## Brooklyn Inland Wetlands Commission Special Meeting Agenda Tuesday, September 12, 2023 Zoom and In-Person Meeting Community Center 31 Tiffany Street Upper Level 6:00 p.m.

In-Person: Community Center 31 Tiffany Street Upper Level, Brooklyn, CT		
Online: Click link below: https://us06web.zoom.us/j/83921116459 C	Go to Zoom.us , click Sign In OR On the top right, click Join a Meeting Enter meeting ID: 839 2111 6459	
Phone: Dial 1 646 558 8656 US Toll Enter meeting number: 839 2111 6459 You can bypass attendee number by pressing #		

## Call to Order:

## **Roll Call:**

**Staff Present:** 

**Seating of Alternates:** 

### **Public Commentary:**

Additions to Agenda: None.

Approval of Minutes: Site Walk Minutes August 16, 2023 Special Meeting Minutes August 8, 2023

**Public Hearings:** 

## 1. IWWC 23-006 Ryan Kelleher. 404 Wolf Den Road, Map 18, Lot 22, RA Zone;

Improvement of an existing gravel driveway through a wetland to construct a single-family home on 41 acres of land.

### **Old Business:**

## 1. IWWC 23-006 Ryan Kelleher. 404 Wolf Den Road, Map 18, Lot 22, RA Zone;

Improvement of an existing gravel driveway through a wetland to construct a single-family home on 41 acres of land.

## 2. IWWC 23-007 Tripp Hollow Investments LLC, Tripp Hollow Road, Map 14, Lot 10-1

**RA Zone;** Proposed single-family house, well, septic system and site grading in the upland review area on a subdivision lot created in 2004.

3. 253 Wolf Den Road, Map 17, Lot 32-3 – Janessa Choquette. Remediation work update.

**4. 071321A A. Kausch & Sons, Pomfret Landing Road/Church Street, Map 37, Lot 17 and Map 37 Lot 20 and 21;** Wetlands crossing for driveway, 2 residential homes, septic system, well, minor grading. Show cause hearing for wetlands violation.

## New Business:

1. IWWC 23-010 A. Kausch & Sons, Church Street, Map 37, Lot 21, RA Zone; Driveway with wetlands crossing; 2,100 sq ft of wetlands alterations for single-family house, septic system, well and grading in the upland review area.

## **Other Business:**

## **Communications:**

- 1. Wetlands Agent Monthly Report.
- 2. Budget Update.

Public Commentary:

## Adjourn:

Richard Oliverson, Chairman

## Brooklyn Inland Wetlands and Watercourses Commission Special Meeting Minutes Tuesday, August 8, 2023 Zoom and In-Person Meeting Community Center 31 Tiffany Street Upper Level

Call to Order: 6:05 pm

**<u>Roll Call</u>**: Richard Oliverson, Adam Brindamour, Janet Booth, Adam Tucker. Absent with notice: Demian Sorrentino, Jason Burgess, James Paquin.

Staff Present: Margaret Washburn; Terry Mahanna, Recording Secretary.

<u>Attendance</u>: Attending in person: Norm Thibeault, Killingly Engineering; Keith Pasay. Attending via Zoom: Jeff Bord, Bohler Engineering; Pete Parent, CHA Engineering; Ryan Kelliher; Sharon Loughlin; one anonymous participant.

Seating of Alternates: None.

Public Commentary: None.

### Approval of Minutes:

Site Walk Minutes June 19, 2023 – APPROVED 4-0-0. Special Meeting Minutes July 11, 2023 - APPROVED 4-0-0.

### **Public Hearings:**

**1. IWWC 23-009: A. Kausch & Sons, Church Street, Map 37, Lot 21, RA Zone;** Single-family house with driveway crossing; 2,100 sq ft of proposed wetlands alteration.

Per Margaret Washburn, Paul Archer did not show up for the site inspection that was scheduled at the July 11, 2023 meeting. He had agreed to attend the site inspection, stake the house location and re-hang the missing wetlands flags prior to the site inspection. None of this was done, and he failed to tell the agent or Commission that he would not attend the site inspection.

Adam Tucker stated that he read the minutes from the July 11, 2023 meeting, and reviewed the applications and plans for all tonight's agenda items. He feels qualified to vote on these applications after making himself familiar with the applications. He was not present at the July 11, 2023 meeting.

No hearing can be held at this time due to the failure of the applicant to post signage and notify abutters. This item will defer to Old Business.

### **Old Business:**

1. IWWC 23-009: A. Kausch & Sons, Church Street, Map 37, Lot 21, RA Zone; Single-family house with driveway crossing; 2,100 sq ft of proposed wetlands alteration.

A **motion** was made by Adam Brindamour and seconded by Janet Booth to deny without prejudice due to an incomplete application. Motion carried unanimously by vote (4-0-0).

**2. IWWC 23-005: Townsend Development Associates LLC, 538 Providence Road, Map 41, Lot 16, PC Zone;** Modification to existing approved Special Permit to construct approximately 16,100 sf of Self Storage in two buildings, and 19,360 sf of commercial space.

Margaret Washburn referenced the comments provided by Syl Pauley (Regional Engineer). Pete Parent confirmed that all his responses to Syl Pauley's review comments were satisfactory and the issues have been addressed. Mr. Parent indicated that there is a hydrodynamic separator. In addition, the commission discussed the need for the culvert to be maintained by the Town, now and on an ongoing basis. Pete Parent stated that the culvert should be maintained at least once per year. Ms. Washburn suggests a letter to the First Selectman, Austin Tanner, and to Tommy Rukstela, Highway Department foreman, to communicate the need for maintenance now, and ongoing.

A **motion** was made by Janet Booth and seconded by Adam Brindamour to approve with standard conditions. The reasons stated were that after the site walk, review of plans, review of comments, and the acceptance of revisions, we are satisfied that there are no impacts to wetlands. A follow-up letter is to be sent by Ms. Washburn to the Town regarding requirement for ongoing maintenance. Motion carried unanimously by vote (4-0-0).

**3. IWWC 23-006: Ryan Kelleher. 404 Wolf Den Road, Map 18, Lot 22, RA Zone;** Improvement of an existing gravel driveway through a wetland to construct a single-family home on 41 acres of land.

Norm Thibeault provided a brief history of the lot: an application was originally made in 2004 to the Army Corps of Engineers (ACOE) for a 10-lot subdivision. The ACOE approved more than 12,000 sf of wetlands alterations. The time allowed for approval of the IWWC application ran out with no decision rendered. The developer appealed, but the economy crashed, causing the appeal to be withdrawn. Norm indicated that the driveway was in at that time and provided photos from 1934 showing the driveway.

Mr. Thibeault described the proposed improvements to the existing driveway, which includes widening it in two areas. There are two 15" pipes which are frequently overwhelmed, even in 2-year storms. Two 4' x 2' open-bottomed box culverts are proposed. The flood zone is shown on the plans with a compensatory flood storage area for impacts from filling wetlands for widening the driveway. A modified rip rap swale with a plunge pool are proposed to slow down runoff from the driveway.

A wetlands impact report with recommendations prepared by Joe Theroux was submitted. Impacts are significant within the footprint of the fill proposed. Mr. Thibeault read a portion of the report. There is a need to address the lack of silt fence and hay bales between the compensatory flood storage area and wetlands. Work mut be done during low flow/no flow conditions. Vegetation needs to be established quickly following the wetlands alterations.

Mr. Thibeault stated that he received Syl Pauley's comments at 3:27pm today, although he did not yet have time to address them. Mr. Thibeault concludes that the impact proposed now will be lower than that of the previously proposed 10-lot subdivision.

Margaret Washburn mentioned the need to be mindful when doing the work and asked if there would be coffer dams or bypass pumping. Mr. Thibeault indicated they could show a temporary culvert or bypass pumping on the plans, if requested.

Janet Booth asked a question as to ensuring ongoing maintenance. Mr. Thibeault indicated the owner (Ryan Kelleher) is aware he will need to stay on top of the maintenance. Mr. Kelleher stated that he has no intentions of paving the driveway; it will remain as gravel in perpetuity.

Ms. Washburn asked Mr. Thibeault how he was sure that the larger box culverts would not drain the wetlands upstream of the driveway. Mr. Thibeault said that the box culverts will have the same invert elevations as the pipes do now.

Ms. Washburn indicated that a public hearing is appropriate. Mr. Thibeault agreed to provide revisions regarding a temporary culvert or bypass pumping for the hearing.

Mr. Thibeault said that low flow/no flow conditions usually occur around this time of year. Regarding the recommendation made by Joe Theroux that vegetation needs to be established quickly following work, Ms. Washburn asked Mr. Thibeault how this would be accomplished late in the growing season. Mr. Thibeault said that Joe Theroux recommended using New England Wet-mix for seeding native wetlands species.

The commission determined a site walk is warranted and will therefore be conducted on August 16<sup>th</sup> at 5:30pm.

A **motion** was made by Adam Brindamour and seconded by Adam Tucker to schedule a public hearing to be held on September 12, 2023 at 6:00 pm at 31 Tiffany Street, Upper Level. Motion carried unanimously by vote (4-0-0).

**4. IWWC 23-007: Tripp Hollow Investments LLC, Tripp Hollow Road, Map 14, Lot 10-1 RA Zone;** Proposed single-family house, well, septic system and site grading in the upland review area on a subdivision lot created in 2004.

Norm Thibeault, as representative of this project, described the parcel as being largely in the regulated area, with the proposed placement of the house creating the least amount of disturbance. He indicated that the parcel is a total of 4.3 acres with approximately 1.75 acres being wetlands.

Janet Booth asked generally how to prevent an owner/developer from clearing up a bigger area than that shown on the approved plan. Margaret Washburn indicated that the developer on this site will not work beyond the limit of disturbance shown on the plan. Also, homeowners are allowed to cut firewood.

A discussion regarding wetlands flagging followed. The property was flagged in 2004. The commission's policy is that if flagging is older than 15 years, the property must be re-delineated. The commission indicates the property needs to be re-delineated prior to construction and the plans need to be updated. Mr. Thibeault agrees.

A **motion** was made by Adam Brindamour and seconded by Janet Booth to continue discussion of this application at the next meeting on September 12, 2023. Wetlands are to be re-delineated and revised plans are to be submitted by September 5, 2023. Motion carried unanimously by vote (4-0-0).

**5. IWWC 23-008: Wal-Mart Real Estate Business Trust, 450 Providence Road, Map 41, Lot 10, PC Zone;** Online grocery pickup addition with parking modifications.

Jeff Bord presented via Zoom. The commission reviewed the application, plans, site walk and inspection report which indicated no work beyond the existing asphalt and no increase in impervious surfaces. It was concluded that there will be no impact to wetlands.

A **motion** was made by Janet Booth and seconded by Adam Tucker to approve the application with standard conditions, because there are no impacts to wetlands. Motion carried unanimously by vote (4-0-0).

## New Business:

253 Wolf Den Road – Janessa Choquette. Show Cause Hearing for Wetlands Violation.

Richard Oliverson indicated he went out to look at the property.

Keith Pasay was present to represent this project. He provided a brief history of the work he previously did when he owned the property, and indicated his goal was not to provide a completed driveway. He no longer owns the property.

As a result of the washout that occurred, Keith agreed to the following remediation sequence:

- Block the top of the driveway with stacked hay bales.
- To slow the flow from the neighboring property, hay bales/silt fence will be placed between the property line and the driveway (60' long).
- Raise the grade between the property line and the driveway by about 3-6" using loam and seed.
- Raise the gravel above the wetlands crossing to meet the grade of the grass on either side.
- Clean the fill that washed down the slope with hand tools, put it back up the slope, loam and seed the washout.
- Place landscape fabric, loam and seed, and add a light layer of hay mulch to stabilize.

Margaret Washburn indicated she is agreeable to closing the Notice of Violation after the site and the above remediation work has been completed. She and Janet Booth will both inspect the site tomorrow morning., Mr. Pasay will provide Ms. Washburn with an update on progress by Monday, August 14, 2023.

A **motion** was made by Adam Brindamour and seconded by Janet Booth to approve the remediation plan and the remediation sequence with an inspection at the beginning of the remediation process. Motion carried unanimously by vote (4-0-0).

## **Other Business:**

**Discussion on special meeting dates**: There is no need to vote. It is anticipated that the next regular meeting will be held at the Green Building. Until we meet at the Green Building, meetings at Tiffany Street will be special meetings.

**183 Barrett Hill Road – Erica and Ryan Murphy.** New horse barn, no wetlands permit needed, no action for the commission.

## Jake Kausch - 409 & 411 Church Street driveway.

Adam Brindamour saw the property. Millings have been added to the driveway. The driveway was supposed to be gravel. Mr. Brindamour stated that if the fill rises to a level in the uplands review area that is beyond what was permitted on the approved plan, Margaret Washburn is to issue a Notice of Violation requiring Jake Kausch to attend a show cause hearing on September 12, 2023.

FCR Realty LLC - FCR Gravel Pit, Map 41, Lot 6 and Map 35, Lot 7. The 3/3/22 Enforcement Order has been closed.

## **Communications:**

- 1. Wetlands Agent Monthly Report.
- 2. Budget Update.

**Public Commentary**: Sharon Loughlin, who joined via Zoom, mentioned that she attended to do her due diligence, and was impressed with the level of professionalism at tonight's meeting.

**Adjourn:** Motion to adjourn was made at 8:36 p.m. by Adam Brindamour and seconded by Adam Tucker. Motion carried unanimously by vote (4-0-0).

Submitted By: Terry Mahanna Recording Secretary

### Brooklyn IWWC

### August 16, 2023 Site Walk Minutes

### 5:30 PM

Site walk location:	IWWC 23-006: Ryan Kelleher. 404 Wolf Den Road, Map 18, Lot 22, RA Zone
Members present:	Adam Brindamour, Adam Tucker, Jason Burgess, Janet Booth
Others present:	Norm Thibeault
Meeting started:	5:30 PM

Mr. Thibeault escorted the members down the driveway into the wetland. He had a set of plans and identified the flags as we walked. Flags 10, 21, 22, 16 were pointed out; The stone wall running alongside the driveway on the left was noted as the northern border of the property. Flags 14, 19, 18 were noted with explanation that they mark the portion of the driveway that is wetland.

Mr. Thibeault pointed out the two old pipes that the plan shows as being replaced with 4'x2' open bottom box culverts with goal of it being able to handle 100-year storm. He explained top of culvert will be 9 in higher than the top of the current pipe.

There was discussion about the historical location of the flow of the brook. Discussion of materials used historically for pipe manufacture.

Flags including 5a marking end of wetland were pointed out. Proposed plunge pool was pointed out.

He explained that the wetland surface will be raised anywhere from half a foot to a foot due to current driveway not being flat.

Discussion of history of driveway and date of manufacture of pipe materials.

Discussion of riprap swale, ¼ ac worth of swale and pavement on 10% slope up to house.

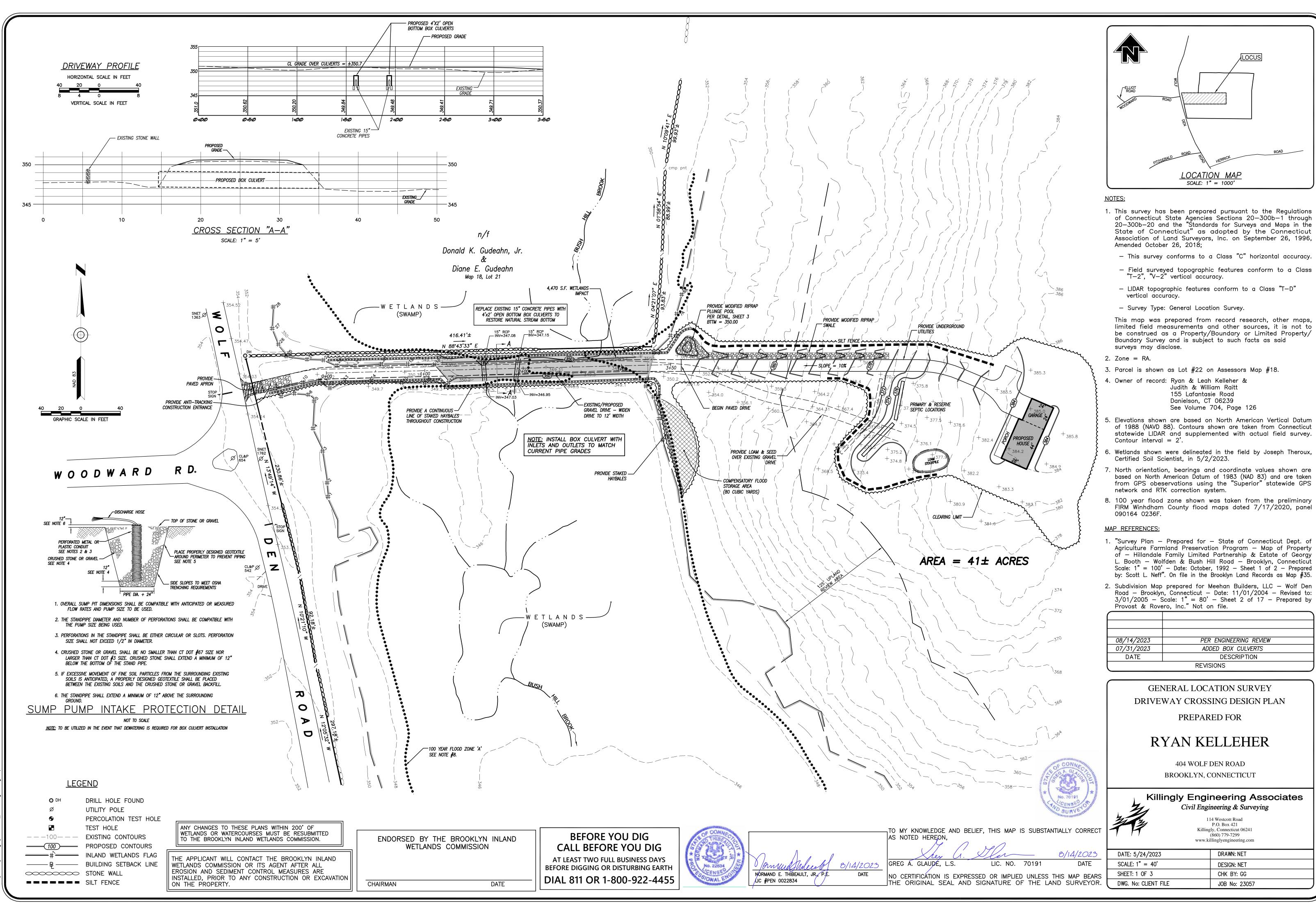
He explained driveway width would be widened from 10 to 12 feet.

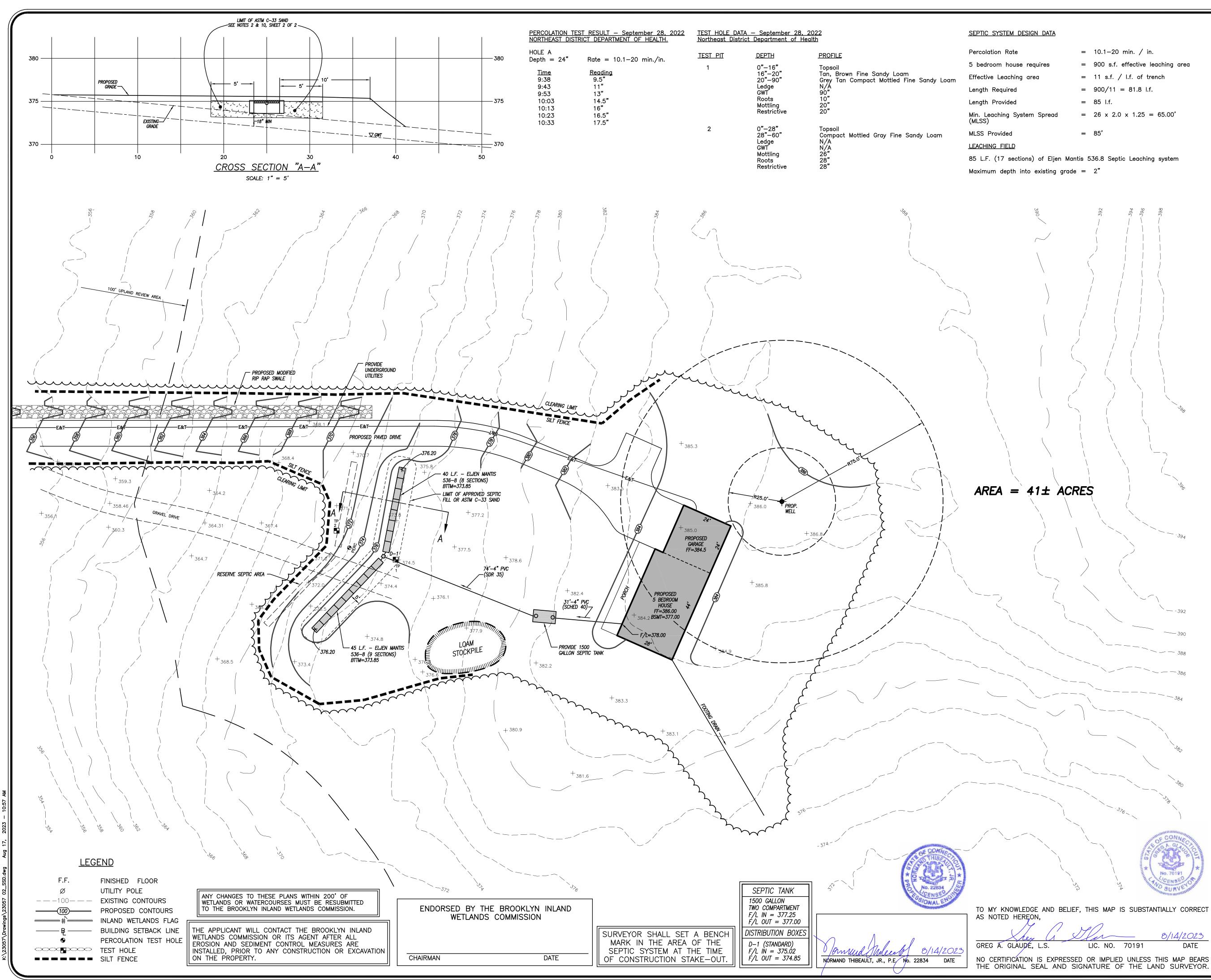
At 5:43 Member Adam Tucker departed ending quorum.

