

**TOWN OF BROOKLYN  
PLANNING AND ZONING COMMISSION  
Regular Meeting Agenda  
Wednesday, February 3, 2021  
6:30 p.m.**

<b>To join this hearing via the web or phone, follow the below instructions:</b>	
<b>Web</b> Go to <a href="http://www.webex.com">www.webex.com</a> Click sign in On the top right, click Join a Meeting Enter meeting ID: 126 815 8731 Enter meeting password: Wednesday	<b>Phone</b> Dial 1-415-655-0001 Enter meeting number: 126 815 8731 You can bypass attendee number by pressing #

- I. Call to Order**
- II. Roll Call**
- III. Seating of Alternates**
- IV. Adoption of Minutes:** Regular Meeting January 6, 2021
- V. Public Commentary**
- VI. Unfinished Business:**
  - a. **Reading of Legal Notice:** None.
  - b. **New Public Hearings:** None.
  - c. **Continued Public Hearings:** None.
  - d. **Other Unfinished Business:**
    - 1. **SD 20-002** - Proposed modification of open space dedication for 3-lot subdivision on Church Street.
    - 2. **SD 21-001** – 4-lot Subdivision, Applicant: Square One Building Associates; 23 acres on the west side of Tripp Hollow Road (Map 7, Lot 12-1) in the RA Zone; Proposed creation of 4 residential building lots.
- VII. New Business:**
  - a. **Applications:**
    - 1. **ZC 21-001** – Zone Boundary Change from R-30 to RA; Robert Perry, Location: 202 South Street, Three acres at the intersection of South Street and Fortin Drive (Map 40, Lot 13)
  - b. **Other New Business:** None.
- VIII. Reports of Officers and Committees:**
  - a. Staff Reports
  - b. Budget Update
  - c. Correspondence.
  - d. Chairman’s Report
- IX. Public Commentary**
- X. Adjourn**

Michelle Sigfridson, Chairman

**TOWN OF BROOKLYN  
PLANNING AND ZONING COMMISSION  
Regular Meeting  
Wednesday, January 6, 2021  
6:30 p.m.**

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<b>Web</b> Go to <a href="https://zoom.us">https://zoom.us</a> Click sign in On top right, click <b>Join a Meeting</b> Enter meeting ID: <b>933 8478 0570</b> Enter meeting password: <b>f25ztt</b>	<b>Phone - Not Available</b>

**MINUTES**

**I. Call to Order** – Michelle Sigfridson, Chair, called the meeting to order at 6:40 p.m.

**II. Roll Call** –Carlene Kelleher, Austin Tanner, Earl Starks, Allen Fitzgerald, Michelle Sigfridson. Charles Sczuroski was absent with notice.

**Staff Present:** Jana Roberson, Director of Community Development, Richard Ives, First Selectman and ex officio Member of the Planning and Zoning Commission.

**Also Present:** Peter Alter, Town Attorney; Paul Archer, Archer Surveying; Robert Deluca, of CLA Engineers; Paul Terwilliger, PC Survey Associates

**III. Seating of Alternates** – None.

**IV. Election of Officers**

J. Roberson opened the floor for nominations for the position of Chair.

Motion was made by C. Kelleher to nominate Michelle Sigfridson for the position of Chair. Second by A. Tanner.

There were no other nominations. No vote taken.

Motion was made by A. Tanner to close nominations for the position of Chair. Second by C. Kelleher. No vote taken.

J. Roberson opened the floor for nominations for the position of Vice Chair.

Motion was made by A. Tanner to nominate Carlene Kelleher for the position of Vice Chair. Second by E. Starks.

There were no other nominations. No vote taken.

Motion was made by A. Fitzgerald to close nominations for the position of Vice Chair. Second by A. Tanner. No vote taken.

**VOTE TAKEN ON THE ABOVE FOUR MOTIONS:**

A vote was taken for Michelle Sigfridson for the position of Chair and Carlene Kelleher for the position of Vice Chair.

Roll Call Vote: C. Kelleher – yes; A. Tanner – yes; E. Starks – yes; A. Fitzgerald – yes; M. Sigfridson – yes. Motion carried unanimously (5-0-0).

## V. Review of Bylaws

There were no suggestions for changes to the Bylaws.

## VI. Adoption of Minutes: Regular Meeting December 15, 2020

Motion was made by C. Kelleher to approve the Minutes of the Regular Meeting of December 15, 2020. Second by A. Tanner. No discussion.

Motion carried unanimously by voice vote (5-0-0).

## VII. Public Commentary – None.

## VIII. Unfinished Business:

a. **Reading of Legal Notice:** None.

b. **New Public Hearings:** None.

c. **Continued Public Hearings:** None.

d. **Other Unfinished Business:**

Motion was made by C. Kelleher to move **Agenda Item VIII.d.1. (Executive Session regarding potential litigation with Atty. Peter Alter)** to be **Item X.** and to renumber the remaining items on the Agenda accordingly. Second by A. Fitzgerald.

Discussion:

Mr. Ives made the Commission Members aware that there have been some issues with previous Zoom meetings where they get cut off after 40 minutes.

Motion carried unanimously by voice vote (5-0-0).

1. Proposed modification of open space dedication for SD 20-002 – 3-lot Subdivision on Church Street.

Ms. Roberson explained that the subdivision had been previously approved and that the owners (Mr. and Mrs. Bell) would like to modify the open space as previously approved as part of that subdivision.

Paul Terwilliger, PC Survey Associates, represented Mr. and Mrs. Bell. Mr. Terwilliger explained that the open-space covenant dedication, as proposed, bisected the 16-acre lot and they would like to reconfigure it to two smaller open-space areas. The way it is currently configured makes it difficult to market.

Ms. Roberson displayed the mark-up plan submitted by Mr. Terwilliger as he explained the proposal and orientated the property. He explained that the proposal would make the body of the lot more open and although it would reduce the amount of open space to 16 percent, it would still exceed the 15-percent requirement.

Ms. Sigfridson commented that it may be appropriate to have the Conservation Commission (which will meet in early February) review this proposal. Ms. Roberson agreed and asked if Mr. and Mrs. Bell would be in agreement with extending the deadline to file the subdivision plans (if needed). Mr. Terwilliger questioned what the Conservation Commission had originally recommended (open space or fee-in-lieu?). Ms. Roberson said that they supported the open space as originally proposed. She displayed and referred to the table on the plan showing that the relative area of wetlands on this open-space proposal is considerably higher than that of the original parcel. She offered that she could refer the proposal to the

Conservation Commission. Ms. Roberson displayed the full plan and explained that the two proposed open-space areas were connected as a continuous conservation easement in the original approved proposal. She commented that, typically, the area of wetlands in the open-space easement is usually an equal ratio to that of the original parcel.

