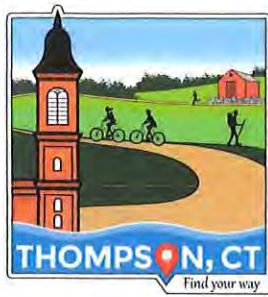


INLAND WETLANDS COMMISSION
TUESDAY, July 12, 2022
ZOOM Meeting

- A) Call to Order & Roll Call
- B) Appointment of Alternates

Agenda Item C.a.
Action on Minutes of Previous Meeting
Minutes of June 14, 2022



TOWN OF THOMPSON

Inland
Wetlands
Commission

RECEIVED
TOWN OF THOMPSON, CT.
2022 JUN 21 P 1:04
Linda Paradise
TOWN CLERK, ASST

MEETING MINUTES: Tuesday, June 14th, 2022 7:00PM

Hybrid meeting via ZOOM Online Meeting Portal

and in-person at Merrill Seney Community Room,

Thompson Town Hall, 815 Riverside Drive, North Grosvenordale, CT

- A) The meeting was Called to Order at 7:00 PM by Chairman George O'Neil, who announced the protocols for conducting the online meeting.

Members and staff present: George O'Neil (Chairman) Charlie Obert (Vice Chairman), Diane Chapin (Treasurer), Francesca Morano (Commissioner), Marla Butts (Wetlands Agent), Dan Malo (Recording Secretary), Bryce Pratt (IT), and Amy St.Onge (First Selectman)

Members of the public: Valerie Clark, Gary Kettle, Mark Simon, Daniel Blanchette, Sean Copeland, WINY, and others.

- B) Appointment of Alternates – n/a

- C) Minutes of Previous Meetings –

- (a) The March 8, 2022 Meeting Minutes were accepted with correction of the Recording URL:

The Meeting Recording can be seen at the link below, with the Access Passcode: xXiL1?VE
https://us02web.zoom.us/rec/share/JH-fdmdu8LyYaEwUR0UbZKtrrQzW3Q0MfWm0uF1ZQyK2j_CPNGSxYnfKzkb_Dcpl.zo1CykrLA4VfCF1j

- (b) A meeting quorum was not achieved at the June 11, 2022 sitewalk. No minutes were taken.

- D) Citizens Comments on Agenda Items – none

- E) Applications

- a) Old Applications

1. **WAA22009**, Thomas Dolan, Jr., 0 New Rd (Assessor's map 154, block 5, lot 10A), new single-family home in 100-foot upland review area, received 4/19/22, issued 5/23/22, legal notice published 6/10/22, end of appeal period 6/25/22. No action required by the Commission.
2. **IWA22010**, Mark Simon, 0 Sand Dam Rd (Assessor's map 133, block 24, lot 63), fill wetlands for driveway crossing & new home, septic and well mostly in 100-foot upland review area, stamped received 5/3/22, statutorily received 5/10/22. Septic design has been finalized. The applicant proposes a driveway crossing over an intermittent stream. Fruit trees and fixed solar panels are being considered in a clearing along Babula Road. George O'Neil asked what type of solar system and battery system would be installed. Mark Simon stated that he is still in the consultation phase. Marla Butts asked about the construction sequence for the crossing, to which Daniel Blanchette of J&D Civil Engineers stated that work will be performed during low flow and according to the erosion and sediment control plan on Sheet #3.

Marla Butts and George O'Neil presented some of the site characteristics that they witnessed on June 11, 2022. Marla asked if a response was received regarding the National Diversity Database. Daniel Blanchette stated that he has not yet received a response, however the construction is outside of the hash-marked area depicted on the map. No work is proposed in the critical habitat. Marla asked why two culverts were chosen for the driveway crossing. Daniel Blanchette stated that there is no well-defined channel, and two culverts will have to follow the natural hydraulics as much as possible. Fran Morano asked how the power supplied by the solar panels would reach the house. Daniel Blanchette said that a conduit would be installed under the driveway. A motion to approve the application was made by Diane Chapin and seconded by Charlie Obert. **The motion was APPROVED 4-0.**

3. **IWA22011**, D.H. Copeland Builder, Inc, 119 New Road (Assessor's map 154, block 3, lot 21), 10-foot extension of 15" culvert under existing driveway to widen driveway by 6', electronically received 5/5/22, statutorily received 5/10/22. Driveway initially authorized by **WAA21016**. Marla Butts stated she observed water from adjacent lot 117 flowing through the ditch-line at the New Road culvert, though the flow has subsided. Marla noted that such runoff should not be occurring and she has discussed this with both property owners. Marla will monitor flow throughout the seasons. She has no concern regarding the expansion of the driveway. An additional driveway permit will be required. A motion to approve the application was made by Charlie Obert and seconded by Diane Chapin. **The motion was APPROVED 4-0.**

b) New Applications

1. **WAA22012**, Marc & Lori Addington, 76 Lehtinen Rd (Assessor's map 137, block 21, lot 17A), construction of a 32' X 24' detached garage with driveway access located within the 100-foot upland review area, stamped received 5/9/22, issued 5/23/2022, legal notice published 6/10/22, end of appeal period 6/25/22. No action required by the Commission.
2. **WAA22013**, Hany Youssef, 274 Riverside Dr (Assessor's map 87, block 95, lot 39), construct commercial building on existing foundation for non-medical cannabis facility, stamped received 5/23/22, under review. The applicant intends to use existing foundation on site. It is unclear if the foundation is adequate to be built upon. An engineer's certification would be required to determine if the foundation is suitable; if not, additional earthmoving might be required which would make the project a significant activity requiring a wetlands permit.
3. **WAA22015**, Greg & Anna Kuznecki, 0 Richard Bennett Lane (Assessor's map 137, block 7, lot 5L), construct septic system and discharge foundation drain in 100-foot upland review area, stamped received 6/6/22, under review pending receipt of NDDH design approval.
4. **DEC22016**, Gary Kettle, 149 Wilsonville Rd (Assessor's map 77, block 47, lot 1), request to install tiles in a 10x10 area in wetlands for irrigating plants at the Wilsonville Herb Farm store, stamped received 6/6/22. A motion to approve the application as a use permitted as a right was made by Charlie Obert and seconded by Diane Chapin. **The motion was APPROVED 4-0**

F) Applications Received After Agenda was Published - None

G) Permit Extensions / Changes - None

H) Violations & Pending Enforcement Actions

- a) **Notice of Violation VIOL21023**, Jamie Piette, 0 & 73 Center Street (Assessor's map 16, block X, lots H & 2), unauthorized construction of retaining wall and associated backfill in or near Little Pond, issued 8/24/21. Marla recommended that a plan provided by Killingly Engineering Associates be considered the 'as-built' and filed on the Town land records. Marla will contact the property owner instructing them to file the as-built.
- b) **Notice of Permit Violation VIOL21036**, Permit IWA20022, Marc Baer, 1227 Thompson Rd (Assessor's map 116, block 24, lot 10), grades not as authorized in modified plan approved by the Commission on February 9, 2021. Marla Butts was informed by Daniel Blanchette of J&D Civil Engineers that he had not yet received notification from Marc Baer to proceed with plan changes. Marla and Dan Malo inspected the site on 6/8/22. Construction has halted.
- c) **Notice of Violation VIOL22008**, Rodney Lamay, 0 Quaddick Town Farm Road (Assessor's map 160, block 11, lot 15), unauthorized clearing, cutting & grading in wetlands, issued by Acting Wetland Agent Dan Malo on 3/21/2022. Marla and Dan inspected the site 6/8/22. No work has occurred since the issuance of the Notice of Violation. Marla will close the file.
- d) **Notice of Violation VIOL22014**, Jason Chin & Dannielle Lohler, 150 Wilsonville Rd (Assessor's map 77, block 46, lot 29), construction of detached garage in 100-foot upland review area, violation issued 6/6/2022. Two garages were built in uplands prior to the issuance of permits. Marla will be working with the Zoning Officer and Building Department to address.

I) Other Business

- a) Draft Subdivision Regulations – Marla Butts recommended in writing to the Planning & Zoning Commission to re-adopt 'net buildable area'. Inland Wetlands Commissioners agreed that Marla should present her concerns in person to Planning & Zoning. Charlie Obert said that the draft regulations should be reviewed by the Town Attorney and Select-board.
- b) A motion to modify the agenda to include public comment after 'Other Business' was made by George O'Neil and seconded by Charlie Obert. **The motion was unanimously APPROVED.**

J) Public Comment Period

Valerie Clark thanked the Wetlands Commission and Marla Butts for diligence in reviewing the revisions to the Subdivision Regulations. She hopes that the Planning & Zoning Commission incorporates Marla's comments before the process moves forward.

K) Reports

- a) Budget & Expenditures – Diane Chapin reported \$3,149.22 available in the budget. 88.1% of the budget has been expended. \$40 were encumbered in the prior month for legal notices. The Wetlands budget for 2022-2023 has been approved by the Board of Finance at \$27,424. Marla noted that her salary line will be exceeded before the end of the current fiscal year.
- b) Wetlands Agent Report – Marla Butts noted that no progress has been made on MS4, records retention, or Inland Wetlands Regulation updates. She noted that the focus of Wetlands Regulation updates will be on 'Conceptual Subdivisions' and the fee structure.

L) Correspondence

- a) Connecticut Wildlife Magazine - March/April 2022 Edition
- b) Copy of DEEP Permit Application for the Use of Pesticides in State Waters (for Quinebaug Park Pond - 111 Old Turnpike, Rte 197)

- c) Copy of DEEP Permit Application for the Use of Pesticides in State Waters (for Vincent Pond - 0 Lambert Rd)
- d) Notification of public review and comment period for DEEP's proposed 2022 Integrated Water Quality Report to Congress from June 6th to July 6th.

M) Signing of Mylars – none

N) Comments by Commissioners –

Diane Chapin echoed Valerie Clarks comments regarding the revisions to the Subdivision Regulations. Charlie Obert thanked Marla Butts for the quality of her analysis of the revisions. He asked if an outside consultant could be brought in to work on the MS4 updates. Marla stated that the lack of a Public Works Director hinders the inter-departmental process.

George O'Neil thanked the Commissioners and staff for their time and efforts.

- O) At 8:30 PM, after completion of the agenda, Charlie Obert made a motion to adjourn the meeting. The motion was seconded by Diane Chapin. **The motion was unanimously APPROVED.**

To see/hear the entire meeting via ZOOM, copy and paste the following link into your search bar:

<https://us02web.zoom.us/rec/share/qHcLs2GUDqMHG5lqnOsTVY9FkgMApRHliQwovKD4DBj1ceH9RotHgzwwCCO8mTFt.ktLZPYng0HuPdJ04>

Access Passcode: mpp?7KTC

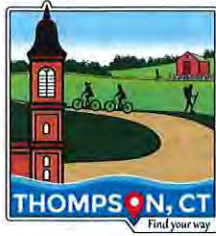
Respectfully submitted, Dan Malo, Recording Secretary

Q3M

Agenda Item D.
Citizens Comments on Agenda Items

Agenda Item E.a) 1. Old Applications

WAA22013, Hany Youssef, 274 Riverside Dr
(Assessor's map 87, block 95, lot 39), construct
commercial building on existing foundation for non-
medical cannabis facility, stamped received 5/23/22,
issued 6/27/22, legal notice published 7/8/22, end of
appeal period 7/23/22.



**TOWN OF
THOMPSON**
Inland Wetlands Commission

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

WETLAND AGENT APPROVAL WAA22013

APPROVAL GRANTED TO:

Hany Youssef
292 Riverside Drive
North Grosvenordale Ct 06255

DATE OF APPROVAL: June 27, 2022

EXPIRATION DATE: June 27, 2027

LOCATION OF AUTHORIZED ACTIVITY: 274 Riverside Drive, Assessor's Map 87, Block 95, Lot 39


DESCRIPTION OF AUTHORIZED ACTIVITY: To conduct regulated activities associated with construction of a commercial building on an existing foundation for non-medical cannabis facility as shown in Wetlands Agent Approval Application WAA22013 stamped received by the Thompson Wetlands Office May 23, 2022 and as shown in drawing(s) stamped received May 23, 2022.

This approval is issued pursuant to section 11(b) of the Inland Wetlands and Watercourses Regulations of the Town of Thompson.

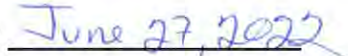
APPROVAL CONDITIONS:

1. No earthmoving work is authorized herein except for the minor repairs to the foundation identified in the June 24, 2022 Foundation Inspection Report signed and sealed by Normand Thibeault, Jr. P.E, copy attached and made part of this approval.
2. If the authorized activity also involves an activity or a project which requires zoning or subdivision approval, special permit, variance, or special exception, then no work pursuant to this approval may begin until such other approval is obtained. (See section 11.10.c. of the Inland Wetlands and Watercourses Regulations of the Town of Thompson)
3. This approval will be valid for five (5) years. You are expected to notify the Wetland Agent of your starting date and to complete your activities within 2 years of beginning your site work. If you expect to take longer, you must contact the Wetland Agent for an extension.
4. The Thompson Wetland Agent/Inland Wetlands Commission must be notified in writing one week prior to the beginning of any regulated activities. Please use the enclosed card.
5. Appropriate erosion and sediment controls shall be installed prior to the beginning of any regulated activities. Until all disturbed soils are stabilized appropriate erosion and sediment controls shall be used and maintained. (See document entitled "2002 Connecticut Guidelines for Soil Erosion and Sediment Controls" for guidance.)
6. If there are any changes in the location of any of the proposed activities for which this approval has been granted, then the new proposal must be presented to Thompson Wetland Agent/ Inland Wetlands Commission for approval of such changes prior to commencing activities.

Wetland Agent:


Marla Butts

Dated:



Application WAA 22013

Killingly Engineering Associates

Civil Engineering & Surveying



P.O. Box 421 Dayville, CT 06241
Phone: 860-779-3703
Fax: 860-774-3703

June 24, 2022

Mr. Hany Youssef
64 Messier Road
North Grosvenordale, CT 06255

**Re: 274 Riverside Drive
Foundation Inspection**

Dear Mr. Youssef;

Per your request, Killingly Engineering Associates (KEA) inspected an existing foundation at the referenced property on June 23, 2022 evaluate the integrity and usability which has been questioned due to a fire that destroyed the former building. In general, fire damage to concrete is uncommon unless there is an extended extended exposure to heat. In these situations, damage is typically indicated by cracking, spalling of the concrete surface, or deformation of the concrete mass. It is our understanding that you would like to utilize the existing foundation to construct a new 2-story building. Killingly Engineering Associates (KEA) inspected the exposed portion of the foundation (approximately 8" above grade) as well as the existing concrete slab on the foundation interior.

Slab

The slab was inspected for evidence of excessive settlement which is typically indicated by the presence of cracking larger than 1/8" which is considered "hairline". KEA did note cracking in the concrete slab as seen in photo 1 below.



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TOWN OF THOMPSON, CT.
2022 JUN 24 A 11:00
Jude C. Tucker
TOWN CLERK ASST

Received

JUN 27 2022

Thompson Wetlands Office

Photo 1 – Typical Hairline Cracking in Concrete Slab

Hairline cracking is common in concrete slabs and can be the result of quick curing of the concrete, improper compaction of the soil beneath the slab or excessive loading. In general, any cracking of 1/8" or less (the width of a pencil lead) is not a concern. KEA inspected the edges of the cracks and found them to be worn, indication that they have been in existence for an extended period of time. We also noted that there was no differential settlement where edge of the crack was higher than the other.

Foundation Wall

The entire perimeter to the foundation wall was inspected for cracking, spalling and deformation. The width of the wall is 10" which is sufficient to support a 2-story structure. In several areas where the wall is damaged, we noted that there does not appear to be any rebar. This is not unusual as the current minimum requirements for rebar in foundations was only adopted in the 2012 IBC and 2015 in the Connecticut State Building Code; it does not affect the integrity or usability of the foundation.

In general, the foundation is in good condition. The inspection did not note any spalling (flaking/surface damage), deformation or significant cracks other than in several areas where anchor bolts have been damaged, presumably from when the building was demolished after the fire. Photo 2 below shows one of the typical bent anchor bolts and the associated cracking.



Photo 2: Bent Anchor Bolt & Foundation Cracking

These anchor bolts should be removed by cutting them flush to the foundation wall surface and the cracks should be filled with an epoxy filler. I would recommend filling using an epoxy injection product such as Simpson Crack-Pak®, SealBoss® Epoxy concrete repair or an approved equal. These epoxy products are structurally stronger than the concrete itself and typically have compressive strengths up to 10,000 psi. I would not recommend polyurethane foam repair kits as they do not provide any structural support and are

useful for waterproofing only. This product could also be utilized for some cracks observed in the wall that are not associated with anchor bolts as shown in photo 3.



Photo 3: Enlarged view of Foundation Wall Crack

There are 3 or 4 areas on the exposed concrete wall that should be replaced entirely. These sections are 24" to 48" long and we would recommend saw cutting at the limits of the damage, removing the wall between the saw cuts, and pouring a new section of the wall. The saw cut surfaces should be properly cleaned and a concrete bonding adhesive should be applied to the exposed surfaces prior to pouring the new wall to facilitate proper bonding between surfaces. These products include "Drylock", "Weld-Crete" and "SikaLatex" but any bonding agent can be utilized. In addition, we would recommend drilling 3/4" holes 12" on center into the existing foundation at the saw cut interface to a depth of 12" and installing #5 rebar anchored with hydraulic cement. The rebar should be a total length of 24" long horizontally to allow for a 12" anchor into the new concrete wall and at least 6" vertically into the bottom of the cut. A detail for this repair procedure is attached herein. Photo 4 shows one of the typical areas recommended for repair.



Photo 4: Portion of Foundation wall to be Replaced

Conclusions & Recommendations

Except for the specific areas discussed in this report, the foundation in good condition and can be used for construction of a new structure. Minor cracking observed along the walls in several areas do not pose a threat to the structural integrity of the foundation and are likely the result of typical minor settlement within the subgrade or possibly the result of impact from machinery when the fire-damaged building was being demolished. We do not feel that the fire that occurred substantially in the second story of the structure has diminished the usability or the integrity of the foundation. When constructing walls on the foundation, new 5/8" anchor bolts should be drilled and epoxied at 48" intervals, 12" from corners, and a sill plate gasket installed prior to securing the sill plates. The concrete slab is also in reasonable condition and exhibits only hairline cracking. This does not detrimentally impact the integrity of the slab.

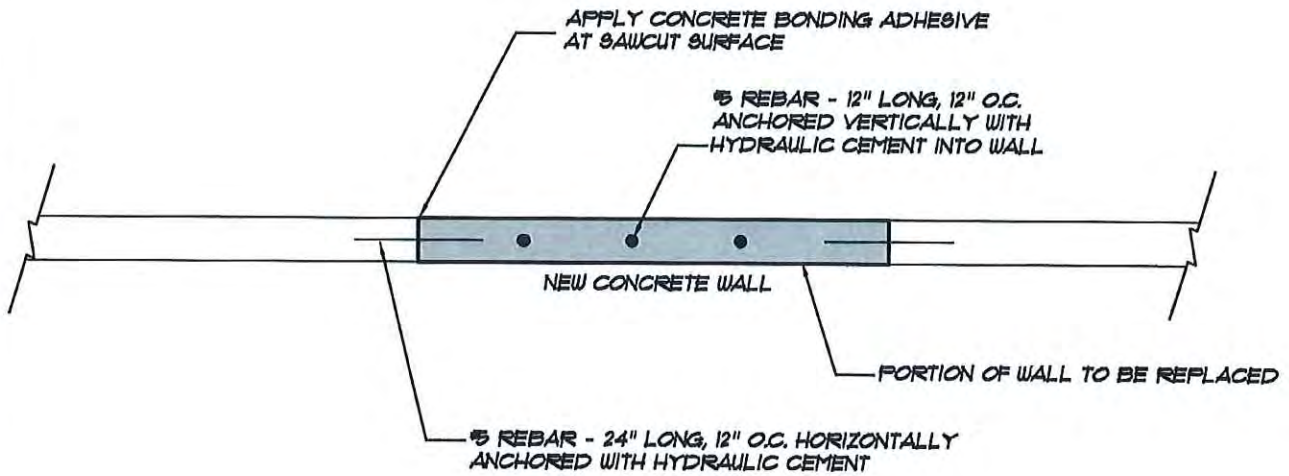
With the recommended repairs and modifications, it is my professional opinion that the foundation and slab can be utilized and does not require complete replacement.

Please feel free to contact me if there are any further questions or concerns.

Sincerely;

Normand Thibeault, Jr., P.E.
Partner





WALL REPAIR DETAIL
NOT TO SCALE



Norman Thibault
6/23/2022

Killingly Engineering Associates
Civil Engineering & Surveying

114 Westcott Road
P.O. Box 421
Dayville, Connecticut 06241
(860) 779-7299 - FAX: (860) 774-3703

FOUNDATION REPAIR DETAIL
PREPARED FOR

HANY YOUSSEF

274 RIVERSIDE DRIVE
THOMPSON, CONNECTICUT

DATE: 06/23/2022

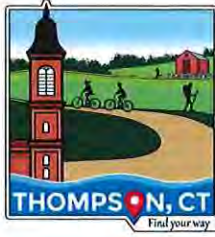
SHEET NO.: 1 OF 1

SCALE: NTS

JOB NO.: 22085

Agenda Item E.a) 2. Old Applications

WAA22015, Greg & Anna Kuznecki, 0 Richard Bennett Lane (Assessor's map 137, block 7, lot 5L), construct septic system and discharge foundation drain in 100-foot upland review area, stamped received 6/6/22, issued 6/28/22, legal notice published 7/8/22, end of appeal period 7/23/22.



**TOWN OF
THOMPSON**
Inland Wetlands Commission

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

WETLAND AGENT APPROVAL WAA22015

APPROVAL GRANTED TO:

Greg and Anna Kuznecki
14 Indian Inn Road
Thompson CT 06277

DATE OF APPROVAL: June 28, 2022

EXPIRATION DATE: June 28, 2027

LOCATION OF AUTHORIZED ACTIVITY: 13 Richard Bennett Land, Assessor's Map 137, Block 7, Lot 5L

DESCRIPTION OF AUTHORIZED ACTIVITY: To conduct regulated activities associated with construction of septic system and foundation drain in the 100-foot upland review area for new single family home as shown in Wetlands Agent Approval Application WAA22015 stamped received by the Thompson Wetlands Office June 6, 2022 and as shown in drawing(s) entitled "Site Development Plan Prepared for Anna and Greg Kuznecki Map 154 Block 7 Lot 5L Richard Bennett Way - Thompson, CT." prepared by J&D Civil Engineers dated Aug. 12, 2005 revised 2022-06-07 (1 sheet) stamped received June 14, 2022.

This approval is issued pursuant to section 11(b) of the Inland Wetlands and Watercourses Regulations of the Town of Thompson.

APPROVAL CONDITIONS:

1. A notice of decision will be requested to be published in the Thompson Villager. Note this approval is subject to appeal to the Inland Wetlands Commission for 15 days from the date of publication for a final decision.
2. If the authorized activity also involves an activity or a project which requires zoning or subdivision approval, special permit, variance, or special exception, then no work pursuant to this approval may begin until such other approval is obtained. (See section 11.10.c. of the Inland Wetlands and Watercourses Regulations of the Town of Thompson)
3. This approval will be valid for five (5) years. You are expected to notify the Wetland Agent of your starting date and to complete your activities within 2 years of beginning your site work. If you expect to take longer, you must contact the Wetland Agent for an extension.
4. The Thompson Wetland Agent/Inland Wetlands Commission must be notified in writing one week prior to the beginning of any regulated activities. Please use the enclosed card.
5. Appropriate erosion and sediment controls shall be installed prior to the beginning of any regulated activities. Until all disturbed soils are stabilized appropriate erosion and sediment controls shall be used and maintained. (See document entitled "2002 Connecticut Guidelines for Soil Erosion and Sediment Controls" for guidance.)
6. If there are any changes in the location of any of the proposed activities for which this approval has been granted, then the new proposal must be presented to Thompson Wetland Agent/ Inland Wetlands Commission for approval of such changes prior to commencing activities.

Wetland Agent: _____

Marla Butts

Dated: _____

June 28, 2022

Agenda Item E.b) 1. New Applications

WAA22017, Emily Kreidler, 31 Becola Rd (Assessor's map116, block 24, lot 25), demolish existing home, reconstruct new home in same location with new well within the 100-foot upland review area for Little Pond, stamped received 6/15/22, under review.

Original

For Wetland Agent:	rev 01/11
APPLICATION #WAA	<u>22017</u>
DATE RECEIVED	<u>June 15, 2022</u>

Application
for
Wetland Agent Approval
to conduct a regulated activity

Town of Thompson
INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

RECEIVED
TOWN OF THOMPSON, CT.
2022 JUN 15 AM 11:11
TOWN CLERK

Instructions:

Two (2) copies of the completed application and two (2) copies of all the additional attached documents (site plan, etc.) must be submitted to the Agent.

The applicant is advised to read Sections 7 and 8 of the Regulations for further information regarding application requirements and procedures. THE APPLICANT IS FURTHER ADVISED THAT A BUFFER (SETBACK) OF 100 FEET FROM AN INLAND WETLAND OR WATERCOURSE IS REQUIRED, AND A BUFFER/SETBACK OF 200 FEET FROM THE TEN (10) ESPECIALLY NOTEWORTHY WETLANDS AND WATERCOURSES IDENTIFIED IN THE TOWN OF THOMPSON INLAND WETLAND INVENTORY PREPARED BY NORTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY 1980 PAGES 9, 14 AND 15 IS REQUIRED. See Section 6 of the Regulations for further information regarding regulated activities.

Please provide the following information:

- Directions to the property from the Thompson Town Hall
- Location of Utility Pole nearest your property
 - *Pole Number *Location of property in reference to Pole

NO APPROVAL SHALL BE TRANSFERRED WITHOUT PERMISSION OF THE AGENCY.

FEE SCHEDULE:

(Additional \$60.00 fee to State as per Public Act 09-03, Section 396)

- Individual Lot \$50 + \$60
(Includes Mandatory Legal Advertisements Fee of \$20)

If the Agent finds that greater than a minimal impact may occur to wetlands, then this proposal must undergo a full permit application. Fee will be applied to the permit application.

Please complete the following application information.
If you need assistance contact the Wetland Agent (office 860- 923-1852)
Fax 860-923-9897
www.thompsonct.org/wetlands

Date June 10, 2022

1) Name of Applicant Emily Kreidler

Home Address 29 Stephen Drive, Webster MA 01570

Home Tele & Hrs _____ Business Tele & Hrs _____

Business Address n/a

2) Applicant's interest in the Property: _____ Owner ☒ Other Emily is owner's grand daughter
INLAND WETLANDS APPROVALS CAN BE GRANTED TO PROPERTY OWNER ONLY.

3) Name of Property Owner (if not applicant) James and Barbara D'Alessandro

Home Address 9 Beacon Road, Webster MA 01570

Business Address n/a

Home Tele & Hrs _____ Business Tele & Hrs _____

4) Geographical Location of the Property (site plan to include utility pole number nearest property or other identifying landmarks)

Pole # and Location CL&P 112

Street or Road Location east side of Becola Road

Tax Assessor's Map # 116

Block # 24

Lot # that appears on site plan 25

Deed Information : Volume # 726

Page # 175

5) The property to be affected by the proposed activity contains:

Soil Types Hinckley Loamy Sand, some Sudbury Sandy Loam

Wetland Soils ☒ (Swamp _____ Marsh _____ Bog _____ Vernal Pool _____)

Watercourses ☒ (Lake or Pond ☒ Stream or River _____ Intermittent Stream _____)

Floodplain ☒ Yes ☐ No

6) Description of the Activity for which Approval is requested _____

The applicant is proposing to demolish the existing home, and construct a new home in the same location. A new well will be drilled as well. All construction will occur in the Upland Review Area, however no work is proposed along the shore.

7) Submit a Site Plan, drawn to scale, with the certification of the preparing Surveyor and/or Engineer including:

- ☒ 1-Locus map at approx. 1" = 1000'
- ☒ 2-Location of property, with boundaries defined and utility pole # near property and any other identifying landmarks.
- ☒ 3-Location of wetlands and /or watercourses. A wetland delineation in the field must be marked with numbered wetlands flags by a certified soil scientist and located on the map/site plan. Site plan shall bear the soil scientist's original signature.
- ☒ 4-Soil types on the property.
- ☒ 5-Flood Hazard area classification and delineation.
- ☒ 6-(a)Location of the proposed activity (i.e. house, septic, well or other areas to be disturbed).
(b)Location of perc tests and soil test holes.
(c)Copy of NDDH approval to construct or repair subsurface sewage disposal system.
- ☒ 7-Nature and volume of the material to be placed, removed, or transferred.
- ☒ 8-Topographical contours, proposed and existing.
- ☒ 9-Location and supporting data for proposed drainage.
- ☒ 10-Date, scale (recommend 1"=40') and North arrow.
- ☒ 11-Proposed limits of clearing/disturbance and location of stockpiles during construction.
- ☒ 12-Location of proposed Erosion and Sedimentation controls and other management practices and mitigation measures which may be considered as a condition of issuing a permit for the proposed regulated activity. The erosion and sedimentation control provisions on the site plan must comply with the most current CT DEP edition of the *Connecticut Guidelines for Soil Erosion and Sedimentation Control* and be so noted on the plans.
- ☒ 13 -Location of proposed Stormwater treatment design on the site plan must comply with the most current CT DEP edition of the *Connecticut Stormwater Quality Manual* and be so noted on the plans. It is strongly recommended that low impact development techniques, stormwater management techniques that are designed to approximate the pre-development site hydrology, be utilized in the stormwater system design wherever practical and possible.
- ☒ 14-Location of proposed mitigation or wetland enhancement measures which may be considered as a condition of issuing a permit for the proposed regulated activity.
- ☒ 15-Timing and description of phases of activities, installation of sediment and stormwater control measures and temporary and permanent stabilization methods.

The Wetland Agent will notify you if any additional information is needed in order to properly evaluate your proposal.

- 8) Is any portion of this property located within the watershed of a water company as defined in section 16-1 of the Connecticut General Statutes? No If yes, the Applicant is required to provide written notice of the application by certified mail, return receipt requested, to the water company on the same day of filing this permit application with the Thompson Inland Wetlands and Watercourses Commission. Documentation of such notice shall be provided to the Commission.

9) Does any portion of this property contain a Natural Diversity Data Base (NDDDB) area of concern as defined on the map of Federal and State Listed Species and Significant Natural Communities, for Thompson, Connecticut, prepared by the Connecticut Department of Environmental Protection? Yes If yes, the Applicant must contact the CT DEP for information regarding the State or Federal Listed Species of Concern.

10) Names and Addresses of Abutters:

33 Becola Road - Matthew and Christine Saad

27 Becola Road - Karen Brown

11) Estimated start date Summer 2022

Estimated date of completion (all disturbed areas are stabilized) Fall 2022

12) The undersigned hereby consents to necessary and proper inspections of the above mentioned property by the Agents of the Town of Thompson Inland Wetlands Commission, at reasonable times, both before and after the approval in question has been granted by the Agent, including site walks by Commission members and staff for the purpose of understanding existing site conditions, which may be necessary in order to render a decision on this application.

The undersigned swears that the information supplied in this completed application is accurate to the best of her/his knowledge and belief.

ABSOLUTELY NO WORK IS TO BEGIN UNTIL ALL NECESSARY APPROVALS ARE OBTAINED.

Upon Approval the Applicant is responsible for publishing a notice of the approval, at the applicant's expense, in a newspaper having a general circulation in the Town of Thompson. The Agent will provide the necessary notice to the newspaper for public notice, and such notice must be published within ten (10) days of the date of approval.

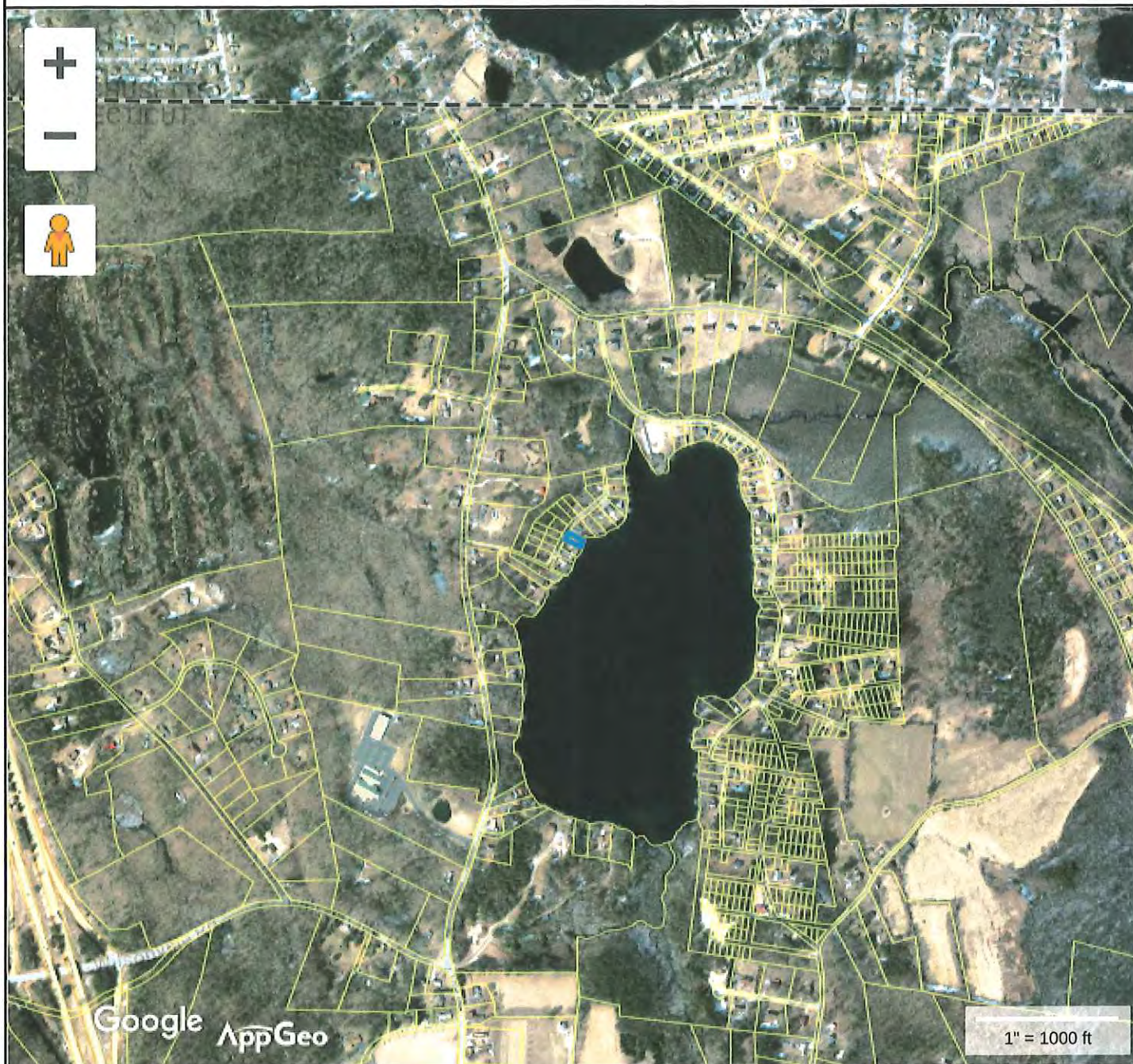
Emily Kriddle
Signature of Applicant

06/14/2022
Date

James D. Alessandro
Consent of Landowner if other than applicant

Date

Please attach a written consent by the owner if applicant is not the property owner.



Property Information

Property ID 3509
 Location 31 BECOLA RD
 Owner DALESSANDRO JAMES P + BARBARA E



**MAP FOR REFERENCE ONLY
 NOT A LEGAL DOCUMENT**

Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated October 19, 2021
 Data updated March 20, 2019

Print map scale is approximate.
 Critical layout or measurement activities should not be done using this resource.



NORTHEAST DISTRICT DEPARTMENT OF HEALTH

69 SOUTH MAIN STREET, UNIT 4, BROOKLYN, CT 06234

860-774-7350/FAX 860-774-1308 WWW.NDDH.ORG

June 24, 2022

James & Barbara D'Alessandro
9 Beacon Road
Webster, MA 01570

B100/APPLICATION

SUBJECT: FILE #5005271 -- BECOLA ROAD #31, MAP #116, BLOCK #24, LOT #25, THOMPSON, CT

Dear James & Barbara D'Alessandro:

On June 15, 2022, this department received an application proposing to raze existing house and build a new 3-bedroom house to your property.

Based on the information provided and paperwork in our files this request has been approved under the following conditions:

1. Once addition is completed, a water analysis must be submitted to this office. The water sample is to be taken from the new faucet in the kitchen. This is to ensure that the new plumbing has been properly disinfected prior to use of the water for drinking purposes.
2. Septic system to be taped off during construction to ensure proper separating distance is maintained and to protect from heavy traffic or storage of building materials in this area.
3. Permit for the new house sewer line must be applied for and inspected by NDDH.

Approval is being granted under Section 19-13-B100a of the CT Public Health Code. This approval is given with the understanding that you will provide proper care and maintenance of the existing system (the septic tank is to be pumped every 3 years).

THE OWNER IS RESPONSIBLE TO SEEK PROPER AUTHORIZATION FROM ALL TOWN AGENCIES PRIOR TO START OF CONSTRUCTION.

Should you have any questions, please do not hesitate to contact this office.

