

MEETING NOTICE AND AGENDA
MANSFIELD INLAND WETLANDS AGENCY

Monday, July 6, 2015 ■ 7:00 PM

Audrey P. Beck Municipal Building ■ 4 South Eagleville Road ■ Council Chambers

- 1. Call to Order**
- 2. Roll Call**
- 3. Review of Minutes**
 - a. 6-1-15 – Meeting Minutes
 - b. 6-10-15 – Field Trip Minutes
- 4. Communications**
 - a. Conservation Commission Minutes
 - b. Monthly Business Memorandum
- 5. Public Hearing**

7:00 p.m.

W1548 - C. & L. Niarhakos, 101 East Rd, Re-Subdivision Application
Memo from Inland Wetlands Agent
- 6. Old Business**
 - a. **W1548 - C. & L. Niarhakos, 101 East Rd, Re-Subdivision Application**
 - b. **W1549 – Jensen’s Rolling Hills Mobile Park, Middle Turnpike-Site Restoration**
Memo from Inland Wetlands Agent
 - c. **W1550 – W. St. Martin, 601 Storrs Road-Pond Clean Out**
Memo from Inland Wetlands Agent
 - d. **W1551 – M. McDonald, 93 Candide Lane-Above Ground Pool**
Memo from Inland Wetlands Agent
 - e. **W1552 – L. and L. Wasiele, 357 Gurleyville Road-Addition**
Memo from Inland Wetlands Agent
 - f. **Other**
- 7. New Business**
 - a. **W1553 – I. and E. Hanka, 225 Mulberry Rd,-Above Ground Pool**
Memo from Inland Wetlands Agent
 - b. **W1554- Storrs Friends Meeting, 57 Hunting Lodge Rd, - Site Improvements**
Memo from Inland Wetlands Agent
 - c. **Other**
- 8. Reports from Officers and Committees**
- 9. Other Communications and Bills**
 - a. 6/12/15 Determination to Approve from DEEP Re: Bridge Replacement over Willimantic River
 - b. 6/2/15 Permit from DEEP Re: CT Water Company Public Water System to UConn and Mansfield
- 10. Adjournment**

DRAFT MINUTES
MANSFIELD INLAND WETLANDS AGENCY
Regular Meeting
Monday June 1, 2015
Council Chamber, Audrey P. Beck Municipal Building

Members present: J. Goodwin, B. Chandy, G. Lewis (7:02), B. Pociask, P. Plante, K. Rawn, B. Ryan, V. Ward,
Members absent: R. Hall
Alternates present: P. Aho, S. Westa
Alternates absent: K. Holt
Staff present: Jennifer Kaufman, Inland Wetlands Agent

Chairman Goodwin called the meeting to order at 7:00 p.m. and appointed Aho to act. Westa was appointed to act until Lewis arrived at 7:02 p.m.

Approval of Minutes:

May 4, 2015 Regular Meeting: Rawn MOVED, Plante seconded, to approve the 5-4-15 meeting minutes as presented. MOTION PASSED UNANIMOUSLY. Chandy noted for the record that she listened to the recording.
May 13, 2015 Field Trip: Aho MOVED, Ryan seconded, to approve the 5-13-15 Field Trip Minutes as presented. MOTION PASSED with Goodwin, Ryan and Aho in favor and all others disqualified.

Communications:

Noted.

Old Business:

W1549 – Jensen’s Rolling Hills Mobile Park, Middle Turnpike-Site Restoration

Ryan MOVED, Pociask seconded, to postpone action on the application submitted by Jensen’s Inc. (IWA File #1549) under the Inland Wetlands and Watercourses Regulations of the Town of Mansfield for wetland restoration on property owned by the applicant, located at Jensen’s Rolling Hills Mobile Home Park, Middle Turnpike, as shown on a map dated 4/14/2015 to allow the applicant to submit a more detailed restoration plan. MOTION PASSED UNANIMOUSLY.

New Business:

W1378 – Storrs Center, Phase 3, Storm Water Improvements

Aho MOVED, Ryan seconded, that the proposed adjustment to Storrs Center Phase 3 noted on a map dated 5/14/15 is consistent with the original wetland permit (File # W1378) approved on October 1, 2007. MOTION PASSED UNANIMOUSLY.

Public Hearing:

W1548 - C. & L. Niarhakos, 101 East Rd, Re-Subdivision Application

Chairman Goodwin opened the Public Hearing at 7:08 p.m. Members present were Goodwin, Chandy, Lewis, Pociask, Rawn, Ryan, Ward and alternates Aho and Westa. Aho was appointed to act.

Wetlands Agent Kaufman read the Legal Notice as it appeared in The Chronicle on 5-19-15 and 5-27-15 and noted the following communications received and distributed to members: a 5-28-15 memo from Jennifer Kaufman, Wetlands Agent; and a 5-21-15 memo from Derek Dilaj, Assistant Town Engineer.

Edward Pelletier, Datum Engineering and Surveying, acting on behalf of the applicant, requested that this matter be tabled to allow the project engineer time to review the comments of the Assistant Town Engineer and revise the plans as necessary. He will make a full presentation at the next meeting.

Goodwin noted there were no comments from the Commission or the Public. At 7:13 p.m. Pociask MOVED, Ryan seconded, to continue the Public Hearing to the 7/6/15 meeting. MOTION PASSED UNANIMOUSLY.

Old Business Continued:

W1548 - C. & L. Niarhakos, 101 East Rd, Re-Subdivision Application

Item tabled pending continued Public Hearing on 7/6/15.

New Business Continued:

W1550 – W. St. Martin, 601 Storrs Road-Pond Clean Out

Ryan MOVED, Chandy seconded, to receive the application submitted by William St. Martin (IWA File #W1550) under the Wetlands and Watercourses Regulations of the Town of Mansfield for dredging an existing pond on property located at 601 Storrs Road, as shown on a map dated 5/14/2015 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments. MOTION PASSED UNANIMOUSLY.

W1551 – M. McDonald, 93 Candide Lane-Above Ground Pool

Chandy MOVED, Ryan seconded, to receive the application submitted by Mark McDonald (IWA File #W1551) under the Wetlands and Watercourses Regulations of the Town of Mansfield for installation of above-ground pool on property located at 93 Candide Lane as shown on a map dated 5/14/2015 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments. MOTION PASSED UNANIMOUSLY.

W1552 – L. and L. Wasiele, 357 Gurleyville Road-Addition

Rawn MOVED, Ryan seconded, to receive the application submitted by Larry and Laurie Wasiele (IWA File #W1552) under the Inland Wetlands and Watercourses Regulations of the Town of Mansfield for a one-bedroom addition, on property located at 357 Gurleyville Road, as shown on a map dated 5/28/2015 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments. MOTION PASSED UNANIMOUSLY.

Reports from Officers and Committees:

No reports were offered.

Other Communications and Bills:

Noted.

Adjournment:

Chairman Goodwin set a Field Trip for 6/10/15 at 3:00 p.m. and declared the meeting adjourned at 7:15 p.m.

Respectfully submitted,

Vera Ward, Secretary

DRAFT MINUTES

MANSFIELD PLANNING AND ZONING COMMISSION
INLAND WETLANDS AGENCY
CONSERVATION COMMISSION
FIELD TRIP

Wednesday, June 10, 2015

Members present: J. Goodwin, V. Ward, P. Aho, B. Ryan (except item 2)
Staff present: J. Kaufman, Inland Wetlands Agent, except item 1
C. Hirsch, Zoning Agent, items 1 & 4

The field trip began at 3:00 p.m.

PZC File#1334-Special Permit, Efficiency Unit, 10 Meadowood Road; Germaine Mama
Members observed current conditions, and site characteristics. No decisions were made.

W1551 – M. McDonald, 93 Candide Lane-Above Ground Pool
Members were met on site by Mark McDonald. Members observed current conditions, and site characteristics. No decisions were made.

W1550 – W. St. Martin, 601 Storrs Road-Pond Clean Out
Members were met on site by William St. Martin. Members observed current conditions, and site characteristics. No decisions were made.

PZC File#1333-Special Permit, Efficiency Unit, 17 Olsen Drive; Adam Lambert
Members observed current conditions, and site characteristics. No decisions were made.

W1552 – L. and L. Wasiele, 357 Gurleyville Road-Addition
Members were met on site by Larry and Laurie Wasiele. Members observed current conditions, and site characteristics. No decisions were made.

The field trip ended at approximately 4:45 p.m.

Vera S. Ward, Secretary

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Town of Mansfield
CONSERVATION COMMISSION
Meeting of 17 June 2015
Conference B, Audrey P. Beck Building
(draft) MINUTES

Members present: Aline Booth (Alt.), Joan Buck (Alt.), Neil Facchinetti, Quentin Kessel, Scott Lehmann, Grant Meitzler, John Silander, Michael Soares. *Members absent:* Robert Dahn.
Others present: Jennifer Kaufman (Wetlands Agent); Bill & Joy St. Martin.

1. The meeting was **called to order** at 7:31p by Chair Quentin Kessel. Alternate Buck was designated a voting member for this meeting.

2. The draft **minutes** of the 20 May meeting were approved, with the slight change that Attachment 1 be re-titled "Scott Lehmann's Report on 13 May 2015 IWA Field Trip".

3. IWA referrals.

a. **W1550 (St. Martin, 601 Storrs Rd).** Bill St. Martin described the proposed project, referring to a large to-scale map of the site. He wishes to restore an old pond, now filled with silt, in a strip of wetland through which an intermittent stream flows. The pond area (approximately 400 ft²) would be temporarily dewatered to allow dredging. Approximately 580 yd³ of material would be excavated, using machinery outside the wetland to the extent possible, and piled to dry away from the wetland. After some discussion, the Commission agreed unanimously (**motion:** Silander, Buck) that the proposed project would have an impact on wetlands, but a positive one, inasmuch as it would restore a natural component of the wetland system. The St. Martins left the meeting.

b. **W1551 (McDonald, 93 Candide La).** The applicants propose to install a 35 ft diameter above-ground pool, 35 ft at its closest point from a wetland through which an intermittent stream flows. The site slopes toward the wetland and would need to be leveled. Water discharged from the pool into the wetland would be filtered to remove chlorine. The Commission unanimously agreed (**motion:** Soares, Silander) that this project is unlikely to have a significant on wetlands, provided standard sedimentation controls are in place during site preparation and installation and are left in place until the area is stabilized.

c. **W1552 (Wasiele, 357 Gurleyville Rd).** The applicants propose to add to their house a 19.7 x 20 ft bedroom, which, at its closest point, would be 60 ft from the center of an intermittent stream. Booth asked whether the addition would require designating a reserve septic area, noting that none is shown on the map. Kaufman replied that it would, and thought this area might be across the intermittent stream. After some discussion, the Commission agreed unanimously (**motion:** Kessel, Silander) to advise the IWA that:

Since the map provided does not indicate where the reserve septic area would be, the Commission does not have enough information to assess the wetlands impact of this project. A reserve septic system that involves crossing the intermittent stream could have a significant impact on wetlands.

4. PZC referral: PZC 1335 (Willard J. Stearns & Sons, Browns & Coventry Rds).

{Lehmann, who owns an adjoining property at 532 Browns Rd, did not participate in discussion of this item.} Town Planner Linda Painter has forwarded conceptual yield & layout plans for a

subdivision on 36.6 acres owned by Willard J. Stearns & Sons with frontage on Browns & Coventry Rds. Such plans are part of a pre-application process designed to elicit comments before detailed engineering plans are submitted.

The yield plan calls for nine lots, including one for an existing house at 522 Browns Rd. The layout plan reduces the number of new driveways from 8 to 3: one on Browns Rd serving a single house west of 542, and two common driveways from Coventry Rd serving 3 and 4 houses respectively. To access the house site on Lot 1, the 3-lot common driveway would cross the wetland that curves through the property from S to NW. The layout plan specifies 3.9 acres of dedicated open space at the corner of Browns and Coventry Rds, plus 10.9 acres of conservation easement, most of it in strips buffering the development from adjacent properties and from Coventry Rd. Kaufman indicated that the Town might build a short trail to a viewpoint in the dedicated open space, but that it would not propose any trails within conservation easements on private land.

Booth asked whether the proposed subdivision constituted a re-subdivision of the property, which would require a public hearing. Kaufman will find out.

Soares wondered why a layout with large lots served by common driveways qualifies as a "Conservation Subdivision," when the houses could have been more closely clustered. The answer seems to be that the layout plan is better than the yield plan (e.g., in protecting more land with conservation easements).

The Commission agreed (without formal motion) to make the following comments about the conceptual layout plan:

- a. The layout plan does protect more open space than the yield plan and maintains a buffer along Coventry Rd with fewer driveway cuts.
- b. The layout plan does not promote conservation goals by clustering houses.
- c. Access to the house site on Lot 1 requires a wetlands crossing, a significant wetlands impact that is not consistent with the conservation goals of the shared driveway permission.
- d. Do the driveways shared by 3 and 4 houses provide adequate access for emergency vehicles?
- e. Joining the conservation easement along the SW boundary to the conservation easement adjacent to the open space dedication would (i) protect the watercourse (not shown on the map) connecting wetland on Coventry Rd to the swath of wetland curving from S-to-NW through the property and (ii) help avoid fragmentation of wildlife habitat.
- f. While not all watercourses are wetlands, they may contribute to the functioning of wetlands and should be shown on site maps.
- g. The Commission appreciates the opportunity to make comments on subdivision layout prior to the preparation of engineering plans.

5. Bicentennial Pond trail. The Town is re-applying for a DEEP Recreational Trails grant to construct a wheelchair-accessible trail, with amenities, around Bicentennial Pond. One section of it would largely coincide with Byron's trail, which would be upgraded. Some open space money might be used to make up the Town's 20% share of the cost, if the grant is awarded. The Commission unanimously agreed (**motion:** Soares, Buck) that this is a worthy project, which the Commission fully supports.

6. Agenda clean-up. The Commission agreed that agendas for its meetings should indicate what is likely to be discussed and, accordingly, agreed that only the following items under "Continuing Business" should be carried forward:

- Review of Monitoring Procedures for Town-Owned Easements

- Mansfield Tomorrow
- Town of Coventry/Mansfield Control of Fanwort in Eagleville Lake
- UConn Agronomy Farm

7. Storrs Downtown hazardous tree removal. Thirteen trees in the Storrs Center development have been identified as “hazardous” and are to be (or have been) removed. No one could tell from the map supplied just where they are (or were).

8. Adjourned at 9:15p. Next meeting: 7:30p, Wednesday, 15 July 2015.

Scott Lehmann, Secretary, 19 June 2015.

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Town of Mansfield

Inland Wetlands Agency

Date: June 29, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: Monthly Business Report

Mansfield Auto Parts - Route 32

On June 25, 2015, I monitored the site. Items identified during my site inspection in April have been removed and there were no cars or automobile parts that could possibly contain oil or other fluids located within 25 feet of the wetlands.

Storage of Potentially Hazardous Materials in Sheds within the Upland Review Area

At the May meeting, the IWA asked me to investigate whether or not a town Inland Wetlands Agency can regulate the type of materials stored in a shed located within the upland review area. I spoke with Darcy Winther, an Environmental Analyst with CT DEEP's Inland Water Resources Division. In addition, she emailed the response below.

"Pursuant to the Connecticut Inland Wetlands and Watercourses Act (IWWA), a municipal inland wetlands agency regulates activities affecting the wetlands and watercourses within the territorial limits of the municipality. In response to your inquiry "can a municipal Inland Wetlands Agency regulate the type of materials stored in a shed located within the upland review area" the answer is it depends on the facts and circumstances. The question asked is very general.

A municipal inland wetlands agency needs to ask: "what is the regulated activity?" (See definition of "regulated activity" in the IWWA and your regulations). Is a person proposing to build a shed to store materials? If so, the type of material being stored may be relevant to the review of the application. For example, is the shed being built for commercial storage? If yes, does the shed have a drain that outlets to a nearby wetland or watercourse? If yes, what is the material that will be stored? Is it possible that the material may be washed down the drain? The inland wetlands agency has the right to gather enough information to make an informed decision based on facts as to the adverse impact to wetlands or watercourses as a result of the proposed regulated activity.

It is important to note that case law over the years has established that if the agency wants to deny the permit based on the material being stored, the agency needs to show an adverse impact to the wetland or watercourse that would be caused by the material. A decision to deny a permit must be based on substantial evidence supported by credible expert testimony and determination of factual issues that support the conclusion that an adverse impact to the wetland or watercourse has been demonstrated. Evidence may not be speculative: "concerns" and "possibilities" cannot ground a determination of adverse impact. An agency cannot conclude that an adverse impact would result simply because "chemicals" would enter wetlands.

It may be “easier” to obtain expert testimony and facts as to the adverse impact of such material storage to wetlands or watercourses if the storage is of a commercial nature, large facility, etc. It is not so easy to link the storage of residential products in a backyard shed, such as a single can of bug spray or weed control spray, to an adverse impact to the wetland and obtain expert testimony to support that adverse impact. In fact, the Inland Wetlands and Watercourses Act provides an exemption (permitted operation and use) for “uses incidental to the enjoyment and maintenance of residential property”.

Bottom line... absent evidence that identifies and specifies the actual harm resulting therefrom, a municipal inland wetlands agency cannot find that the proposed activities will, or are likely to, adversely impact wetlands or watercourses. The case law that really drove home the court’s opinion that municipal inland wetlands agencies need to determine the adverse impact from an activity and base such determination on substantial evidence is the River Bend v. Simsbury court case.”

Establishing Fines for Wetlands Violations

The potential for establishing fines for wetlands violations has come up in a few instances over the past year that I have served as Mansfield’s Inland Wetlands Agent. As you know, currently, the Town does not have any way to fine someone who has either completed work in the upland review area without a permit or caused adverse impacts to the wetlands because of an unpermitted activity. While I believe that the goal of staff and the IWA should always be to assist in bringing violations into compliance with the regulations and to protect the wetlands, a financial penalty for working without a permit could serve as a disincentive to future violations. The Conservation Commission has also raised concerns with the lack of a fine for violations in its review of the application for site restoration at Jensen’s Mobile Home Park (File # W1549). According to CGS Chapter 440 Sec. 22a-42g (a) any municipality may establish, by ordinance, a fine for violations of regulations adopted pursuant to section 22a-42. If you agree that staff should begin working with the Agency on this issue, we will work on drafting something for the Agency to send to the Council for their consideration.