Meeting ended: 5:43 PM

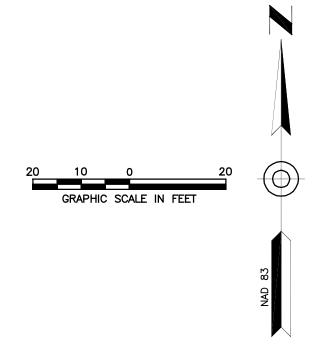
Respectfully submitted,

Janet Booth, Member Brooklyn IWWC





Rate	=	10.1–20 min. / in.
house requires	=	900 s.f. effective leaching area
aching area	=	11 s.f. / l.f. of trench
uired	=	900/11 = 81.8 l.f.
rided	=	85 l.f.
ng System Spread	=	26 x 2.0 x 1.25 = 65.00'
ded	=	85'



## NOTES:

- 1. This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20-300b-1 through 20-300b-20 and the "Štandards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, Amended October 26, 2018;
- This survey conforms to a Class "C" horizontal accuracy.
- Field surveyed topographic features conform to a Class "T-2", "V-2" vertical accuracy.
- LIDAR topographic features conform to a Class "T-D" vertical accuracy.
- Survey Type: General Location Survey.

This map was prepared from record research, other maps, limited field measurements and other sources, it is not to be construed as a Property/Boundary or Limited Property/ Boundary Survey and is subject to such facts as said surveys may disclose.

- 2. Zone = RA.
- 3. Parcel is shown as Lot #22 on Assessors Map #18.
- 4. Owner of record: Ryan & Leah Kelleher & Judith & William Raitt 155 Lafantasie Road Danielson, CT 06239 See Volume 704, Page 126
- 5. Elevations shown are based on North American Vertical Datum of 1988 (NAVD 88). Contours shown are taken from Connecticut statewide LIDAR and supplemented with actual field survey. Contour interval = 2'.
- 6. Wetlands shown were delineated in the field by Joseph Theroux, Certified Soil Scientist, in 5/2/2023.
- 7. North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD 83) and are taken from GPS obeservations using the "Superior" statewide GPS network and RTK correction system.
- 8. Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455 or 811.

## MAP REFERENCES:

- 1. "Survey Plan Prepared for State of Connecticut Dept. of Agriculture Farmland Preservation Program - Map of Property of — Hillandale Family Limited Partnership & Estate of Georgy L. Booth - Wolfden & Bush Hill Road - Brooklyn, Connecticut Scale: 1" = 100' - Date: October, 1992 - Sheet 1 of 2 - Prepared by: Scott L. Neff". On file in the Brooklyn Land Records as Map #35.
- 2. Subdivision Map prepared for Meehan Builders, LLC Wolf Den Road – Brooklyn, Connecticut – Date: 11/01/2004 – Revised to: 3/01/2005 – Scale: 1" = 80' – Sheet 2 of 17 – Prepared by Provost & Rovero, Inc." Not on file.

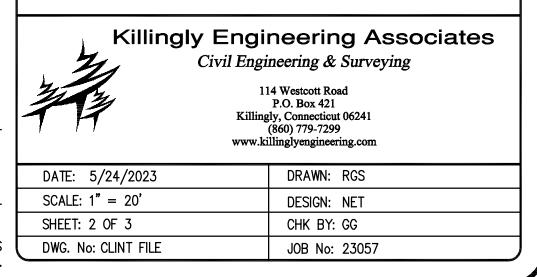
08/03/2023	PER ENGINEERING REVIEW	
7/31/2023	ADDED BOX CULVERTS	
DATE	DESCRIPTION	
REVISIONS		

GENERAL LOCATION SURVEY SEPTIC SYSTEM DESIGN PLAN

PREPARED FOR

# **RYAN KELLEHER**

404 WOLF DEN ROAD **BROOKLYN, CONNECTICUT** 



EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soil and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.

- Route traffic patterns within the site to avoid existing or newly planted vegetation.

- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems \_ so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flow into them.

- Schedule construction so that final grading and stabilization is completed as soon as possible.

SLOW THE FLOW

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Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Use diversions, stone dikes, silt fences and similar measures to break flow lines and dissipate storm water energy.

- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion.

KEEP CLEAN RUNOFF SEPARATED

Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off-site generated runoff with sediment laden runoff generated on-site until after adequate filtration of on-site waters has occurred.

- Segregate construction waters from clean water.

- Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub-drainage basins within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off-site damage that it can cause is reduced. It is generally more expensive to correct off-site damage than it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.
- Direct runoff from small disturbed areas to adjoining undisturbed vegetated areas to reduce the potential for concentrated flows and increase

settlement and filtering of sediments.

- Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.
- Determine the need for sediment basins. Sediment \_ basins are required on larger developments where major grading is planned and where it is impossible or impractical to control erosion at the source. Sediment basins are needed on large and small sites when sensitive areas such as wetlands, watercourses, and streets would be impacted by off-site sediment deposition. Do not locate sediment basins in wetlands or permanent or intermittent watercourses. Sediment basins should be located to intercept runoff prior to its entry into the wetland or watercourse.

SEPTIC SYSTEM CONSTRUCTION NOTES

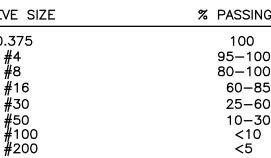
- 1. The building, septic system and well shall be accurately staked in the field by a licensed Land Surveyor in the State of Connecticut, prior to construction.

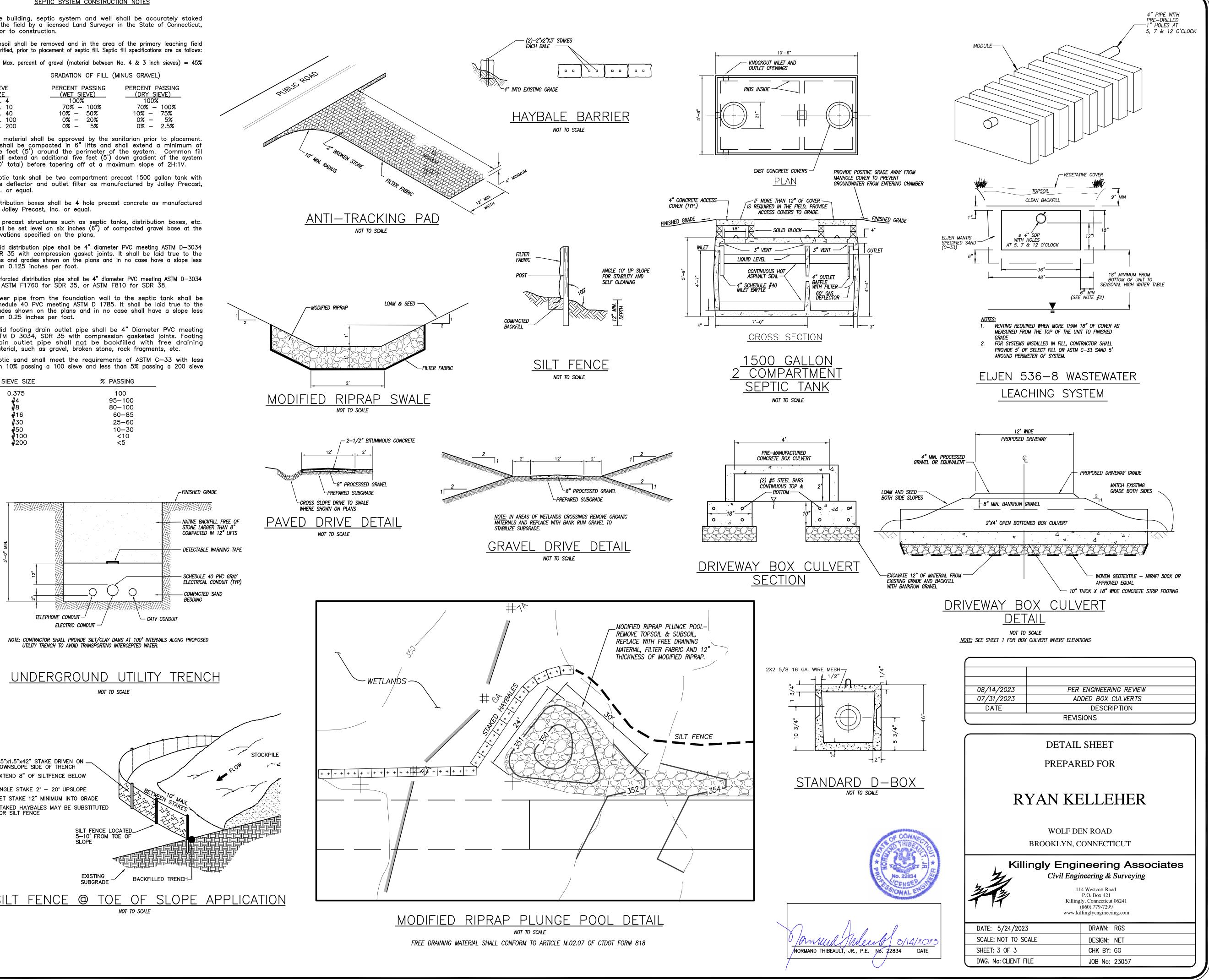
GRADATION OF FILL (MINUS GRAVEL)

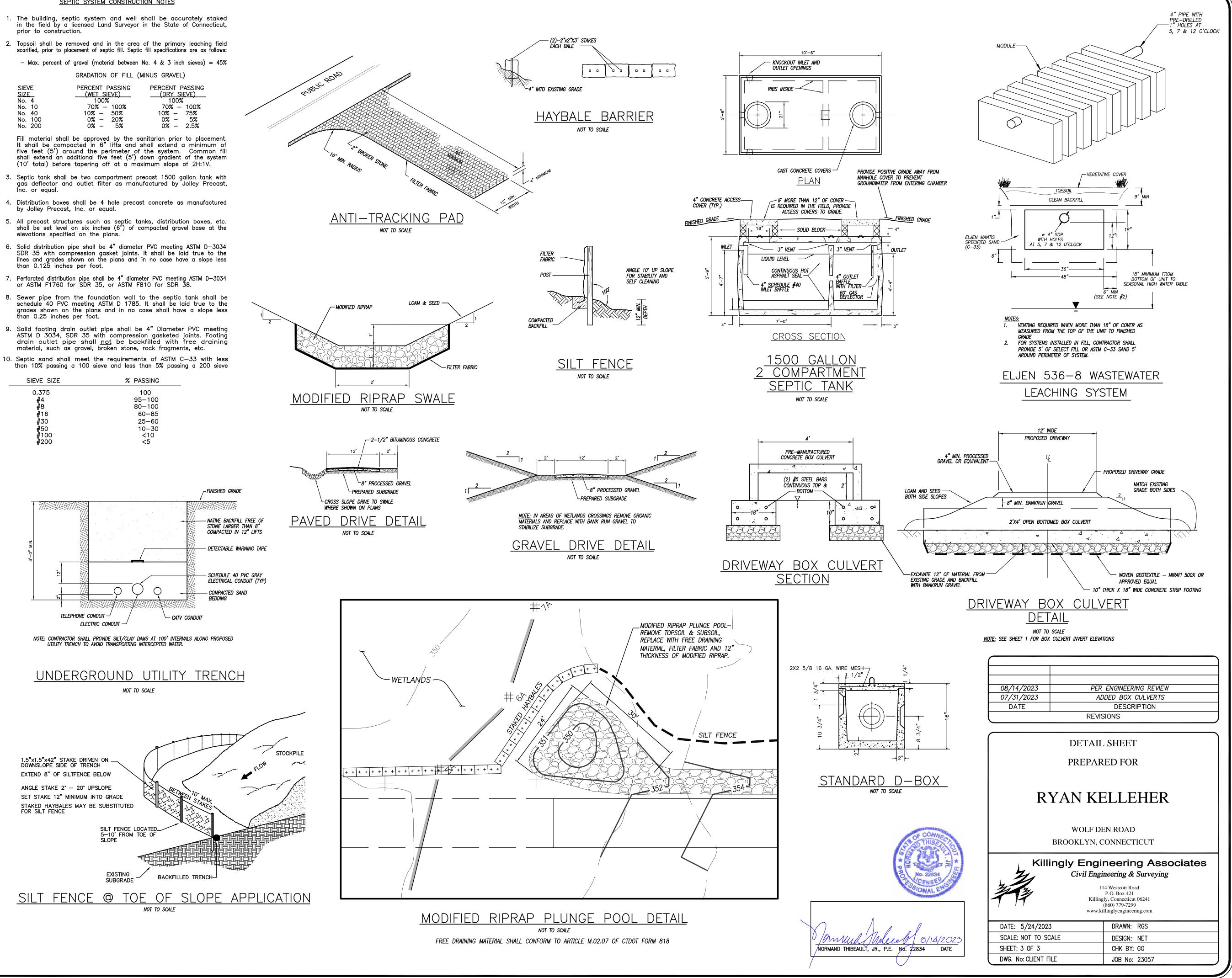
	•	•
SIEVE SIZE	PERCENT PASSING (WET SIEVE)	PERCENT PASSING (DRY SIEVE)
No. 4	100%	100%
No. 10	70% — 100%	70% — 100%
No. 40	10% — 50%	10% — 75%
No. 100	0% – 20%	0% – 5%
No. 200	0% – 5%	0% — 2.5%

(10' total) before tapering off at a maximum slope of 2H:1V.

- 3. Septic tank shall be two compartment precast 1500 gallon tank with Inc. or equal.
- 5. All precast structures such as septic tanks, distribution boxes, etc. shall be set level on six inches (6") of compacted gravel base at the elevations specified on the plans.
- 6. Solid distribution pipe shall be 4" diameter PVC meeting ASTM D-3034 than 0.125 inches per foot.
- 8. Sewer pipe from the foundation wall to the septic tank shall be than 0.25 inches per foot.
- 9. Solid footing drain outlet pipe shall be 4" Diameter PVC meeting material, such as gravel, broken stone, rock fragments, etc.
- 10. Septic sand shall meet the requirements of ASTM C-33 with less









# NORTHEAST DISTRICT DEPARTMENT OF HEALTH

69 South Main Street , Unit 4 , Brooklyn, CT 06234 Phone (860) 774-7350 , Fax (860) 774-1308 , Web Site www.nddh.org

Tripp Hollow Investments, LLC. 89 Wauregan Road Brooklyn, CT 06234

## SUBJECT: FILE #5005209 -- TRIPP HOLLOW ROAD #, MAP #14, LOT #10-1, BROOKLYN, CT

Dear Tripp Hollow Investments, LLC.:

The subject plan (KILLINGLY ENGINEERING ASSOCIATES, JOB# 16069, TRIPP HOLLOW INVESTMENTS, DRAWN 06/15/2023, REVISED 08/11/2023, REVISED 08/18/2023) submitted on 08/18/2023 has been reviewed, as requested. Following completion of this review, it has been determined that the subject plan will meet the requirements of the Technical Standards for a 3 bedroom house based on the following:

- 1. CT licensed surveyor must stake house, well, benchmark, and septic system, offset stakes to include flow line or bottom of trench elevation.
- 2. Permanent benchmark to be set within 50 feet horizontally and 12 feet vertically of septic system.
- 3. A bottom of excavation inspection is required once the topsoil and fill material have been removed.
- 4. A current sieve analysis of select fill material (within past 30 days) must be submitted to the Northeast District Department of Health (NDDH).
- 5. A set of house plans must be submitted prior to an Approval to Construct Permit being issued.
- 6. An engineer/surveyor's As-Built drawing (to include ties to the house) is to be submitted following the final inspection and approval of installation by NDDH.
- 7. Installer to schedule and be present for the final inspection with NDDH staff. Level to be set up for verification of elevations OR an Engineer's As Built will be required.

This letter is NOT to be construed as an APPROVAL TO CONSTRUCT the septic system and DOES NOT indicate that the Northeast District Department of Health endorses approval for issuance of any building permit.

Prior to the start of construction of the septic system, you must apply for your Approval to Construct Permit and submit the applicable fees to this office. A set of the floor plans of your house must be submitted to NDDH for review. Your CT licensed installer must come in to this department to sign for the permit if we do not have his signature on file. Office hours are Mon - Thurs 8 am - 4 pm, Fri 8 am - Noon.

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

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

Sincerely,

Donora Moe

Donovan Moe, EHS Environmental Health Specialist-NDDH

cc: Brooklyn Building Official; Killingly Engineering Associates

## Margaret Washburn

From: Sent: To: Cc: Subject: Attachments: Greg Glaude <gglaude@killinglyea.com> Thursday, August 24, 2023 10:19 AM Margaret Washburn Normand Thibeault Kelliher --> Wolf Den Road, Brooklyn Kelliher PH sign.jpg

Hi Margaret,

The public hearing sign for Kelliher on Wolf Den Road was posted today. See attached photo.

Thanks.

Greg A. Glaude, L.S. Killingly Engineering Associates Civil Engineering & Surveying

www.killinglyengineering.com Mailing Address: P.O. Box 421 Dayville, CT 06241

Office Address: 114 Westcott Road Danielson, CT 06239 Phone: 860-779-7299 Cell: 860-617-9998 Email: gglaude@killinglyea.com





P.O. Box 421 Dayville, CT 06241 Phone: 860-779-7299

August 16, 2023

Ms. Margaret Washburn, WEO Clifford B. Green Memorial Center 69 South Main Street Brooklyn, CT 06234

Re: Proposed Driveway Wetlands Crossing, Wolf Den Road

Dear Margaret;

In response to review comments from Regional Engineer, Syl Pauley, P.E. on the referenced project, we ofer the following:

## Sheet 1 of 3 – Driveway Crossing Design Plan

- 1. The inlet and outlet inverts of the proposed box culverts have been more clearly defined as requested;
- 2. Additional haybale erosion controls have been added between the compensatory flood storage area and the adjacent wetlands;
- 3. A profile of the proposed driveway has been added to the plan;
- 4. A cross section for the proposed driveway has been added to the plan with elevations in relation to existing and proposed topography on the site.

### Sheet 2 of 3 – Septic System Design Plan

1. State of Connecticut Public Health Code does not require anti-buoyancy measures for distribution boxes and/or septic tanks.

### Sheet 3 of 3 – Detail Sheet

Inverts for each box culvert are shown on sheet 1 on the plans as well as a note specifying that they shall be installed at the locations and at the grades of the existing pipes;

The dimensions on the "Driveway Box Culvert" detail have been modified to shown interior dimensions of 4'x2'.

We trust that the revised plans have addressed all items and concerns accordingly. Please feel free to contact me if there are any further questions or concerns.

Sincerely:

hileauth

Normand Thibeault, Jr., P.E.

## **NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS**

## ENGINEERING REVIEW PERTAINING TO A PROPOSED DRIVEWAY CROSSING A WETLAND (Assessor's Map 17, Lot 32-3) WOLF DEN DRIVE BROOKLYN, CT (October 5, 2022)

The comments contained herein pertain to my review of plans and supporting documentation, which is for the construction of a driveway across a wetland. The plans consisting of three (3) sheets were created by Killingly Engineering Associates, dated May 24, 2023 with revision date of July 31, 2023.

## Sheet 1 of 3 – Driveway Crossing Design Plan

- . The inlet and outlet inverts of each box culvert need to be more clearly defined.
- 2. Hay bale erosion and sediment control system needs to be located between the "compensatory flood storage area" and the delineated wetland edge.
- 3. A profile of the proposed driveway across the wetland needs to be included on the plan showing where the existing 15" pipes are positioned and, the proposed culverts and fnished elevations of the driveway wearing surface.
- 4. A cross-section of the driveway section needs to be added to the plan showing the extent of slopes into the wetland on each side of the driveway. Elevations shall be in relation to existing and proposed topography on the site plan.

## Sheet 2 of 3 – Septic System Design Plan

1. Considering the seasonal high groundwater level indicated by mottling, were anti-buoyancy measures considered for the septic tank and distribution box to guard against flotation?

## Sheet 3 of 3 – Detail Sheet

- 1. Inverts (in out) for each box culvert need to be added to the "Driveway Box Culvert Detail."
- 2. The dimensions of the "Driveway Box Culvert Section" do not match the area (interior 4'x2') used to calculate flow in the Drainage Calculations. Which is correct?

Syl Pauley, Jr., P.E.

Syl Pauley, Jr., P.E., NECCOG Regional Engineer

August 24, 2023

Dear Abutting Property Owner;

The Town of Brooklyn Inland Wetlands Commission will be holding a public hearing on Tuesday, September 12, 2023, at 6:00 PM via Webex or in person at the Brooklyn Community Center, 31 Tiffany Street, Upper Level, on the following matter:

*IWWC 23-006 of Ryan Kelleher* requesting permission to make improvements to an existing gravel driveway which will include wetlands impacts. The property located at 44 Wolf Den Road, Assessor's Map 18, Lot 22.

All are invited to attend. The application and plans are available for viewing in the Town of Brooklyn Land Use Office.