Sincerely,

Maureen Marcoux, RS
Senior Sanitarian ~ NDDH

cc: Thompson Building Official; J&D Civil Engineers

EROSION AND SEDIMENT CONTROL NOTES:

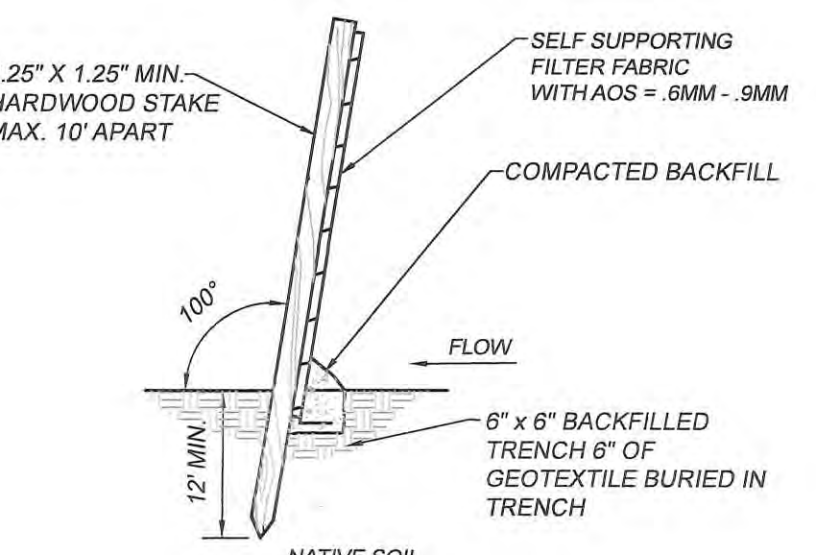
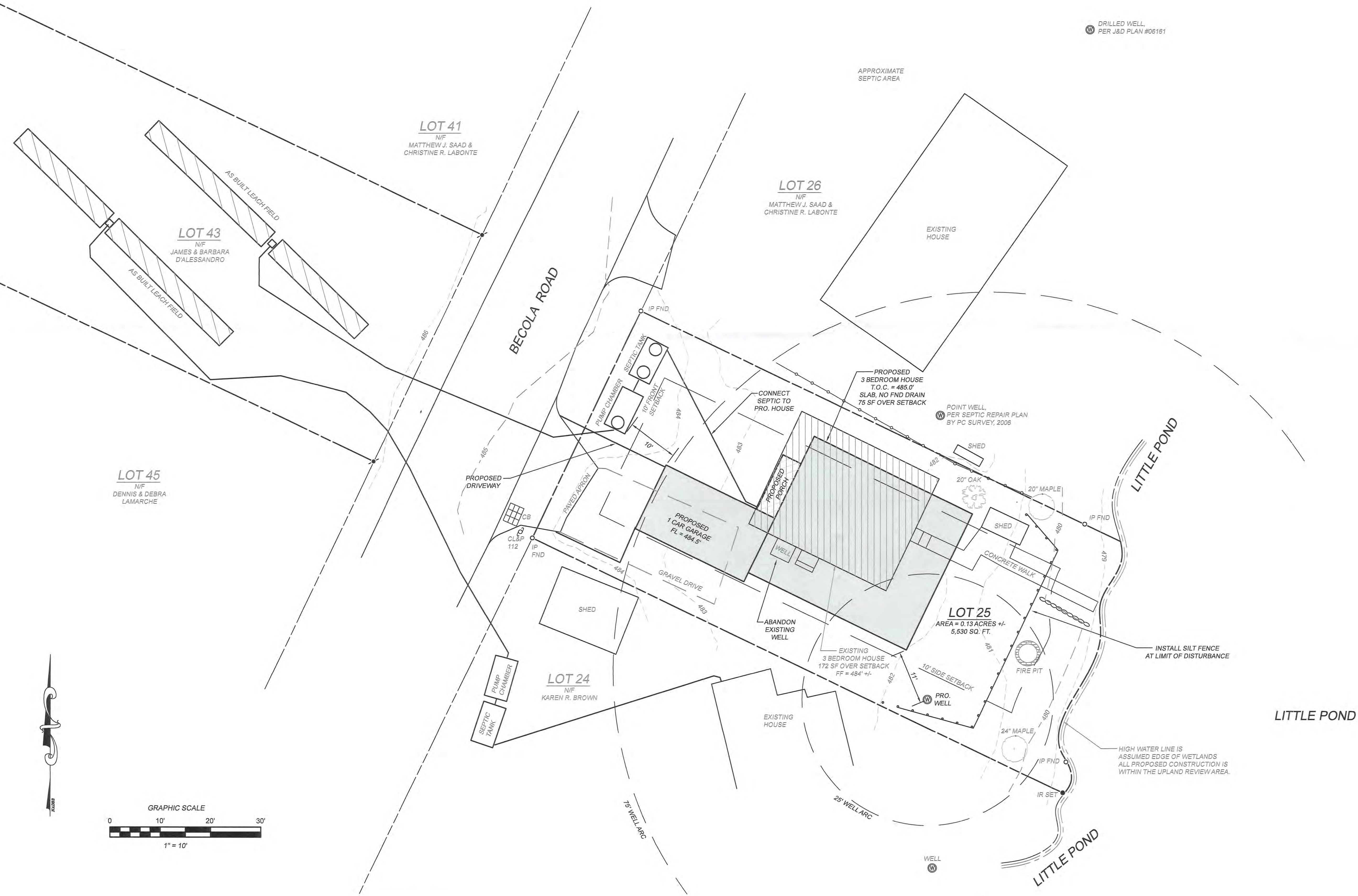
1. THE PROPOSED ACTIVITY ON THE SITE WILL CONSIST OF THE DEMOLITION OF AN EXISTING HOUSE, AND CONSTRUCTION OF A NEW HOUSE, GARAGE, AND WELL.
2. ALL PROPOSED CONSTRUCTION IS WITHIN THE UPLAND REVIEW AREA.
3. NO WORK IS PROPOSED ALONG THE SHORELINE, OR WITHIN ANY WETLANDS OR WATERCOURSES.
4. EROSION CONTROL DEVICES MUST BE INSTALLED WHERE INDICATED ON THIS SHEET PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MAY SELECT AN ALTERNATE LOCATION FOR EROSION CONTROLS, PROVIDED THE EROSION CONTROLS ARE DOWNHILL OF ANY EARTHWORK OR CONSTRUCTION.
5. DISTURBED AREAS SHALL BE KEPT TO A MINIMUM AND SEEDED OR STABILIZED WITH TEMPORARY MULCH AS SOON AS FINAL GRADES HAVE BEEN ATTAINED.
6. THE OWNER OF RECORD SHALL DESIGNATE THE ON SITE ENVIRONMENTAL AGENT RESPONSIBLE FOR REGULARLY CHECKING THE CONDITION OF THE EROSION CONTROL DEVICES AND REMOVING ACCUMULATED SEDIMENT.

SURVEY NOTES:

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
- THE SURVEY TYPE IS TOPOGRAPHIC, PERFORMED IN MAY 2022, AND IS INTENDED TO BE USED FOR THE DESIGN OF AN ENGINEERED SEPTIC SYSTEM.
- PROPERTY LINES DO NOT EXPRESS A BOUNDARY OPINION.
2. TEST PIT AND PERC TEST LOCATIONS HAVE BEEN COMPILED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND J & D CIVIL ENGINEERS DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS PLAN AS A RESULT.
3. REFERENCE PLAN: "PROPERTY SURVEY PREPARED FOR JAMES AND BARBARA D'ALESSANDRO, 31 BECOLA ROAD THOMPSON" BY J&D CIVIL ENGINEERS, LLC. DATED JANUARY 8, 2020. SCALE 1" = 10'
- TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

Dennis R. Blanchette 6/10/22 12107
DENNIS R. BLANCHETTE DATE LICENSE
NUMBER

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2022 J&D CIVIL ENGINEERS, LLC



SILT FENCE INSTALLATION
NOT TO SCALE

LEGEND

	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	WATER BODY
	EROSION CONTROL DEVICES
	LEACHING TRENCH
	STONEWALL
	UTILITIES
	TREELINE

JUN 15 2022

Thompson Wetlands Office

SITE DEVELOPMENT PLAN
PREPARED FOR
EMILY KREIDLER
31 BECOLA RD - THOMPSON, CT
MAP 116 BLOCK 24 LOT 25

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: JJB
CHECKED: DRB

REVISIONS:

JOB NO: 22141
SCALE: 1" = 10'

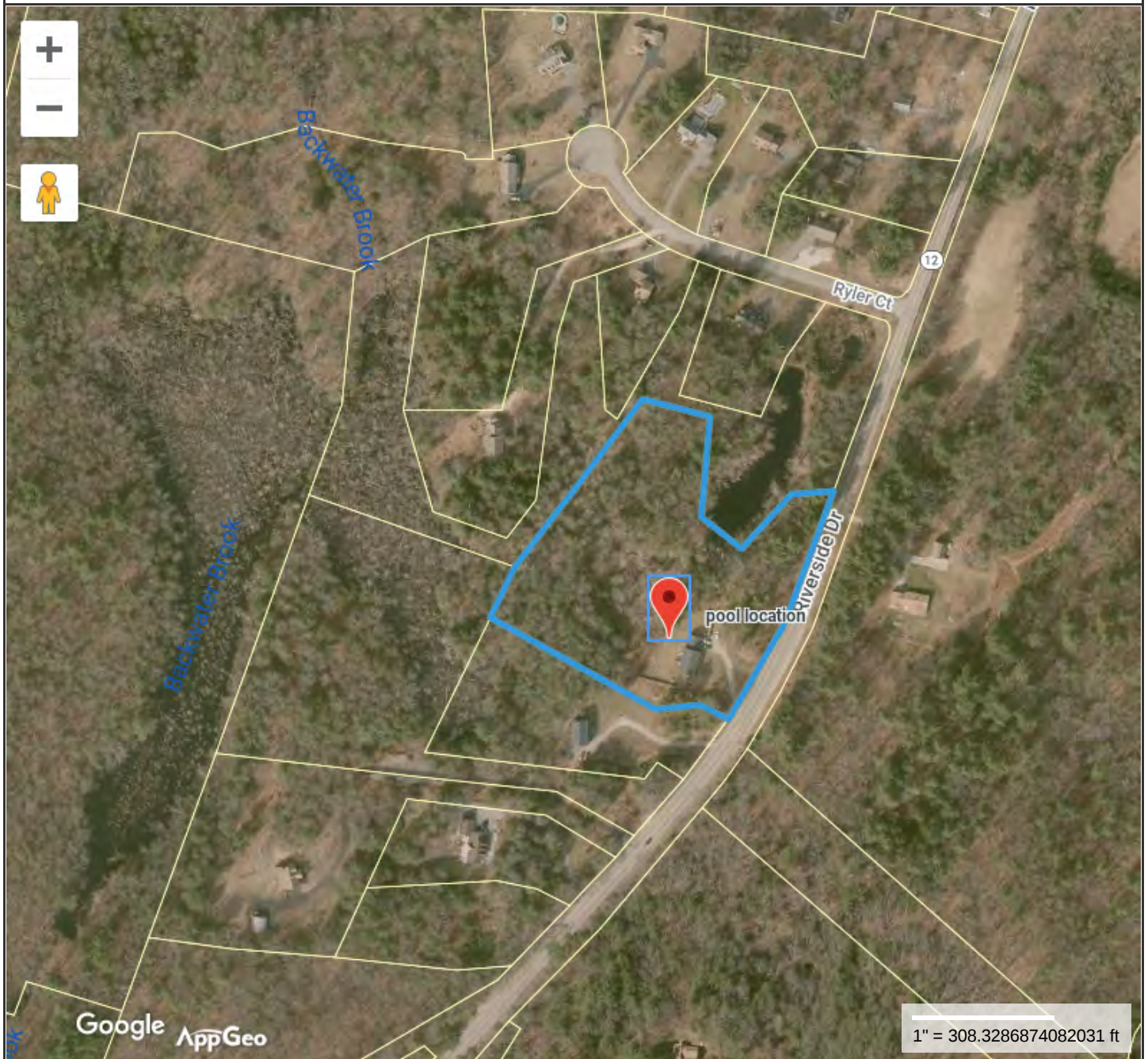
DATE: JUNE 10, 2022
SHEET: 1 OF 1

Appl WAAS2017 Copy 1

Agenda Item E.b) 2. New Applications

WAA22018, Eliezer & Joyce Machado, 1290 Riverside Drive (Assessor's map 57, block 66, lot 6S), construct 12' X 24' inground pool, stamped received 6/15/22, issued 6/28/22, legal notice published 7/8/22, end of appeal period 7/23/22.

Locus Map for 1290 Riverside Drive

**Property Information**

Property ID 101887
Location 1290 RIVERSIDE DR
Owner MACHADO ELIEZER

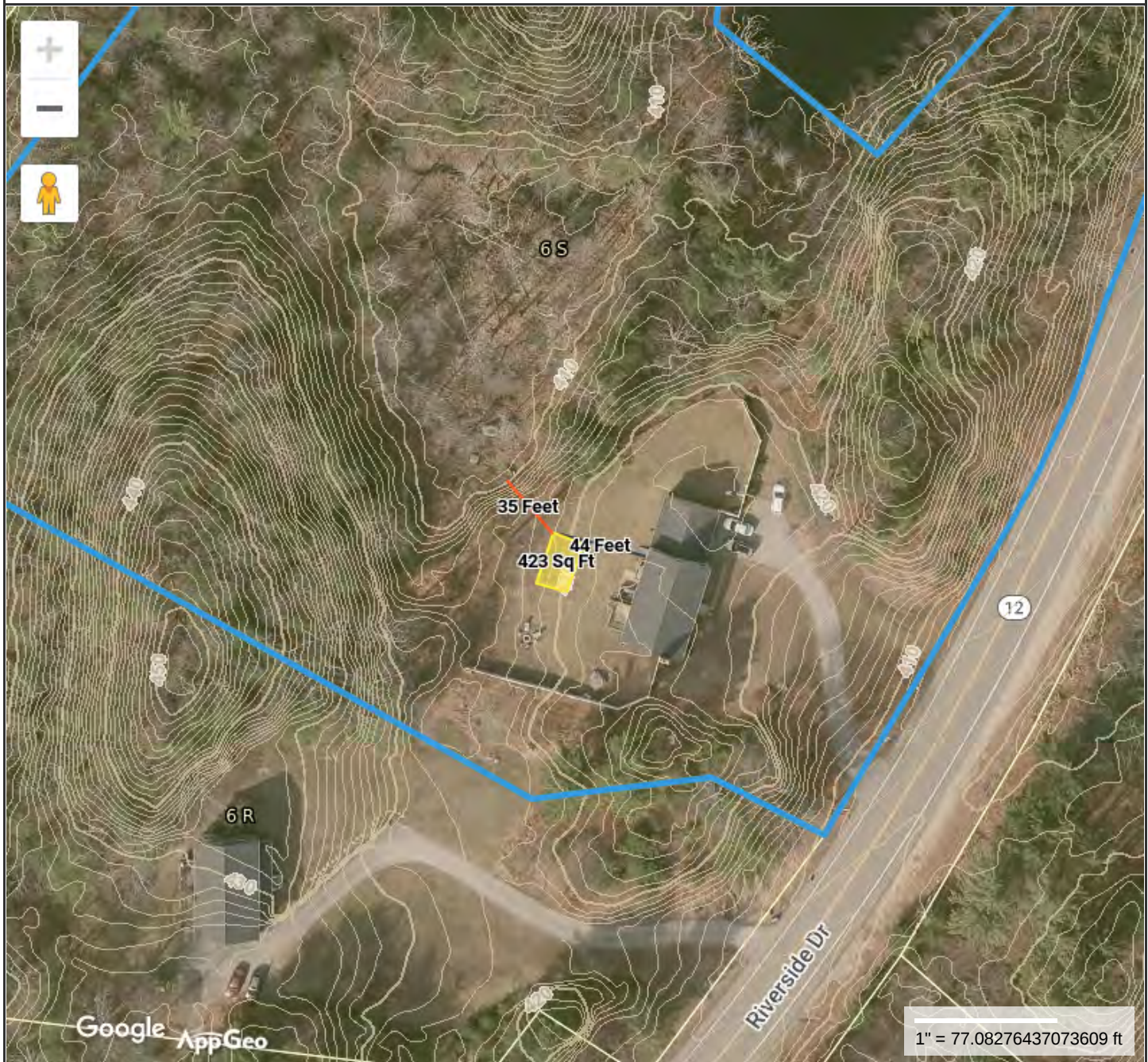
**MAP FOR REFERENCE ONLY
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Geometry updated October 19, 2021
Data updated March 20, 2019

Print map scale is approximate.
Critical layout or measurement
activities should not be done using
this resource.

Pool Locus Map for 1290 Riverside Drive

**Property Information**

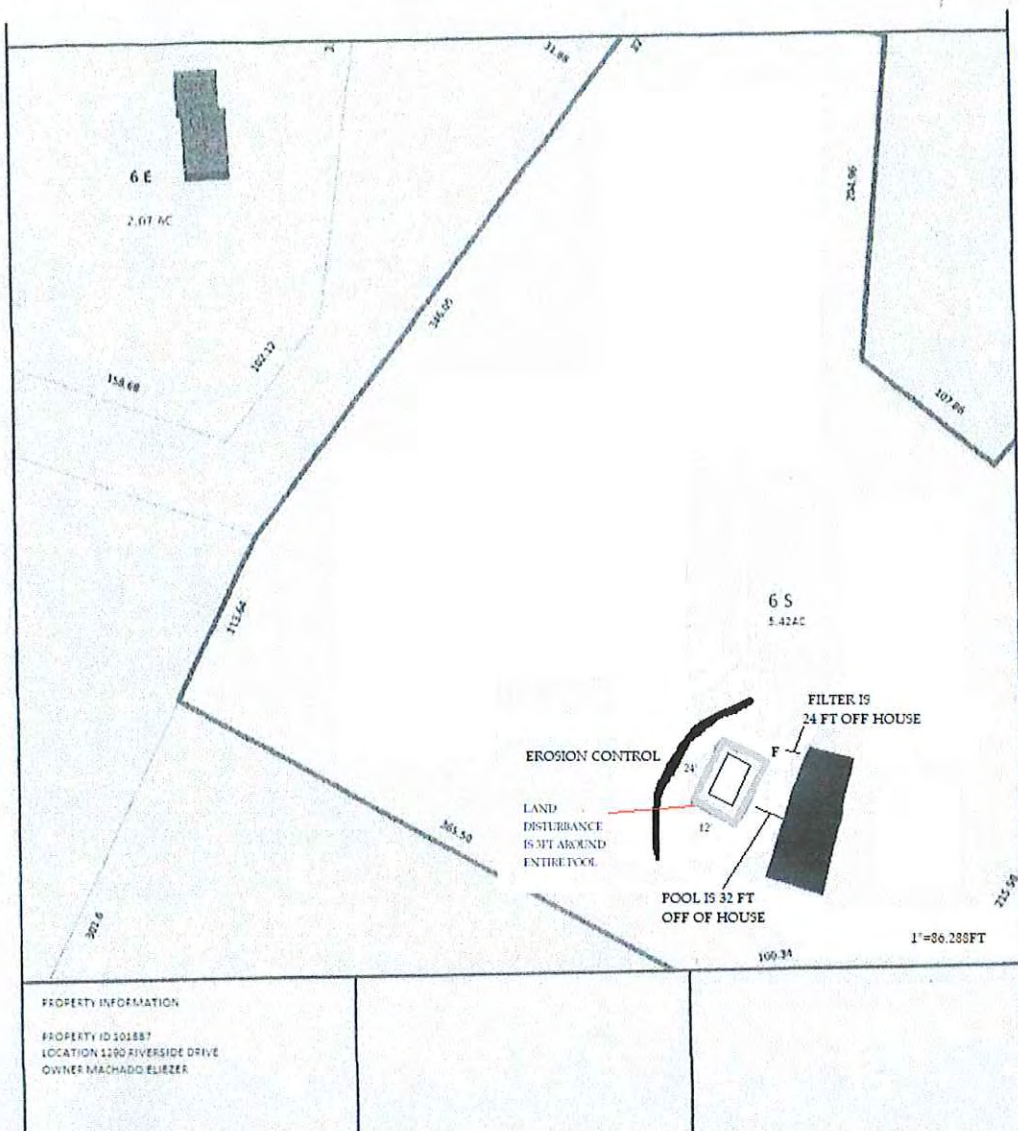
Property ID 101887
Location 1290 RIVERSIDE DR
Owner MACHADO ELIEZER

**MAP FOR REFERENCE ONLY
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Geometry updated October 19, 2021
Data updated March 20, 2019

Print map scale is approximate.
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this resource.



Received

JUN 15 2022

Thompson Wetlands Office



**TOWN OF
THOMPSON**
Inland Wetlands Commission

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

WETLAND AGENT APPROVAL WAA22018

APPROVAL GRANTED TO:

Eliezer and Joyce Machado
1290 Riverside Drive
North Grosvenordale, CT 06255

DATE OF APPROVAL: June 28, 2022

EXPIRATION DATE: June 28, 2027

LOCATION OF AUTHORIZED ACTIVITY: 1290 Riverside Drive, Assessor's Map 57, Block 66, Lot 6S

DESCRIPTION OF AUTHORIZED ACTIVITY: To conduct regulated activities associated with the construction of a 12' by 24' inground pool as shown in Wetlands Agent Approval Application WAA22018 stamped received by the Thompson Wetlands Office June 15, 2022 and as shown in drawing(s) stamped received June 15, 2022.

This approval is issued pursuant to section 11(b) of the Inland Wetlands and Watercourses Regulations of the Town of Thompson.

APPROVAL CONDITIONS:

1. Soils excavated for the pool construction, if deposited on site, shall be placed and stabilized with vegetation in any area that is not within 100 feet of delineated wetlands as shown in the application drawings. If excess soils are to be spoiled off site disposal, then such disposal must comply with all state and municipal requirements with respect to wetlands and watercourses.
2. A notice of decision will be requested to be published in the Thompson Villager. Note this approval is subject to appeal to the Inland Wetlands Commission for 15 days from the date of publication for a final decision.
3. If the authorized activity also involves an activity or a project which requires zoning or subdivision approval, special permit, variance, or special exception, then no work pursuant to this approval may begin until such other approval is obtained. (See section 11.10.c. of the Inland Wetlands and Watercourses Regulations of the Town of Thompson)
4. This approval will be valid for five (5) years. You are expected to notify the Wetland Agent of your starting date and to complete your activities within 2 years of beginning your site work. If you expect to take longer, you must contact the Wetland Agent for an extension.
5. The Thompson Wetland Agent/Inland Wetlands Commission must be notified in writing one week prior to the beginning of any regulated activities. Please use the enclosed card.
6. Appropriate erosion and sediment controls shall be installed prior to the beginning of any regulated activities. Until all disturbed soils are stabilized appropriate erosion and sediment controls shall be used and maintained. (See document entitled "2002 Connecticut Guidelines for Soil Erosion and Sediment Controls" for guidance.)
7. If there are any changes in the location of any of the proposed activities for which this approval has been granted, then the new proposal must be presented to Thompson Wetland Agent/ Inland Wetlands Commission for approval of such changes prior to commencing activities.

Wetland Agent: _____

Marla Butts

Dated: _____

June 28, 2022

Agenda Item E.b) 3. New Applications

SUB22019, Lavallee Construction LLC, 0 Donovan Dr (Assessor's map 3, block 80, lots 2T, 2U & 2W), re-subdivide 3 existing lots into 4 lots, stamped received 6/30/22. Note: work proposed in the 100-foot upland review area on Lot 2T is already authorized under Permit IWA17037.

Original
Application SUB 22019

J & D CIVIL
ENGINEERS, LLC

401 Ravenelle Road
N. Grosvenordale, CT 06255
www.jdcivilengineers.com
(860) 923-2920

June 29, 2022

Thompson IWWC
815 Riverside Drive
North Grosvenordale, CT 06255

Re: Green Valley View Estates Subdivision
River Lots Resubdivision – Lots 2T, 2U and 2W
Job No: 06137/17206/20246/22142

Dear Members:

The Green Valley View subdivision was approved by the IWWC on October 9, 2007. It consisted of a 31 lots on 67 acres of land adjacent to the Quinebaug River. Approximately 22 acres, or approximately 33%, is open space and has been deeded to the town. Within the open space, there is an approximately 18 acre conservation easement preserving the important Quinebaug River riparian corridor.

The owner is now proposing to resubdivide 3 lots (2T, 2U and 2W - Developers lots 17, 18 and 20) into 4 lots, 2T, 2U-1, 2U-2 and 2W. There are minimal changes to the approved work on 2T, 2U-1 and 2W. Test pits were dug on 2U-2, which is considered the "new lot." The following documents are being submitted:

- 2 copies of subdivision review application
- 2 full size sets of plans by J & D Civil Engineers dated June 27, 2022
- 2 copies of excerpts from the report from Margaret Washburn, soil scientist dated August 28, 2007
- 2 copies of the stormwater narrative
- 2 copies of abutters

We hope that the Commission will accept the application at their July meeting so that decisions could potentially be made at the August meeting. Please contact me if you have any questions or require additional information.

Very Truly Yours,

J & D Civil Engineers, LLC

Janet J. Blanchette, PE

Received

JUN 30 2022

Thompson Wetlands Office

Original

for commission use: rev 1/11
application # SUB20019
date received June 30, 2022

SUBDIVISION REVIEW APPLICATION

Town of Thompson

INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

Instructions:

All applicants must complete this application for preliminary review. The Commission will notify the applicant of any additional information that may be required and will schedule a public hearing if necessary. In addition to the information supplied herein, the applicant may submit other supporting facts or documents which may assist the Commission in its evaluation of the proposal. In order to streamline the application review process, it is recommended that all subdivision review applications be submitted to the Thompson Conservation Commission for review prior to submission to the regulatory commissions. Any changes made to a subdivision plan that affects wetlands or watercourses as a result of Planning & Zoning approval must be resubmitted to the Wetlands Commission for review and approval, or the conceptual approval will be considered null and void and a new subdivision review application with all fees will need to be submitted.

Two (2) copies of the completed application and two (2) copies of all the additional attached documents (site plan, etc.) must be submitted to the Town Clerk. State Statute provides that you may submit an application up to three (3) business days prior to the next regularly scheduled meeting, which means by the close of business hours on the Wednesday before a regular meeting date. The applicant is advised to read Sections 7 and 8 of the Regulations for further information regarding application requirements and procedures. THE APPLICANT IS FURTHER ADVISED THAT A BUFFER/SETBACK OF 100 FEET FROM A WETLAND OR WATERCOURSE IS REQUIRED, AND A BUFFER/SETBACK OF 200 FEET FROM THE TEN (10) ESPECIALLY NOTEWORTHY WETLANDS AND WATERCOURSES IDENTIFIED IN THE TOWN OF THOMPSON INLAND WETLAND INVENTORY PREPARED BY NORTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY 1980 PAGES 9, 14 AND 15 IS REQUIRED. See Section 6 of the Regulations for further information regarding activities.

WE MUST HAVE THE FOLLOWING INFORMATION TO PROCESS YOUR APPLICATION:

- Directions to the property from the Thompson Town Hall
- Location of Utility Pole nearest your property
 - *Pole Number *Location of property in reference to Pole (side of street)
- Locations of proposed house, septic test pits, well and driveway must be staked and labeled on site (These requirements must be LEGIBLY PRINTED on your MAPS at the time of application, but NOT in the area of the map details. Use outside edge of map for this information. Thank you.)

FAILURE TO HAVE THE ABOVE INFORMATION WILL POSTPONE PROCESSING OF YOUR APPLICATION

FEE SCHEDULE:

(Additional \$60.00 fee to State as per Public Act 09-03, Section 396)

(Permit Fee Now Includes Mandatory Legal Advertisement Fee of \$20. This DOES NOT include Legal Notice fees for Public Hearings, which will be billed separately.)

- Conceptual Approval of Subdivision up to Two (2) Lots \$50 + \$60
- Conceptual Approval of Subdivision of Three (3) Lots or more..... \$250 Base Fee – PLUS
\$250 per lot + \$60 State Fee
- Complex Application Fee.....Applicants will be billed for professional review as needed,
see regulations booklet Section 18.5

Please complete the following application information.

Received

JUN 30 2022

If you need assistance contact the wetland Agent (business office 860- 923-1852)

Date 6/27/22

1) Name of Applicant LAVALLEE CONST LLC

Home Address 83 RICH RD, N GROS, CT 06255

Home Tele & Hrs _____ Business Tele & Hrs 508-728-6128

Business Address SAME

2) Applicant's interest in the Property: ☒ Owner ☐ Other

INLAND WETLANDS APPROVALS CAN BE GRANTED TO PROPERTY OWNER ONLY.

No permit shall be assigned or transferred without written permission of the Commission.

3) Name of Property Owner (if not applicant) N/A

Home Address _____

Business Address _____

Home Tele & Hrs _____ Business Tele & Hrs _____

4) Geographical Location of the Property (site plan to include utility pole number nearest property or other identifying landmarks)

Pole # and Location ✓

Street or Road Location DONOVAN DR

Tax Assessor's Map # 3

Block # 80

Lot # that appears on site plan 2T, 2U-1, 2U-2, 2W

Deed Info: Volume # 916

Page # 218

5) The property to be subdivided contains:

Soil Types SEE SOIL SCIENTIST LETTER

Wetland Soils ☒ (Swamp ☐ Marsh ☐ Bog ☐ Vernal Pool ☐)

Watercourses ☐ (Lake or Pond ☐ Stream or River ☐ Intermittent Stream ☐)

Floodplain - Yes/No

6) Purpose and Description of the Activity for which Approval is requested:

- a. Give a complete description of the proposed activity CONSTRUCTION OF 4 HOUSES, WELLS, SEPTIC SYSTEMS AND DRIVEWAYS, MINIMAL GRADING IN UPLAND REVIEW AREA

If the above activity involves deposition or removal of material, what is the quantity? _____

b. Submit a Site Plan, drawn to scale, with the certification of the preparing Surveyor and/or Engineer including:

- ☒ 1-Locus map at approx. 1" = 1000'
- ☒ 2-Location of property, with boundaries defined and utility pole # near property and any other identifying landmarks.
- ☒ 3-Location of wetlands and /or watercourses. A wetland delineation in the field must be marked with numbered wetlands flags by a certified soil scientist and located on the map/site plan. Site plan shall bear the soil scientist's original signature.

☒ 4-Soil types on the property.

☒ 5-Flood Hazard area classification and delineation with base flood elevations.

☒ 6-(a)Location of the proposed activity (i.e. house, septic, well or other areas to be disturbed).

(b)Location of perc tests and soil test holes.

(c)Copy of NDDH approval to construct or repair subsurface sewage disposal system. PENDING

N/A ☐ 7-Nature and volume of the material to be placed, removed, or transferred.

☒ 8-Topographical contours, proposed and existing.

N/A ☐ 9-Location and supporting data for proposed drainage.

☒ 10-Date, scale (recommend 1"=40') and North arrow.

☒ 11-Subdivisions must be A-2 Surveys and have Certified Soil Scientist's original signature on face sheet.

☒ 12-Proposed limits of clearing/disturbance and location of stockpiles during construction.

☒ 13-Location of proposed Erosion and Sedimentation controls and other management practices which may be considered as a condition of issuing a future permit for the proposed regulated activity. The erosion and sedimentation control provisions and the storm water treatment design on the site plan must comply with the most current DEP edition of the *Connecticut Guidelines for Soil Erosion and Sedimentation Control* and the most current version of the *Connecticut Stormwater Quality Manual* and be and be so noted on the plans.

☒ 14 -Location of proposed Stormwater treatment design on the site plan must comply with the most current CT DEP edition of the *Connecticut Stormwater Quality Manual* and be so noted on the plans. It is strongly recommended that low impact development techniques, stormwater management techniques that are designed to approximate the pre-development site hydrology, be utilized in the stormwater system design wherever practical and possible.

N/A ☐ 15-Location of proposed mitigation or wetland enhancement measures which may be considered as a condition of issuing a permit for the proposed regulated activity.

☒ 16-Timing and description of phases of activities, installation of sediment and stormwater control measures and temporary and permanent stabilization methods.

c. Explain whatever measures you propose to lessen or to compensate for the impacts to the wetlands or watercourse(s) PROPOSED FEATURES LOCATED OUTSIDE

OF UPLAND REVIEW AREA IF POSSIBLE.

d. Have any alternatives been considered? NO If yes, explain why this proposal was chosen _____

7) Is any portion of this property located within 500' of the boundary of an adjoining municipality? NO

If yes, Applicant is required to give written notice of the application by certified mail, return receipt requested, to

the adjacent municipal wetlands agency on the same day of filing this permit application with the Thompson Inland Wetlands Commission (TIWC). Documentation of such notice shall be provided to the TIWC.

- 8) Is any portion of this property located within the watershed of a water company as defined in section 16-1 of the Connecticut General Statutes? NO If yes, the Applicant is required to provide written notice of the application by certified mail, return receipt requested, to the water company on the same day of filing this permit application with the Thompson Inland Wetlands and Watercourses Commission. Documentation of such notice shall be provided to the Commission.
- 9) Does any portion of this property contain a Natural Diversity Data Base (NDDB) area of concern as defined on the most updated map of Federal and State Listed Species and Significant Natural Communities, for Thompson, Connecticut, prepared by the Connecticut Department of Environmental Protection? NO If yes, the Applicant must contact the CT DEP for information regarding the State or Federal Listed Species of Concern.

10) Names and Addresses of Abutters:

SEE ATTACHED

- 11) Estimated start date OCT 2022
Estimated date of completion (all disturbed areas are stabilized) JUNE 2023

- 12) The undersigned hereby consents to necessary and proper inspections of the above mentioned property by the Agents of the Town of Thompson Inland Wetlands Commission, at reasonable times, both before and after the approval in question has been granted, including site walks by Commission members and staff for the purpose of understanding existing site conditions, which may be necessary in order to render a decision on this application.

The undersigned swears that the information supplied in this completed application is accurate to the best of her/his knowledge

ABSOLUTELY NO WORK IS TO BEGIN UNTIL ALL NECESSARY APPROVALS ARE OBTAINED.

I understand by signing this application that it is my responsibility to provide all the information as requested.
I understand that the commission is unable to act upon an incomplete application.

Jason Lulla
Signature of Applicant

6-28-22
Date

Consent of Landowner if other than applicant

Date

Please attach a written consent by the owner if applicant is not the property owner.

Account N	Site Address	Owner Name	Owner Address	Owner City	Owner St	Owner Zip
3-80-2-C	48 OLD TURNPIKE	CURTIS STEVEN L	48 OLD TURNPIKE	QUINEBAUG	CT	06262
3-80-4	5 CAROL AVE	MARCIANO JOSEPH A	5 CAROL AVE	QUINEBAUG	CT	06262
3-80-5	7 CAROL AVE	MEAD EDWARD M JR + CANI	18 MUROLO RD	N GROSVENORD,	CT	06255-1814
3-80-6	8 CAROL AVE	SHIPPEE ROBERT J + JUDY	P O BOX 294	QUINEBAUG	CT	06262
3-80-9	9 DONOVAN DR	LANGLOIS JOHN E + TRICIA	P O BOX 483	QUINEBAUG	CT	06262
3-80-9-A	0 DONOVAN DR	LAVALLEE CONSTRUCTION	83 RICH RD	N GROSVENORD,	CT	06255
3-80-12-D	68 OLD TURNPIKE	MATEO GABRIEL E + DAVINC	2846 N MAIN ST	WATERBURY	CT	06704-1211
3-80-2-AK	0 DONOVAN DR	TOWN OF THOMPSON	P O BOX 899	N GROSVENORD,	CT	06255-0899
3-80-2-AJ	0 DONOVAN DR	THOMPSON TOWN OF	815 RIVERSIDE DR	N GROSVENORD,	CT	06255
3-80-2-AI	0 DONOVAN DR	THOMPSON TOWN OF	815 RIVERSIDE DRIVE	N GROSVENORD,	CT	06255
3-80-2-Y	0 DONOVAN DR	LAVALLEE CONSTRUCTION	83 RICH RD	N GROSVENORD,	CT	06255
3-80-2-X	0 DONOVAN DR	LAVALLEE CONSTRUCTION	83 RICH RD	N GROSVENORD,	CT	06255
3-80-2-V	0 DONOVAN DR	LAVALLEE CONSTRUCTION	83 RICH RD	N GROSVENORD,	CT	06255
3-80-2-S	43 DONOVAN DR	LAVALLEE CONSTRUCTION	83 RICH RD	N GROSVENORD,	CT	06255
3-80-2-R	0 DONOVAN DR	LAVALLEE CONSTRUCTION	83 RICH RD	N GROSVENORD,	CT	06255
3-80-2-E	98 DONOVAN DR	PEREIRA RICARDO +	98 DONOVAN DR	QUINEBAUG	CT	06262

WASHBURN WETLAND CONSULTING LLC

19 Wolf Den Road • Pomfret Center, Connecticut 06259-2022

Telephone (860) 928-6728 • Fax (860) 963-1999

Janet Blanchette
J & D Civil Engineers
401 Ravenelle Road
North Grosvenordale, CT
06255

August 28, 2007

Introduction

At your request, on October 13, 16, 17, 24, 25, 27, 30, 31, November 1 and 3, 2006, and January 10, 2007, I conducted a site investigation on the Whipple property on Route 197 in Quinebaug, Connecticut. The purpose of the site investigation was to delineate the wetlands on the subject property, as well as some wetlands on abutting properties. I also verified that a small isolated wetland does not function as a vernal pool on April 20, 2007 (see below for further details). At your request, I did not delineate most of the floodplain wetlands associated with the Quinebaug River.