Agent Approvals

- None



Town of Mansfield

Department of Planning and Development

Date: July 1, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: 101 East Road (File #W1548)
C. and L. Niarhakos.
Description of work: 3 Lot Subdivision
Map Date: March 30, 2015, revised through June 21, 2015

Notifications

- The applicant has paid the required application fee
- The applicant has submitted certified mail receipts for notices mailed to abutters
- The applicant has submitted certified mail receipts for notice mailed to Windham Water Works and proof of notice to the Connecticut DPH

Project Overview

The applicants propose to subdivide a 14.56-acre parcel into 3 lots. There is an existing single family dwelling located on the property and the applicants are proposing 2 new lots for single family dwellings east of the existing house. There are two major forested wetlands on the site, which, according to the field survey completed by John Ianni, compose 24.5% of the property. The wetland located on the southwest portion of the property is associated with the existing house lot, and no new activities are proposed here. The wetland that extends from the UConn property south onto the existing property divides lots two and three. The abutting property owners to the east have expressed concern that the proposed subdivision will cause increased runoff onto their property. Mary and Ross Harper of 129 East Road submitted a report to dated February 12, 2015 to the Agency detailing these concerns was submitted to the Inland Wetland Agency on February 17, 2015.

The applicants propose to install a storm water drainage structure at an existing culvert on East Road. This will disturb 82 square feet of wetlands but will improve a damaged headwall at an existing drainage structure which currently poses a safety hazard along East Road. The wetlands in this location are a result of surface drainage. While the construction of the storm water drainage structure will be activity in the wetlands, in my opinion, this will be a necessary improvement to an existing structure.

On both of the new lots, the applicants are proposing storm water detention basins so that any storm water from the construction activities and the increase in impervious surface is managed on site. In my memo of May 28, 2015, I recommended that 1) the applicants move the storm water basin on lot 2 as far away from

wetlands as possible and 2) move the storm water basin on lot 3 as far away as possible from the house located at 129 East Road so that their property would not be adversely impacted by the potential increase in runoff. The applicants have submitted revised plans indicating that the storm water basin on lot 3 has been moved over two hundred feet to the northeast, which will direct storm water northeast of the house located at 129 East Road. In my opinion, any increase in storm water that may result from the construction and increase in impervious surface will flow to this detention basin, filter and slow the storm water that may flow into the wetlands and, thus, will avoid adverse impacts to the wetlands. In order to move the storm water detention basin further away from the neighbors, the applicants have moved it within the proposed conservation easement area. This will be an item for PZC to review at a later date, if the applicants submit their subdivision application to PZC. The applicants did state that if this portion of the conservation easement area was excluded, they still would meet the open space dedication requirements of Mansfield's Subdivision Regulations.

The storm water detention basin on lot 2 has been moved further north by approximately 60 feet and moved approximately 3 feet further away from the edge of wetlands. While the storm water detention basin is close, in my opinion, neither the construction nor location of this basin will adversely affect the wetlands. There are adequate sedimentation and erosion controls shown on the plan that will protect the wetlands during construction and the detention basin will be designed to detain and filter the water slowly into the wetlands.

Because the majority of the potential impact to wetlands is related to the potential increase in storm water resulting from site disturbance and increase of impervious surfaces, staff referred the application to Derek Dilaj, P.E., Assistant Town Engineer. In my May 28, 2015 Memo, I stated that he suggested that the applicants consider changes to the site plan and that he had requested clarification on some portions of the plan. Mr. Dilaj, is currently reviewing the June 21 plan and will provide an opinion regarding these modification that will be handed out at your meeting.

The Conservation Commission reviewed the application at its May 20, 2015 meeting and had the following comments:

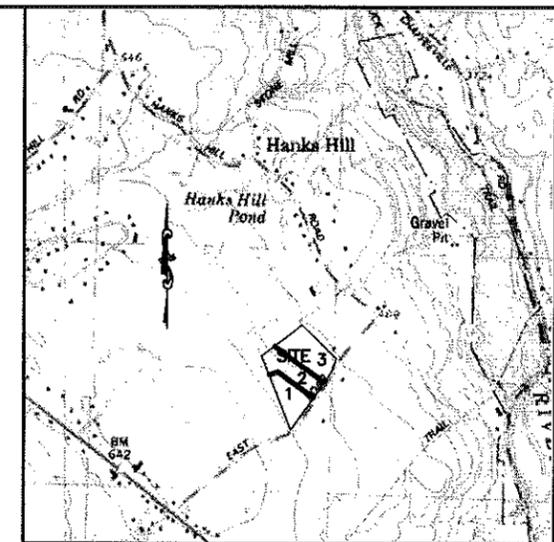
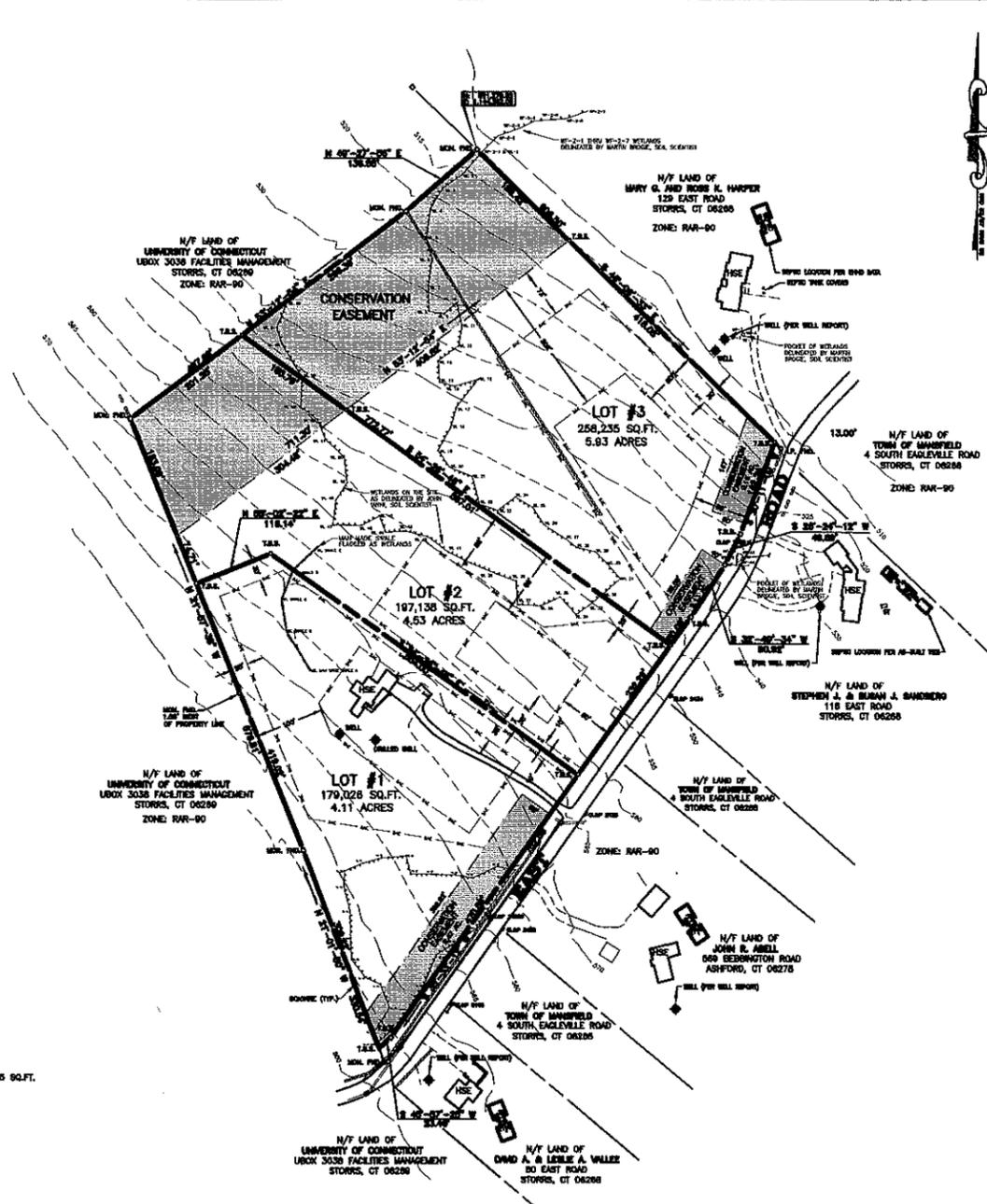
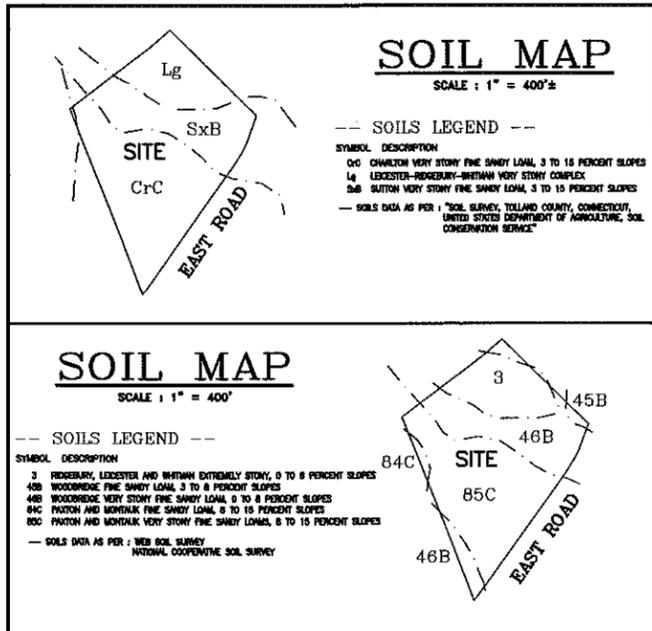
The Commission is uneasy about the potential wetlands impact of the proposed development. Nearly all of the proposed work on Lots 2 and 3, including engineered septic systems and swales to divert surface water to settling basins, is within the regulated area. Moreover, development of Lot 3 may worsen surface and groundwater problems for abutters Mary & Ross Harper. Don Aubrey of Towne Engineering, whose experience with the parcel dates from his tenure as Mansfield's Town Engineer, has described the hydrology of the area as unusual and not amenable to standard modeling. Wetland plants (observed on the IWA Field Trip) growing outside the mapped wetland testify to inaccurate mapping or unusual hydrology. The length of the watershed yields significant surface and ground water flows, especially after heavy rain that are a challenge to the Harpers' septic system, basement and yard. The Commission is concerned that the swale and recharge areas

proposed for Lots 2 and 3 may concentrate such flows, to the further detriment of the Harpers' property.

On May 27, 2015, I walked the property to with John Ianni, the client's wetland scientist, to review the wetland boundary. We walked the perimeter of the wetland boundary that separates lots 2 and 3. Core samples were taken outside of the delineated wetland in areas where there was evidence of surface drainage and wetland plants. There was no evidence of wetland soils beyond the delineated edge of wetlands. Eastern Highlands Health District was consulted regarding the site's suitability for development. Chief Sanitarian, Jeffrey Polhemus, stated that development would only be approved if the site met the requirements outlined in the CT Public Health Code.

Recommendation

I recommend that the Agency wait to act on this application until the August 3, 2015 meeting so that the public comment heard on July 6, 2015 can be fully considered.



LOCATION MAP
SCALE: 1" = 1000'

BOUNDARY NOTES:

- STREET LINE ALONG EAST ROAD (LOCAL ROAD PER ARTICLE III SECTION 9.3 OF THE ZONING REGULATIONS) WAS ESTABLISHED 30 FEET FROM THE CENTERLINE OF THE EXISTING TRAVELED WAY TO ALLOW SUFFICIENT WIDTH TO ALLOW FOR DRAINAGE IMPROVEMENTS IN THE FUTURE AND EXCEED MINIMUM REQUIREMENTS IN ARTICLE VII SECTION 9 (HIGHWAY CLEARANCE SETBACKS) OF THE ZONING REGULATIONS.
- THE SUBJECT PROPERTY CONTAINS 14.56 ACRES.
- COORDINATES, BEARINGS AND ELEVATION BASED ON CDS MONUMENTS #4670 AND #4671.

NOTES:

- ALL PROPOSED LOTS CONTAIN 40,000 SQUARE FEET OF SUITABLE LAND FOR BUILDING AS DEFINED IN ARTICLE VII, SECTION 9.3 OF THE MANSFIELD ZONING REGULATIONS.
- UNDERGROUND UTILITIES
 - ALL WIRED UTILITY LINES SERVING STRUCTURES ON NEW LOTS SHALL BE INSTALLED UNDERGROUND. UTILITY LINES SHALL BE INSTALLED IN A SUITABLE CONDUIT SYSTEM UNLESS THE RESPONSIBLE UTILITY COMPANY DETERMINES THAT DIRECT BURIAL IS MORE APPROPRIATE.
 - UPON APPROVAL BY THE RESPONSIBLE UTILITY COMPANY, PLANS SHALL BE SUBMITTED TO DEPICT THE LOCATION OF ALL UNDERGROUND UTILITY EASEMENT AREAS.
- PURSUANT TO SUBDIVISION REGULATION PROVISIONS, (PARTICULARLY SECTIONS 7.4A, 7.5, AND 7.6) AND ZONING REGULATION PROVISIONS (PARTICULARLY ARTICLE VII, SECTION 9.3 AND 9.4) THIS ACTION SPECIFICALLY APPROVES PROPOSED LOT AREAS AND THE DEPICTED BUILDING ENVELOPES, UNLESS THE COMMISSION SPECIFICALLY AUTHORIZES OTHERWISE. THE DEPICTED BUILDING ENVELOPES SHALL SERVE AS THE SETBACK LINES FOR ALL FUTURE STRUCTURES AND SITE IMPROVEMENTS, PURSUANT TO ARTICLE VII OF THE ZONING REGULATIONS. THIS REQUIREMENT SHALL BE NOTED ON THE LAND RECORDS.
- PROPERTY LINE TO SERVE AS DEVELOPMENT AREA ENVELOPE LINE (DAE) EXCEPT WHERE DENOTED OTHERWISE ON LOTS.
- TOPOGRAPHIC INFORMATION PROVIDED IS FROM PHOTOGRAMMETRIC MAPPING SUPPLIED BY EASTERN TOPOGRAPHICS AND VERIFIED IN THE FIELD BY ACTUAL FIELD TOPOGRAPHIC MEASUREMENTS CONDUCTED BY THIS OFFICE.

TOTAL PARCEL AREA 14.56 ACRES
 AREA WITH OVER 15 PERCENT SLOPES - 16,420 SQ. FT. ±
 TOTAL AREA OF WETLANDS - 130,340 SQ. FT. ±
 PERCENT OF WETLANDS AND 15 PERCENT OR GREATER SLOPES ON SUBJECT PROPERTY - 24.2%

OPEN SPACE DEDICATION
 PER SECTION 13.1.1 - COMMISSION SHALL HAVE THE RIGHT TO REQUIRE UP TO 15% OF THE LAND TO BE SUBDIVIDED DEDICATED AS OPEN SPACE, CONSERVATION, PARK OR PLAYGROUND.
 REQUIRED OPEN SPACE = 654,400 SQ. FT. ± 15% = 98,160 SQ. FT.
 REQUIRED DRY LAND WITHIN OPEN SPACE = 98,160 SQ. FT. ± 75.0% = 71,845 SQ. FT.
 DRY LAND WITHIN PROPOSED CONSERVATION EASEMENTS = 98,162 SQ. FT.
 PROPOSED CONSERVATION EASEMENTS 3.00 ACRES (121,854 SQ. FT.)
 TOTAL DEDICATION = 3.50 AC. (24.0%)

REFERENCE MADE TO THE FOLLOWING MAPS:

- "FINAL SUBDIVISION PLAN 'WILLIAMS HEIGHTS' SHEET NO. 1 OF 3 OWNED AND DEVELOPED BY WALTER A. WILLIAMS & FRANCES M. WILLIAMS ADDRESS: EAST ROAD, MANSFIELD, CONN. TOWN OF MANSFIELD, CONN. SCALE: 1" = 40' DATE: 3-4-70" PREPARED BY FERNANDO A. CROMAZO.
- "MAP SHOWING PARCELS A,B,C,D,E & F PREPARED FOR ROBERT E. CASEY MANSFIELD CONNECTICUT DATE 3-30 SCALE: 1" = 100' JOB NO. 81-30-A" PREPARED BY TORINE ENGINEERING INC.

200 100 0 100 300
SCALE: 1" = 100'

INDEX TO SHEETS

BOUNDARY SURVEY	SHEET 1 OF 4
SITE DEVELOPMENT PLAN	SHEET 2 OF 4
SITE DEVELOPMENT PLAN	SHEET 3 OF 4
DETAIL SHEET	SHEET 4 OF 4

**BOUNDARY PLAN
FOR
RESUBDIVISION
ENTITLED
WILLIAMS HEIGHTS PARCEL "A"**

EAST ROAD
STORRS, CONNECTICUT
OWNER AND SUBDIVIDER
CHRISTOPHER W. & LINDSEY L. NIARHAKOS
60 BROOKSIDE LANE
MANSFIELD CENTER, CONNECTICUT 06250
SCALE: 1" = 100' DATE: MARCH 30, 2016
REVISED: JUNE 21, 2016 (PER STAFF COMMENTS)

APPROVED BY THE TOWN OF MANSFIELD INLAND WETLAND AGENCY

CHAIRMAN _____ DATE _____
 APPROVED BY THE MANSFIELD PLANNING AND ZONING COMMISSION

CHAIRMAN _____ DATE _____
 APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____
 APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____

THE WETLAND SOILS ON THIS SITE WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-186 AS AMENDED BY CONN. P.A. 73-571, CONN. P.A. 87-338 AND P.A. 87-533. THE BOUNDARIES OF THESE SOILS AND OF IDENTIFIED WATERCOURSES ARE ACCURATELY REPRESENTED ON THIS PLAN.