Syl's email dated Aug. 21, 2023

Hi Margaret,

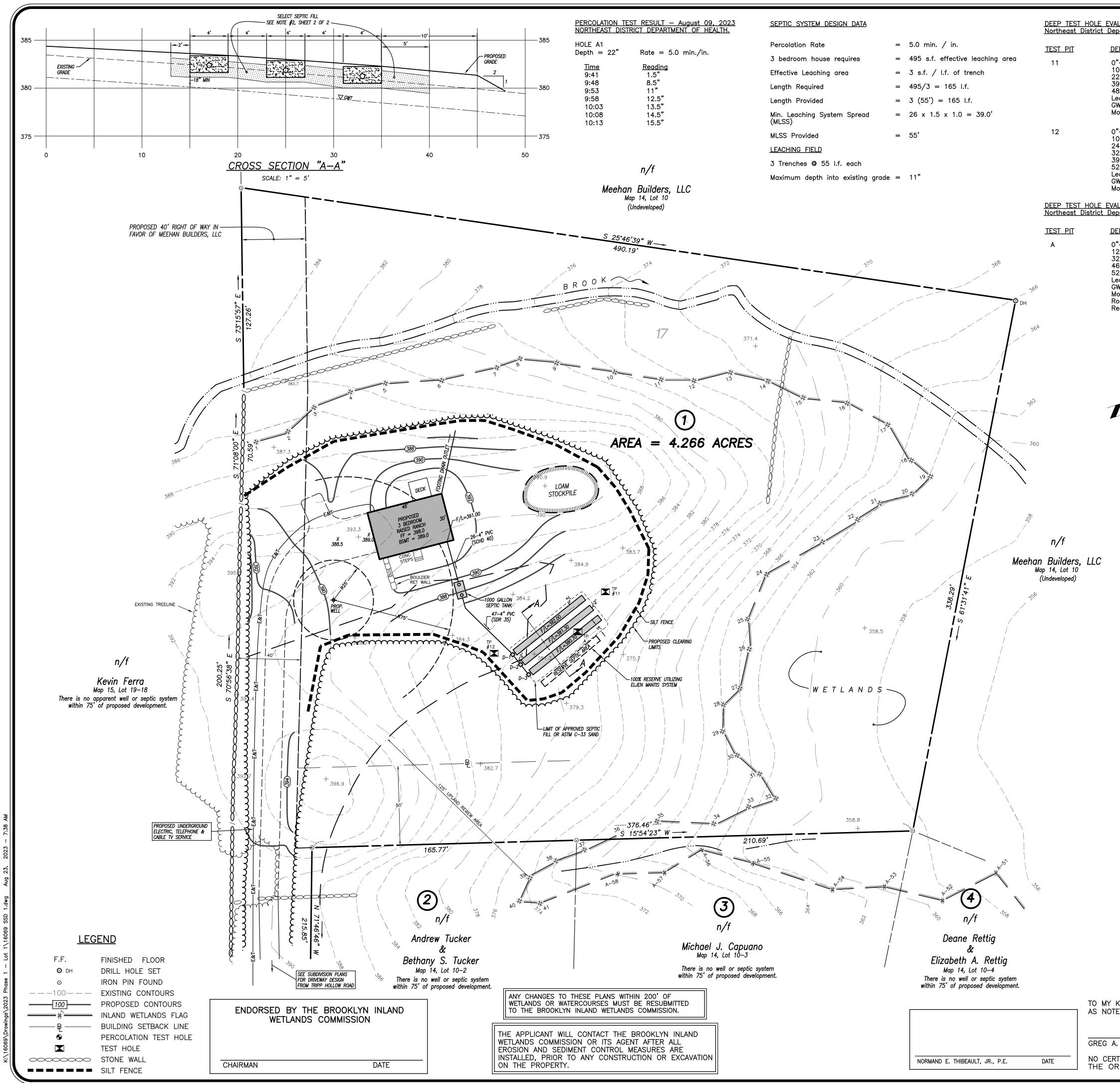
I have reviewed Killingly Engineering's revised plans of August 14, 2023 for 404 Wolf Den Drive and found the plans are modified in accordance with my review comments of August 2023. I now find the plans to be acceptable and have no further comments.

I would like to add that my review comments were mistakenly noted with a 2022 review date. The date should have read "August 8, 2023."

Syl







HOLE EVALUATION - January 7, 2004	
District Department of Health         DEPTH       PROFILE         0"-10"       Topsoil Organics Roots         10"-22"       V.F. Sandy Loam Roots         22"-39"       F. Sandy Loam, Fine Roots         22"-39"       F. Sandy Loam, Fine Roots         39"-48"       Loamy Fine Sand/Gravel Compact Mottled         48"-93"       Loamy V.F. Sand/Gravel Very Compact Mottles         Ledge       N/A         GWT       N/A         Mottling       30"         0"-10"       Topsoil Roots Organics         10"-24"       V.F. Sandy Loam Moist Roots         24"-32"       F. Sandy Loam Moist Roots         32"-39"       Loamy Sand/Gravel Mottled         39"-52"       Loamy Sand/Gravel Mottled         39"-52"       Loamy Sand/Gravel Rocky Mottled Very Compact         Ledge       N/A         GWT       N/A         GWT       N/A         GWT       N/A         Mottling       29"         *       HOLE EVALUATION - August 09, 2023         District Department of Health       PEPTH         DEPTH       PROFILE         0"-12"       Topsoil/Organics         12"-32"       Fine Sandy Loam         32"	LOCUS LOCUS LOCUS NU DOCATION MAP SCALE: 1" = 1000'
Ledge N/A GWT N/A Mottling 32" Roots 26" Restrictive 32"	NOTES: 1. This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Sections 20–300b–1 through 20–300b–20 and the "Standards for Surveys and Maps in the State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996, Amended October 26, 2018; This map was prepared from record research, other maps, limited field measurements and other sources, It is not to be construed as a Property/Boundary or Limited Property/Boundary Survey and is subject to such facts as said surveys may disclose. – This survey conforms to a Class "C" horizontal accuracy.
, LLC SURVEYOR SHALL SET A BENCH MARK IN THE AREA OF THE SEPTIC SYSTEM AT THE TIME OF CONSTRUCTION STAKE-OUT. SEPTIC TANK 1000 GALION TWO COMPARTMENT F/L IN = 386.25 F/L OUT = 386.00 DISTRIBUTION BOXES D-1 (OVERFLOW) F/L IN = 382.17 F/L OUT = 382.00 OVERFLOW = 381.47 F/L IN = 381.47 F/L IN = 381.45 D-3 (STANDARD) F/L IN = 380.87 F/L OUT = 380.70	<ul> <li>This survey conforms to a Class "C" horizontal accuracy.</li> <li>Topographic features conform to a Class "T-2", "V-2" vertical accuracy.</li> <li>Survey Type: General Location Survey.</li> <li>Zone = RA.</li> <li>Owner of record: Tripp Hollow Investments, LLC 89 Wauregan Road, Brooklyn, CT 06234</li> <li>Parcel shown is as Lot #10-1 on Assessors Map #14.</li> <li>Parcel lies within Flood Hazard Zone 'C' (areas of minimal flooding as shown on FIRM Map # 090164 Panel 0008A Effective date: Jan. 3, 1985.</li> <li>Northeast District Department of Health file number: 04003693.</li> <li>Elevations based on National Geodetic Vertical Datum of 1929. Contours taken from aerial photogrammetry and supplemented with actual field survey. Contour interval = 2'.</li> <li>Wetlands shown were flagged in the field by Joseph Therous, Certified Soil Scientist in August 2023.</li> <li>Before any construction is to commence contact "CALL BEFORE YOU DIG" at 1-800-922-4455.</li> <li>MAP REFERENCES:</li> <li>"Subdivision Map - prepared for - Meehan Builders, LLC - Tripp Hollow Road - Brooklyn, Connecticut - Scale: 1" = 80' - Dated: 3/11/2004 Revised to: 12/14/2004 - Provost &amp; Rovero, Inc." On file in the Brooklyn Land Records.</li> <li>"Property Survey - Showing Boundary Line Adjustment - Between - Lots 1 &amp; 4 Prepared for - Meehan Builders, LLC - Tripp Hollow Road - Brooklyn Connecticut - Scale: 1" = 80' - Dated: 3/21/2005 - Prepared by: Provost &amp; Rovero, Inc." On file in the Brooklyn Land Records.</li> <li>"Property Survey - Showing Boundary Line Adjustment - Between - Lots 1 &amp; 4 Prepared for - Meehan Builders, LLC - Tripp Hollow Road - Brooklyn Emotkyn, Connecticut - Scale: 1" = 80' - Dated: 6/21/2005 - Prepared by: Provost &amp; Rovero, Inc." On file in the Brooklyn Land Records.</li> <li><u>8/18/2023 PER NDDH REVIEW</u></li> <li><u>8/11/2023 TEST PIT DATA/SEPTIC SYSTEM</u></li> <li><u>DATE DESCRIPTION REVIEW</u></li> </ul>
TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON, GREG A. GLAUDE, L.S. LIC. NO. 70191 DATE NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS	GENERAL LOCATION SURVEY SEPTIC SYSTEM DESIGN PLAN - LOT 1 PREPARED FOR <b>TRIPP HOLLOW</b> <b>INVESTMENTS, LLC</b> TRIPP HOLLOW ROAD BROOKLYN, CONNECTICUT Killingly Engineering Associates Civil Engineering & Surveying I14 Westcott Road P.O. Box 421 Killingly, G00 779-7299 www.killingly.engineering.com

EROSION AND SEDIMENT CONTROL PLAN:	SEEDBED PREPARATION
REFERENCE IS MADE TO:	Loosen the soil to a depth of 3-4 inches with the area has been recently loosened or disturb Soil preparation can be accomplished by tracki
1. Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).	harrowing, raking or dragging with a section of compaction of the surface by equipment traveli If the slope is tracked, the cleat marks shall b
2. Soil Survey of Windham County Connecticut, U.S.D.A. Soil Conservation Service 1983.	direction of the flow of surface water. If soil testing is not practical or feasible on sr
<u>SOILS:</u> The proposed development area is comprised mainly of three soil types;	timing is critical, fertilizer may be applied at th 7.5 pounds per 1,000 square feet of 10—10—1
Timakwa and Natchaug (17), Sutton (52C) and Gloucester (59D)	may be applied using rates given in Figure TS- SEEDING
17 Timakwa and Natchaug soils, 0-2% slopes Included with these soils in mapping are areas of very poorly drained Catden soils	Apply seed uniformly by hand cyclone seeder, o hydroseeder at a minimum rate for the selecte
where the muck is more than 51 inches thick over mineral substratum. Also included are areas of very poorly drained Whitman, Menlo, Scarboro, Maybid, and Saco soils.	by 10% when hydroseeding. MULCHING
Whitman and Menlo soils formed in loamy glacial till. Scarboro soils are sandy and Maybid soils are silty and clayey. Saco soils are on flood plains and are silty. Minor components make up about 15 percent of the map unit	Temporary seedings made during optimum seed
Slope: nearly level Landscape: depressions	according to the recommendations in the 2002 of the recommended dates, increase the applic coverage.
Size of map unit: Areas commonly range from 3 to 150 acres. 52C Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony	MAINTENANCE
Included with this soil in mapping are areas of well drained Canton, Charlton, and	Inspect seeded area at least once a week and storm with a rainfall amount of 0.5 inch or gr
Paxton soils that are higher on the landscape. Canton soils are loamy over sandy, Charlton soils are sandy loam throughout, and Paxton soils have a dense substratum. Also included are small areas of poorly drained Leicester soils in depressions and	and rill erosion. Where seed has moved or where soil erosion h
drainageways. Small areas of moderately well drained Woodbridge soils are included in areas with a dense substratum. Some areas have a silt loam surface layer and	the failure. Repair eroded areas and install ac prevent reoccurrence of erosion.
subsoil. A few areas in New London County include well drained Narragansett soils and moderately well drained Rainbow soils. Minor components make up about 20 percent of this map unit.	Continue inspections until the grasses are firml considered established until a ground cover is
Slope: nearly level to strongly sloping Landscape: drainageways on uplands, depressions on uplands	control soil erosion and to survive severe weat vegetative cover).
Surface cover: 3 to 15 percent stones Size of map unit: Areas commonly range from 3 to 50 acres.	<u>PERMANENT VEGETATIVE COVER:</u> Refer to Permanent Seeding Measure in the 20
59D—Gloucester gravelly sandy loam, 15 to 35 percent slopes, extremely stony	and details related to the installation and main cover. In general, the following sequence of o
Included with these soils in mapping are areas of moderately well drained Sutton soils in slight depressions on the landscape, and poorly drained Leicester soils in depressions and drainageways. Also included are areas of moderately deep,	1. Topsoil will be replaced once the excavation Topsoil will be spread at a minimum compact
somewhat excessively drained and well drained Chatfield soils where bedrock is 20 to 40 inches below the surface. Shallow, somewhat excessively drained and well	<ol> <li>Once the topsoil has been spread, all stor will be removed as well as debris.</li> </ol>
drained Hollis soils are in small areas where bedrock is 10 to 20 inches below the surface. Minor components make up about 20 percent of the map unit.	3. Apply agricultural ground limestone at a re
DEVELOPMENT SCHEDULE:	per 1000 s.f. Apply 10–10–10 fertilizer or ec acre or 7.5 lbs. per 1000 s.f. Work lime and 4".
<ol> <li>Construction will begin with clearing, grubbing and rough grading of the proposed site. The work will be confined to areas adjacent to the proposed buildings, septic systems and driveways. Topsoil will be stockpiled on site and utilized during final grading.</li> </ol>	4. Inspect seedbed before seeding. If traffic compacted areas.
2. The site will be graded so that all possible trees on site will be saved to provide buffers to adjoining lots.	5. Apply the chosen grass seed mix. The rec
DEVELOPMENT CONTROL PLAN:	to June 15 & August 15 — October 1. 6. Following seeding, firm seedbed with a roll
<ol> <li>Development of the site will be performed by the individual lot owner, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout construction.</li> </ol>	seeding. If a permanent vegetative stand canr apply a temporary cover on the topsoil such
2. The sedimentation control mechanisms shall remain in place from start of construction until permanent vegetation has been established. The representative for the Town of Brooklyn will be notified when sediment and erosion control structures are	EROSION AND SEDIMENT CONTROL NARRATIVE:
initially in place. Any additional soil & erosion control measures requested by the Town or its agent, shall be installed immediately. Once the proposed development, seeding and planting have been completed, the representative shall again be	PRINCIPLES OF EROSION AND SEDIMENT CONTRO
notified to inspect the site. The control measures will not be removed until this inspection is complete. 3. All stripping is to be confined to the immediate construction area. Topsoil shall be stockpiled so that slopes do not exceed	energies and reduce runoff velocities that force soil and/or encourage the deposition of eroded sensitive area.
2 to 1. A hay bale sediment barrier is to surround each stockpile and a temporary vegetative cover shall be provided.	KEEP LAND DISTURBANCE TO A MINIMUM
<ol> <li>Dust control will be accomplished by spraying with water and if necessary, the application of calcium chloride.</li> <li>The proposed planting schedule is to be adhered to during the planting of disturbed areas throughout the proposed</li> </ol>	The more land that is in vegetative cover, the the soil, thus minimizing stormwater runoff and
construction site.	disturbance to a minimum not only involves mi any one time, but also the duration of exposu construction scheduling are interrelated. Phasir
6. Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.	distinct sections where construction work over a periods of time and each phase is not depende
FILTER BARRIER INSTALLATION AND MAINTENANCE:	order to be functional. A sequence is the ord to occur during any particular phase. A seque premise of "first things first" and "last things l
<ol> <li>Dig a 6" deep trench on the uphill side of the barrier location.</li> <li>Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.</li> </ol>	the inclusion of adequate erosion and sediment schedule is a sequence with time lines applied potential overlap of actions in a sequence whic
3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.	other. — Limit areas of clearing and grading. Pr
4. Inspect and repair barrier after heavy rainfall.	construction equipment with fencing or tree wells.
5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.	<ul> <li>Route traffic patterns within the site to vegetation.</li> </ul>
6. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands commission.	<ul> <li>Phase construction so that areas which one time are minimized and only the second secon</li></ul>
7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to	exposed. Clear only those areas e
be retained by the fence because: — the fence has been overtopped, undercut or bypassed by runoff water, — the fence has been moved out of position (knocked over), or	<ul> <li>Sequence the construction of storm drais operational as soon as possible du are stable before outletting storm</li> </ul>
<ul> <li>the geotextile has decomposed or been damaged.</li> </ul>	<ul> <li>Schedule construction so that final grad soon as possible.</li> </ul>
HAY BALE INSTALLATION AND MAINTENANCE:	SLOW THE FLOW
1. Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.	Detachment and transport of eroded soil must and reducing the erosive energy of water. The
<ol> <li>Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.</li> </ol>	as the volume and velocity of runoff increases, increases during development as a result of re removal of existing vegetation, removal of tops
3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.	construction of impervious surfaces.
4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not	<ul> <li>Use diversions, stone dikes, silt fences diversion dissipate storm water en</li> </ul>
regulated by the Inland Wetlands Commission. 5. Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails	<ul> <li>Avoid diverting one drainage system into potential for downstream flooding of</li> </ul>
to be retained by the barrier because: — the barrier has been overtopped, undercut or bypassed by runoff water,	KEEP CLEAN RUNOFF SEPARATED
<ul> <li>the barrier has been moved out of position, or</li> <li>the hay bales have deteriorated or been damaged.</li> </ul>	Clean runoff should be kept separated from se be directed over disturbed areas without addition the mixing of clean off—site generated runoff
TEMPORARY VEGETATIVE COVER:	on-site until after adequate filtration of on-sit - Segregate construction waters from clea
SEED SELECTION	<ul> <li>Divert site runoff to keep it isolated fro</li> </ul>
Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS—2 in the 2002 Guidelines.	drainage ways that flow through or sediment in that runoff is trapped
TIMING CONSIDERATIONS	REDUCE ON SITE POTENTIAL INTERNALLY AND INS While it may seem less complicated to collect
Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 year.	for treatment and just install a perimeter contr apply internal controls to many small sub-drain
SITE PREPARATION	reducing sediment loading from within the site, failure and the potential off—site damage that generally more expensive to correct off—site do
Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways.	internal controls. — Control erosion and sedimentation in the
Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring.	is easier to control erosion than t been carried downstream and depo
	<ul> <li>Direct runoff from small disturbed areas areas to reduce the potential for</li> </ul>
ENDORSED BY THE BROOKLYN INLAND	settlement and filtering of sedimen — Concentrated runoff from development s
WETLANDS COMMISSION	outlets using rip rapped channels, or similar measures.
	<ul> <li>Determine the need for sediment basins larger developments where major g impossible or impractical to control</li> </ul>
	impossible or impractical to contro basins are needed on large and sr as wetlands, watercourses, and str
CHAIRMAN DATE	sediment deposition. Do not locat permanent or intermittent watercou located to intercept runoff prior to
ANY CHANGES TO THESE PLANS WITHIN 200' OF	watercourse.
WETLANDS OR WATERCOURSES MUST BE RESUBMITTED TO THE BROOKLYN INLAND WETLANDS COMMISSION.	<ul> <li>Grade and landscape around buildings an away from them.</li> </ul>
THE APPLICANT WILL CONTACT THE BROOKLYN INLAND	
WETLANDS COMMISSION OR ITS AGENT AFTER ALL EROSION AND SEDIMENT CONTROL MEASURES ARE	
INSTALLED, PRIOR TO ANY CONSTRUCTION OR EXCAVATION ON THE PROPERTY.	

## h a slightly roughened surface. If bed, no further roughening is required. ing with a bulldozer, discing, f chain link fence. Avoid excessive ing back and forth over the surface. e perpendicular to the anticipated

mall or variable sites, or where the rate of 300 pounds per acre or 10 or equivalent. Additionally, lime -1 in the 2002 Guidelines.

drill, cultipacker type seeder or ed species. Increase seeding rates

ling dates shall be mulched 2 Guidelines. When seeding outside ation of mulch to provide 95%-100%

within 24 hours of the end of a eater for seed and mulch movement

nas occurred, determine the cause of Iditional controls if required to

ly established. Grasses shall not be achieved which is mature enough to ther conditions (approximately 80%

002 Guidelines for specific applications ntenance of a permanent vegetative operations shall apply: ition and grading has been completed. acted depth of 4".

nes 2" or larger in any dimension

rate of 2 tons per acre or 100 lbs. equivalent at a rate of 300 lbs. per id fertilizer into the soil to a depth of

has compacted the soil, retill

commended seeding dates are: April 1

oller. Mulch immediately following nnot be established by September 30, n as netting, mat or organic mulch.

controls is to absorb erosional the detachment and transport of soil particles before they reach any

more surface water will infiltrate into potential erosion. Keeping land nimizing the extent of exposure at ure. Phasing, sequencing and ing divides a large project into specific area occurs over distinct ent upon a subsequent phase in ler in which construction activities are nce should be developed on the ast" with proper attention given to

t control measures. A construction to it and should address the h may be in conflict with each otect natural vegetation from

tree armoring, and retaining walls avoid existing or newly planted

are actively being developed at any hat area under construction is essential for construction.

inage systems so that they are uring construction. Ensure all outlets drainage flow into them. ding and stabilization is completed as

be kept to a minimum by absorbing e erosive energy of water increases s. The volume and velocity of runoff duced infiltration rates caused by the oil, compaction of soil and the

and similar measures to break flow gery. another without calculating the or erosion.

diment laden water and should not onal controls. Additionally, prevent with sediment laden runoff generated waters has occurred.

n water. m wetlands, watercourses and near the development until the or detained.

