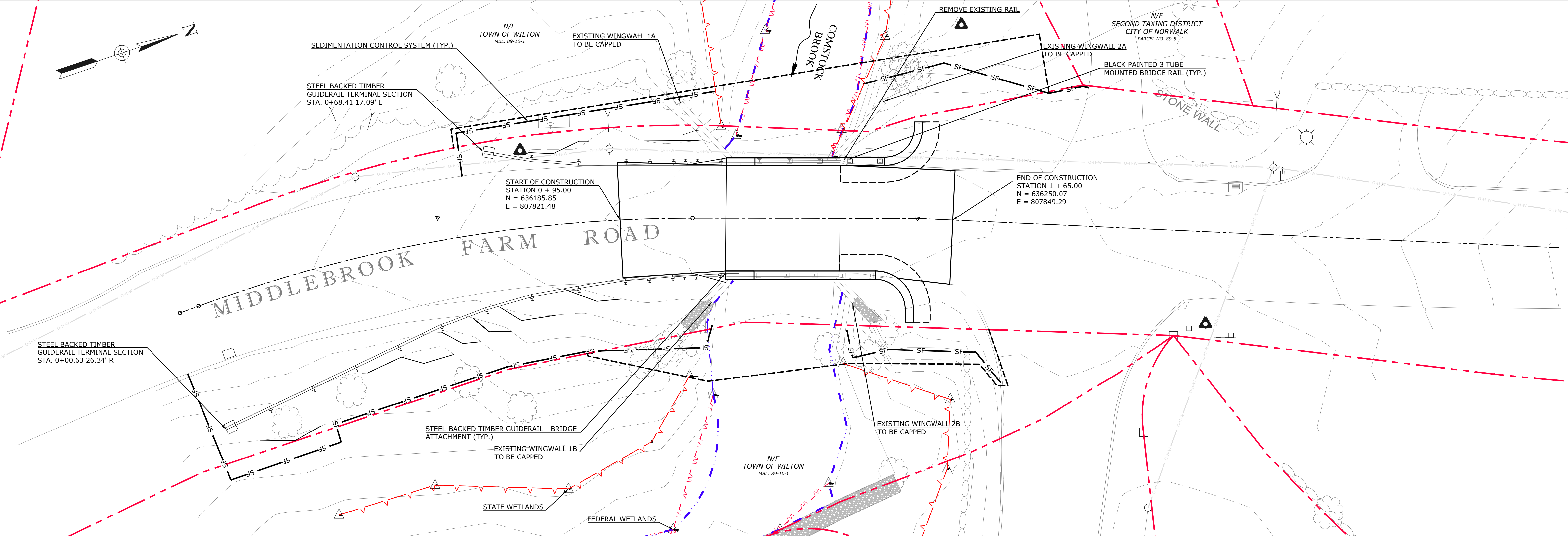
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Application Version: 4.6.2

StreamStats Services Version: 1.2.22

NSS Services Version: 2.1.2



GENERAL SITE PLAN
SCALE: 1" = 10'-0"

LEGEND

— SF — SF — SEDIMENTATION CONTROL SYSTEM

— FEMA 100-YR — FEMA 100-YR FLOOD (CALCULATED)

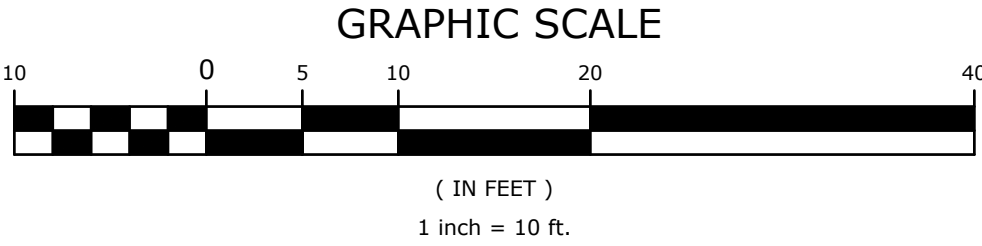
— FEMA FLOODWAY — LIMIT OF FLOODWAY


— OHW — ORDINARY HIGH WATER (OHW)