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-30 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "MINIMUM STANDARDS FOR SURVEYS AND MAPS BY THE BUREAU OF CONSTRUCTION" AS ENFORCED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A SUBDIVISION MAP BASED ON A DEPENDENT SURVEY CONFORMING TO THE REGULATIONS, ACCURACY CLASS 3-2. THE PROPOSED PROPERTY LINES BETWEEN LOTS BEING AN ORIGINAL SURVEY. THIS SURVEY AND MAP IS INTENDED TO ENABLE DETERMINATION OF COMPLIANCE OR NON-COMPLIANCE WITH APPLICABLE MUNICIPAL, OR STATUTORY REQUIREMENTS.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREIN.

EDWARD PELLETIER, L.S. #14203

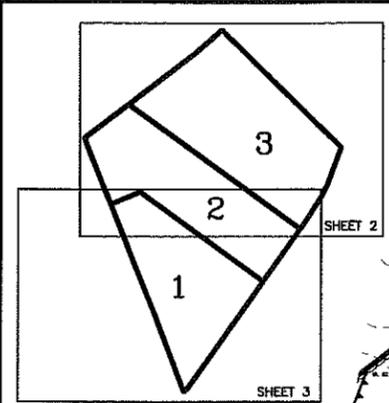
ANY ORIGINAL OR DUPLICATE OF THIS MAP IS NOT VALID UNLESS IT BEARS THE EMBOSSED SEAL OF THE SURVEYOR WHOSE REGISTRATION NUMBER AND SIGNATURE APPEAR ABOVE. NO OTHER CERTIFICATION OR WARRANTY IS EXPRESSED OR IMPLIED.



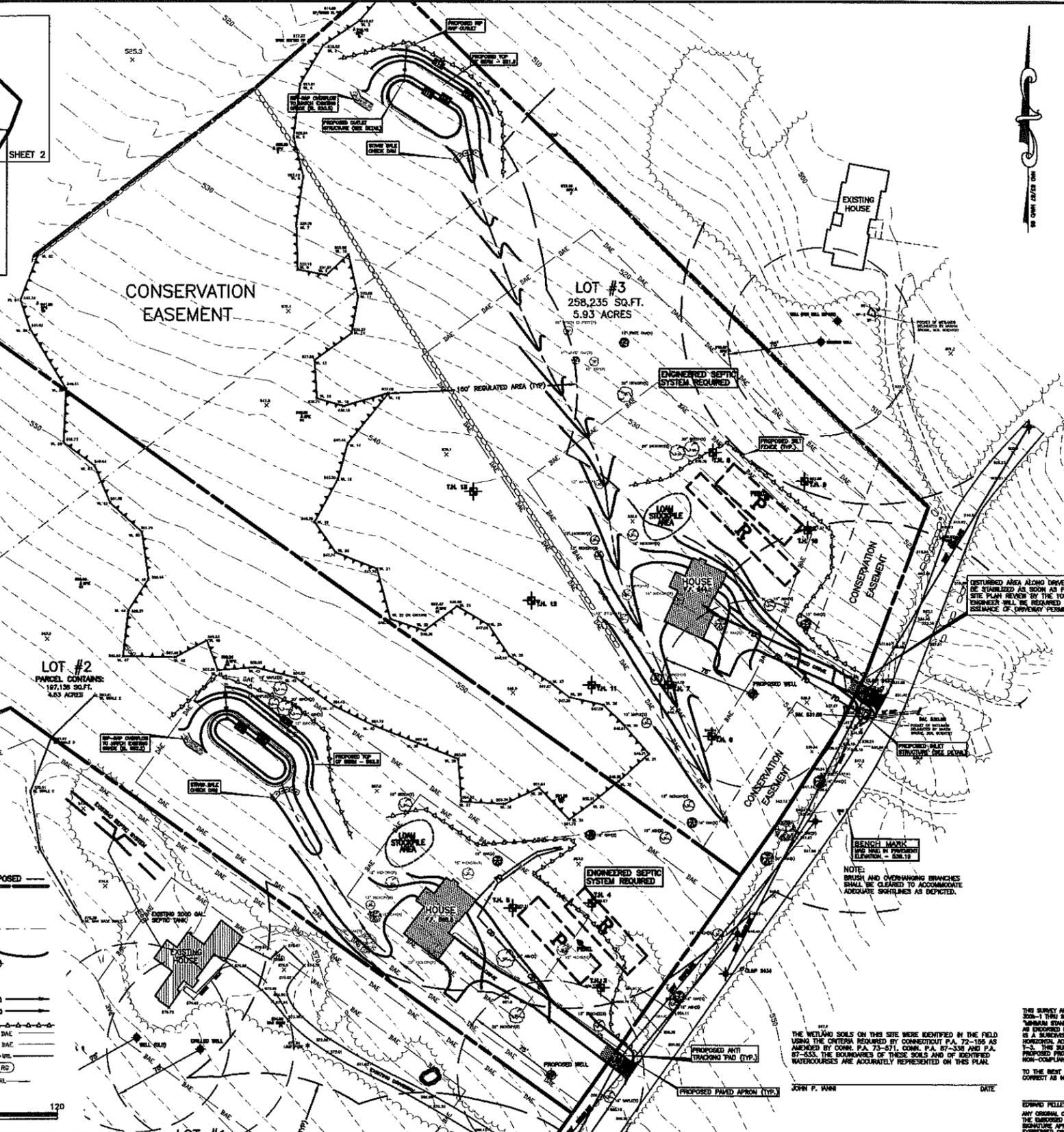
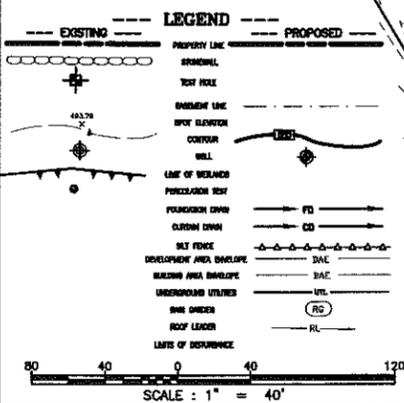
SHEET 1 OF 4
ENGINEERING & SURVEYING, LLC

132 CONANTVILLE ROAD
MANSFIELD CENTER, CT 06250
TEL: (860)456-1367 FAX: (860)456-1840

JOB NO.: E14057
CHECKED BY: _____ COMMISSIONER BY: _____



INDEX MAP



- NOTES:
- 1) THE DEPICTED SEPTIC SYSTEMS ARE SIZED FOR FOUR BEDROOM DWELLINGS.
 - 2) SOLAR ACCESS: PROPOSED HOUSES HAVE BEEN DEPICTED TO MINIMIZE SOLAR HEAT GAIN AND MINIMIZE SOLAR HEAT LOSS AS SPECIFIED IN SECTION 4.8 OF THE TOWN OF MANSFIELD SUBDIVISION REGULATIONS.
 - 3) RESIDENTIAL SITE PLAN DESIGNS SHALL INCORPORATE AT LEAST ONE OF THE FOLLOWING PASSIVE SOLAR AND OTHER ALTERNATIVE ENERGY TECHNOLOGIES:
 - a) GARAGE POSITIONED ON THE NORTH OR WEST SIDE
 - b) KITCHEN ON THE EAST SIDE
 - c) PREDOMINATE DAYTIME LIVING SPACE WITH SOUTHERN EXPOSURE
 - d) SOUTHERLY FACING BUILDING EDGES EXTENDED SO AS TO REDUCE SUMMER SUNLIT HEAT FROM ENTERING WINDOWS
 - e) GEOTHERMAL OR OTHER ACTIVE ALTERNATIVE ENERGY SOURCE
 - 3) IT IS CERTIFIED WITH THE ACKNOWLEDGMENT BELOW, THAT THE DIMENSIONAL LOT REQUIREMENTS OF ARTICLE VII, SECTION A OF THE TOWN OF MANSFIELD ZONING REGULATIONS HAVE BEEN MET.
 - 4) ALL PROPOSED LOTS CONTAIN 40,000 SQUARE FEET OF SUITABLE LAND FOR BUILDING AS DEFINED IN ARTICLE VII, SECTION B.8 OF THE MANSFIELD ZONING REGULATIONS.
 - 5) ALL STAMP BURIAL HOLES ON INDIVIDUAL LOTS SHALL COMPLY WITH THE STATE OF CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION SOLID WASTE REGULATIONS.
 - 6) UNDERGROUND UTILITIES
 - a) ALL WIRED UTILITY LINES SERVING STRUCTURES ON NEW LOTS SHALL BE INSTALLED UNDERGROUND. UTILITY LINES SHALL BE INSTALLED IN A SUITABLE CONDUIT SYSTEM UNLESS THE RESPONSIBLE UTILITY COMPANY DETERMINES THAT DIRECT BURIAL IS MORE APPROPRIATE.
 - b) UPON APPROVAL BY THE RESPONSIBLE UTILITY COMPANY, PLANS SHALL BE SUBMITTED TO DEPICT THE LOCATION OF ALL UNDERGROUND UTILITY EASEMENT AREAS.
 - c) ALL UNDER PAVEMENT CONDUITS SHALL BE INSTALLED PRIOR TO THE PAVING OF ANY STREETS OR DRIVEWAYS.
 - 7) UNLESS REVISIONS ARE SPECIFICALLY AUTHORIZED BY THE COMMISSION, THE BUILDING AREA ENVELOPE AS DEPICTED ON THESE FINAL PLANS SHALL SERVE AS THE SETBACK LINES FOR ALL FUTURE STRUCTURES AND SITE IMPROVEMENTS, PURSUANT TO ART. VI OF THE ZONING REGULATIONS.
 - 8) PORTIONS OF THE DEPICTED BUILDING ENVELOPES ARE WITHIN AREAS REGULATED BY THE INLAND WETLAND AGENCY. ANY LAND DISTURBANCES WITHIN THESE AREAS THAT ARE NOT INCLUDED ON THE PLANS APPROVED BY THE INLAND WETLAND AGENCY MAY REQUIRE SUBSEQUENT APPROVAL BY THE AGENCY.
 - 9) ALL LOTS REQUIRE THE REMOVAL OR FILLING OF LESS THAN 800 CUBIC YARDS OF MATERIAL FOR THE CONSTRUCTION OF THE PROPOSED HOUSE AND DRIVEWAY AND LESS THAN 300 CUBIC YARDS FOR THE SEPTIC PILL.
 - 10) A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT SHALL DESIGN ON-SITE SUBSURFACE DISPOSAL SYSTEMS FOR ALL LOTS IN THIS SUBDIVISION. MANSFIELD WETLAND AGENCY MAY REQUIRE APPROVAL BY THE INLAND WETLANDS COMMISSION OF THE PROPOSED SITE PLAN.
 - 11) FOUNDATION DRAIN OUTLETS WITHIN 25 FEET OF PROPOSED SEPTIC SYSTEMS SHALL BE CONSTRUCTED OF SOLID PVC ASTM D 1785/ ASTM D 2688 (OR EQUAL) WITH RUBBER GASKET JOINTS.
 - 12) NO LOTS MAY BE SOLD UNTIL SUBDIVISION WORK IS COMPLETED AND APPROVED OR FULLY BONDED TO THE SATISFACTION OF THE MANSFIELD PLANNING AND ZONING COMMISSION.
 - 13) DURING HOUSE CONSTRUCTION EFFORTS SHALL BE MADE TO RETAIN AND PRESERVE EXISTING STONE WALLS. ANY STONE WALLS REMOVED DURING CONSTRUCTION SHALL BE RECONSTRUCTED ALONG BOUNDARY LINES AND/OR ENHANCE ADJACENT SEGMENTS OF EXISTING STONE WALLS.
 - 14) DRIVEWAY SIGHT LINES MEET OR EXCEED 250 FEET FOR ALL LOTS. NO PROPOSED DRIVEWAY SLOPES EXCEED 15 PERCENT.
 - 15) ALL SIGNIFICANT TREES PURSUANT TO SECTION 6.4.3 OF THE MANSFIELD SUBDIVISION REGULATIONS HAVE BEEN IDENTIFIED BASED ON A FIELD INSPECTION BY A LANDSCAPE ARCHITECT. ALL SIGNIFICANT TREES DEPICTED HEREON, NOT NOTED TO BE REMOVED, SHALL BE PROTECTED DURING ANY HEAVY CONSTRUCTION. PROTECTION SHALL CONSIST OF A 4 FOOT HIGH ORANGE UNITS POLYETHYLENE BARRIER FENCE WITH POSTS PROVIDING A MINIMUM 10 FOOT RADII AROUND THE BASE UNTIL COMPLETION OF CONSTRUCTION ACTIVITIES.
 - 16) DEVELOPMENT OF INDIVIDUAL HOUSE SITES SHOULD CONSIDER LOW IMPACT DESIGN PRACTICES FOR STORM WATER MANAGEMENT TO MINIMIZE DISTURBANCE, PRESERVE NATURAL FEATURES, REDUCE IMPERVIOUS COVER, FACILITATE INFILTRATION OPPORTUNITIES AND PRESERVATION OF STONE WALLS.
 - 17) THE PROPOSED STORM WATER/GROUND WATER RECHARGE AREAS HEREON ARE CONCEPTUAL AND SIZED APPROPRIATELY FOR THE HOUSE AND DRIVEWAY SIZES AND CONFIGURATIONS SHOWN AND ARE BASED ON THE ASSUMPTION THAT ALL ROOF LEACHS WILL BE DIRECTED TO THESE AREAS. SPECIFIC SITE DEVELOPMENT PLANS SHALL INCLUDE JUSTIFICATION FOR SIZES AND DETAILS FOR BERM CONSTRUCTION. PRIOR TO CONSTRUCTION OF STORM WATER/GROUND WATER RECHARGE AREAS A REQUEST FOR DETERMINATION THAT THE STORM WATER/RETENTION AREA DOES NOT REQUIRE APPROVAL BY DEEP SHALL BE SUBMITTED.

APPROVED BY THE TOWN OF MANSFIELD INLAND WETLAND AGENCY

CHAIRMAN _____ DATE _____

APPROVED BY THE MANSFIELD PLANNING AND ZONING COMMISSION

CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

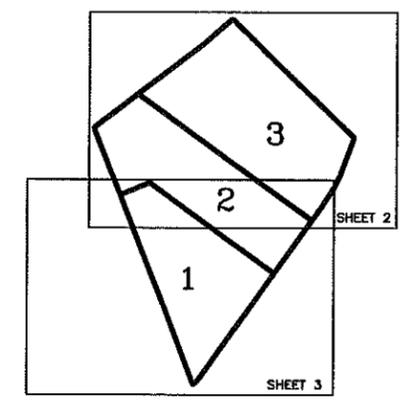
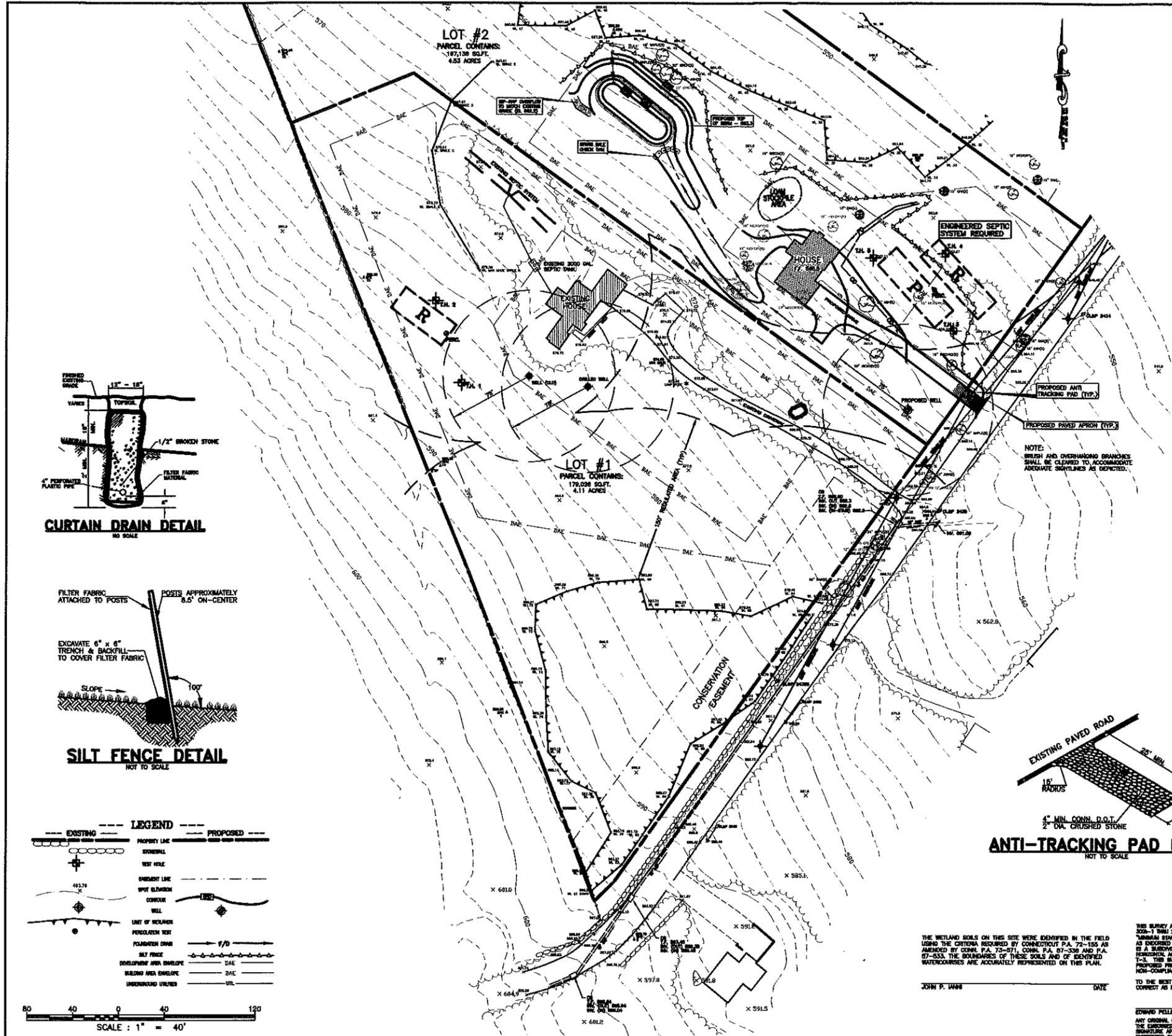
DIRECTOR _____ DATE _____

