TO: MEMBERS OF THE INLAND WETLANDS AND WATERCOURSES COMMISSION

RE: VIDEOCONFERENCE MEETING – Tuesday, June 7, 2022

The Town of Trumbull Inland Wetlands and Watercourses Commission will hold a videoconference meeting on Tuesday, June 7, 2022 at 7:00 p.m

https://us06web.zoom.us/j/82834782094?pwd=VU0xWlZuUWpvc2lsaENwUzhtYU1PZz09
Webinar ID: 828 3478 2094
Password: 507712
Join by telephone: (929) 205-6099 or (877) 853-5257 (Toll Free) / Webinar ID: 828 3478 2094

NEW BUSINESS
Application 22-15 David Arendt Permit approval for construction of a single family dwelling with appurtenances within a regulated area at Lot 4 West Mischa Road.

Application 22-16 David Arendt Permit approval for construction of a single family dwelling with appurtenances within a regulated area at Lot 5 West Mischa Road.

OLD BUSINESS
Application 22-06 Bridgeport Roman Catholic Diocesan Corp. Permit approval for driveway with associated drainage & subsurface detention system. Landscape buffers, tree planting and previously placed fill within a regulated area at 1056 Daniels Farm Road.

MINUTES
No meeting minutes to approve. May 3, 2022 meeting cancelled

SCHEDULE FIELD INSPECTION(S)
INLAND WETLANDS AND WATERCOURSES
COMMISSION
TOWN OF TRUMBULL
APPLICATION FOR PERMIT

SECTION I

1. Location/address of property where activity is proposed: Lot 4 WEST MISCHA ROAD

Parcel Size: 1.01 ac. Zone: AA Map ID: I-08/190 Current Use: VACANT

2. Applicant’s Name: DAVID ARENDT

Applicant’s Address: 108 PINEWOOD TRAIL, TRUMBULL, CT 06611

Telephone: ___________________ Cell: 203-895-5758 Email: dca322@gmail.com

Applicant’s interest in property (Lessee, Licensee, Owner, etc.): OWNER

3. Name of Property Owner of Record: SAME AS APPLICANT

Address of Owner of Record: _______________________

Telephone: ___________________ Cell: ( ) Email: _______________________

If Applicant is the Owner, go to #5

4. The undersigned hereby authorizes ________________________ to act as Agent on my behalf as related to this application.

(Owner of Record)

5. Description of proposed activity and location of property. Include listing of all proposed regulated activities (use separate sheet if necessary):

Construction of a single family dwelling with appurtenances, Lot 4 West Mischa Road

See application attachment for specific regulated activities

The applicant understands that this application is to be considered complete only when all information and documents required by the Agency have been submitted.

The undersigned warrants the truth of all statements contained herein and in all supporting documents under penalty of false statement according to the best of his/her knowledge and belief.

Permission is granted to the Town of Trumbull, Inland Wetlands & Watercourses Commission, and its agent(s) to inspect the subject land, at reasonable times, during the pendency of an application and for the life of the permit under Section 7.5 of the IWWC Regulations.

Applicant’s Signature: ________________________ Date: ________________________

(If not the Owner) ________________________ Date: ________________________

Owner’s Signature: ________________________ Date: 5/24/2022
SECTION II

SITE PLAN REQUIREMENTS

1. Total property area: 1.01 ac. Zone: AA Number of Lots: 1
2. Map ID, from assessors card: 1/08/00190
3. Total area existing of wetlands on property: 0.352 ac (15,364 sf)
4. Total area of Regulated area on property: 0.654 (upland only) (28,508 sf)
5. Wetlands area to be disturbed: 0.11 ac (4835 sf)
6. Upland Review area to be disturbed: 0.2 ac. (9017 sf)
7. Proposed % of wetlands on the property to be disturbed: 31%
8. Total area of proposed land disturbance: 0.31 ac. (13,852 sf)
9. Is the proposed activity located within 500 feet of the boundary of Easton, Monroe, Shelton, Stratford, Bridgeport or Fairfield. Yes _____ No __ (If yes, see Section 8.2 of the Trumbull IWWC Regulations.)
10. Is any portion of the site located within a water company watershed: Yes _____ No __ (If yes, see Section 8.3 of Trumbull Inland Wetlands & Watercourses Regulations.)
11. Existing property coverage type data:

<table>
<thead>
<tr>
<th>Percent of Regulated Area</th>
<th>Dominant Species</th>
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</thead>
<tbody>
<tr>
<td>Trees:</td>
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<td>Shrubs:</td>
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<td>Grasses, weeds, etc:</td>
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<td>Impervious area:</td>
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12. Existing watercourse data and open water characteristics: (if applicable)
   a. Size of pond(s) or lake(s): _____________________
   b. Stream characteristics: intermittent or permanent: intermittent
   c. 100 year flood evaluation: _____________________

13. Probable effect of proposal (if any) on vegetation and wildlife: Refer to Wetland Impact Assessment Report

14. Existing or proposed source(s) of water supply for the property: Public water

15. Existing or proposed method of sewage disposal for the property: Public Sewer

16. Creation of proposed water bodies (if yes, detailed information will be required) Yes: _______ No: X

17. List proposed measures to protect regulated and inland wetland areas from:
   a. Erosion and sedimentation: Silt fence/haybale barrier/silt sacks

18. Proposed percent of Regulated area to be covered with impermeable surface: 12.5%

19. Material to be (check all that applies): deposited ☐ excavated ☐ (if yes, complete the following)
   a. Area: 0.31 ac. Volume: 143cy-cut/550 cy-fill
   b. Physical & Chemical composition of material to be deposited: Topsoil/common fill/
      subbase/asphalt/concrete/stone
APPLICATION ATTACHMENTS

Regulated activities include construction of dwelling, driveway, storm drainage facilities, underground utilities, retaining walls, riprap plunge pools, and associated site grading.
### RECORD OF OWNERSHIP

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<th>SALE PRICE V.C.</th>
<th>PREVIOUS ASSESSMENTS (HISTORY)</th>
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### EXEMPTIONS

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### OTHER ASSESSMENTS

### ASSESSING NEIGHBORHOOD

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### NOTES

### BUILDING PERMIT RECORD

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### VISIT/CHANGE HISTORY

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<td>Vacant Lot Inspected</td>
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### LAND LINE VALUATION SECTION

| Zone | Front | Depth | Units | Unit Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor | Units | Price | Factor |
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|      |       |       |       |           |        |       |       |        |       |       |        |       |       |        |       |       |        |       |       |        |       |       |        |       |       |        |       |       |        |       |       |        |       |       |        |

Total Card Land Units: 1.20 AC | Parcel Total Land Area: 1.2 AC | Total Land Value: 99,100
INLAND WETLANDS AND WATERCOURSES COMMISSION
TOWN OF TRUMBULL
APPLICATION FOR PERMIT

SECTION I

1. Location/address of property where activity is proposed: LOT 5 WEST MISCHA ROAD
   Parcel Size: 1.011 ac  Zone: AA  Map ID: I-08/189  Current Use: VACANT

2. Applicant's Name: DAVID ARENDT
   Applicant's Address: 106 PINEWOOD TRAIL, TRUMBULL, CT 06611
   Telephone:  ()  Cell: 203-865-5758  Email: dca322@gmail.com
   Applicant's interest in property (Lessee, Licensee, Owner, etc.): OWNER

3. Name of Property Owner of Record: SAME AS APPLICANT
   Address of Owner of Record: __________________________________________
   Telephone:  ()  Cell:  ()  Email: ________________________________________
   If Applicant is the Owner, go to #5

4. The undersigned hereby authorizes ____________________________ to act as Agent on my behalf as related to this application.
   (Owner of Record)

5. Description of proposed activity and location of property. Include listing of all proposed regulated activities (use separate sheet if necessary):
   Construction of a single family dwelling with appurtenances. Lot 5 West Mischa Road
   See application attachment for specific regulated activities

The applicant understands that this application is to be considered complete only when all information and documents required by the Agency have been submitted.
The undersigned warrants the truth of all statements contained herein and in all supporting documents under penalty of false statement according to the best of his/her knowledge and belief. Permission is granted to the Town of Trumbull, Inland Wetlands & Watercourses Commission, and its agent (s) to inspect the subject land, at reasonable times, during the pendency of an application and for the life of the permit under Section 7.5 of the IWWC Regulations.