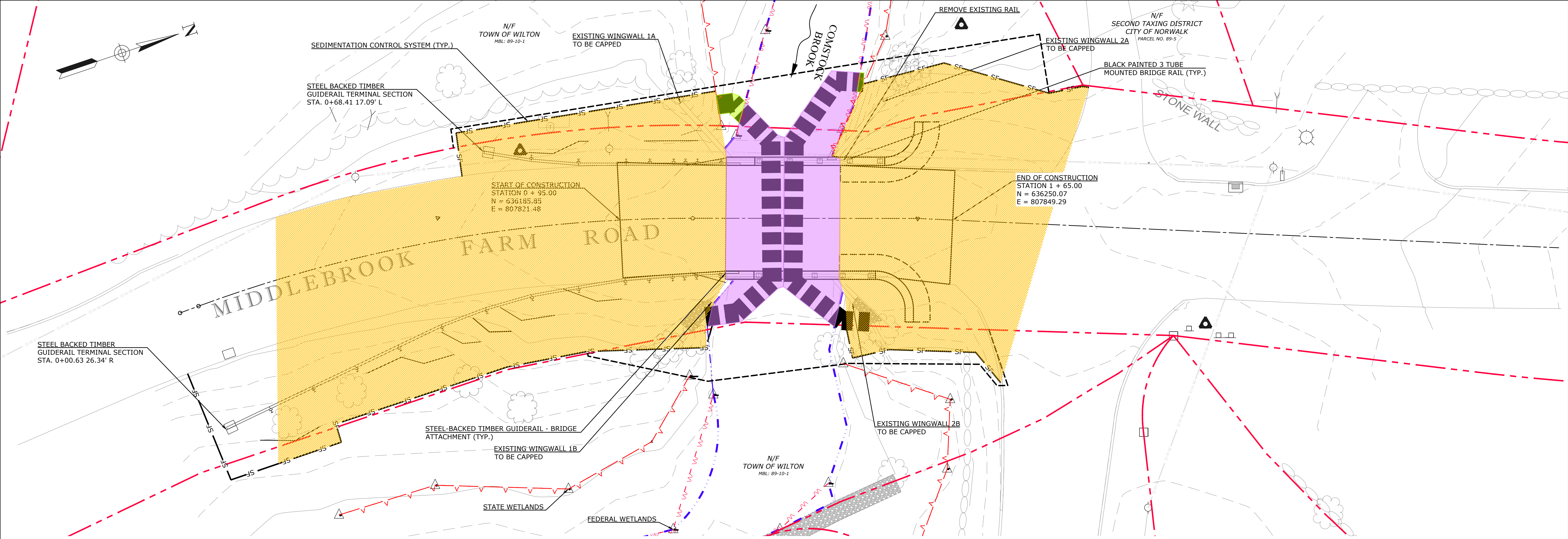
— W — W — W — W — FEDERAL WETLANDS

— V — V — V — STATE WETLANDS

⊗ TREES TO BE REMOVED



			SUPV.	K.O.E.	S.F.D. SUBMITTAL			 • WENGELL, McDONNELL & COSTELLO • 87 HOLMES ROAD NEWINGTON, CT 06111 (860) 667-9624		PRESERVATION OF MIDDLEBROOK FARM ROAD OVER COMSTOCK BROOK GENERAL SITE PLAN							
			DESIGN	E.O.D.													
			DRAWN	M.A.													
			CHECKED	E.O.D.													
			DATE	01/13/2023													
NO.	DATE	DESCRIPTION									D MIDDLEBROOK FARM RD 21063.1SFD — 21063.0 —				SHEET	1	
REVISIONS											SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	3