ALTERNATIVE PLAN
SITE DEVELOPMENT PLAN
 FOR
RESUBDIVISION
 ENTITLED
WILLIAMS HEIGHTS PARCEL "A"
 EAST ROAD
 STORRS, CONNECTICUT
 OWNER AND SUBDIVIDER
CHRISTOPHER W. & LINDSEY L. NARHAKOS
 88 BROOKSIDE LANE
 MANSFIELD CENTER, CONNECTICUT 06260
 SCALE: 1" = 40' DATE: MARCH 30, 2015
 REVISION: JUNE 21, 2015 (PER STAFF COMMENTS)

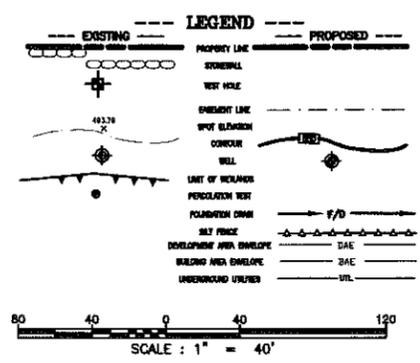
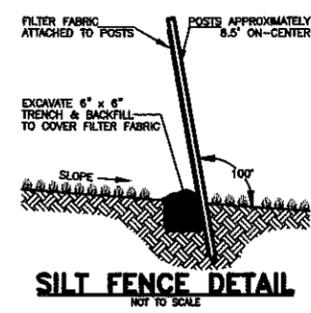
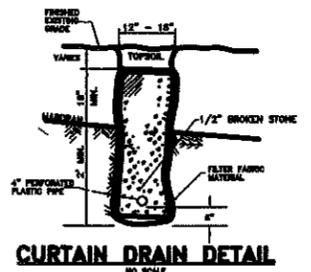
DATUM
ENGINEERING & SURVEYING, LLC
 132 CONANTVILLE ROAD
 MANSFIELD CENTER, CT 06250
 TEL: (860)468-1067 FAX: (860)468-1840
 JOB NO.: 214057
 SHEET 2 OF 4

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 80-300a-1 THRU 80-300a-30 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES. NUMEROUS ENDORSEMENTS FOR SURVEY AND MAPS IN THE STATE OF CONNECTICUT AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IS A SURVEYING MAP BASED ON AN ORIGINAL SURVEY ACCURACY CLASS IS-2. THIS SURVEY AND MAP IS INTENDED TO BE USED FOR THE CREATION OF PROPOSED PROPERTY LINES AND TO ENABLE PARTICIPATION CONCERNING NON-COMPLIANCE WITH APPLICABLE MUNICIPAL OR STATUTORY REQUIREMENTS. TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

EDWARD PELLETIER, R.L.S. 14203
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INDEX MAP



APPROVED BY THE TOWN OF MANSFIELD ISLAND WETLAND AGENCY

CHAIRMAN _____ DATE _____

APPROVED BY THE MANSFIELD PLANNING AND ZONING COMMISSION

CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____

SITE DEVELOPMENT PLAN
FOR
RESUBDIVISION
ENTITLED
WILLIAMS HEIGHTS PARCEL "A"

EAST ROAD
STORRS, CONNECTICUT

OWNER AND SUBDIVIDER
CHRISTOPHER W. & LINDSEY L. NIARHAKOS
68 BROOKSIDE LANE
MANSFIELD CENTER, CONNECTICUT 06260

SCALE: 1" = 40' DATE: MARCH 30, 2016
REVISED: JUNE 21, 2016 (PER STAFF COMMENTS)

THE WETLAND SOILS ON THIS SITE WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-125 AS AMENDED BY CONN. P.A. 73-571, CONN. P.A. 87-339 AND P.A. 07-833. THE BOUNDARIES OF THESE SOILS AND OF IDENTIFIED WATERCOURSES ARE ACCURATELY REPRESENTED ON THIS PLAN.

JOHN P. IANNI DATE _____

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-202a-1 THRU 20-202a-30 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENFORCED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A SUBDIVISION MAP BASED ON AN ORIGINAL SURVEY CONFORMING TO FEDERAL ACCURACY CLASS A-2 AND TOPOGRAPHIC SURVEY ACCURACY CLASS 1-3. THIS SURVEY AND MAP IS INTENDED TO BE USED FOR THE PURPOSES OF PROPOSED PROPERTY LINES AND TO ENABLE DETERMINATION OF COMPLIANCE OR NON-COMPLIANCE WITH APPLICABLE MUNICIPAL OR STATUTORY REQUIREMENTS. TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

EDWARD FELLEHER, R.L.S. 14225

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SHEET 3 OF 4

DATUM

ENGINEERING & SURVEYING, LLC

132 CONANTVILLE ROAD
MANSFIELD CENTER, CT 06260
TEL: (860)456-1507 FAX: (860)456-1840
JOB NO.: 214057

CHECKED BY: _____ CORRECTED BY: _____

TEST HOLE DATA

TEST HOLES OBSERVED BY EHDH ON 3-12-14

-TEST HOLE #1

0'-12" TOPSOIL
12"-30" BROWN FINE SANDY LOAM
30"-71" OLIVE/BROWN MEDIUM SAND W/GRAVEL
ROOTS TO 30"
MOTTILING AT 30"
SEEPS AT 40"
NO LEDGE

-TEST HOLE #2

0'-8" TOPSOIL
8"-27" BROWN FINE SANDY LOAM, SOME ROCKS
27"-80" OLIVE/BROWN MEDIUM SAND, GRAVEL
ROOTS TO 41"
MOTTILING AT 27"
SEEPS AT 33"
NO LEDGE

-TEST HOLE #3

0'-9" TOPSOIL
9"-28" BROWN FINE SANDY LOAM
28"-78" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 28"
MOTTILING AT 27"
SEEPS AT 28"
NO LEDGE

-TEST HOLE #4

0'-10" TOPSOIL
10"-25" BROWN FINE SANDY LOAM
25"-80" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 21"
MOTTILING AT 25"
SEEPS AT 20"
NO LEDGE

-TEST HOLE #5

0'-9" TOPSOIL
9"-31" BROWN FINE SANDY LOAM
31"-72" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 28"
MOTTILING AT 31"
SEEPS AT 28"
NO LEDGE

-TEST HOLE #6

0'-8" TOPSOIL
8"-18" BROWN FINE SANDY LOAM
18"-74" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 19"
MOTTILING AT 18"
SEEPS AT 17"
NO LEDGE

-TEST HOLE #7

0'-9" TOPSOIL
9"-28" BROWN FINE SANDY LOAM
28"-75" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 28"
MOTTILING AT 26"
SEEPS AT 27"
NO LEDGE

-TEST HOLE #8

0'-9" TOPSOIL
9"-32" BROWN FINE SANDY LOAM
32"-76" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 32"
MOTTILING AT 32"
SEEPS AT 47"
NO LEDGE

-TEST HOLE #9

0'-8" TOPSOIL
8"-39" BROWN FINE SANDY LOAM
39"-76" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 49"
MOTTILING AT 56"
SEEPS AT 66"
NO LEDGE

-TEST HOLE #10

0'-8" TOPSOIL
8"-36" BROWN FINE SANDY LOAM
36"-77" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 39"
MOTTILING AT 26"
SEEPS AT 35"
NO LEDGE

-TEST HOLE #11

0'-8" TOPSOIL
8"-20" BROWN FINE SANDY LOAM
20"-74" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 20"
MOTTILING AT 20"
SEEPS AT 13"
NO LEDGE

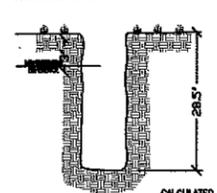
-TEST HOLE #12

0'-9" TOPSOIL
9"-24" BROWN FINE SANDY LOAM
24"-72" OLIVE/BROWN MEDIUM SAND, GRAVEL, SLIGHTLY FIRM
ROOTS TO 36"
MOTTILING AT 36"
SEEPS AT 27"
NO LEDGE

PERCOLATION TEST - LOT #1

CONDUCTED BY DATUM ENGINEERING & SURVEYING, LLC. ON SEPT. 26, 2014

PREPARED AT 8:06 AM



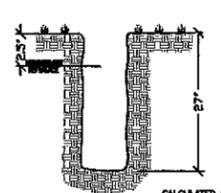
TIME	READING
1:48	11-1/2"
1:51	18-1/2"
1:56	21"
2:01	23"
2:06	DRY/REFILL
2:08	12"
2:13	10"
2:18	20-1/2"
2:23	22"
2:28	23-1/2"
2:33	25"
2:38	DRY

CALCULATED PERCOLATION RATE: 2.8 MM/M

PERCOLATION TEST - LOT #2

CONDUCTED BY DATUM ENGINEERING & SURVEYING, LLC. ON SEPT. 26, 2014

PREPARED AT 8:26 AM



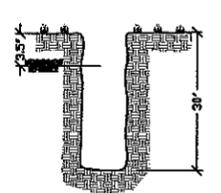
TIME	READING
2:42	12"
2:47	17"
2:52	18-1/2"
2:57	20"
3:02	21-1/2"
3:07	23"
3:12	DRY/REFILL
3:18	12"
3:18	17"
3:23	20"
3:28	21-1/2"
3:31	23"

CALCULATED PERCOLATION RATE: 3.3 MM/M

PERCOLATION TEST - LOT #3

CONDUCTED BY DATUM ENGINEERING & SURVEYING, LLC. ON SEPT. 26, 2014

PREPARED AT 8:47 AM



TIME	READING
3:35	13"
3:40	20"
3:46	23"
3:50	DRY/REFILL
3:53	12"
3:58	17-1/2"
4:03	19"
4:08	19-1/2"
4:13	20-1/2"
4:18	21-1/2"
4:23	22-1/2"
4:28	23"
4:33	24"
4:38	24-1/2"
4:47	DRY

CALCULATED PERCOLATION RATE: 2.7 MM/M

HOUSE SITE DEVELOPMENT

INDIVIDUAL SITE PLANS SHALL BE PREPARED INDICATING APPROPRIATE SIZE AND SHAPE OF PROPOSED DETENTION / RECHARGE BASINS. BASINS SIZE SHALL BE ADEQUATE TO PROVIDE GROUNDWATER STORAGE EQUIVALENT TO THAT LOST BY LOT IMPROVEMENTS.

THE FOLLOWING PROCEDURES FOR THE DEVELOPMENT OF THESE LOTS ARE RECOMMENDED:

- THE LIMITS OF DISTURBANCE SHALL BE ESTABLISHED IN THE FIELD FOR THE PROPOSED RESIDENTIAL STRUCTURE. DISTURBANCE LIMITS OF 25-35 FEET BEYOND THE PHYSICAL DIMENSIONS OF THE STRUCTURE AND RELATED APPURTENANCES IS RECOMMENDED.
- STORM WATER/GROUND WATER RECHARGE AREAS TO BE CONSTRUCTED PRIOR TO EXCAVATION OF PROPOSED HOUSE.
- DRIVEWAY SHOULDERS SHOULD BE STABILIZED IMMEDIATELY UPON COMPLETION OF ROUGH GRADING. SHOULDER SEED BED PREPARATION SHOULD BE USED TO ENTRAP ANY SEDIMENT GENERATED FROM EXPOSED SOIL SURFACES. DRIVEWAY ROADSIDES SHALL BE STABILIZED WITH COMPACTED ROAD AGGREGATES AS SOON AS POSSIBLE.
- TOPSOIL AND EXCAVATED SUBSOIL FROM THE FOUNDATION AREA SHOULD BE STOCKPILED WITHIN THE AREA OF DISTURBANCE IF NOT USED FOR ONSITE REGRADING. THE AREA OF DISTURBANCE MUST BE ADEQUATELY RIMMED WITH SEDIMENT CONTROL MATERIALS (I.E., STRAW-BALES AND/OR SILT FENCE).
- ANY ADDITIONAL STOCKPIILING OF LUMBER AND BUILDING MATERIALS SHOULD ALSO BE CONFINED TO THE AREA OF DISTURBANCE. SIMILARLY, VEHICULAR MOVEMENT SHALL BE DIRECTED TO ESTABLISHED PARKING AREAS. DEVELOPMENT OF SEWAGE DISPOSAL LEACHING AREAS SHOULD BE STAGED TO FOLLOW HOUSE SITE PREPARATION. ONLY THE PRIMARY LEACHING SYSTEM NEED BE CLEARED OF EXISTING VEGETATION IN COORDINATION WITH THE APPROVED SEPTIC SYSTEM DESIGN. RESERVE AREA SHALL REMAIN UNDISTURBED IF SITE CONDITIONS PERMIT.
- ONCE THE PROPOSED STRUCTURE IS ENCLOSED, ALL EFFORTS SHOULD BE MADE TO COMPLETE ON SITE IMPROVEMENTS SUCH AS WELL, FOOTING DRAIN, SEPTIC SYSTEM DRIVEWAY, ETC. THEREAFTER, ALL RAW SOIL AREAS SURROUNDING THE HOME SITE SHALL BE FINE GRADED AND MULCHED.

GENERAL NOTES

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EXCAVATION OR DISTURBANCE OF EXISTING GROUND.

EXCAVATIONS WHICH MUST BE Dewatered SHALL BE DIRECTED INTO A SEDIMENTATION BASIN SEPARATE FROM THE GROUND WATER RECHARGE AREA.

DEBRIS AND OTHER WASTE GENERATED FROM EQUIPMENT MAINTENANCE AND CONSTRUCTION WILL NOT BE DISCARDED ON THE SITE.

IN THE EVENT OF CONFLICT BETWEEN THESE PLANS AND OTHER REGULATIONS, THE MORE STRINGENT SHALL APPLY.

A. SEED BED PREPARATION: FINE GRADE AND RAKE SOIL SURFACE TO REMOVE STONES LARGER THAN 2" DIAMETER. INSTALL NEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIMENSIONERS. APPLY LIMESTONE AT A MINIMUM RATE OF 2 TONS PER ACRE OR 90 LBS PER 1000 SQUARE FEET. FERTILIZE WITH 10-10-10 AT A RATE OF 300 LBS. PER ACRE OR 7.5 LBS. PER 1000 SQUARE FEET. WORK LIME AND FERTILIZER INTO SOIL UNIFORMLY TO A DEPTH OF 4" WITH A WISK, SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT FOLLOWING THE CONTOUR LINES.

B. SEED APPLICATION: APPLY GRASS SEED MIXTURE BY HAND, CYCLOE SEEDER OR HYDROSEEDER. INCREASE SEED MIXTURE BY 10 PERCENT IF HYDROSEEDING. LIGHTLY DRAG OR ROLL THE SEEDED SURFACE TO COVER SEED. SEED SHALL CONSIST OF A MIXTURE OF KENTUCKY BLUEGRASS (0.45 LBS./1000 SQ.FT.), CREEPING RED FESCUE (0.45 LBS./1000 SQ.FT.), AND PERENNIAL RYEGRASS (0.10 LBS./1000 SQ.FT.). SEEDING OF PERMANENT GRASS SEED SHALL BE DONE BETWEEN APRIL 15 THROUGH JUNE 15 AND AUGUST 15 THROUGH SEPTEMBER 15. IN THE EVENT SEEDING CANNOT BE COMPLETED DURING THE ABOVE DATES, A TEMPORARY GRASS SEED CONSISTING OF 1.0 LBS./1000 SQ.FT. OF ANNUAL RYE GRASS SHALL BE APPLIED. MOISTURE CONDITIONS SHALL BE SUPPLEMENTED FOR TEMPORARY SEEDING BETWEEN JUNE 15 AND AUGUST 15.

C. MULCHING: IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEEDED SURFACE, WITH STRAW OR HAY AT A RATE OF 1.5 TO 2 TONS PER ACRE

WHERE SLOPES EXCEED 10 PERCENT, SPREAD MULCH BY HAND OR MULCH BLOWER. PUNCH MULCH INTO SOIL SURFACE WITH TRACK MACHINE OR DISH HARROW SET STRAIGHT UP. MULCH MATERIAL SHOULD BE "SET" INTO SOIL SURFACE APPROXIMATELY 2-3 INCHES.

PLAN IMPLEMENTATION

DURING CONSTRUCTION IT SHALL BE THE RESPONSIBILITY OF CHRIS NIARHAKOS (860-677-5304) TO INSURE THE IMPLEMENTATION OF THIS EROSION & SEDIMENTATION CONTROL PLAN. THIS RESPONSIBILITY INCLUDES INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE SITE OF THE REQUIREMENTS AND OBJECTIVES OF THIS PLAN, AND NOTIFYING THE WETLAND AGENT OF ANY TRANSFER OF THIS RESPONSIBILITY AND FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT PLAN IF AND WHEN TITLE OF THE LAND IS TRANSFERRED.