Applicant's Signature: ____________________________ Date: ____________
(If not the Owner) ____________________________ Date: ____________

Owner's Signature: ____________________________ Date: 5/24/2022
SECTION II

SITE PLAN REQUIREMENTS

1. Total property area: 1.01 ac. Zone: AA Number of Lots: 1
2. Map ID, from assessors card: 1/08/00190
3. Total area existing of wetlands on property: 0.638 ac (27,818 sf)
4. Total area of Regulated area on property: 0.372 ac (upland only) (16,241 sf)
5. Wetlands area to be disturbed: 0
6. Upland Review area to be disturbed: 0.24 ac. (10,666 sf)
7. Proposed % of wetlands on the property to be disturbed: 0%
8. Total area of proposed land disturbance: 0.24 ac. (10,666 sf)
9. Is the proposed activity located within 500 feet of the boundary of Easton, Monroe, Shelton, Stratford, Bridgeport or Fairfield: Yes ___ No ___ (If yes, see Section 8.2 of the Trumbull WWMC Regulations.)
10. Is any portion of the site located within a water company watershed: Yes _____ No ___ (If yes, see Section 8.3 of Trumbull Inland Wetlands & Watercourses Regulations.)
11. Existing property coverage type data:
   
<table>
<thead>
<tr>
<th>Trees:</th>
<th>Percent of Regulated Area:</th>
<th>Dominant Species:</th>
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<th>Grasses, weeds, etc:</th>
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<tr>
<th>Impervious area:</th>
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</table>

12. Existing watercourse data and open water characteristics: (if applicable)
   a. Size of pond(s) or lake(s): ____________________ _
   b. Stream characteristics: intermittent or permanent: intermittent
   c. 100 year flood evaluation: ____________________ _

13. Probable effect of proposal (if any) on vegetation and wildlife: Refer to Wetland Impact Assessment Report

14. Existing or proposed source(s) of water supply for the property: Public water
15. Existing or proposed method of sewage disposal for the property: Public Sewer
16. Creation of proposed water bodies (if yes, detailed information will be required) Yes: ______ No: X
17. List proposed measures to protect regulated and inland wetland areas from:
   a. Erosion and sedimentation: Silt fence/haybayle barrier/silt sacks
18. Proposed percent of Regulated area to be covered with impermeable surface: 26.6%
19. Material to be (check all that applies): deposited ☒ excavated ☐ (if yes, complete the following)
   a. Area: 0.24 ac. Volume: 20 cy-cut/710 cy-fill
   b. Physical & Chemical composition of material to be deposited: Topsoil/common fill/ subbase/asphalt/concrete/stone
APPLICATION ATTACHMENTS

Regulated activities include construction of dwelling, driveway, storm drainage facilities, underground utilities, retaining walls, and associated site grading.
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### MIXED USE

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### COST/MARKET VALUATION

- **Adj. Base Rate**: $0.00
- **Replace Cost**: $0.00
- **ARV**: $0.00

### OB-OUTBUILDING & YARD ITEMS(A) / XF-BUILDING EXTRA FEATURES(B)

### BUILDING SUB-AREA SUMMARY SECTION

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<tr>
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**PROPERTY LOCATION**: WEST MISCHA ROAD

**Vision ID**: 1209

**Current Owner**: REED DAVID

**Account #:**

**TOPO**:

**UTILITIES**:

**STRT/ROAD**:

**LOCATION**:

**SUPPLEMENTAL DATA**

**Other ID**: 00791600

**Census Tract**: 0906

**Fire Dist**: N

**Border Prop**: Section #: A3

**Voting Dist**:

**GIS ID**: 00791600

**ASSOC PH#**:

**RECORD OF OWNERSHIP**

| BK-VOL/PAGE | SALE DATE | SALE PRICE | Yr. Code | Assessed Value | Tr
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**EXEMPTIONS**

**OTHER ASSESSMENTS**

**ASSURING NEIGHBORHOOD**

**5/A**

**NOTES**

**BUILDING PERMIT RECORD**

**VISIT/CHANGE HISTORY**

**LAND LINE VALUATION SECTION**

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<th>Factor</th>
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<th>Factor</th>
<th>Adj</th>
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<td></td>
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**Total Card Land Units**: 1.23 AC

**Parcell Total Land Area**: 1.23 AC
IDENTIFICATION OF WETLANDS AND WATERCOURSES RESOURCES

Wetlands and watercourses present on property?  Yes ☑️  No ☐

Wetlands:

- Inland Wetlands ☑️
- Tidal Wetlands ☐

Watercourses:

- Perennial Streams ☐
- Intermittent Watercourses ☑️

Identification Method:

- Auger and Spade ☑️
- Backhoe Pits ☐

Numbering Sequences:

1-30
31-67

Wetland Plant Communities Present:

- Forest ☑️
- Sapling/Shrub ☐
- Wet Meadow ☐
- Marsh ☐
- Pond ☐

Definitions and methodology for identification of state regulated wetlands & watercourses

Wetlands and watercourses are regulated in the State of Connecticut General Statutes, Chapter 440, sections 22a-28 to 22a-45. The Statutes are divided into the Inland Wetlands and Watercourses Act (sections 22a-36 to 22a-45) and the Tidal Wetlands Act (sections 22a-28 to 22a-35). Inland Wetlands "means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, inclusive, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the National Resources Conservation Service (NRCS) of the United States Department of Agriculture” section 22a-38(15). Watercourses "means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private which are contained within, flow through or border upon this state or any portion thereof, not regulated pursuant to sections 22a-28 to 22a-35, inclusive. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation" section 22a-38(16). Tidal Wetlands are defined as “those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marsh, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing some, but not necessarily all of the following” (includes plant list) section 22a-29(2).
WETLAND SOIL TYPES
Wetland soils consist of the Ridgebury, Leicester and Whitman complex. This is an undifferentiated mapping unit consisting of two poorly drained (Ridgebury and Leicester) and one very poorly drained (Whitman) soil developed on glacial till in depressions and drainageways in uplands and valleys. Their use interpretations are very similar, and they typically are so intermingled on the landscape that separation is not practical. The Ridgebury and Leicester series have a seasonal high water table at or near the surface (0-6") from fall through spring. They differ in that the Leicester soil has a more friable compact layer or hardpan, while the Ridgebury soils have a dense to very dense compact layer. The Whitman soil has a high water table for much of the year and may frequently be ponded.