There was discussion and Mr. Ives questioned why not be more inclined to fee-in-lieu rather than ending up with pieces of useless land. Mr. Tanner commented that they like to see contiguous land and he doesn't like to see it separated. Ms. Kelleher asked whether there is a requirement regarding the amount of wetlands. Ms. Roberson stated that it is not a requirement and said that the Commission always has discretion in selecting the most appropriate open space. Ms. Sigfridson commented that fee-in-lieu is an option and asked how the Applicant would feel about that. Mr. Terwilliger stated that Mr. Bell does not want to bisect the property in any way and Mr. Terwilliger explained that he does not see a way to connect the two areas very effectively without running some kind of easement through the property. Mr. Terwilliger said that if the Commission is not amenable to this proposal, which is what the Applicant prefers, then the Applicant would go for the fee-in-lieu and they would have to get an appraisal. Ms. Kelleher asked whether the proposal should be referred to the Conservation Commission for their recommendation. Ms. Sigfridson commented that she feels that it would be good to get their input.

Motion was made by C. Kelleher to refer the proposed modification of open space dedication for SD 20-002 – 3-lot Subdivision on Church Street to the Brooklyn Conservation Commission for their recommendation regarding fee-in-lieu of open space vs. the proposed open space.

Second by A. Fitzgerald. No discussion.

Motion carried unanimously by voice vote (5-0-0).

## **IX. New Business:**

### **a. Applications:**

- 1. SD 21-001 – 4-lot Subdivision**, Applicant: Square One Building Associates; 23 acres on the west side of Tripp Hollow Road (Map 7, Lot 121) in the RA Zone; Proposed creation of 4 residential building lots.

Paul Archer, Archer Surveying, represented the Applicant. Robert DeLuca, CLA Engineers, was also present. Mr. Archer gave an overview:

- Property is located on the westerly side of Tripp Hollow Road, along the southerly line of Brooklyn and the northerly line of Canterbury.
- A six-lot conservation subdivision, previously approved approximately a year ago, is to the north and east of this property.
- Proposing an open-space easement which will abut the conservation easement on the above-referenced six-lot conservation subdivision. They will submit the proposal to the Conservation Commission.
- It has been approved by the IWWC.
- It has been approved by the Health Department.
- Syl Pauley has reviewed it and Mr. Archer stated that all of Mr. Pauley's comments have been answered.
- Mr. Archer asked if a public hearing would be scheduled or if there are any questions for himself or for Mr. DeLuca.

There were no questions from the Commission and no desire for a public hearing or a site walk was expressed. Ms. Roberson explained where the property is and

stated that the proposal is for one frontage lot and three rear lots served by a common driveway.

Mr. DeLuca displayed plans as he orientated and gave an overview:

- He indicated how the topography all slopes away from Tripp Hollow Road to a wetland that runs through near the rear of the middle of one of the four lots.
- He indicated the location of the proposed open space and where it is in relation to the conservation easement in the previously approved six-lot conservation subdivision (which has no access).
- He indicated the location of the shared driveway.
- He indicated the location where the wetland crosses.

There was discussion regarding the open space and Mr. Archer explained that the proposed open space would be a conservation easement as in the previously approved six-lot conservation subdivision which is also owned by the Applicant, Square One Building Associates. He said that, if accepted by the Conservation Commission, it would be one, large open space easement.

Ms. Roberson will notify neighboring towns since it is within 500 feet of the town lines.

Ms. Sigfridson asked if the Commission would like a site visit. No desire for a site visit was expressed.

Ms. Roberson stated that the PZC would be looking at this proposal again in the future. Ms. Roberson will present this proposal to the Conservation Commission at its meeting on the first Monday in February.

**b. Other New Business: None.**

**X. Executive Session regarding potential litigation with Atty. Peter Alter**

Motion was made by A. Tanner to enter into Executive Session at 7:19 p.m. to discuss a legal matter. Invited into Executive Session: M. Sigfridson, C. Kelleher, A. Tanner, E. Starks, A. Fitzgerald, Attorney Peter Alter, Richard Ives, Jana Roberson. Second by A. Fitzgerald. No discussion. Motion carried unanimously by voice vote (5-0-0).

The Executive Session ended at 8:37 p.m. The Commission waited for the Recording Secretary to log back into the meeting.

At 8:43 p.m., due to the Court's Memorandum of Decision on the Appeal, M. Sigfridson recused herself from discussion/action regarding Brooklyn Sand and Gravel.

Acting Chair, C. Kelleher stated that there was no longer a quorum and she stated that any action of the Commission would be deferred until the next meeting.

M. Sigfridson returned at 8:44 p.m. and resumed the position of Chair.

**XI. Reports of Officers and Committees:**

a. Staff Reports

Ms. Roberson stated that she did not have anything further to report, but that ZEO, Margaret Washburn's report was included in packets to Commission Members.

b. Budget Update

Ms. Roberson stated that she did not have an update other than what she had provided at the last meeting. She stated that the Finance Department is working on revenues.

c. Correspondence – None.

d. Chairman's Report – None.

**XII. Public Commentary – None.**

**XIII. Adjourn**

The meeting adjourned at 8:47 p.m.