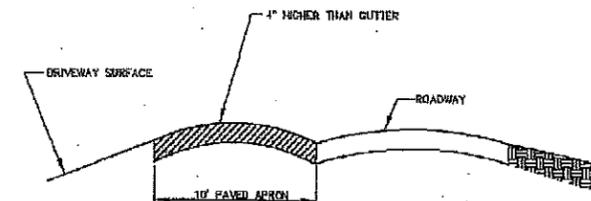
EDWARD PELLETIER, L.S. #14203

SIZING SUBSURFACE DISPOSAL SYSTEMS (FOR NEW DWELLINGS)

LOT NO.	SLOPE (%)	RESTRICTIVE LAYER (INCHES)	HYDRAULIC FACTOR	FLOW FACTOR	PERCOLATION FACTOR	REQUIRED MLSS (L.F.)	REQUIRED AREA (SQ.FT.)	SEPTIC PROVIDED (L.F.)
2	8	25	34	2.0	1.0	88	860	3 AT 74 TRENCHES
3	15	25	28	2.0	1.0	52	660	3 AT 74 TRENCHES

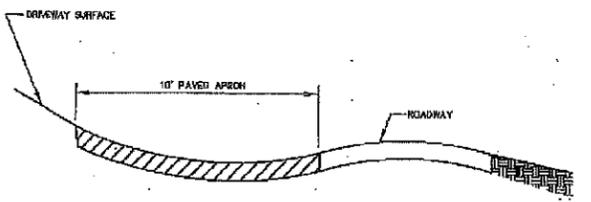
MLSS (EXISTING DWELLING)

LOT NO.	SLOPE (%)	RESTRICTIVE LAYER (INCHES)	HYDRAULIC FACTOR	FLOW FACTOR	PERCOLATION FACTOR	REQUIRED MLSS (L.F.)	REQUIRED AREA (SQ.FT.)	SEPTIC PROVIDED (L.F.)
1	9	27	26	1.0	1.0	26	485	3 AT 55



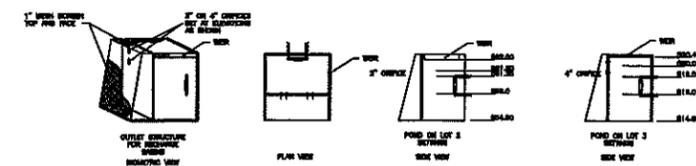
DRIVEWAY DETAIL FOR LOTS LOWER THAN ROAD

NOT TO SCALE



DRIVEWAY DETAIL FOR LOTS HIGHER THAN ROAD

NOT TO SCALE



OUTLET STRUCTURE DETAILS

NOT TO SCALE

APPROVED BY THE TOWN OF MANSFIELD INLAND WETLAND AGENCY

CHAIRMAN DATE

APPROVED BY THE MANSFIELD PLANNING AND ZONING COMMISSION

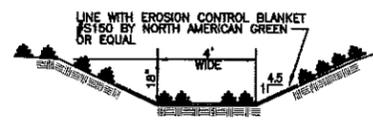
CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

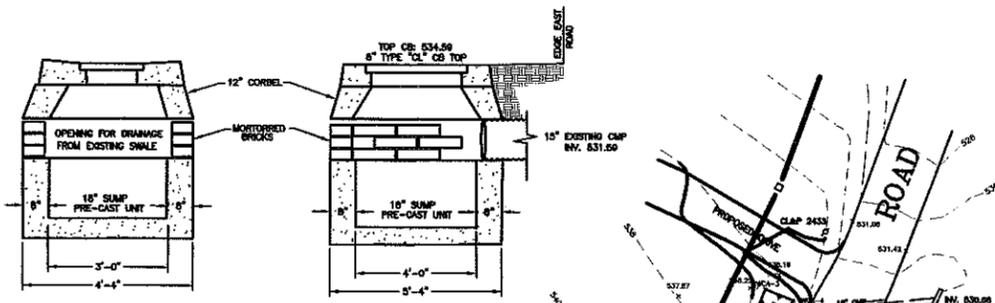


GRASS SWALE DETAIL

NO SCALE

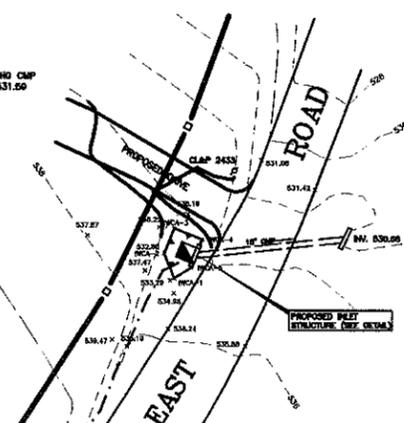
PROFESSIONAL ENGINEER AS LICENSED BY THE STATE OF CONNECTICUT DEPARTMENT OF CONSUMER PROTECTION.

GERALD HURDSTY, P.E. #10674



INLET STRUCTURE DETAIL

NO SCALE



INLET STRUCTURE PLAN VIEW DETAIL

SCALE: 1" = 20'

STORM WATER/GROUND WATER RECHARGE AREA

MANSFIELD SIZE 30" WIDE BY 80' LONG

NOT TO SCALE

OPERATION AND MAINTENANCE PLAN

OPERATION AND MAINTENANCE OF DETENTION / RECHARGE BASINS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER UNTIL THE PROPERTIES ARE SOLD, AT WHICH TIME THE HOME OWNER SHALL TAKE FULL RESPONSIBILITY FOR THE ITEMS ON HIS OR HER PROPERTY.

SWALES SHALL BE KEPT MOWED AND CLEAR OF DEBRIS. BASIN OUTLETS SHALL BE INSPECTED PERIODICALLY, AT LEAST ONCE IN THE SPRING AND ONCE IN THE FALL TO ENSURE TRASH SCREENS ARE CLEAR AND FUNCTIONAL, AND THAT BERMS ARE IN NO WAY COMPROMISED.

MORE SPECIFIC DETAILS MAY BE REQUIRED WITH SUBMISSION OF INDIVIDUAL SITE PLANS.

DETAIL SHEET FOR RESUBDIVISION ENTITLED WILLIAMS HEIGHTS PARCEL "A"

EAST ROAD
STORRS, CONNECTICUT
OWNER AND SUBDIVIDER
CHRISTOPHER W. & LINDSEY L NIARHAKOS
68 BROOKSIDE LANE
MANSFIELD CENTER, CONNECTICUT 06250
SCALE: AS NOTED DATE: MARCH 30, 2015
REVISED: JUNE 21, 2015 (PER STAFF COMMENTS)

SHEET 4 OF 4

DATUM ENGINEERING & SURVEYING, LLC
132 CONANTVILLE ROAD
MANSFIELD CENTER, CT 06250
TEL: (860)466-1877 FAX: (860)466-1840
JOB NO.: 214057

THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-202a-1 THRU 20-202a-30 OF THE REGULATIONS OF CONNECTICUT STATE AGENCY - MANSFIELD ENGINEERING FOR SURVEY AND MAPS IN THE STATE OF CONNECTICUT AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A SUBDIVISION MAP BASED ON AN ORIGINAL SURVEY CONFORMING TO FEDERAL ACCURACY CLASS 1-A AND TOPOGRAPHIC SURVEY ACCURACY CLASS 1-A. THIS SURVEY AND MAP IS INTENDED TO BE USED FOR THE CREATION OF PROPOSED PROPERTY LINES AND TO ENABLE DETERMINATION OF COMPLIANCE OR NON-COMPLIANCE WITH APPLICABLE MUNICIPAL OR STATUTORY REQUIREMENTS. TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

EDWARD PELLETIER, L.L.S. 14203
ANY ORIGINAL OR DUPLICATE OF THIS MAP IS NOT VALID UNLESS IT BEARS THE ENDORSED SEAL OF THE SURVEYOR WHOSE REGISTRATION NUMBER AND SIGNATURE APPEAR ABOVE. NO OTHER CERTIFICATION OR WARRANTY IS EXPRESSED OR IMPLIED.



Department of Planning and Development

Date: June 30, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: Jensen's Rolling Hills Mobile Home Park, Middle Turnpike (IWA File #W1549)
Jensen's Inc.
Description of work: Site Restoration

Notifications

- The applicant has paid the required application fee
- The applicant has submitted certified mail receipts for notices mailed to abutters

Project Description

In early April 2015, facility staff at Jensen's Rolling Hills Mobile Home Park pushed approximately 9 cubic yards of soil, stones, and logs into wetlands located at the southern end of the property. The wetlands drain into the Cedar Swamp Brook. At that time, in an effort to stabilize the disturbed area, the applicant removed the debris and seeded and mulched the slope. When I looked at the site in late May, it appeared that the seeding and mulching would not be adequate to stabilize the disturbed area. At your June meeting, I suggested that the agency postpone action until a more complete landscape plan was submitted. Since this time, I have inspected the site and the seeding and mulching that took place in April is in fact working well to stabilize the slope. There is one area on the slope that was not seeded and should be to promote further stabilization. The owners are proposing to install erosion control mat from the top to the bottom of the slope and to seed the area to ensure that this portion of the slope is stabilized. It is my opinion that aside from the one area that was not seeded previously, the slope should be left as is to allow the vegetation to establish. Further restoration (aside from the additional area described above) would cause more disturbance. To prevent debris from being pushed into the wetland again, the applicants propose to install concrete barriers 15 feet away from the top of the slope. In addition, all wood on the top left of the slope will be removed.



Department of Planning and Development

Suggested Motion

_____ MOVES, _____ seconds to grant an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield to Jensen's Inc. (File #WW1549) for Site Restoration on property owned by the applicants and located at Jensen's Rolling Hills Mobile Home Park, Middle Turnpike as shown on plans dated 5/14/2015 and as described in application submissions.

This action is based on a finding that this will adequately restore and prevent further adverse impact to the wetlands, and is conditioned on the following provisions being met:

1. Appropriate erosion and sedimentation controls shall be in place prior to construction, maintained during construction and removed when disturbed areas are completely stabilized;
2. Grass along the disturbed slope will continue to be monitored to ensure that vegetation reestablishes to stabilize the slope;
3. To further stabilize the area on the slope that lacks vegetation, erosion mat will be installed and the area will be over seeded with a native grass mix;
4. All wood at the top left side of the slope area will be removed; and
5. Concrete barriers will be installed at least 15-feet away from the top of the slope to prevent debris from being pushed into the wetlands in the future.

This approval is valid for five years (until July 6, 2020) unless additional time is requested by the applicant and granted by the Inland Wetlands Agency. The applicant shall notify the Wetlands Agent before any work begins and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment.



Town of Mansfield

Department of Planning and Development

Date: June 30, 2015

To: Mansfield Inland Wetlands Agency

From: Jennifer Kaufman, Inland Wetlands Agent

Subject: 601 Storrs Rd (File #W1550)
William St. Martin
Description of work: dredging an existing pond
Map Date: 5/24/2015, revised through 6/14/2015

Notifications

- The applicant has paid the required application fee
- The applicant has submitted certified mail receipts for notices mailed to abutters
- The applicant has submitted certified mail receipts for notice mailed to Windham Water Works and proof of notice to the Connecticut DPH
- The applicant has submitted a copy of his application to CT DEEP and requested a Natural Diversity Data Base State Listed Species Review

Project Overview

The applicant proposes to dredge an existing 4000 square foot pond, which has been in existence for at least 60 years but has silted in over time. The pond is primarily fed by groundwater and, to a much lesser extent, runoff from an up gradient wetland. The applicant proposes to dewater the pond by pumping the water into a 20-foot square by 3-foot deep, temporary sediment trap designed to filter the water from the pond then discharge it through a stone lined swale into a brook, just southwest of the pond. The applicant's engineer has demonstrated that the temporary sediment trap is sized sufficiently to filter the water prior to being discharged to the brook. Mansfield's Assistant Town Engineer has reviewed the calculations provided by the applicant regarding the capacity of the temporary sediment trap and concurs that it is sized adequately.

The area up gradient of the pond will be blocked off to prevent any additional water from entering the pond during the dewatering process. An excavator will be used to remove approximately 580 cubic yards of material. The excavated material will be stockpiled until dry then and distributed on site on either side of the driveway. The area where the excavated material is distributed will be covered with top soil and seeded. No material will be removed from the site.

The applicants propose to install silt fence down gradient of the pond and around the area stockpile area. There is an existing berm between the pond and the brook. No excavation will take place in this area allowing this berm to continue to act as a buffer between the pond and the brook.

While in some instances pond dredging can cause significant disturbance, it is also an important tool to improve habitat, remove non-native species plant biomass, and improve recreational access. A major concern in some dredging operations is the dewatering operation. Because of the temporary sediment trap, it is unlikely that the dewatering will and adversely impact the brook. Further, I have discussed the erosion and sedimentation control plan at length with the applicant and it is my opinion that he has taken appropriate measures so that neither the wetland nor the brook will be adversely impacted.

Recommendation/Suggested Motion

_____ MOVES, _____ seconds to grant an Inland Wetlands License pursuant to the Inland Wetlands and Watercourses Regulations of the Town of Mansfield to William St. Martin (File #W1550) for dredging an existing pond on property owned by the applicant and located at 601 Storrs Rd as shown on plans dated 5/24/2015, revised through 6/14/2015 and as described in application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned on the following provisions being met:

1. Appropriate erosion and sedimentation controls shall be in place prior to construction, maintained during construction and removed when disturbed areas are completely stabilized; and
2. All conditions outlined in the CT DEEP Natural Diversity Database Review are followed.

This approval is valid for five years (until July 6, 2020) unless additional time is requested by the applicant and granted by the Inland Wetlands Agency. The applicant shall notify the Wetlands Agent before any work begins and all work shall be completed within one year and is contingent upon all other state and federal permit requirements being met. Any extension of the activity period shall come before this Agency for further review and comment.



Town of Mansfield

Department of Planning and Development

Date: June 25, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: 93 Candide Lane (File #W1551)
Mark MacDonald
Description of work: above ground pool
Map Date: 5/14/2015

Notifications

- The applicant has paid the required application fee
- The applicant has submitted certified mail receipts for notices mailed to abutters

Project Overview

The applicant proposes to install a 25-foot diameter above-ground pool approximately 36 feet from the edge of wetlands. The proposed location of the pool slopes toward the wetlands. When I first visited the site in late May, no construction had taken place. When the IWA conducted its field trip, there was evidence that some site clearing had occurred. The applicant was instructed to place silt fence down gradient of the disturbed area immediately and to stop work until the application came before the agency.

In my opinion there has been no impact to the wetlands from the site clearing that occurred and the installation of the pool will not have a significant impact to the wetlands. I recommended that the applicant propose a way to manage the back wash resulting from cleaning the filter. The applicant has indicated that he will be directing the filter back wash to a 70-gallon drum for watering his gardens which are located primarily in the front of the house, at least away from wetlands.

Recommendation/Suggested Motion

_____ MOVES, _____ seconds to grant an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield to Mark MacDonald (File #W1551) for above ground pool on property owned by the applicants and located at 93 Candide Lane as shown on plans dated 5/14/2015 and as described in application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned on the following provisions being met:

1. Appropriate erosion and sedimentation controls shall be in place prior to construction, maintained during construction and removed when disturbed areas are completely stabilized;
2. The silt fence currently installed down gradient of the pool construction site shall remain until the site is completely stabilized;
3. All material shall be stockpiled at least 50 feet from the edge of wetlands and surrounded by silt fence until it is either removed from the site or distributed at least 50 feet from the edge of wetlands;
and
4. All pool filter back wash shall be contained and not discharged directly to the wetlands.

This approval is valid for five years (until July 6, 2020) unless additional time is requested by the applicant and granted by the Inland Wetlands Agency. The applicant shall notify the Wetlands Agent before any work begins and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment.



Town of Mansfield

Department of Planning and Development

Date: June 30, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: 357 Gurleyville Rd (File #W1552)
Larry and Laurie Wasiele
Description of work: one-bedroom addition
Map Date: 5/28/2015

Notifications

- The applicant has paid the required application fee
- The applicant has submitted certified mail receipts for notices mailed to abutters
- The applicant has submitted certified mail receipts for notice mailed to Windham Water Works and proof of notice to the Connecticut DPH

Project Overview

The applicants propose to construct a one bedroom addition on a 19.5 foot by 20 foot foundation on the north side of the existing house. The activity will occur approximately 50 feet from the edge of wetlands. The area of the proposed activity slopes toward the wetlands. The applicants estimate that approximately 147 cubic yards of material will be excavated and removed from the site. Provided that the applicant places silt fence 10 feet from the edge of wetlands prior to construction and it remains until the site is completely stabilized, in my opinion, the activity will not adversely impact the wetlands.

The applicant has not yet received approval from Eastern Highlands Health District (EHHD) that the addition meets the CT Public Health Code. Should EHHD require that a new septic system be constructed within the upland review area, or require that the addition be moved closer to wetlands, the owners will need to apply for another Inland Wetlands License.

Recommendation/Suggested Motion

_____ MOVES, _____ seconds to grant an Inland Wetlands License pursuant to the Wetlands and Watercourses Regulations of the Town of Mansfield to Larry and Laurie Wasiele (File #W1552) for one-bedroom addition on property owned by the applicants and located at 357 Gurleyville Rd as shown on plans dated 5/14/2015 and as described in application submissions.

This action is based on a finding of no anticipated significant impact on the wetlands, and is conditioned on the following provisions being met:

1. Appropriate erosion and sedimentation controls shall be in place prior to construction, maintained during construction and removed when disturbed areas are completely stabilized;
2. Silt fence shall be installed 10 feet from the edge of wetlands and shall remain until the site is completely stabilized;
3. All fill shall be removed from the site immediately or stockpiled at least 50 feet from the edge of wetlands and surrounded by silt fence to prevent sedimentation of the wetlands; and
4. Should a septic system need to be installed within the upland review area or should the addition need to be moved closer to the edge of wetlands to meet the CT Public Health Code, the owners will need to file a new application for an inland wetlands license, prior to beginning construction.

This approval is valid for five years (until July 6, 2020) unless additional time is requested by the applicant and granted by the Inland Wetlands Agency. The applicant shall notify the Wetlands Agent before any work begins and all work shall be completed within one year. Any extension of the activity period shall come before this Agency for further review and comment.



Department of Planning and Development

Date: June 29, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: Receipt of New Application for Wetlands License
225 Mulberry Rd (IWA File #W1553)
Ingrid and Erik Hanka/Sabrina Pools
Description of work: above-ground pool

Project Description

The applicant proposes to install a 21-foot-diameter above ground pool, approximately 55 feet from the edge of wetlands. The proposed location of the pool is located within the designated building area shown on the original subdivision map for the property. Approximately 6 cubic yards of soil will be excavated to grade the area of the pool. The activity will result in approximately 375 square feet of disturbance in the upland review area. Silt fence will be installed down gradient of the activity to protect the wetland from erosion and sedimentation.

- The project includes work in wetlands.
- The project includes work in the 150 foot upland review area.
- The project is located in a Public Water Supply Watershed.

Application Fees and Notifications

- The applicant has paid the required application fee
- The applicant has submitted copies of the notice mailed to neighbors and a list of abutters to be notified. Certified mail receipts must be submitted prior to action on the application.
- The applicant has submitted copies of notices provided to the Connecticut DPH and Windham Water Works. Certified mail receipts must be submitted prior to action on the application.
- Natural Diversity Database has been checked and state and/or federal listed species or significant natural communities have not been identified on the property.