The subject property is located on the edge of a glacial till ridge and deposits of ice-contact glacial outwash. A portion of the floodplain of the Quinebaug River is located on the subject property. The soils on the subject property were extensively disturbed in the past during the gravel mining process.

Wetlands on the Subject Property

The wetlands were delineated using consecutively numbered lengths of blue surveyors' ribbon. The wetland flags series are listed below. Please refer to the enclosed site sketches for further details. Please note that the site sketches are not to scale.

A { WF1 – WF12. Near northwest property boundary. Intermittent watercourse shown on U.S.G.S. topographic map, plus associated wooded shrub swamp. The main part of this stream flows into Massachusetts.

WF13 – WF23. Connect WF13 to WF1. Same wetland system as WF1– WF12.

B { WF24 – WF44. Unmapped intermittent stream flowing through the central portion of the subject property from west toward the northeast. Includes associated wooded shrub swamp.

WF45 – WF87. Same wetland system as WF24 – WF44.

WF88 – WF109. Connect WF109 to WF24. Same wetland system as WF24 – WF44.

LAVALLEE
LANE

WF110 – WF127. Unmapped intermittent stream flowing southeast toward the floodplain. Includes associated wooded shrub swamp.

WF1A – WF12A. Same wetland system as WF110 – WF127.

C WF13A – WF15A. Connect WF13A to WF1A. Connect WF15A to WF127. Please note that an interrupted channel was observed connecting this wetland system to a wetland containing cattails on the abutting property to the west. However, this interrupted channel, which appears, disappears and reappears between the western boundary and wetland flag series WF13A – WF15A, does not meet the criteria for status as an intermittent watercourse. The other intermittent watercourses on the subject property were delineated under Part II of the General Provisions of the Connecticut Department of Environmental Protection State Policy, whereby "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." In the interrupted channel, which appears, disappears and reappears between the western boundary and wetland flag series WF13A – WF15A, only characteristic (A) was observed on the steepest part of the till ridge. Characteristics (B) and (C) were not observed. No wetlands soils were observed associated with the interrupted channel which appears, disappears and reappears between the western boundary and wetland flag series WF13A – WF15A.

D WF128 – WF 133. Connect WF128 to WF133. Isolated wetland near an old well. In this area the soils have been disturbed by heavy equipment.

E WF134 – WF148. Connect WF134 to WF148. Isolated wetland containing an old well. In this area the soils have been disturbed by heavy equipment.

F WF149 – WF195. Connect WF149 to WF195. Isolated wetland. Probably functions as a vernal pool.

G WF196 – WF211. Connect WF196 to WF211. (Do not connect WF197 to WF198. Please refer to series WF320 – WF327 and WF328 – WF335 below for further details.) A vernal pool. Fish predators are absent. The water in this vernal pool may overflow at extreme peaks of high precipitation, flow through a ditch and into a culvert under Route 197.

NOT WITHIN 100' OF PROPERTY { WF212 – WF216. Isolated wetland.

WF217 – WF234. This wetland system has characteristics of a shallow pond, wet meadow, a marsh, a bog, and a wooded shrub swamp. Functions as a vernal pool. Wood frogs were calling from these wetlands on April 20, 2007. The wetland continues beyond

NOT
WITHIN
100' OF
PROPERTY

WF243, but I did not think I was on the subject property any more so I stopped the flags at WF234.

WF235 – WF243. Same wetland system as WF217 – WF234. The flags end beside Route 197 at the end of a stone-lined drainage ditch.

H { WF244 – WF249. Do not connect WF249 to WF250. Isolated wetland behind last house on the left on Carol Ave. Water appears to flow off the subject property between WF249 and WF250. Water flowing off the subject property at this point appears to percolate through the sandy soil on the abutting property.

WF250 – WF254. Connect WF254 to WF244. Same wetland system as WF244 – WF249.

I WF255 – WF273. Connect WF255 to WF273. Isolated wooded shrub swamp wetland formed by gravel mining process.

J WF274 – WF295. Connect WF274 to WF295. Intermittent watercourse and associated wet meadow and wooded shrub swamp. Water pools in the existing cart path, flows down a very steep slope to the south, and percolates into the soil near the base of the steep slope.

K WF296 – WF300. Connect WF296 to WF300. Small isolated wetland formed during gravel mining process. Site investigation verified that this small isolated wetland does not function as a vernal pool on April 20, 2007.

L WF301 – WF320. Connect WF301 to WF320. Isolated wooded shrub swamp.

M { WF321 – WF327. Connect WF327 to WF197. Drainage ditch beside Route 197.
WF328 – WF335. Connect WF335 to WF198. Do not connect WF197 to WF198. Same drainage ditch as WF320 – WF327.

References used in the soil identification process included the *Munsell Color Chart*, *Soil Survey of Windham County Connecticut* (USDA Soil Conservation Service, December 1981), *Indicators for Identifying Hydric Soils in New England* (New England Interstate Water Pollution Control Commission, Third Edition, April, 2004), a surveyor's map you provided, a satellite map from the internet, and the USGS topographic map for the subject property.

Soil Types on the Subject Property

According to the *Soil Survey of Windham County Connecticut*, the wetlands soils on the subject property associated with the floodplain of the Quinebaug River consist of Rippowam fine sandy loam. Also, according to the *Soil Survey*, the wetlands soils associated with wetland flag series WF149 – WF195, WF196 – WF211, WF212 – WF216, and WF217 – WF243 consist of Adrian and Palms mucks.

Many of the wetlands on the subject property are not mapped in the *Soil Survey*. The wetlands soils associated with these wetlands consist of a complex of Ridgebury, Leicester, and Whitman extremely stony fine sandy loams, and/or Udorthents (manmade soils consisting of fill created during the gravel mining process).

Wetlands on Abutting Property

On January 10, 2007, I conducted a site investigation on property abutting the Whipple site on Route 197 in Quinebaug, Connecticut. The purpose of the site investigation was to delineate the wetlands the abutting property. The site investigation was limited to the area you indicated on a sketch that you provided. The only wetlands that were observed were associated with the Quinebaug River. The subject property is located on deposits of ice-contact glacial outwash.

The wetlands were delineated using consecutively numbered lengths of blue surveyors' ribbon. There is one series of wetland flags, WF1R – WF17R. Please refer to the attached site sketch and U.S.G.S. topographic map for further details.

References used in the soil identification process included the *Munsell Color Chart*, *Soil Survey of Windham County Connecticut* (USDA Soil Conservation Service, December 1981), *Indicators for Identifying Hydric Soils in New England* (New England Interstate Water Pollution Control Commission, Second Edition, 1998), a surveyor's map you provided, and the USGS topographic map for the subject property.

According to Map 2 of the *Soil Survey of Windham County Connecticut*, the wetlands soils on the subject property associated with the floodplain of the Quinebaug River consist of Rippowam fine sandy loam and Suncook loamy fine sand.

Vernal Pool Verification

On April 20, 2007, at your request, I investigated the small isolated wetland created during the gravel mining process that was delineated in the fall of 2006 with wetland flags numbered WF296 – WF300, to see if it was functioning as a vernal pool.

Using a kick net, I checked this isolated depression and no obligate vernal pool species (wood frog, spotted salamander, fairy shrimp) were observed. No egg masses of any amphibian species were observed. No wood frogs were heard calling from this depression.

It was the height of the season for wood frogs to mate on April 20, 2007. Many wood frogs were calling in vernal pools elsewhere on the site. If the small isolated depression delineated with wetland flags WF296 – WF300 were functioning as a vernal pool, on April 20, 2007, they and/or their egg masses would have been present.

Clearly, the isolated depression delineated with wetland flags numbered WF296 – WF300 does not function as a vernal pool.

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

Sincerely,

Margaret Washburn, M.S.

Margaret Washburn, M.S.
Registered Professional Soil Scientist



WF 13A
START.
CONNECT TO
WF 1A.

WF 1A
START

WF 15A END.
CONNECT TO WF 127.

WF 127 end

WF 12A
END.

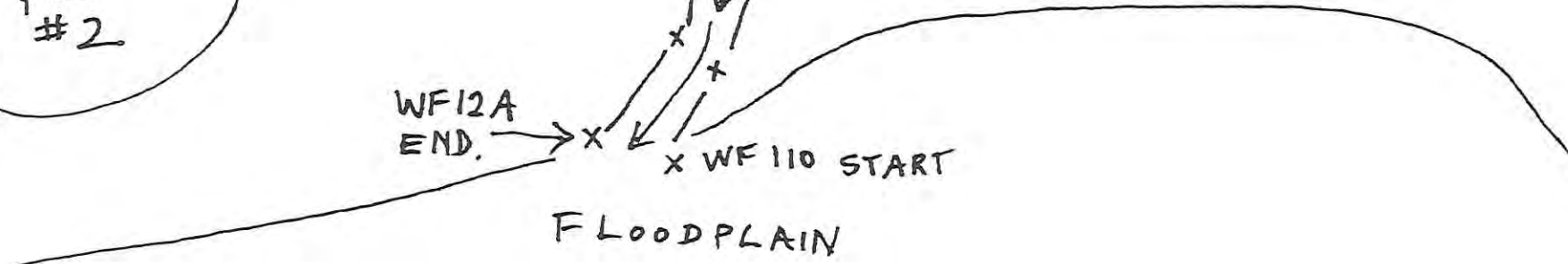
WF 110 START

FLOODPLAIN

Shown as Lot 33
on alternative
plan # 2

Shown as
Lot 11
on
alternative
plan
2

→ N



J & D CIVIL
ENGINEERS, LLC

401 Ravenelle Road
N. Grosvenordale, CT 06255
www.jdcivilengineers.com
(860) 923-2920

Stormwater Runoff Narrative – Lavallee 4 lot - Resubdivision
Donovan Drive – Thompson, CT

Original Subdivision Lots 17, 18, and 20, Assessors Lots 2T, 2U, 2W
June 29, 2022

This property is part of the Donovan Drive subdivision near the Massachusetts border under construction by Lavallee Construction. There are currently 3 lots on the northeast side of Donovan Drive that the owner would like to reconfigure to result in 4 building lots. So, one new building lot is proposed. The 4 lots will each be a little over 1 acre in size. The rear property lines of these lots abut the town's recently accepted open space parcel along the Quinebaug River and its adjacent flood plain. The lots all drain away from Donovan Drive and toward the flood plain.

The soil to the rear of these lots and on the sloped land below the lots in the town's open space parcel is classified as well drained Hinkley sands and gravels. Runoff from the lots will be in the form of sheet flow toward the well drained soil where significant infiltration will occur. In addition, there is considerable storage in the flat wetlands in the flood plain along the river to absorb any runoff that is not infiltrated.

Therefore, the addition of one proposed house lot in the drainage area to the flood plain will not affect the runoff pattern in the watershed or significantly increase the flow to the Quinebaug River.

4 LOT RESUBDIVISION PLAN
MAP 3 BLOCK 80 LOTS 2T, 2U, 2W)
(DEVELOPER'S LOTS 17, 18, 20)
DONOVAN DRIVE - THOMPSON, CT

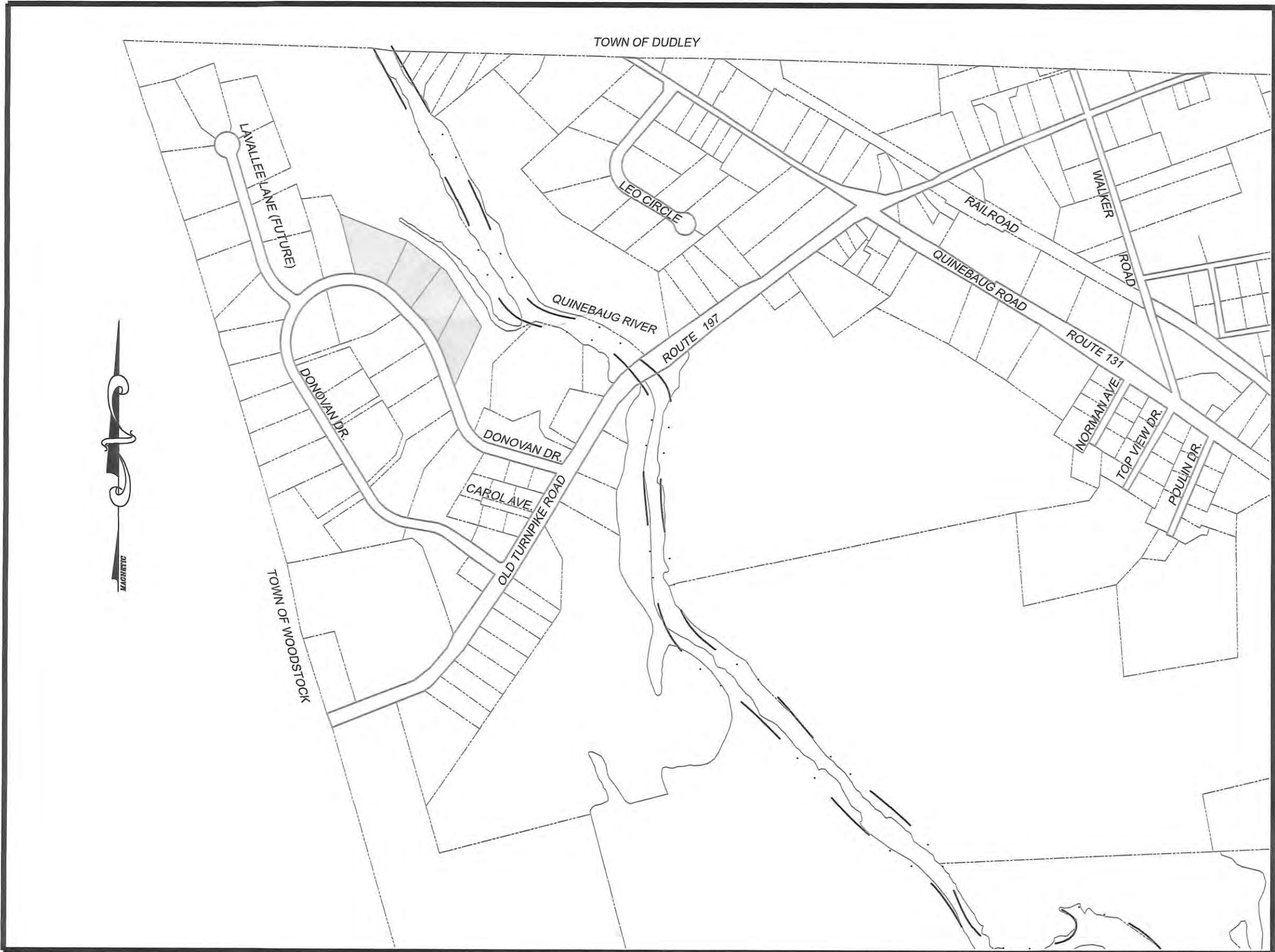
DATED: JUNE 27, 2022

OWNER AND APPLICANT:

LAVALLEE CONSTRUCTION LLC
83 RICH ROAD
NORTH GROSVENORDALE, CT 06255

INDEX OF DRAWINGS

- 1 COVER
- 2 SURVEY
- 3 SITE DEVELOPMENT PLAN
- 4 TEST PIT AND MLSS DATA



LOCATION MAP
1" = 500'

ZONE: RURAL RESIDENTIAL AGRICULTURAL DISTRICT (RRAD)
USE: RESIDENTIAL

ITEM	REQUIRED	LOT 2T	LOT 2U-1
FRONTAGE	150'	156.25'	162.10'
LOT COVERAGE	<50%	7 %	8 %
FRONT SETBACK	40'	74'	51'
SIDE SETBACK	20'	22'	50'
REAR SETBACK	20'	115'	143'
LOT SIZE	40,000 SF	57,255 SF	41,837 SF

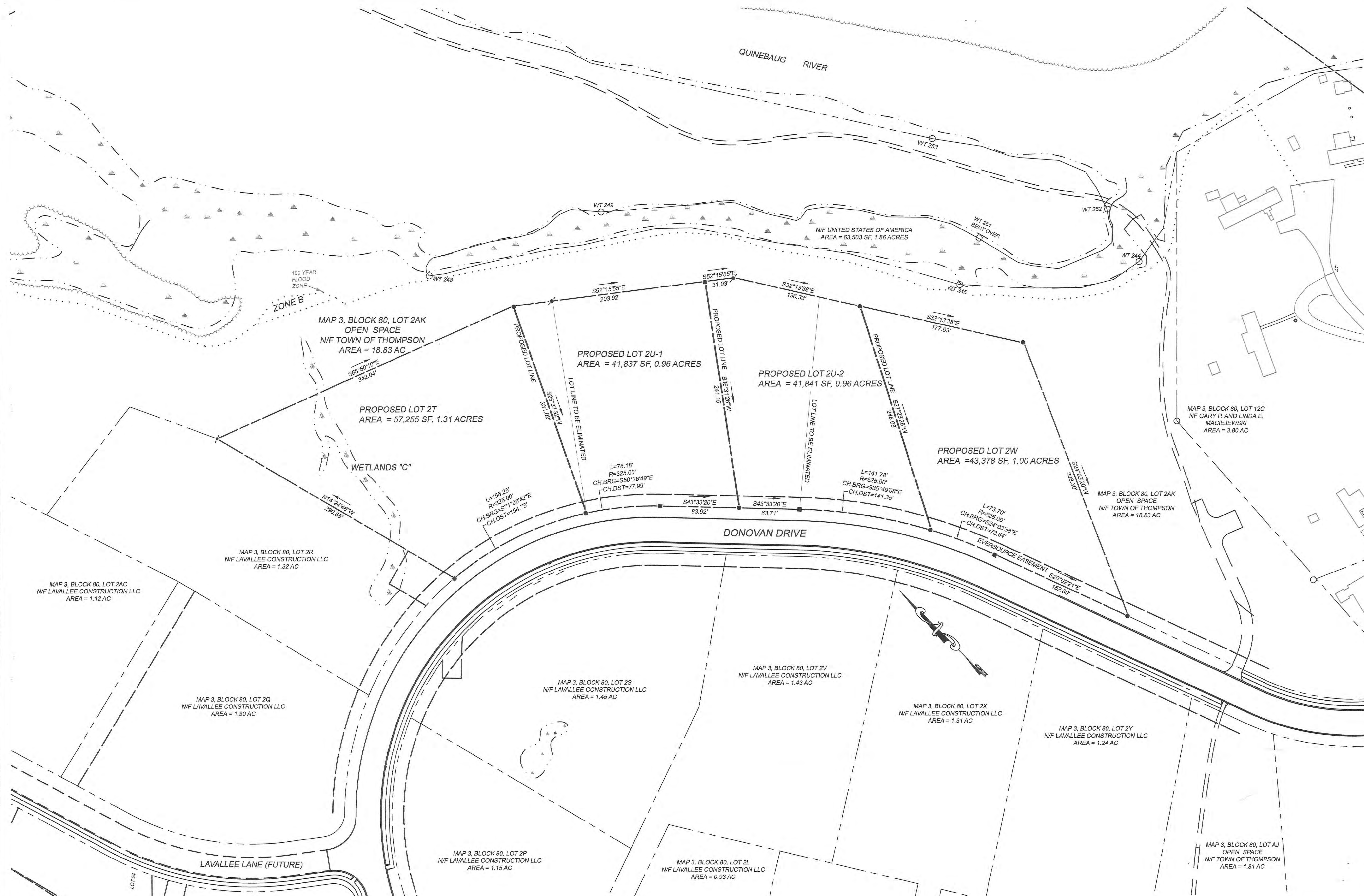
ITEM	REQUIRED	LOT 2U-2	LOT 2W
FRONTAGE	150'	205.49'	226.50'
LOT COVERAGE	<50%	10%	9%
FRONT SETBACK	40'	72'	67'
SIDE SETBACK	20'	34'	31'
REAR SETBACK	20'	119'	101'
LOT SIZE	40,000 SF	41,841 SF	43,379 SF

Received
JUN 30 2022
Thompson Wetlands Office

APPROVED INLAND WETLANDS COMMISSION		APPROVED PLANNING AND ZONING COMMISSION	
CHAIRMAN	DATE	CHAIRMAN	DATE
TOWN OF THOMPSON RECEIVED FOR RECORDING		DATE OF PZC APPROVAL	
TOWN CLERK	DATE	TIME	MAP #
		DATE OF EXPIRATION	

J & D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
THOMPSON, CT 06255
JDCIVILENGINEERS.COM
860-923-2920

Appl SUB2019 Copy 1



SURVEY NOTES

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

SURVEY TYPE: RESUBDIVISION
BOUNDARY DETERMINATION CATEGORY: DEPENDENT RESURVEY WITH
REGARD TO EXISTING PROPERTY LINES AND ORIGINAL SURVEY WITH
REGARD TO PROPOSED PROPERTY LINES.
HORIZONTAL ACCURACY: A-2

2. REFERENCE PLANS:

(A) PLANS SHEET 1 AND 2 ENTITLED "COMPLIATION PLAN, MAP SHOWING EASEMENT AREA TO BE GRANTED TO THE CL&P, DBA EVERSOURCE ENERGY ACROSS THE PROPERTY OF MELODY MAURO, ROUTE 197, DOVONAVMN DRIVE, AND LAVALLEE LANE." PLAN PREPARED BY J & D CIVIL ENGINEERS, LLC, DATE: MARCH 25, 2018, FILE NO.: ES017

(B) PLANS ENTITLED SHEETS S-1 AND S-2 "SUBDIVISION PLAN SOUTH AND NORTH, GREEN VALLEY VIEW ESTATES, THOMPSON, CT" PREPARED BY J&D CIVIL ENGINEERS LLC, DATE: REV THROUGH 01-31-08.

3.OPEN SPACE: THE OPEN SPACE REQUIREMENT FOR SUBDIVISIONS OF THIS PROPERTY WAS PREVIOUSLY SATISFIED DURING THE APPROVAL OF THE ABOVE REFERENCED SUBDIVISION.

4. THE WETLANDS INDICATED ON THIS PLAN WERE FLAGGED BY SOIL SCIENTIST MARGARET WASHBURN IN 2007 AND THE LOCATIONS WERE TAKEN FROM THE ABOVE REFERENCED SUBDIVISION.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

DENNIS R. BLANCHETTE DATE 6/30/22 LICENSE # 12107

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2022 J&D CIVIL ENGINEERS, LLC

FLOOD ZONE: PROPERTY IS NOT WITHIN A 100 YEAR FLOOD ZONE PER FIRM
MAP 090117 0001B DATED: 11/1/84

SOIL TYPES: THE SOIL ON THE SUBJECT PROPERTY HAVE BEEN CATEGORIZED BY THE NATURAL RESOURCES CONSERVATION SERVICE AS HINCKLEY LOAMY SAND ON THE UNDISTURBED PORTION AND UDORTHENTS - PITS WHERE PREVIOUS GRAVEL EXCAVATION OCCURRED.

ZONING INFORMATION:
ZONE: RURAL RESIDENTIAL AGRICULTURAL DISTRICT (RRAD)
MINIMUM LOT AREA: 40,000 S.F.
MINIMUM FRONTAGE: 150'
MINIMUM FRONT YARD: 40'
MINIMUM SIDE YARD: 20'
MINIMUM REAR YARD: 20'

LEGEND

- | | |
|----------------------|----------------------------------|
| ● | IRON ROD OR DRILL HOLE TO BE SET |
| ■ | CONC. MONUMENT TO BE SET |
| ○ | EXISTING IRON ROD DRILL HOLE |
| _____ | EXISTING PROPERTY LINE |
| _____ | ABUTTING PROPERTY LINE |
| _____ | PROPOSED PROPERTY LINE |
| _____ | BUILDING SETBACK |
| _____ | EDGE OF EASEMENT |
| ○○○○○○○○○○○○○○○○○○○○ | STONE WALL |
| _____ | UTILITIES |
| □□□□□□□□□□ | GUARDRAIL |
| x-x-x-x-x-x-x-x-x-x | FENCE |
| | EDGE OF WETLANDS |

RESUBDIVISION PLAN**PREPARED FOR**

LAVALLEE CONSTRUCTION LLC

DONOVAN DRIVE - THOMPSON, CT

MAP 3 BLOCK 80 LOTS 2T, 2U, 2W (DEVELOPER'S LOTS 17, 18, 20)

J&D CIVIL
ENGINEERS, LLC

**401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920**

DESIGNED: JJB
CHECKED: DRB

REVISIONS:

JOB NO: 22142

SCALE: 1" = 50'

DATE: JUNE 27, 2022

SHEET: 2 OF 4

TOWN OF THOMPSON
RECEIVED FOR RECORDING

APPROVED
PLANNING AND ZONING COMMISSION

APPROVED
INLAND WETLANDS COMMISSION

TOWN CLERK	DATE	TIME	MAP #
------------	------	------	-------

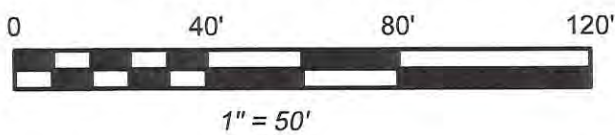
CHAIRMAN

DATE _____

CHAIRMAN

DATE _____

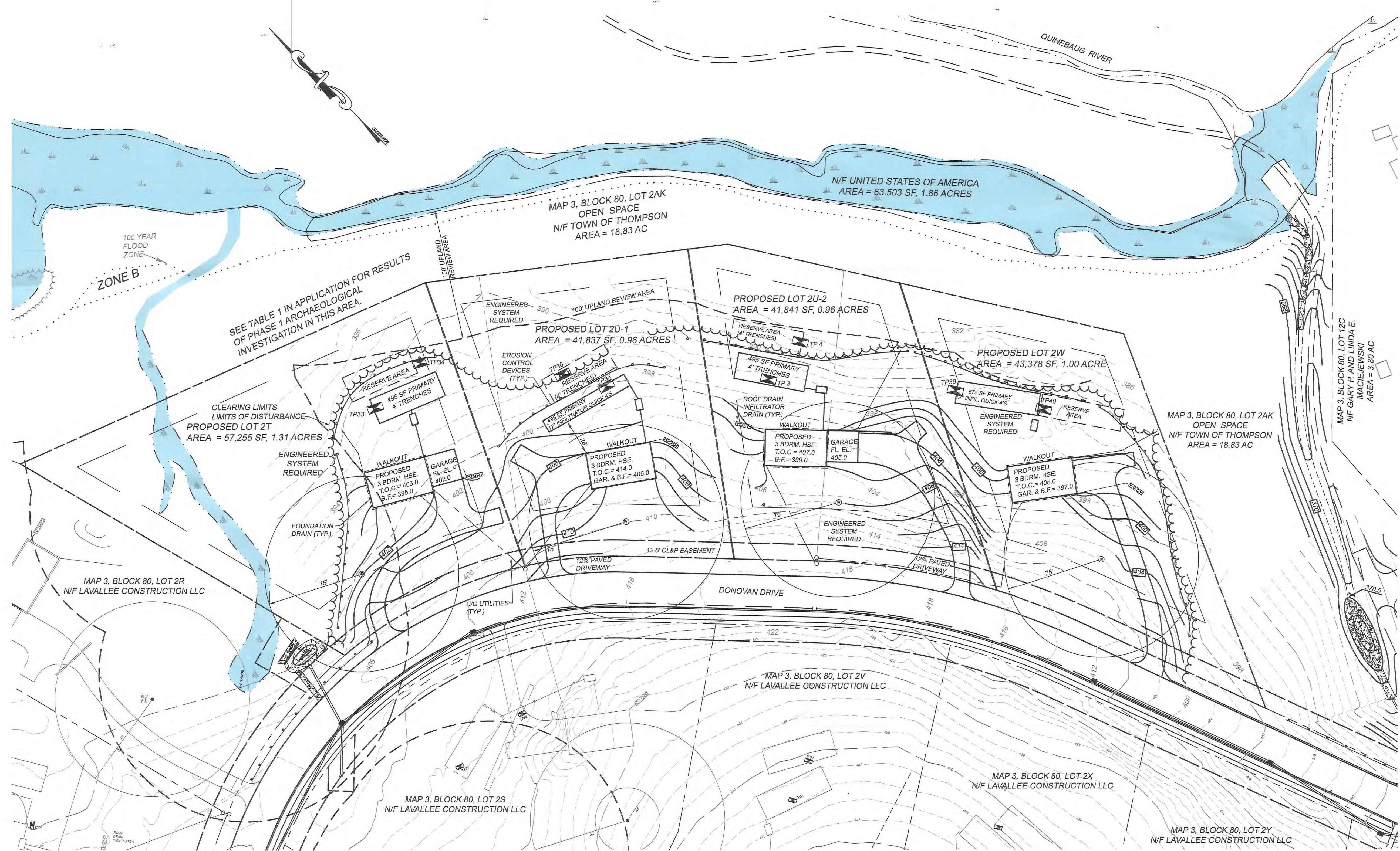
GRAPHIC SCALE



PROPERTY OWNER
LAVALLEE CONSTRUCTION LLC
83 RICH ROAD
NORTH GROSVENORDALE, CT 06255

REFERENCE DEED
THOMPSON LAND RECORDS
VOL. 916 PG. 218

ASSESSORS REFERENCE
MAP 3 BLOCK 80 LOT 2D



SURVEY NOTES:

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

PURPOSE: CONCEPTUAL SITE DEVELOPMENT PLANS
TYPE: GENERAL LOCATION
HORIZONTAL ACCURACY: CLASS B
TOPOGRAPHIC ACCURACY: CLASS T-2
PROPERTY LINES DO NOT EXPRESS A BOUNDARY OPINION

2. TEST PIT AND PERC TEST LOCATIONS HAVE BEEN COMPILED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND J&D CIVIL ENGINEERS DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS PLAN AS A RESULT.

3. REFERENCE PLAN: SUBDIVISION AND SITE PLANS TITLED "GREEN VALLEY VIEW ESTATES" THOMPSON, CT BY J & D CIVIL ENGINEERS ORIGINALLY APPROVED IN 2006 AND UPDATED IN 2018.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

Dennis R. Blanchette 12107
DENNIS R. BLANCHETTE DATE LICENSE
THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2022 J&D CIVIL ENGINEERS, LLC

LEGEND	
	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	EDGE OF WETLANDS
	WETLAND BUFFER/UPLAND REVIEW AREA
	EROSION CONTROL DEVICES
	TEST PIT
	CLEARING LIMITS
	UNDERGROUND UTILITIES

NDDH FILE # 7001397

CONCEPTUAL SITE DEVELOPMENT PLANS
PREPARED FOR
LAVALLEE CONSTRUCTION LLC
DONOVAN DRIVE - THOMPSON, CT
MAP 3 BLOCK 80 LOTS 2T, 2U-1, 2U-2, 2W
(DEVELOPER'S LOTS 17, 18, 20)

Received
JUN 3 0 2022
Thompson Wetlands Office

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: JJB
CHECKED: DRB

REVISIONS:

JOB NO: 22142
SCALE: 1" = 40'

DATE: JUNE 27, 2022
SHEET: 3 OF 4

22142 River Lots Resub 2022-02-27 Along State Plan north split 3 07/29/2022 09:13:35

TEST PIT NO. 32
0-5" TOPSOIL
5-32" SANDY LOAM TO LOAMY SAND, ROOTS, ROCKS
32-116" MOD. COMPACT PAN

TEST PIT NO. 33
0-5" TOPSOIL
5-24" FINE SANDY LOAM, FINE ROOTS
24-88" COMPACT PLATEY SILT LOAM, MOIST
88-138" SILT SAND AND GRAVEL COBBLES
138-150" COMPACT PLATEY SILT LOAM

MOTTLING: N/A
RESTRICTIVE LAYER: 24"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 34
0-9" TOPSOIL, ROOTS
9-31" FINE SANDY LOAM, ROOTS
31-136" COMPACT SILTY LOAM, WET
136-168" SILTY FINE SAND

MOTTLING: N/A
RESTRICTIVE LAYER: 31"
LEDGE: N/A
WATER: SEEPS 68"

TEST PIT NO. 35

0-5" TOPSOIL, ROOTS
5-41" FINE SANDY LOAM TO SANDY LOAM
41-145" COMPACT SANDS TO GRAVEL

MOTTLING: N/A
RESTRICTIVE LAYER: 41"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 36

0-5" TOPSOIL
5-29" FINE SANDY LOAM
29-112" COMPACT SILT LOAM
112-157" MED TO FINE SANDS

MOTTLING: N/A
RESTRICTIVE LAYER: 29"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 37

0-6" TOPSOIL
6-39" SANDY LOAM
39-100" COMPACT PAN

MOTTLING: N/A
RESTRICTIVE LAYER: 39"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 38

0-6" TOPSOIL
6-29" SANDY LOAM
29-102" COMPACT PAN

MOTTLING: N/A
RESTRICTIVE LAYER: 29"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 39
0-6" TOPSOIL ORGANICS
6-21" REDDISH BROWN FINE SANDY
LOAM, PEBBLES
21-73" GRAY VERY COMPACT SANDY PAN, MOTTLED
73-144" COURSE LOAMY SAND AND GRAVEL WITH POCKET OF FINE SAND

MOTTLING: 23"
RESTRICTIVE LAYER: 23"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 40

0-5" TOPSOIL WITH ORGANICS
5-23" YELLOW BROWN FINE SANDY LOAM WITH PEBBLES
23-79" DARK GRAY SANDY PAN, MOTTLED
79-166" COURSE SAND AND GRAVEL WITH FINE SAND, MOTTLED

MOTTLING: 24"
RESTRICTIVE LAYER: 24"
LEDGE: N/A
WATER: N/A

TEST PITS DATED JUNE 10, 2022

TEST PIT NO. 3

0-7" ORGANICS, TOPSOIL, ROOTS
7-24" SANDY LOAM TO FINE SANDY LOAM
24-33" GREY SILTY LOAMY FINE SAND, ROCKS
33" COMPACT PAN, ROCKS

MOTTLING: N/A
RESTRICTIVE LAYER: 24"
LEDGE: N/A
WATER: N/A
ROOTS: 25"

TEST PIT NO. 4

0-4" ORGANICS, TOPSOIL, ROOTS
4-19" SANDY LOAM, ROOTS
19-31" GREY SILTY LOAMY FINE SAND, STONES, ROCKS
31-83" COMPACT PAN

MOTTLING: N/A
RESTRICTIVE LAYER: 19"
LEDGE: N/A
WATER: N/A
ROOTS: 24"

TEST PIT NO. 3

0-6" TOPSOIL
6-39" SANDY LOAM
39-100" COMPACT PAN

MOTTLING: N/A
RESTRICTIVE LAYER: 39"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 38

0-6" TOPSOIL
6-29" SANDY LOAM
29-102" COMPACT PAN

MOTTLING: N/A
RESTRICTIVE LAYER: 29"
LEDGE: N/A
WATER: N/A

HOLE Q (TP'S 33 & 34)
DEPTH = 21"
PERC. RATE = 10.0 MIN/INCH

TIME	READING
12:37	1"
12:47	5.50"
12:57	8"
1:07	10.25"
1:17	11.50"
1:27	12.50"

HOLE R (TP'S 35 & 36)
DEPTH = 19"
PERC. RATE = 10.0 MIN/INCH

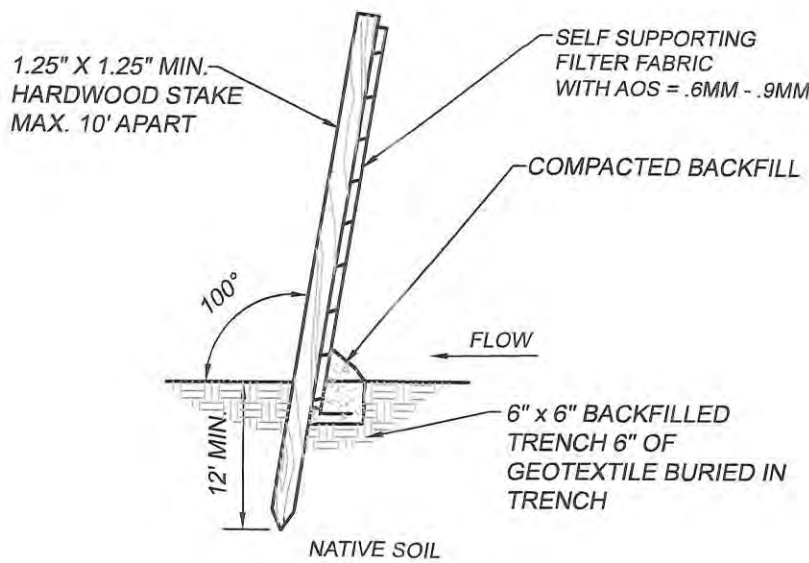
TIME	READING
12:39	1.75"
12:49	9"
12:59	11.75"
1:09	14"
1:19	15.75"
1:29	16.75"