Respectfully submitted,

J.S. Perreault  
Recording Secretary

## Jana Roberson

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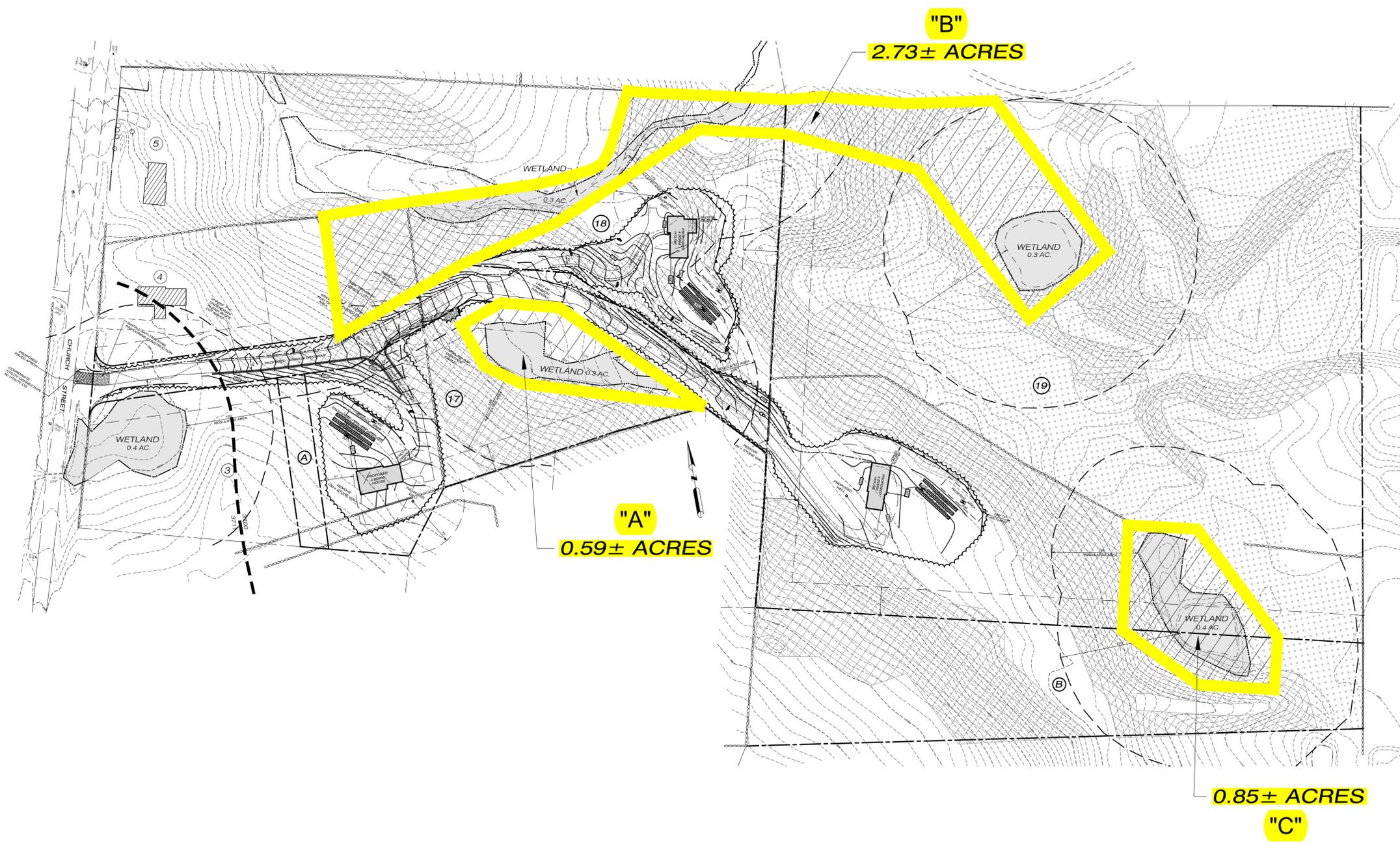
**From:** pc survey associates, llc <pcsurvey@snet.net>  
**Sent:** Monday, January 04, 2021 2:50 PM  
**To:** Jana Roberson  
**Subject:** RE: Legal Documents for Brooklyn Subdivision

Jana,

Mr. Bell would like to reduce the area of the open space conservation area across Lot 19 of the recently approved subdivision on Church Street. (SD20-002). The approved conservation area bisects the lot in such a way that it is making it hard to market. We would like to remove the middle portion between the wetland areas. This would still leave the open space areas over the minimum 15% area requirement. If you could put this on your next meeting's agenda for discussion, I will get you plans depicting our proposal before then.

Thank you,

Paul A. Terwilliger, LS



- NOTES:**
1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH SECTIONS 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES - "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT", AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. IT IS A COMPILATION MAP BASED ON A DEPENDENT RESURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS "D". SEE SHEETS 2 & 4 FOR PROPERTY LINE & LOT DEVELOPMENT INFORMATION. TOPOGRAPHIC FEATURES DEPICTED HEREON WERE TAKEN FROM AERIAL PHOTOGRAMMETRY PROVIDED BY CHAS. H. SELLS, INC. DATED JUNE 2006 AND CONFORM TO TOPOGRAPHIC ACCURACY CLASS T-3. VERTICAL DATUM IS NGVD88. THIS MAP HAS BEEN COMPILED FROM OTHER MAPS, DEED DIMENSIONS, AND OTHER SOURCES. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.
  2. ZONING DISTRICT: RA
  3. PROPOSED IMPROVEMENTS ARE CONCEPTUAL LOCATIONS TO SHOW LOT SUITABILITY ONLY.
  4. SOLAR ACCESS WAS CONSIDERED IN THE DESIGN OF THIS SUBDIVISION. THE HOUSE LOCATIONS DEPICTED ARE ONLY CONCEPTUAL IN NATURE AND IT IS UP TO THE LOT DEVELOPER TO TAKE ADVANTAGE OF THE PASSIVE SOLAR OPPORTUNITIES PRESENTED BY THESE LOTS AT THE TIME OF ACTUAL HOUSE CONSTRUCTION. THE DEVELOPER IS ENCOURAGED TO UTILIZE PASSIVE SOLAR TECHNIQUES AND IT IS RECOMMENDED THAT SUCH FACTORS AS HOUSE ORIENTATION, WINDOW LOCATION AND STYLE, CLEARING LIMITS AND POSITION ON THE LOT BE TAKEN INTO CONSIDERATION WHEN DEVELOPMENT OCCURS.
  5. THE INLAND WETLANDS & WATERCOURSES WERE FIELD DELINEATED BY MICHAEL G. SCHAEFER, SOIL SCIENTIST AND FIELD LOCATED BY PC SURVEY ASSOCIATES, LLC IN MAY AND JUNE 2006.
  6. MAXIMUM DRIVEWAY GRADE PERMITTED IS 12%. GRADES OF 10% OR GREATER ARE TO BE PAVED. PROPOSED DRIVEWAY GRADES DEPICTED ARE AT LESS THAN 10%.

**SOILS WITHIN DEVELOPMENT AREAS**

CHARTLTON-CHATFIELD COMPLEX, 0-15% SLOPES, VERY ROCKY FINE SANDY LOAM TO GRAVELLY FINE SANDY LOAM WELL DRAINED, WATER TABLE GREATER THAN 80", BEDROCK 20" - 80"

SUTTON, 0-8% SLOPES, VERY STONY FINE SANDY LOAM TO GRAVELLY SANDY LOAM MODERATELY WELL DRAINED, WATER TABLE 12-27"

**FARMLAND SOILS ON SUBDIVIDED PROPERTY**

NINIGRET FINE SANDY LOAM, 0-3% SLOPES  
 CANTON & CHARLTON FINE SANDY LOAMS, 3-8% SLOPES  
 HINKLEY LOAMY SAND, 3-15% SLOPES  
 WALPOLE LOAMY SAND, 0-3% SLOPES  
 AREA OF FARMLAND SOILS: 10± ACRES

**WETLAND SOILS ON SUBDIVIDED PROPERTY**

RIDGEBURY & LEICESTER  
 WALPOLE

\* SOILS INFORMATION AS TAKEN FROM USDA NRCS WEBSITE

- OPEN SPACE = 16% OF SUBDIVIDED AREA
- WETLAND AREAS OF SUBDIVIDED PARCEL = 5%
- WETLAND AREAS OF OPEN SPACE AREA = 25%
- SLOPES OVER 25% OF SUBDIVIDED PARCEL = 30%
- SLOPES OVER 25% OF OPEN SPACE AREA = 15%

APPROVED BY THE BROOKLYN INLAND WETLANDS & WATERCOURSES COMMISSION

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED BY THE BROOKLYN PLANNING & ZONING COMMISSION

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_

PER SECTION 8-26 OF THE CONNECTICUT GENERAL STATUTES, AMENDED, APPROVAL AUTOMATICALLY EXPIRES IF ALL PHYSICAL IMPROVEMENTS REQUIRED BY THIS PLAN ARE NOT COMPLETED BY THAT DATE