Receipt Motion

_____ MOVES, _____ seconds to receive the application submitted by Ingrid and Erik Hanka/Sabrina Pools (IWA File #W1553) under the Wetlands and Watercourses Regulations of the Town of Mansfield for an above-ground pool on property located at 225 Mulberry Rd as shown on a map dated 6/15/2015 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments.

PAGE
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Part C - Project Description (attach extra pages, if necessary)

1) Describe in detail the proposed activity here or on an attached page. (See guidelines at end of application)

Please include a description of all activity or construction or disturbance:

- a) **in** the wetland/watercourse
- b) **in** the area **adjacent** to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is **off** your property

Excavate 4-5 cu of native soil for standard above ground installation the area is adjacent to a wetland & there is going to little to no disturbance with this job

2) Describe the amount or area of disturbance (in square feet or cubic yards or acres):

- a) **in** the wetland/watercourse
- b) **in** the area **adjacent** to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is **off** your property

The total disturbed area is approximately 375 sq ft
A) none in wetlands
B) area adjacent to wetlands is to have 5-6 cu of soil excavated

3) Describe the type of materials you are using for the project: Steel wall above ground pool kit

- a) include **type** of material used as fill or to be excavated soil that is native to area
- b) include **volume** of material to be filled or excavated 5-6 cubic yards

4) Describe measures to be taken to minimize or avoid any adverse impacts on the wetlands and regulated areas (silt fence, staked hay bales or other Erosion and Sedimentation control measures).

We plan to wrap the area to be disturbed with silt fence to protect wetland

Part D - Site Description

Describe the general character of the land. (Hilly? Flat? Wooded? Well drained? etc.)

Site is sloping from front of property to the rear of property where wetland is located

Part E - Alternatives

Have you considered any alternatives to your proposal that would meet your needs and might have less impact on the wetland/watercourse? Please list these alternatives.

There are no alternative sites on this site

Part F - Map/Site Plan (all applications)

1) Attach to the application a map or site plan showing **existing conditions** and the **proposed project** in relation to wetland/ watercourses. Scale of map or site plan should be 1" = 40'; if this is not possible, please indicate the scale that you are using. A sketch map may be sufficient for small, minor projects. **(See guidelines at end of application)**

- 2) Applicant's map date and date of last revision _____
- 3) Zone Classification _____
- 4) Is your property in a flood zone? Yes No Don't Know

Part G - Major Applications Requiring Full Review and a Public Hearing

See Section 6 of the Mansfield Regulations for additional requirements.

Part H - Notice to Abutting Property Owners

- 1) Attach list of abutters, name, and address
- 2) **Proof of Written Notice to Abutters.** You must notify abutting (neighboring) property owners (any property immediately contiguous with the subject property, including those across the street) by certified mail, return receipt requested, stating that a wetland application is in progress, and that abutters may contact the Mansfield Inland Wetlands Agent for more information. Include a brief description of your project. **Postal receipts of your notice to abutters must accompany your application.** To generate an abutters list go to <http://www.mainstreetmaps.com/CT/Mansfield/>

Part I - Additional Notices, if necessary

Notice to Windham Water Works and CT Department of Public Health is attached. If this application is in the public watershed for the Windham Water Works (WWW), you must notify the WWW and the Department of Public Health of your project within 7 days of sending the application to Mansfield--sending it by certified mail, return receipt requested. Contact the Mansfield Inland Wetlands Agent to find out if you are in this watershed.

Notice to Adjoining Town. If your property is within 500 feet of an adjoining town, you must also send a copy of the application, on the same day you sent one to Mansfield, to the Inland Wetlands Agency of the adjoining town, by certified mail, return receipt requested.

The Statewide Reporting Form shall be part of the application and specified parts must be completed and returned with this application.

Part J - Other Impacts To Adjoining Towns, if applicable

- 1) Will a significant portion of the traffic to the completed project on the site use streets within the adjoining municipality to enter or exit the site? ___ Yes No ___ Don't Know
- 2) Will sewer or water drainage from the project site flow through and impact the sewage or drainage system within the adjoining municipality? ___ Yes No ___ Don't Know
- 3) Will water run-off from the improved site impact streets or other municipal or private property within the adjoining municipality? ___ Yes No ___ Don't Know

Part K - Additional Information from the Applicant

Set forth (or attach) any other information which would assist the Agency in evaluating your application. (Please provide extra copies of any lengthy documents or reports, and extra copies of maps larger than 8.5" x 11", which are not easily copied.)

Part L - Filing Fee

Application fees shall be in accordance with the current Mansfield Code of Ordinance fee Schedule, pursuant to Section 8-1c of the Connecticut General Statutes. The fee schedule includes provisions for applicant-funded consultant studies and reports. The current fee schedule is available in the Planning and Zoning office.

Note: The Agency may require additional information about the upland review area or about wetlands or watercourses affected by the regulated activity. If the Agency, upon review of your application, finds the activity proposed may involve a "significant activity" as defined in the Regulations, additional information and/or a public hearing may be required.

Certification

I hereby certify that:

- I am familiar with the information contained in this form and that such information is true and correct to the best of my knowledge.
- I understand the penalties for obtaining a permit through deception or through inaccurate or misleading information.

William P. [Signature]
Signature

6/15/15
Date

Authorization to Enter Property

The undersigned hereby consent to necessary and proper inspections of the above-mentioned property by members and agents of the Inland Wetlands Agency at reasonable times, both before and after the permit in question has been issued by the Agency.

William P. [Signature]
Signature

6/15/15
Date

6" - 25" FE
 25" - 80" MC
 SANDY TILL
 NO LEDGE, NO
 NO SEEPAGE, RC

4" PVC BUI
 GASH D77E
 4" PVC PIPE
 SLOPE 1/4"

DEPTH OF
 TANK AC
 NOT EXC
 HBL DIAL
 COVER.

FF 37
 371
 HOUSE

370

369

368

367

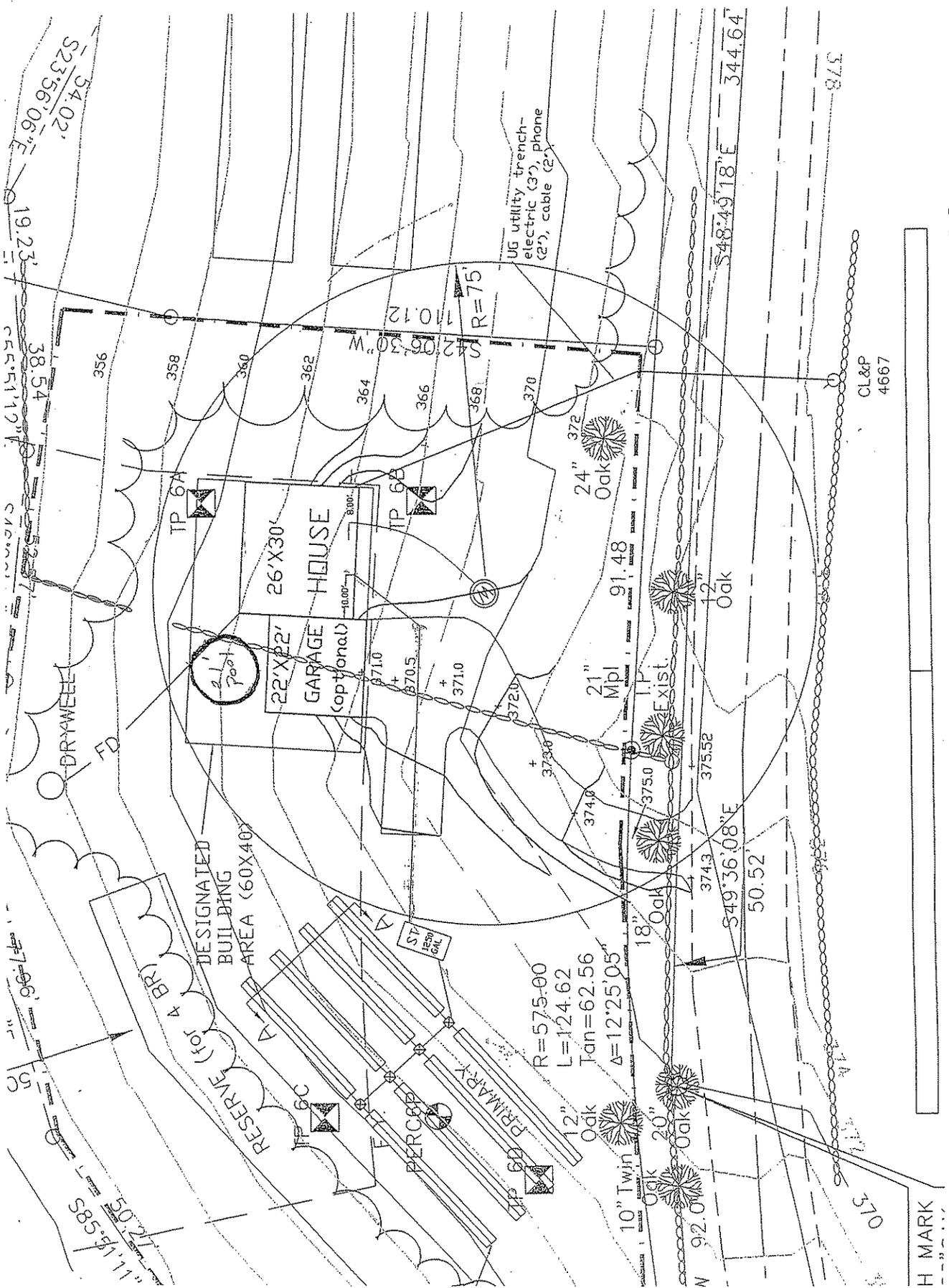
366
 INV 0
 365.4

365

364

363
 BASEMENT
 FF 362.6

362



N22°05'33" W
333.07

CONSERVATION
EASEMENT

N51°29'26.7"
179.71

Natural Boundary

LOT 5

S22°08'51"E
30.54

S45°06'41"E
52.57

S55°51'12"E
38.54

55-60'

35.72

Pool

Garage

House

LOT 6

BUILDABLE AREA 30,000 SQ FT
TOTAL LOT AREA 93,759 SQ FT

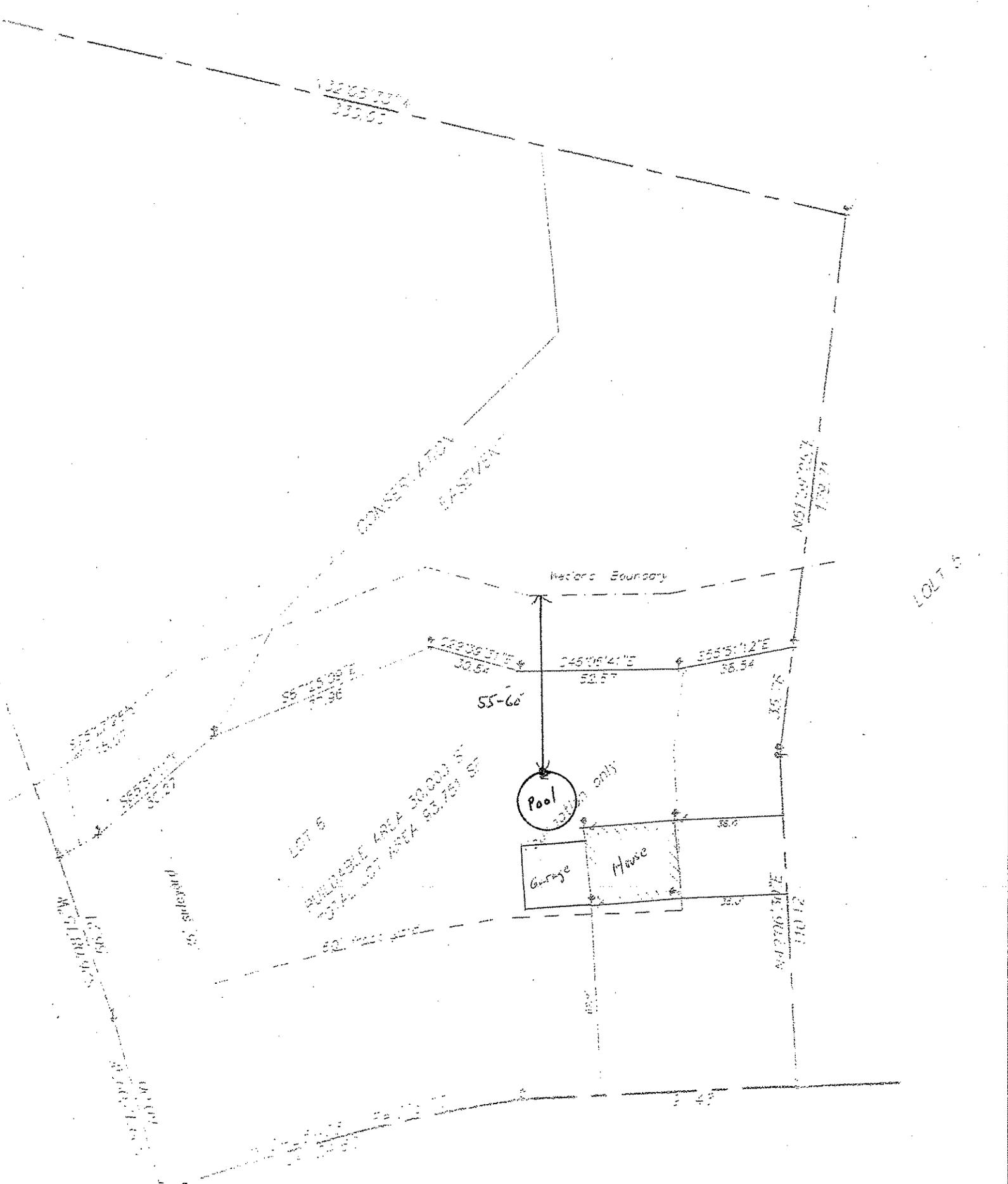
75' sidewalk

N47°16'31"E
170.12

S26°08'11"W
195.71

S55°51'12"E
38.54

S21°00'00"E





Department of Planning and Development

Date: June 29, 2015
To: Mansfield Inland Wetlands Agency
From: Jennifer Kaufman, Inland Wetlands Agent
Subject: Receipt of New Application for Wetlands License
57 Hunting Lodge Rd (IWA File #1554)
Storrs Friends Meeting
Description of work: parking and storm water improvements

Project Description

The applicants propose to replace the existing pavement for their parking areas and install storm water controls and a vegetative surface to detain and infiltrate runoff. South of the existing building, the applicants propose to grade the parking area to direct runoff to a 1090 square foot vegetated bioretention area, instead of having the runoff drain into Eagleville Brook as it does currently. To construct this bioretention area, approximately 20 yards of existing material will be replaced with approximately 12 yards of septic sand and 8 yards of screened top soil. To the north of the building, the applicants propose repave the area and to install a 330 square foot infiltration basin, using 2-inch washed stone or natural on-site stone with a modified rip-rap overflow. Runoff will be directed into this infiltration basin. The applicants will install silt fence in the areas of construction to prevent erosion and sedimentation of the wetlands during construction.

- The project includes work in wetlands.
- The project includes work in the 150 foot upland review area.
- The project is located in a Flood Zone

Application Fees and Notifications

- The applicant has paid the required application fee
- The applicant has submitted copies of the notice mailed to neighbors and a list of abutters to be notified.
Certified mail receipts must be submitted prior to action on the application.

Receipt Motion

_____ MOVES, _____ seconds to receive the application submitted by Storrs Friends Meeting (IWA File #1554) under the Wetlands and Watercourses Regulations of the Town of Mansfield for parking and storm water improvements on property located at 57 Hunting Lodge Rd as shown on a map dated 5/4/2015 and as described in application submissions, and to refer said application to staff and the Conservation Commission for review and comments.

PAGE
BREAK

**APPLICATION FOR PERMIT
MANSFIELD INLAND WETLANDS AGENCY
4 SOUTH EAGLEVILLE ROAD, STORRS, CT 06268
860-429-3015x6204 (DIRECT) TEL: 860-429-3330 OR
FAX: 860-429-6863**

FOR OFFICE USE ONLY

File #
W _____ 1554
Fee Paid \$185-
Official Date of Receipt 6-29-15

Applicants are referred to the Mansfield Inland Wetlands and Watercourses Regulations for complete requirements, and are obligated to follow them. For assistance, please contact the Inland Wetlands Agent at the telephone numbers above.

Please print or type or use similar format for computer; attach additional pages as necessary.

Part A - Applicant

Name Storrs Friends Meeting

Mailing Address 57 Hunting Lodge Road, Storrs, CT 06268

Zip _____

Phone 860-487-1847 Email _____

Title and Brief Description of Project

Proposed parking and stormwater improvements on an existing site

which has Inland Wetlands present

Location of Project 57 Hunting Lodge Road

Intended Start Date August 2015

Part B - Property Owner (if applicant is the owner, just write "same")

Name Same

Mailing Address _____

Zip _____

Phone _____ Email _____

Owner's written consent to the filing of this application, if owner is not the applicant:

Signature _____ date _____

Applicant's interest in the land: (if other than owner) _____

Part C - Project Description (attach extra pages, if necessary)

1) Describe in detail the proposed activity here or on an attached page. (See guidelines at end of application)

Please include a description of all activity or construction or disturbance:

- a) in the wetland/watercourse
- b) in the area **adjacent** to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is **off** your property

This application is for the upgrade of two existing parking areas on this site. The first area is a parking area which is experiencing subbase issues with boulders pushing through the pavement due to frost, has become difficult to maintain, and has no storm water controls except for a leak off. The second area is proposing to install two additional handicap parking spaces, and install a stone infiltration trench and infiltration basin to detain and infiltrate the storm water generated from this area.

- a. This application proposes no work in the Wetlands.
- b. Work will be performed in the Upland Review Area, & includes the removal of the existing pavement and curb, replacement of pavement, installation of stormwater controls and vegetative surfaces to detain and infiltrate runoff. Also please see attached "Continuation of Project

2) Describe the amount or area of disturbance (in square feet or cubic yards or acres): Description.