NON-WETLAND SOILS
The non-wetland soils consist of Sutton series, and the Canton-Charlton complex. The Sutton series consists of very deep, moderately well drained loamy soils formed in friable till. They are nearly level to strongly sloping soils on till plains and low ridges, typically in mid to low slope positions. Sutton soils have a seasonal high water table at a depth of about 18-42" from mid-fall through mid-spring.

The Canton series consists of very deep, well drained soils formed in a loamy mantle underlain by sandy glacial till. They are on nearly level to very steep glaciated plains, hills, and ridges. Slope ranges from 0 to 35 percent. Permeability is moderately rapid in the solum and rapid in the substratum. The soils developed in a fine sandy loam mantle over acid sandy glacial till of Wisconsin age derived mainly from granite and gneiss and some fine-grained sandstone.

The Charlton series is a very deep, well drained loamy soil formed in friable till. They are nearly level to very steep soils on till plains and hills. Depth to bedrock and the seasonal high water table is commonly more than 6 feet.

SUMMARY
Wetlands delineated include a single contiguous forested wetland classified as a hillside groundwater slope wetland. The wetland is fed by groundwater discharge from the broad easterly slope, as well as stormwater discharge from a culvert at West Mischa Road along the northeasterly site boundary. Embedded within the wetland is an intermittent watercourse that originates at the culvert discharge, eventually dissipating in the lower terrace of the wetland when the slope flattens, then reforming again and flowing offsite to the southwest.
Attached is a sketch map showing the wetlands delineation. This map is intended for general planning purposes only; the location and extent of wetlands is approximate.

Eric Davison
Certified Professional Wetland Scientist
Registered Soil Scientist

Wetland Sketch Map
May 24, 2022

Trumbull Inland Wetlands & Watercourses Commission
366 Church Hill Road
Public Works Admin Building
Trumbull, Connecticut 06611

Re: Wetland Impact Assessment
Parcel 189 & 190, West Mischa Road, Trumbull, Connecticut

Dear Members of the Commission:

William Kenny Associates LLC (WKA) investigated two undeveloped residential lots, Parcels 189 & 190, on West Mischa Road in Trumbull, Connecticut to inventory and assess existing and proposed wetland and watercourse conditions related to the proposed construction of a single-family dwelling, asphalt drive and related site improvements at each lot. The following letter includes the methods and results of this investigation. WKA conducted a field investigation on March 21, 2022. Our assessment, particularly of proposed conditions, also included a review of the following:


In summary, we find that the proposed residential development minimizes adverse wetland impacts to the greatest extent practicable and that the primary wetland and watercourse functions will be maintained substantially at current levels. The development includes the filling of approximately 4,800 square feet of wetlands and modifying 135 linear feet of a stream. These direct impacts have been minimized through the project design. Indirect adverse impacts to wetlands will be avoided through the installation and maintenance of soil erosion and sediment controls during construction and stormwater management measures following construction on each lot. A wetland and buffer habitat enhancement plan is proposed to establish a native vegetated buffer between the wetland and development and will provide protection to the wetland in the long-term.
**Existing Conditions**

The site consists of two undeveloped residential properties: Parcels 189 and 190 on West Mischa Road in Trumbull, Connecticut. Parcel 189 is to the west and Parcel 190 is to the east. Each is approximately 1 acre. West Mischa Road borders the site to the north and Pinewood Trail is perpendicular to the site and extends to the north. Residential properties surround the site to the north, south and east. Twin Brook Park and Pinewood Lake are to the west and northwest of the site, respectively. The site is primarily undeveloped. A gas line Right-of-Way (ROW) extends through the eastern portion of the site. Other minor improvements at both properties include foot trails and wooden bridges extending from West Mischa Road and some neighboring residential properties. No other improvements exist onsite. The site is topographically variable but, in general, slopes downhill from northeast to southwest. The two highest points on the properties are along the eastern property line, one in the north and one in the south, and the lowest area of the property is in the southern portion of the site. Both high points slope towards a wetland that extends through the central and southern portions of the site. The northern high point slopes moderately downhill to the southwest to a gently sloping portion of a wetland in the central portion of the site and the southern high point slopes steeply to the northwest, to the same wetland area, and south to the low-lying wetland area in the southern portion of the site. As such, the majority of surface and shallow subsurface water at the property ultimately flows to the low-lying wetland area in the southern portion. The wetland continues to flow offsite to the west and appears to ultimately flow to Pinewood Lake to the northwest of the site.

The primary vegetative cover at the site is a broadleaved deciduous woodland. The majority of the woodland is dominated by native vegetation with some invasive vegetation present in a low abundance and density; however, the edges of the woodland, primarily adjacent to the neighboring properties, are dominated by invasive vegetation. The central and primarily native portion of the woodland is dominated by mature tulip poplar trees (20 to 30-inch or greater in DBH). Other common trees are generally pole- to timber-sized and include northern red oak, sweet birch, American beech, sugar maple and red maple and some yellow birch, American elm, white oak, black oak, shagbark hickory and American hornbeam. The canopy cover is generally relatively high; however, the canopy cover within the ROW is low. The understory of the woodland is relatively open and is dominated primarily by American beech seedlings and saplings with some sassafras seedlings, greenbrier and some invasive burning bushing, multiflora rose and Japanese barberry. Poison ivy and fox grape are also sparsely present. At the time of investigation, leaf litter dominated the woodland floor and observed groundcover vegetation was limited to native Christmas fern, wild onion, asters and some invasive garlic mustard and English ivy. Within the southern portion of the gas line ROW, native greenbrier and invasive multiflora rose are the dominant vegetation. Invasive vegetation is dense in pockets along the southeastern, southwestern, west-central and northeastern property boundaries. Vegetation primarily includes burning bush, multiflora rose, wineberry, Japanese barberry, common privet and Japanese honeysuckle in variable abundance at each location.

One inland wetland and watercourse system is present at the site. The wetland was delineated Davison Environmental on March 16, 2021 and assessed by WKA on March 21, 2022. The wetland is a sloping woodland wetland bordering a narrow stream that generally extends and
flows from northeast to south through the central portion of the site. The stream is about two to three feet wide and the bordering wetland is variable in extent. Portions of the stream are apparently human-altered with stone-lined banks and wooden planks serving as bridges in the northern portion of the site. The wetland is relatively steep and narrow in the northeastern portion of the site and relatively level and wide in the central and southern portions of the site. The wider, flatter portions had areas of standing water at the time of investigation with the deepest water depth in the southern, more depressional portion of the wetland. In general, the southern, inundated portion of the wetland consists of the highest abundance and diversity of native wetland vegetation such as red maple, ash, pignut hickory, sweet birch, yellow birch, spicebush, sweet pepperbush, greenbrier, tussock sedge, Christmas fern, soft rush and various grass and moss species. Some invasive vegetation is dense in pockets (in areas closest to adjacent properties) and consists of multiflora rose, Japanese barberry, burning bush and common privet. The native and invasive species are present throughout the remaining portions of the wetland, but at a lower abundance due to the limited width of the wetland and the invasive vegetation is more common in the northern portions of the wetland compared to the southern portion. The following table provides the primary defining characteristics of the wetland area.