HOLE T (TP'S 39 & 40)
DEPTH = 22"
PERC. RATE = 13.0 MIN/INCH

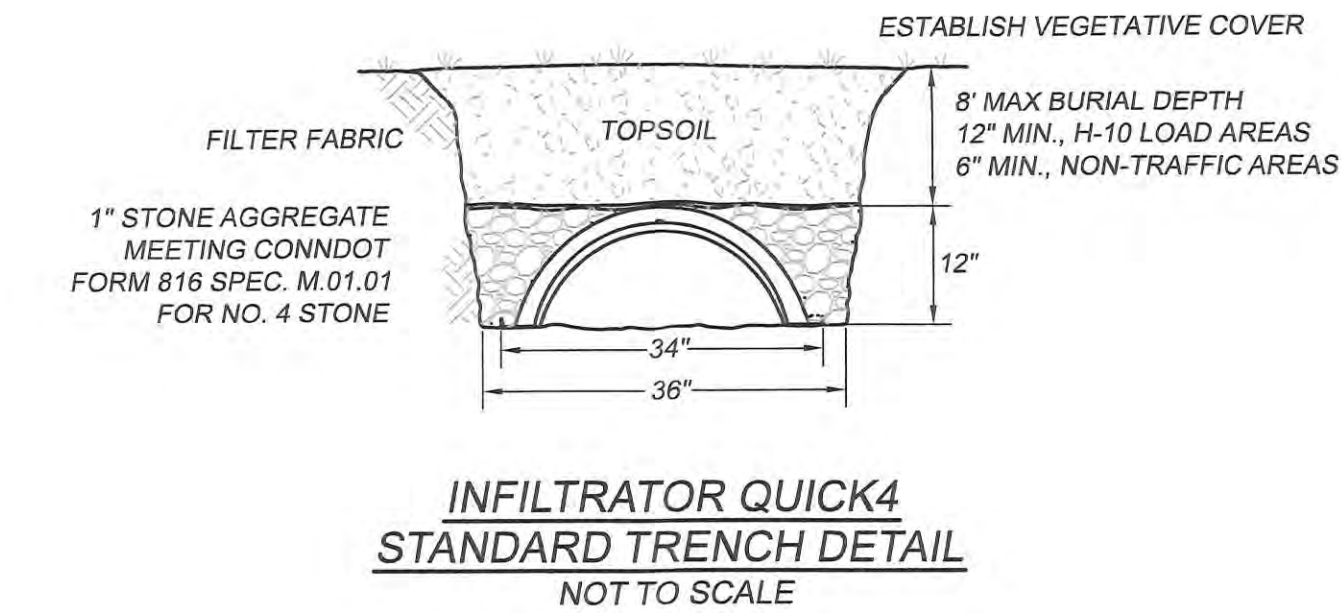
TIME	READING
1:34	2.125"
1:44	3.875"
1:54	5.25"
2:04	6.125"
2:14	6.875"
2:26	7.75"

HOLE TAA (TP'S 3 & 4)
DEPTH = 16/20"
PERC. RATE = 7.2 MIN/INCH

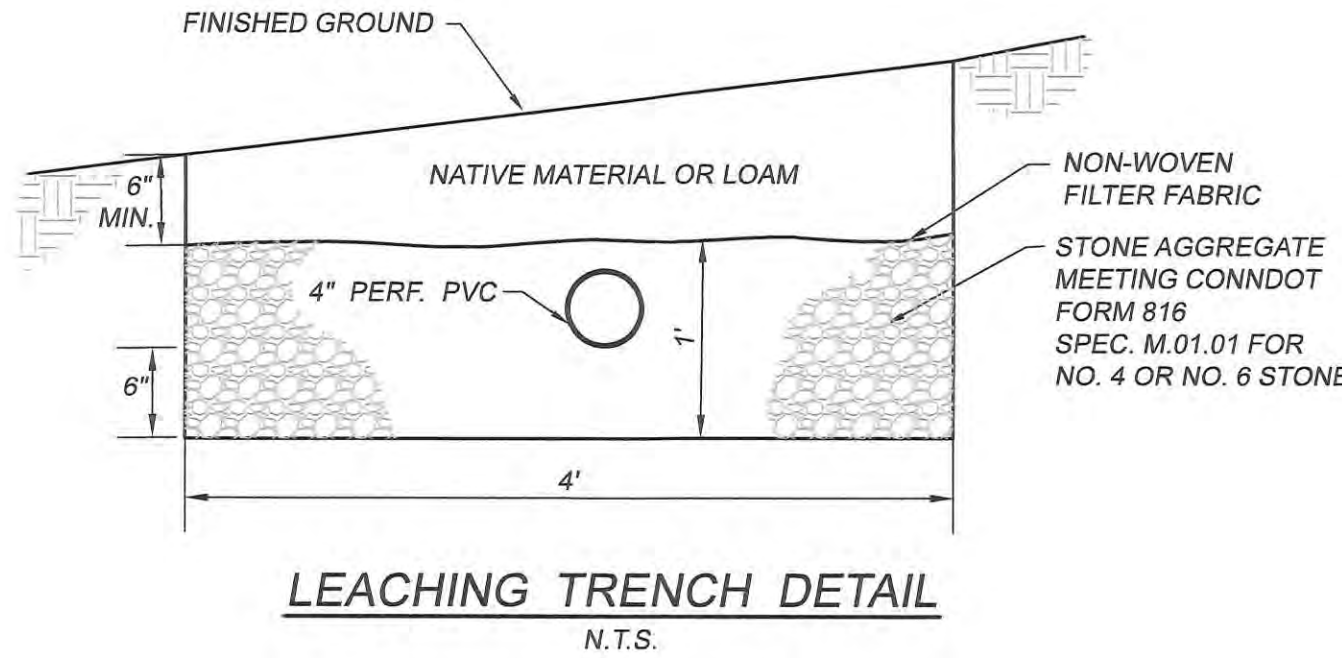
TIME	READING
10:11	3"
10:24	6.25"
10:28	9"
10:38	10.38"
10:48	12"



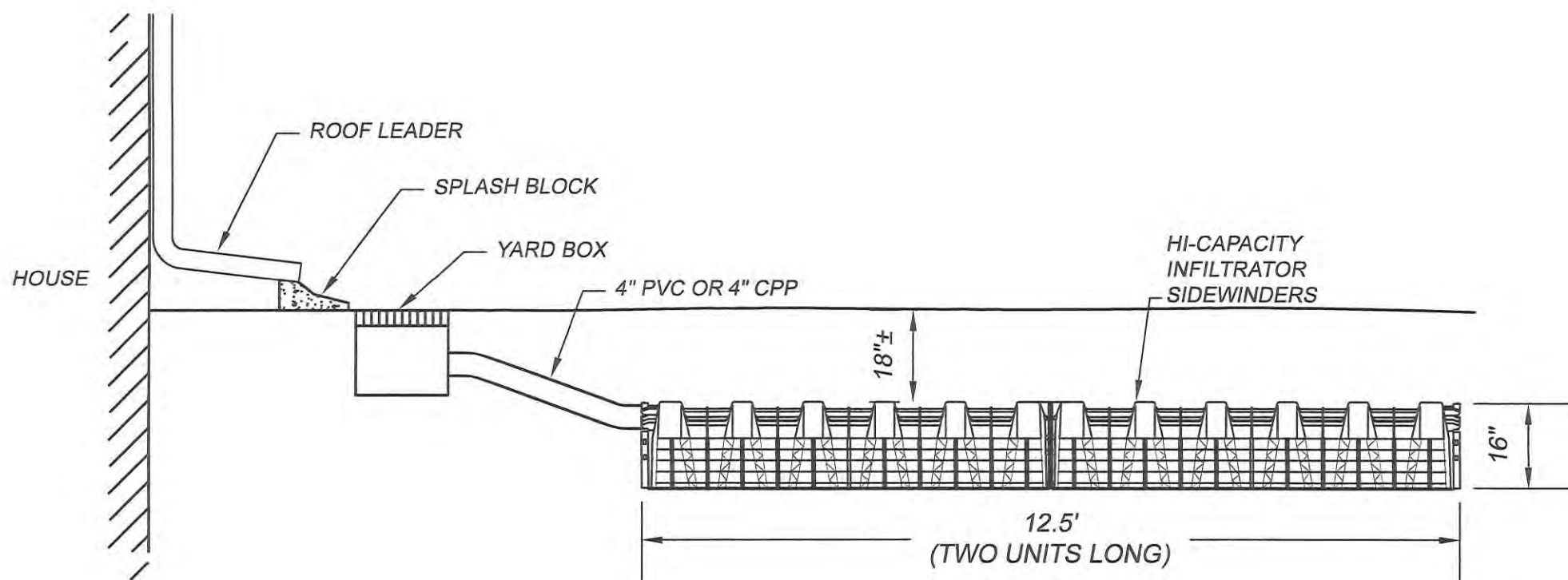
SILT FENCE INSTALLATION
NOT TO SCALE



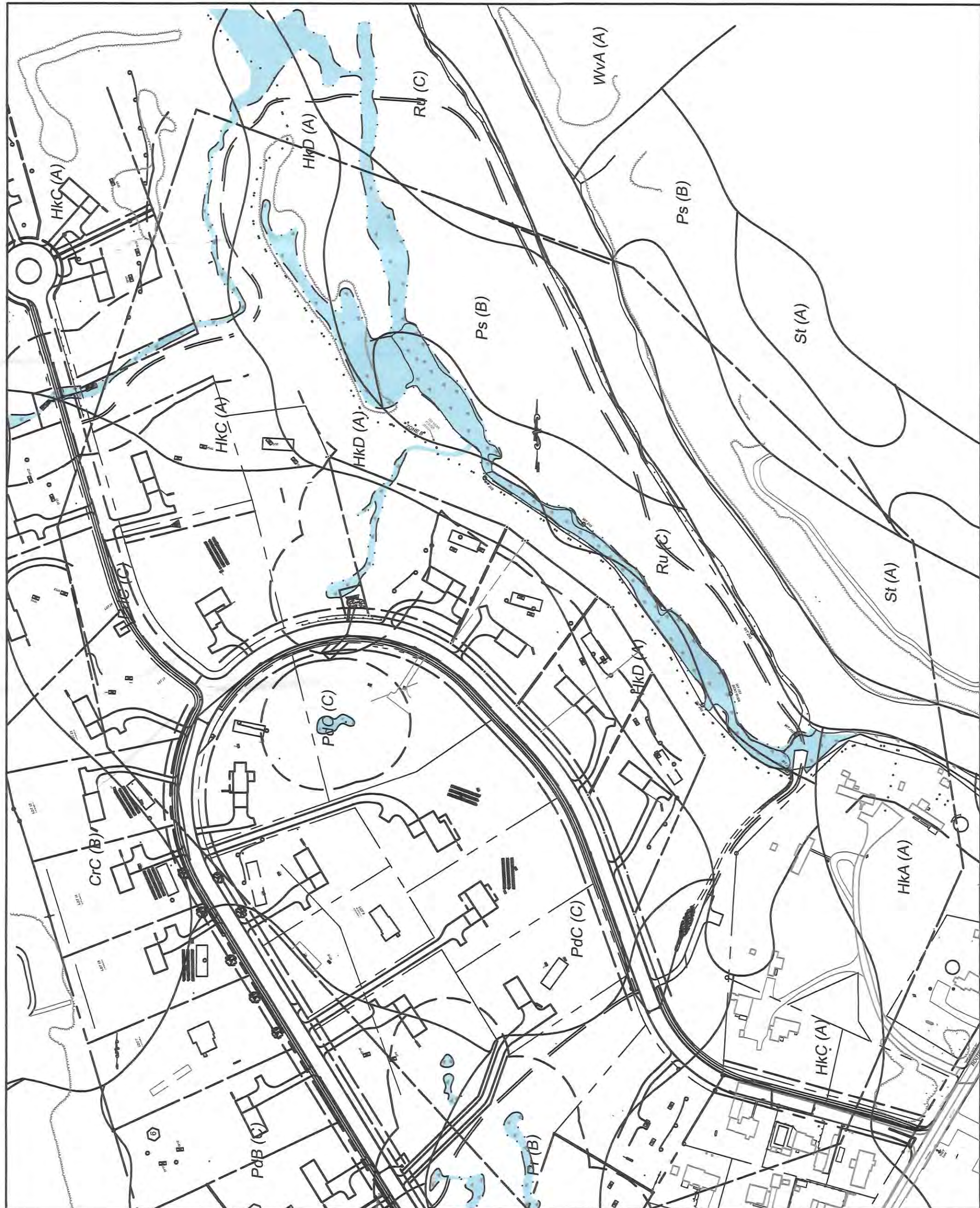
INFILTRATOR QUICK4
STANDARD TRENCH DETAIL
NOT TO SCALE



LEACHING TRENCH DETAIL
N.T.S.



ROOF DRAIN INFILTRATOR DETAIL
N.T.S.



SOILS MAP, EXISTING BUILDINGS AND STREETS WITHIN 500'
NTS

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

A. REFERENCE IS MADE TO THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.

THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT 4 SINGLE FAMILY RESIDENCES. THE PRIMARY FOCUS OF EROSION AND SEDIMENT CONTROL FOR THIS PROJECT IS THAT NO ERODED SEDIMENTS ENTER THE WETLANDS, DOWNSTREAM PROPERTIES OR DOWNSTREAM ROADS. ANY EXCAVATED MATERIAL, WHETHER REMOVED FROM THE SITE OR NOT, SHALL NOT BE PLACED WITHIN A REGULATED INLAND WETLAND AREA.

THE RESPONSIBILITY FOR COMPLIANCE WITH THIS PLAN SHALL BELONG TO JASON LAVALLEE (508 728 6628). IF CONDITIONS WARRANT IT OR THE TOWN REQUESTS IT, THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL DEVICES BEYOND WHAT IS INDICATED ON THE PLANS.

THE APPLICANT WILL CONTACT THE THOMPSON INLAND WETLANDS AND WATERCOURSES COMMISSION'S AGENT AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON THE PROPERTY.

B. INDIVIDUAL LOT CONSTRUCTION:

SEE LOT DEVELOPMENT SHEETS FOR ADDITIONAL AND SPECIFIC EROSION CONTROL NOTES ASSOCIATED WITH EACH LOT.

1. THE CLEARING LIMITS SHALL BE STAKED IN THE FIELD BY A LAND SURVEYOR.
2. INSTALL THE ANTI-TRACKING CONSTRUCTION ENTRANCE FOR LOTS BEING BUILT UPON AFTER PAVING OF THE BINDER COURSE.
3. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS IN ACCORDANCE WITH THE E&S PLAN.
4. CUT TREES WITHIN THE DEFINED CLEARING LIMITS AND REMOVE CUT WOOD, CHIP BRUSH AND STOCKPILE CHIPS FOR FUTURE USE OR REMOVE OFF SITE.
5. STRIP TOPSOIL AND STOCKPILE WHERE INDICATED AND SECURE WITH EROSION AND SEDIMENT CONTROLS.
6. BEGIN HOUSE CONSTRUCTION.
7. INSTALL SEPTIC SYSTEM.
8. PAVE DRIVEWAY IF SLOPE EXCEEDS 10%.
9. LOAM AND SEED DISTURBED AREAS.
10. AFTER LAWN AREAS ARE PERMANENTLY STABILIZED REMOVE EROSION AND SEDIMENT CONTROLS.

C. MAINTENANCE OF EROSION CONTROL DEVICES:

1. INSPECT SILT FENCE AND HAYBALES AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF EVERY STORM WITH A RAINFALL AMOUNT OF 0.5" OR GREATER.
2. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH A HEIGHT OF HALF THE HEIGHT OF THE BARRIER.
3. REPAIR OR REPLACE THE SILT FENCE OR HAYBALES WITHIN 24 HOURS OF OBSERVED FAILURE. FAILURE OF THE EROSION CONTROL DEVICE HAS OCCURRED WHEN SEDIMENT FAILS TO BE RETAINED.

NDDH FILE # 7001397

TEST PIT DATA, MLSS CALCULATIONS & DETAILS

PREPARED FOR

LAVALLEE CONSTRUCTION LLC

DONOVAN DRIVE - THOMPSON, CT

MAP 3 BLOCK 80 LOTS 2T, 2U-1, 2U-2, 2W

(DEVELOPER'S LOTS 17, 18, 20)

J&D

CIVIL
ENGINEERS, LLC

401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: JJB
CHECKED: DRB

REVISIONS:

JOB NO: 22142

SCALE: AS NOTED

DATE: JUNE 27, 2022

SHEET: 4 OF 4



Agenda Item E.b) 4. New Applications

IWA22020, Lavallee Construction LLC, 0 Donovan Dr. (Assessor's map 3, block 80, lot 2D), filling 690 sq ft of wetlands and work in the 100-foot upland review area for the construction to 2 single family homes with wells & septic systems. Note: proposal involves a re-subdivision splitting the lot into 2 lots; site walk conducted on 3/12/22.

DWA 22020
Original

RECEIVED
TOWN OF THOMPSON, CT.

J & D CIVIL
ENGINEERS, LLC

2022 JUN 30 12:00

TOWN CLERK

401 Ravenelle Road
N. Grosvenordale, CT 06255
www.jdcivilengineers.com
(860) 923-2920

June 27, 2022

Thompson IWWC
815 Riverside Drive
North Grosvenordale, CT 06255

Received

JUN 30 2022

Thompson Wetlands Office

Re: Green Valley View Estates Subdivision
Resubdivision of Lot 2D (developer's lot 1)
Job No: 06137/17206/20246/22142

Dear Members:

This subdivision was approved by the IWWC on October 9, 2007. The proposal consisted of a 31 lot subdivision on 67 acres of land adjacent to the Quinebaug River. Approximately 22 acres, or approximately 33%, is open space and has been deeded to the town. Within the open space, there is an approximately 18 acre conservation easement preserving the important Quinebaug River riparian corridor.

The owner is proposing to resubdivide Lot 2D into 2 lots, depicted on the plan as 2D-North and 2D South. There are no changes to the approved septic system located on lot 2D North. The septic system for lot 2D south is fully designed. Therefore the following documents are being submitted:

- 2 copies of an application to conduct a regulated activity
- 2 full size sets of plans by J & D Civil Engineers dated June 27, 2022
- 2 copies of excerpts from the original wetland delineation report dated August 28, 2007
- 2 copies of a letter from Margaret Washburn dated April 11, 2022, addressing wetland "H" on Lot 2D South (previously called lot 1B)
- 2 copies of the storm water narrative
- 2 copies of abutters

We hope that the Commission will accept the application at their July meeting so that decisions could potentially be made at the August meeting. Please contact me if you have any questions or require additional information.

Very Truly Yours,

J & D Civil Engineers, LLC


Janet J. Blanchette, PE

Original

for commission use: rev 1/11

application # 120400020
date received June 30, 2022

PERMIT APPLICATION

TO CONDUCT A REGULATED ACTIVITY

Town of Thompson

INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

Instructions:

All applicants must complete this application for preliminary review. The Commission will notify the applicant of any additional information that may be required and will schedule a public hearing if necessary. In addition to the information supplied herein, the applicant may submit other supporting facts or documents which may assist the Commission in its evaluation of the proposal. In order to streamline the application review process, it is recommended that all applications containing significant impact to the wetlands be submitted to the Thompson Conservation Commission for review prior to submission to the regulatory commissions.

Two (2) copies of the completed application and two (2) copies of all the additional attached documents (site plan, etc.) must be submitted to the Town Clerk. State Statute provides that you may submit an application up to three (3) business days prior to the next regularly scheduled meeting, which means by the close of business hours on the Wednesday before a regular meeting date. The applicant is advised to read Sections 7 and 8 of the Regulations for further information regarding application requirements and procedures. THE APPLICANT IS FURTHER ADVISED THAT A BUFFER/SETBACK OF 100 FEET FROM A WETLAND OR WATERCOURSE IS REQUIRED, AND A BUFFER/SETBACK OF 200 FEET FROM THE TEN (10) ESPECIALLY NOTEWORTHY WETLANDS AND WATERCOURSES IDENTIFIED IN THE TOWN OF THOMPSON INLAND WETLAND INVENTORY PREPARED BY NORTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY 1980 PAGES 9, 14 AND 15 IS REQUIRED. See Section 6 of the Regulations for further information regarding activities.

NO PERMIT SHALL BE TRANSFERRED WITHOUT PERMISSION OF THE AGENCY.

WE MUST HAVE THE FOLLOWING INFORMATION TO PROCESS YOUR APPLICATION:

- Directions to the property from the Thompson Town Hall
- Location of Utility Pole nearest your property
 - *Pole Number *Location of property in reference to Pole (side of street)
- Locations of proposed house, septic test pits, well and driveway must be staked and labeled on site (These requirements must be LEGIBLY PRINTED on your MAPS at the time of application, but NOT in the area of the map details. Use outside edge of map for this information. Thank you.)

FAILURE TO HAVE THE ABOVE INFORMATION WILL POSTPONE PROCESSING OF YOUR APPLICATION

FEE SCHEDULE:

(Additional \$60.00 fee to State as per Public Act 09-03, Section 396)

- Individual Lot \$50 + \$60
(Permit Fee Now Includes Mandatory Legal Advertisement Fee of \$20. This DOES NOT include Legal Notice fees for Public Hearings, which will be billed separately.)
- Complex Application Fee.....Applicants will be billed for professional review as needed,
see regulations booklet Section 18.5

For: Conceptual Approval of Subdivisions use "Subdivision Review Application"

Please complete the following application information.

Date 6/27/22

1) Name of Applicant LAVALLEE CONSTRUCTION, LLC

Home Address 83 RICH RD, N. GROS, CT 06255

Home Tele & Hrs _____ Business Tele & Hrs 508-728-6628

Business Address SAME

2) Applicant's interest in the Property: ☒ Owner ☐ Other

INLAND WETLANDS APPROVALS CAN BE GRANTED TO PROPERTY OWNER ONLY.

No permit shall be assigned or transferred without written permission of the Commission.

3) Name of Property Owner (if not applicant) _____

Home Address _____

Business Address _____

Home Tele & Hrs _____ Business Tele & Hrs _____

4) Geographical Location of the Property (site plan to include utility pole number nearest property or other identifying landmarks)

Pole # and Location N/A

Street or Road Location DONOVAN DR

Tax Assessor's Map # 3

Block # 80

Lot # that appears on site plan 2D

Deed Info : Volume # 916

Page # 218

5) The property to be affected by the proposed activity contains:

Soil Types SEE SOIL SCIENTIST LETTERS

Wetland Soils ☒ (Swamp ☐ Marsh ☐ Bog ☐ Vernal Pool ☐)

Watercourses ☐ (Lake or Pond ☐ Stream or River ☐ Intermittent Stream ☐)

Floodplain - Yes ☐ No ☒

6) Purpose and Description of the Activity for which Approval is requested:

a. Give a complete description of the proposed activity CONSTRUCTION OF

2 HOUSES, DRIVEWAYS, WELLS & SEPTIC

SYSTEMS. LOT 2D-SOUTH INVOLVES FILLING OF
WETLAND 'H'

If the above activity involves deposition or removal of material, what is the quantity? 690 SF FILLED

b. Submit a Site Plan, drawn to scale, with the certification of the preparing Surveyor and/or Engineer including:

- ☒ 1-Locus map at approx. 1" = 1000'
- ☒ 2-Location of property, with boundaries defined and utility pole # near property and any other identifying landmarks.
- ☒ 3-Location of wetlands and /or watercourses. A wetland delineation in the field must be marked with numbered wetlands flags by a certified soil scientist and located on the map/site plan. Site plan shall bear the soil scientist's original signature.
- ☒ 4-Soil types on the property.
- ☐ 5-Flood Hazard area classification and delineation with base flood elevations.
- ☒ 6-(a)Location of the proposed activity (i.e. house, septic, well or other areas to be disturbed).
(b)Location of perc tests and soil test holes.
(c)Copy of NDDH approval to construct or repair subsurface sewage disposal system.
- ☒ 7-Nature and volume of the material to be placed, removed, or transferred.
- ☒ 8-Topographical contours, proposed and existing.
- ☒ 9-Location and supporting data for proposed drainage.
- ☒ 10-Date, scale (recommend 1"=40') and North arrow.
- ☒ 11-Subdivisions must be A-2 Surveys and have Certified Soil Scientist's original signature on face sheet.
- ☒ 12-Proposed limits of clearing/disturbance and location of stockpiles during construction.
- ☒ 13-Location of proposed Erosion and Sedimentation controls and other management practices which may be considered as a condition of issuing a permit for the proposed regulated activity. The erosion and sedimentation control provisions must comply with the most current DEP edition of the *Connecticut Guidelines for Soil Erosion and Sedimentation Control* and be so noted on the plans.
- ☒ 14 -Location of proposed Stormwater treatment design on the site plan must comply with the most current CT DEP edition of the *Connecticut Stormwater Quality Manual* and be so noted on the plans. It is strongly recommended that low impact development techniques, stormwater management techniques that are designed to approximate the pre-development site hydrology, be utilized in the stormwater system design wherever practical and possible.
- ☐ 15-Location of proposed mitigation or wetland enhancement measures which may be considered as a condition of issuing a permit for the proposed regulated activity.
- ☒ 16-Timing and description of phases of activities, installation of sediment and stormwater control measures and temporary and permanent stabilization methods.

c. Explain whatever measures you propose to lessen or to compensate for the impacts to the wetlands or watercourse(s) ROOF RUNOFF & FOUNDATION DRAIN & FRONT YARD

GRADED TO PROMOTE INFILTRATION INTO GRAVELLY SOILS

d. Have any alternatives been considered? YES, NO DEVELOPMENT
If yes, explain why this proposal was chosen THE WETLAND PROPOSED TO BE FILLED WAS CREATED BY HISTORIC GRAVEL MINING & IS SMALL (690 SF) AND OF LIMITED FUNCTION & VALUE.

7) Is any portion of this property located within 500' of the boundary of an adjoining municipality: NO

If yes, Applicant is required to give written notice of the application by certified mail, return receipt requested, to the adjacent municipal wetlands agency on the same day of filing this permit application with the Thompson Inland Wetlands & Watercourses Commission. Documentation of notice shall be provided to the Commission.

8) Is any portion of this property located within the watershed of a water company as defined in section 16-1 of the Connecticut General Statutes? NO If yes, the Applicant is required to provide written notice of the application by certified mail, return receipt requested, to the water company on the same day of filing this permit application with the Thompson Inland Wetlands and Watercourses Commission. Documentation of such notice shall be provided to the Commission.

9) Does any portion of this property contain a Natural Diversity Data Base (NDDB) area of concern as defined on the most updated map of Federal and State Listed Species and Significant Natural Communities, for Thompson, Connecticut, prepared by the Connecticut Department of Environmental Protection? NO If yes, the Applicant must contact the CT DEP for information regarding the State or Federal Listed Species of Concern.

10) Names and Addresses of Abutters:

SEE ATTACHED

11) Estimated start date OCTOBER, 2022

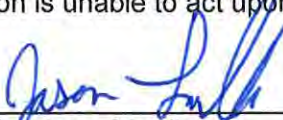
Estimated date of completion (all disturbed areas are stabilized) MAY 2023

12) The undersigned hereby consents to necessary and proper inspections of the above mentioned property by the Agents of the Town of Thompson Inland Wetlands Commission, at reasonable times, both before and after the approval in question has been granted, including site walks by Commission members and staff for the purpose of understanding existing site conditions, which may be necessary in order to render a decision on this application.

The undersigned swears that the information supplied in this completed application is accurate to the best of her/his knowledge and belief.

ABSOLUTELY NO WORK IS TO BEGIN UNTIL ALL NECESSARY APPROVALS ARE OBTAINED.

I understand by signing this application that it is my responsibility to provide all the information as requested.
I understand that the commission is unable to act upon an incomplete application.



Signature of Applicant

6-28-22

Date

Consent of Landowner if other than applicant

Date

Please attach a written consent by the owner if applicant is not the property owner.

LOT 2D ABUTTERS

Account N	Site Address	Owner Name	Owner Address	Owner City	Owner St	Owner Zip
3-80-2-C	48 OLD TURNPIKE	CURTIS STEVEN L	48 OLD TURNPIKE	QUINEBAUG	CT	06262
3-80-4	5 CAROL AVE	MARCIANO JOSEPH A	5 CAROL AVE	QUINEBAUG	CT	06262
3-80-5	7 CAROL AVE	MEAD EDWARD M JR + CANDICE	18 MUROLO RD	N GROSVENORDALE	CT	06255-1814
3-80-6	8 CAROL AVE	SHIPPEE ROBERT J + JUDY E	P O BOX 294	QUINEBAUG	CT	06262
3-80-9	9 DONOVAN DR	LANGLOIS JOHN E + TRICIA N	P O BOX 483	QUINEBAUG	CT	06262
3-80-9-A	0 DONOVAN DR	LAVALLEE CONSTRUCTION LLC	83 RICH RD	N GROSVENORDALE	CT	06255
3-80-12-D	68 OLD TURNPIKE	MATEO GABRIEL E + DAVINO SAM	2846 N MAIN ST	WATERBURY	CT	06704-1211
3-80-2-AK	0 DONOVAN DR	TOWN OF THOMPSON	P O BOX 899	N GROSVENORDALE	CT	06255-0899
3-80-2-AJ	0 DONOVAN DR	THOMPSON TOWN OF	815 RIVERSIDE DR	N GROSVENORDALE	CT	06255
3-80-2-AI	0 DONOVAN DR	THOMPSON TOWN OF	815 RIVERSIDE DR	N GROSVENORDALE	CT	06255
3-80-2-E	98 DONOVAN DR	PEREIRA RICARDO +	98 DONOVAN DR	QUINEBAUG	CT	06262

WASHBURN WETLAND CONSULTING LLC

19 Wolf Den Road • Pomfret Center, Connecticut 06259-2022

Telephone (860) 928-6728 • Fax (860) 963-1999

Janet Blanchette
J & D Civil Engineers
401 Ravenelle Road
North Grosvenordale, CT
06255

August 28, 2007

Introduction

At your request, on October 13, 16, 17, 24, 25, 27, 30, 31, November 1 and 3, 2006, and January 10, 2007, I conducted a site investigation on the Whipple property on Route 197 in Quinebaug, Connecticut. The purpose of the site investigation was to delineate the wetlands on the subject property, as well as some wetlands on abutting properties. I also verified that a small isolated wetland does not function as a vernal pool on April 20, 2007 (see below for further details). At your request, I did not delineate most of the floodplain wetlands associated with the Quinebaug River.

The subject property is located on the edge of a glacial till ridge and deposits of ice-contact glacial outwash. A portion of the floodplain of the Quinebaug River is located on the subject property. The soils on the subject property were extensively disturbed in the past during the gravel mining process.

Wetlands on the Subject Property

The wetlands were delineated using consecutively numbered lengths of blue surveyors' ribbon. The wetland flags series are listed below. Please refer to the enclosed site sketches for further details. Please note that the site sketches are not to scale.

- A { WF1 – WF12. Near northwest property boundary. Intermittent watercourse shown on U.S.G.S. topographic map, plus associated wooded shrub swamp. The main part of this stream flows into Massachusetts.
- WF13 – WF23. Connect WF13 to WF1. Same wetland system as WF1– WF12.
- B { WF24 – WF44. Unmapped intermittent stream flowing through the central portion of the subject property from west toward the northeast. Includes associated wooded shrub swamp.
- WF45 – WF87. Same wetland system as WF24 – WF44.
- WF88 – WF109. Connect WF109 to WF24. Same wetland system as WF24 – WF44.

LAVALLEE
LANE

WF110 – WF127. Unmapped intermittent stream flowing southeast toward the floodplain. Includes associated wooded shrub swamp.

WF1A – WF12A. Same wetland system as WF110 – WF127.

C { WF13A – WF15A. Connect WF13A to WF1A. Connect WF15A to WF127. Please note that an interrupted channel was observed connecting this wetland system to a wetland containing cattails on the abutting property to the west. However, this interrupted channel, which appears, disappears and reappears between the western boundary and wetland flag series WF13A – WF15A, does not meet the criteria for status as an intermittent watercourse. The other intermittent watercourses on the subject property were delineated under Part II of the General Provisions of the Connecticut Department of Environmental Protection State Policy, whereby "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." In the interrupted channel, which appears, disappears and reappears between the western boundary and wetland flag series WF13A – WF15A, only characteristic (A) was observed on the steepest part of the till ridge. Characteristics (B) and (C) were not observed. No wetlands soils were observed associated with the interrupted channel which appears, disappears and reappears between the western boundary and wetland flag series WF13A – WF15A.

D WF128 – WF 133. Connect WF128 to WF133. Isolated wetland near an old well. In this area the soils have been disturbed by heavy equipment.

E WF134 – WF148. Connect WF134 to WF148. Isolated wetland containing an old well. In this area the soils have been disturbed by heavy equipment.

F WF149 – WF195. Connect WF149 to WF195. Isolated wetland. Probably functions as a vernal pool.

G WF196 – WF211. Connect WF196 to WF211. (Do not connect WF197 to WF198. Please refer to series WF320 – WF327 and WF328 – WF335 below for further details.) A vernal pool. Fish predators are absent. The water in this vernal pool may overflow at extreme peaks of high precipitation, flow through a ditch and into a culvert under Route 197.

NOT WITHIN 100' OF PROPERTY { WF212 – WF216. Isolated wetland.

WF217 – WF234. This wetland system has characteristics of a shallow pond, wet meadow, a marsh, a bog, and a wooded shrub swamp. Functions as a vernal pool. Wood frogs were calling from these wetlands on April 20, 2007. The wetland continues beyond

NOT
WITHIN
100' OF
PROPERTY

WF243, but I did not think I was on the subject property any more so I stopped the flags at WF234.

WF235 – WF243. Same wetland system as WF217 – WF234. The flags end beside Route 197 at the end of a stone-lined drainage ditch.

H { WF244 – WF249. Do not connect WF249 to WF250. Isolated wetland behind last house on the left on Carol Ave. Water appears to flow off the subject property between WF249 and WF250. Water flowing off the subject property at this point appears to percolate through the sandy soil on the abutting property.

WF250 – WF254. Connect WF254 to WF244. Same wetland system as WF244 – WF249.

I { WF255 – WF273. Connect WF255 to WF273. Isolated wooded shrub swamp wetland formed by gravel mining process.

J { WF274 – WF295. Connect WF274 to WF295. Intermittent watercourse and associated wet meadow and wooded shrub swamp. Water pools in the existing cart path, flows down a very steep slope to the south, and percolates into the soil near the base of the steep slope.

K { WF296 – WF300. Connect WF296 to WF300. Small isolated wetland formed during gravel mining process. Site investigation verified that this small isolated wetland does not function as a vernal pool on April 20, 2007.

L { WF301 – WF320. Connect WF301 to WF320. Isolated wooded shrub swamp.

M { WF321 – WF327. Connect WF327 to WF197. Drainage ditch beside Route 197.
WF328 – WF335. Connect WF335 to WF198. Do not connect WF197 to WF198. Same drainage ditch as WF320 – WF327.

References used in the soil identification process included the *Munsell Color Chart*, *Soil Survey of Windham County Connecticut* (USDA Soil Conservation Service, December 1981), *Indicators for Identifying Hydric Soils in New England* (New England Interstate Water Pollution Control Commission, Third Edition, April, 2004), a surveyor's map you provided, a satellite map from the internet, and the USGS topographic map for the subject property.

Soil Types on the Subject Property

According to the *Soil Survey of Windham County Connecticut*, the wetlands soils on the subject property associated with the floodplain of the Quinebaug River consist of Rippowam fine sandy loam. Also, according to the *Soil Survey*, the wetlands soils associated with wetland flag series WF149 – WF195, WF196 – WF211, WF212 – WF216, and WF217 – WF243 consist of Adrian and Palms mucks.

Many of the wetlands on the subject property are not mapped in the *Soil Survey*. The wetlands soils associated with these wetlands consist of a complex of Ridgebury, Leicester, and Whitman extremely stony fine sandy loams, and/or Udorthents (manmade soils consisting of fill created during the gravel mining process).

Wetlands on Abutting Property

On January 10, 2007, I conducted a site investigation on property abutting the Whipple site on Route 197 in Quinebaug, Connecticut. The purpose of the site investigation was to delineate the wetlands the abutting property. The site investigation was limited to the area you indicated on a sketch that you provided. The only wetlands that were observed were associated with the Quinebaug River. The subject property is located on deposits of ice-contact glacial outwash.

The wetlands were delineated using consecutively numbered lengths of blue surveyors' ribbon. There is one series of wetland flags, WF1R – WF17R. Please refer to the attached site sketch and U.S.G.S. topographic map for further details.

References used in the soil identification process included the *Munsell Color Chart, Soil Survey of Windham County Connecticut* (USDA Soil Conservation Service, December 1981), *Indicators for Identifying Hydric Soils in New England* (New England Interstate Water Pollution Control Commission, Second Edition, 1998), a surveyor's map you provided, and the USGS topographic map for the subject property.

According to Map 2 of the *Soil Survey of Windham County Connecticut*, the wetlands soils on the subject property associated with the floodplain of the Quinebaug River consist of Rippowam fine sandy loam and Suncook loamy fine sand.

Vernal Pool Verification

On April 20, 2007, at your request, I investigated the small isolated wetland created during the gravel mining process that was delineated in the fall of 2006 with wetland flags numbered WF296 – WF300, to see if it was functioning as a vernal pool.

Using a kick net, I checked this isolated depression and no obligate vernal pool species (wood frog, spotted salamander, fairy shrimp) were observed. No egg masses of any amphibian species were observed. No wood frogs were heard calling from this depression.

It was the height of the season for wood frogs to mate on April 20, 2007. Many wood frogs were calling in vernal pools elsewhere on the site. If the small isolated depression delineated with wetland flags WF296 – WF300 were functioning as a vernal pool, on April 20, 2007, they and/or their egg masses would have been present.

Clearly, the isolated depression delineated with wetland flags numbered WF296 – WF300 does not function as a vernal pool.

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

Sincerely,

Margaret Washburn, M.S.

Margaret Washburn, M.S.
Registered Professional Soil Scientist

Small isolated wetland
does not
function as a vernal pool.

WF296
START

WF300 END.
CONNECT TO
WF296.

gravel
mine



WF254 end
CONNECT
TO WF
244.

WF244
START

WF128 START

WF133 end. CONNECT TO
WF128.

OLD WELL

WF148
END.

WF134 START. CONNECT TO WF148.