- a) in the wetland/watercourse
- b) in the area **adjacent** to (within 150 feet from the edge of) the wetland/watercourse, even if wetland/watercourse is **off** your property

 - a. 0.0 s. f.

b. 7,300 s.f. for the southerly area and 3,500 s.f. in the northerly area

3) Describe the type of materials you are using for the project: gravel, stone, pavement washed sand, perforated pipe with sock, grass seed and bark or wood mulch.

Media for bioretention to be 60% septic sand (12 yards or 17 tons) and 40% screened topsoil to be blended at DeSiato Sand & Gravel.

- a) include **type** of material used as fill or to be excavated gravel fill for parking
- b) include **volume** of material to be filled or excavated unknown fill volume since subbase conditions below existing pavement are unknown

4) Describe measures to be taken to minimize or avoid any adverse impacts on the wetlands and regulated areas (silt fence, staked hay bales or other Erosion and Sedimentation control measures).

Request contractor to not work in the rain, and to install E&S measure immediately prior to construction. Require the contractor to inspect and maintain E&S controls daily and as rain events occur

Part D - Site Description

Describe the general character of the land. (Hilly? Flat? Wooded? Well drained? etc.)

This project site is an existing site which is both wooded and developed and has poorly drained soils in the wetlands area and is well drained on the uplands between the Inland Wetlands on site.

Part E - Alternatives

Have you considered any alternatives to your proposal that would meet your needs and might have less impact on the wetland/watercourse? Please list these alternatives.
No wetlands impacts are proposed. The Proposed work is designed to improve stormwater quality that is currently discharged without treatment

Part F - Map/Site Plan (all applications)

1) Attach to the application a map or site plan showing **existing conditions** and the **proposed project** in relation to wetland/ watercourses. Scale of map or site plan should be 1" = 40'; if this is not possible, please indicate the scale that you are using. A sketch map may be sufficient for small, minor projects. (See guidelines at end of application)

2) Applicant's map date and date of last revision 5/4/2015

3) Zone Classification R-90

4) Is your property in a flood zone? Yes No Don't Know

Part G - Major Applications Requiring Full Review and a Public Hearing

See Section 6 of the Mansfield Regulations for additional requirements.

Part H - Notice to Abutting Property Owners

1) Attach list of abutters, name, and address

2) **Proof of Written Notice to Abutters.** You must notify abutting (neighboring) property owners (any property immediately contiguous with the subject property, including those across the street) by certified mail, return receipt requested, stating that a wetland application is in progress, and that abutters may contact the Mansfield Inland Wetlands Agent for more information. Include a brief description of your project. **Postal receipts of your notice to abutters must accompany your application.** To generate an abutters list go to <http://www.mainstreetmaps.com/CT/Mansfield/>

Part I - Additional Notices, if necessary

Notice to Windham Water Works and CT Department of Public Health is attached. If this application is in the public watershed for the Windham Water Works (WWW), you must notify the WWW and the Department of Public Health of your project within 7 days of sending the application to Mansfield--sending it by certified mail, return receipt requested. Contact the Mansfield Inland Wetlands Agent to find out if you are in this watershed.

Notice to Adjoining Town. If your property is within 500 feet of an adjoining town, you must also send a copy of the application, on the same day you sent one to Mansfield, to the Inland Wetlands Agency of the adjoining town, by certified mail, return receipt requested.

The Statewide Reporting Form shall be part of the application and specified parts must be completed and returned with this application.

Part J - Other Impacts To Adjoining Towns, if applicable

- 1) Will a significant portion of the traffic to the completed project on the site use streets within the adjoining municipality to enter or exit the site? ___ Yes No ___ Don't Know
- 2) Will sewer or water drainage from the project site flow through and impact the sewage or drainage system within the adjoining municipality? ___ Yes No ___ Don't Know
- 3) Will water run-off from the improved site impact streets or other municipal or private property within the adjoining municipality? ___ Yes No ___ Don't Know

Part K - Additional Information from the Applicant

Set forth (or attach) any other information which would assist the Agency in evaluating your application. *(Please provide extra copies of any lengthy documents or reports, and extra copies of maps larger than 8.5" x 11", which are not easily copied.)*

Part L - Filing Fee

Application fees shall be in accordance with the current Mansfield Code of Ordinance fee Schedule, pursuant to Section 8-1c of the Connecticut General Statutes. The fee schedule includes provisions for applicant-funded consultant studies and reports. The current fee schedule is available in the Planning and Zoning office.

Note: The Agency may require additional information about the upland review area or about wetlands or watercourses affected by the regulated activity. If the Agency, upon review of your application, finds the activity proposed may involve a "significant activity" as defined in the Regulations, additional information and/or a public hearing may be required.

Certification

I hereby certify that:

- I am familiar with the information contained in this form and that such information is true and correct to the best of my knowledge.
- I understand the penalties for obtaining a permit through deception or through inaccurate or misleading information.

Josef Pambic, Assistant Clerk SPM
Signature

6/28/15
Date

Authorization to Enter Property

The undersigned hereby consent to necessary and proper inspections of the above-mentioned property by members and agents of the Inland Wetlands Agency at reasonable times, both before and after the permit in question has been issued by the Agency.

Josef Pambic, Assistant Clerk SPM
Signature

6/28/15
Date

Part C. Continuation of Project Description

A large-format, two-page design created by Towne Engineering is included with this application, as is a letter from the soil scientist, John P. Ianni, who provided the wetlands delineation. We seek approval for the accompanying engineering design, with the following notes:

(1) Alternatives Considered: We considered repaving the lower (southern) parking lot, while shortening it to leave more space between the pavement and the stream as a way to decrease impact on the stream. We wanted to do more for the stream, so instead, we worked with Mike Dietz, an expert in storm water and low-impact design, to apply for a grant from the Department of Energy and Environmental Protection to allow us to afford to install bioretention for substantially reduced runoff directly into the brook. The wetlands delineation indicated that the land was not suitable for bioretention ESE or SSW of the southern parking lot. On advice from Towne Engineering and Mike Dietz, the proposed plan places bioretention NE of the parking lot, requiring raising the lot very slightly to grade it to direct runoff into the bioretention area, rather into the stream or toward the wetland area. The bioretention area, removal of curbs, and regrading of certain areas all reduce direct runoff of storm water into the stream.

We considered repairing and refreshing our damaged handicapped parking spaces (snow plow damage to required curb and signage), which are located rather far from our front entrance because they need to be located in an area with less than 2% grade. Besides being a long way from the front door, and hence causing difficulty for those who need the spaces, the handicapped spaces also block the use of one to two other possible parking spaces that could be used otherwise. The upper parking lot appears rather large, but because of its shape, and the requirements for handicapped parking, rather few cars can be parked there without double parking.

By moving the handicapped parking area, our handicapped parking spaces can be closer to the front door, and further from traffic. The proposed infiltration trench and basin would handle storm water from the proposed new handicapped parking area, and would also improve the management of storm water runoff from the existing parking lot.

We considered various forms of porous pavement, but the cost of installation and the maintenance required is beyond reach for us as a community, especially given the magnitude of the overall project needed to provide a safer lower (southern) parking lot. (Currently, large puddles freeze in winter and cause treacherous footing when getting in and out of the car.)

(2) Rather than having sheet flow into Eagleville Brook, as occurs now, the proposed revised "lower" (southern) parking lot would be graded to drain away from the wetland area and stream, toward the northeast direction where a bioretention area would be located. The bioretention area was designed by Mike Dietz, within a funded project with the Department of Energy and Environmental Protection (DEEP), in collaboration with the University of Connecticut. Mike Dietz would also supervise installation of the bioretention area and plantings. Informal parking on the area that would become the bioretention area would no longer be allowed, and blocked by a physical barrier such as shrubs or posts.

The engineering design brings the proposed footprint of this parking lot slightly closer to the wetland, but dramatically improves overall drainage. Mike Dietz is available to answer questions about this proposed adjustment in the parking lot footprint. Lost [informal] parking in the bioretention area would be recovered in the parking lot, with a net dramatic improvement in overall storm water management, with benefit to Eagleville Brook.

(3) For the bioretention excavation, roughly 12-14 inches of existing soil would be removed, replacing it with 6 inches of bioretention media (this leaves 6 inches of storage for water). This equates to roughly 20 yards of media for the 1,090 square foot bioretention unit. The media will consist of 60% septic sand (12 yards, or 17 tons), and 40% screened topsoil (8 yards), to be blended at DeSiato Sand and Gravel.

(4) The proposed new handicapped parking area in the upper (northern) parking lot would also drain away from the wetland, into drainage elements shown on the map. We would plan to use asphalt for the handicapped area. We could not afford pavers for the handicapped area, given the magnitude of the overall project. We also wish to repair a large pothole in the northern (upper) driveway with asphalt, which is not shown on the design.

(5) The larger area of asphalt shown as "Project Alternative #1" in a box near the upper left corner of the map refers to a possible extension of asphalt into an area already approved for asphalt by Planning and Zoning and the Wetlands Agency at the time that the "upper" (northern) parking lot was approved for a new addition on the building (*Site Plan A-0.2 as obtained from the Inland Wetlands File dated 3/5/1996, and based on a plan titled Storrs Friends Meeting, date 3/3/1996 prepared by Meehan Associates Consulting Engineers-Surveyors, P.C. Manchester, CT*). Although we may wish to expand the area of asphalt, it would *not* go closer to the wetland than previously approved. Also, the drainage area shown in the design and the bioretention area would both improve overall site drainage substantially, relative the current situation.

(6) No work will be done by the contractor in the area of the septic tank and field as part of this project because of the risk of damage to the underground components.



HIGHLAND SOILS LLC

June 23, 2015

Joe Boucher
Towne Engineering, Inc.
1 Richmond Lane
South Windham, CT 06226

**RE: STORRS FRIENDS MEETING
57 HUNTING LODGE ROAD
MANSFIELD, CT**

Dear Joe:

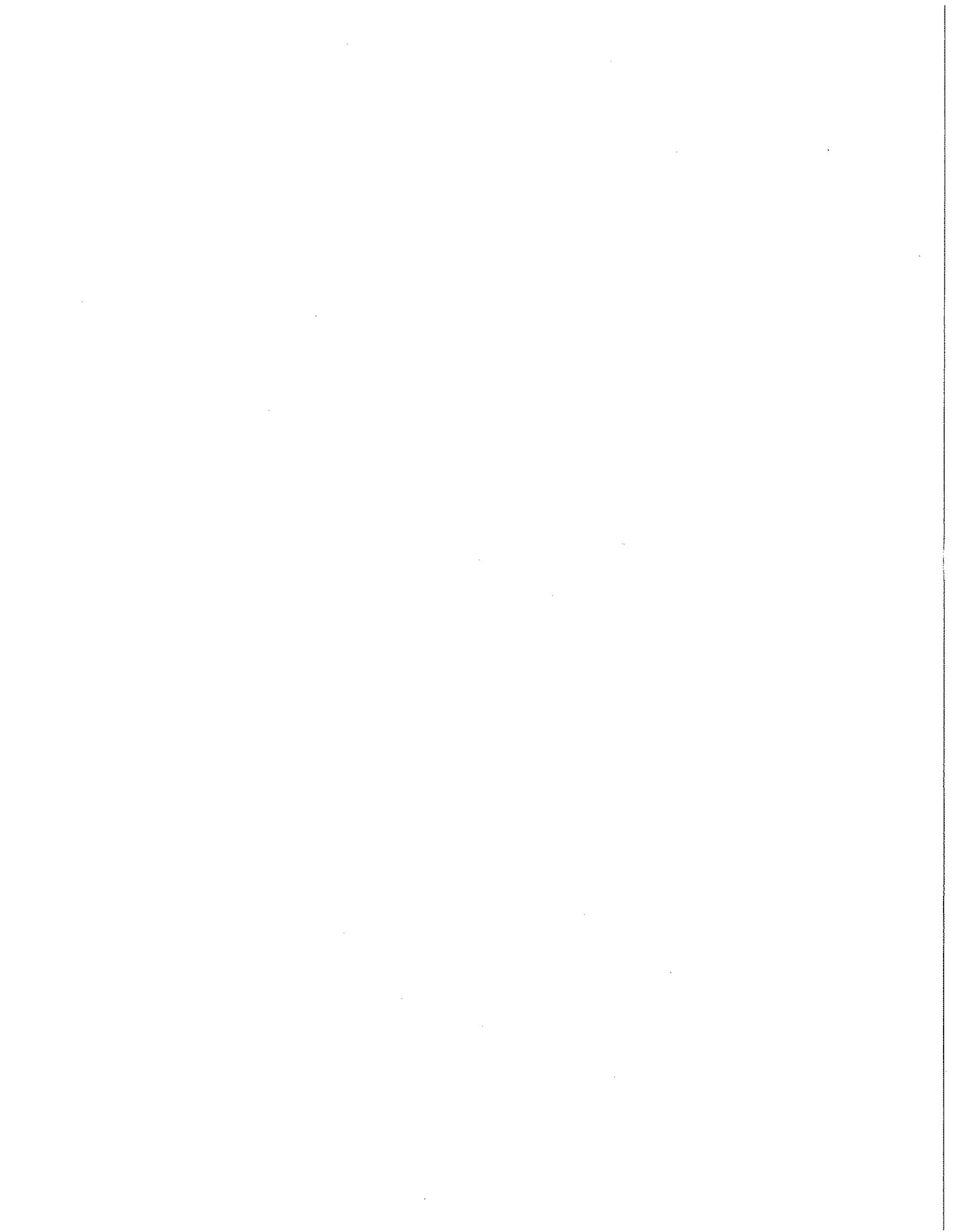
The inland wetland boundaries on the above-referenced property were field delineated on April 30, 2015. The wetlands were field delineated in accordance with the standards of the National Cooperative Soil Survey and the definition of wetlands as found in the Connecticut General Statutes, Chapter 440, Section 22A-38. I have reviewed the plans prepared by your office and have found the representation of the field delineated wetlands to be substantially correct.

If you have any questions, or require additional information, please call me at (860) 742-5868.

Very truly yours,

John P. Ianni, M.S.
Professional Soil Scientist
CPESC

c:\users\owner\documents\let2015\let36.doc





**Notice of Tentative Determination to Approve
An Exemption to Connecticut General Statutes Section 25-68d(b) (Flood Management)
And Intent to Waive Public Hearing
Applicant(s): Connecticut Department of Transportation (DOT)
Application No.: FM-201503335
City/Town: Coventry and Mansfield**

The Commissioner of the Department of Energy and Environmental Protection ("DEEP") hereby gives notice that a tentative determination has been reached to approve the following application. The Commissioner also intends to waive the requirement for public hearing provided that a hearing may be held on this application if the Commissioner determines that the public interest will best be served thereby, and shall hold a hearing upon receipt of a petition as more thoroughly described below.

Application Number: FM-201503335

Applicant's Name and Address: Connecticut Department of Transportation
2800 Berlin Turnpike, P.O. Box 317546
Newington, CT 06131-7546

Contact Name and Phone No.: Mark W. Alexander, 860-594-2931

Type of Permit: Flood Management Exemption

Relevant statute(s)/Regulation: Section 25-68d of the Connecticut General Statutes,

Exemption From: Sec.25-68h-3(e)(1) of RCSA

Project Description: Bridge Replacement

Project Location: Route 275 over Willimantic River, Coventry & Mansfield

Water(s): Willimantic River

COMMISSIONER'S FINDINGS/REGULATORY CONDITIONS

The proposed activity will affect the Special Flood Hazard Area of the Willimantic River.

According to CGS Section 25-68d(d), the commissioner, after public notice of the application for exemption and an opportunity for a public hearing in accordance with the provisions of this Section, may approve such exemption if he determines that the agency has shown that the activity or critical activity is in the public interest, will not injure persons or damage property in the area of such activity, complies with the provisions of the National Flood Insurance Program, and, in the case of a loan or grant, the recipient of the loan or grant has been informed that

increased flood insurance premiums may result from the activity or critical activity. The agency has determined that the proposed activity meets these requirements and recommends issuance by the commissioner of an approval of exemption for this project.

INFORMATION REQUESTS/PUBLIC COMMENT

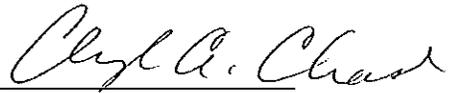
This application has been assigned No. FM-201503335; please use this number when corresponding with DEEP regarding this application. Interested persons may obtain a copy of the application from the applicant's contact noted above. The applications and supporting documentation are available for inspection at the DEEP, Bureau of Water Protection & Land Reuse, 79 Elm Street, Hartford, CT from 8:30am to 4:30pm, Monday through Friday. Questions may be directed to Colin Clark of the Inland Water Resources Division at (860) 424-3214 or colin.clark@ct.gov.

Before making a final decision on this application, the Commissioner shall consider written comments on the application from interested persons. Written comments on the application should be directed to Colin Clark, Bureau of Water Protection & Land Reuse, Inland Water Resources Division, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127, or may be submitted via electronic mail to: colin.clark@ct.gov, no later than thirty (30) days from the publication date of this notice.

PETITIONS FOR HEARING

Petitions shall be signed by 25 persons and should include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. Original signed petitions may be scanned and sent electronically to deep.adjudications@ct.gov or may be *mailed or delivered* to: DEEP Office of Adjudications, 79 Elm Street, 3rd floor, Hartford, CT 06106-5127. All petitions must be received within the comment period noted above. If submitted electronically, original signed petitions must also be mailed or delivered to the address above within ten days of electronic submittal. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation.