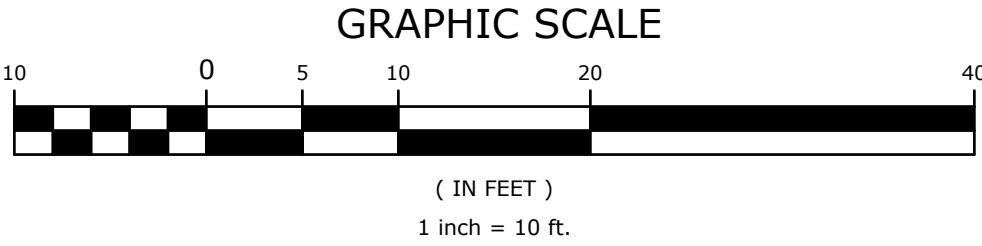
LEGEND

- SF SF SEDIMENTATION CONTROL SYSTEM
- FEMA 100-YR FEMA 100-YR FLOOD (CALCULATED)
- FEMA FLOODWAY LIMIT OF FLOODWAY
- ORDINARY HIGH WATER (OHW)
- FEDERAL WETLANDS
- STATE WETLANDS
- TEMPORARY WATERCOURSE IMPACT
- PERMANENT WATERCOURSE IMPACT
- TEMPORARY WETLAND IMPACT
- PERMANENT WETLAND IMPACT
- UPLAND REVIEW AREA

WETLAND/WATERCOURSE IMPACT PLAN

SCALE: 1" = 10'-0"

STATE WETLAND AND WATERCOURSE IMPACT TABLE					
	WETLAND SITE NO.	WETLAND IMPACTS	WATERCOURSE IMPACTS	TOTAL	UPLAND REVIEW AREA
PERMANENT IMPACTS	1	0 S.F. (0.0 AC.)	0 S.F. (0.0 AC.)	0 S.F. (0.0 AC.)	4105 S.F. (0.0942 AC.)
TEMPORARY IMPACTS	1	28 S.F. (0.00064 AC.)	1040 S.F. (0.0238 AC.)	1068 S.F. (0.0245 AC.)	0 S.F. (0.0 AC.)
TOTAL IMPACTS		28 S.F. (0.00064 AC.)	1040 S.F. (0.0238 AC.)	1068 S.F. (0.0245 AC.)	4105 S.F. (0.0942 AC.)



			SUPV. K.O.E.
			DESIGN E.O.D.
			DRAWN M.A.
			CHECKED E.O.D.
NO.	DATE	DESCRIPTION	DATE 01/13/2023

REVISIONS

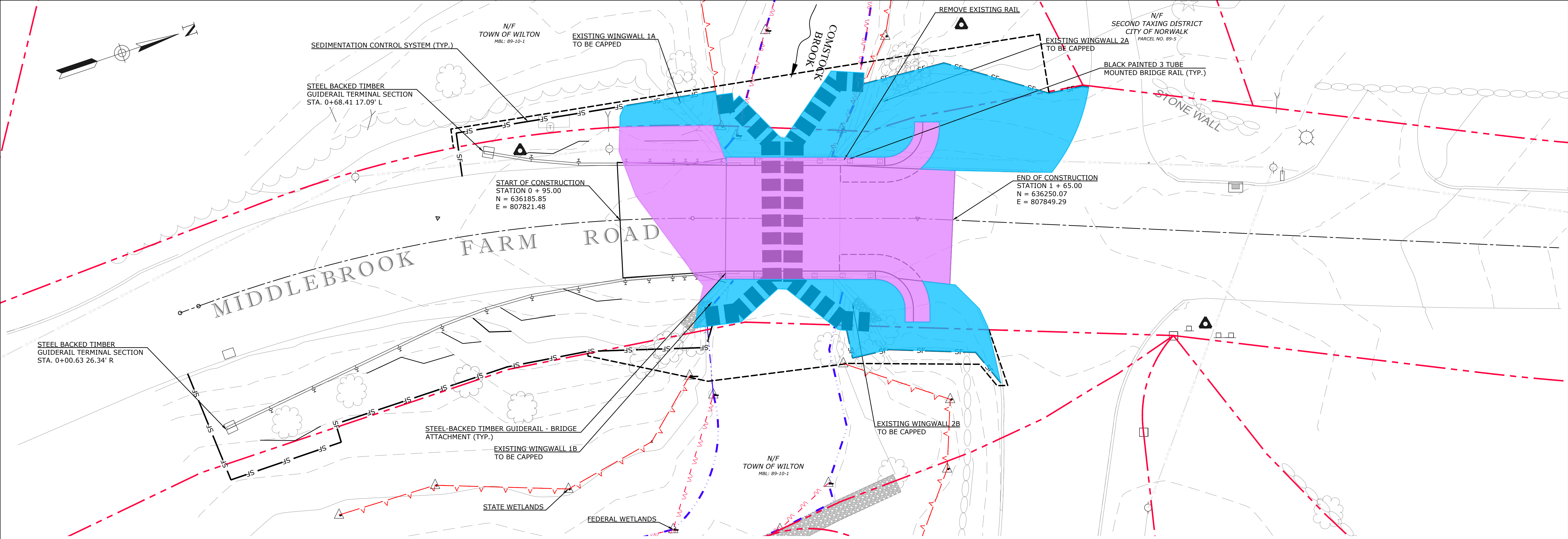
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WMC
CONSULTING ENGINEERS