Table One: Wetland Primary Characteristics

<table>
<thead>
<tr>
<th>PRINCIPAL SOURCE(S) OF HYDROLOGY</th>
<th>WATER TABLE TYPE</th>
<th>HGM CLASSIFICATION</th>
<th>USFWS CLASSIFICATION</th>
<th>VEGETATION COVER TYPE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURFACE &amp; GROUNDWATER INTERCEPTION &amp; PRECIPITATION</td>
<td>APPARENT</td>
<td>SLOPING &amp; GENTLY SLOPING</td>
<td>PFO1</td>
<td>WOODLAND</td>
</tr>
</tbody>
</table>

1Palustrine (P); Forested (FO); Broad-leaved Deciduous (I)

The wetland is a moderate-quality wetland, performing most wetland functions at a moderate capacity. The primary function of the stream is water conveyance. The functional capacity of the wetland varies due to the variable topography throughout the site. The northern, relatively steeper and narrower portions of the wetland provide functions such as groundwater discharge and the export of detritus to a higher degree compared to the southern, relatively flatter and more expansive portion of the wetland that provides functions such as stormwater storage, water quality modification and groundwater recharge to a higher degree. The wetland as a whole contributes to the abundance and diversity of wetland flora and fauna; however, the southern portion has a higher capacity to provide wildlife habitat value due to its larger size, hydrogeomorphic conditions and due to the contiguous forested buffer to the north providing ecological protection to the wetland. Throughout the wetland, the presence of invasive vegetation encroaching from adjacent properties will reduce the capacity of the wetland to provide this function over time if left unmanaged.

Proposed Site Conditions

The project proposes the construction of two single-family dwellings, asphalt driveways (one on each lot) and related site improvements. Each lot will be serviced by public water mains and
sanitary sewer lines. The proposed activities at Parcel 190 will result in the filling of approximately 4,800 square feet of wetlands and the piping of approximately 135 linear feet of the stream. The direct impacts to wetlands have been minimized through two primary project design features. The project was designed to avoid direct impacts to the high-value portions of the wetlands and the limit of disturbance within the wetlands has been reduced to the greatest extent practicable through the use of retaining walls to limit the extent of fill required to accommodate improvements. Further, a zoning variance was obtained to avoid direct impacts to wetlands on Parcel 189 and as such, no direct adverse impacts to wetlands will occur. During construction, mitigation measures such as water handling and soil erosion and sediment controls are proposed to avoid impacts to wetlands and watercourses outside the limit of disturbance.

The proposed activities will increase the impervious surface cover at each lot: approximately 5,400 square feet on Parcel 190 and 4,600 square feet on Parcel 189, resulting in a total of 11 percent impervious surface cover at the site. To compensate for this increase, stormwater management best management practices (BMPs) are proposed to manage and treat stormwater runoff from the proposed impervious surfaces. This will primarily be achieved through subsurface recharge systems proposed on each lot. Construction activities within the upland portions of each lot will occur very close to wetlands and, as such, mitigation measures such as soil erosion and sediment controls are proposed on each lot to avoid indirect adverse impacts to wetlands outside the limit of disturbance. Following construction, a wetland and buffer habitat enhancement plan will establish a native vegetated buffer in disturbed areas between the improvements and the wetlands to provide protection to the wetlands in the long-term.

**Potential Impacts and Mitigation**

Land development has the potential to cause short- and long-term as well as direct and indirect impacts to wetlands and watercourses from activities such as vegetation clearing, soil filling, excavation or pollution of stormwater. The proposed site improvements are designed to minimize direct adverse impacts and avoid short-term and long-term indirect adverse impacts. Due to the obtained zoning variance, no direct impacts to wetlands, other than enhancement activities, are proposed on Parcel 189 and as such, no direct adverse impacts to wetlands will occur. To accommodate improvements on Parcel 190, approximately 4,800 square feet of wetlands will be filled and approximately 135 linear feet of the stream will be modified. The stream will be piped around the dwelling and the streambed and adjacent wetland will be filled to construct the dwelling and driveway. This impact has been minimized through the location of the improvements and structures to minimize the extent of fill required. The proposed design sites the improvements in the northern portion of the lot, near the existing road. Although there is a larger area of upland in the southern portion of the lot, this upland area is adjacent to the highest-value portion of the wetland (the expansive, gently sloping portion of the wetland) and, to reach this developable area, a segment of the stream and watercourse would still be filled to construct a longer driveway. By siting the improvements in the northern portion of the lot, the southern portion of the lot will remain an unfragmented and undisturbed forest and wetland area, providing better protection to the wetland than if improvements were located in this area. Additionally, if the dwelling were proposed in the southern portion of the lot, the gas line ROW
would result in the house being directly adjacent to the wetland. The current design also incorporates retaining walls along the stream to minimize the extent of fill required to accommodate the improvements and thus reduces the loss of wetlands and natural streambed. The proposed pipe design will maintain the primary function of the stream, which is surface water conveyance. To minimize impacts during construction, the work will occur during low-flow conditions to protect downstream areas of stream and wetlands from turbid, sediment-laden water. Water handling measures are proposed to pump and divert upstream water around the construction area. The water will discharge to a temporary pump outlet armored with riprap to prevent soil erosion as the water reenters the stream to the south of the construction area.

Following construction, a wetland and buffer habitat enhancement plan is proposed to provide improved long-term protection to the wetlands and enhance the habitat within the wetland and buffer. This will primarily be achieved by establishing a continuous native shrub buffer between the proposed improvements and the wetlands. A split rail fence is proposed to physically separate the landscaped areas of each lot from the vegetated buffer and wetlands. Additionally, invasive woody shrubs and vines will be controlled via hand-cutting in a portion of the wetland and buffer. Clusters of native shrubs will be planted within the wetland to supplement the existing native vegetation. The plan provides long-term protection to the undisturbed portions of the wetlands through the plantings and physical features and provides wildlife value through the removal of invasive vegetation and the establishment of supplemental native vegetation. Wetland creation is not proposed as a mitigation strategy, as it would require additional disturbance within the upland forest to create the wetlands resulting in native tree removal and habitat loss. Due to steep slopes and the gas line ROW, the earthwork would be excessive and only a small area of mitigation would result. However, this mitigation strategy can be prepared as an alternative, if requested.

In the short-term, inland wetland and watercourse systems can be indirectly impacted by sediment-laden stormwater from proposed site improvement construction activities. For this project, the proposed improvements on each lot are within close proximity to wetlands and watercourses. As such, the project proposes to install and maintain soil erosion and sediment control measures in accordance with the 2004 CT E&S Guidelines to provide protection to wetlands. Primarily, sediment barrier fencing backed by hay bales is proposed to contain sediment within the limit of disturbance and prevent sediment migration downslope towards the wetlands. Other measures include inlet protection and antitracking pads at the construction entrances to prevent sediment from leaving the worksite. Due to the proximity to wetlands, the monitoring and maintenance of these measures will be critical to ensure efficacy during construction activity.