6/12/15
Publication Date


Cheryl A. Chase, Director
Inland Water Resources Division
Bureau of Water Protection and Land Reuse

ADA PUBLICATION STATEMENT

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action and Equal Opportunity Employer that is committed to complying with the Americans with Disabilities Act. To request an accommodation contact us at (860) 418-5910 or deep.accommodations@ct.gov



The Connecticut Water Company
93 West Main Street, Clinton, CT 06413-0562
Attn: David Radka DRadka@ctwater.com

The University of Connecticut
31 LeDoyt Road, Unit 3055, Storrs, CT 06269-3055
Attn: Jason Coite Jason.Coite@uconn.edu

Application No.: DIV-201404187
Towns: Ellington, Vernon, Tolland, Coventry, Mansfield
Waters: Shenipsit Lake, Hockanum River, Willimantic River
Permit type: Water Diversion
Project: Interconnection and diversion of water from the Connecticut Water Company public water system in Tolland to the University of Connecticut and the Town of Mansfield

Dear Messrs. Radka and Coite:

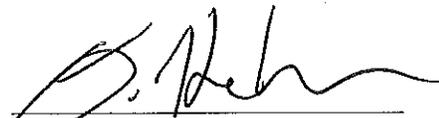
The Commissioner of Energy and Environmental Protection has approved your application to conduct certain regulated activities. Your attention is directed to the conditions of the enclosed permit. You should read your permit carefully. Construction and other work must conform to that which is authorized.

If you have not already done so, you should contact your local Planning and Zoning Office and the U. S. Army Corps of Engineers to determine local and federal permit requirements on your project, if any. Write the Corps' New England District, Regulatory Branch, 696 Virginia Road, Concord, MA 01742-2751; <http://www.nae.usace.army.mil/> or call 1-800-343-4789.

Section 22a-379 of the General Statutes requires the holder of a water diversion permit authorizing a consumptive use of waters of the state to pay an annual fee to the Commissioner of Energy and Environmental Protection. Each year, the department mails an invoice for payment to each permit holder. Payment of the invoice is due by July 1st.

If you have any questions concerning your permit, please contact the Inland Water Resources Division at (860) 424-3019.

6/12/15
DATE


Doug Hoskins
Environmental Analyst III

COPIES FURNISHED TO:

All Parties
Mayor/First Selectman
Conservation Commission
Inland Wetland Agency

DEEP Inland Fisheries
DPH Drinking Water Section
U. S. Army Corps of Engineers
Planning & Zoning Commission

Mark Sussman, Esq. msussman@murthalaw.com
Patricia L. Boye-Williams, Esq. pboyewilliams@murthalaw.com
W. Richard Smith, Jr., Esq. wsmith@rc.com
David Murphy DaveM@miloneandmacbroom.com



PERMIT

Permittees: The Connecticut Water Company
93 West Main Street, Clinton CT 06413-0562
Attn: David Radka

The University of Connecticut
31 LeDoyt Road, Unit 3055, Storrs, CT 06269-3055
Attn: Jason Coite

Permit No: DIV-201404187

Town: Ellington, Vernon, Tolland, Coventry, Mansfield

Project: Interconnection and diversion of water from the Connecticut Water Company public water system in Tolland to the University of Connecticut and the Town of Mansfield

Waters: Shenipsit Lake, Hockanum River, Willimantic River

Pursuant to Connecticut General Statutes Section 22a-368, the Commissioner of Energy and Environmental Protection (“Commissioner”) hereby grants a permit to The Connecticut Water Company and The University of Connecticut (“the Permittees”) to conduct regulated activities associated with the interconnection and transfer of water from the Connecticut Water Company public water system in Tolland to the University of Connecticut and Mansfield. The purpose of said activities is to provide supplemental public water supplies to the University of Connecticut and the Town of Mansfield.

AUTHORIZED ACTIVITY

Specifically, the permittees are authorized to: 1) transfer a maximum of 1.85 million gallons per day of potable water from The Company’s Northern Operations Western System to Mansfield and the University of Connecticut’s public water system Connecticut Water via a proposed regional 5.3 mile pipeline along Route 195, and 2) installation of a 0.5 mile water distribution main emanating from the aforementioned regional pipeline westerly along Route 44 from Mansfield Four Corners to the vicinity of the Jensen’s Mobile Home Park. The location of the regional pipeline and the water distribution main authorized by this permit are referred to as “the Site”.

The activities proposed will impact Shenipsit Lake, Hockanum River, and the Willimantic River.

All activities shall be conducted in accordance with plans entitled: “Water Systems and Proposed Improvements / Tolland-Mansfield Regional Pipeline and Interconnection / Tolland, Coventry &

Mansfield, CT," prepared by Milone & MacBroom, dated 12/6/2013, revised through 4/7/2014, submitted as a part of the application.

This authorization constitutes the licenses and approvals required by Section 22a-368 of the Connecticut General Statutes.

This authorization is subject to and does not derogate any present or future property rights or other rights or powers of the State of Connecticut, conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state, or local laws or regulations pertinent to the property or activity affected thereby.

The permittees' failure to comply with the terms and conditions of this permit shall subject the permittees, including the permittees' agents or contractor(s) to enforcement actions and penalties as provided by law.

This authorization is subject to the following conditions:

CONDITIONS:

1. **Expiration.** This permit shall expire on May 29, 2040.
2. **Construction Commencement and Completion.** If construction of any structures or facilities authorized herein is not completed within three years of issuance of this permit or within such other time as may be provided by this permit, or if any activity authorized herein is not commenced within three years of issuance of this permit or within such other time as may be provided by this permit, this permit shall expire three years after issuance or at the end of such time as may be authorized by the Commissioner.
3. **Notification of Project Initiation.** The permittees shall notify the Commissioner in writing two weeks prior to: (A) commencing construction or modification of structures or facilities authorized herein; and (B) initiating the diversion authorized herein.
4. **De minimis Alteration.** For Water Diversion Permits (CGS 22a-368) - The permittees may not make any alterations, except de minimis alterations, to any structure, facility, or activity authorized by this permit unless the permittees apply for and receives a modification of this permit in accordance with the provisions of section 22a-377(c)-2 of the Regulations of Connecticut State Agencies. Except as authorized by subdivision (5) of section 22a-377(b)-1(a) of the Regulations of Connecticut State Agencies, the permittee may not make any de minimis alterations to any structure, facility, or activity authorized by this permit without written permission from the Commissioner. A de minimis alteration means an alteration which does not significantly increase the quantity of water diverted or significantly change the capacity to divert water.

5. **Maintenance of Structures.** All structures, facilities, or activities constructed, maintained, or conducted pursuant hereto shall be consistent with the terms and conditions of this permit, and any structure, facility or activity not specifically authorized by this permit, or exempted pursuant to section 22a-377 of the General Statutes or section 22a-377(b)-1 of the Regulations of Connecticut State Agencies, or otherwise exempt pursuant to other General Statutes, shall constitute a violation hereof which may result in modification, revocation or suspension of this permit or in the institution of other legal proceedings to enforce its terms and conditions.

Unless the permittees maintain in optimal condition any structures or facilities authorized by this permit, the permittees shall remove such structures and facilities and restore the affected waters to their condition prior to construction of such structures or facilities.

6. **Accuracy of Documentation.** In issuing this permit, the Commissioner has relied on information provided by the permittees. If such information was false, incomplete, or misleading, this permit may be modified, suspended or revoked and the permittees may be subject to any other remedies or penalties provided by law.
7. **Best Management Practices & Notification of Adverse Impact.** In constructing or maintaining any structure or facility or conducting any activity authorized herein, or in removing any such structure or facility under condition 5 hereof, the permittees shall employ best management practices to control storm water discharges, to prevent erosion and sedimentation, and to otherwise prevent pollution of wetlands and other waters of the State. Best Management Practices include, but are not limited, to practices identified in the *Connecticut Guidelines for Soil Erosion and Sediment Control* as revised, 2004 *Connecticut Stormwater Quality Manual*, Department of Transportation's *ConnDOT Drainage Manual* as revised, and the Department of Transportation Standard Specifications as revised.

The permittees shall immediately inform the Commissioner of any adverse impact or hazard to the environment which occurs or is likely to occur as the direct result of the construction, maintenance, or conduct of structures, facilities, or activities authorized herein.

8. **Reporting of Violations.** The permittees shall, no later than 48 hours after the permittees learn of a violation of this permit, report same in writing to the Commissioner. Such report shall contain the following information:
- a. the provision(s) of this permit that has been violated;
 - b. the date and time the violation(s) was first observed and by whom;
 - c. the cause of the violation(s), if known
 - d. if the violation(s) has ceased, the duration of the violation(s) and the exact date(s) and times(s) it was corrected;

- e. if the violation(s) has not ceased, the anticipated date when it will be corrected;
- f. steps taken and steps planned to prevent a reoccurrence of the violation(s) and the date(s) such steps were implemented or will be implemented;
- g. the signatures of the permittee(s) and of the individual(s) responsible for actually preparing such report, each of whom shall certify said report in accordance with condition 12 of this permit.

9. **Material Storage in the Floodplain.** The storage of any materials at the site which are buoyant, hazardous, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life, below the elevation of the five-hundred (500) year flood is prohibited. Any other material or equipment stored at the site below said elevation by the permittees or the permittees' contractor must be firmly anchored, restrained or enclosed to prevent flotation. The quantity of fuel stored below such elevation for equipment used at the site shall not exceed the quantity of fuel that is expected to be used by such equipment in one day.
10. **Permit Transfer.** This permit is not transferable without the prior written consent of the Commissioner.
11. **Contractor Notification.** The permittees shall give a copy of this permit to the contractor(s) who will be carrying out the activities authorized herein prior to the start of construction and shall receive a written receipt for such copy, signed and dated by such contractor(s). The permittees' contractor(s) shall conduct all operations at the Site in full compliance with this permit and, to the extent provided by law, may be held liable for any violation of the terms and conditions of this permit.
12. **Certification of Documents.** Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the permittees or a responsible corporate officer of the permittees, a general partner of the permittees, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:
- “I have personally examined and am familiar with the information submitted in this document and all attachments thereto and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense in accordance with Section 22a-6 of the General Statutes, pursuant to Section 53a-157b and in accordance with any other applicable statute.”

13. **Submission of Documents.** Any document or notice required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Director, Inland Water Resources Division
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval on any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means any calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

14. **Rights.** This permit is subject to and does not derogate any rights or powers of the State of Connecticut, conveys no property rights or exclusive privileges, and is subject to all public and private rights and to all applicable federal, state, and local law. In constructing or maintaining any structure or facility or conducting any activity authorized herein, the permittees may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this State. The issuance of this permit shall not create any presumption that this permit should be renewed.

15. **Shenipsit Lake Stream Flow Release.**

- a. In order to mitigate potential fisheries impact resulting from the authorized diversion, the permittees shall maintain the current stream flow release of 3.24 cubic feet per second (cfs), with the current spring freshet release as defined in Table L-1 in Attachment L of their application dated April 23, 2014. Such stream flow releases shall be made from the Shenipsit Lake to the Hockanum River immediately downstream of the lake, and
- b. Within ten (10) years of the issuance of this permit, the permittees shall make stream flow releases from the Shenipsit Lake fully coincident with Class 3 releases as defined in section 26-141b-6(a)(3) and 26-141b-6(b) of the Regulations of Connecticut State Agencies (RCSA).
- c. The permittees may request from the commissioner an extension of time to comply with the releases as defined in section 26-141b-6(a)(3) RCSA. Any such request for a time extension shall be submitted in writing to the commissioner and shall include reasons for such a request, including but not limited to, engineering,

financial, permitting, or public health considerations. The commissioner shall have sole discretion to approve or deny such request.

- d. The permittees may request an alternative site specific release compatible with the standards of section 26-141b-6(f)(2) of the RCSA.
 - e. In accordance with commitments made by the permittees in the application, the permittees shall not reduce managed stream flow releases from Shenipsit Lake due to an inadequate water supply margin of safety for the duration of this permit.
- 16. Stream Discharge Record Keeping and Reporting.** The permittees shall monitor and record the daily discharge to the Hockanum River immediately downstream of the Shenipsit Lake. The permittees shall record the stage reading, the gate opening, the date and time of the reading and the converted flow value at the time of measurement. The permittees shall also record the number of hours elapsed since their discharge to the Hockanum River has fallen below the specified trigger thresholds as required in Condition #15. A copy of the daily discharge records shall be included in the Annual Report to the Commissioner required by Condition #23 of this permit.
- 17. Metering.** The permittees shall measure the total amount of water transferred each day from The Connecticut Water Company water supply system to the Town of Mansfield and the University of Connecticut at the intersection of Route 195 and Towers Loop Road in Mansfield and shall for the duration of this authorization continuously operate and maintain any meters used in such measuring in good working order. In the event of meter malfunction or breakage, the permittees shall repair or replace such meter within 72 hours. The permittees shall submit for the Commissioner's approval a metering plan no later than 60 days prior to the initiation of the diversion.
- 18. Meter Calibration.** The permittees shall biennially test and calibrate any distribution meter used for measuring the total amount of water transferred each day within two percent accuracy as shown through a post-calibration test. The permittees shall maintain a record of the accuracy and calibration test(s) along with supporting documentation and certifications. The permittees shall make a copy of said records available to the Commissioner or the Commissioner's designee immediately upon request.
- 19. Daily Transfer Record.** The permittees shall maintain a daily record of the meter readings indicating the total volume of water in gallons transferred from The Connecticut Water Company water system to the Town of Mansfield and the University of Connecticut water supply system that day. The daily record shall also record the time of meter readings and denote and explain any instances in which the diversion of water exceeded the authorized withdrawal limitation(s) specified in this permit. A copy of the daily record of withdrawals shall be included in the Annual Report to the Commissioner required by Condition #23 of this permit.

20. **Leak Detection.** Within five years of the issuance of this permit, and every five years thereafter, the permittees shall complete a system wide comprehensive leak detection survey of the water distribution system and repair any leaks found. The leak detection survey shall follow standards and criteria contained within AWWA Manual M36 as may be amended or revised. A copy of all actions taken pursuant to the leak detection survey, including the number of miles of main surveyed, survey techniques and methodology, leaks found and repairs made shall be included in the Annual Report to the Commissioner required by Condition #23 of this permit.
21. **Long-range Water Conservation Plan.** The permittees shall implement their Long-range Water Conservation Plans, as described in the permittees' application, and in accordance with the permittees' Water Supply Plan as approved pursuant to CGS Section 25-32d and any amendments or updates thereto. The permittees shall maintain a summary of all actions taken each year pursuant to the Long-range Water Conservation Plan and a description of the estimated or actual water savings achieved. A copy of this summary shall be included in the Annual Report to the Commissioner required by Condition #23 of this permit.
22. **Record Keeping Requirements.** Except as provided below, or as otherwise specified in writing by the commissioner, all information required under this permit shall be retained at the permittees' principal place of business, or be readily available on request. The permittees shall maintain a copy of this permit on Site at all times during the construction of the pipeline. The permittees shall retain copies of all records and reports required by this permit; and records of all data used to compile these reports for a period of at least ten years from the date such data was generated or report created, whichever is later.
23. **Annual Reporting.** The permittees shall submit by February 28 of each year, for the duration of this authorization, an Annual Report for the preceding calendar year. The Annual Report shall be certified in accordance with Condition #12 of this permit and shall contain a compilation of the following:
 - a. A copy of the daily record of stream discharge as required by Condition #16 of this permit;
 - b. A copy of the records documenting the daily transfer of water from The Connecticut Water Company water system to The University of Connecticut water supply system as required by Condition #29 of this permit;
 - c. A copy of the leak detection report as required by Condition #20 of this permit;
 - d. A summary report from each permittee of all the actions taken pursuant to the Long-Range Water Conservation Plan and Water Conservation Plan and description of actual or estimated water savings achieved, as required by Condition #21 of this permit;
 - e. A copy of the list of the number and types of customers connected to the regional pipeline during the prior year as required by Condition #26; and

- f. Denotation and explanation of any instances of violation of the authorized withdrawal limitation(s) or any other condition of this authorization.

24. **Wood Turtle Conservation.** To limit the potential for impacts to Wood Turtles (a Connecticut species of special concern) at locations as indicated on Figure 4-3 of Attachment D-4 of the permittees' application, project construction activities should be restricted to the turtles' dormant period of November 1 to April 1 at said locations. If work must be done during the turtle's active period of April 1 to November 1 at said locations, the permittee shall adhere to the following precautionary measures:

- silt fencing shall be installed around the appropriate work area prior to construction,
- work crews shall be apprised of the species description and possible presence prior to construction,
- work crews shall search the work area for wood turtles each day prior to construction,
- any wood turtles encountered during the work shall be moved unharmed to an area immediately outside of the fenced work area and oriented in the same direction it was walking when found,
- all precautionary measures should be taken to avoid degradation to wetland habitats including any wet meadows and seasonal pools,
- work conducted in these habitats during the early morning and evening hours should occur with special care not to harm basking or foraging individuals,
- no heavy machinery or vehicles shall be parked in any turtle habitat and precautions shall be taken when the machinery is traveling to the work area to avoid turtles,
- work conducted during the early morning and evening hours shall occur with special care not to harm basking or foraging individuals, and
- all silt fencing shall be removed after work is completed when soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Refer to the attached fact sheet for species and habitat description.

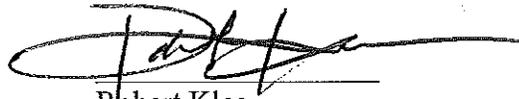
25. **Southern Bog Lemming Conservation.** Work crews shall be apprised of the species description, habitat and possible presence of the Southern Bog Lemming, at locations as indicated on Figure 4-3 of Attachment D-4 of the permittees' application, prior to construction. Refer to the attached fact sheet for species and habitat description.

26. **New Service Connections.** New service connections along the distribution pipeline route from Tolland, or more intensive use of an existing service connection along said route, from water supplied pursuant to this permit shall be limited to only those proposed land uses of an intensity allowed under local plans of conservation and development as of the

date of the Connecticut Office of Policy and Managements' notice of Environmental Impact Evaluation sufficiency (September 16, 2013). Connections for users of greater intensity will be allowed only if determination is made by State or local agencies, within their applicable authorities, including but not limited to the Public Utility Regulatory Authority pursuant to Section 16-10 Connecticut General Statutes, that such connection is necessary to address a demonstrated environmental, public health, public safety, economic, social, or general welfare concern. The permittees shall provide in the annual report as, required by Condition #23 of this permit, a list of the number and types of customers connected to the pipeline during the prior year.

Issued by the Commissioner of Energy and Environmental Protection on:

6/2/15
Date


Robert Klee
Commissioner