• WENGELL, McDONNELL & COSTELLO •
87 HOLMES ROAD
NEWINGTON, CT 06111
(860) 667-9624

PRESERVATION OF MIDDLEBROOK FARM ROAD
OVER COMSTOCK BROOK
WETLAND/WATERCOURSE IMPACT PLAN

D	MIDDLEBROOK FARM RD	21063.1SFD	21063.0	REV.	SHEET 2
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF 3



LEGEND

SF

SF

SEDIMENTATION CONTROL SYSTEM

FEMA 100-YR

FEMA 100-YR FLOOD (CALCULATED)

FEMA FLOODWAY

LIMIT OF FLOODWAY

OH

ORDINARY HIGH WATER (OHW)

FW

FEDERAL WETLANDS

SW

STATE WETLANDS

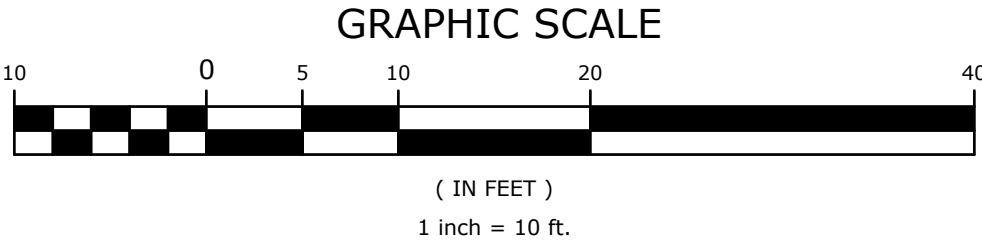
PERMANENT 100-YR FLOOD IMPACT

TEMPORARY 100-YR FLOOD IMPACT

100-YEAR FLOOD IMPACT PLAN

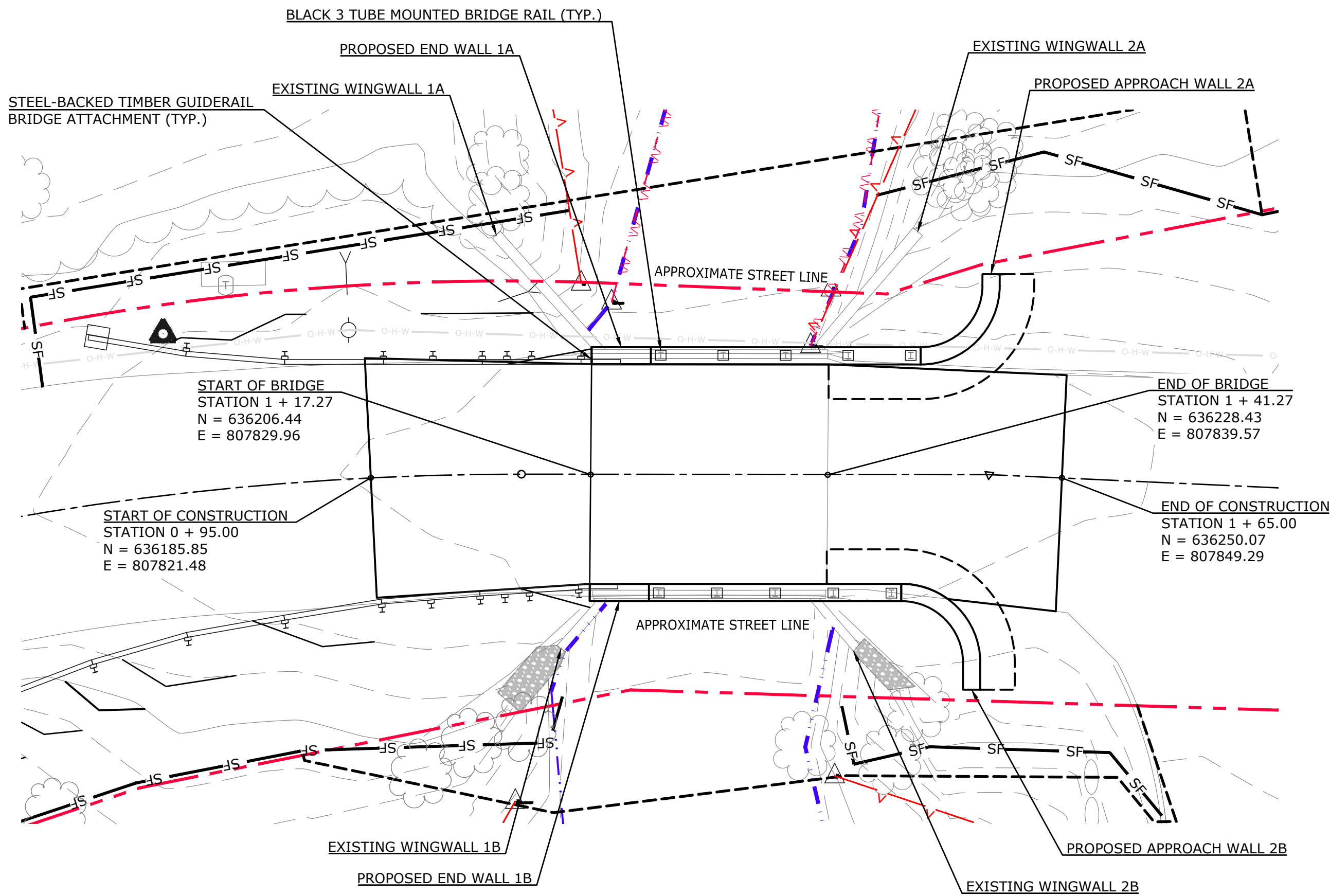
SCALE: 1" = 10'-0"

100-YEAR FLOODPLAIN IMPACTS CUT & FILL	
VOLUME IMPACTS	
EXCAVATION IN FLOODPLAIN	FILL IN FLOODPLAIN
5 C.Y.	5 C.Y.