- LEGEND**
- IRON PIN FOUND
  - IRON ROD TO BE SET
  - STONE WALL
  - EXISTING CONTOUR
  - - - - PROPOSED CONTOUR
  - PROPOSED SPOT GRADE
  - ⊠ TEST PIT
  - EROSION CONTROL BARRIER
  - - - - EDGE OF WETLAND
  - - - - PROPOSED UNDERGROUND UTILITIES
  - ▨ SLOPES GREATER THAN 15%
  - XXXXXX FARMLAND SOILS
  - ~~~~~ PROPOSED CLEARING LIMIT

THIS MAP PRODUCED BY ORIGINAL INK DRAWING ON POLY FILM OR LINEN BY PC SURVEY ASSOCIATES, LLC



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

*Paul A. Terwilliger*  
 PAUL A. TERWILLIGER, L.S. NO. 70155  
 1/4/2021  
 DATE

NO CERTIFICATION IS EXPRESSED OR IMPLIED UNLESS THIS MAP BEARS THE EMBOSSED SEAL OF THE LAND SURVEYOR WHOSE SIGNATURE APPEARS HEREON.

**Killingly Engineering Associates**  
 114 Westcott Road  
 P.O. Box 421  
 Dayville, Connecticut 06241  
 860 779 7299

**KINGSWOOD ESTATES**

COMPILATION MAP  
 LOT DEVELOPMENT AREAS  
 SUBDIVISION OF LAND  
 PREPARED FOR  
**DAVID P. BELL**  
**NANCY M. BELL**

CHURCH STREET  
 BROOKLYN, CONNECTICUT

DATE: APRIL 2020  
 SCALE: 1" = 80'

63 SNAKE MEADOW RD  
 KILLINGLY, CT 06239  
 860 774 6230

email: pbsurvey@snet.net

REVISIONS:

7/6/2020 - OPEN SPACE
7/29/2020
8/20/2020 - ENG. COMMENTS
1/4/2021 - OPEN SPACE

0 40' 80' 160' 240'

JOB NO: 18016 F.B. NO: N/A DRAWN BY: P.A.T. MAP NO:

Brooklyn Conservation Commission

P. O. Box 356

Brooklyn, CT 06234

February 2, 2021

Attn: Planning and Zoning Commission, Town Planner

Re: SD20-012, David & Nancy Bell, Church Street, Map #35, Lot #4, Zone RA, Total Acres 25.56, Number of Lots 3

The Brooklyn Conservation Commission reviewed the request to modify the proposed open space set aside for the above application on February 1, 2021, via Webex.

The Brooklyn Conservation Commission recommends that the Permanent Conservation Easement Covenant be kept as previously proposed and recommended on August 3, 2020. In the alternative, the Commission recommends a Fee-in-Lieu of open space.

Respectfully submitted,

/s/Jeannine Noel

RECEIVED

PLANNING AND ZONING COMMISSION  
TOWN OF BROOKLYN  
CONNECTICUT

DEC 24 2020

Received Date \_\_\_\_\_

Application # SD 21-001  
Check # 3388

APPLICATION FOR SUBDIVISION/RESUBDIVISION

Name of Applicant SQUARE 1 BUILDING ASSOCIATES Phone \_\_\_\_\_  
Mailing Address 101 MACLIN DRIVE, PRESTON, CT  
Applicants Interest in the Property OWNER

Property Owner SQUARE 1 BUILDING ASSOCIATES Phone \_\_\_\_\_  
Mailing Address 101 MACLIN DRIVE, PRESTON CT

Name of Engineer/Surveyor CLA ENGINEERS / ARCHER SURVEYING LLC  
Address 18 PROVIDENCE ST, BRIDGEVILLE CT  
Contact Person PAUL ARCHER Phone 779-2240 Fax 779-2240

Name of Attorney \_\_\_\_\_  
Address \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_

Subdivision  Re subdivision \_\_\_\_\_  
Property location TRIP HOLLOW ROAD  
Map # 2 Lot # 12-1 Zone RA Total Acres 23.2 Acres to be Divided 23.2  
Number of Proposed Lots 4 Length of New Road Proposed 0  
Sewage Disposal: Private  Public \_\_\_\_\_

Note: Hydrological report required by Section 11.6.2

Length of new Sewer proposed: Sanitary \_\_\_\_\_ Storm \_\_\_\_\_  
Water: Private  Public \_\_\_\_\_

Is parcel located within 500 feet of an adjoining Town? YES

The following shall accompany the application when required:

- 4.2.2 Fee \$ 1250 - State (\$60.00) 60 4.2.3 Sanitary Report \_\_\_\_\_ 4.2.5, 3 copies of plans \_\_\_\_\_
- 4.2.4 Application/ Report of Decision from the Inland Wetlands Com. & the Conservation Com.
- 4.2.6 Erosion & Sediment Control Plans
- 4.2.7 Certificate of Public Convenience and Necessity
- 4.2.8 Applications filed with other Agencies

The owner and applicant hereby grant the Brooklyn Planning and Zoning Commission, the Board of Selectman, Authorized Agents of the Planning and Zoning Commission or Board of Selectman, permission to enter the property to which the application is requested for the purpose of inspection and enforcement of the Zoning regulations and the Subdivision regulations of the Town of Brooklyn

Applicant: [Signature], member Date 12-1-20

Owner: [Signature], member Date 12-1-20

\*Note: All consulting fees shall be paid by the applicant