STALL PERIMETER CONTROLS all waters to one point of discharge rol, it can be more effective to nage basins within the site. By the chance of perimeter control it can cause is reduced. It is mage than it is to install proper

e smallest drainage area possible. It o contend with sediment after it has sited in unwanted areas.

s to adjoining undisturbed vegetated concentrated flows and increase hould be safely conveyed to stable

waterways, diversions, storm drains Sediment basins are required on rading is planned and where it is erosion at the source. Sediment nall sites when sensitive areas such

eets would be impacted by off-site sediment basins in wetlands or rses. Sediment basins should be its entry into the wetland or

and septic systems to divert water

## SEPTIC SYSTEM CONSTRUCTION NOTES

1. The building, septic system and well shall be accurately staked in the field by a licensed Land Surveyor in the State of Connecticut, prior to construction.

2. Topsoil shall be removed and in the area of the primary leaching field scarified, prior to placement of septic fill. Septic fill specifications are as follows: - Max. percent of gravel (material between No. 4 & 3 inch sieves) = 45%

GRADATION OF FILL (MINUS GRAVEL)

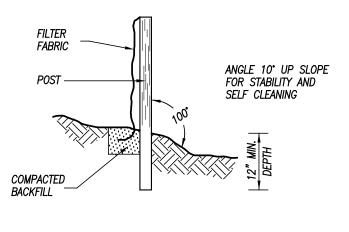
SIEVE	PERCENT PASSING (WET SIEVE)	PERCENT PASSING (DRY SIEVE)
lo. 4	100%	100%
lo. 10	70% — 100%	70% - 100%
lo. 40	10% — 50%	10% – 75%
lo. 100	0% – 20%	0% – 5%
lo. 200	0% – 5%	0% – 2.5%

Fill material shall be approved by the sanitarian prior to placement. It shall be compacted in 6" lifts and shall extend a minimum of ten feet (10') beyond the last leaching trench before tapering off.

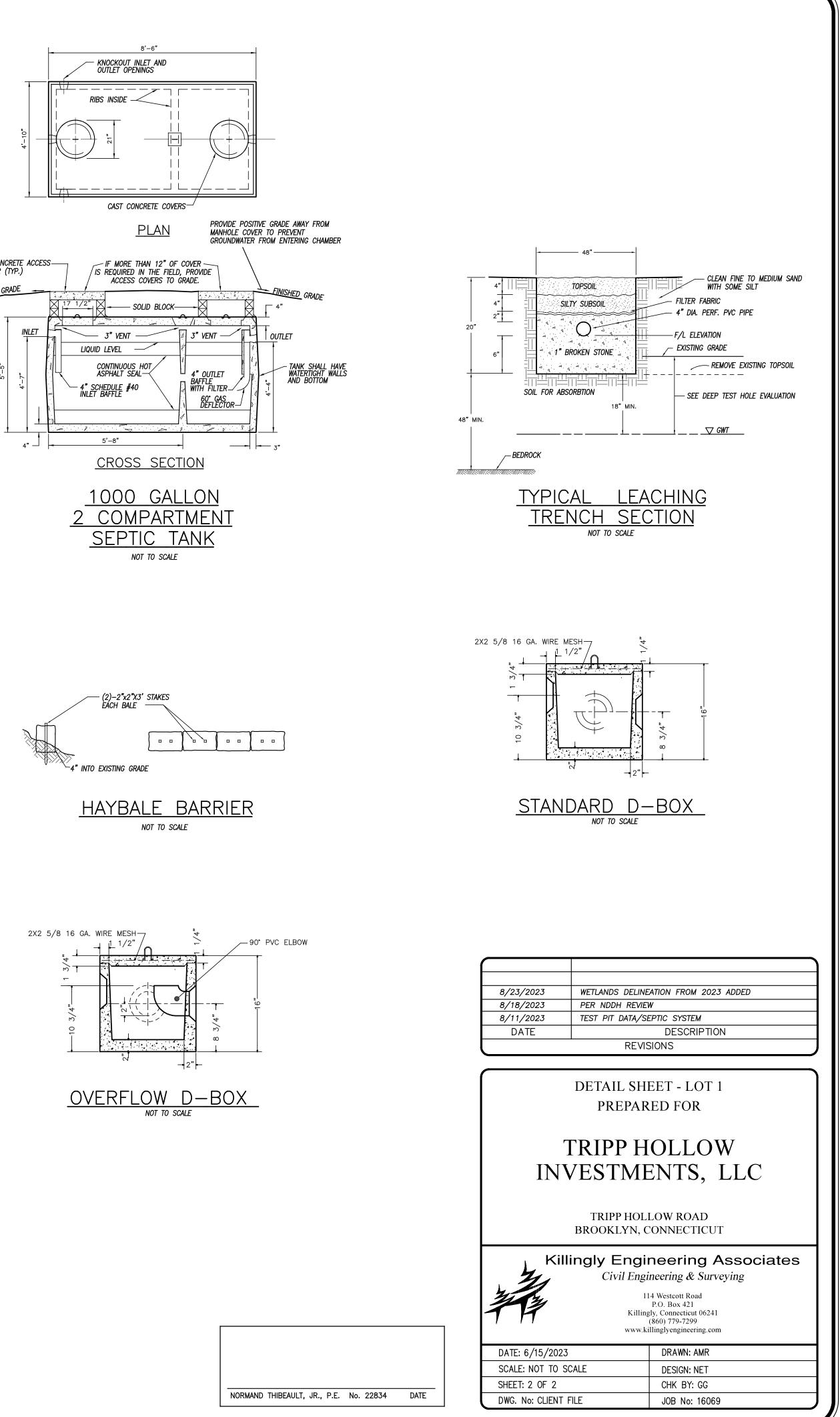
Septic tank shall be two compartment precast 1000 gallon tank with gas deflector and outlet filter as manufactured by Jolley Precast, Inc. or equal.

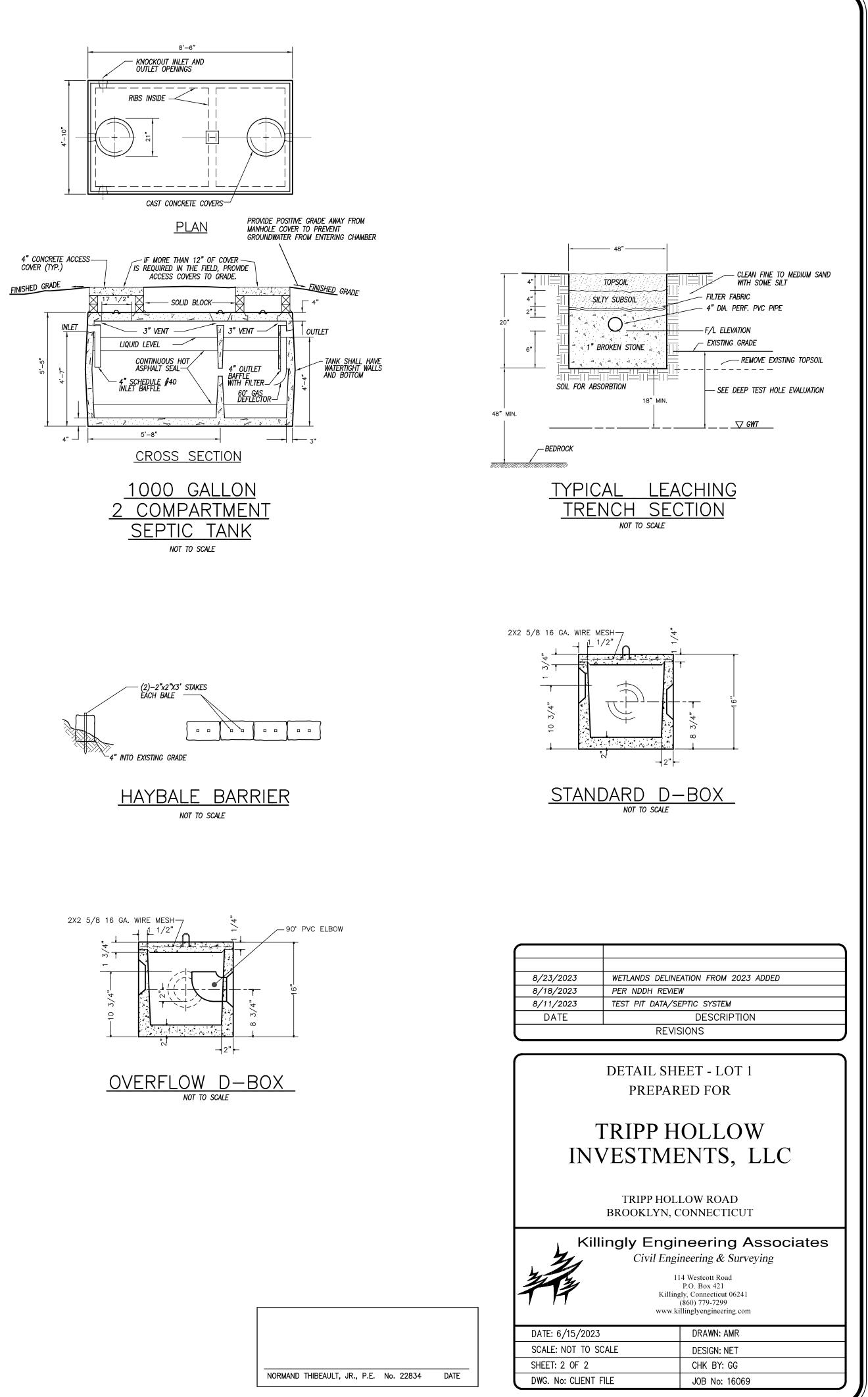
4. Distribution boxes shall be 4 hole precast concrete as manufactured by Jolley Precast, Inc. or equal.

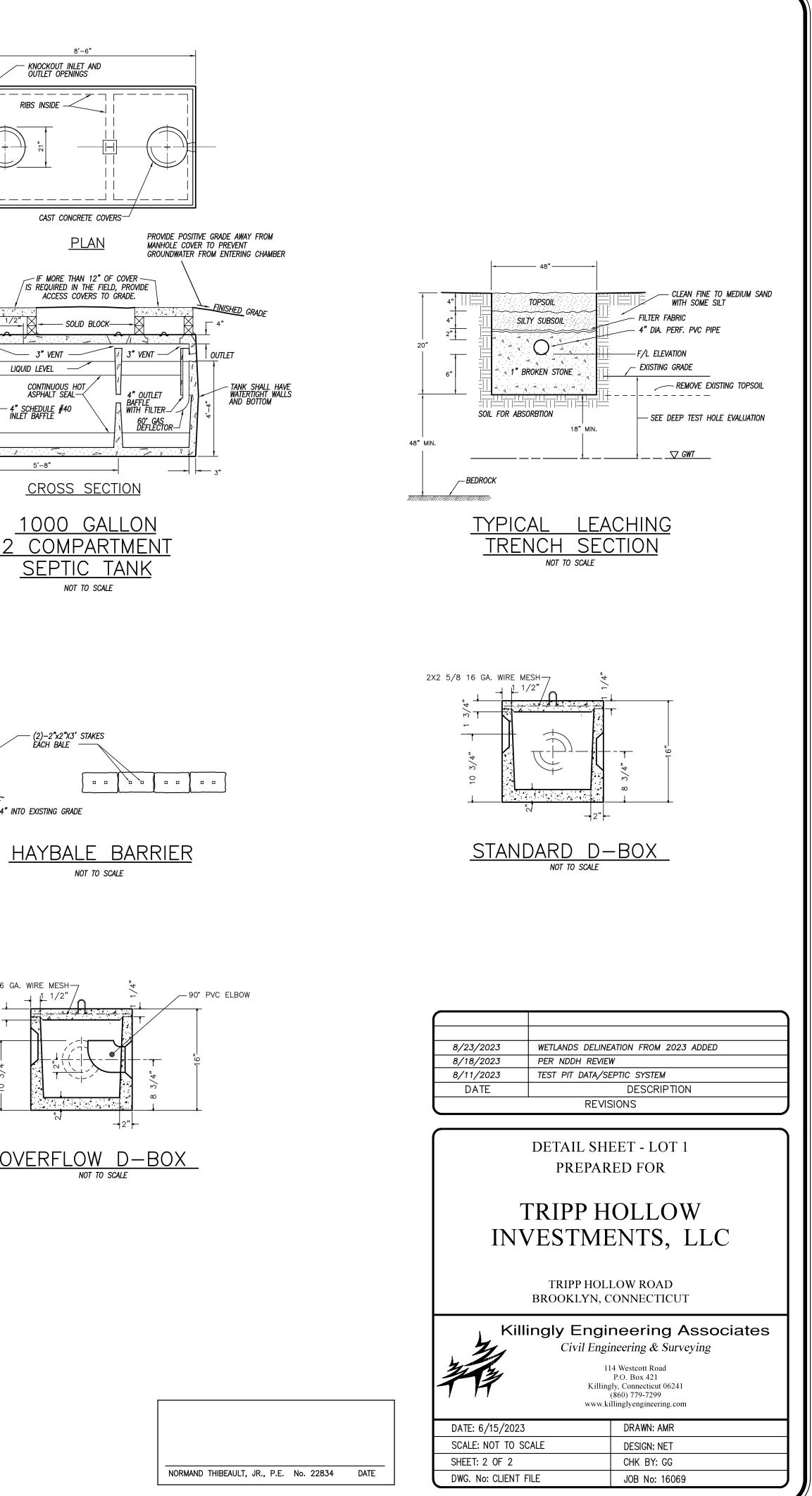
- 5. All precast structures such as septic tanks, distribution boxes, etc. shall be set level on six inches (6") of compacted gravel base at the elevations specified on the plans.
- 6. Solid distribution pipe shall be 4" diameter PVC meeting ASTM D—3034 SDR 35 with compression gasket joints. It shall be laid true to the lines and grades shown on the plans and in no case have a slope less than 0.125 inches per foot.
- 7. Perforated distribution pipe shall be 4" diameter PVC meeting ASTM D-2729 or ASTM D-3350, 1500 lb. minimum crush.
- 8. Sewer pipe from the foundation wall to the septic tank shall be schedule 40 PVC meeting ASTM D 1785. It shall be laid true to the grades shown on the plans and in no case shall have a slope less ťhan 0.25 inches per foot.
- 9. Force main pressure pipe from pump chamber to the leaching field shall be 2" diameter pvc meeting ASTM D 2241 SDR 21.
- 10. Solid footing drain outlet pipe shall be 4" Diameter PVC meeting ASTM D 3034, SDR 35 with compression gasketed joints. Footing drain outlet pipe shall not be backfilled with free draining material, such as gravel, broken stone, rock fragments, etc.

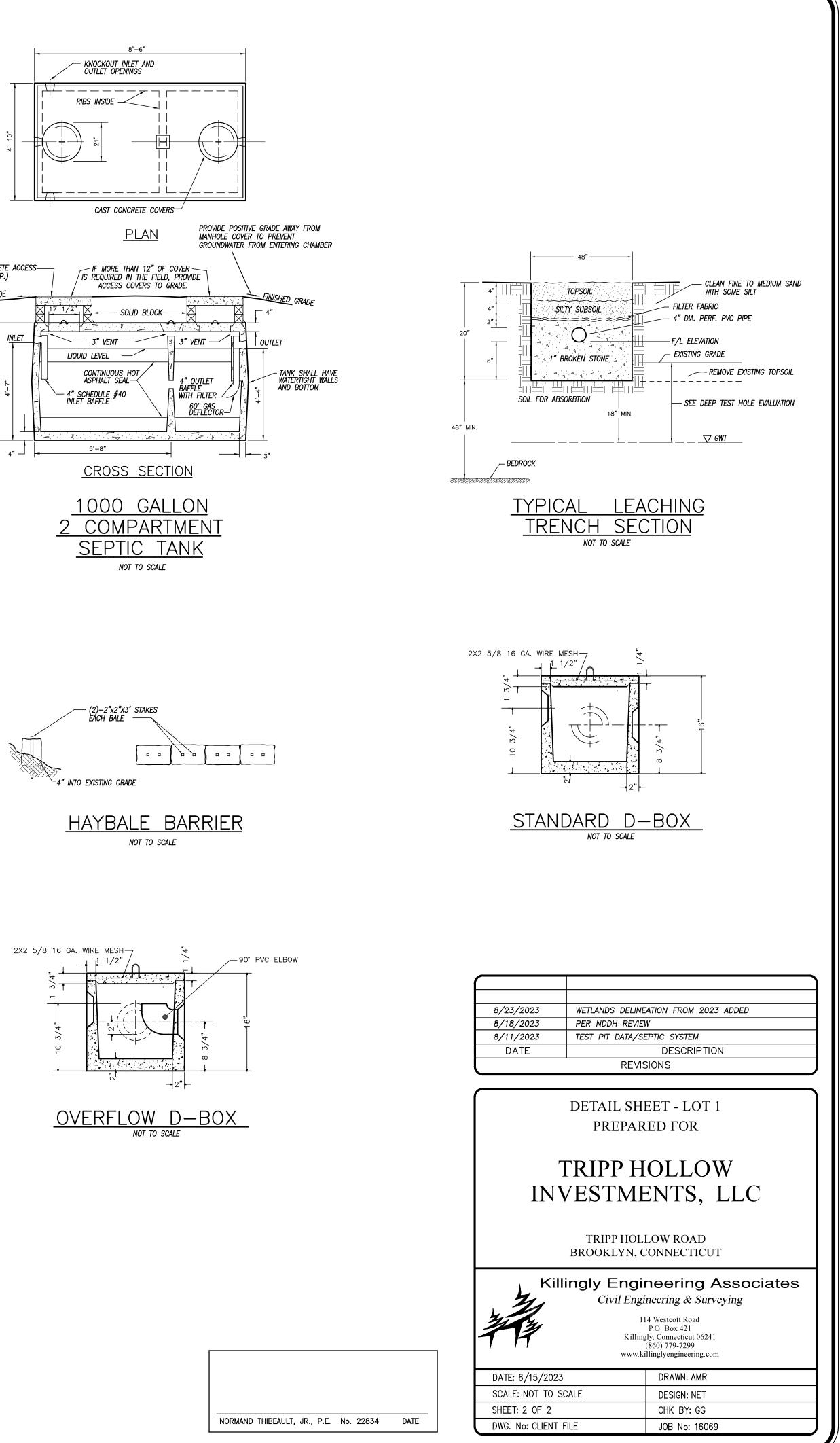


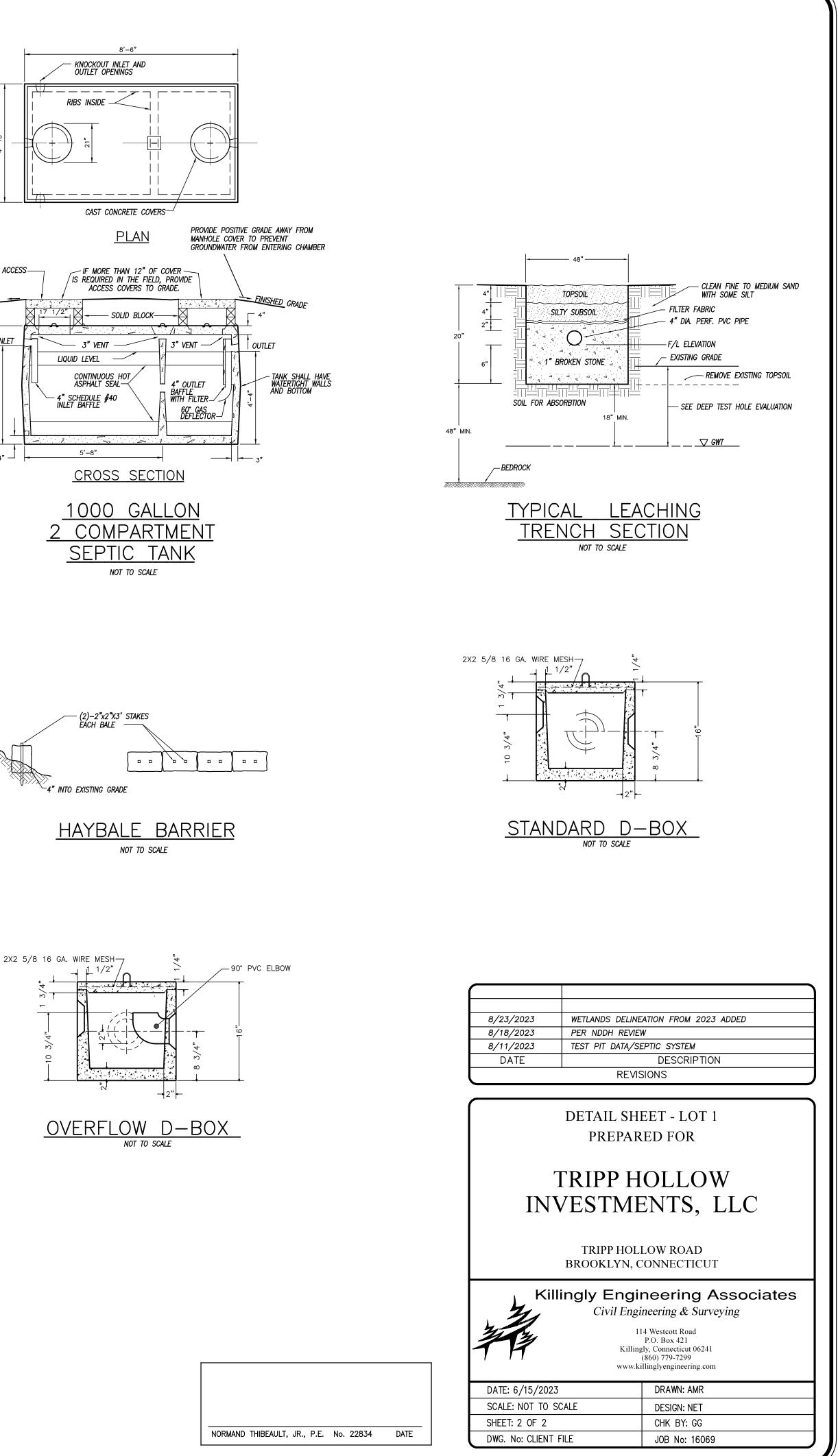














# NORTHEAST DISTRICT DEPARTMENT OF HEALTH

69 South Main Street , Unit 4 , Brooklyn, CT 06234 Phone (860) 774-7350 , Fax (860) 774-1308 , Web Site www.nddh.org

Tripp Hollow Investments, LLC. 89 Wauregan Road Brooklyn, CT 06234

## SUBJECT: FILE #5005209 -- TRIPP HOLLOW ROAD #, MAP #14, LOT #10-1, BROOKLYN, CT

Dear Tripp Hollow Investments, LLC.:

The subject plan (KILLINGLY ENGINEERING ASSOCIATES, JOB# 16069, TRIPP HOLLOW INVESTMENTS, DRAWN 06/15/2023, REVISED 08/11/2023, REVISED 08/18/2023) submitted on 08/18/2023 has been reviewed, as requested. Following completion of this review, it has been determined that the subject plan will meet the requirements of the Technical Standards for a 3 bedroom house based on the following:

- 1. CT licensed surveyor must stake house, well, benchmark, and septic system, offset stakes to include flow line or bottom of trench elevation.
- 2. Permanent benchmark to be set within 50 feet horizontally and 12 feet vertically of septic system.
- 3. A bottom of excavation inspection is required once the topsoil and fill material have been removed.
- 4. A current sieve analysis of select fill material (within past 30 days) must be submitted to the Northeast District Department of Health (NDDH).
- 5. A set of house plans must be submitted prior to an Approval to Construct Permit being issued.
- 6. An engineer/surveyor's As-Built drawing (to include ties to the house) is to be submitted following the final inspection and approval of installation by NDDH.
- 7. Installer to schedule and be present for the final inspection with NDDH staff. Level to be set up for verification of elevations OR an Engineer's As Built will be required.