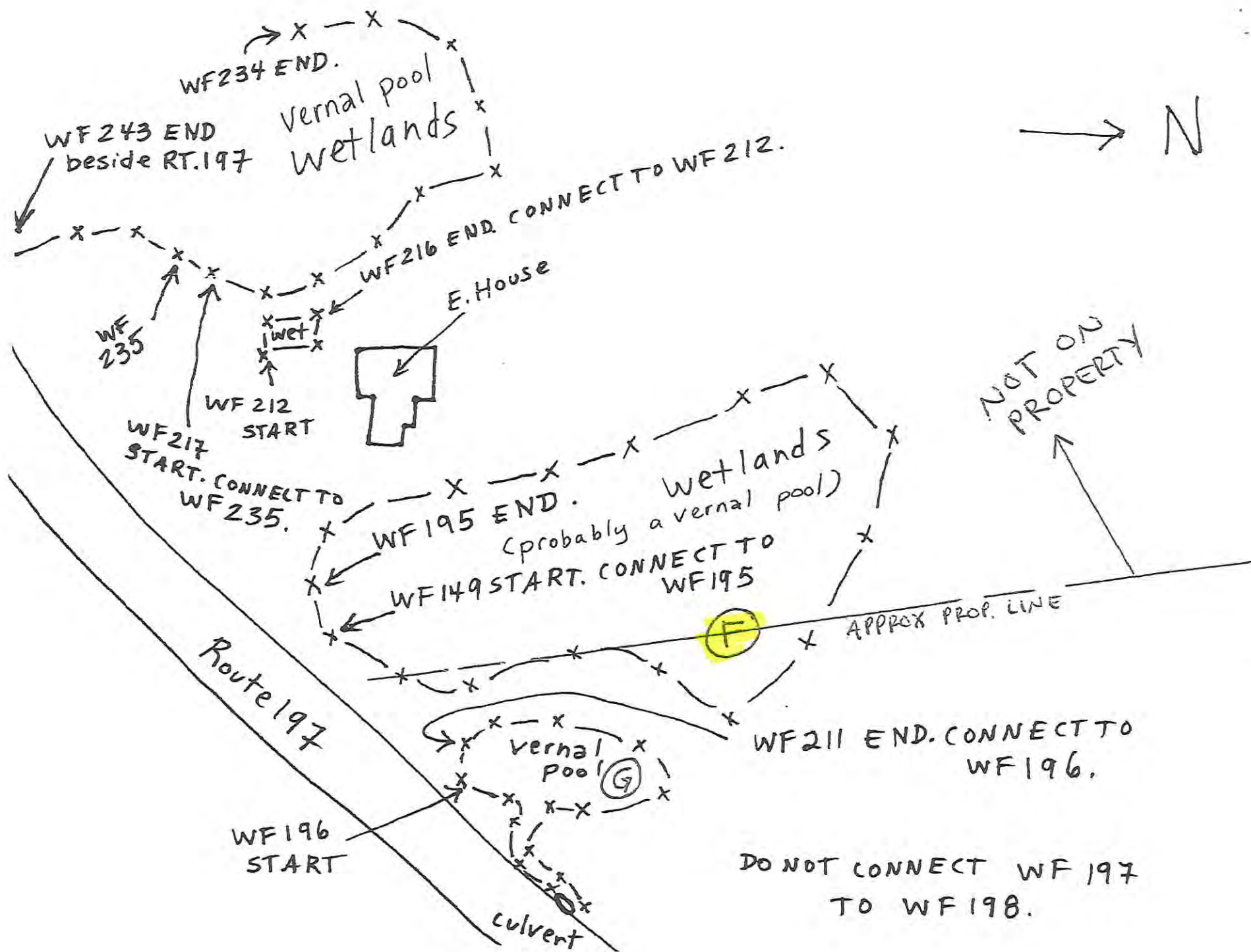
WF249
END.
DO NOT
CONNECT TO
WF250.

WF250
START.

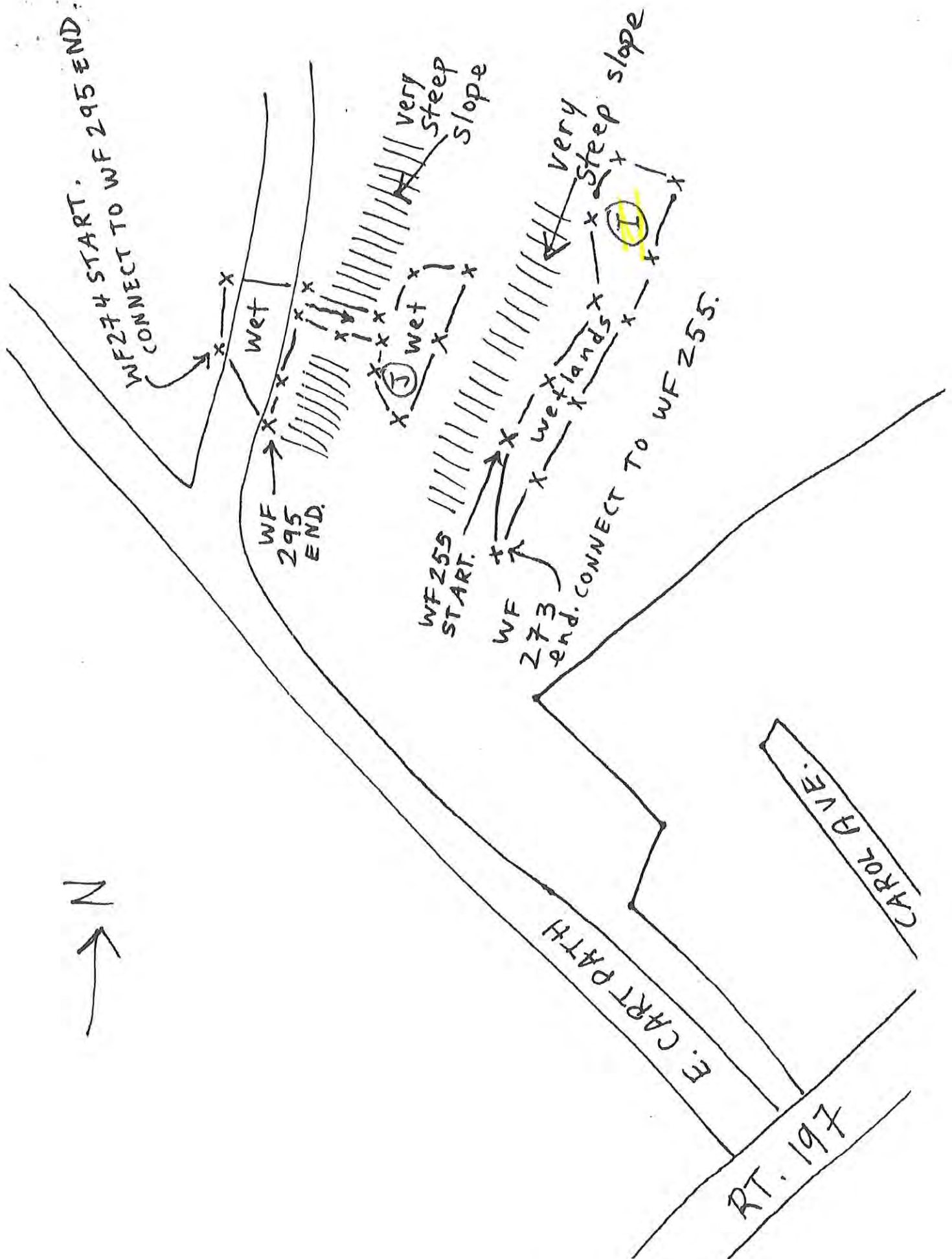
RT. 197

CAROL AVE

E. CART PATH



→ N



WF 274 START.
CONNECT TO WF 295 END.

WF 295
END.

WF 255
START.

WF 273
end. CONNECT TO WF 255.

Wet

wetlands

very steep slope

very steep slope

CAROL AVE.

E. CART PATH

RT. 197

WASHBURN WETLAND CONSULTING LLC

19 Wolf Den Road • Pomfret Center, Connecticut 06259-2022

Telephone (860) 428-8424 • washburnwetland@gmail.com

Janet Blanchette
J & D Civil Engineers
401 Ravenelle Road
North Grosvenordale, CT 06255

April 11, 2022

Dear Janet,

On April 9, 2022, at your request, I conducted a site investigation on Lot 1B on Donovan Drive in Thompson, CT. The purpose of the site investigation was to determine whether a wetland shown as "Wetland H" functions as a vernal pool. Wetland H is shown on the Conceptual Resubdivision Plan prepared for Lavallee Construction, Lot 1 Donovan Drive, Thompson CT, dated March 7, 2022. The soils surrounding this isolated wetland have been extensively disturbed in the past, apparently during the mining of earth products.

In your presence, I entered the standing water in Wetland H with a net and made about 6 sweeps in different parts of the depression. No fairy shrimp, amphibians or egg masses were observed. No vernal pool obligates were observed. Large quantities of algae and some winged insects were observed.

Spring peepers and American toads were heard chorusing in a nearby wetland across Donovan Drive, to the south, indicating that it was late enough in the spring for vernal pool obligates such as spotted salamanders and wood frogs to have laid eggs, if they had been present in Wetland H.

In conclusion, Wetland H does not function as a vernal pool.

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

Sincerely,

Margaret Washburn, M.S.

Margaret Washburn, M.S.
Registered Professional Soil Scientist

**Stormwater Runoff Narrative – Lavallee Resubdivision
Donovan Drive – Thompson, CT**

**Original Subdivision Lot 1, Assessors Lot 2D
June 29, 2022**

This property is part of the Donovan Drive subdivision near the Massachusetts border under construction by Lavallee Construction. The project site is approximately 2 acres in size with frontage on two different sections of Donovan Drive. Previously one house lot was approved on the property and the proposal is for the construction of an additional house lot. The lots will each be about 1 acre in size. Years ago, was gravel removed and the lot was left in a roughly graded condition with depressions and mounds. The NRCS classifies the soil on the lot as Hinkley Loamy Sand which is a well-drained soil type. The test pits recorded by the sanitarian at NDDH confirms the gravelly nature of the soil on this property.

The two proposed lots are referred to on the plans as 2D-North and 2D-South. The land generally slopes from northwest to southeast. Lot 2D-North contains the site development features that were previously approved in the original subdivision and the drainage system on Donovan Drive was designed to handle runoff from this lot in its developed condition.

The site development on Lot 2D-South was not part of the original subdivision but this lot does not drain onto Donovan Drive because it sits lower than the road. Under existing conditions land uphill (northwesterly) drains toward Lot 2D and runoff infiltrates into the ground. The proposed grading plan will help ensure that this pattern continues under proposed conditions. A depression has been graded into the front yard upslope of the driveway to help facilitate infiltration into the underlying gravel. Impervious area was also minimized since a modest ranch house with a garage under is proposed.

The addition of one proposed house lot on the property will not affect the runoff pattern in the watershed or significantly increase the flow. Runoff from the project will not adversely affect neighboring residential properties or the Town's stormwater drainage infrastructure.

**2 LOT RESUBDIVISION PLAN
MAP 3 BLOCK 80 LOT 2D
(DEVELOPER'S LOT 1)
DONOVAN DRIVE - THOMPSON, CT**

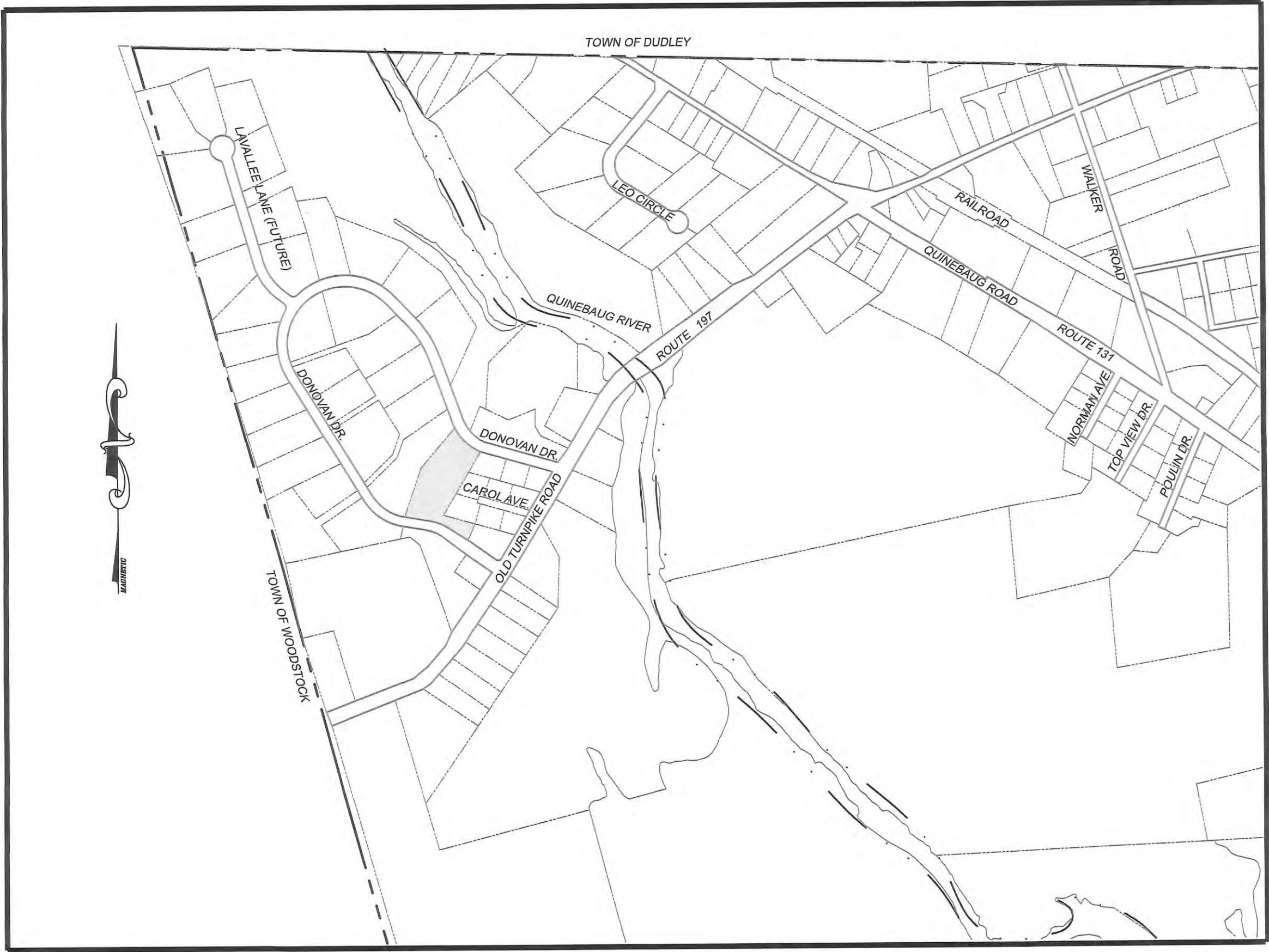
DATED: JUNE 27, 2022

OWNER AND APPLICANT:

LAVALLEE CONSTRUCTION LLC
83 RICH ROAD
NORTH GROSVENORDALE, CT 06255

INDEX OF DRAWINGS

- 1 COVER
- 2 RESUBDIVISION PLAN
- 3 SITE DEVELOPMENT PLAN - NORTH
- 4 SITE DEVELOPMENT PLAN - SOUTH



LOCATION MAP
1" = 500'

ZONE: RURAL RESIDENTIAL AGRICULTURAL DISTRICT (RRAD)
USE: RESIDENTIAL

ITEM	REQUIRED	LOT 2D-NORTH	LOT 2D-SOUTH
FRONTAGE	150'	173.27'	328.23'
LOT COVERAGE	<50%	8.5%	7.7%
FRONT SETBACK	40'	122'	63'
SIDE SETBACK	20'	54'	48'
REAR SETBACK	20'	64'	110'
LOT SIZE	40,000 SF	41,206 SF	48,224 SF

Received
JUN 30 2022
Thompson Wetlands Office

J & D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
THOMPSON, CT 06255
JDCIVILENGINEERS.COM
860-923-2920

APPROVED INLAND WETLANDS COMMISSION		APPROVED PLANNING AND ZONING COMMISSION	
CHAIRMAN	DATE	CHAIRMAN	DATE
TOWN OF THOMPSON RECEIVED FOR RECORDING		DATE OF PZC APPROVAL	
TOWN CLERK		DATE OF EXPIRATION	
DATE	TIME	MAP #	

TEST PIT & PERC TEST RESULTS

OBSERVED BY MAUREEN MARCOUX AND
LYNETTE SWANSON
DATE: JUNE 6-11, 2007

TEST PIT NO. 45

0-12" TOPSOIL WITH ORGANICS
12-44" REDDISH BROWN FINE
SANDY LOAM WITH GRAVEL
44-119" COARSE LOAMY SAND AND
GRAVEL, WATER WORKED

MOTTLING: 44"
RESTRICTIVE LAYER: 44"
LEDGE: N/A
WATER: N/A

TEST PIT NO. 46

0-19" DISTURBED SOIL, COARSE
LOAMY SAND, GRAVEL,
POCKETS VFSL
19-145" DARK GRAY COMPACT
SANDY PAN, MOTTLED

MOTTLING: 19"
RESTRICTIVE LAYER: 19"
LEDGE: N/A

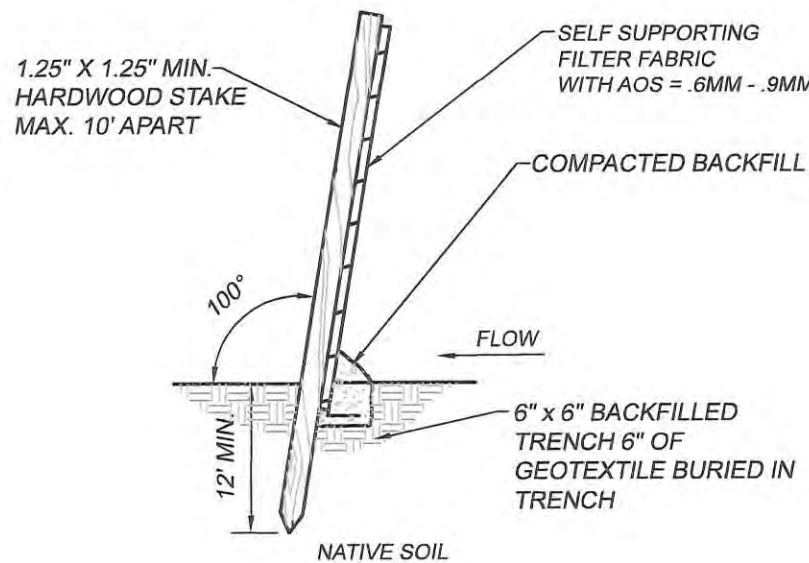
TEST PIT NO. 46A

0-19" GRAVELLY TOPSOIL
10-19" FILL ROOTS
19-28" ORIGINAL TOPSOIL
28-50" GRAVELLY SANDY LOAM,
ROOTS
50-91" COARSE SANDS AND
GRAVEL
91-132" WASHED COARSE SANDS
AND GRAVEL

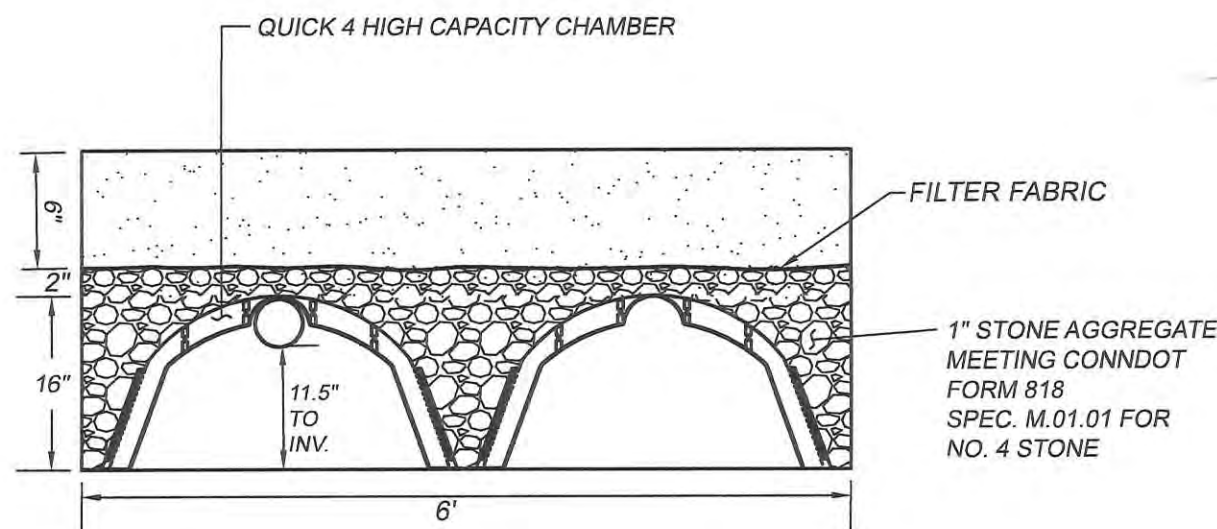
MOTTLING: N/A
RESTRICTIVE LAYER: 91"
LEDGE: N/A
WATER: N/A

HOLE W (TP 46 A)
DEPTH = 17"
PERC. RATE = 2.5 MIN/INCH

TIME	READING
10:53	3"
10:55	7"
10:57	9.25"
11:00	11.25"
11:05	13.25"
11:10	15.25"
11:12	DRY



SILT FENCE INSTALLATION
NOT TO SCALE



INSTALL INFILTRATORS AS PER MANUFACTURERS' SPECIFICATIONS

QUICK 4 HIGH CAPACITY GALLERY TRENCH
N.T.S.

SURVEY NOTES:

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

PURPOSE: THE DESIGN OF AN ENGINEERED SEPTIC SYSTEM

TYPE: GENERAL LOCATION

HORIZONTAL ACCURACY: CLASS B

TOPOGRAPHIC ACCURACY: CLASS T3 - CONTOURS ARE FROM AN AERIAL SURVEY IN 2006, SUPPLEMENTED BY ON THE GROUND FIELD SURVEY IN THE AREA OF THE SEPTIC SYSTEMS BY J & D CIVIL ENGINEERS IN 2020.

PROPERTY LINES DO NOT EXPRESS A BOUNDARY OPINION

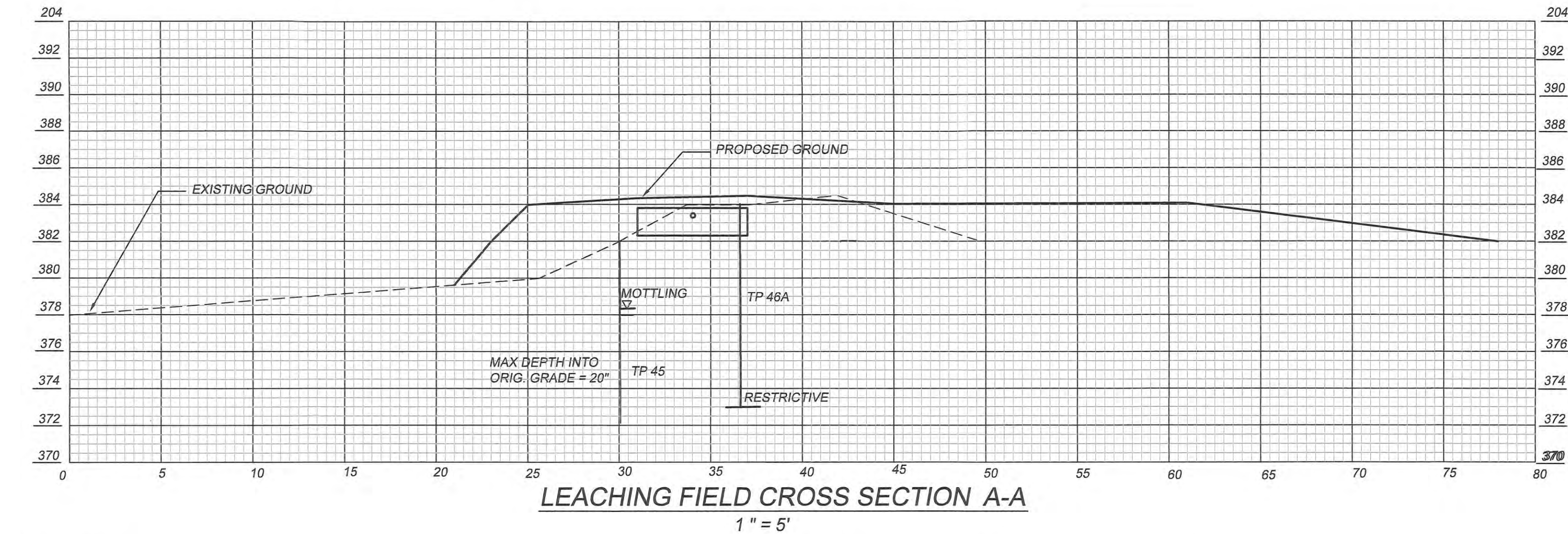
2. TEST PIT AND PERC TEST LOCATIONS HAVE BEEN COMPILED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND J&D CIVIL ENGINEERS DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS PLAN AS A RESULT.

3. REFERENCE PLAN: SUBDIVISION AND SITE PLANS TITLED "GREEN VALLEY VIEW ESTATES" THOMPSON, CT BY J & D CIVIL ENGINEERS ORIGINALLY APPROVED IN 2006 AND UPDATED IN 2018.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

DENNIS R. BLANCHETTE DATE 12/10/2022 LICENSE

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2022 J&D CIVIL ENGINEERS, LLC



SEPTIC SYSTEM DESIGN CRITERIA

NUMBER OF BEDROOMS: 3
SEPTIC TANK: 1000 GALLON
PERC RATE: 2.5 MINS/INCH
MOTTLING: 32"; LEDGE: N/A; WATER: N/A; RL: 44"; SLOPE: 8.1-10%
LEACHING AREA REQUIRED: 495 SQUARE FEET
LEACHING AREA PROVIDED: 80' OF INFILTRATORS IN A GALLERY CONFIGURATION, 6' WIDE, @ 6.2 SF/LF = 496 SQUARE FEET
MLSS (PRIMARY) = 27' (HF=18, PF=1.0, FF=1.5)
LSS PROVIDED = 80'

SEPTIC SYSTEM SPECIFICATIONS

- SEPTIC SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH THE "CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS".
- THE BUILDING, SEPTIC SYSTEM, AND WELL SHALL BE ACCURATELY STAKED IN THE FIELD BY A LICENSED SURVEYOR OR ENGINEER PRIOR TO CONSTRUCTION.
- ALL PRECAST STRUCTURES SUCH AS SEPTIC TANKS AND DISTRIBUTION BOXES SHALL BE SET LEVEL ON SIX INCHES OF COMPACTED GRAVEL BASE.
- SEPTIC TANK: TWO-COMPARTMENT TANK WITH OUTLET FILTER. INSTALL RISERS OVER TANK CLEANOUTS IF COVER OVER TANK EXCEEDS 1'.
- DISTRIBUTION BOXES: 4 HOLE D-BOXES
- HOUSE, EFFLUENT AND "TIGHT PIPE" FOR DRAIN OUTLETS: 4" PVC SCHEDULE 40, ASTM D 1785 OR ASTM D 2665 WITH RUBBER COMPRESSION GASKET ASTM D 3139 OR SOLVENT WELD COUPLINGS.
- DISTRIBUTION: HIGH CAPACITY INFILTRATORS IN A GALLERY CONFIGURATION. INSTALL PER MANUFACTURER'S DIRECTIONS.
- BOTTOM OF TRENCHES TO BE LEVEL.
- TOPSOIL SHALL BE STRIPPED IN AREA OF LEACH FIELD AND THE SUBSOIL SCARIFIED PRIOR TO PLACEMENT OF SELECT SEPTIC FILL.
- ALL SELECT FILL SHALL BE CLEAN BANK RUN GRAVEL, MEETING THE FOLLOWING REQUIREMENTS OF THE CT DEPT. OF PUBLIC HEALTH:

PERCENT GRAVEL (PLUS NO. 4 SIEVE MATERIAL) = 5%		
11. GRADATION ON FILL LESS GRAVEL:		
SIEVE	DRY PERCENT PASSING	WET PERCENT PASSING
NO. 4	100	100
NO. 10	70-100	70-100
NO. 40	10-75	10-50*
NO. 100	0-5	0-20
NO. 200	0-2.5	0-5

*PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

12. THIS DESIGN IS BASED ON TEST PIT INFORMATION RECORDED BY NDDH. J & D HAS MADE NO INDEPENDENT INVESTIGATION OF SOIL CONDITIONS. THE CONTRACTOR IS ADVISED TO PERFORM SUFFICIENT SITE INVESTIGATION TO DETERMINE CONSTRUCTABILITY OF THE DESIGN PRIOR TO BIDDING OR COMMENCING WORK.

EROSION AND SEDIMENT CONTROL NOTES

- THE PROPOSED ACTIVITY ON THE SITE WILL CONSIST OF THE CONSTRUCTION OF A SINGLE FAMILY HOUSE, WELL, SEPTIC SYSTEM AND DRIVEWAY.
- EROSION CONTROL DEVICES MUST BE INSTALLED WHERE INDICATED ON THIS SHEET PRIOR TO THE START OF CONSTRUCTION.
- DISTURBED AREAS SHALL BE KEPT TO A MINIMUM AND SEEDED OR STABILIZED WITH TEMPORARY MULCH AS SOON AS FINAL GRADES HAVE BEEN ATTAINED.
- THE OWNER OF RECORD SHALL DESIGNATE THE ON SITE ENVIRONMENTAL AGENT RESPONSIBLE FOR REGULARLY CHECKING THE CONDITION OF THE EROSION CONTROL DEVICES AND REMOVING ACCUMULATED SEDIMENT.

LEGEND

---	BUILDING SETBACK LINE
---	PROPERTY LINE
---	EXISTING CONTOUR LINE
---	PROPOSED CONTOUR LINE
---	EDGE OF WETLANDS
---	WETLAND BUFFER/UPLAND REVIEW AREA
---	EROSION CONTROL DEVICES
---	TEST PIT
---	LEACHING TRENCH
---	STONEWALL
---	UTILITIES
---	TREELINE

NDDH FILE # 7001397

SITE DEVELOPMENT PLAN - NORTH LOT 2D- NORTH (DEVELOPER'S LOT 1) PREPARED FOR LAVALLEE CONSTRUCTION LLC DONOVAN DRIVE - THOMPSON, CT	
J&D CIVIL ENGINEERS, LLC 401 RAVENELLE ROAD N. GROSVENORDALE, CT 06255 860-923-2920	
DESIGNED: JJB CHECKED: DRB	REVISIONS:
JOB NO: 22142 SCALE: 1" = 20'	DATE: JUNE 27, 2022 SHEET: 3 OF 4

TEST PIT & PERC TEST RESULTS

OBSERVED BY MAUREEN MARCOUX
DATE: MAY 10, 2022

TEST PIT NO. 1

0-12" FILL
12-26" TOPSOIL
26-40" RED BROWN SANDY LOAM ROOTS
40-58" YELLOW BROWN F SANDY LOAM ROOTS
58-111" COARSE SAND AND GRAVEL

MOTTLING: N/A
RESTRICTIVE LAYER: N/A
LEDGE: N/A
WATER: N/A
ROOTS: 60"

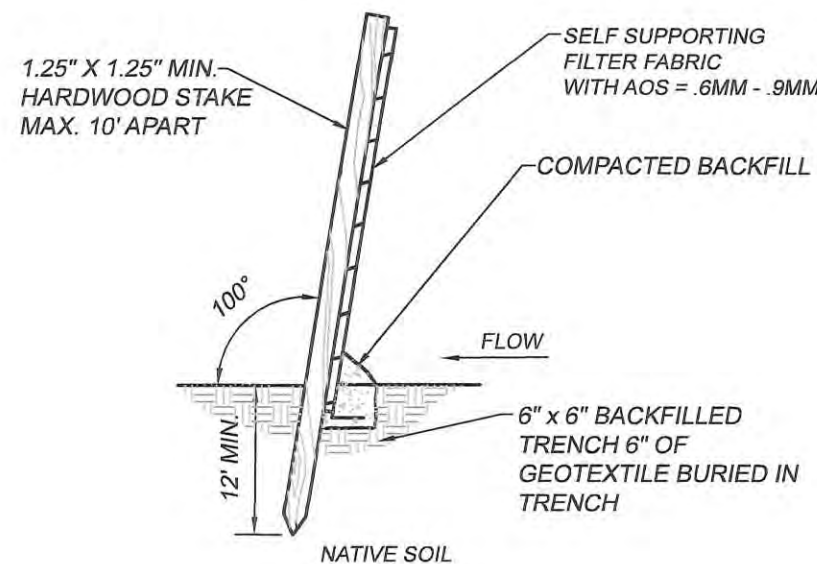
TEST PIT NO. 2

0-8" TOPSOIL
8-57" BONEY COARSE SANDS AND GRAVEL
57-96" GREY COMPACT SILTY PAN MOTTLED

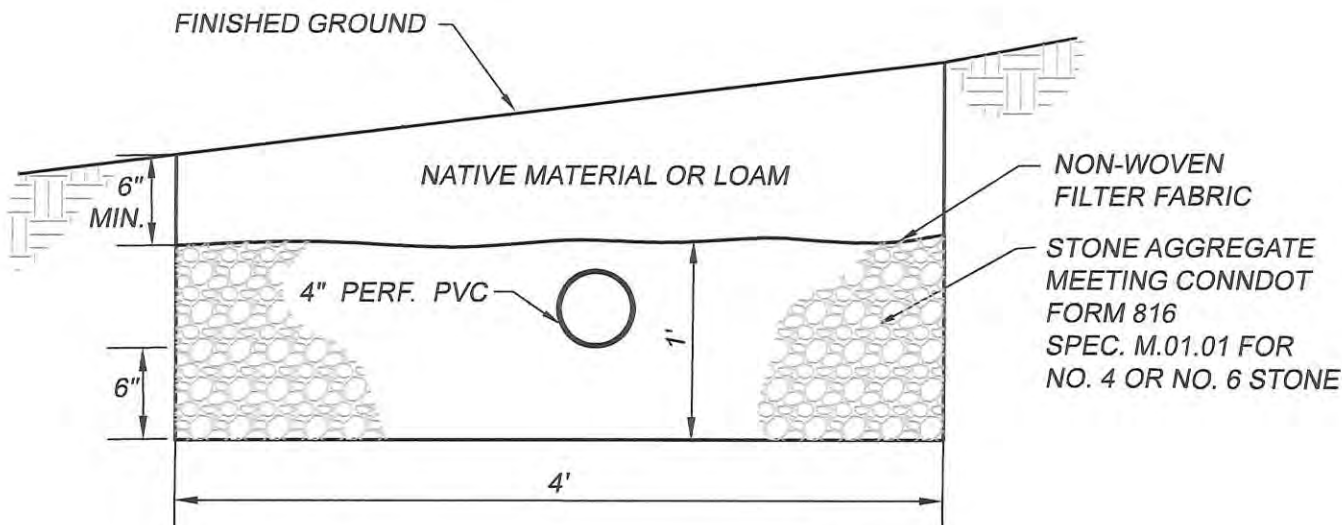
MOTTLING: 57"
RESTRICTIVE LAYER: 57"
LEDGE: N/A

HOLE BB TP 1&2
DEPTH = 15/48"
PERC. RATE = 6.1 MIN/INCH

TIME	READING
11:10	4.75"
11:15	6.5"
11:20	8"
11:25	9"
11:35	11"
11:45	12.625"



SILT FENCE INSTALLATION
NOT TO SCALE



LEACHING TRENCH DETAIL
N.T.S.

SURVEY NOTES:

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

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PROPERTY LINES DO NOT EXPRESS A BOUNDARY OPINION

2. TEST PIT AND PERC TEST LOCATIONS HAVE BEEN COMPILED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. THIS INFORMATION IS TO BE CONSIDERED APPROXIMATE AND J&D CIVIL ENGINEERS DOES NOT TAKE RESPONSIBILITY FOR SUBSEQUENT ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THIS PLAN AS A RESULT.