## NORTHEAST DISTRICT DEPARTMENT OF HEALTH

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

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

October 27, 2020

Square 1 Building Associates  
101 Mackin Drive  
Griswold, CT 06351

**SUBJECT: FILE #21000003 -- TRIPP HOLLOW ROAD, MAP #7, LOT #12-1, BROOKLYN, CT**

Dear Square 1 Building Associates:

Upon review of the subdivision plan CLA ENGINEERS, ARCHER SURVEYING, SQUARE 1 BUILDING ASSOC., PROJ#CLA-6503, LAST REVISED 09/28/2020 submitted to this office on 10/22/2020 for the above referenced subdivision, The Northeast District Department of Health concurs with the feasibility of this parcel of land for future development. Additionally, approval to construct individual subsurface sewage disposal systems may be granted based on compliance with appropriate regulations and the Technical Standards as they apply to individual building lots with the following notations:

1. Lots #:12-1, 12-8, 12-9, and 12-10 require that a Professional Engineer design and submit individual plot plan(s) for review and approval prior to construction.
2. Proposed lots are based on 3 bedroom homes at the locations tested. If the number of bedrooms are increased, septic system sizes will require an increase per the Technical Standards.
3. If the proposed septic area is moved, additional testing may be required

Be advised you must receive approval from the appropriate commissions in the Town of Brooklyn prior to construction of these lots.

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.

Should you have any questions, please feel free to contact the sanitarian that reviewed your plan.

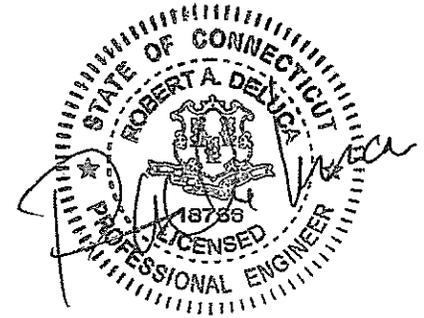
Sincerely,

Sherry McGann, RS  
Registered Sanitarian ~ NDDH

cc: Town of Brooklyn; CLA Engineers; Archer Surveying

## DRAINAGE NARRATIVE

4-Lot Subdivision  
Tripp Hollow Road, Brooklyn, CT  
Prepared for  
Square 1 Building Associates, LLC



The existing site consists of approximately 23.3 acres of undeveloped woodlands located to the west of Tripp Hollow Road in Brooklyn Connecticut. There are inland wetlands running in a north/south direction through the center of the site.

The proposed subdivision consists of 4 residential building lots served by approximately 1,000 L.F. of new shared driveway access from Tripp Hollow Road. Presently, storm water in the proposed development area drains west and north, exiting the site via the wetlands and eventually discharging to Tatnic Brook.

The driveway for the western most building lot is required to cross the wetland. The crossing location has been determined to minimize impact to the wetland (see CLA Wetland Letter to Inland Wetlands Commission 09/03/20). The crossing length is approximately 100 feet.

The following determines the size of the drainage culvert required to pass the 25-year storm event with inlet control, without submerging the culvert.

### Methodology:

In accordance with the Town of Brooklyn's Public Improvement Specifications, the site's watershed was analyzed using the Rational method for the 25-year storm. The Rational method predicts the peak runoff according to the formula:  $Q=CiA$ , where C is a runoff coefficient, i is the rainfall intensity, and A is the sub-catchment area.

Rainfall intensities used in the calculations were taken from the Brooklyn (06-0918) weather station readings accessed via the NOAA Atlas 14 Point Precipitation Frequency website.

The proposed watershed contributing to the driveway crossing was determined to be 5.77 acres using local DEEP watershed basin boundaries and Connecticut Elevation (Lidar) Data (See Fig. 1).

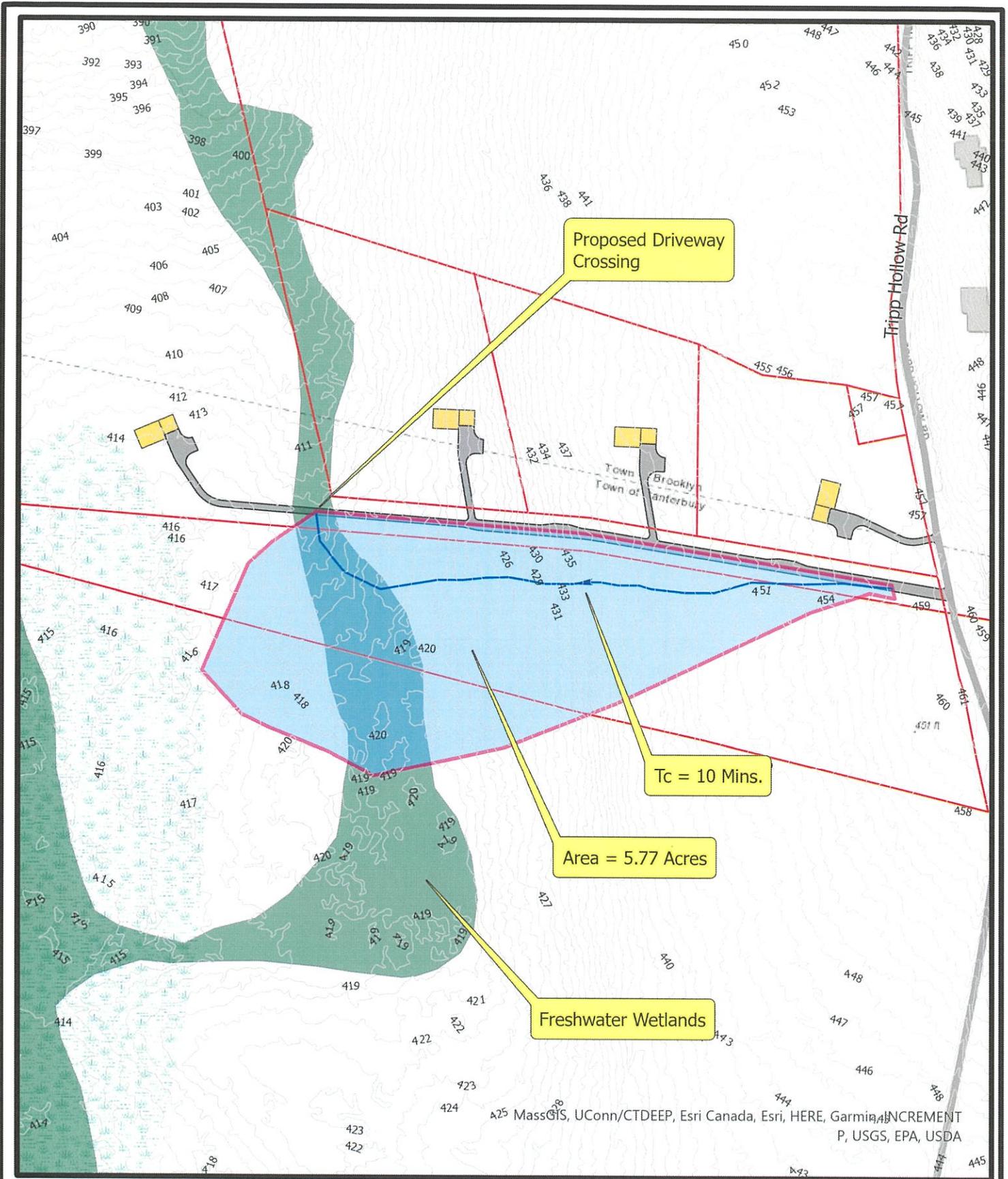
The site consists primarily undeveloped woodlands. A run-off coefficient (C) of 0.2 (Unimproved Surface) was utilized. The Time of Concentration was determined as approximately 10 minutes using the TR-55 method.

The peak discharge (Q) for the 25-year storm event was calculated as follows:

Peak Volume (Q) = CiA = 0.2 x 6.11 in/hr x 5.77 acres = 7.05 c.f.s. (See Appendix 1)