In the long-term and if not properly mitigated, wetlands and watercourses can be indirectly adversely impacted by stormwater runoff that flows from structures, pavement and vegetated surfaces. According to the project engineer, the project will result in approximately 11 percent impervious cover at the entire site. According to the results of studies conducted in many areas of the country, water quality is degraded and streams become impacted as the impervious cover of a watershed with few to no stormwater BMPs exceeds approximately 10 percent. Based on assessments of the water habitat and quality and the watershed impervious cover for numerous
streams in Connecticut, and after careful consideration, the CT DEP Bureau of Water Management concluded that 12 percent impervious cover is an acceptable threshold for protecting streams. This conclusion was used to develop a Total Maximum Daily Load (TMDL) implementation plan for the Eagleville Brook in Mansfield, Connecticut that is based on impervious cover. In this plan, a TMDL target of 11 percent maximum impervious cover is used (reduced from 12 to 11 for a margin of safety). Further, the TMDL plan acknowledges that the effects of impervious coverage on water quality can be reduced through the use of engineered stormwater management measures. With no mitigation measures, the proposed impervious cover meets the 11-percent target threshold to maintain the water quality of the onsite wetland and stream. To further ensure water quality protection, the project includes a stormwater management plan in accordance with the 2004 CT Stormwater Quality Manual. One primary BMP, a subsurface recharge system, is included to manage stormwater runoff at each lot. The systems will capture stormwater runoff from the proposed dwellings and drives and will provide water quality treatment and storage for the first flush of stormwater runoff generated during frequent storm events. The stored and treated water will infiltrate the soils, providing water quality treatment and groundwater recharge. Each system is sited on the northern portion of the lot to maintain natural flow patterns, as the infiltrated groundwater will continue to flow downslope towards the wetlands as it does today. Overall, the plan will maintain natural water flow pathways and provide water quality volume treatment and control the peak discharge rates for the 25-year storm or smaller.

**Wetland Functions and Values: Existing versus Proposed Conditions**

A comparison of the capacity of the onsite wetland areas to perform typical wetland and watercourse functions before and after the completion of the proposed site improvements was performed. This comparison was generated by evaluating the existing wetland functions and anticipated wetland functions after construction of the project within the context of typical wetland functions and values as established by Normandeau Associates, Inc. in the 1998 publication, *A Rapid Procedure for Assessing Wetland Functional Capacity*.

The comparison of the existing wetland and watercourse functions and the anticipated wetland and watercourse functions following implementation of the proposed project revealed that the wetland functions will be substantially maintained from the existing conditions. A summary of this evaluation is presented in the table below.

**Table Two: Wetland Functions: Existing versus Proposed Conditions**

<table>
<thead>
<tr>
<th>WETLAND FUNCTIONS</th>
<th>RELATIVE CAPACITY TO PERFORM FUNCTION</th>
<th>FUNCTIONAL DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modification of Groundwater Discharge</td>
<td>MODERATE MODERATE</td>
<td>Changed - The capacity of the wetland to influence the amount of water moving from groundwater to surface water will be slightly reduced due to the proposed wetland loss in an area that provides moderate to high groundwater discharge.</td>
</tr>
</tbody>
</table>
### Modification of Groundwater Recharge

| LOW-MODERATE | LOW-MODERATE | **Unchanged** - The capacity of the wetland to influence the amount of water moving from surface water to groundwater will not be altered as the proposed wetland loss is in an area that provides little to no groundwater recharge. |

### Storm and Flood Water Storage

| MODERATE | MODERATE | **Unchanged** - The capacity of the wetland to store floodwater will not be altered as the proposed wetland loss is in an area that provides little to no stormwater storage. |

### Modification of Water Quality

| MODERATE | MODERATE | **Unchanged** - The capacity of the wetland to modify water quality will not be altered with the proposed project as the proposed wetland loss is in an area that provides little to no water quality modification. |

### Export of Detritus

| MODERATE | MODERATE | **Changed** - The capacity of the wetland to export organic detritus from the wetland to the adjacent and downstream aquatic ecosystems will be reduced slightly because the proposed wetland loss is in an area that provides a moderate to high capacity to export detritus. |

### Contribution to Abundance and Diversity of Wetland Flora

| MODERATE | MODERATE | **Changed** - The capacity of the wetland to contribute to the abundance and diversity of wetland flora will be slightly reduced simply due to the reduction in area of wetland. |

### Contribution to Abundance and Diversity of Wetland Fauna

| MODERATE | MODERATE | **Changed** - The capacity of the wetland to contribute to the abundance and diversity of wetland fauna will be slightly reduced simply due to the reduction in area of wetland. |

## Conclusions

We completed an assessment of existing and proposed wetland and watercourse conditions related to proposed property improvements. Based on this assessment, we conclude that the proposed project minimizes direct adverse impacts to wetlands and watercourses to the greatest extent practicable and that the primary wetland and watercourse functions will be maintained substantially at current levels. Thank you for your consideration of this information. If you should have any questions or comments, please do not hesitate to contact us at (203) 366-0588.

Sincerely,

William L. Kenny, PWS, PLA  
Principal

Carolyn Matthews  
ESA Certified Ecologist  
ISA Certified Arborist, NE-6822A

Ref. No. 5167
LOTS 4 & 5
WEST MISCHA HILL ROAD
SITE IMPROVEMENTS
IN
TRUMBULL, CONNECTICUT

SHEET LIST

1.0 TITLE SHEET
2.0 SITE PLAN
2.1 SITE PLAN ALTERNATE
2.2 EROSION CONTROL PLAN
3.0 WETLAND & BUFFER ENHANCEMENT PLAN (BY OTHERS)
4.0-4.1 CONSTRUCTION DETAILS
10. The contractor is to have available at all times extra silt fence, hay bale mulch, grass seed, and straw bales for mulching.

14. Land disturbance will be kept to a minimum. Re-stabilization will be scheduled as soon as possible after the project is completed to ensure the stability of the site.

1. Land disturbance will be kept to a minimum. Clearing and stump removal will be performed in a manner that minimizes soil disturbance.

3. Erosion and sediment control measures will be installed prior to construction whenever feasible, to prevent soil and sediment from being carried into the storm drain or other drainage systems.

6. All control measures will be maintained in effective condition throughout the construction period. Maintenance of the erosion controls shall consist of inspection at the start of each work day.

8. The contractor is to inspect the site daily during construction to ensure the integrity of the erosion and sediment control devices. Additional reinforcing can be installed if necessary to control the generation of dust.

11. The contractor is to verify all on-site and off-site field conditions and for conveying a copy of the erosion control plans to the project site.

13. Riprap is specified on the plan. The riprap used will conform to the requirements specified in the plan.

16. No burying of stumps, slash, and grubbing material is allowed on any site. Materials must be removed or treated as specified in the plan.

18. The contractor is to have available at all times extra silt fence, hay bale mulch, grass seed, and straw bales for mulching.

21. All construction traffic entering a public street or road shall be channeled onto anti-tracking aprons as shown on the detail sheets.

24. The use of all control measures will be monitored throughout the construction period, with periodic reports submitted to the design engineer.

27. The contractor is to have available at all times extra silt fence, hay bale mulch, grass seed, and straw bales for mulching.
1. UNLESS NOTED OTHERWISE, EXISTING AND ALL OTHER PROPOSED CONDITIONS INFORMATION TAKEN

3. TO PREVENT DAMAGE FROM WHITE TAILED DEER BROWSE, THE SHRUB PLANTINGS SHALL BE

PLANTING PLAN

WILLIAM KENNY ASSOCIATES LLC.

PROPOSED WETLAND BUFFER HABITAT ENHANCEMENT PLANTING INFORMATION PROVIDED BY

ASSOCIATES, LLC.

---END OF TABLE---

OBJECTIVES:

1. OBTAIN REVIEW AND FLAGGING BY PROJECT WETLAND SCIENTIST OF NATIVE VEGETATION TO

2. VEGETATION CUTTING AND REMOVAL WILL BE COMPLETED VIA THE USE OF HAND TOOLS TO

ABUNDANCE OF INVASIVE PLANTS, WHICH DO LESS WELL IN SHADE.