This letter is NOT to be construed as an APPROVAL TO CONSTRUCT the septic system and DOES NOT indicate that the Northeast District Department of Health endorses approval for issuance of any building permit.

Prior to the start of construction of the septic system, you must apply for your Approval to Construct Permit and submit the applicable fees to this office. A set of the floor plans of your house must be submitted to NDDH for review. Your CT licensed installer must come in to this department to sign for the permit if we do not have his signature on file. Office hours are Mon - Thurs 8 am - 4 pm, Fri 8 am - Noon.

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

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

Sincerely,

Donora Moe

Donovan Moe, EHS Environmental Health Specialist-NDDH

cc: Brooklyn Building Official; Killingly Engineering Associates



8/18/23

KILLINGLY ENGINEERING ASSOCIATES P.O. Box 421 Dayville, CT. 06241

RE: WETLAND DELINEATION, TRIPP HOLLOW INVESTMENTS PROPERTY, BROOKLYN, CT.

DEAR MR. GLAUDE,

AT YOUR REQUEST I HAVE DELINEATED THE INLAND WETLANDS AND WATERCOURSE ON THE 4.2 ACRE SUBJECT PROPERTY.

THESE WETLANDS HAVE BEEN DELINEATED IN ACCORDANCE WITH THE STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY AND THE DEFINITIONS OF WETLANDS AS FOUND IN THE CONNECTICUT STATUTES, CHAPTER 440, SECTIONS 22A-38.

FLUORESCENT PINK FLAGS WITH A CORRESPONDING LOCATION NUMBER DELINEATE THE BOUNDARY BETWEEN THE UPLAND SOILS AND THE INLAND WETLANDS THAT WERE FOUND.

FLAG NUMBERS WF-1 THROUGH WF-41 DELINEATE THE BOUNDARY OF A PALUSTRINE FORESTED WETLAND FOUND ALONG THE EASTERN, SOUTHERN AND WESTERN PORTIONS OF THE PROPERTY.

AN INTERMITTENT WATERCOURSE WAS FOUND WITHIN THE LIMITS OF THE WETLAND ALONG THE EASTERN PROPERTY BOUNDARY.

THESE WETLAND SOILS HAVE FORMED FROM THE PROLONGED WETNESS FROM THE SEASONALLY HIGH WATER TABLES AND GROUNDWATER BREAKOUT.

THESE SOILS ARE CHARACTERIZED BY THICK ORGANIC "A" HORIZONS, SHALLOW REDOXIMORPHIC FEATURES AND LOW CHROMA COLORS FOUND WITHIN 20 INCHES OF THE SOIL SURFACE.

I INSPECTED THE REMAINDER OF THE PROPERTY AND FOUND NO OTHER INLAND WETLANDS OR WATERCOURSES.

IN CONCLUSION, IF YOU HAVE ANY QUESTIONS CONCERNING THE DELINEATION OR THIS REPORT, PLEASE FEEL FREE TO CONTACT ME.

Thank you,

Joseph R. Theroux

JOSEPH R. THEROUX CERTIFIED SOIL SCIENTIST MEMBER SSSSNE, NSCSS, SSSA.

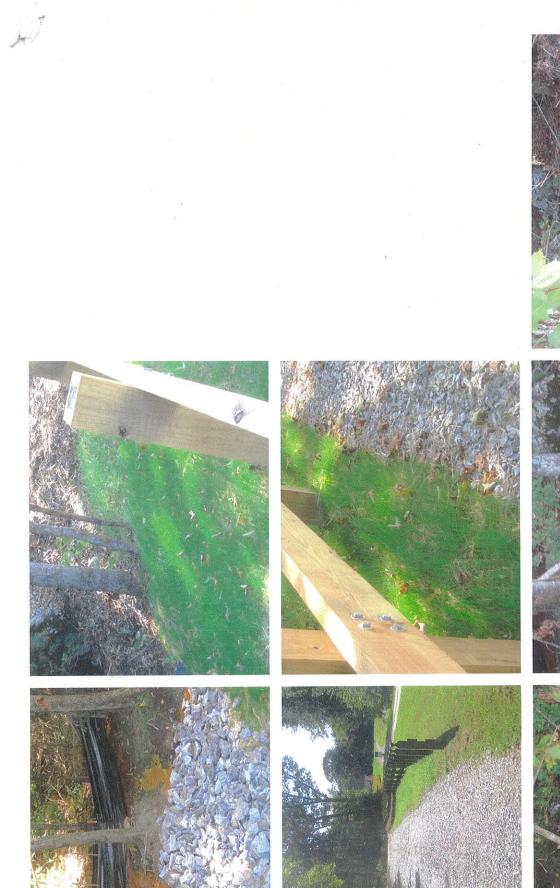


# Brooklyn Land Use Department

69 South Main Street Brooklyn CT 06234 (860) 779-3411 x 31

	,	
Inland Wetlands	Zoning Enforcement	Blight Enforcement
SITE INSPEC	TION NUMBER	1 2 3 4 5
253 Wa	lf. Den Rd	8/21/23
Ac	Idress	Date
- I imp	ected + took photo	os. The.
remed	ected + took photo iation has held	up despite
heavy	rain last Fri.	day.
Jhe gr	ass is growing on alope.	the remediated
	· · · ·	
		•
Commission Repre	sentative <u>M. Woshl</u>	rum.
Owner or Authorize	ed Signature	

0834









# Brooklyn Land Use Department

69 South Main Street Brooklyn CT 06234 (860) 779-3411 x 31

	Inland Wetlands	Zoning Enforcement	Blight Enforcement
	SITE INSPEC	TION NUMBER	1 2 3 4 5
409	+4/1 Church Ad	St driveway	7/31/23 Date
	_ The drive	way has been	r covered with
		, adam	
	Janet 1.	Booth and J	ispected. The
	milling	have made	
	The wet	lands on b	oth sides of the
	pipe a	t the western	+
	crossi	1	o water flowing through
5	thispipe, 1		rought the other 2 pipes.
	Jake Ka	ausch was p	
8	to ren	nove the mil	lings at the
	ends of	2 the pipe a	1 the westernmos
_	crossin	1.9 1	
(a)	□ Email Ja	het askhimtol	et me know when the
	millingha	ve been removed	from the wetlands.
	U Commission Represe	entative <u>M. Wash</u>	rum
	Owner or Authorized	l Signature	























TOWN OF BROOKLYN Land Use Department 69 South Main Street • Suite 22 BROOKLYN, CONNECTICUT 06234 860-779-3411 Ext. 12

## ORDER TO CORRECT VIOLATIONS OF THE BROOKLYN, CT INLAND WETLANDS AND WATERCOURSES REGULATIONS

**CERTIFIED #** 

9489 0090 0027 6215 8985 13

To: A. Kausch & Sons 15 Beach View Road Extension Voluntown, CT 06384

August 21, 2023

Location of Violation: Church Street, Map 37, Lot 17 and Map 37 Lot 20 and 21

Violation of Wetlands Permit #071321A A. Kausch & Sons, Pomfret Landing Road/Church Street, Map 37, Lot 17 and Map 37 Lot 20 and 21; Wetlands crossing for driveway, 2 residential homes, septic system, well, minor grading.

## <u>Facts</u>

On 9/28/21, CLA Engineers, Inc. submitted to the Brooklyn Land Use Office a Plan dated 9/16/21 prepared for A. Kausch & Sons LLC titled "Lots 019-37-17, 019-37-20 & 019-37-21 Church St. Site Development Brooklyn, CT Grading & Site Design" ("the approved plan"). This plan includes a Driveway Construction Sequence as was required as a condition of approval.

Because of your failure to follow the approved plan or the approved Driveway Construction Sequence, you were issued a Notice of Violation, required to attend a Show Cause Hearing, and required to submit a Revised Driveway Construction Sequence, which was approved. Refer to the attached Revised Driveway Construction Sequence.

Also, refer to the following attached documents:

- 11/2/22 inspection report and photos with captions
- Syl Pauley's report dated 11-3-22
- Bob DeLuca's letter dated 11-8-22
- Approved driveway remediation plan
- Inspection report dated 2/21/23 and 3/8/23

None of the documents listed above called for ground asphalt millings to be placed on the driveway surface.

On 7/31/23, Margaret Washburn, Wetlands Enforcement Officer, conducted an inspection with Jake Kausch and IWWC Members, Adam Brindamour and Janet Booth.

During the 7/31/23inspection, the following non-compliance issues appeared to have occurred on your property in violation of your Inland Wetlands and Watercourses Permit #071321A:

The driveway work does not appear to have been done in accordance with the Revised Driveway Construction Sequence. The driveway has been covered with ground asphalt millings. The Revised Driveway Construction Sequence did not call for the driveway to be covered with ground asphalt millings.

Material other than the approved driveway gravel had been installed over the entire driveway. That material amounts to unauthorized fill in the upland review area.

The sediment controls have been removed. Ground asphalt millings were observed and photographs in the wetlands at both ends of the pipe at the westernmost wetlands crossing.

Your activities, conducted in violation of your Inland Wetlands and Watercourses Permit, are in violation of the Brooklyn Inland Wetlands and Watercourses Regulations.

## Applicable Laws and Regulations

The Brooklyn Inland Wetlands and Watercourses Regulations define, in part, a "regulated activity" as "any operation within or use of a wetland or watercourse involving removal or deposition of material, or any obstruction, construction, alteration or pollution, of such wetlands or watercourses....". "Material" is defined to include "means any substance, solid or liquid, organic or inorganic, including but not limited to soil, sediment, aggregate, land, gravel, clay, bog, mud, debris, sand, refuse or waste". The term "pollution" is defined to include "harmful thermal effect or the contamination or rendering unclean or impure of any waters of the state by reason of any waste or other materials discharged or deposited therein by any public or private sewer or otherwise so as directly or indirectly to come in contact with any waters. This includes, but is not limited to, erosion and sedimentation resulting from any filling, land clearing or excavation activity".

The phrase "rendering unclean or impure" is further defined as "any alteration of the physical, chemical or biological properties of any waters of the state, including, but not limited to, change in odor, color, turbidity or taste".

Furthermore, a "significant impact" is defined as "any activity, including, but not limited to, the following activities which may have a major effect:

- 1. Any activity involving deposition or removal of material which will or may have a substantial effect on the wetland or watercourse or on wetlands or watercourses outside the area for which the activity is proposed.
- 2. Any activity which substantially changes the natural channel or may inhibit the natural dynamics of a watercourse system.

- 3. Any activity which substantially diminishes the natural capacity of an inland wetland or watercourse to: support aquatic, plant or animal life and habitats; prevent flooding; supply water; assimilate waste; facilitate drainage; provide recreation or open space; or perform other functions.
- 4. Any activity which is likely to cause or has the potential to cause substantial turbidity, siltation or sedimentation in a wetland or watercourse.
- 5. Any activity which causes substantial diminution of flow of a natural watercourse or groundwater levels of the wetland or watercourse.
- 6. Any activity which is likely to cause or has the potential to cause pollution of a wetland or watercourse.
- 7. Any activity which damages or destroys unique wetland or watercourse areas or such areas having demonstrable scientific or educational value."

"Upland Review Area" means "non-wetland or non-watercourse areas where activities are likely to impact or affect wetlands or continuous watercourses". Section 4 of the Regulations addresses exemptions, and Section 6.1 provides that any regulated activity requires a permit.

Section 6.2 states "Any person found to be conducting or maintaining a regulated activity without the prior authorization of the Commission, or violating any other provision of these regulations, shall be subject to the enforcement proceedings and penalties prescribed in section 14 of these regulations and any other remedies as provided by law".

### You are hereby required to:

1. By 8/30/23, remove the ground asphalt millings that have been deposited in the wetlands at both ends of the pipe at the westernmost wetlands crossing, using hand tools.

2. Remove the millings outside the upland review area on the subject property.

3. By 8/30/23, contact me at <u>m.washburn@brooklynct.org</u> to verify that the millings have been removed from the wetlands.

4. By 9/5/23, submit a revised site plan showing

1) millings as the final surface and

2) cross-sections of the driveway sections at the three wetlands crossings showing final elevations in relation to existing adjacent wetlands topography.

5. Attend the Show Cause Hearing at the 9/12/23 special meeting of the Brooklyn IWWC at 6:00 PM at 31 Tiffany Street, to be heard and show cause why this order should not remain in effect.

Refer to the attached copy of Section 6 of the Town of Brooklyn IWWC Regulations, which states that any person violating provisions of these regulations shall be subject to enforcement proceedings and penalties. Also, refer to the attached ordinance Chapter 20-2, the Town Ordinance in which **the fine for each day a wetland violation continues is \$1,000.00**.

For each day during which to violation continues beyond the deadline in this Order, the Town may commence an enforcement action and the seek a civil penalty of up to \$1,000.00 per day for such violation, plus its attorney's fees and costs. The civil penalties are assessed by the Superior Court when an action is brought before the court by the municipality. The Commission members or its duly authorized agent may make regular inspections of the subject property work during reasonable hours.

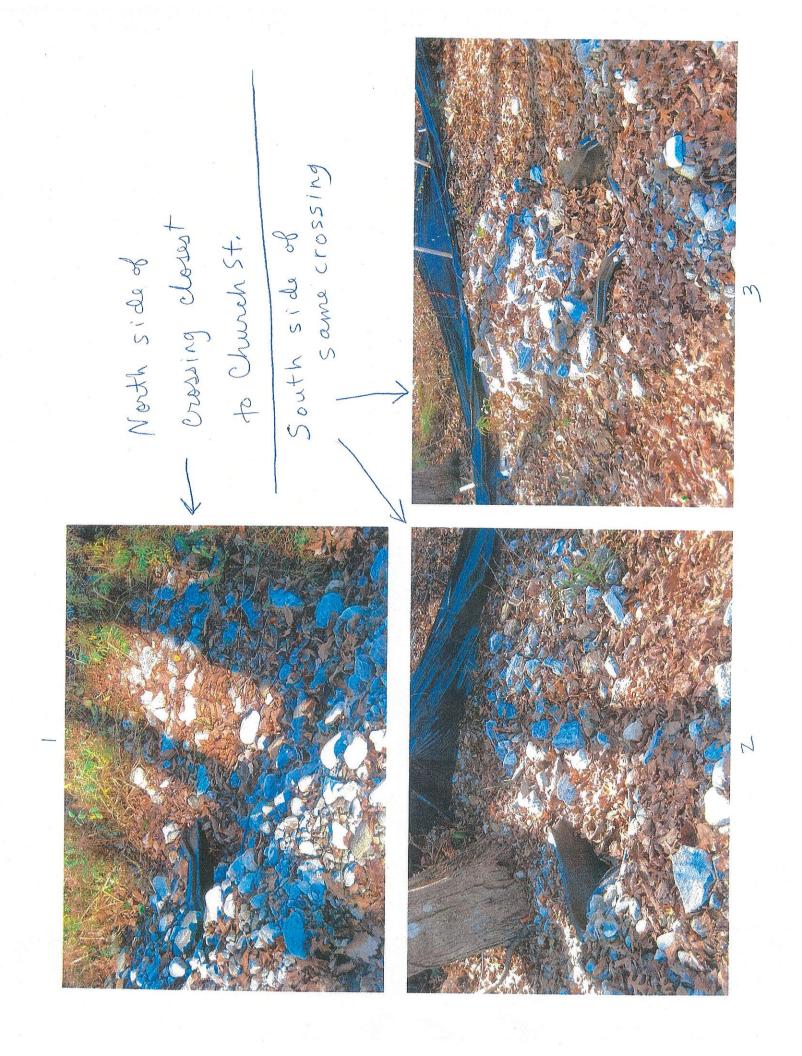
Dated at Brooklyn, this 21<sup>st</sup> day of August 2023.

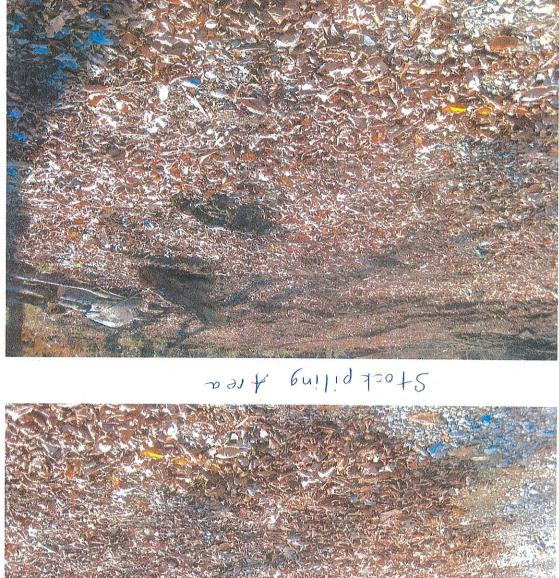
Margaret Washburn

Margaret Washburn, Enforcement Officer of the Brooklyn Inland Wetlands and Watercourses Commission

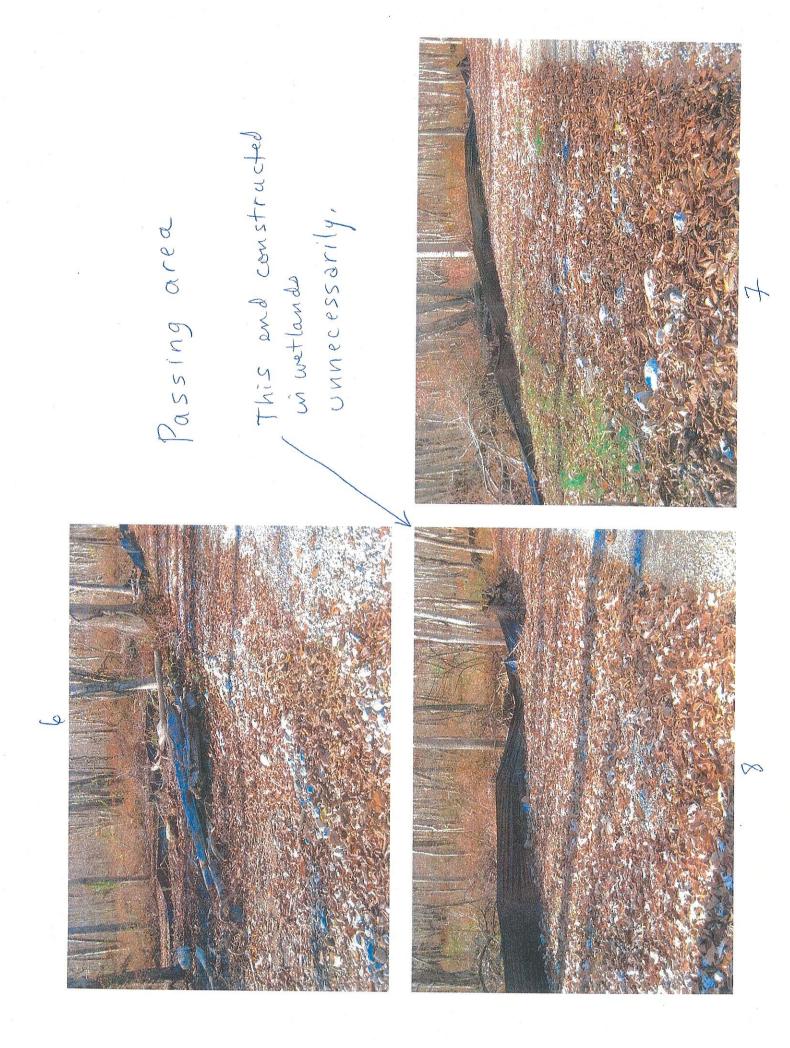
CC: Austin Tanner, First Selectman; Jana Roberson, Town Planner; Paul Archer, Archer Survey