Analysis of the culvert crossing was performed using Hydraflow Express culvert modeler (used in HDS-5 Hydraulic Design of Highway Culverts).

The resultant analysis determined that three 15" diameter pipes, installed at a grade consistent with the existing wetland, are able to convey approximately 12 c.f.s without submerging the pipes (See Appendix 2).



**CLA Engineers, Inc.**  
 CIVIL • STRUCTURAL • SURVEYING

317 Main Street Norwich, Connecticut  
 (860) 886-1966 Fax (860) 886-9165  
 e-mail: cla@claengineers.com

**PROPOSED WATERSHED**

SQUARE 1 BUILDING ASSOCIATES, LLC  
 4 LOT SUBDIVISION  
 TRIPP HOLLOW ROAD, BROOKLYN, CT

DATE: 9/7/20

SCALE: 1:2,400

FIGURE

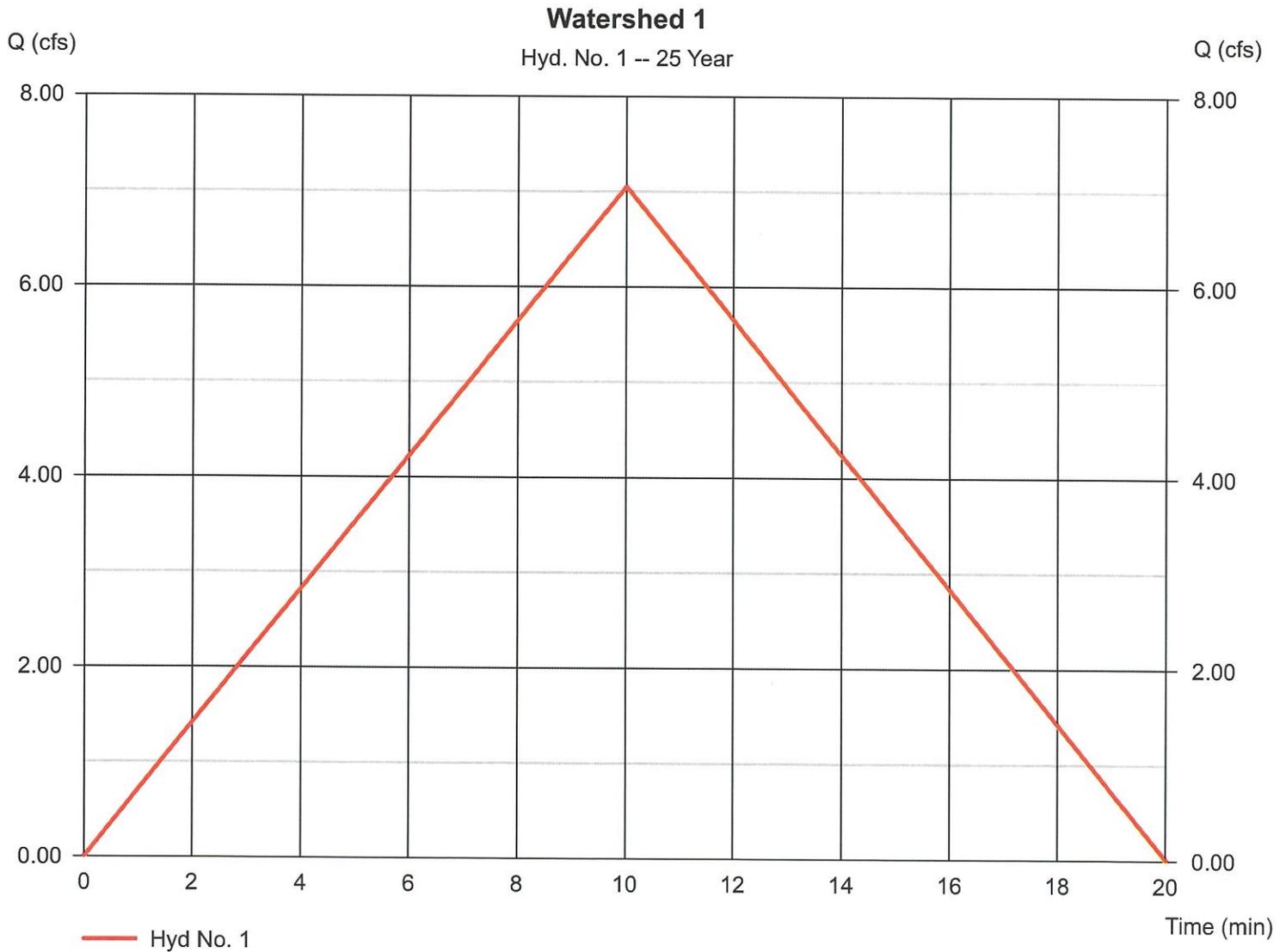
**1**

## Hyd. No. 1

### Watershed 1

Hydrograph type = Rational  
Storm frequency = 25 yrs  
Time interval = 1 min  
Drainage area = 5.770 ac  
Intensity = 6.111 in/hr  
IDF Curve = 6503 Pollock.IDF

Peak discharge = 7.052 cfs  
Time to peak = 10 min  
Hyd. volume = 0.097 acft  
Runoff coeff. = 0.2  
Tc by TR55 = 10.00 min  
Asc/Rec limb fact = 1/1



# Culvert Report

## Appendix 2

Hydraflow Express Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc.

Monday, Nov 23 2020

### Wetland Crossing

Invert Elev Dn (ft) = 417.10  
 Pipe Length (ft) = 24.00  
 Slope (%) = 1.25  
 Invert Elev Up (ft) = 417.40  
 Rise (in) = 15.0  
 Shape = Cir  
 Span (in) = 15.0  
 No. Barrels = 3  
 n-Value = 0.012  
 Inlet Edge = Projecting  
 Coeff. K,M,c,Y,k = 0.0045, 2, 0.0317, 0.69, 0.5

#### Embankment

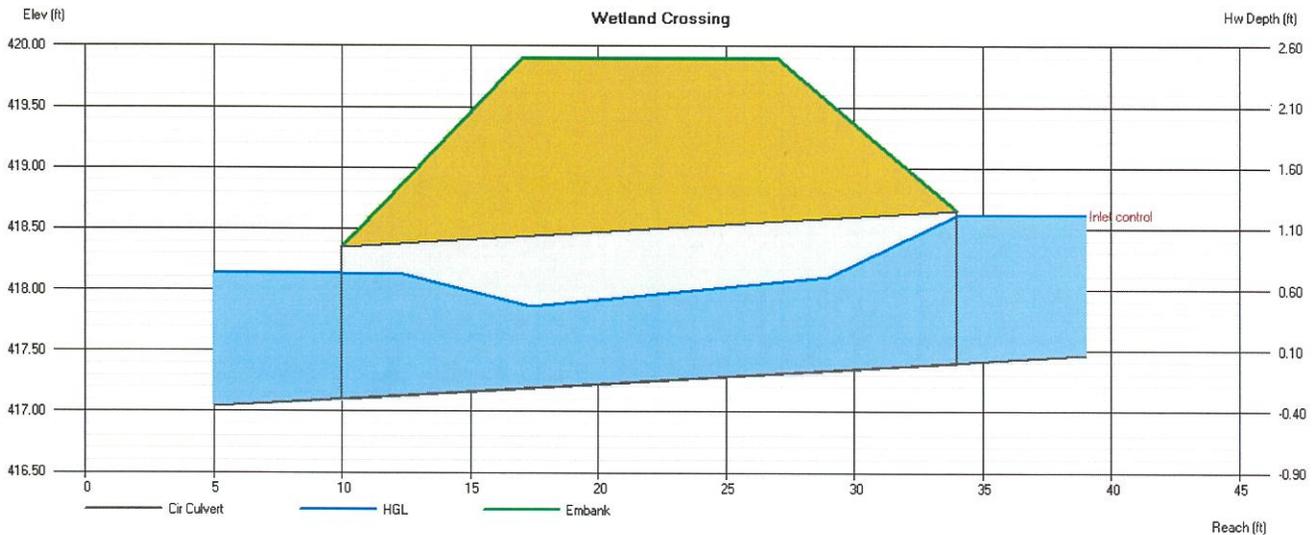
Top Elevation (ft) = 419.90  
 Top Width (ft) = 10.00  
 Crest Width (ft) = 50.00

#### Calculations

Qmin (cfs) = 1.00  
 Qmax (cfs) = 20.00  
 Tailwater Elev (ft) = (dc+D)/2

#### Highlighted

Qtotal (cfs) = 12.00  
 Qpipe (cfs) = 12.00  
 Qovertop (cfs) = 0.00  
 Veloc Dn (ft/s) = 3.69  
 Veloc Up (ft/s) = 4.74  
 HGL Dn (ft) = 418.13  
 HGL Up (ft) = 418.21  
 Hw Elev (ft) = 418.61  
 Hw/D (ft) = 0.97  
 Flow Regime = Inlet Control



# CLA Engineers, Inc.

Civil • Structural • Survey

317 MAIN STREET

NORWICH, CT 06360

(860) 886-1966

(860) 886-9165 FAX

September 3, 2020

Inland Wetlands Commission  
Town of Brooklyn  
69 South Main Street  
Suite 22  
Brooklyn, CT 06234

RE: CLA 6503  
Square 1 Subdivision  
Tripp Hollow Rd

To the Commission:

CLA Engineers was retained by Square 1 Building Associates LLC to conduct a wetlands investigation and functional assessment on the parcel of land, located on Tripp Hollow Road, that is proposed to be developed for a residential subdivision. The 23+/- (Source NECOG GIS) acre site is located within the Town of Brooklyn on the Canterbury border. It is currently wooded undeveloped land. The approximate site location is shown on the cover sheet of the site plans. The purposes of the investigation were to: establish the wetland delineation, provide background data in the form of determining wetland functions, and assess the potential for wetland impacts due to the proposed development.

Wetlands were delineated by Robert Russo of CLA Engineers according to the State of Connecticut statutory definition as described in Section 22a of the State Statutes. CLA conducted field work in June and July of 2020.

After wetland delineation was complete, the wetland resources of the site were surveyed by conducting a deliberate walk through of the site, traversing each wetland in order to collect data characteristic of that wetland. During the walk through, vegetation identifiable was noted, and described.

## Site Setting

Much of the site had been used for agriculture up until the 20<sup>th</sup> century as demonstrated by abundant stonewalls. The Square 1 subdivision site currently has two vegetative cover types that were established after farming ceased. Both cover types, wooded upland and wooded swamp, are dominated by mixed hardwoods.

The areas of upland have mixed hardwoods such as red maple, red oak, white oak, black cherry and black birch. The wetlands are dominated by red maple trees with other species such as yellow birch and pin oak in lesser numbers.