TO MANAGEMENT METHOD

INVENTORY & RESIDUES WILL BE COMPLETED VIA THE USE OF HERBICIDE AND THE PLANTING OF NATIVE VEGETATION.

PLANTS AND REDUCE THE POTENTIAL FOR THE INVASIVE PLANTS TO BECOME ESTABLISHED OR TO

REMAIN AND BE PROTECTED AND VEGETATION THAT IS INVASIVE AND TO BE MANAGED.

EXCLUDING VEGETATION IDENTIFIED BY THE PROJECT WETLAND SCIENTIST TO REMAIN. REMOVE

WOOD DEBRIS FROM AREA AS DESCRIBED IN MANAGEMENT METHOD 2.4 •

FOLLOWING REVIEW AND APPROVAL BY IWWA STAFF, DEAD, DYING OR HAZARD TREES WILL BE

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INLAND WETLANDS AND WATERCOURSES
COMMISSION
TOWN OF TRUMBULL
APPLICATION FOR PERMIT

SECTION I

1. Location/address of property where activity is proposed: 1056 Daniels Farm Road
   Parcel Size: 30 ac; Zone: AA; Map ID: G03/03/012; Current Use: Cemetery

2. Applicant’s Name: Same as owner
   Applicant’s Address:
   Telephone: _________________________ Cell: (___) _________________________ Email: _________________________
   Applicant’s interest in property (Lessee, Licensee, Owner, etc.):

3. Name of Property Owner of Record: Bridgeport Roman Catholic Diocesan Corp. c/o Joe McCurdy
   Address of Owner of Record: 1060 Daniels Farm Road
   Telephone: _________________________ Cell: (___) _________________________ Email: joe.mccurdy@diobpt.org
   If Applicant is the Owner, go to #5

4. The undersigned hereby authorizes _________________________ to act as Agent on my behalf as
   related to this application.
   _________________________ _________________________ _________________________
   (Owner of Record)

5. Description of proposed activity and location of property. Include listing of all proposed regulated activities
   (use separate sheet if necessary):
   See application attachment.

The applicant understands that this application is to be considered complete only when all information and documents
required by the Agency have been submitted.
The undersigned warrants the truth of all statements contained herein and in all supporting documents under penalty of false
statement according to the best of his/her knowledge and belief.
Permission is granted to the Town of Trumbull, Inland Wetlands & Watercourses Commission, and its agent(s) to inspect
the subject land, at reasonable times, during the pendency of an application and for the life of the permit under Section
7.5 of the IWWC Regulations.

Applicant’s Signature: _________________________ Date: _______________
(If not the Owner)

Owner’s Signature: _________________________ Date: _______________

Secretary, Bridgeport Roman Catholic
Diocesan Corporation

Submitted 3/22/2022
22-06
SECTION II
SITE PLAN REQUIREMENTS

1. Total property area: 30 ac. Zone: AA Number of Lots: N/A

2. Map ID, from assessors card: G03/012

3. Total area existing of wetlands on property: 2.16 ac.

4. Total area of Regulated area on property: 5.51 ac.

5. Wetlands area to be disturbed: 0

6. Upland Review area to be disturbed: 0.88 ac.

7. Proposed % of wetlands on the property to be disturbed: 0

8. Total area of proposed land disturbance: 2.83 ac.

9. Is the proposed activity located within 500 feet of the boundary of Easton, Monroe, Shelton, Stratford, Bridgeport or Fairfield: Yes _ No X (If yes, see Section 8.2 of the Trumbull Inland Wetlands & Watercourses Regulations.)

10. Is any portion of the site located within a water company watershed: Yes _ No X (If yes, see Section 8.3 of Trumbull Inland Wetlands & Watercourses Regulations.)

11. Existing property coverage type data:

<table>
<thead>
<tr>
<th>Percent of Regulated Area</th>
<th>Dominant Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trees: 90</td>
<td></td>
</tr>
<tr>
<td>Shrubs:</td>
<td></td>
</tr>
<tr>
<td>Grasses, weeds, etc: 9</td>
<td></td>
</tr>
<tr>
<td>Impervious area: &lt;1</td>
<td></td>
</tr>
</tbody>
</table>

12. Existing watercourse data and open water characteristics: (if applicable)

a. Size of pond(s) or lake(s): N/A
b. Stream characteristics: intermittent or permanent: N/A
c. 100 year flood evaluation: N/A

13. Probable effect of proposal (if any) on vegetation and wildlife: None

14. Existing or proposed source(s) of water supply for the property: N/A

15. Existing or proposed method of sewage disposal for the property: N/A

16. Creation of proposed water bodies (if yes, detailed information will be required): Yes: _ No: X

17. List proposed measures to protect regulated and inland wetland areas from:

a. Erosion and sedimentation: Silt fence barrier/temporary sediment trap and w/sediment routing

18. Proposed percent of Regulated area to be covered with impermeable surface: 0

19. Material to be (check all that applies): deposited _ excavated _ (if yes, complete the following)

a. Area: 0.73 ac. Volume: 2000 cy

b. Physical & Chemical composition of material to be deposited: Topsoil/common fill
PROJECT DESCRIPTION

Proposed improvements are construction of 700 ft of 20 foot wide driveway with associated drainage and subsurface detention system to access approximately 2000 grave sites. Landscape buffers and tree planting are also included.

In addition, approval is being sought for a previously unpermitted activity of placement of fill within upland review areas to remain in place.
**Property Location:** 1056 DANIELS FARM ROAD

**Vision ID:** 12474

**Property Info:**
- **Account #:**
- **MAP ID:** G/03 / 00012/ 000/
- **Bldg #:** 1 of 2
- **Sec #:** 1 of 2
- **Card #:** 1 of 2
- **State Use:** 968
- **Print Date:** 03/22/2022 09:22

**Assessment Details:**
- **Appraised Value:**
  - **Year:** 2020
  - **Code:** 21
  - **Value:** 713,440
- **Assessed Value:**
  - **Yr. Code:**
    - **2020 21:** 713,440
    - **2020 22:** 622,720

**Exemptions:**
- **Special Land Value:** 0
- **Total Appraised Parcel Value:** 2,062,600

**Building Permit Record:**
- **Permit ID:** 4468 E
- **Issue Date:** 12/16/2003
- **Type:** NC
- **Description:** New Construct
- **Amount:** 975,000
- **Comments:** COMMUNITY MAUSO 08/29/2005

**Land Line Valuation Section:**
- **B #**: 1
  - **Use Code:** 968
  - **Use Description:** Cemetery Bldg
  - **Zone:** AA
  - **Front Depth:** 2.00
  - **Unit Price:** 183,750.00
  - **J Factor:** 1.0000
  - **C Factor:** 1.00
  - **S Adj Fac:** 1.00
  - **Adj Unit Price:** 411,600

- **Total Land Value:** 1,038,800
**Property Location:** 1056 DANIELS FARM ROAD

**Vision ID:** 12474

**State Use:** 968

**Print Date:** 03/22/2022 09:22

### CURRENT OWNER

<table>
<thead>
<tr>
<th>TOPO. UTILITY</th>
<th>STRT./ROAD</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLDG #: 12474</td>
<td>1056 DANIELS FARM RD</td>
<td>TRUMBULL, CT</td>
</tr>
</tbody>
</table>