Brooklyn Land Use Department 69 South Main Street Brooklyn CT 06234 (860) 779-3411 x 31 Inland Wetlands V Zoning Enforcement **Blight Enforcement** SITE INSPECTION NUMBER 1 2 3 4 5 driveway # 409.4 Paule Sul d otographs he Inet for the passing area filled. This filling was R1160 ands rouldnor have been shown on T pproved an, rewetlands killed Southwest of the pe under the driveway should as ed, This filling was not have been nown on the approved driveway plan. over the third resternmost in themi 00 sing . M. Washburn Commission Representative \_ Owner or Authorized Signature \_



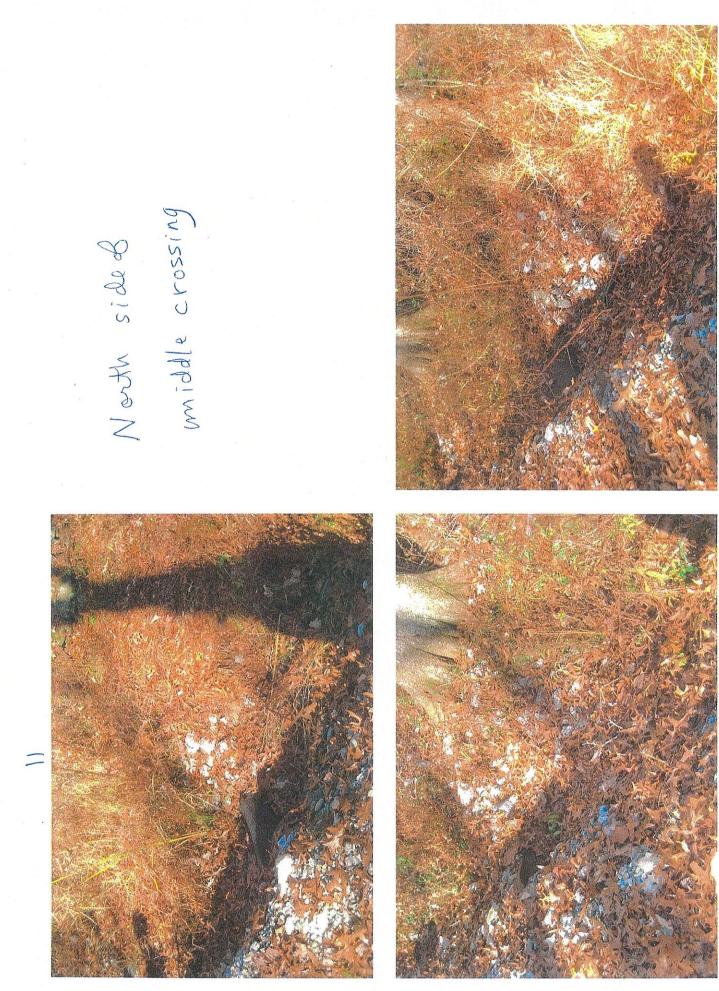


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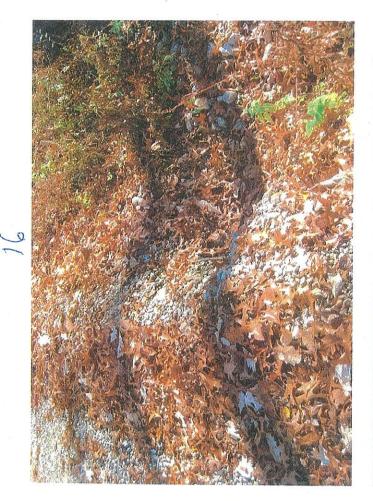








South side of middle crossing





T

11



Tape measured 9" of fill over third pipe in





Wetlands Filled but not shown on either as-built plan, photo 19 taken from the last pipe (westernmost) under the driveway, facing southwest





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November 3, 2022

Ms. Margaret Washburn ZEO/WEO/Blight Enforcement Officer Town of Brooklyn 5 Wolf Den Road P.O. Box 356 Brooklyn, CT 06234

SUBJECT: Kausch Church Street Driveway Transmittal of Engineer's Driveway Installation Inspection & As-Built Plan Review Report Assessor's Map/Lot Nos. 019-37-17, 019-37-20 & 019-37-21 Church Street Brooklyn, Connecticut

Dear Ms. Washburn:

Transmitted herewith is a copy of my Driveway Installation Inspection & As-Built Plan Review Report, dated November 3, 2022.

Please do not hesitate to contact me via email at syl.pauley@neccog.com with any questions.

Sincerely, Syl Pauley, yr. .E.

NECCOG Regional Engineer

SP/s

Cc: File

Sent to recipient via email

# NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

### **ENGINEER'S REPORT**

# KAUSCH CHURCH STREET DRIVEWAY INSTALLATION INSPECTION

### AND

### AS-BUILT PLAN REVIEW (ASSESSOR'S MAP/LOT NOS. 019-37-17, 019-37-20 & 019-37-21) CHURCH STREET BROOKLYN, CT (November 3, 2022)

The comments contained herein pertain to 1) my review of a plan, entitled "Zoning Location Plan, Driveway As-Built, Prepared for A. Kausch & Sons, LLC, Church Street & Pomfret Landing, Brooklyn, Connecticut," prepared by Archer Surveying, LLC, dated September 2, 2022 with Revision Date October 26, 2022, and 2) a site inspection with Brooklyn ZEO/WEO Margaret Washburn at 11:00 a.m. on November 2, 2022.

### **Driveway Inspection Comments**

- 1. No wetland flagging was observed anywhere during the site walk.
- 2. The driveway appeared to be "as straight as an arrow" with its width measuring 12' at several points from Church Street to the bend in the driveway.
- 3. The location of the previous "temporary stockpile" location needs to be restored better than what was observed. It was found to be rough graded with deep muddy equipment tire ruts and covered with cobbles. The cobbles need to be removed, the remaining exposed soil compacted and fine graded to a uniform surface, and finished with a 6" layer of topsoil (loam) and seeded with a mixture that will thrive in the woodland environment. The cobbles may be buried on site outside of any wetland.
- 4. The driveway surface was found to consist entirely of rounded stone. Round stone is not stable and will be easily displaced with traffic and especially during a snow plowing operation. However, the approved plans for this subdivision has a "Typical Driveway Cross Section" that calls for the surface of the driveway to consist of 8" rolled bank gravel to CT DOT 818 M.02.03 over 6" processed aggregate base to CT DOT 818 M.05.01. Onsite inspection did not observe either of these materials used for the construction of the driveway. Several test pits will be needed to be dug and observed by town staff to verify whether or not the approved materials were incorporated in the construction of the driveway. I would like to point out that Mr. Robert DeLuca, P.E., stated in his letter of October 7, 2022 that the driveway installation was installed "substantially in accordance with the design plan", however, this appears to be an inaccurate assessment upon what was found in the field. Mr. DeLuca needs to be asked to submit a written certification that he inspected the driveway as it was being constructed to make such a statement.
- 5. The depth of driveway embankment over <u>all</u> the pipes varied from approximately 3" to 9", which does not meet the approved "Typical Driveway Cross Section" construction detail. However, the driveway wetland crossing profiles on approved plan Sheet 2 of 4 indicated at least 12" of cover over the pipes. The "Typical Driveway Cross Section" should be the control and the amount of fill

over the pipes should be the same, 14". This instance is again contrary to what Mr. DeLuca stated in his letter and statement on the plan.

- 6. The vehicle passing area is not in the location shown on the approved Sheet 2 of 4 (Grading & Site Design) plan. It was constructed to one side of the driveway with a portion of it in wetlands. This is clearly a violation as it was not approved by the Inland Wetlands and Watercourses Commission, as far as I can tell. Furthermore, it needs a treatment the same as the "Typical Driveway Cross Section" with a uniform grade, which it does not exhibit.
- 7. Stumps, tree trunks and other debris is piled up along the back edge of the passing area is objectionable and needs to be removed. Furthermore, this material appears to be disposed of in the regulated wetland.
- 8. It appears that a portion of the wetland has been filled in way beyond the south end of the single pipe installed at Wetlands Crossing #1. Trees have been removed with several logs stacked up and there is no apparent reason of why this was done as it is well beyond the area needed for the driveway. The area is strewn with cobblestones that need to be removed at least from the unauthorized wetland disturbance and restored with 6" topsoil (ioam) and with a mixture that will thrive in the woodland environment. This area was not to be disturbed in accordance with the previously approved site plan and is in violation of the wetlands regulations.

### As-Built Plan Review Comments

- 1. The scale noted in the Title Block is 1'' = 80'. This is incorrect and needs to be changed to the actual plan scale of 1'' = 40'.
- 2. The driveway as depicted does not reflect the linearity or the uniform width of 12' as measured at several locations during the site inspection.
- 3. The plan does not show flared end sections or riprap on both ends of each pipe as observed in the field. These items count as disturbance in the wetland and needs to be included in the area of disturbance note. Additionally, the area covered by the side slope of the driveway needs to be included in the area of disturbance calculation and the angle of the slopes in the field appear to be 1:1 and not as approved as shown in the "Wetland Crossing (Typical) Shared Driveway" detail on Sheet 2 of 4. Accordingly, all areas of wetland disturbance need to be revised and recalculated by the Applicant's land surveyor.
- 4. Based upon field observations as described in Note 8 under "Driveway Inspection Comments", the area of disturbance noted at Wetlands Crossing #1 appears to be grossly inaccurate. This area covers approximately 600 square feet and needs to be verified by field surveying methods.
- 5. As far as Mr. DeLuca's certification statement goes, please refer to Note 4 under "Driveway Inspection Comments."
- 6. Based upon discrepancies between what was observed in the field and what is described on the plan, the areas of disturbance in the wetlands need to be verified in the field via land surveying methods and witnessed by town staff at that time.
- 7. The current as-built plan is deficient as noted in this report and needs to be revised and resubmitted for review

By: Syl Pauley, Jr., R.E., NECOOG Regional Engineer

Page 2 of 2

## **CLA Engineers**, Inc.

Civil • Structural • Survey

317 MAIN STREET • NORWICH, CT 06360 • (860) 886-1966 • (860) 886-9165 FAX

November 8, 2022

Margaret Washburn, MS, RPSS Zoning & Wetland Enforcement Officer Town of Brooklyn 69 South Main Street Suite 22 Brooklyn, CT 06234

RE: Church Street Site Development Church Street, Brooklyn CT CLA-6639

#### Dear Margaret:

We are writing in response to the Town Engineers review letter regarding the as-built plan for the above referenced project.

Driveway/Inspection Comments:

- 1) No comment. We note that wetland flagging is over 2 years old.
- 2) No comment.
- 3) The driveway location is an easement through an existing lot of record and the applicant has scheduled test pits with the Health Department in the temporary stockpile area. E&S barriers will be maintained during this work. The outcome of test pits will determine if and when this area will be restored.
- 4) We note that the specification calls for gravel conforming to M.02.01 which can consist of broken or bank gravel and bank gravel can consist of rounded stone. It is apparent that the material used is bank gravel. We note that CLA did not inspect this driveway during construction. We agree that a broken material with more fines on the upper most surface would be less prone to rutting. We also note that the house construction has been completed and therefore concrete trucks and other similarly loaded vehicles have traversed the driveway and the drainage crossings and the driveway has remained stable. We note that driveway maintenance will be the responsibility of the home owner.
- 5) We find that pipe cover at crossing 1 & 3 is less than 12" and the applicant agrees to add gravel material to provide a minimum of 12" of cover over pipe.
- 6) We recommend that the applicant and Wetland Agent meet in the field to determine any proposed modifications related to this area.
- 7) See note 6 above.
- 8) We recommend that the applicant and Wetland Agent meet in the field to determine any proposed modifications related to this area.

As-Built Plan Comments:

- 1) The scale will be modified.
- 2) We find that the horizontal deviation in the general driveway alignment does not impact the wetland permit significantly to justify any modification.
- 3) Flared end sections are called out on plan. A leader line will be added to make it more clear. We recommend that the applicant and Wetland Agent meet in the field to determine if calculations related to wetland impacts need to be verified in this area.
- 4) We recommend that the applicant and Wetland Agent meet in the field to determine if calculations related to wetland impacts need to be verified in this area.
- 5) We note that CLA performed an inspection of the completed driveway as it relates to the placement and elevation of the drainage system and its function related to the proposed wetland crossings. Observation of the private driveway construction was not considered of significant importance as this is typically not something that a Town would inspect.
- 6) No comment.
- 7) No comment.

Please contact me if you have any questions.

Sincerely,

Robert A. DeLuca, P.E.

### **REVISED DRIVEWAY SEQUENCE:**

- 1. NOTIFY BROOKLYN WETLAND AGENT TO SCHEDULE A PRE-CONSTRUCTION MEETING 10 DAYS PRIOR TO STARTING WORK
- 2. CLEAR & GRUB WITHIN SILT FENCE AND WETLAND DISTURBANCE LIMITS SHOWN ON PLAN
- 3. INSTALL SILT FENCE & WATTLES (MAINTAIN CONTROLS AS NEEDED)
- 4. ROUGH INSTALL DRIVEWAY GRAVEL/GRADE IN ORDER TO ACCESS PROPERTY EASILY
- 5. TEMPORARILY STOCKPILE TOPSOIL/OTHER MATERIALS (PIPES, ADDITIONAL SILT FENCE, GRAVEL IF NEEDED, ETC.) & REMOVE AS NECESSARY
- 6. INSTALL DRAINAGE PIPES WITH ELEVATIONS CONFIRMED BY SURVEYOR
- 7. INSTALL DRIVEWAY GRAVEL/FINISH GRADE
- 8. PROVIDE WOODCHIPS/TOPSOIL WITH FERTILIZER & SEED ON ALL REMAINING DISTURBED AREA
- 9. PREPARE AS-BUILT PLAN
- 10. INSTALL OVERHEAD UTILITIES, STABILIZE DISTURBED AREAS, REMOVE E&S CONTROLS ONCE VEGETATION IS ESTABLISHED



# Brooklyn Land Use Department

69 South Main Street Brooklyn CT 06234 (860) 779-3411 x 31

Inland Wetlands Zoning Enforcement	Blight Enforcement
SITE INSPECTION NUMBER	1 2 3 4 5
HII + 409 Church St. driveway	2.21.23 + 3/8/23 Date
1 met andreur + Jake Kausch	. Andrew gave
me the Driveway Remediation Pl	
required. Lapprove of the Drive	vay Remodiation
plan. I inspected + took photo	
wood chips are spread, in the	
Area, all of the work required	to Remediate
the driveway will have been	completed.
March 8,2023 - andrew si	ubmitted
theattached photos showing 1	woodchips
spread in the Remediation fre	g. all the
work required to remedia	
driveway has been complete	d.
Commission Representative M. Washbur	n

Owner or Authorized Signature \_\_\_\_

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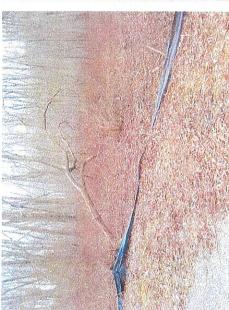


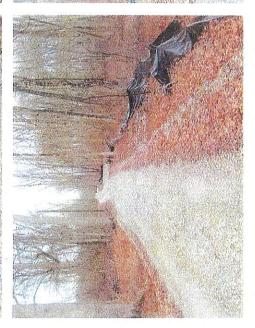




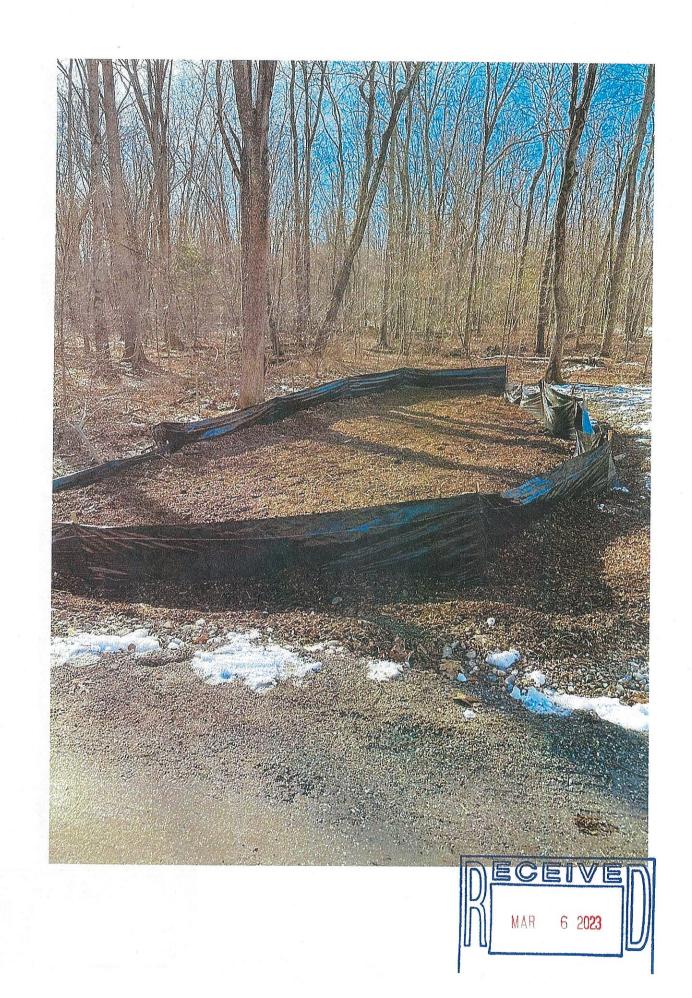


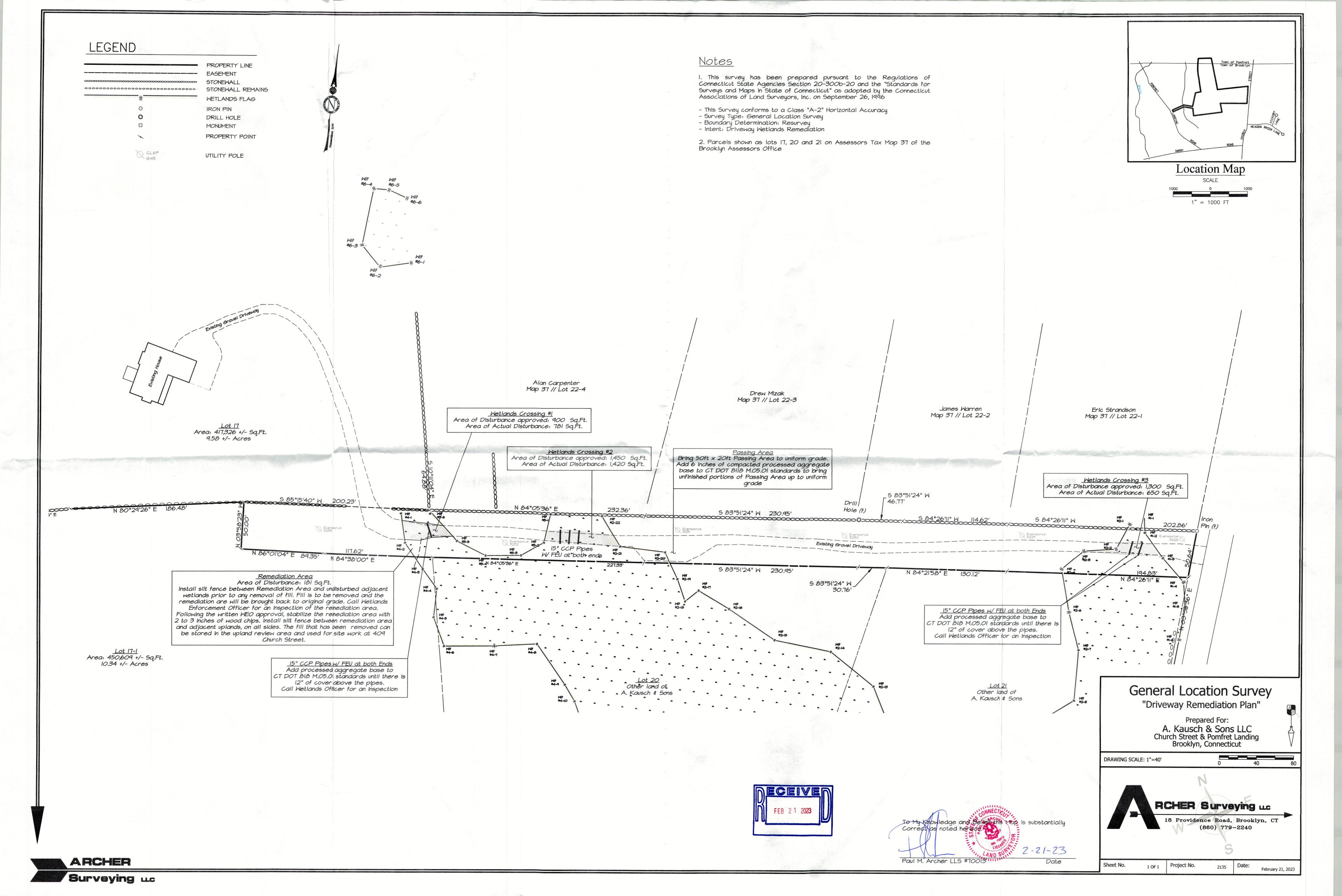












### MAHER AND COTNOIR Attorneys at Law

John J. Maher (1960 – 2004) Ernest J. Cotnoir

August 28, 2023

Via Facsimile and E Mail

Ms. Margaret Washburn Enforcement Officer, Brooklyn Inland Wetlands and Watercourses Commission 69 South Main Street, Suite 22 Brooklyn, CT 06234

> *Re: Order to Correct Violations Church Street, Map 37, Lots 17, 20 and 21*

Dear Ms. Washburn:

The undersigned represents A. Kausch & Sons, LLC, and I have been asked by its member, Andrew Kausch, to respond to the above referenced order dated August 21, 2023. I have reviewed the order, with particular attention to the required actions, as well as section 14.4.b of the Brooklyn Inland Wetlands and Watercourses Regulations, which you cite as authority for the order.