The land uses surrounding the site include residential, agricultural and woodland. The residential development is primarily located to the east along Tripp Hollow Rd. Undeveloped farmland and woodland surrounds the site to the north, west and south.

Throughout the site slopes vary from moderate to nearly flat. The surface water drains from the west and east to the centrally located wetland and flows northward off site to Tatnic Brook. The slopes on the east and west side of the wetland are gentle at the edge of the wetland and are not prone to erosion.

### **Surficial Geology and Soils**

Southern New England was overlain by glacial ice as recently as 12,000-15,000 years ago. The materials that the glaciers deposited over top the local bedrock determine the surficial geology of the region and of the Square 1 subdivision site. Connecticut's glacial deposits are generally divided into three categories: glacial till (un-stratified sand, silt and rock), glaciofluvial (water sorted, stratified sand and gravel), and glaciolacustrine (stratified sand, silt and clay that settled out in lakebeds). Only glacial till is present on the site. However, one of the wetland soil types is formed in post glacial deposits of organic matter. The soils formed in till deposits typically have sandy loam to silt loam textures and in this case they are the coarser, sandy loams. The slopes are moderate to flat throughout the site and this leads to differences in soil mapping classification as listed by the NRCS.

Table 1 is a summary table of the soils found on the site.

**Table 1 - Soil Types and Properties at the Square 1 Subdivision Site**

<b><u>Soil Series</u></b>	<b><u>Parent Material</u></b>	<b><u>Drainage Class</u></b>	<b><u>Texture/Characteristics</u></b>
*3 Ridgebury, Leicester and Whitman	Glacial Till	Somewhat poorly to very poorly drained	Stony sandy loam
*17 Timakwa and Natchuag	Decayed organic matter	Very poorly drained	Well to moderately decayed
47 Woodbridge	Glacial Till	Moderately Well Drained	Sandy loam

\* Wetland soil types

## **Wetland Descriptions and Functions**

The Square 1 Subdivision site has one wetland system that occupies a broad swale approximately 1000 west of Tripp Hollow Rd. The wetland itself varies from approximately 100 to 200 feet wide. It is nearly level but has hummocky micro-topography. Under the USFWS system is a palustrine deciduous swamp (PF01) that is seasonally flooded/saturated. This designation reflects its vegetation which is dominated by mature trees, and its hydrology which has shallow standing water in the winter and after storm events. The wetland lacks standing water in the summer and was not found to contain a perennial stream or vernal pool.

The typical vegetation of the wetlands includes: trees such as red maple trees and saplings, yellow birch trees and saplings; shrubs such as spice bush, highbush blueberry, winterberry holly, sweet pepperbush, clammy azalea, alder and plants such as skunk cabbage, cinnamon fern, sphagnum, royal fern, and sensitive fern.

The principle functions of this wetland system are typical to local red maple swamps and the wetland is generally undisturbed with an undisturbed wooded upland buffer. The CTDEEP NDDB (June 2020) shows no known habitat of threatened, endangered or special concern species.

The functions were found to include:

- Wildlife habitat
- Floodwater retention/detention
- Groundwater recharge/discharge
- Biomass production export
- Recreation
- Aesthetics

These values associated with the wetland and are supported by several important features of that wetland:

- Areas of undeveloped buffer
- Limited development within the watershed
- Evidence of use by a diversity of wildlife species.

## **Potential for Impacts**

As shown on the project plans there are proposed activities in the inland wetlands. The total area of wetland excavation and fill proposed is 2,800 square feet. These activities are limited to impacts necessary to provide a driveway for the lot located furthest from the road. This lot has significant developable area that cannot be accessed without wetland