**State Use:** 968

### SUPPLEMENTAL DATA

- **Vision ID:** 12474
- **Account #:** 000000000012
- **Bldg Name:** State
- **Card #:** 2 of 2
- **Sec #:** 1 of 1
- **Print Date:** 03/22/2022

### VISION

- **Total:** 2,062,600
- **Preval:** 1,443,820

### EXEMPTIONS

- **Appraised Value:** 1,336,160
- **Comm. Int.:** 0

### BUILDING PERMIT RECORD

- **Permit ID:** 8/29/2005
- **Issue Date:** 02
- **Type:** Int Insp

### LAND LINE VALUATION SECTION

- **B #:** 968
- **Description:** Cemetery Bldg

### ASSESSING NEIGHBORHOOD

- **NBHD/SUB:** 3/A
- **NBHD Name:** ST MONICA MAUSOLEUM
- **Tracing:** 0
- **Batch:** 0

### APPRAISED VALUE SUMMARY

- **Appraised Bldg. Value (Card):** 143,400
- **Appraised XF (B) Value (Bldg):** 0
- **Appraised OB (L) Value (Bldg):** 0
- **Appraised Land Value (Bldg):** 0
- **Special Land Value:** 0
- **Total Appraised Parcel Value:** 2,062,600
- **Valuation Method:** C
- **Adjustment:** 0

### TOTAL Land Value:

- **Total:** 0

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This signature acknowledges a visit by a Data Collector or Assessor.
Soil Report

Date: May 2, 2021

By: Steven Danzer Ph.D.

- Soil Scientist, Senior Professional Wetland Scientist, Arborist
  - Nationally certified by the Soil Science Society of America (#353463).
  - Registered with the Society of Soil Scientists of Southern New England.
  - Certified PWS #1321 by the Society of Wetland Scientists
  - Certified Arborist by the International Society of Arboriculture (ISA) NE-7409A
  - CT Licensed Arborist DEEP S-5639

- Ph.D. in Renewable Natural Resource Studies.

Project: 1056 Daniels Farm Road; Gates of Heaven Cemetery – Parcels 03/012/000 and 03/078/000

INTRODUCTION

A wetlands investigation was performed at the above-referenced property to locate and identify any inland wetland soils or watercourses.

The purpose of this report is to document that the field work for the site investigation was conducted using professionally accepted methods and procedures. This report is intended for submission by the owner(s) of the property or their designated agent to the local municipal regulatory agency.

DEFINITIONS

The Connecticut General Statutes Ch. 440 Sections 22a-36 and 22a-45 (as amended) define inland wetlands as land, including submerged land (except for tidal wetlands) which consist of any of the soil types designated by the National Cooperative Soil Survey as poorly drained, very poorly drained, floodplain, or alluvial.
Poorly drained and very poorly drained are soil drainage classes that are defined by specific technical criteria in the Soil Survey Manual, Ch. 3 of the USDA Natural Resources Conservation Service. Generally speaking, poorly drained soils are wet at shallow depths periodically during the growing season, or remain wet for long periods, while in very poorly drained soils water is removed from the soil so slowly that free water remains at or very near the ground surface during much of the growing season.

Floodplain refers to the land bordering a stream or river that is subject to flood stage inundation, and alluvial refers to soil deposited by concentrated running water (Soil Survey Manual, Part 629).

Watercourses are defined by the Connecticut General Statutes Ch. 440 Sections 22a-36 and 22a-45 (as amended) to include rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private. Intermittent watercourses are a type of watercourse that typically do not flow year-round, and are specifically defined within the CT statutes by the presence of a defined permanent channel and bank, and the occurrence of two or more of the following characteristics:

a) Evidence of scour, or deposits of recent alluvium or detritus;
b) The presence of standing or flowing water for a duration longer than a particular storm incident;
c) The presence of hydrophytic vegetation.

Uplands are land areas that are not inland wetlands, watercourses, or subject to tides.

The soil series is a soil label that refers to the lowest category of the National Soil Classification System. It is used as a specification for identifying and classifying soils within a soil map unit. The descriptions are standardized by the USDA-NRCS, and contain soil properties that define and distinguish them from the other soil series.

METHODS

All soils were sampled to a depth of at least 20 inches with spade and augur unless noted otherwise during a field investigation conducted during the week of April 25, 2021. Soils were classified according to the nomenclature presented within the NRCS Web Soil Survey, with additional reference to the National Cooperative Soil Survey, and the local Soil Survey.

The wetland boundaries were marked on site with flagging tape and/or stakes (Wetland Flags 1-722) and a sketch map prepared (attached).
SITE DESCRIPTION AND DISCUSSION

Two adjoining parcels were examined. The western parcel, 30 acres, consisted of the active cemetery area with some wooded buffer around the edges. The eastern parcel, 55 acres, was predominately forested, with an unpaved road/trail running north/south in the far eastern region.

Booth Hill Brook flows southerly through the center of the forested eastern parcel. Two other watercourse systems flow southerly to their confluence with the Booth Hill Brook corridor in the southern region of the site. Numerous seeps and intermittent watercourses drain from the adjoining slopes. A forested red maple swamp with numerous depressions is located in the northwest corner of the site, on the western parcel. Of note were several long fill piles in the southern central region, north of Firehouse road. These were considered as inclusions occurring within the wetlands.

WETLAND AND WATERCOURSE SOIL MAPPING UNITS

(3) Ridgebury, Leicester, and Whitman soils, extremely stony - Booth Hill Brook, the other 2 main watercourse corridors, the intermittent watercourses, lawned wetlands around the pond in the southern region, and the forested wetland located in northwest region

The Ridgebury series consists of very deep, somewhat poorly and poorly drained soils formed in till derived mainly from granite, gneiss and schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in low areas in uplands. Slope ranges from 0 to 15 percent. Saturated hydraulic conductivity ranges from moderately low to high in the solum and very low to moderately low in the substratum. Mean annual temperature is about 49 degrees F. and the mean annual precipitation is about 45 inches.
TAXONOMIC CLASS: Loamy, mixed, active, acid, mesic, shallow Aeric Endoaquepts

The Leicester series consists of very deep, poorly drained loamy soils formed in friable till. They are nearly level or gently sloping soils in drainageways and low-lying positions on hills. Slope ranges from 0 to 8 percent. Permeability is moderate or moderately rapid in the surface layer and subsoil and moderate to rapid in the substratum. Mean annual temperature is about 50 degrees F., and mean annual precipitation is about 47 inches.
TAXONOMIC CLASS: Coarse-loamy, mixed, active, acid, mesic Aeric Endoaquepts

The Whitman series consists of very deep, very poorly drained soils formed in lodgement till derived mainly from granite, gneiss, and schist. They are shallow to a densic contact. These soils are nearly level or gently sloping soils in depressions and drainageways on uplands. Saturated hydraulic conductivity is moderately high or high in the solum and very low through moderately high in the substratum. Mean annual precipitation is about 45 inches (1143 millimeters) and mean annual temperature is about 49 degrees F. (9 degrees C.).
TAXONOMIC CLASS: Loamy, mixed, superactive, acid, mesic, shallow Typic Humaquepts

(17) Timakwa and Natchaug soils – Forested wetland located in northeast corner of the site, flags 1-33.