It is my understanding that the driveway in question had been constructed in the fall of last year but required certain items of remediation to be done by the owner/builder. Those items were addressed and on March 8, 2023, you inspected the same and concluded that all work necessary to remediate the driveway had been completed and a certificate of occupancy was issued for the property.

Subsequently, as part of maintaining and improving his property, the owner added asphalt millings to the surface of the driveway. In your order, you conclude that this was a violation of the previously issued wetlands permit because millings were not shown as part of that application. You also order removal of the millings and submission of a revised site plan showing, among other things, millings as the final surface.

Because the permit had already been granted and the work approved, Mr. Kausch did not believe any additional action was necessary in connection with his addition of the millings since he did not make any change to the wetlands crossings. Nonetheless, Mr. Kausch will submit the modified plan as requested and we will plan to attend the meeting on September 12, 2023. Since the plan is to be revised to show the millings as the final surface I would request that any removal of the millings that are already there be continued until after the meeting. Millings are, as you know, an appropriate Ms. Margaret Washburn August 28, 2023 Page 2

(and common) material for the final surface of driveways and it would serve no purpose to have the owner remove them prior to the Commission having a chance to review and approve the new site plan.

Thank you for your consideration and please call or contact me, or have counsel contact me, if you have any questions or suggestions regarding this matter.

Sincerely, Connect Ablants Ernest J. Cotnoir

### **Margaret Washburn**

From:	Margaret Washburn
Sent:	Monday, August 28, 2023 3:09 PM
То:	Ernie Cotnoir
Subject:	RE: Order to Correct Violations, Church Street, Brooklyn
Attachments:	millings at pipe 1.JPG; millings at pipe 2.JPG; millings at pipe 3.JPG; millings on the
	driveway to 409 & 411 Church Street; 7-31-23 insp report & pix.pdf

Thank you, Attorney Cotnoir. Just to clarify, the only millings the Commission's Order calls for is the removal of the millings that have been deposited in the wetlands at both ends of the westernmost wetlands crossing. Please see attached.

On 7/31, Jake Kausch agreed to remove the millings at the ends of the pipe.

On 8/2, I sent Jake an email reminding him to please remove the millings and to let me know when he did so.

Jake never responded to my email.

My concern is that the millings may impede the passage of water through the pipe.

I agree to extend the deadline for removing these millings from the wetlands until after the 9/12 meeting.

Margaret Washburn ZEO/WEO/Blight Enforcement Officer 69 South Main Street, Suite 23 Brooklyn, CT 06234 (860) 779-3411 ext. 31 Mon. – Thurs. 8:00 am – 3:30 pm <u>m.washburn@brooklynct.org</u>

From: Ernie Cotnoir <ecotnoir@maherandcotnoir.com> Sent: Monday, August 28, 2023 2:32 PM To: Margaret Washburn <M.Washburn@Brooklynct.org> Subject: Order to Correct Violations, Church Street, Brooklyn

Ms. Washburn:

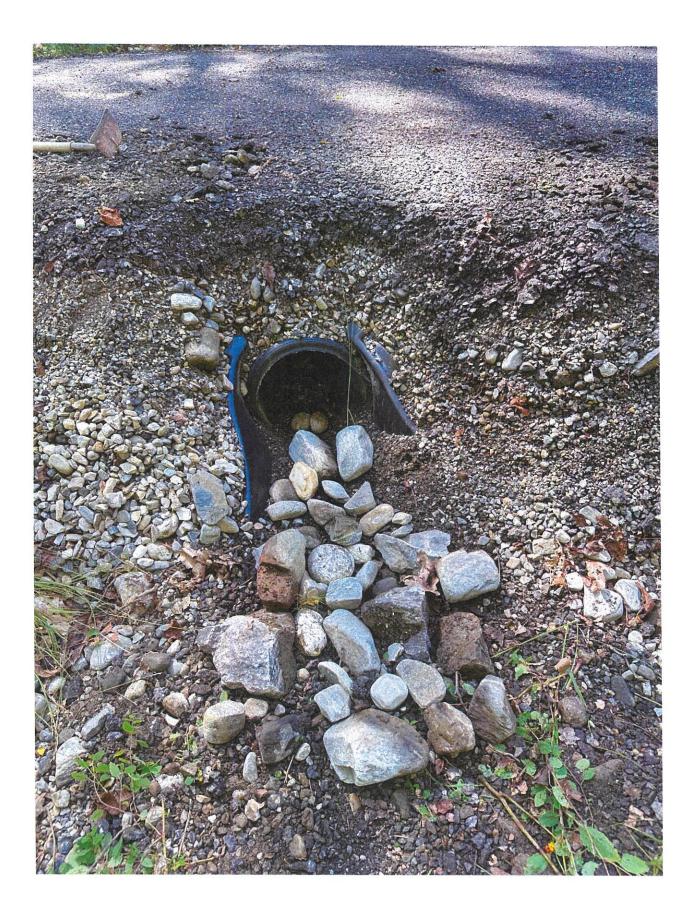
Attached is correspondence responding to the above referenced matter.

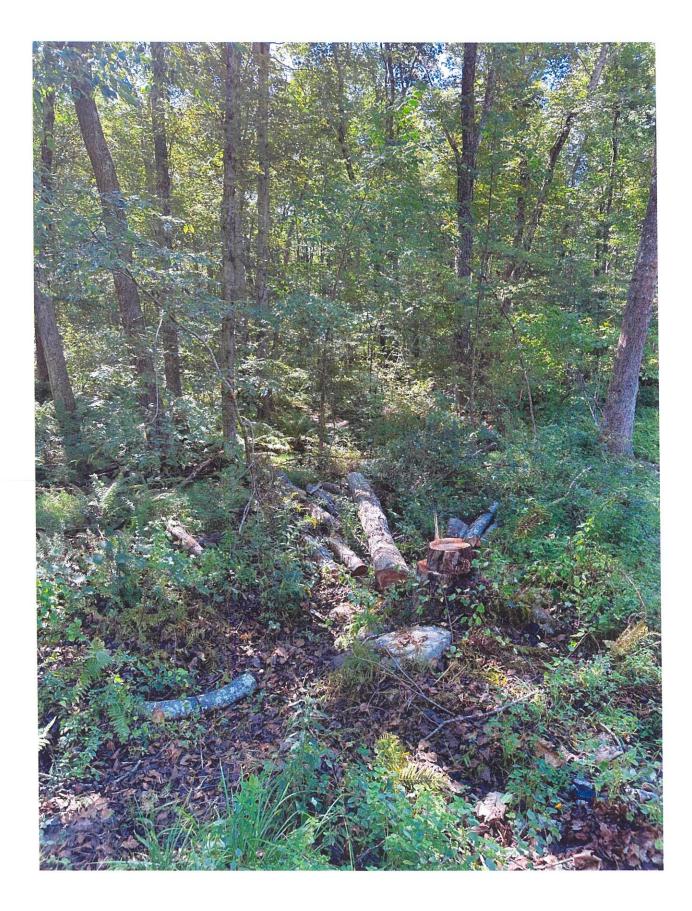
Thank you.

Ernest J. Cotnoir, Esq. Maher and Cotnoir PO Box 187 Putnam, CT 06260 (860)928-9694 Facsimile (860)928-9459 From: Jake Kausch <<u>aikausch@yahoo.com</u>> Sent: Thursday, August 31, 2023 12:17 PM To: Margaret Washburn <<u>M.Washburn@Brooklynct.org</u>> Subject: 411 church st

Attached is picture of millings cleared from the pipe. Also there is a picture of a tree that eversource cut down and left after a branch fell on power lines, just to let you know we didn't cut and leave it.

Sent from my iPhone





	\$ 150 APP1 \$ 60 state \$ 250 Sig Act \$150 Pub Total \$ 61000
INLAND WETLANDS & WATERCOURSES COM TOWN OF BROOKLYN, CONECTICUT RECEIVED	IMISSION #3215
SEP - 5 2023 APPLICATION INLAND WETLANDS & WATE	Application # $\underline{TWWC}$ 33-010
APPLICANT APPLICANTON - INLAND WETLANDS & WATE APPLICANT APPLICANT AND ADDRESS 13 BEACH APPLICANT'S INTEREST IN PROPERTY OWNER PHONE 840 230 - 7928	p
PROPERTY OWNER IF DIFFERENTPHON MAILING ADDRESSEMAIL	E
ENGINEER/SURVEYOR (IF ANY) ARCHER SURVEYOR (IF ANY)	
PROPERTY LOCATION/ADDRESS CHURCH STREET MAP # 37 LOT # 21 ZONE PA TOTAL ACRES 4.18 ACRES OF WETLANDS OF	
PURPOSE AND DESCRIPTION OF THE ACTIVITY RESEDENTAL DEVELOPMENT HOME, SERTIC SYSTEM, WELL, DENEMAL, MINION	TT- SINGLE FAMILY GANDING
WETLANDS EXCAVATION AND FILL: FILL PROPOSED CUBIC YDS SQ FT SO O EXCAVATION PROPOSED CUBIC YDS SQ FT OFF SITE LOCATION WHERE MATERIAL WILL BE PLACED: ON SITE OFF SITE TOTAL REGULATED AREA ALTERED: SQ FT OFF OFF SITE OFF OFF SITE OFF OFF OFF OFF OFF OFF OFF OFF	DRUEWON
WITH LENST IMPACT ON THE WETCHNOS	
MITIGATION MEASURES (IF REQUIRED): WETLANDS/WATERCOURSES CREATED: CY 6 SQ IS PARCEL LOCATED WITHIN 500FT OF AN ADJOINING TOWN? 1 IF YES, WHICH TOWN(S) 1 IS THE ACTIVITY LOCATED WITHIN THE WATERSHED OF A WATER COMPANY AS DEFINED IN CT GENE	
THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR A SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.	
NOTE: DETERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE IWWC DECISION APPLICANT: DATE 8-30	
OWNERS DATE 8-30	223

 $\dot{\mathbf{z}}$ 

THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.

NOTE:	TERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE IWWC DECISION AND RESULT IN	N
ENFOR	MENT ACTION.	

Applicant:	DATE	_
Owner:	DATE	_
<u>REQUIREMENTS</u>		
STANDARD APPLICATION FEE \$ (\$	150) STATE FEE (\$60)	CHECK #
NOTICE OF ACTION PUBLICATION	Fee \$ CHECK #	
PUBLIC HEARING PUBLICATION FE	EE (\$100) \$ (SUBJECT TO CHANGE DEPENDING	G ON PAPER) CHECK#
SIGNIFICANT ACTIVITY FEE (PUBL	LIC HEARING) (\$250) \$ CHE0	CK #
COMPLETION OF CT DEEP REPORT	fing Form	
ORIGINAL PLUS COPIES OF ALL MA	TERIALS REQUIRED - NUMBER TO BE DETER	RMINED BY STAFF
PRE-APPLICATION MEETING WITH	THE WETLANDS AGENT IS RECOMMENDED T	O EXAMINE THE SCOPE OF THE
	THE WETLANDS WITH EXISTING AND PROPOSITIES AND	
COMPLIANCE WITH THE CONNECTI	CUT EROSION & SEDIMENTATION CONTROL	Manual
REQUIRED ALONG WITH THE FOLL NAMES AND ADDRESSES OF A		
ADDITIONAL INFORMATION/ACTION N	EEDED:	- Mary
<u> </u>		

OTHER APPLICATIONS MAY BE REQUIRED. CONTACT THESE AGENCIES FOR FURTHER INFORMATION: APPLICATION TO STATE OF CONNECTICUT DEEP

INLAND WATER RESOURCES DIVISION 79 ELM ST. HARTFORD, CT. 06106 1-860-424-3019 DEPARTMENT OF THE ARMY CORPS OF ENGINEERS 696 VIRGINIA ROAD CONCORD, MA. 01742 1-860-343-4789

STAFF	USE ONLY:
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\_\_ DECLARATORY RULING: AS OF RIGHT & NON-REGULATED USES (SEE IWWC REGULATIONS SECTION 4)

PERMIT REQUIRED:

AUTHORIZED BY STAFF/CHAIR (NO ACTIVITY IN WETLANDS/WATERCOURSE AND MINIMAL IMPACT)

CHAIR, BROOKLYN IWWC

WETLANDS OFFICER

\_AUTHORIZED BY IWWC

\_\_\_\_\_\_ SIGNIFICANT ACTIVITY/PUBLIC HEARING

NO PERMIT REQUIRED

\_\_\_\_\_ OUTSIDE OF UPLAND REVIEW AREA

\_\_\_\_\_ NO IMPACT

CHAIR, BROOKLYN IWWC

WETLANDS OFFICER

TIMBER HARVEST

Connecticut Department of ENERGY & ENVIRONMENTAL PROTECTION 79 Elm Street • Hartford, CT 06106-5127		S CODE #: DEEP Use Only Affirmative Action/Equal Op	portunity Employer		
DEEP Land & Water Resources Division, Inla	is form in accordance with the nd Wetlands Management Pro	instructions on pages 2 and 3 to:	-		
PART I: Must Be Com	pleted By The Inland W	/etlands Agency			
1. DATE ACTION WAS TAKEN: year:	month:	·			
2. ACTION TAKEN (see instructions, only use one	code):				
3. WAS A PUBLIC HEARING HELD (check one)?	yes 🔲 no 🛄				
4. NAME OF AGENCY OFFICIAL VERIFYING ANI	D COMPLETING THIS FORM	A:			
(print name)	(signature)				
······································	· · · · · · · · · · · · · · · · · · ·	an a			
PART II: To Be Completed By	The Inland Wetlands A	gency Or The Applicant			
5. TOWN IN WHICH THE ACTION IS OCCURRING does this project cross municipal boundaries (ch	eck one)? yes 🗌 no	E			
<ul><li>if yes, list the other town(s) in which the action is</li><li>6. LOCATION (see instructions for information): U</li></ul>	لى		ber: <b>43</b>		
6. LOCATION (see instructions for information): U subregional drainage basin number:	SGS quad name:		ber:		
7. NAME OF APPLICANT, VIOLATOR OR PETITIN	ONER (print pama): A.K.	auscit & Son's			
8. NAME & ADDRESS / LOCATION OF PROJECT					
briefly describe the action/project/activity (check	and print information): temp	oorary 🔲 permanent 🗹 descrip	tion:		
9. ACTIVITY PURPOSE CODE (see instructions, o					
10. ACTIVITY TYPE CODE(S) (see instructions for	codes):	2 9	/2		
11. WETLAND / WATERCOURSE AREA ALTEREI wetlands: 0.048 acres ope	D (must provide acres or line) en water body:		🥖 linear feet		
12. UPLAND AREA ALTERED (must provide acres	): 0.80 acres				
13. AREA OF WETLANDS / WATERCOURSES RE	STORED, ENHANCED OR	CREATED (must provide acres):	<u> </u>		
DATE RECEIVED: PART III: To Be Completed By The DEEP DATE RETURNED TO DEEP:					
FORM COMPLETED: YES NO		FORM CORRECTED / COM	IPLETED: YES NO		

Driveway Construction Sequence

\_\_\_\_

Ыf

#2-22

#2-21

Eversource

N 83°51'24" E

#2-16

MH #4

-#4=18-

Iron Pipe (f)

230.95'

WIF #2-20

Ыf

#2-18\*

#2

WIF

\#2-l9

I. Notify Brooklyn Wetlands Agent to schedule a Pre-construction Meeting

2. Install Silt Fence and Anti Tracking Pad

3. Clear & Grub within Silt Fence and Wetlands Disturbance Limits

4. Remove & Temporarily stockpile Topsoil

5. Install Drainage Pipe

6. Install Driveway Gravel

7. Provide Topsoil Fertilizer & Seed on all remaining disturbed area

8. Prepared As Built plan

9. Remove E&S Control once vegetation is established

# LEGEND

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100
<b> </b>
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O
CL#P 1645

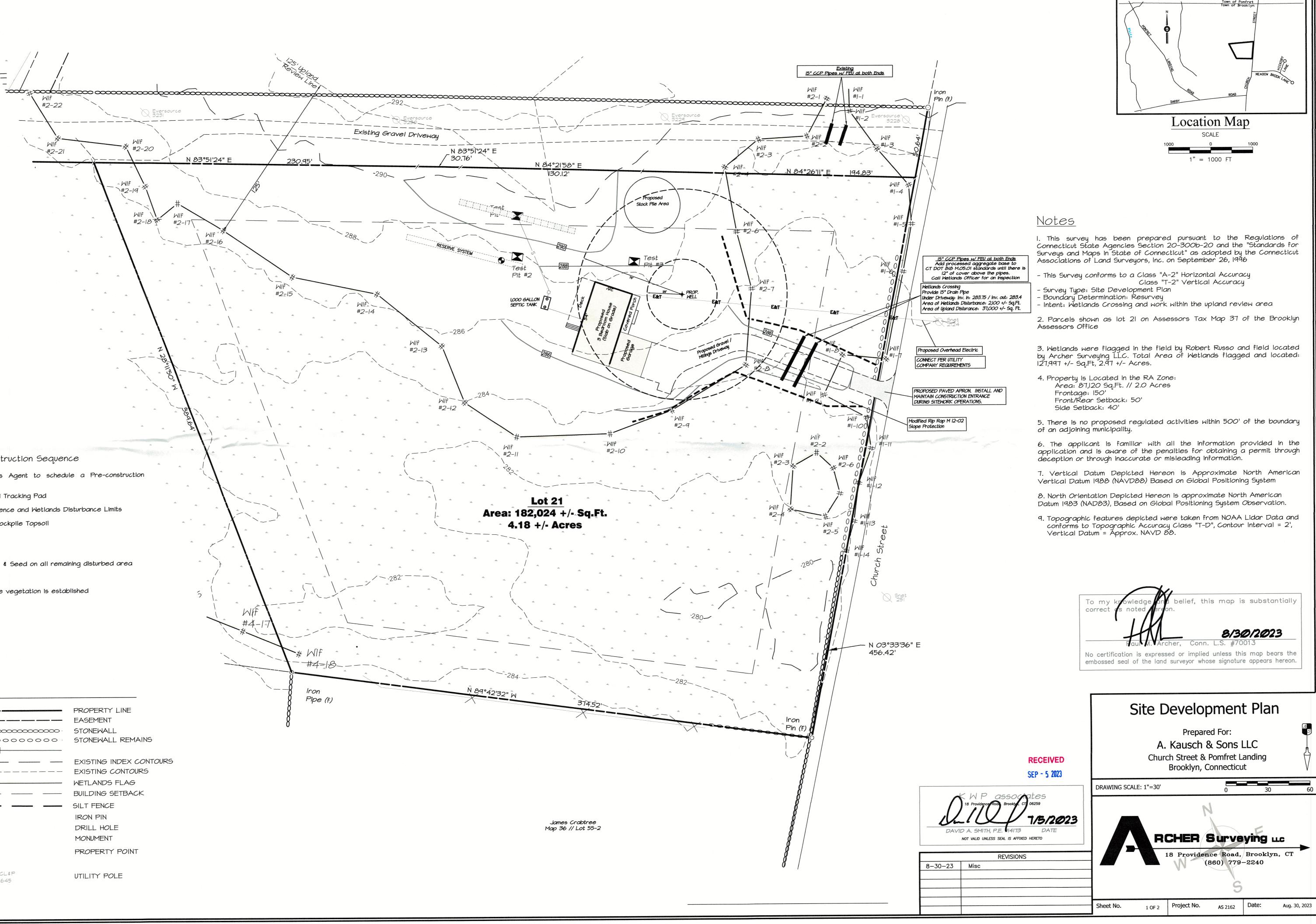
PROPERTY LINE EASEMENT STONEWALL STONEWALL REMAINS

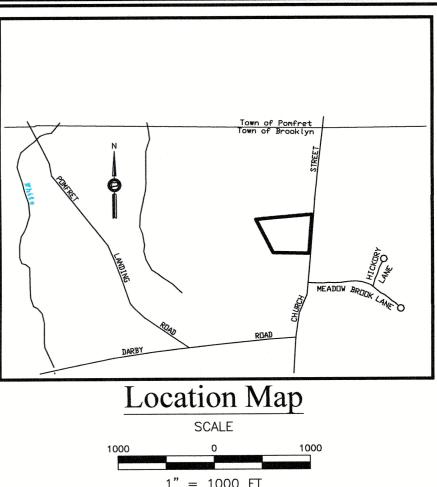
EXISTING INDEX CONTOURS EXISTING CONTOURS WETLANDS FLAG BUILDING SETBACK SILT FENCE IRON PIN DRILL HOLE MONUMENT PROPERTY POINT

UTILITY POLE

ARCHER

Surveying LLC





## EROSION AND SEDIMENT CONTROL PLAN:

REFERENCE IS MADE TO:

- Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).
- 2. Soil Survey of Windham County Connecticut, U.S.D.A. Soil Conservation Service 1983.
- DEVELOPMENT SCHEDULE: (Individual Lots):
- I. Prior to any work on site, the limits of disturbance shall be clearly flagged in the field by a Land Surveyor, licensed in the State of Connecticut. Once the limits of clearing are flagged, they shall be reviewed and approved by an agent of the Town.
- 2. Install and maintain erosion and sedimentation control devices as shown on these plans. All erosion control devices shall be inspected by an agent of the Town. Any additional erosion control devices required by the Town's Agent shall be installed and inspected prior to any construction on site. (See silt fence installation notes.)
- 3. Install construction entrance.
- 4. Construction will begin with clearing, grubbing and rough grading of the proposed site. The work will be confined to areas adjacent to the proposed building, septic system and driveway. Topsoil will be stockpiled on site and utilized during final grading.
- 5. Begin construction of the house, septic system and well.
- 6. Disturbed areas shall be seeded and stabilized as soon as possible to prevent erosion.
- 1. The site will be graded so that all possible trees on site will be saved to provide buffers to adjoining
- DEVELOPMENT CONTROL PLAN:
- Development of the site will be performed by the individual lot owner, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout construction.
- 2. The sedimentation control mechanisms shall remain in place from start of construction until permanent vegetation has been established. The representative for the Town will be notified when sediment and erosion control structures are initially in place. Any additional soil & erosion control measures requested by the Town or its agent, shall be installed immediately. Once the proposed development, seeding and planting have been completed, the representative shall again be notified to inspect the site. The control measures will not be removed until this inspection is complete.
- 3. All stripping is to be confined to the immediate construction area. Topsoil shall be stockpiled so that slopes do not exceed 2 to 1. A hay bale sediment barrier is to surround each stockpile and a temporary vegetative cover shall be provided.
- 4. Dust control will be accomplished by spraying with water and if necessary, the application of calcium chloride.
- 5. The proposed planting schedule is to be adhered to during the planting of disturbed areas throughout the proposed construction site.
- 6. Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.
- SILT FENCE INSTALLATION AND MAINTENANCE:
- I. Dig a 6" deep trench on the uphill side of the barrier location.
- 2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the ground.
- 3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
- 4. Inspect and repair barrier after heavy rainfall.
- 5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
- . Sediment deposits are to be removed when they reach a height of I foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands
- Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because:
- the fence has been overtopped, undercut or bypassed by runoff water,
- the fence has been moved out of position (knocked over), or the geotextile has decomposed or been damaged.