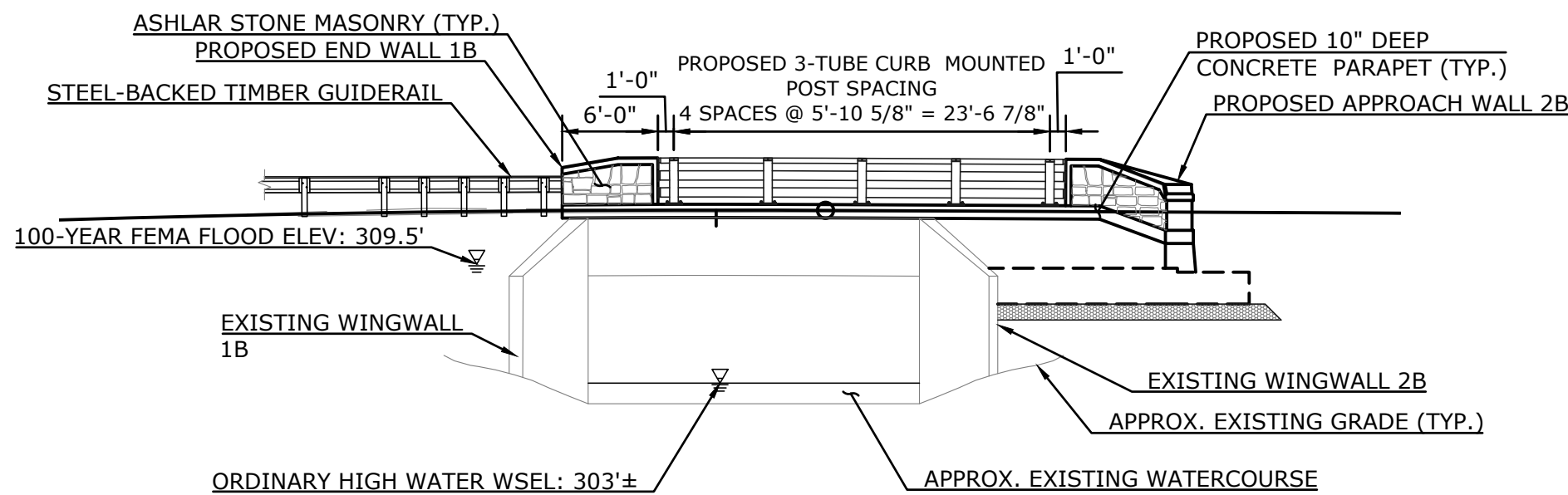


			SUPV. K.O.E.	S.F.D. SUBMITTAL	<div><div>WMC</div><div>CONSULTING ENGINEERS</div><div>• WENGELL, McDONNELL & COSTELLO •</div><div>87 HOLMES ROAD</div><div>NEWINGTON, CT 06111</div><div>(860) 667-9624</div></div>	<div>PRESERVATION OF MIDDLEBROOK FARM ROAD OVER COMSTOCK BROOK 100-YR FLOOD IMPACT PLAN</div>