Steven Danzer PhD and Associates LLC
www.CTWetlandsConsulting.com
203-451-8319
The Timakwa series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials over sandy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. Saturated hydraulic conductivity is moderately high or high in the organic layers and high or very high in the sandy material. Slope ranges from 0 to 2 percent. Mean annual temperature is about 13 degrees C and the mean annual precipitation is about 1258 mm.

TAXONOMIC CLASS: Sandy or sandy-skeletal, mixed, euic, mesic Terric Haplosaprists

The Natchaug series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials overlying loamy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. Saturated hydraulic conductivity is moderately high or high in the organic layers and moderately low to high in the loamy material. Slope ranges from 0 to 2 percent. Mean annual temperature is about 9 degrees Celsius and mean annual precipitation is about 1205 millimeters.

TAXONOMIC CLASS: Loamy, mixed, euic, mesic Terric Haplosaprists

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LIMITATIONS
All observations and conclusions within this report are opinion and were based upon the field conditions at time of investigation and best professional judgment. Field conditions may change over time. All wetland boundary lines established by the undersigned Soil Scientist are subject to change until officially adopted by the appropriate local, state and federal regulatory agencies.

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CERTIFICATION

Signed,

Steven Danzer Ph.D., Certified Professional Soil Scientist (CPSS #353463)
1056 Daniels Farm Rd., Trumbull, CT
Parcels 03/012/000 and 03/078/000 - EASTERN

Sketch Map - not to scale
See report for methods
Steven Danzer Ph.D., Soil Scientist
Steven Danzer Ph.D. & Associates LLC
203-451-8319
www.CTWetlandsConsulting.com

1 inch = 200 feet
Sketch Map - not to scale
See report for methods
Steven Danzer Ph.D., Soil Scientist
Steven Danzer Ph.D. & Associates LLC
203-451-8319
www.CTWetlandsConsulting.com

1  inch  =  200  feet
Additional Investigation

Date: April 28, 2022

By: Steven Danzer Ph.D.

- Soil Scientist, Senior Professional Wetland Scientist, Arborist
  - Nationally certified by the Soil Science Society of America (#353463).
  - Registered with the Society of Soil Scientists of Southern New England.
  - Certified PWS #1321 by the Society of Wetland Scientists
  - Certified Arborist by the International Society of Arboriculture (ISA) NE-7409A
  - CT Licensed Arborist DEEP S-5639

- Ph.D. in Renewable Natural Resource Studies.

Project: Gate of Heaven Cemetery – 1056 Daniels Farm Road, Trumbull

RESULTS

At the request of Jason Edwards Associates, LLC, two areas were investigated on 4/28/22 to determine if either of the areas were intermittent watercourses or wetlands. The first area was located south of the existing unpaved entrance road. The second area was located to the north of base of the existing fill piles. Both areas are indicated on the attached sketch map.

The area south of the existing unpaved entrance road does not meet the criteria of an intermittent watercourse, nor was it wetlands. There was no defined channel, and the soils did not contain redoximorphic features, or low chroma colors, or any other indications of poorly or very poorly drained soils. As such there was no indication that the area in question was supported by groundwater. The source of hydration for this area appears to be runoff from the road, funneled and constricted between the slopes on both sides. The runoff is perched by fine soil particles that have eroded from the adjacent disturbed areas. There was no hydrophytic vegetation. There was no flow, only puddling due to the localized perching. Similar puddles were observed throughout the surface of the adjacent fill area due to soil compaction and settling of fine soil particles.
The area located north of the base of the existing fill pile was determined to be an intermittent watercourse. Accordingly, it was flagged. The watercourse appears to daylight groundwater seepage from the naturally forested hill to the west. The watercourse flows southeasterly until it is physically obstructed by the edge of the large fill pile.

Signed,
Steven Danzer Ph.D., Certified Professional Soil Scientist (CPSS #353463)
Not an intermittent watercourse

Intermittent watercourse flagged 4/27/22

Sketch Map - not to scale
See report for methods
Steven Danzer Ph.D., Soil Scientist
Steven Danzer Ph.D. & Associates LLC
203-451-8319
www.CTWetlandsConsulting.com

1 inch = 60 feet
SITE IMPROVEMENTS

#1056 DANIELS FARM ROAD
PREPARED FOR
BRIDGEPORT ROMAN CATHOLIC DIOCESAN CORP.

LIST OF DRAWINGS:
L-1 LAYOUT PLAN
S-1 SITE DEVELOPMENT PLAN (PHASE ONE)
S-2 & S-3 SITE DEVELOPMENT PLAN (PHASE TWO)
E-1 EROSION CONTROL PLAN (PHASE TWO)
LP-1 LANDSCAPE PLAN
D-1 & D-2 DETAILS
1. Land disturbance is to be kept to a minimum. There shall be no clear cutting of the

2. A determination should be made concerning whether the sand and debris have

3. The Stormwater Pollution Control Plan shall include all erosion and sedimentation control

4. Support and anti-tracking concrete clear cuts will be completed as shown and

5. The detention galleries shall be inspected annually. If sediment is observed at the

6. Silt fence and temporary erosion and sediment controls shall be employed as required.

7. The Stormwater Pollution Control Plan shall include all erosion and sedimentation control

8. A TO

9. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

10. Install curbing.

11. Install underground detention system and storm drainage.

12. Install erosion control devices. Location shown on plan may be revised as construction

13. 1-200 feet, or as site conditions warrant.

14. Prior to closing the site down for winter, if required, the contractor shall schedule a

15. To the extent that the storm water pollution control requirements are met, the permitting

16. All contractors and subcontractors working on site will ensure that no litter, debris,

17. Land disturbance is to be kept to a minimum. There shall be no clear cutting of the

18. The use of high velocity blowers is not recommended as they

19. Disturbance for individual lot development will be limited to 1 acre at any one time.

20. Contractors will implement techniques to control the generation of dust.

21. Contractors shall ensure that the use of all materials and equipment will be kept to a

22. All wastewater will be properly treated before being discharged into the

23. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

24. Contractors shall ensure that the use of all materials and equipment will be kept to a

25. The use of high velocity blowers is not recommended as they

26. All wastewater will be properly treated before being discharged into the

27. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

28. Contractors shall ensure that the use of all materials and equipment will be kept to a

29. The use of high velocity blowers is not recommended as they

30. All wastewater will be properly treated before being discharged into the

31. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

32. Contractors shall ensure that the use of all materials and equipment will be kept to a

33. The use of high velocity blowers is not recommended as they

34. All wastewater will be properly treated before being discharged into the

35. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

36. Contractors shall ensure that the use of all materials and equipment will be kept to a

37. The use of high velocity blowers is not recommended as they

38. All wastewater will be properly treated before being discharged into the

39. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

40. Contractors shall ensure that the use of all materials and equipment will be kept to a

41. The use of high velocity blowers is not recommended as they

42. All wastewater will be properly treated before being discharged into the

43. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

44. Contractors shall ensure that the use of all materials and equipment will be kept to a

45. The use of high velocity blowers is not recommended as they

46. All wastewater will be properly treated before being discharged into the

47. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

48. Contractors shall ensure that the use of all materials and equipment will be kept to a

49. The use of high velocity blowers is not recommended as they

50. All wastewater will be properly treated before being discharged into the

51. All materials that have been contaminated by oil or other hazardous wastes. A decision can then be made

52. Contractors shall ensure that the use of all materials and equipment will be kept to a

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