3. REFERENCE PLAN: SUBDIVISION AND SITE PLANS TITLED "GREEN VALLEY VIEW ESTATES" THOMPSON, CT BY J & D CIVIL ENGINEERS ORIGINALLY APPROVED IN 2006 AND UPDATED IN 2018.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

DENNIS R. BLANCHETTE DATE 12/07
LICENCE

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2022 J&D CIVIL ENGINEERS, LLC



SEPTIC SYSTEM DESIGN CRITERIA

NUMBER OF BEDROOMS: 3
SEPTIC TANK: 1000 GALLON
PERC RATE: 6.1 MINS/INCH
MOTTLING: 57"; LEDGE: N/A; WATER: N/A; RL: 57"; SLOPE: 4.1-6.0%
LEACHING AREA REQUIRED: 495 SQUARE FEET
LEACHING AREA PROVIDED: 165' OF 4' WIDE STONE TRENCHES, @ 3.0 SF/FF = 495 SQUARE FEET
MLSS (PRIMARY) = 30' (HF=20, PF=1.0, FF=1.5)
LSS PROVIDED = 55'

SEPTIC SYSTEM SPECIFICATIONS

- SEPTIC SYSTEM INSTALLATION SHALL BE IN ACCORDANCE WITH THE "CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS".
- THE BUILDING, SEPTIC SYSTEM, AND WELL SHALL BE ACCURATELY STAKED IN THE FIELD BY A LICENSED SURVEYOR OR ENGINEER PRIOR TO CONSTRUCTION.
- ALL PRECAST STRUCTURES SUCH AS SEPTIC TANKS AND DISTRIBUTION BOXES SHALL BE SET LEVEL ON SIX INCHES OF COMPACTED GRAVEL BASE.
- SEPTIC TANK: TWO-COMPARTMENT TANK WITH OUTLET FILTER. INSTALL RISERS OVER TANK CLEANOUTS IF COVER OVER TANK EXCEEDS 1'.
- DISTRIBUTION BOXES: 4 HOLE D-BOXES
- HOUSE, EFFLUENT AND "TIGHT PIPE" FOR DRAIN OUTLETS: 4" PVC SCHEDULE 40, ASTM D 1785 OR ASTM D 2865 WITH RUBBER COMPRESSION GASKET ASTM D 3139 OR SOLVENT WELD COUPLINGS.
- DISTRIBUTION: STONE FILLED TRENCHES.
- BOTTOM OF TRENCHES TO BE LEVEL.
- TOPSOIL SHALL BE STRIPPED IN AREA OF LEACH FIELD AND THE SUBSOIL SCARIFIED PRIOR TO PLACEMENT OF SELECT SEPTIC FILL.
- ALL SELECT FILL SHALL BE CLEAN BANK RUN GRAVEL, MEETING THE FOLLOWING REQUIREMENTS OF THE CT DEPT. OF PUBLIC HEALTH:

PERCENT GRAVEL (PLUS NO. 4 SIEVE MATERIAL) = 5%		
11. GRADATION ON FILL LESS GRAVEL:		
SIEVE	DRY PERCENT PASSING	WET PERCENT PASSING
NO. 4	100	100
NO. 10	70-100	70-100
NO. 40	10-75	10-50
NO. 100	0-5	0-20
NO. 200	0-2.5	0-5

*PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

12. SELECT FILL MUST PERC AT A RATE EQUAL TO OR FASTER THAN THE UNDERLYING SOIL. SELECT FILL MATERIAL SHALL EXTEND A MINIMUM OF 5' BEYOND THE SYSTEM ON ALL SIDES.

13. THIS DESIGN IS BASED ON TEST PIT INFORMATION RECORDED BY NDDH. J & D HAS MADE NO INDEPENDENT INVESTIGATION OF SOIL CONDITIONS. THE CONTRACTOR IS ADVISED TO PERFORM SUFFICIENT SITE INVESTIGATION TO DETERMINE CONSTRUCTABILITY OF THE DESIGN PRIOR TO BIDDING OR COMMENCING WORK.

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- EROSION CONTROL DEVICES MUST BE INSTALLED WHERE INDICATED ON THIS SHEET PRIOR TO THE START OF CONSTRUCTION.
- DISTURBED AREAS SHALL BE KEPT TO A MINIMUM AND SEEDED OR STABILIZED WITH TEMPORARY MULCH AS SOON AS FINAL GRADES HAVE BEEN ATTAINED.
- THE OWNER OF RECORD SHALL DESIGNATE THE ON SITE ENVIRONMENTAL AGENT RESPONSIBLE FOR REGULARLY CHECKING THE CONDITION OF THE EROSION CONTROL DEVICES AND REMOVING ACCUMULATED SEDIMENT.

LEGEND

	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	EDGE OF WETLANDS
	WETLAND BUFFER/UPLAND REVIEW AREA
	EROSION CONTROL DEVICES
	TEST PIT
	LEACHING TRENCH
	STONEWALL
	UTILITIES
	TREELINE

NDDH FILE # 7001397

SITE DEVELOPMENT PLAN - SOUTH
LOT 2D- SOUTH (DEVELOPER'S LOT 1)
PREPARED FOR
LAVALLEE CONSTRUCTION LLC
DONOVAN DRIVE - THOMPSON, CT

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920



DESIGNED: JJB
CHECKED: DRB

REVISIONS:

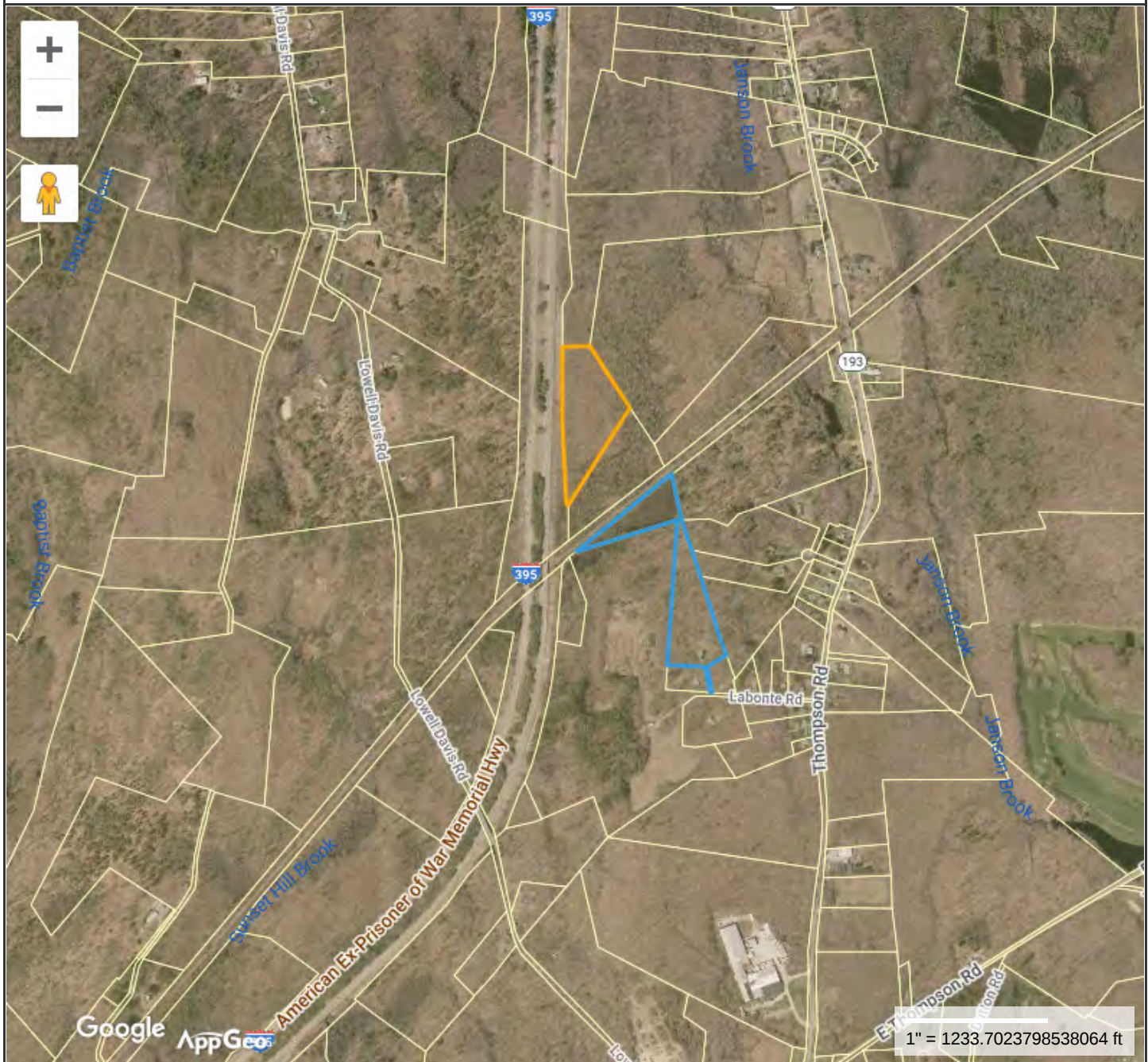
JOB NO: 22142
SCALE: 1" = 20'

DATE: JUNE 27, 2022
SHEET: 4 OF 4

Agenda Item E.b) 5. New Applications

DEC22021, Gregg & Lauren Corso, 36 Labonte Rd.
(Assessor's map 120, block 30, lot 7), timber harvest
request as use permitted as of right, stamped received
July 5, 2022.

Locus Map for Corso timber harvest (blue, not included future timber harvest orange)

**Property Information**

Property ID 3725
Location 36 LABONTE RD
Owner CORSO GREGG A + LAUREN

**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated October 19, 2021
Data updated March 20, 2019

Print map scale is approximate.
Critical layout or measurement
activities should not be done using
this resource.

THOMPSON INLAND WETLANDS COMMISSION**Request for Approval of Timber Harvest as Use Permitted as of Right**ID # DEC22021Receipt Date: July 6, 2022

Certain activities associated with timber harvesting are a use permitted as of right pursuant to Section 22a-40(a) of the Connecticut General Statutes and Section 4.1 of the Inland Wetlands for the Town of Thompson. (For guidance see Connecticut Department of Environmental Protection's document entitled "Agriculture, Forestry and Wetlands Protection in Connecticut") This form constitutes the notification required by Section 4.4 of the Inland Wetlands and Watercourse Regulations of the Town of Thompson for such timber harvesting. Note: If the timber harvest covers multiple properties with different owners, then a separate request for approval must be filed for each of the different property owner(s).

Property Information

(Locate property boundaries on attached USGS topographic map and copy of assessor's map – see information on maps on reverse side of this form.)

Landowner of Record: Gray and Lauren Corso
Mailing Address: 36 Labonte Rd Thompson, CT 06277
Town: Thompson, CT Zip: 06277
Phone: (800) 970 7720
E-mail: Corso.g@gmail.com
Total acreage of Property(s): 28.27

Assessor's Ref.

Map	Block	Lot	Address
120	30	7	36 Labonte Rd
118	29	25	0 Lowell Davis Rd

Property boundaries are marked and can be viewed in the field

Yes ☒ No ☐

Have owners of all lands within 100 feet of the harvest area been notified via first-class mail prior to filing this form?

Yes ☐ No ☒**Harvest Information**

This timber harvest has been prepared by a State of Connecticut certified:

(Check one): ☒ Forester

OR

☐ Supervising Forest Products HarvesterForest Practitioner Certificate #: F-720Name: Eric HansenAddress: 6 Way Rd. Middlefield, CT 06455E-mail: eric@fwforesters.comPhone # (Business) 860.349.7007

(Cell)

Harvester (if not landowner): Landowner

Mailing Address: _____

Town: _____

Zip: _____

Phone: () _____

E-mail: _____

Estimated starting date of timber harvesting operations: 11 / 1 / 2022Estimated completion date of harvesting operations: 5 / 1 / 2026Total acreage of harvest area: 5.5

Timber harvest boundaries are marked/flagged and can be viewed in the field

Yes ☒ No ☐

Designation of trees to be harvested

Trees to be harvested have been marked with paint at eye level and at ground level

Yes ☒ No ☐If marked, then paint marking color(s) are Orange - to be marked in summer 2022

Amount of forest products to be harvested: (Estimated volumes to be marked)

12,500

Board feet

12

Cords

Cubic feet

Tons

Received

JUL 06 2022

DC 22021

Timber Harvest Objective: Enhance vigor of residual trees, release advance regeneration of desirable species, and encourage development of new size and age class of desirable regeneration
Timber Harvest Treatment: Single tree and small group selection

Actions Being Performed on This Land

(Check all that apply and locate on attached Harvest Area map – see information below on maps.)

<u>Crossings / Clearing</u> <input checked="" type="checkbox"/> Temporary stream/drainage crossing <input type="checkbox"/> Temporary wetlands crossing <input type="checkbox"/> Removal of trees in wetlands <input checked="" type="checkbox"/> Removal of trees in upland review area	<u>Erosion and Sedimentation Control Measures*</u> <input type="checkbox"/> Installation of water bars <input type="checkbox"/> Grading <input checked="" type="checkbox"/> Seeding <input type="checkbox"/> Other (describe below)
<u>Log landing area:</u> <input type="checkbox"/> Anti-tracking pad <input type="checkbox"/> Curb cut	<u>Roads</u> Are new roads, other than skid trails, to be constructed for transport of logs or other activities associated with this harvest? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

* All erosion and sediment controls must comply with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control as amended. See <http://www.ct.gov/dep/cwp/view.asp?A=2720&Q=325660> for info on viewing copy

Describe in further detail as necessary: See included NRCS Access Rd &

Stream crossing engineering plan

The following maps are attached to this Request For Approval Of Timber Harvest (Check all that apply)

- ☒ Copy of USGS topographic map with the property outlined
- ☐ Copy of Assessor's map with the property outlines
- ☒ Timber Harvest Area map showing outline of harvest area, skid road locations, log landing area, truck access roads, inland wetlands, watercourses and any crossings drawn to scale

The undersigned hereby swears that the information contained in this application is true, accurate and complete to the best of my (our) knowledge and belief and that the timber harvest will be conducted in accordance with the specifications outlined in this Request for Approval of Timber Harvest

Signature of Landowner: [Signature]

Date: 6/21/2022

Print / Type Name: Greg Goss

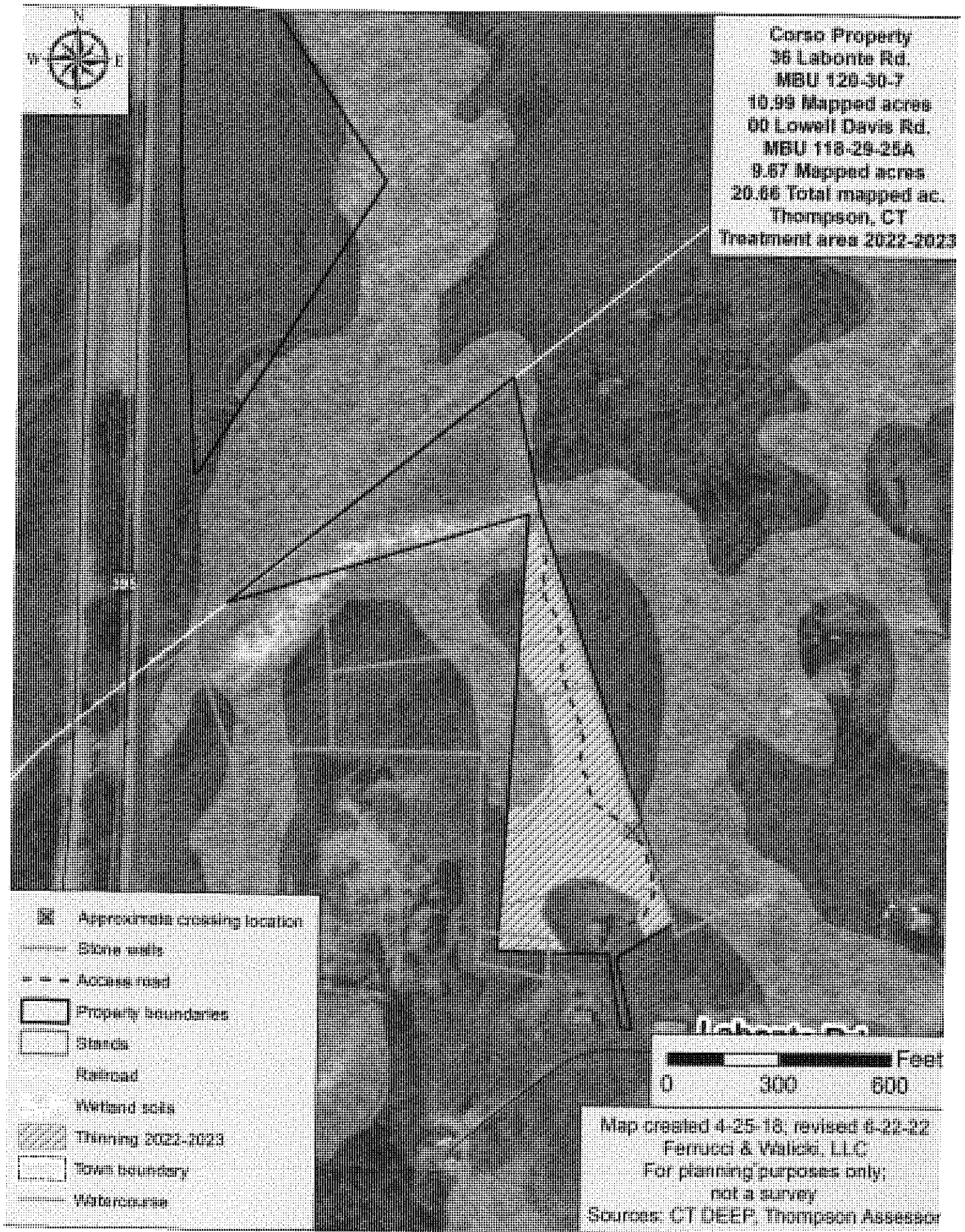
Signature of Certified Forest Practitioner: _____

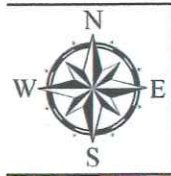
Date: _____

Print Name: _____

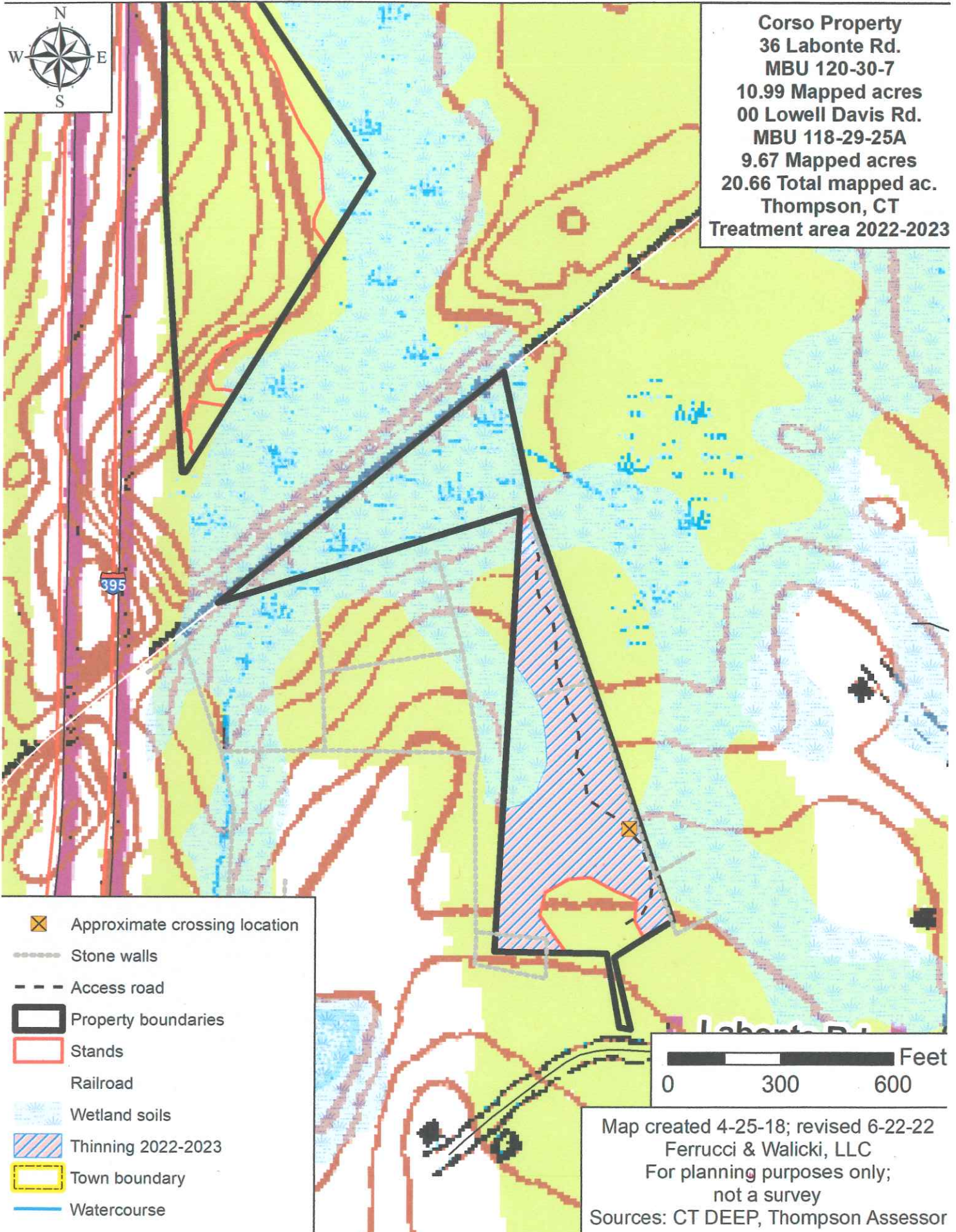
Complete and Submit to: Office of the Thompson Inland Wetlands Commission, Thompson Town Hall, 815 Riverside Drive, N. Grosvenordale, CT 06255
A courtesy copy of this completed form should be sent to the Department of Environmental Protection, Division of Forestry, 79 Elm Street, Hartford, CT 06106-5127, Tel: (860)424-3630

*** For Commission Use Only ***	
Agency or Agent's Response:	
IWC Chair or Agent Signature:	Date:





Corso Property
 36 Labonte Rd.
 MBU 120-30-7
 10.99 Mapped acres
 00 Lowell Davis Rd.
 MBU 118-29-25A
 9.67 Mapped acres
 20.66 Total mapped ac.
 Thompson, CT
 Treatment area 2022-2023



NO CHANGES MAY BE MADE TO THIS DESIGN WITHOUT THE APPROVAL OF NRCS ENGINEERING STAFF

Corso
Access Road & Stream Crossing
TOWN OF THOMPSON, WINDHAM COUNTY, CONNECTICUT

DESIGN PROVIDED BY:
UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

PROGRAM FUNDING: EQIP
NRCS DESIGN PRACTICES: 560, 578
JOB CLASSIFICATION: II

INDEX

SHEET 1	COVER SHEET
SHEET 2	CONSTRUCTION DETAILS
SHEET 3	EROSION AND SEDIMENT CONTROL

ACCESS ROAD & STREAM CROSSING OPERATION AND MAINTANCE

ITEMS TO INSPECT AND MAINTAIN DURING THE 10-YEAR DESIGN LIFE OF THE PRACTICE INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

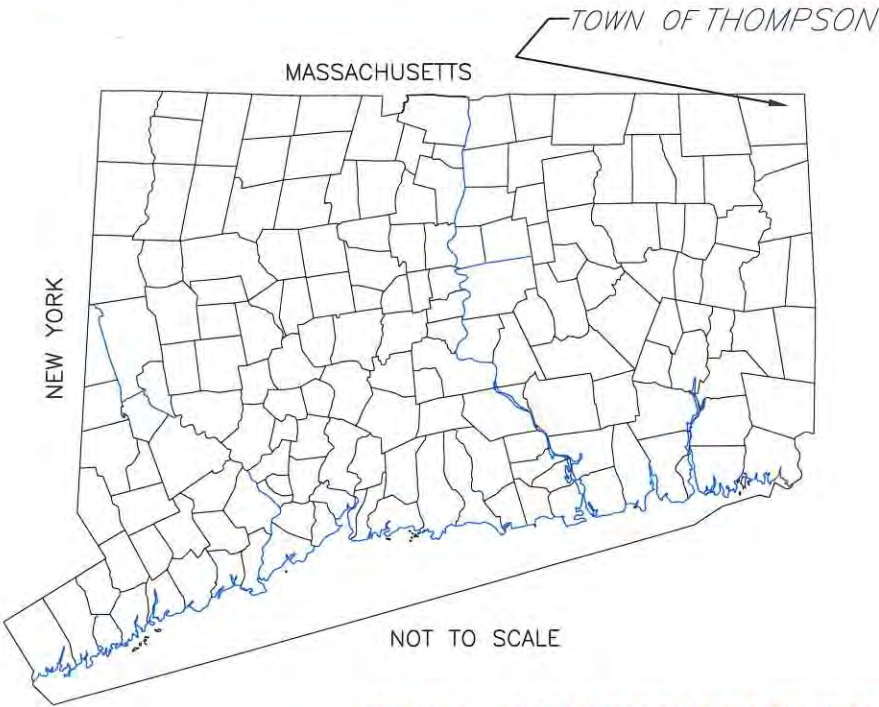
- 1.INSPECT ANNUALLY AND AFTER SIGNIFICANT STORM EVENTS TO IDENTIFY REPAIR AND MAINTENANCE NEEDS. INSPECT CULVERTS, ROADSIDE DITCHES, WATER BARS AND OUTLETS AND RESTORE FLOW CAPACITY AS NEEDED. LANDOWNER IS RESPONSIBLE FOR ENSURING MATERIALS ARE REPAIRED OR REPLACED AFTER STORM EVENTS.
- 2.PERIODICALLY GRADE OR RE-SHAPE ACCESS ROAD TO MAINTAIN THE DESIGNED GRADE AND DIMENSIONS.
- 3.PERIODICALLY ADD SURFACING MATERIALS WHERE NEEDED (WHERE RILLS OR GULLIES HAVE FORMED, PONDING OR OTHER DEGRADATION HAS OCCURRED) TO MAINTAIN THE ROADWAY SURFACE.
- 4.RE-SEED ANY AREAS IN WHICH THE VEGETATION HAS BEEN DAMAGED OR DESTROYED TO PREVENT EROSION.
- 5.MAINTAIN VEGETATED AREAS WITH ADEQUATE COVER TO MEET THE INTENDED PURPOSE(S) OF SOIL OR STRUCTURAL PROTECTION.
- 6.INSPECT ROADS WITH WATER BARS PERIODICALLY TO INSURE PROPER CROSS SECTION IS MAINTAINED AND WATER OUTLETS ARE STABLE.
- 7.INSPECT THE STREAM CROSSING, APPURTENANCES, AND ASSOCIATED FENCE AFTER EACH MAJOR STORM EVENT AND PROMPTLY MAKE REPAIRS OR REPLACE DAMAGED OR BROKEN MATERIALS AS NEEDED.
- 8.INSPECT AFTER ICE FLOWS.
- 9.REMOVE ANY ACCUMULATION OF ORGANIC MATERIAL, WOODY MATERIAL, DEBRIS OR EXCESS SEDIMENT.
10. REPAIR AND RESEED ANY AREAS OF EROSION IN THE APPROACHES, ALONG THE RAMPS, OR OTHER AREAS ADJACENT TO THE STREAM CROSSING
11. CHECK AREAS WHERE UNUSUAL SETTLEMENT HAS OCCURRED. DETERMINE CAUSE OF SETTLEMENT AND FILL OR OTHERWISE REPAIR, AS APPROPRIATE.
12. USE ON THE STREAM CROSSING ONLY FOR THE VEHICLES AND/OR MACHINERY FOR WHICH THE STREAM CROSSING WAS DESIGNED.
13. KEEP MACHINERY AWAY FROM STEEP SIDE SLOPES. KEEP EQUIPMENT OPERATORS INFORMED OF ALL POTENTIAL HAZARDS.
14. DO NOT CROSS STREAM DURING HIGH FLOW EVENTS.

SITE LOCATION



LOCATION MAP

38 LABONTE RD
THOMPSON, CT



CALL BEFORE YOU DIG

TO INSURE SAFE TROUBLE-FREE EXCAVATING
TO LOCATE UNDERGROUND UTILITY PIPE
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CALL TWO FULL WORKING DAYS IN ADVANCE

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*LANDOWNER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS

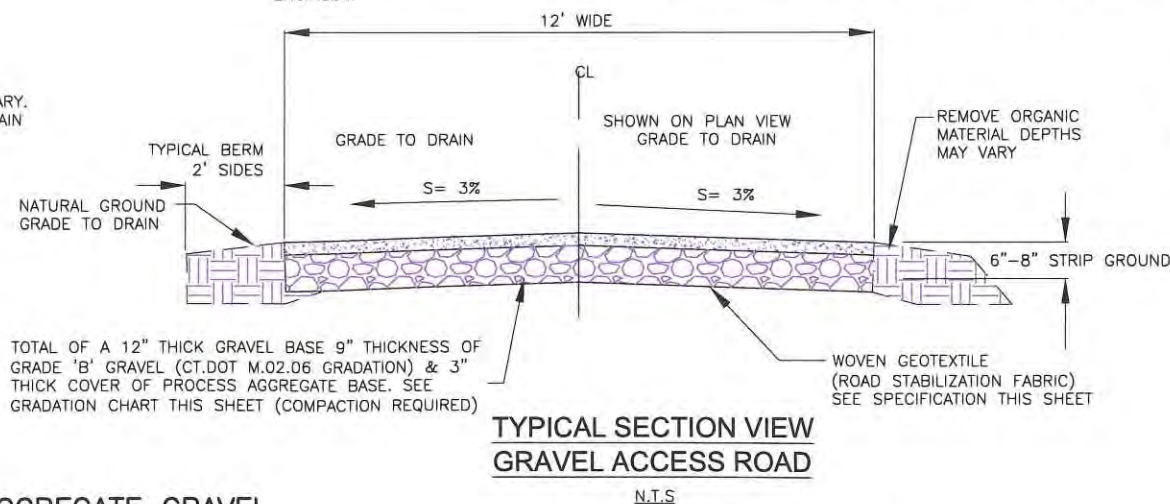
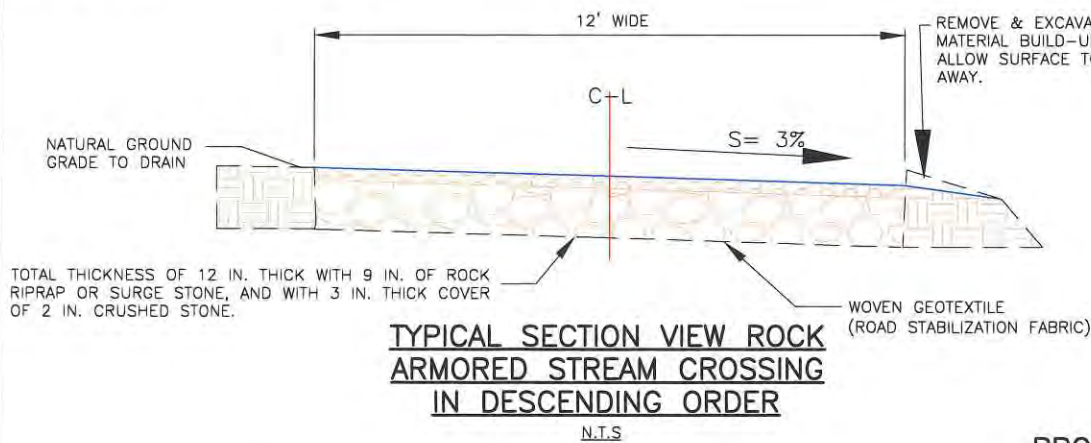
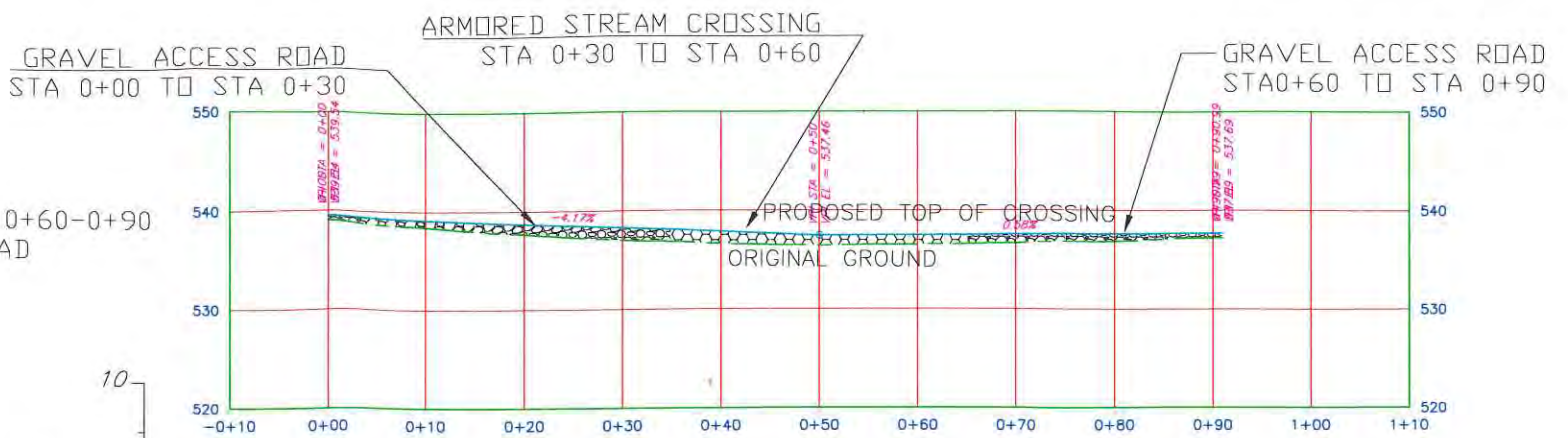
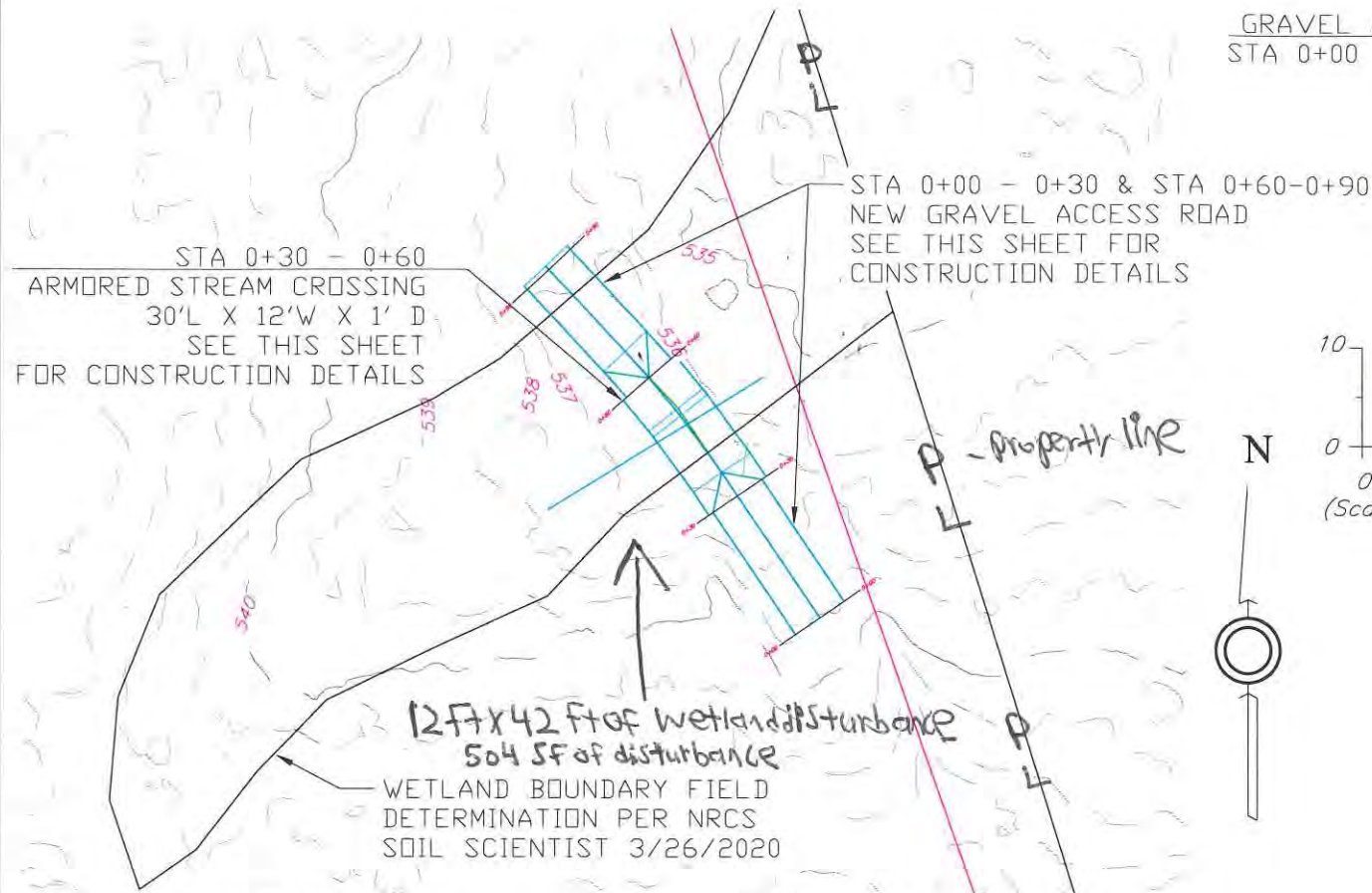
Date	2/22
Designed	CAD
Drawn	CAD
Checked	JEG
Approved	JEG

COVER SHEET
Access Road & Stream Crossing
Corso, Town of Thompson
Windham County, CT

United States
Department of
Agriculture
USDA
Natural Resources
Conservation Service

Drawing No.
Corso2022.dwg

Sheet 1 of 3



WOVEN GEOTEXTILE FABRIC

(ROAD STABILIZATION FABRIC)
GEOTEXTILE SHALL BE USED BENEATH GRAVEL ACCESS ROAD, AS NOTED ON THE DRAWINGS OR AS SPECIFIED AND APPROVED BY THE NRCS PROJECT ENGINEER.

THIS WOVEN GEOTEXTILE MUST MEET THE MINIMUM "SURVIVABILITY CRITERIA LISTED BELOW":

- SPECIFICATIONS ARE AS FOLLOWS:
- GRAB TENSILE STRENGTH: 130 LBS. ASTM D-1682
 - TEAR STRENGTH: 55 LBS. ASTM D-1117
 - MULLEN BURST 290 PSI OR BETTER.
 - PUNCTURE STRENGTH 65 LBS.
 - U.V. LIGHT RESISTANT
 - APPARENT OPENING U.S. SIEVE #40 SIZE.