			DESIGN E.O.D.			
			DRAWN M.A.			
			CHECKED E.O.D.			
			DATE 01/13/2023			
NO.	DATE	DESCRIPTION				
REVISIONS						

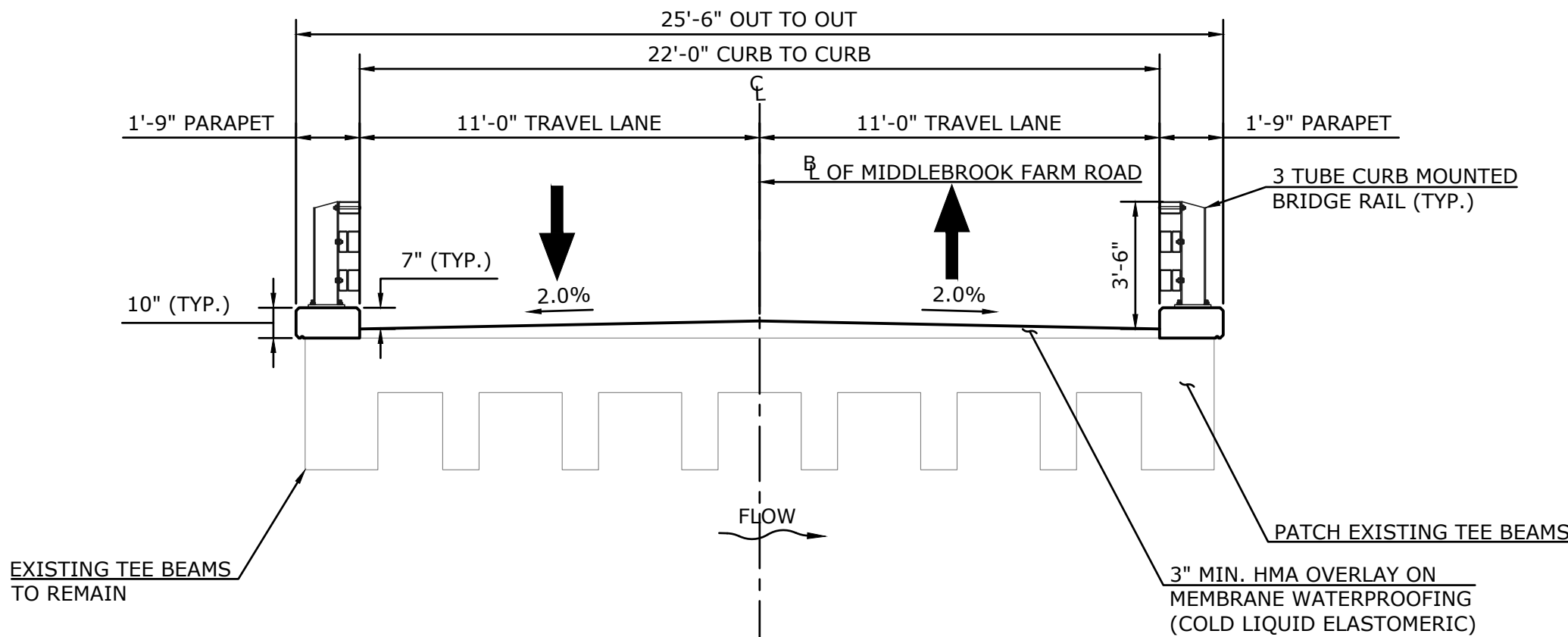
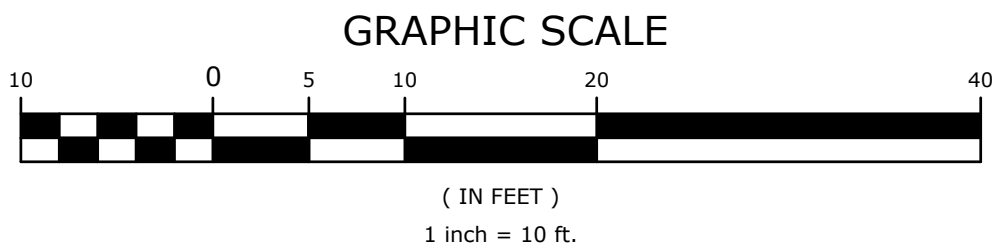
SIZE	PROJECT	FILE NAME	NUMBER	REV.	OF	SHEET 3
D	MIDDLEBROOK FARM RD	21063.1SFD	21063.0			3