### HAY BALE INSTALLATION AND MAINTENANCE:

- Bales shall be placed as shown on the plans with the ends of the bales tightly abutting each other.
- 2. Each bale shall be securely anchored with at least 2 stakes and gaps between bales shall be wedged with straw to prevent water from passing between the bales.
- 3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
- 4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the inland Wetlands Commission.
- . Replace or repair the barrier within 24 hours of observed failure. Failure of the barrier has occurred when sediment fails to be retained by the barrier because: the barrier has been overtopped, undercut or bypassed by runoff water,
- the barrier has been moved out of position, or
- the hay bales have deteriorated or been damaged.

TEMPORARY VEGETATIVE COVER:

### SEED SELECTION

commission.

Kentucky Blue Grass 0.45 lb /1000 sf, Creeplay Red Fescue 0.45 lbs / 1000 sf, Perennial Ryegrass 0.10 lbs / 1000 sf TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than I year.

### SITE PREPARATION

Install needed erosion control measures such as diversions, grade stabilization structures, sediment basins and grassed waterways.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application, and mulch anchoring.

### SEEDBED PREPARATION

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a buildozer, discing, harrowing, raking or dragging with a section of chain link fence. Avoid excessive compaction of the surface by equipment traveling back and forth over the surface. If the slope is tracked, the cleat marks shall be perpendicular to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10-10-10 or equivalent. Additionally, lime may be applied using rates given in Figure TS-1 in the 2002 Guidelines.

### SEEDING

Apply seed uniformly by hand cyclone seeder, drill, cultipacker type seeder or hydroseeder at a minimum rate for the selected species. Increase seeding rates by 10% when hydroseeding.

### MULCHING

Temporary seedings made during optimum seeding dates shall be mulched according to the recommendations in the 2002 Guidelines. When seeding outside of the recommended dates, increase the application of mulch to provide 95%-100% coverage.

### MAINTENANCE

Inspect seeded area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has moved or where soil erosion has occurred, determine the cause of the failure. Repair eroded areas and install additional controls if required to prevent reoccurrence of erosion.

Continue inspections until the grasses are firmly established. Grasses shall not be considered established until a ground cover is achieved which is mature enough to control soil erosion and to survive severe weather conditions (approximately 80% vegetative cover).

PERMANENT VEGETATIVE COVER:

- Refer to Permanent Seeding Measure in the 2002 Guidelines for specific applications and details related to the installation and maintenance of a permanent vegetative cover. In general, the following sequence of operations shall apply:
- 1. Topsoil will be replaced once the excavation and grading has been completed. Topsoil will be spread at a minimum compacted depth of
- 2. Once the topsoil has been spread, all stones 2" or larger in any dimension will be removed as well as debris.
- Apply agricultural ground limestone at a rate of 2 tons per acre or 100 lbs. per 1000 s.f. Apply 10-10-10 fertilizer or equivalent at a rate of 300 lbs. per acre or 7.5 lbs. per 1000 s.f. Work lime and fertilizer into the soil to a depth of 4".
- 4. Inspect seedbed before seeding. If traffic has compacted the soil, retill compacted areas.
- 5. Apply the chosen grass seed mix. The recommended seeding dates are: April I to June 15 & August 15 - October I.
- 6. Following seeding, firm seedbed with a roller. Mulch immediately following seeding. If a permanent vegetative stand cannot be established by September 30, apply a temporary cover on the topsoil such as netting, mat or organic mulch.

### EROSION AND SEDIMENT CONTROL NARRATIVE:

PRINCIPLES OF EROSION AND SEDIMENT CONTROL

The primary function of erosion and sediment controls is to absorb erosional energies and reduce runoff velocities that force the detachment and transport of soll and/or encourage the deposition of eroded soil particles before they reach any sensitive area.

### KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent phase in order to be functional. A sequence is the order in which construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequaté erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

- Limit areas of clearing and grading. Protect natural vegetation from construction equipment with fencing, tree armoring, and retaining walls or tree wells.
- Route traffic patterns within the site to avoid existing or newly planted vegetation.
- Phase construction so that areas which are actively being developed at any one time are minimized and only that area under construction is exposed. Clear only those areas essential for construction.
- Sequence the construction of storm drainage systems so that they are operational as soon as possible during construction. Ensure all outlets are stable before outletting storm drainage flow into them.
- Schedule construction so that final grading and stabilization is completed as soon as possible.

### SLOW THE FLOW

Detachment and transport of eroded soil must be kept to a minimum by absorbing and reducing the erosive energy of water. The erosive energy of water increases as the volume and velocity of runoff increases. The volume and velocity of runoff increases during development as a result of reduced infiltration rates caused by the removal of existing vegetation, removal of topsoil, compaction of soil and the construction of impervious surfaces.

- Use diversions, stone dikes, silt fences and similar measures to break flow lines and dissipate storm water energy.
- Avoid diverting one drainage system into another without calculating the potential for downstream flooding or erosion. KEEP CLEAN RUNOFF SEPARATED

#### Clean runoff should be kept separated from sediment laden water and should not be directed over disturbed areas without additional controls. Additionally, prevent the mixing of clean off-site generated runoff with sediment laden runoff generated on-site until after adequate filtration of on-site waters has occurred.

- Segregate construction waters from clean water.
- Divert site runoff to keep it isolated from wetlands, watercourses and drainage ways that flow through or near the development until the sediment in that runoff is trapped or detained.

REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS

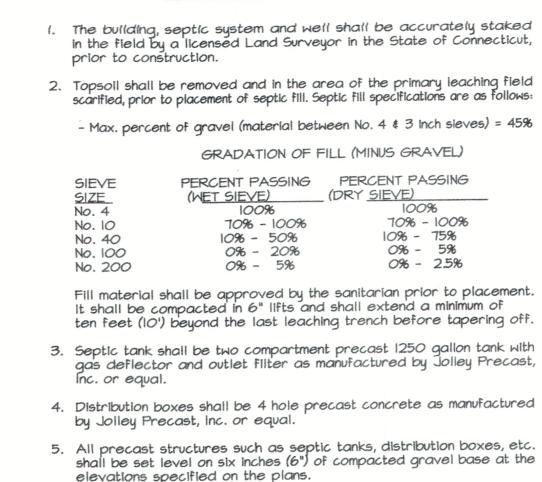
While it may seem less complicated to collect all waters to one point of discharge for treatment and just install a perimeter control, it can be more effective to apply internal controls to many small sub-drainage basing within the site. By reducing sediment loading from within the site, the chance of perimeter control failure and the potential off-site damage that it can cause is reduced. It is generally more expensive to correct off-site damage than it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area possible. It is easier to control erosion than to contend with sediment after it has been carried downstream and deposited in unwanted areas.
- Direct runoff from small disturbed areas to adjoining undisturbed regetated areas to reduce the potential for concentrated flows and increase settlement and filtering of sediments.
- Concentrated runoff from development should be safely conveyed to stable outlets using rip rapped channels, waterways, diversions, storm drains or similar measures.
- Determine the need for sediment basins. Sediment basins are required on larger developments where major grading is planned and where it is impossible or impractical to control erosion at the source. Sediment basins are needed on large and small sites when sensitive areas such as wetlands, watercourses, and streets would be impacted by off-site sediment deposition. Do not locate sediment basins in wetlands or permanent or intermittent watercourses. Sediment basins should be located to intercept runoff prior to its entry into the wetland or watercourse.

Grade and landscape around buildings and septic systems to divert water away from them.





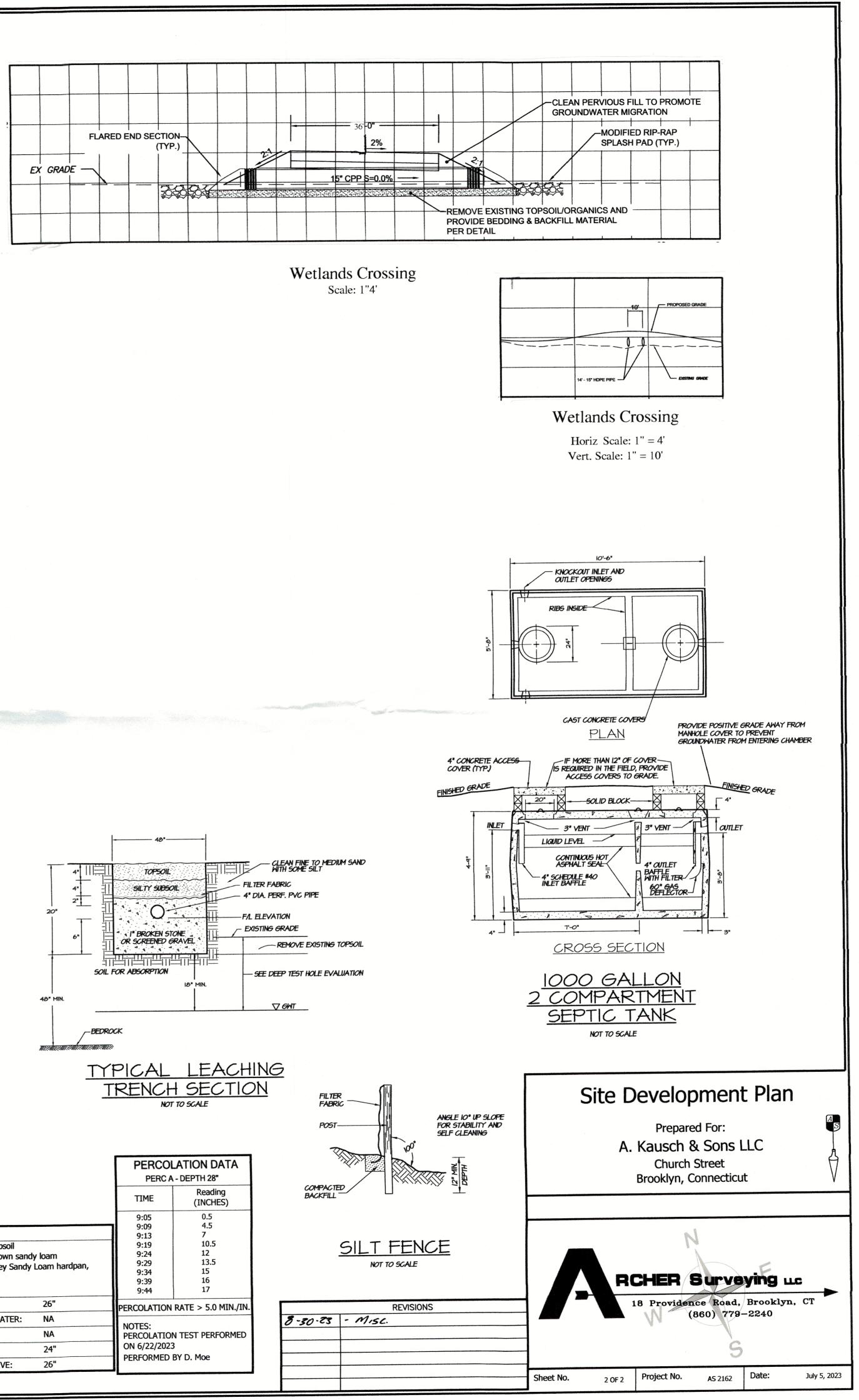


6. Solid distribution pipe shall be 4" diameter PVC meeting ASTM D-3034 SDR 35 with compression gasket joints. It shall be laid true to the lines and grades shown on the plans and in no case have a slope less than 0.125 inches per foot.

- 7. Perforated distribution pipe shall be 4" diameter PVC meeting ASTM D-2729 or ASTM D-3350, 1500 lb. minimum crush.
- 8. Sewer pipe from the foundation wall to the septic tank shall be schedule 40 PVC meeting ASTM D 1785. It shall be laid true to the grades shown on the plans and in no case shall have a slope less than 0.25 inches per foot.

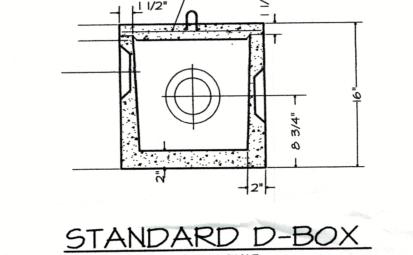
2X2 5/8 16 GA. WIRE MESH-

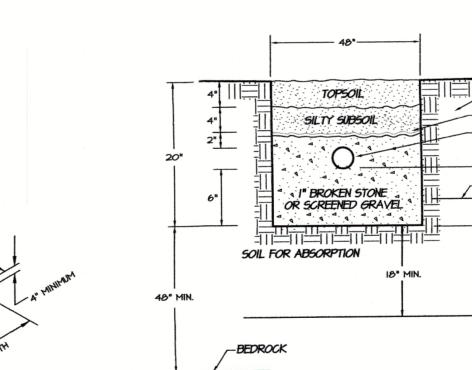


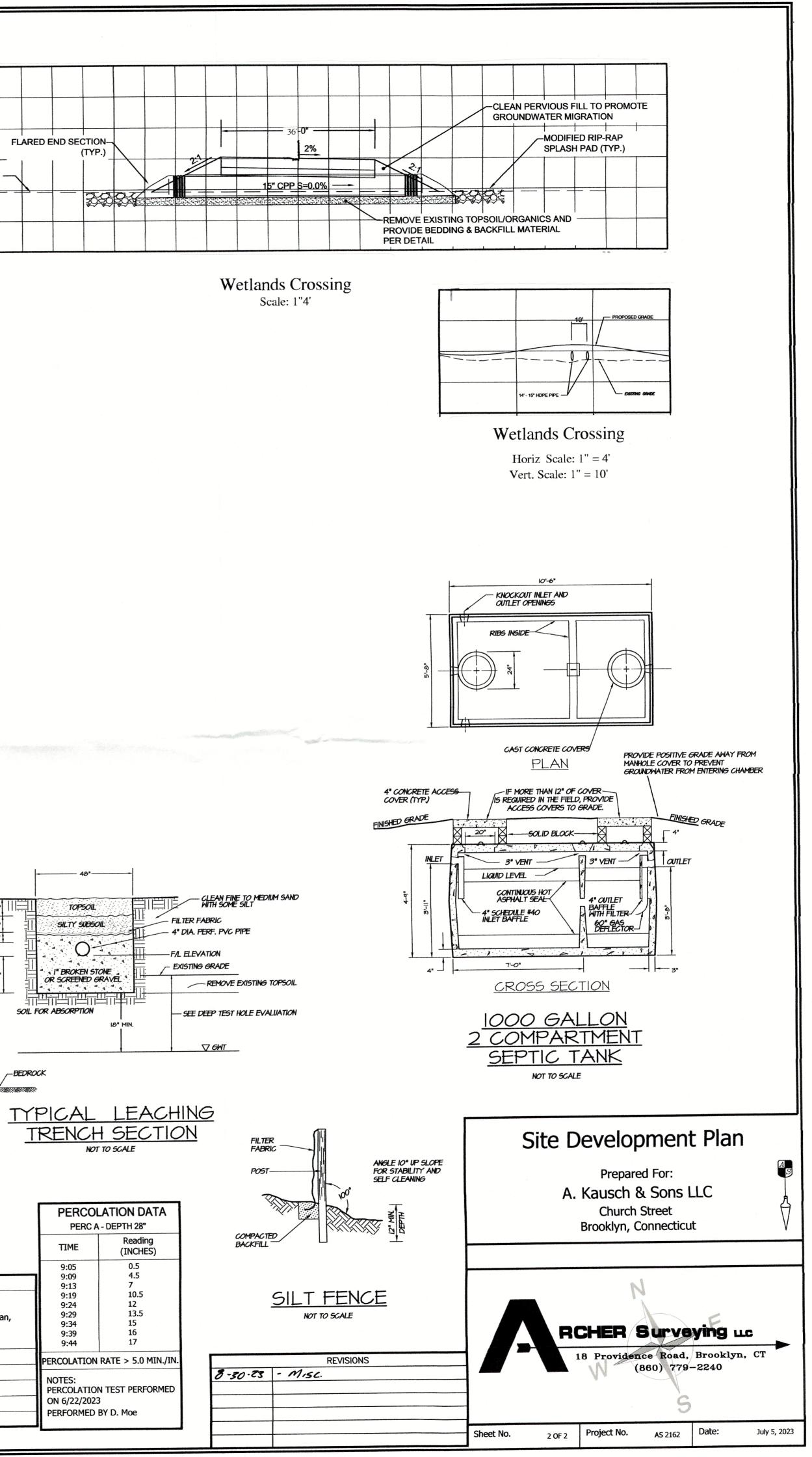




DEEP TEST PIT DATA / SOIL DESCRIPTIONS					ATION DATA - DEPTH 28"		
PERFORMED BY: Donovan Moe					TIME	Reading (INCHES)	
WITNESSED BY: No	rtheast District Departr	ment of Health	DATE: 6/22/202			9:05 9:09	0.5 4.5
TEST PIT: 1       TEST PIT: 2         0"-10" Topsoil       0"-7" Topsoil         10"-25" brown sandy loam       7"-20" brown sandy         25"-80" Grey sandy loam, mottled, hardpar       20"-78" Grey Sandy		y loam Loam hardpan,		0"-7" Topsoil 7"-26" brown sandy loam 26"-80" Grey Sandy Loam hardpan,		7 10.5 12 13.5 15 16 17	
MOTTLES:	25"	MOTTLES:	20"	MOTTLES:	26"	PERCOLATION	RATE > 5.0 MIN./IN.
GROUNDWATER:	78" seeps @58"	GROUNDWATER:	seeps @61"	GROUNDWATER:	NA	NOTES:	
LEDGE:	NA	LEDGE:	NA	LEDGE:	NA	PERCOLATION	TEST PERFORMED
ROOTS:	16"	ROOTS:	18"	ROOTS:	24"	ON 6/22/2023	
RESTRICTIVE:	25"	RESTRICTIVE:	20"	RESTRICTIVE:	26"	PERFORMED E	







### Town of Brooklyn

Inland Wetlands Bud			From Date:	8/1/2023	To Date:	8/31/2023		
Fiscal Year: 2023-2024	Subtotal by Collapse Mask	Include pre enc	umbrance 🗹 Print a	accounts with ze	ro balance 🖌 Fi	Iter Encumbrance	Detail by Date F	Range
	Exclude Inactive Accounts wi	th zero balance						
Account Number	Description	GL Budget	Range To Date	YTD	Balance	Encumbrance	Budget Balan	ce % Bud
1005.41.4163.51900	Inland Wetlands-Wages-Recordin	\$1,000.00	\$175.00	\$262.50	\$737.50	\$0.00	\$737.50	73.75%
1005.41.4163.53020	Inland Wetlands-Legal Fees	\$3,500.00	\$0.00	\$0.00	\$3,500.00	\$0.00	\$3,500.00	100.00%
1005.41.4163.53200	Inland Wetlands-Professional A	\$65.00	\$0.00	\$0.00	\$65.00	\$0.00	\$65.00	100.00%
1005.41.4163.53400	Inland Wetlands-Professional S	\$500.00	\$0.00	\$0.00	\$500.00	\$0.00	\$500.00	100.00%
1005.41.4163.55400	Inland Wetlands-Advertising &	\$500.00	\$0.00	\$0.00	\$500.00	\$0.00	\$500.00	100.00%
1005.41.4163.55500	Inland Wetlands-Printing & Pub	\$120.00	\$0.00	\$0.00	\$120.00	\$0.00	\$120.00	100.00%
1005.41.4163.56900	Inland Wetlands-Other Supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00%
	Grand Total:	\$5,685.00	\$175.00	\$262.50	\$5,422.50	\$0.00	\$5,422.50	95.38%

End of Report