COMPACTIVE EFFORT REQUIREMENTS

MAX. ROCK SIZE	MAX LIFT THICKNESS	OPTIMUM WATER CONTENT FOR COMPACTION	COMPACTION REQUIREMENT
3"	12"	THOROUGHLY WET BUT NOT SO WET AS TO CAUSE ADHERENCE OF THE MATERIAL TO THE COMPACTION EQUIPMENT.	CLASS II HAND COMPACTION WITH A MINIMUM OF 3 PASSES PER 12" LIFT OF A MANUALLY DIRECTED POWER TAMPER OR PLATE "VIBRATOR" WEIGHING AT LEAST 200LBS OR AN EQUIVALENT METHOD

10" MODIFIED RIPRAP (IF REQUIRED BY THE ENGINEER)

MATERIAL	SIZE	% OF THE MASS
GRADATION SHALL CONFORM WITH CT D.O.T. FORM 814A 1995 SECTION M.12.02 MODIFIED RIPRAP	10"	0
	6"-10"	20-50
	4"-6"	30-60
	2"-4"	30-40
	1"-2"	10-20
	<1"	0-10

PROCESSED AGGREGATE GRAVEL

CT. D.O.T PROCESSED AGGREGATE BASE GRADATION - 3' FINAL GRAVEL FINISH	
SQUARE MESH SIEVE	% PASSING BY WEIGHT
PASS 2-1/2"	100
PASS 2"	95-100
PASS 3/4"	50-75
PASS # 1/4"	25-45
PASS # 40	5-20
PASS # 100	2-12
PASS # 200	<-2

MATERIAL: NO MORE THAN 2% BY WEIGHT SHALL PASS THE # 200 SIEVE. COMPACTION REQUIRED

GRADE B GRADED GRAVEL

FROM 814A CT DOT M.02.06 GRADATION - 9" GRADE "B" BASE GRAVEL	
SQUARE MESH SIEVE	% PASSING BY WEIGHT
PASS 5"	100
PASS 3-1/2"	95-100
PASS 1-1/2"	55-95
PASS 1/4"	25-60
PASS # 10	15-45
PASS # 40	5-25
PASS # 100	0-10
PASS # 200	0-5

Date	2/22
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CONSTRUCTION DETAILS Access Road & Stream Crossing

Corso, Town of Thompson

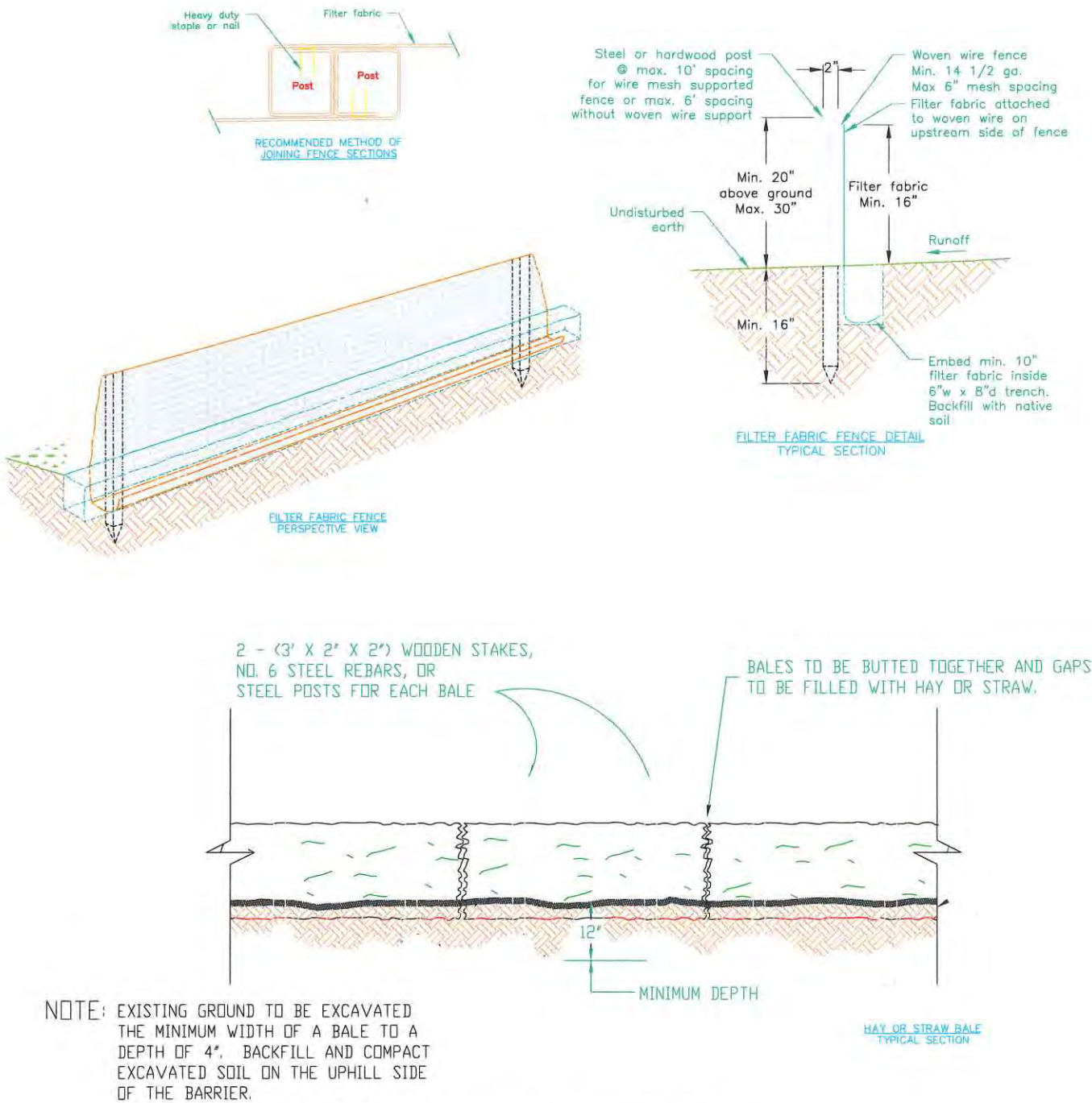
Windham County, CT

EROSION AND SEDIMENT CONTROL NOTES

-)Erosion and sediment control measures will be installed prior to and during clearing, grading, and excavation. Silt fence (bale type or fabric type) shall be installed as needed, or as instructed by the NRCS project engineer.
-)Posts shall (36) inch minimum length constructed of either of the following materials: Steel "T" or "U" type, or 2" x 2" hardwood.
-)Woven wire used as additional fence support shall be minimum 14.5 gauge with (6) inch maximum mesh spacing.
-)Woven wire shall be placed along the uphill side of the fence and fastened with wire ties or (1) inch staples along the uphill side of the posts.
-)Filter fabric shall be fastened to woven wire according to manufacturers recommendation, or with ties every (24) inches at top and mid-section.
-)Where two pieces of filter fabric adjoin each other they shall be overlapped by (6) inches and folded.
-)Where two posts meet to join fence sections, the tops of the posts shall be secured together with wire.
-)The fence shall be constructed along the contour as much as possible.
-)Ends of fences shall be extended up the slope to prevent runoff from migrating around the end of the fence.
-)Inspection of the fence shall be performed weekly, or immediately after a rain event, or when bulges appear in the fence. Accumulated silt shall not be allowed to exceed (1/2) height of the fabric. Repair and or replacement of damaged fence shall be completed promptly, as needed.
-)Accumulated silt shall be removed and disposed of in an approved site in such a manner that it will not contribute to off-site siltation.
-)Mulching and final seeding shall follow completed segments of the work. See specification for seeding requirements.
-)All fencing shall be removed when the construction site is fully stabilized so as to not impede storm flow or drainage.
-)All chemicals, fuels, and lubrications, shall be located, stored, and disposed of in such a manner as to prevent their entry into wetland or watercourse. No equipment or machinery shall be stored, cleaned or repaired within a wetland or watercourse.

SEEDING RECOMMENDATIONS AND SPECIFICATIONS

1. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RESULTS OR 300 POUNDS 10-10-10 AND 2 TONS OF LIME PER ACRE.
2. RECOMMENDED SEEDING DATES ARE APRIL 1 - JUNE 15 AND AUGUST 15 - SEPTEMBER 30.
3. MULCH ALL DISTURBED AREAS WITH STRAW OR HAY AT THE RATE OF 100LBS/1000 FT².



SEEDING REQUIREMENTS

SEED MIXTURE	LBS/ACRE	LBS/1,000 Sq. Ft.
KENTUCKY BLUEGRASS	20	.5
PERENNIAL RYE	5	.125
CREeping RED FESCUE	20	.5
Total	45	1.125

* NOTE: OTHER SUITABLE SEED MIXTURES MAY BE USED INSTEAD OF THE ABOVE

Date2/22

CAD

Designed

Date2/22

CAD

Drawn

Date2/22

JEG

Checked

Date2/22

JEG

Approved

EROSION & SEDIMENT CONTROL

Access Road & Stream Crossing

Windham County, CT

United States

Department of

Agriculture

USDA

Natural Resources

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Drawing No.

Corso2022.dwg

Sheet 3 of 3

Management Plan for
Gregg and Lauren Corso
20.66 total mapped acres; 2019-2028
Thompson, CT – Windham County

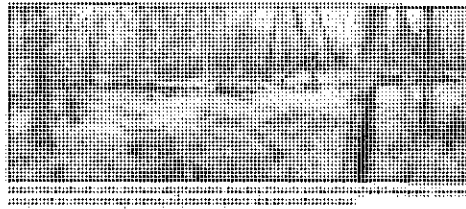


Prepared for:

Gregg and Lauren Corso
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860.970.7720

Prepared by:

Ferruci & Walicki, LLC
8 Way Rd.
Middlefield, CT 06455
Eric Ferruci, CT Certified Forester #7720
860.348.7097



Executive Summary

This Management Plan is intended to guide the management of Gregg and Lauren Corso's property located in Thompson, Connecticut in Windham County for the period of 2019-2028. This property is to be managed to maintain and enhance wildlife habitat for a variety of species, improve forest health, help maintain balanced and properly functioning ecosystems, improve recreational experiences, and maintain aesthetic qualities, all while keeping the protection of water quality and soil integrity paramount.

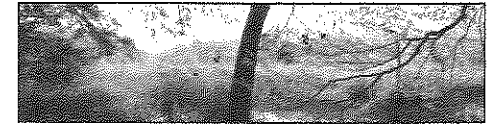
The entire property contains approximately 21 mapped acres. This property was researched and field-investigated by Ferruci & Walicki, LLC during spring 2019. The results, along with multiple-use management recommendations for the next ten years, are included in this Management Plan.

Overall, the investigation revealed that the property contains generally even-aged forested upland, wetland, and riparian ecosystems, a maintained open area surrounding the house, and a large semi-open wetland with associated drainages. This property possesses varying levels of both existing and potential opportunities for future forest and wildlife habitat management. There are also some existing roads and trails that provide access to portions of the property.

This property is well-suited for a multiple-use land management program. All of the recommendations provided in this document have been carefully considered and balanced within the general overall objectives of the Corso's land management goals and other interests.

Goals for the Corso property Multiple-Use Management Program

1. Protect, maintain, restore & enhance diverse wildlife habitat, and structural complexity
2. Engage in sound, sustainable land stewardship
3. Provide suitable recreational opportunities
4. Conserve soil & water resources
5. Potentially maintain some sensitive or special areas as reserves
6. Protect cultural resources
7. Maintain & improve forest and ecosystem health



Above: The semi-open wetland in the northern portion of the southern block of this property provides some interesting and unique features for this area.

Summary of Major General Recommendations

A summary of area-specific recommendations can be found on page 26

Nature Resources

1. A forest management program, including active forest management and wildlife habitat work, should be considered for this property. Efforts to maintain and enhance wildlife habitat, improve forest and ecosystem health and diversity, personal safety, and maintain water quality and soil stability, should be the focus of management activities.
2. Engage in projects to improve forest health and to diversify species, age class and size class diversity of vegetation.
3. Where feasible, invasive plant species should be controlled/removed to encourage regeneration of native vegetation. Where feasible native alternatives could be planted to replace invasives.

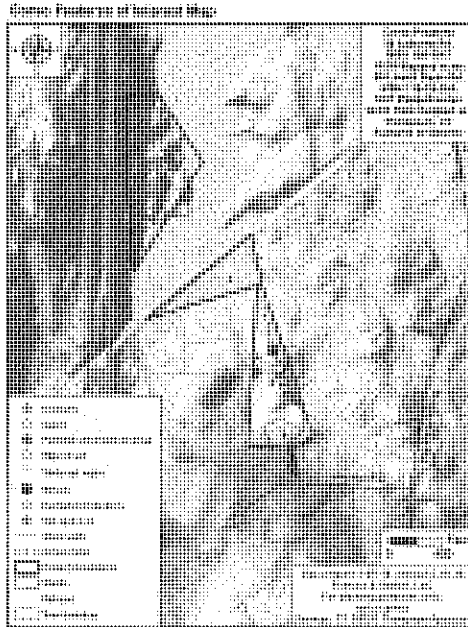
Recreation

1. Continue the maintenance of the trails that currently provide access to parts of the property. Consider attempting to develop an easement for legal access to the northern block of the property.
2. Ensure the preservation of historical features on the property (i.e., stone walls etc.).

Summary of NRCS Resource Concerns

- High density of trees in overstory in places reducing tree vigor/inhibiting regeneration
- Invasive plant species established in areas
- Lack of tree regeneration in places, and a significant lack of diversity of tree regeneration throughout property.

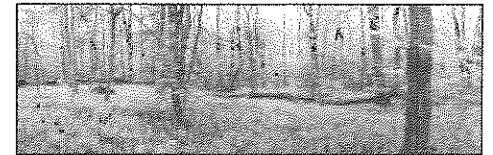
Contents	
EXECUTIVE SUMMARY	1
Summary of Major General Recommendations	2
CORSO FEATURES OF INTEREST MAP	4
GENERAL PROPERTY DESCRIPTION AND INVENTORY METHODS	5
BOUNDARIES, LOCATION AND ACCESS	6
WATER FEATURES	6
INSECT, DISEASE AND OTHER FOREST HEALTH ISSUES	7
PROPERTY HISTORY	12
WILDLIFE	13
LANDOWNER GOALS	15
STAND DESCRIPTIONS	15
CORSO STAND INFORMATION	15
CORSO STAND MAP	16
STAND 1: MIXED HARDWOOD SAWTIMBER (7.9 ACRES)	17
STAND 2: MIXED HARDWOOD SAWTIMBER (5.2 ACRES)	19
STAND 3: FORESTED WETLAND (1.8 ACRES)	21
AREA 4: OPEN WETLAND (3.7 ACRES)	22
AREA 5: RESIDENCE (1.1 ACRES)	23
General Property Recommendations	25
Stand Specific Property Recommendations	26
Sources Consulted and/or Cited	30
Maps - Corso NRCS Treatments Map	31
CORSO NATURAL DIVERSITY DATABASE MAP	32
CONSERVED PROPERTIES NEAR THE CORSO PROPERTY	33
CORSO SOILS MAP	34
CORSO SOILS CHARTS	35
CORSO WATER FEATURES	37
Glossary	38
Appendix A: Brush pile construction	42



General Property Description and Inventory Methods

The Corso property amounts to 20.66 mapped acres divided into two blocks: The northern block, which is 9.67 acres located at 0 Lowell Davis Road adjacent to I-395, and the southern block, which is 10.99 acres, located at 36 Lobonte Road. and contains the residence of the landowner. The two blocks are separated by an old railroad bed that now serves as a walking/biking trail (The Air-Line Trail), which forms the northern boundary of the southern block, and another piece of private property.

The southern block is mostly flat with dry soils toward the house and a 3.7 acre wetland toward the Air-Line Trail. Vegetation consists of small to large sawtimber-sized mixed hardwoods with some scattered white pines in the overstory. In the understorey, black birch, red maple, American elm, white oak, white ash, and white pine are the most prominent saplings. Black birch, red maple, and white pine are the most common seedlings. Shrubs and herbaceous plants include various ferns, Canada mayflower, raspberry, pockets of highbush blueberry, and Jack-in-the-pulpit.



Above: Fern (such as this patch found in the eastern portion of Stand 3) dominates portions of the understorey and may inhibit future efforts to regenerate trees due to how densely it is currently established. If we attempt to regenerate forest is being considered, a simultaneous attempt to reduce fern populations would be advisable.

The northern block has a gentle slope facing east with dry soils throughout and small pockets of water soils near the southern and eastern boundary. The western boundary about I-395 while the rest of the block borders private land. Vegetation consists of small to large¹ sawtimber sized mixed hardwoods with some scattered white pines in the understorey. In the understorey, hickory, white pine, black birch, and American chestnut are the most prominent saplings. White oak, black birch, hophornbeam, and hickory are the most common seedlings.

Invasive species are sparse throughout the property, however pockets of Japanese barberry were observed. In addition, hay-scented fern, a native species with some invasive tendencies is present in places.

The property as a whole is mostly flat. Elevation ranges from 500ft to 550ft above sea level.

¹ Pole timber is any tree that is between 4.5 and 12 inches in diameter at breast height (dbh). Sawtimber-sized trees are those that are over 12 inches dbh. Small sawtimber ranges from between 12-14 inch dbh. Medium sawtimber is generally between 14-18 inches dbh, and large sawtimber is generally 18 inches dbh and greater.

purposeful active management to maintain and enhance species diversity in all forest strata, and to encourage the presence of multiple size and age classes of trees.

Property History

Due to physical evidence including the stone walls that are found in various places throughout the property, it appears as though most of this area was used for agriculture and subsequently abandoned, perhaps at the turn of the last century. Evidence of prior logging in the form of stumps, old tops not used during the last entry for logging, and what appear to have been skid roads also exist in places on the property. The map below shows the property boundaries on an orthophoto from 1934. Note the amount of farmland that has reverted to forest or has been developed into residential property.



Figure 1: Aerial orthophoto map from 1934. Understory is considered to be from ground level to 6 ft. Midstory is from 6-30 ft. above the ground, and canopy is taller than 30 ft.

A check of Connecticut's Natural Diversity Database (NODB) indicates that there are no areas on the property that contain rare or threatened species or species of special concern.

Landowner Goals

1. Protect, maintain, restore & enhance diverse wildlife habitat, and structural complexity
2. Engage in sound, sustainable land stewardship
3. Provide suitable recreational opportunities
4. Conserve soil & water resources
5. Potentially maintain some sensitive or special areas as reserves
6. Protect cultural resources
7. Maintain & improve forest and ecosystem health

Stand Descriptions

For the purposes of this management plan, the property has been divided into five management units called stands or areas. Forested stands are sections of the property in which the vegetation, species composition, age class, size class, density, etc. to be able to group together as relatively homogeneous. Other features that are examined to help group stands together are location, accessibility, and size of area. That is not to say, however, that forested stands are completely uniform. There will almost always be some variability due to the fact that we are attempting to quantify and qualify natural systems, which inherently trend towards entropy.

There is a set of recommended actions provided for each stand. Significant activities are provided with a date to help guide the management of the property over the next 10 years. Some of the dates may be interchangeable and should remain flexible to be able to respond to changing conditions (i.e. storm, insect or disease damage/infestation, changing goals on the part of the landowners etc.). Additionally, there may be opportunities to work with adjacent landowners which may increase economic feasibility and/or increase the effectiveness of a treatment. As wildlife habitat use many of the adjacent properties in addition to the land the Corso's own and manage, consulting operations in cooperation with adjacent landowners may have the capacity to have a greater impact than managing for one property alone.

Corso Stand Information

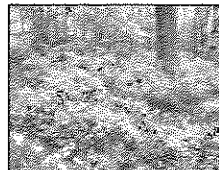
Stand	Cover Type	Acres
1	Mixed Hardwood	7.9
2	Mixed Hardwood	6.2
3	Forested Wetland	1.8
4	Open Wetland	3.7
5	Residence	1.1
Total Acreage		20.7

Wildlife

Providing quality habitat for a variety of wildlife species is a primary goal of the landowners. Focus species to manage for include songbirds, rabbit, deer, turkey, birds of prey, bobcat, grouse, amphibians, reptiles, woodcock, and small and large mammals.

Some wildlife (primarily evidence of deer and songbirds) was observed during field visits to the property, and there is good potential for a variety of species to exist here due to the variety of habitats present. Throughout the property there are hard mast producing species of trees in the overstory (i.e. the main tree canopy). Red, black, and white oaks, and Hickory play a significant role in the mixed hardwood stands which constitute the majority of the forests on the property. Soft mast producing species including maple leaf viburnum, huckleberry, and blueberry are present and are found in various places throughout the property and on adjacent properties.

Figure 1: The dense-growing huckleberry shrubs in the canopy of Stand 1 are directly adjacent to the trail. In order to increase productivity of this and other understory shrubs and existing desirable tree regeneration, some overstory trees will need to be removed to increase amount of sunlight that can reach the forest floor.



Having a variety of different kinds of mast producing species is beneficial because oftentimes different species will have good mast years (i.e. produce significant amounts of seeds, nuts or acorns) in different years. Staggered production of seed sources can aid in the dispersal of mast over time and help wildlife prepare for difficult winter months. The hard and soft mast produced by the tree and shrub species mentioned above is used as food for a variety of wildlife.

Soft mast – In the form of shrubs such as huckleberry, highbush blueberry, and maple leaf viburnum – is also found in places on the property. It is beneficial for many species of wildlife to have a combination of hard and soft mast. In their diet as each mast source provides different dietary elements. Hard mast often has more protein and fats, whereas soft mast tends to be higher in sugars.

Stand 1 contains a small group of bigtooth aspen trees (see location of aspen on map on page 4). These trees can be an important source of food and cover for a variety of wildlife including grouse, woodcock, songbirds and deer. Aspen – also known as poplar – sprouts very prolifically from roots and stumps when the above ground portion of the trees are cut. If they are cut when the trees are still vigorous, aspen are very shade intolerant trees so in order for the species to successfully regenerate, they need a significant amount of direct sunlight. Successfully regenerating aspen can create dense thickets which can provide cover, feeding, nesting and courtship habitat for the wildlife species mentioned above. Additionally,

Figure 2: Mast is food for wildlife and is sourced into two general categories: hard and soft. Hard mast includes oak, hickory, beech and other nut producers. Soft mast is fruits including berries, cherries, and apples.

Corso Stand Map



flower buds of male aspen trees can be a valuable food source for grouse in winter. When attempting to regenerate aspen, openings of at least a 75 foot radius are useful.

As mentioned earlier, there are small pockets of softwood trees on the property. Most of the softwood is eastern white pine. Healthy groups of softwood trees within a larger hardwood matrix add diversity to the property and provide habitat conditions that are useful to a suite of songbirds and other wildlife species that will typically use softwood or mixedwood forests for their core habitat.

Figure 1: The healthy eastern white pine in the southwestern portion of Stand 1 is relatively healthy and vigorous though some scale was noted on some of the needles. When possible, encouraging pockets of healthy softwood to persist can help augment habitat offerings here.



In addition to the species diversity they provide in an area dominated by hardwood trees, softwood trees – in particular healthy hemlock and spruce, but also white pine to a certain extent – can act as a sheltering area for wildlife. In heavy snow, dense softwood cover can limit snow depths allowing for easier travel for deer and other wildlife. Additionally, wild turkeys frequently roost in white pine. Many other species including non-game species of wildlife such as songbirds utilize the dense cover of softwood foliage and some species including black-throated green warblers and black-throated blue warblers will preferentially breed in areas with a softwood component.

The forested wetlands, drainage in the northern edge of the southern block, and potential vernal pools add extra layers of importance for a small property. Many species of wildlife likely use the pools when they have water in them as a source of drinking water, and for amphibians a potentially critical area for breeding. The semi-open wetland provides a valuable source of shrub cover and unique breeding and feeding opportunities for a suite of species that use such areas as opposed to forested wetlands. As this habitat condition can be short-lived, especially if wetland oriented trees such as red maple and elm begin to germinate and become established, perpetually open and semi-open wetlands have become a somewhat rare but very important commodity.

Snags and cavity trees are two elements of a forest that can be easily overlooked by a casual observer. As described earlier, snags are standing dead trees. As these trees decompose, they provide habitat for many species including insects, fungi, bacteria, birds, reptiles, amphibians, and mammals. Cavity trees are standing trees with holes in them that may provide habitat. Where feasible, attempt to retain and recruit snags and cavity trees. At any given time, the presence of at least six (6) snags and/or cavity trees per acre of various sizes is ideal. If possible, attempt to retain one (1) tree/acre that is greater than 18 inches in diameter at breast height (dbh) and three (3) trees that are greater than 12 inches dbh.

Figure 3: Aspen trees are keystone, which means that male and female flowers are housed on different trees. Male aspen buds are considered to be larger than female.

Figure 4: Diameter at breast height (dbh) is diameter outside bark measured at 4.5 feet above the ground on the straight side of the bole (if uneven slope).

Figure 5: Snags, dead trees, and cavity trees are important for many species of wildlife. Snags are standing dead trees. Cavity trees are standing trees with holes in them that may provide habitat. Where feasible, attempt to retain and recruit snags and cavity trees. At any given time, the presence of at least six (6) snags and/or cavity trees per acre of various sizes is ideal. If possible, attempt to retain one (1) tree/acre that is greater than 18 inches in diameter at breast height (dbh) and three (3) trees that are greater than 12 inches dbh.

Stand 1: Mixed Hardwood Sawtimber (7.9 Acres)

Stand	Soil Symbol	Soil Type	Acres
1B		Carbon and Fluventic ash, 0 to 2 percent slope	0.0
30S		Udorthents-Udorthic loam complex	0.1
73C		Chertan Chertic loam complex, 0 to 15 percent slopes, very rich	7.8
Total			7.9

Stand 1									
All Trees			Acceptable Growing Stock			Dominant/Co-dominant			
Age Class	# Trees/Ac	DBH	# Trees/Ac	DBH	Volume/Ac	# Trees/Ac	DBH	Volume/Ac	
Seedlings	1,000.7	-	-	-	-	-	-	-	-
Saplings	0.0	-	-	-	-	-	-	-	-
Smalltimber	50.1	8.6	7,115.5 MBF	50.2	76.0	6,929.3 MBF	50.4	80.0	7,708.3 MBF
Mediumtimber	70.6	20.7	43.3 MBF	20.7	11.1	24.6 MBF	22.3	15.8	23.6 MBF
Large	9.5	23.3	-	-	-	-	-	-	-
Total	1,070.9	32.6	-	-	-	100.7	33.3	-	-

Quadratic Mean Stand Diameter (QMD) = 27.38 inches

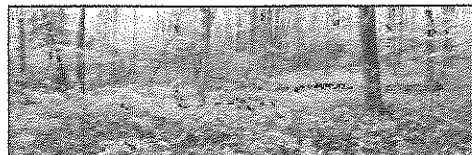
All trees				Dominant and Codominant trees			
Species	Percent BA	Percent Trees	Percent Volume	Species	Percent BA	Percent Trees	Percent Volume
Black Birch	5.88	19.15	2.95	Black Birch	14.29	15.18	13.41
Black Oak	11.76	0.68	11.95	Aspen	7.14	7.73	6.39
Aspen	5.88	0.35	5.65	Red Oak	46.43	49.01	49.52
Red Maple	2.94	0.53	2.92	Scarlet Oak	25	20.81	25.48
Red Oak	41.18	2.72	46.6	Ash	3.57	2.62	2.58
Scarlet Oak	20.59	0.94	22.52	White Oak	3.57	4.48	2.62
Snag	2.94	0.53	-				
Ash	2.94	0.12	2.28				
White Oak	2.94	74.05	2.32				
White Pine	2.94	0.94	3.01				

Description

This is the largest stand throughout the property and is situated in the northern block. It lies on a slight eastern aspect between I-395 to the west and forested wetland to the south and east. According to soils mapping through the Connecticut Department of Energy and Environmental Protection (DEEP) and NRCS, there is one main soil type and two fringe soil types in this stand. Almost all of the area is composed of

Charlton-Charfield complex soils, which are well suited to growing hardwoods. Site Index⁹ for red oak on this property is 65 ft, which is fair to good for this species.

The majority of overstory trees are sawtimber size northern red oak with a large component of scarlet oak. Black oak, white oak, ash, and aspen are also present. The midstory contains a mixture of planted black birch, red maple, northern red oak, and white pine. There is a large component of white oak seedlings in the understory, which will be critical for future regeneration of the stand. Black birch seedlings are also present. Shrubs include lowbush blueberry, witch hazel, aster, maple leaf viburnum, and sedge.



Above: The densely growing oak seedlings in the understory in the southern portion of Stand 1 are relatively short now and are not yet fully established. Increasing sunlight by targeted removal of some overstory trees can help increase the likelihood that the seedlings can become established and survive to become a part of the next stand.

1934 aerial imagery shows a road connecting this stand to property to the west. Since then, interstate 395 has been built, cutting off access from that direction. The stand is surrounded by wetlands on all other sides with the exception of a narrow stretch of land to the north, which is privately owned. If legal access were needed into this stand it would likely have to go through this northern pathway with the permission of that landowner or along the Airline trail working with DEEP to secure permission if this is feasible.

Whenever activity with equipment is undertaken, use Best Management Practices¹⁰ to ensure water quality.

Desired future condition: Consider managing to maintain and enhance diversity of stand structure, size and age class of trees, and increase species diversity. Continue to grow good quality trees of a variety of species. Light thinning can occur here every 15-20 years. Ensure invasive plants do not become established following tree cutting by vigilant monitoring and early treatment if found.

⁹ Site index is a relative measure of tree productivity. The higher the site index, the more productive the soils for the species indicated. A site index of 65, for example, means that a tree of the species indicated is likely to grow to 65 feet in height after 50 years of growth. Measurements are based on species because different species grow differently on different soil types.

¹⁰ A guide to recommended best management practices for protecting water quality during forest management activities in Connecticut can be found here:

<http://www.ct.gov/deep/ctso/for/forsover.htm> by wagner, p. 10-11 (http://www.ct.gov/deep/ctso/for/forsover.htm)

Recommendations:

2020 - Treat invasive plants and inspect the area for oak mortality that could/should be salvaged. This inspection could be done in 2019 as well. These are both non-commercial treatments.

2021 - According to the Gingrich Stedding Diagram for upland oaks this stand is well-stocked for the continued growth of overstory trees, but is nearing the point of being overstocked. Because of that, most portions of the canopy are relatively closed which decreases the feasibility of successful establishment of regeneration even in places where advance regeneration already exists.

The bountiful oak seedlings in portions of this stand are not often found in Connecticut. If this is a feature that the landowners would like to work with consider releasing pockets of seedlings where it makes sense to do so based on overstory condition and composition using small group selection up to 1/2 acre in size. Regeneration of up to 30% of this stand (3-2 cumulative acres) may be feasible, but the actual amount should likely be less than this. If regeneration treatments are to be done, create canopy gaps over existing regeneration where the seedlings appear vigorous enough to respond to release and where it makes sense to do so based on overstory composition and condition. Retain snags, potential cavity trees and softwood trees wherever feasible. Swamp white oak and other healthy oaks should also be retained to continue to grow and provide most and a potential source of timber in this stand.

If portions of the area between regeneration pockets are to be thinned, reduce basal areas to approximately 80 ft² per acre. In addition to tree regeneration, where existing pockets of huckleberry and/or blueberry are found, consider creating canopy gaps above them as well. If it makes sense based on overstory condition and composition, this treatment would be done to enhance production of nectar and soft mast.

Consider addressing the wet spot in the road in this stand. This could potentially be done using fabric and stone. All these treatments will be non-commercial due to lack of volume even if combined with a treatment in Stand 1.

Stand 3: Forested wetland (1.8 Acres)

Stand	Soil Symbol	Soil Type	Acres
18	Calden and Freetown soils, 0 to 2 percent slopes		0.6
3	Udorthents-Urbans land complex		0.0
73C	Charlton-Charfield complex, 0 to 15 percent slopes, very rocky		1.2
Total			1.8

Description:

Stand 3 is a collection of small, sometimes less than 1-acre, patches of land that share similar soils and forest cover types. All sections of the stand are adjacent to Stand 1, and the above have limited access. No inventory plots were taken in this stand, but the overstory trees are a mixture of hardwoods (especially red maple) and occasional pine and hemlock. Stand structure is good with a relatively dense shrub layer in portions of the stand, especially the northern block. Understory species present include spicebush, ferns, sweet pepperbush, winterberry, stink cabbage, Jack-in-the-pulpit and a variety of

Recommendations:

2020 - Treat invasive plants and inspect the area for oak mortality that could/should be salvaged. This inspection could be done in 2019 as well. These are both non-commercial treatments.

2021 - According to the Gingrich Stedding Diagram for upland oaks this stand is well-stocked for the continued growth of overstory trees. That said, most portions of the canopy are relatively closed which decreases the feasibility of successful establishment of regeneration. The bountiful white oak seedlings in portions of this stand are not often found in Connecticut. If this is a feature that the landowners would like to work with consider releasing pockets of seedlings where it makes sense to do so based on overstory condition and composition using small group selection up to 1/2 acre in size. Regeneration of up to 25% of this stand may be feasible. If this is to be done it will require working with adjacent landowners to secure permission to access the land with equipment if the wood from felled trees is to be removed. This will be a non-commercial treatment due to lack of volume and difficulty of access.

Stand 2: Mixed Hardwood Sawtimber (6.2 Acres)

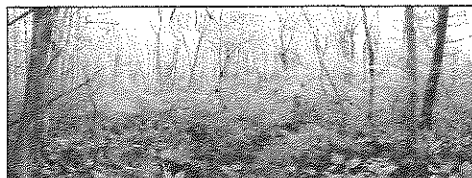
Stand	Soil Symbol	Soil Type	Acres
18	Calden and Freetown soils, 0 to 2 percent slopes		0.5
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony		0.9
2	48B Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony		1.3
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony		2.9
61C	Canton and Charlton fine sandy loams, 8 to 15 percent slopes, very stony		0.6
Total			6.2

Stand 2									
Average Stand Growing Stock									
Size Class	Volume	BA	Volume	BA	Volume	BA	Volume	BA	Volume
Seedlings	0.0	-	-	-	-	-	-	-	-
Saplings	57.3	5.9	-	-	-	-	-	-	-
Sawtimber	68.0	68.0	6,202.24MFB	34.4	68.0	5,758.16MFB	38.0	65.0	6,192.24MFB
Polestand	55.1	45.0	5.84MFB	34.8	25.0	2.53MFB	27.6	25.0	0.1MFB
SNAG	97.3	15.0	-	-	-	-	-	-	-
Total	217.7	133.9	6,202.24	73.2	-	5,780.85	100.6	115.0	6,192.34



Left: The northern end of Stand 2 showing white oak regeneration with some huckleberry shrubs.

herbaceous species. Some invasive plants including Japanese barberry and multiflora rose were noted along edges of these stands. These pockets of forested wetland are beneficial for a variety of wildlife.



Above: The structural attributes in the northern block of this stand provide cover for a variety of wildlife that use the lower areas of the forest for habitat needs. If desired, creating some small canopy gaps in the overstory might then may enhance available habitat options. This is especially true of some of the older retro-mat trees were girdled or left as standing dead snags and potential cavity trees.

Including songbirds, birds of prey, amphibians, reptiles and many mammal species as well.

Desired future condition: Consider managing to maintain and enhance diversity of stand structure, size and age class of trees, and increase species diversity including softwoods. Ensure invasive plants do not become established following tree cutting by vigilant monitoring and early treatment if found.

Recommendations:

Ongoing - Monitor for the presence of invasive plants and remove them where feasible.

2021 - If desired, consider creating some small canopy gaps in the northeastern block of this stand in conjunction with work being done in Stand 1. This can be done by either felling and leaving felled trees to create additional structure on the forest floor or girdling some trees to create pockets of standing dead snags. The purpose for creating canopy gaps is similar to treatments recommended in Stands 1 and 2, which is ideally to enhance structural attributes (i.e. maintain dense maple understory) and to consider keeping open areas open. Retaining existing snags, cavity trees, and softwoods is important. All these treatments will be non-commercial.

Area 4: Open Wetland (3.7 Acres)

Stand	Soil Symbol	Soil Type	Acres
18	Calden and Freetown soils, 0 to 2 percent slopes		3.7
4	3 Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony		0.9
62C	Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony		0.0
Total			3.7

All trees

Species	Percent BA	Percent Trees	Percent Volume
Black Birch	14.25	12.39	10.21
Black Oak	10.71	2.92	15.23
Red Maple	25	11.87	29.35
Scarlet Oak	3.57	2	6.50
Snag	10.71	28.12	0
Swamp White Oak	3.57	2	4.45
Ash	3.57	0.78	3.34
White Oak	28.57	39.71	30.48

Dominant and Codominant trees

Species	Percent BA	Percent Trees	Percent Volume
Swamp White Oak	3.57	17.35	5.48
Black Oak	15	9.08	17.02
Red Maple	30	22.88	27.09
Scarlet Oak	5	6.21	7.71
Swamp White Oak	5	6.21	4.96
Ash	5	2.43	3.73
White Oak	35	35.95	34.02

Description:

Stand 2 is located just north of the Corso residence. It can be accessed by an old forest road along the eastern end of the stand. According to soils mapping through the Connecticut Department of Energy and Environmental Protection (DEEP) and NRCS, the most common soil type is Woodbridge fine sandy loam, which is excellent for growing oaks. There is also an acre of Ridgebury, Leicester, and Whitman soils, which is wetland soil type and not conducive to harvest activity unless performed in the winter when the ground is properly frozen. Site Index⁹ for black oak¹¹ is 77 ft, which is high for this site.