STRUCTURE PLAN
SCALE: 1" = 10'



STRUCTURE ELEVATION
(LOOKING UPSTREAM)
SCALE: 1" = 10'



BRIDGE SECTION
(NORMAL TO BASELINE)
SCALE: 3" = 1'-0"

GENERAL NOTES:
SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020) SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2022 AND SPECIAL PROVISIONS.
DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (AASHTO EIGHTH EDITION, DATED 2017 INCLUDING INTERIM SPECIFICATIONS UP TO 2018), AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).
MATERIAL STRENGTHS:
CONCRETE:
CLASS PCC 04462 $f'_c = 4000$ P.S.I.
THE CONCRETE STRENGTH, f'_c , USED IN DESIGN OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES, AND M.03 - PORTLAND CEMENT CONCRETE.
REINFORCEMENT: ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS I, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED." $f_y = 60,000$ P.S.I.
LIVE LOAD: HL-93, LEGAL AND PERMIT VEHICLES
FUTURE PAVING ALLOWANCE: NONE
HMA OVERLAY: THIS SHALL CONSIST OF 2" OF HMA S0.5 ON TOP OF 1" OF HMA S0.25 ON MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC).
DIMENSIONS: WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.
EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL DESIGN DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR REVIEW, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.
BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGNS AT EACH LEADING END OF THE BRIDGE ON THE TRAFFIC SIDE. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4"x12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ "04980". ALL COST ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE SIGNS SHALL BE COVERED UNDER ITEM "SIGN FACE - SHEET ALUMINUM (TYPE IX RETROREFLECTIVE SHEETING)". THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

CONCRETE DISTRIBUTION	
SUPERSTRUCTURE	5 C.Y.
SUBSTRUCTURE	0 C.Y.
FOOTING	0 C.Y.
TOTAL	5 C.Y.

NOTICE TO BRIDGE INSPECTORS	
THE DEPARTMENT'S BRIDGE SAFETY PROCEDURES REQUIRE THIS BRIDGE TO BE INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION. ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS. (THE LISTING OF COMPONENTS FOR SPECIFIC ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE IMPORTANCE OF INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURE.) THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE MANAGER OF BRIDGE SAFETY AND EVALUATION.	
COMPONENT OR DETAIL	STRUCTURE SHEET REFERENCE
NONE	NONE

CONCRETE NOTES:
CONCRETE: THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
PARAPET CONCRETE	BRIDGE PARAPET	PCC04462

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE
CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE MIN. 2" COVER UNLESS DIMENSIONED OTHERWISE.
CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

			SUPV.	K.O.E.
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PRESERVATION OF MIDDLEBROOK FARM ROAD OVER COMSTOCK BROOK STRUCTURE PLAN, ELEVATION AND SECTION						SHEET	S5.1
D	MIDDLEBROOK FARM RD	21063.1SFD	21063.0	—	—	SIZE	PROJECT
		FILE NAME	NUMBER	REV.	OF		4