The overstory is a mixed hardwood cover type with white oak, black oak, and red maple being the most common species. Also present is scarlet oak and swamp white oak, the latter of which is somewhat rare in the state of Connecticut. The midstory is composed of black birch, red maple, black oak, white ash, and white oak. The understory is sparse with white oak saplings being the main component. The fact that there are very few seedlings observed during the inventory means that any future management activity should focus on establishing advance regeneration to ensure the future productivity and resilience of the forest.

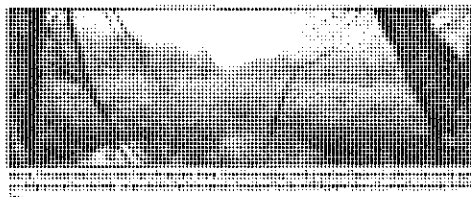
As mentioned previously, access to this stand can be gained via a forest road that stems from the Corso residence. The road does cross some wet soils so if it were to be used by any heavy machinery, some type of maintenance should be performed to ensure the integrity of the road, soil, and nearby wetlands. This could mean laying down stone over the road surface, waiting until the ground is frozen, using a combination of the two, or even moving the road entirely. Whenever activity with equipment is undertaken, use Best Management Practices¹⁰ to ensure water quality.

Desired future condition: Consider managing to maintain and enhance diversity of stand structure, size and age class of trees, and increase species diversity including softwoods. Continue to grow good quality trees of a variety of species. Light thinning can occur here every 15-20 years. Ensure invasive plants do not become established following tree cutting by vigilant monitoring and early treatment if found.

¹¹ Black oak was chosen because of all the major species in the stand it is the only one listed for these soil types.

Description:

Stand 4 is an open wetland located to the north of Stand 2 in the southern block of the property. The Airline Trail acts as this stand's northern boundary. The most common soil type is Calden and Freetown soils (wetland soils), which make up almost all of the acreage. Ridgebury, Leicester, and Whitman soils (wetland soils) as well as Canton and Charlton fine sandy loams are present around the periphery of this stand where drier landscape emerges. Open wetlands are a critical component of Connecticut forest ecology and typically fall under the regulations of local wetland commissions. It is not recommended to transport heavy machinery over wetlands in any circumstances.



Desired future condition: Consider managing to maintain and enhance diversity of stand structure, size and age class of trees, and increase species diversity including softwoods. Ensure invasive plants do not become established following tree cutting by vigilant monitoring and early treatment if found.

Recommendations:

Ongoing - Monitor for the presence of invasive plants and remove them where feasible. This is a non-commercial treatment.

Ongoing - Monitor for development and establishment of trees. Consider felling or girdling trees to ensure maintenance of open condition of wetland. This is a non-commercial treatment.

2020 - Consider installing 1-3 wood duck nest boxes within and/or along the perimeter of the wetland if appropriate locations can be determined.

Area 5: Residence (1.1 Acres)

Stand	Soil Symbol	Soil Type	Acres
5	48B Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony		1.1
Total			1.1

Description:

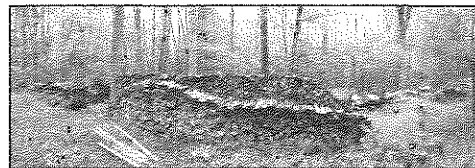
This is the residence and surrounding open area of the Corso property. There is a lawn and a narrow transition zone to the mature forest of Stand 2. Some of the trees in this area have been killed by gypsy moth/drought stress.

Desired future condition: Continue to manage as a maintained area. If feasible, increase diversity of vegetation over time along edges.

Recommendations

Ongoing – Monitor for the presence of invasive plants and remove them where feasible.

2022 – Depending on how many additional trees die, remove dead and dying trees for safety. Consider replanting along the boundary of stand 5 and 2 with native flowers and shrubs that can provide sources of nectar, mast and potentially cover. This is a non-commercial treatment.



24

Corso Property – Forest Management Plan 2019

2022

- Area 5 – Depending on how many additional trees die, remove dead and dying trees for safety. Consider replanting along the boundary of stand 5 and 2 with native flowers and shrubs that can provide sources of nectar, mast and potentially cover. This is a non-commercial treatment.

Annually/Ongoing

- Stand 1 and 2 – Monitor treated areas for new populations of invasive plants and remove them if noted.
- Stand 3, 4 and 5 – Monitor for the presence of invasive plants and remove them where feasible.
- Stand 4 – Monitor for the development and establishment of trees. Consider felling or girdling trees to ensure maintenance of open condition of wetland. This is a non-commercial treatment.
- All stands/areas – Locate, maintain and periodically remark boundaries.
- All stands/areas – Maintain roads and trails.

2028

- All stands – Re-inventory property and develop management plan for next 10-year plan period.

GENERAL PROPERTY RECOMMENDATIONS

- With any activity undertaken on the property, attempt to:
 1. Improve forest health and species diversity
 2. Improve vertical and horizontal structural diversity and complexity, including retaining and resulting snags and only as necessary doing so from counter-productive to the goal of the activity
 3. Ensure water quality and soil stability
 4. Increase accessibility
 5. Limit spread of invasive plant species. Treat populations of invasive in and adjacent to the area where trees are to be cut prior to forest management activities.
 6. Attempt to create softer edges and/or transition zones from open areas to mature forest.
- Attempt to limit populations of invasive plant species. Keep abreast of information regarding invasive insects, especially the emerald ash borer and Asian long-horned beetle. Amend plan to salvage imminently infested stems if necessary. **Vigilance and re-treatment of invasives will be critical.**
- Attempt to treat forested areas on a 10-15-20 year cutting cycle.
- If aspen trees are encountered during treatments, attempt to regenerate those areas if feasible to encourage dense sprouting for wildlife habitat.
- Attempt to maintain and enhance vigor and abundance of populations of softwood tree species on the property.
- Whenever possible, avoid cutting trees during the songbird breeding season (i.e. early May-early August). If NRCS cost-share funding is used for tree cutting purposes, no tree cutting will be allowed between April 1 and as late as October 1.
- Attempt to recruit some large trees scattered throughout the property, even if these trees are not "wolf trees" to increase structural diversity. These large trees could become "legacy trees" and be allowed to mature and die naturally.
- Locate, maintain, and consider painting all boundary lines.
- Maintain roads and trails to maintain access and limit erosion throughout the property.
- Where and when appropriate consider working with adjacent landowners to "manage across boundaries".
- During or after forest management activities that involve cutting trees, consider piling tops of some felled trees to increase value for wildlife. Pile tops near edges of openings where they exist and limit piles to no more than 2-3/acre. See Appendix A for NRCS recommended brush pile construction methods.
- Follow Connecticut's Field Guide for Best Management Practices for Water Quality while Harvesting Forest Products during any forest management operations.

25

Corso Property – Forest Management Plan 2019

STAND SPECIFIC PROPERTY RECOMMENDATIONS

2020

- Stand 1 and 2 – Treat invasive plants. This is a non-commercial treatment.
- Stand 1 and 2 – Inspect these areas for oak mortality that could/should be salvaged. This is a non-commercial treatment due to minimal volumes to be removed. This could be done in 2019 as well.
- Stand 2 – Address the wet area in the access road to maintain and/or improve future access.
- Area 4 – Consider installing 1-3 wood duck nest boxes within and/or along the perimeter of the wetland if appropriate locations can be determined.

2021

- Stand 1 and 2 – Treat invasive plants. This is a non-commercial treatment.
- Stand 1 – Consider attempting to regenerate up to 1/2 of the stand. This should be considered especially where desirable advance regeneration (i.e. white oak seedlings and small saplings) currently exists. Treatments should include creating overstory canopy gaps above existing regeneration where it also makes sense based on composition and condition of overstory trees (i.e. if the overstory tree species are less desirable than the regeneration and/or if the overstory trees are declining or are in otherwise poor health). Create gaps of up to 1/2 acre or slightly larger if it makes sense based on ground conditions. Working with and an adjacent neighbor to the north can enhance the functionality of these treatments and may also facilitate access to the property. This will be a non-commercial operation.
- Stand 2 – Consider attempting to regenerate up to 1/2 of the stand. This should be considered especially where desirable advance regeneration (i.e. white oak seedlings and small saplings and/or healthy hickory) currently exists. Treatments should include creating overstory canopy gaps above existing regeneration where it also makes sense based on composition and condition of overstory trees (i.e. if the overstory tree species are less desirable than the regeneration and/or if the overstory trees are declining or are in otherwise poor health). Create gaps of up to 1/2 acre or slightly larger if it makes sense based on ground conditions. If thinning is to be done between gaps, retain a basal area of approximately 80 square feet/acre. This will be a non-commercial operation.
- Stand 3 – If desired, consider creating some small canopy gaps in the northeastern block of this stand in conjunction with work being done in Stand 1. This can be done by either felling and leaving felled trees to create additional structure on the forest floor or girdling some trees to create pockets of standing dead snags. The purpose for creating canopy gaps is similar to treatments recommended in Stands 1 and 2, which is ideally to enhance structural attributes (i.e. maintain dense native understory) and to consider leaving open areas open. Retaining existing snags, cavity trees, and softwoods is important. All these treatments will be non-commercial.

26

Corso Property – Forest Management Plan 2019

SUMMARY OF SCHEDULED ACTIVITIES 2019-2028

Corso Property		
Summary of Scheduled Activities 2019-2028		
Year	Stand/ Area	Treatment
2019	1-2	Monitor oak trees and consider salvaging if necessary and desired
2020	1-2	Monitor oak trees and consider salvaging if necessary and desired
2020	1-2	Treat invasive plants
2020	2	Address wet area in access road
2020	4	Consider installing 1-3 wood duck nesting boxes
2021	1-2	Conduct follow up treatment for invasive plants
2021	1	Release desirable regeneration and hickory using small group selection.
2021	2	Release desirable regeneration and hickory using small group selection. Consider thinning between group selections.
2021	3	Consider creating some small canopy gaps
2022	5	Consider plantings for nectar, mast and cover.
Ongoing	1-2	Monitor treated areas for new populations of invasive plants and remove them if noted.
Ongoing	3-5	Monitor and remove invasive plants
Ongoing	4	Monitor for development of trees. Cut them to ensure retention of open condition.
Ongoing	All	Continue to maintain roads, trails and other infrastructure
Ongoing	All	Mark and periodically maintain boundary lines
2028	All	Re-inventory property and update forest management plan

28

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NRCS PRACTICES TO APPLY FOR

Stand	Unit (Acres)	NRCS Practice Code*	Treatment Activity (Short Description)	Planned Date**	Completed Date	Assistance Program Used?	Cost	Income
1-2	13.4 ac.	314	Invasive plant treatment	2020-2021				
2	150	655	Improve trail drainage	2020				
4	1-3 acres	649	Wood duck boxes	2020				
1-2	13.4 ac.	056	Release regeneration	2021				
3	0.24 ac.	666	Create canopy gaps	2021				
5	0.14 ac.	327	Plantings	2022				

29

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27

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British Columbia Ministry of Forests, "Stand Level Biodiversity Web Based Training Course - Module 3A", 2002.
<http://www12.gov.bc.ca/http/training/00001/module03/standstructure2.htm>, accessed on January 2, 2013.

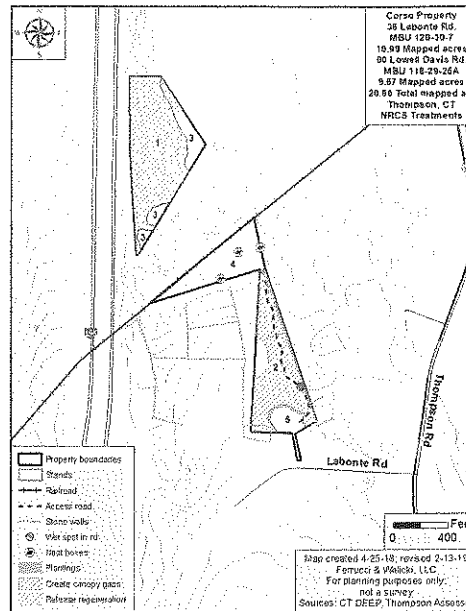
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Hagenbuch, Steve, Katherine Minares, Jim Shallow, Kristen Sharpless, and Michael Snyder, *Silviculture with Birds in Mind*, Huntington & Waterbury, VT: Audubon Vermont & VT FPR, 2011. Printed guide.

30

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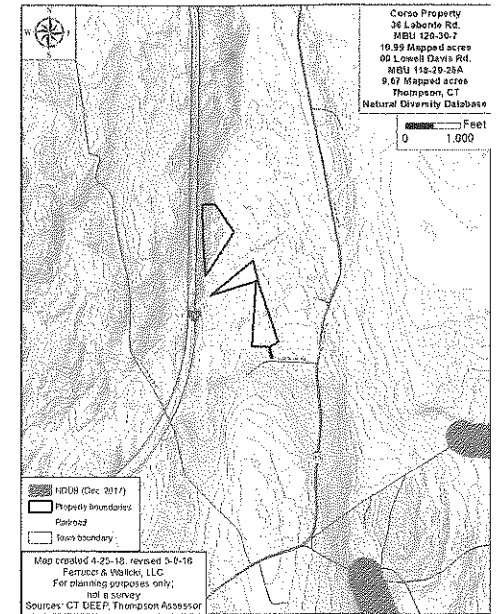
MAPS - CORSO NRCS TREATMENTS MAP



31

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Corso Natural Diversity Database Map



32

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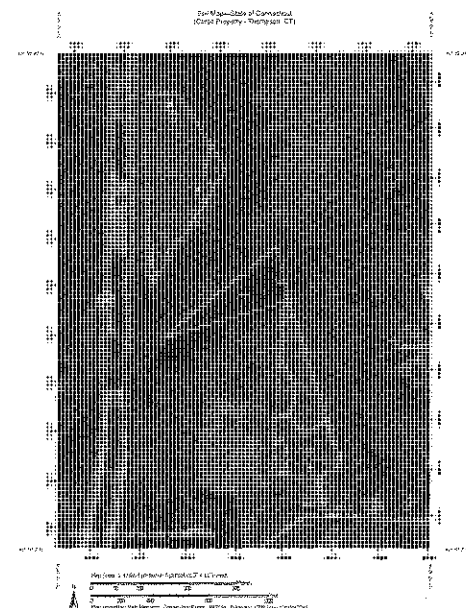
Conserved Properties near the Corso Property



33

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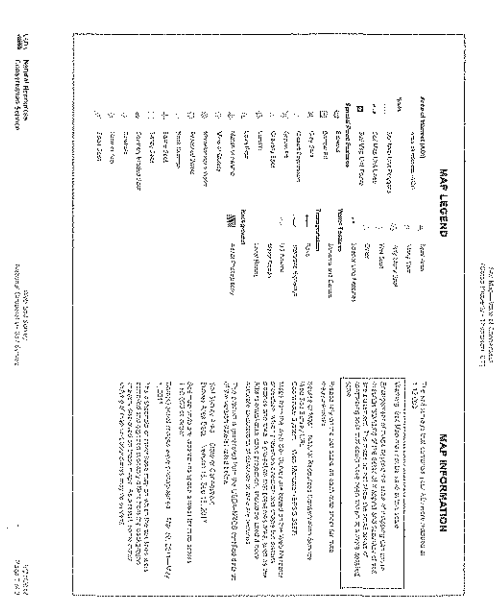
Corso Soils Map



34

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Corso Soils Charts



35

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Map Unit Legend

Map Unit Symbol	Map Unit Name	Percent in ACP	Percent of ACP
1	Openly accessible and average 20% to 30% percent canopy, very open	0.0	0.0%
2	Openly accessible and average 30% to 40% percent canopy, very open	4.4	2.1%
3	Openly accessible and average 40% to 50% percent canopy, very open	3.0	1.4%
4	Openly accessible and average 50% to 60% percent canopy, very open	3.0	1.4%
5	Openly accessible and average 60% to 70% percent canopy, very open	0.4	0.2%
6	Openly accessible and average 70% to 80% percent canopy, very open	0.4	0.2%
7	Openly accessible and average 80% to 90% percent canopy, very open	0.4	0.2%
8	Openly accessible and average 90% to 100% percent canopy, very open	0.4	0.2%
9	Openly accessible and average 100% to 110% percent canopy, very open	0.4	0.2%
10	Openly accessible and average 110% to 120% percent canopy, very open	0.4	0.2%
11	Openly accessible and average 120% to 130% percent canopy, very open	0.4	0.2%
12	Openly accessible and average 130% to 140% percent canopy, very open	0.4	0.2%
13	Openly accessible and average 140% to 150% percent canopy, very open	0.4	0.2%
14	Openly accessible and average 150% to 160% percent canopy, very open	0.4	0.2%
15	Openly accessible and average 160% to 170% percent canopy, very open	0.4	0.2%
16	Openly accessible and average 170% to 180% percent canopy, very open	0.4	0.2%
17	Openly accessible and average 180% to 190% percent canopy, very open	0.4	0.2%
18	Openly accessible and average 190% to 200% percent canopy, very open	0.4	0.2%
19	Openly accessible and average 200% to 210% percent canopy, very open	0.4	0.2%
20	Openly accessible and average 210% to 220% percent canopy, very open	0.4	0.2%
21	Openly accessible and average 220% to 230% percent canopy, very open	0.4	0.2%
22	Openly accessible and average 230% to 240% percent canopy, very open	0.4	0.2%
23	Openly accessible and average 240% to 250% percent canopy, very open	0.4	0.2%
24	Openly accessible and average 250% to 260% percent canopy, very open	0.4	0.2%
25	Openly accessible and average 260% to 270% percent canopy, very open	0.4	0.2%
26	Openly accessible and average 270% to 280% percent canopy, very open	0.4	0.2%
27	Openly accessible and average 280% to 290% percent canopy, very open	0.4	0.2%
28	Openly accessible and average 290% to 300% percent canopy, very open	0.4	0.2%
29	Openly accessible and average 300% to 310% percent canopy, very open	0.4	0.2%
30	Openly accessible and average 310% to 320% percent canopy, very open	0.4	0.2%
31	Openly accessible and average 320% to 330% percent canopy, very open	0.4	0.2%
32	Openly accessible and average 330% to 340% percent canopy, very open	0.4	0.2%
33	Openly accessible and average 340% to 350% percent canopy, very open	0.4	0.2%
34	Openly accessible and average 350% to 360% percent canopy, very open	0.4	0.2%
35	Openly accessible and average 360% to 370% percent canopy, very open	0.4	0.2%
36	Openly accessible and average 370% to 380% percent canopy, very open	0.4	0.2%
37	Openly accessible and average 380% to 390% percent canopy, very open	0.4	0.2%
38	Openly accessible and average 390% to 400% percent canopy, very open	0.4	0.2%
39	Openly accessible and average 400% to 410% percent canopy, very open	0.4	0.2%
40	Openly accessible and average 410% to 420% percent canopy, very open	0.4	0.2%
41	Openly accessible and average 420% to 430% percent canopy, very open	0.4	0.2%
42	Openly accessible and average 430% to 440% percent canopy, very open	0.4	0.2%
43	Openly accessible and average 440% to 450% percent canopy, very open	0.4	0.2%
44	Openly accessible and average 450% to 460% percent canopy, very open	0.4	0.2%
45	Openly accessible and average 460% to 470% percent canopy, very open	0.4	0.2%
46	Openly accessible and average 470% to 480% percent canopy, very open	0.4	0.2%
47	Openly accessible and average 480% to 490% percent canopy, very open	0.4	0.2%
48	Openly accessible and average 490% to 500% percent canopy, very open	0.4	0.2%
49	Openly accessible and average 500% to 510% percent canopy, very open	0.4	0.2%
50	Openly accessible and average 510% to 520% percent canopy, very open	0.4	0.2%
51	Openly accessible and average 520% to 530% percent canopy, very open	0.4	0.2%
52	Openly accessible and average 530% to 540% percent canopy, very open	0.4	0.2%
53	Openly accessible and average 540% to 550% percent canopy, very open	0.4	0.2%
54	Openly accessible and average 550% to 560% percent canopy, very open	0.4	0.2%
55	Openly accessible and average 560% to 570% percent canopy, very open	0.4	0.2%
56	Openly accessible and average 570% to 580% percent canopy, very open	0.4	0.2%
57	Openly accessible and average 580% to 590% percent canopy, very open	0.4	0.2%
58	Openly accessible and average 590% to 600% percent canopy, very open	0.4	0.2%
59	Openly accessible and average 600% to 610% percent canopy, very open	0.4	0.2%
60	Openly accessible and average 610% to 620% percent canopy, very open	0.4	0.2%
61	Openly accessible and average 620% to 630% percent canopy, very open	0.4	0.2%
62	Openly accessible and average 630% to 640% percent canopy, very open	0.4	0.2%
63	Openly accessible and average 640% to 650% percent canopy, very open	0.4	0.2%
64	Openly accessible and average 650% to 660% percent canopy, very open	0.4	0.2%
65	Openly accessible and average 660% to 670% percent canopy, very open	0.4	0.2%
66	Openly accessible and average 670% to 680% percent canopy, very open	0.4	0.2%
67	Openly accessible and average 680% to 690% percent canopy, very open	0.4	0.2%
68	Openly accessible and average 690% to 700% percent canopy, very open	0.4	0.2%
69	Openly accessible and average 700% to 710% percent canopy, very open	0.4	0.2%
70	Openly accessible and average 710% to 720% percent canopy, very open	0.4	0.2%
71	Openly accessible and average 720% to 730% percent canopy, very open	0.4	0.2%
72	Openly accessible and average 730% to 740% percent canopy, very open	0.4	0.2%
73	Openly accessible and average 740% to 750% percent canopy, very open	0.4	0.2%
74	Openly accessible and average 750% to 760% percent canopy, very open	0.4	0.2%
75	Openly accessible and average 760% to 770% percent canopy, very open	0.4	0.2%
76	Openly accessible and average 770% to 780% percent canopy, very open	0.4	0.2%
77	Openly accessible and average 780% to 790% percent canopy, very open	0.4	0.2%
78	Openly accessible and average 790% to 800% percent canopy, very open	0.4	0.2%
79	Openly accessible and average 800% to 810% percent canopy, very open	0.4	0.2%
80	Openly accessible and average 810% to 820% percent canopy, very open	0.4	0.2%
81	Openly accessible and average 820% to 830% percent canopy, very open	0.4	0.2%
82	Openly accessible and average 830% to 840% percent canopy, very open	0.4	0.2%
83	Openly accessible and average 840% to 850% percent canopy, very open	0.4	0.2%
84	Openly accessible and average 850% to 860% percent canopy, very open	0.4	0.2%
85	Openly accessible and average 860% to 870% percent canopy, very open	0.4	0.2%
86	Openly accessible and average 870% to 880% percent canopy, very open	0.4	0.2%
87	Openly accessible and average 880% to 890% percent canopy, very open	0.4	0.2%
88	Openly accessible and average 890% to 900% percent canopy, very open	0.4	0.2%
89	Openly accessible and average 900% to 910% percent canopy, very open	0.4	0.2%
90	Openly accessible and average 910% to 920% percent canopy, very open	0.4	0.2%
91	Openly accessible and average 920% to 930% percent canopy, very open	0.4	0.2%
92	Openly accessible and average 930% to 940% percent canopy, very open	0.4	0.2%
93	Openly accessible and average 940% to 950% percent canopy, very open	0.4	0.2%
94	Openly accessible and average 950% to 960% percent canopy, very open	0.4	0.2%
95	Openly accessible and average 960% to 970% percent canopy, very open	0.4	0.2%
96	Openly accessible and average 970% to 980% percent canopy, very open	0.4	0.2%
97	Openly accessible and average 980% to 990% percent canopy, very open	0.4	0.2%
98	Openly accessible and average 990% to 1000% percent canopy, very open	0.4	0.2%
99	Openly accessible and average 1000% to 1010% percent canopy, very open	0.4	0.2%
100	Openly accessible and average 1010% to 1020% percent canopy, very open	0.4	0.2%

cull
An inventory of standing trees during which information about species, size and other characteristics is gathered.

cull
A tree of such poor quality that it is not suitable for sawtimber. Culls are sometimes sold for firewood.

dbh
Diameter of a tree outside the bark measured at breast height.

den tree
A tree with a hollow or cavity large enough to potentially be used by wildlife (a.k.a. cavity tree).

even-age management
Managing trees in such a way that it creates a single or two age classes in a stand.

free-to-grow
A condition in which seedlings, saplings, or other smaller, younger vegetation has sufficient sunlight to allow them to continue to develop. This is achieved when there is little to no competing vegetation overtopping the smaller vegetation.

girdle
To attempt to kill a tree by cutting through the outer bark and cambium around its entire circumference.

hardwood
A deciduous, broadleaf tree. Angiosperm.

high-grade
A logging practice in which only the best trees are removed leaving poorer quality and/or damaged trees.

International Rule
A type of log (measuring) rule. The International Rule is the legal standard for measuring sawtimber in Connecticut.

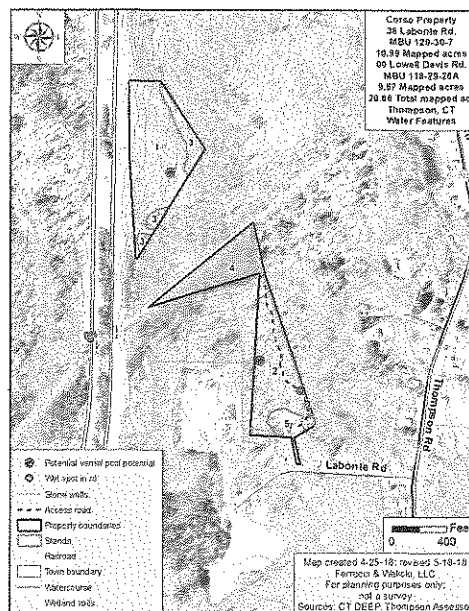
live crown ratio
The ratio of live crown length to total tree height.

mast
Seeds and nuts produced by trees and shrubs. Mast is often discussed in terms of hard and soft and is crucial to providing food for wildlife.

mibf
One thousand board feet (of sawtimber) or "a thousand".

midstory
Level of strata of the forest layer from between 5-30 feet in height. Dense foliage in this stratum is important for nesting and cover for many forest breeding birds and other wildlife.

Corso Water features



mixedwood
A forested area that contains both hardwood and softwood tree species in the main canopy. Typically a mixedwood stand contains between 25-75% softwood.

overstory
The portion of trees in a stand which form the upper canopy.

overstory removal
An even age silvicultural treatment type in which most or all of the overstory trees are removed in order to release established regeneration.

poletimber
Trees from 5 to 11 inches diameter at breast height (4.5 feet above ground). Also pole or pole tree.

regeneration
New trees, generally seedlings, saplings and sprouts. Regenerating a forest involves replanting existing trees with new ones.

release
To free a desirable tree from competition by cutting or otherwise killing one or more adjacent competing trees or shrubs.

sapling
A tree from 1 to 5 inches diameter.

sawlog
A log that is straight, large and sound enough to be sawn into boards. Sawlogs are usually at least 8 feet long and ten inches or larger in diameter.

sawtimber tree
A tree large enough to contain at least one sawlog. (Saw)timber trees are usually twelve inches or larger in diameter outside the bark at breast height.

seedling
A tree from newly germinated up to 1 inch diameter.

Selection System
A silvicultural system involving the removal of individual trees or groups of trees at regular intervals. This system tends to promote the development of uneven aged forests.

Shelterwood System
A silvicultural system whereby new trees are regenerated under the partial shelter of other trees. This system is one of the options available to regenerate a stand or part of a stand to create an even aged or two-aged forest. (The latter occurs when the overstory trees are not removed following the successful regeneration of trees in the understory).

silvicultural system
A planned program of silvicultural treatments during the entire life of a stand. The main focus is on the methods used to obtain desirable regeneration.

GLOSSARY

acceptable growing stock (AGS)
Trees that are vigorous and now or in the future are capable of producing a sawlog that is at least 8 feet long.

aspect
The general direction in which land slopes.

basal area
A commonly used measure of forest density or stocking. It is measured as the cross sectional area of a tree in square feet at 4.5 feet above ground.

B-level
The stocking level considered optimal for sawtimber growth.

board foot
A measurement unit for lumber volume. One board foot is a piece of wood 1 foot long by 1 foot wide by 1 inch thick (Abbreviated b.f.).

breast height
Measurement at which diameter is generally measured for inventory and timber tally purposes. Breast height is measured at 4.5 feet above the ground. Where there is any slope, breast height is always measured from the highest part of the slope where the ground intersects the tree.

clearcut
An even-age silvicultural technique in which all the trees in an area are removed and - typically - removed. Silvicultural clearcuts generally remove all trees above 2 inches dbh. Commercial clearcuts or "high-grades" remove all the trees of value leaving poorer quality trees of a variety of diameters.

clearcut with reserves
A modified clearcut in which the majority of the trees in an area are cut, but some minimal trees are left standing. Typically reserve trees will allow to mature and will not be cut. This differs from a shelterwood or seed tree harvest in that residual trees following the initial regeneration cut are intended for removal.

clear log
A length of tree stem or cut log that has no horizontal (i.e. side) branches.

coppice
A sprout from roots or stumps. Or a practice of cutting a tree or group of trees to cause them to resprout from the stump or roots.

cord
A measurement unit for firewood. One cord of stacked wood measures 4 feet by 4 feet by 8 feet. 1 cord contains 83 cubic feet of solid wood. (Abbreviated cd).

crown
The top of the tree, including the live branches and the leaves.

silviculture
The science and the art of growing and tending trees for a variety of purposes.

slash
The debris left after logging, pruning or thinning. Slash can include tree tops and unused or unusable portions of the main stems of trees.

softwood
A coniferous, frequently "evergreen" tree. A gymnosperm. Common examples include pine, hemlock, spruce, fir, cedar, and juniper (though the latter is not evergreen).

stand type
A group or community of trees sufficiently uniform with respect to size, species composition, spatial arrangement, age or condition to be distinguished from other groups of trees.

stocking
An indication of the amount or density of trees in a stand.

strata
The different heights of vegetation in the forest. Typically divided into understory, midstory, overstory or superstory. The latter exists when a few trees are at least twice as tall as most trees in the stand.

stumpage
Standing trees, usually associated with volume information and intended for sale.

thinning
A cutting done in immature stands in order to maintain tree health and vigor, stimulate the growth of the trees that remain and increase the total yield of useful material from the stand.

tolerance
The relative ability of a tree species to survive and/or grow in shade.

timber stand improvement (TSI)
Improving a stand of trees, usually by pruning, cut-tree removal or pre-commercial thinning.

unacceptable growing stock (UAGS)
Trees which are either incapable of producing at least an 8 foot long sawlog now or in the future due to defect, rot, branches, etc. or are in poor health, have significant decline/dieback, or are likely to succumb to insect or disease mortality in the near future.

understory
Vegetation in the lower levels or strata of the forest. Frequently is composed of tree seedlings and saplings, shrubs, herbaceous species and/or invasive plants. Dense low-growing vegetation and foliage is important for many species of wildlife which use this stratum of the forest for cover, nesting, and forage opportunities. Can be considered between ground level to 5 feet in height.

uneven-age management
Managing trees in such a way that it creates three or more age classes in a stand. The selection system is most often used to develop uneven-age stands.

Connecticut Wildlife Brush Piles- 645

Conservation Practice Job Sheet

Lifespan - 1 Year

Description

A mound or pile of appropriate woody material, fashioned by piling brush and loose branches on top of a base comprised of larger logs, or other natural materials, to provide cover for wildlife where cover is limited.

Purpose

This practice is used to create cover for many songbirds, small mammals, reptiles, and amphibians when natural cover is limited; such as after clear-cutting. It provides areas for nesting, resting, escape from predators, and protection from harsh weather conditions.

Criteria, Considerations, and Specifications

Brush piles may be built to various dimensions based on the size of available material; however, the size should range between 10 to 20 feet on a side and 4 to 8 feet high.

Materials

Brush piles can be constructed using a variety of materials. Commonly, materials left from timber harvesting, woodland edge development, forest stand improvement, forest opening development and firewood cutting are utilized. Natural features, such as rocks, boulders, and stumps may also be incorporated.

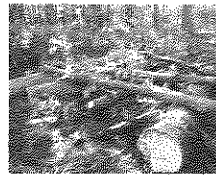
Construction

1. Base Layer:

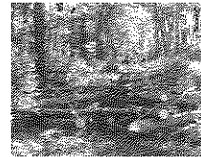
- a. Logs at a minimum of 6-10 inches in diameter are laid at various angles, leaving small openings (6 to 8 inches wide) between base logs for easy wildlife access. Avoid creating parallel runways through the base layer.

- b. Logs of various lengths (that add up to 10 to 20 feet on a side) can be staggered throughout the foundation, with breaks, creating a maze-like environment.

- c. Outer logs should be closer to 20 feet in length to provide stability for the brush pile.



- 3. The foundation should be covered with 2-4 feet of brush, using small limbs, saplings, loose brush, and pine boughs. Larger branches should cover the foundation, and smaller branches placed on top.



- 4. Brush should loosely drape over the edges, with openings (6 to 8 inches in diameter) left on the sides in several places for easy wildlife access and escape.



NOTE: When constructing brush piles using mechanized forestry equipment, it is not possible to construct piles exactly as described. It is suitable if larger logs are clustered on the base and covered with increasingly smaller logs and finely brush, so long as adequate spaces are left for wildlife to enter and exit the pile.

Placement

Several considerations should be made when placing brush piles:

- Multiple brush piles are better than one large pile, providing more opportunities for cover and escape from predators.
- Good locations include adjacent to forest openings, pastures or hay fields; within shrub thickets or fence rows; in field corners; near stone walls and wetlands.
 - On properties with little natural cover, such as after a clear-cut, begin brush piles within 25 feet of woodland edges, and build in towards the center of the habitat patch, resulting in 1-4 brush piles per acre, evenly distributed across the project site.
- Place near wildlife food sources, such as mast and fruit trees.
- Avoid placing brush piles on existing high quality food or cover sources.
- Avoid placing brush piles near houses, barns, or gardens, to prevent situations where wildlife could become a nuisance.

- Keep away from buildings due to flammability.

Variations for Brush Pile Base

- Tree stumps still in place can be incorporated into your brush pile base. Several logs (6 to 10 inches in diameter and 5 to 6 feet long) are placed on top of and around the stump.

- Small rock piles - these should be staggered about 12 inches apart with each pile about 10 inches high and 12 inches across to support next layer of limbs. Existing boulders and rocks on the landscape can be piled together to provide additional den sites; start with the largest rocks on the bottom of the stack to create hiding places between the rocks, and stack brush on top for additional cover.



Other Types of Cover (not for reimbursement)

- Using brush pile - take a cluster of small diameter trees, each tree is cut half way through the trunk about 12-18 inches above the ground; tree tops are folded inwards towards other trees in groups so they rest on the ground or on top of the other half-cut trees.
- Stone walls - may be incorporated into the brush piles base; brush should be placed against the wall with similar

dimensions and distribution to brush piles created in an open space.

- When harvesting trees, leave the crowns of the largest trees (e.g. an oak tree top) for wildlife cover.
- Windrowed brush piles - typically these linear brush piles can best be created following a forestry or tree removal operation. As with other brush pile creation, larger materials should be placed on the bottom at various angles with subsequently smaller material on top. Avoid packing the logs tightly, as this will eliminate any openings for wildlife to enter and exit the linear pile. Windows should range from 10 to 20 feet on a side and 6 to 8 feet high. Windows should have breaks built into them every 50 to 100 feet to provide travel lanes for wildlife.

Additional Notes

- Brush piles are not permanent; new brush needs to be added over time or new piles may need to be constructed. Rot and decay is a natural process and may attract more insects, providing additional food sources.
- Do not use materials that contain toxic substances (i.e. pressure treated lumber/posts, creosote railroad ties, lead painted surfaces, tires, etc.). These substances can cause wildlife mortality either through contact, consumption, or inhalation.

Agenda Item E.c) Applications Received After Agenda
was Published

None

Agenda Item F) Permit Extensions / Changes
None

Agenda Item G.a) Violations & Pending Enforcement Actions

Notice of Violation **VIOL21023**, Jamie Piette, 0 & 73 Center Street (Assessor's map16, block X, lots H & 2), unauthorized construction of retaining wall and associated backfill in or near Little Pond, issued 8/24/21
- status.

Agenda Item G.b) Violations & Pending Enforcement Actions

Notice of Permit Violation **VIOL21036**, Permit IWA20022, Marc Baer, 1227 Thompson Rd (Assessor's map 116, block 24, lot 10), grades not as authorized in modified plan approved by the Commission on 2/9/21.

Agenda Item G.c) Violations & Pending Enforcement Actions

Notice of Violation **VIOL22008**, Rodney Lamay, 0 Quaddick Town Farm Road (Assessor's map 160, block 11, lot 15), unauthorized clearing, cutting & grading in wetlands, issued by Acting Wetland Agent 3/21/22 – status.

Agenda Item G.d) Violations & Pending Enforcement Actions

Notice of Violation **VIOL22014**, Jason Chin & Dannielle Lohler, 150 Wilsonville Rd (Assessor's map 77, block 46, lot 29), construction of detached garage in 100-foot upland review area, issued 6/6/2022 – status.

Agenda Item H

Citizens Comments on Agenda Items

Agenda Item I Other Business

a) Training Options

b) Update on Proposed Revisions to Subdivision Regulations.

Agenda Item J Reports

1 Budget & Expenditures

2 Wetlands Agent Report

Agenda Item K, Correspondence - None

Agenda Item L, Signing of Mylars -None

Agenda Item M, Comments by Commissioners

Agenda Item N, Adjournment