impacts. The driveway crossing location is at a narrow point in the wetland to assist in minimizing wetland impacts. There is one other narrow point to the north, but this location would result in no further reduction of wetland impact. The width of the driveway has been kept to the minimum required and the use of multiple, smaller diameter culverts assists in keeping the elevation of the driveway low, minimizing the side slopes needed for the crossing. CLA believes that the proposed driveway crossing is the most feasible and prudent alternative.

As shown on the plans, work in the upland review zone will include:

- Clearing and grading
- Construction of driveways, a houses and a septic systems
- Installation of erosion and sedimentation controls
- Construction of utilities

These activities in the upland review zone present limited potential for wetland impacts. The site has only moderate slopes and short length of slope. CLA believes that the Best Management Practices (BMPs) measures shown on the plans for erosion and sediment control and stormwater management will be adequate in preventing wetland impacts if properly installed and maintained.

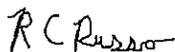
CLA notes that in order to minimize the potential for impacts to wetlands, the E&S has been designed in compliance with the CTDEEP 2002 E&S Manual.

### **Summary**

The proposed development activities will directly impact wetlands. The work in the upland review zone can be managed with BMPS so as to not impact wetlands during construction. In summary, if the proposed erosion and sedimentation control measures are adhered to, CLA believes that the wetland impacts will be limited to what is necessary to provide a driveway for a building lot.

Please contact me if you have any questions.

Very truly yours,



Robert C. Russo  
Soil Scientist

# **Appendix A**

## **Soils Data**

## NRCS Soils descriptions

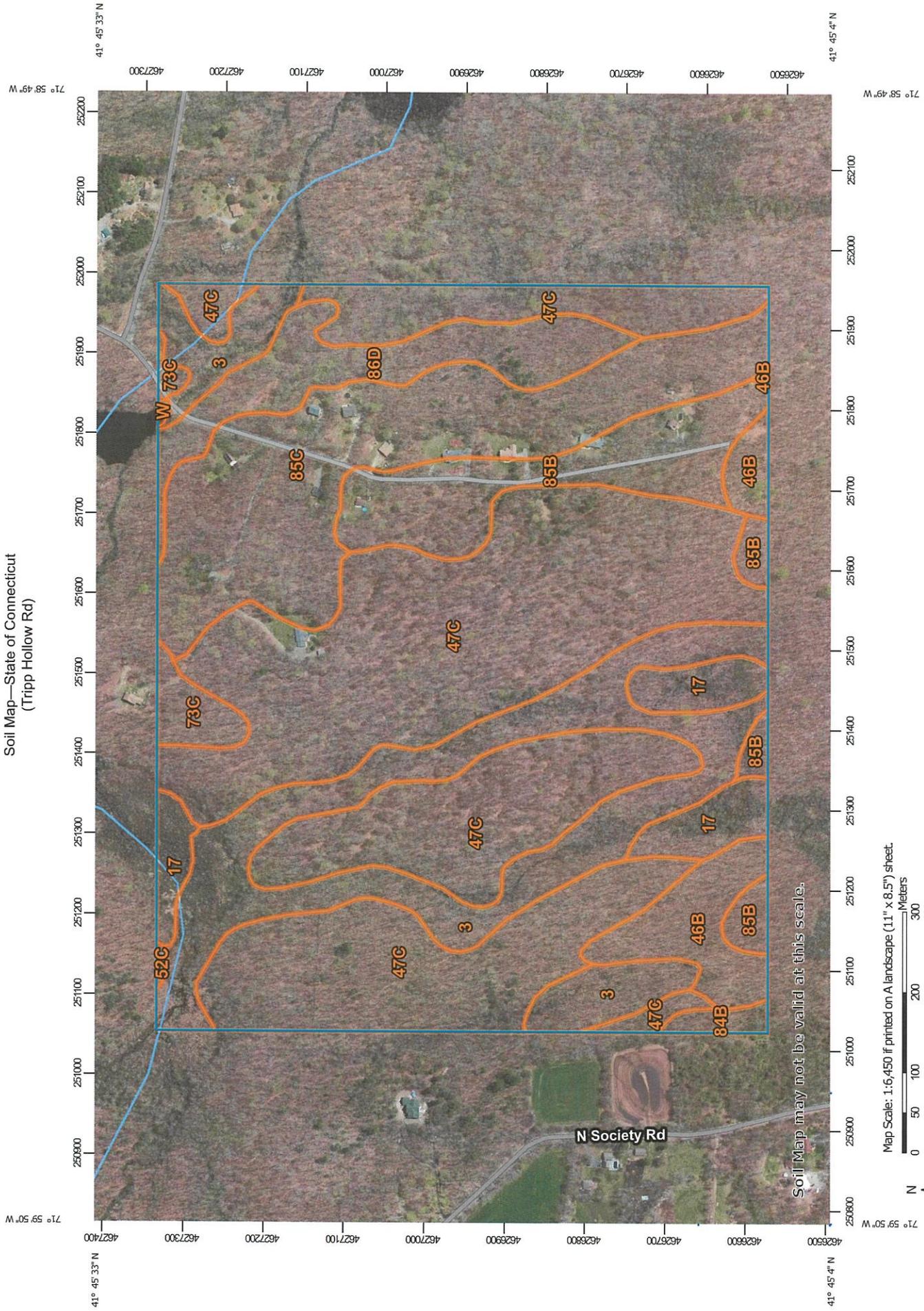
(3) The Ridgebury series consists of very deep, somewhat poorly and poorly drained soils formed in lodgment till derived mainly from granite, gneiss and/or schist. They are commonly shallow to a densic contact. They are nearly level to gently sloping soils in depressions in uplands. They also occur in drainageways in uplands, in toeslope positions of hills, drumlins, and ground moraines, and in till plains. Slope ranges from 0 to 15 percent. Saturated hydraulic conductivity is moderately high or high in the solum and very low to moderately low in the substratum. Mean annual temperature is about 9 degrees C. and the mean annual precipitation is about 1143 mm.

(17) The Timakwa series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials over sandy deposits in depressions on lake plains, outwash plains, till plains, moraines, and flood plains. Saturated hydraulic conductivity is moderately high or high in the organic layers and high or very high in the sandy material. Slope ranges from 0 to 2 percent. Mean annual temperature is about 13 degrees C and the mean annual precipitation is about 1258 mm.

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

(47) The Woodbridge series consists of moderately well drained loamy soils formed in lodgment till. They are very deep to bedrock and moderately deep to a densic contact. They are nearly level to moderately steep soils on hills, drumlins, till plains, and ground moraines. Slope ranges from 0 to 25 percent. Saturated hydraulic conductivity ranges from moderately high to high in the surface layer and subsoil and low or moderately low in the dense substratum. Mean annual temperature is about 9 degrees C., and mean annual precipitation is about 1168 mm.

Soil Map—State of Connecticut  
(Tripp Hollow Rd)



## MAP LEGEND

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

## MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: State of Connecticut  
Survey Area Data: Version 20, Jun 9, 2020

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

Date(s) aerial images were photographed: Mar 30, 2011—May 1, 2011

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

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	28.9	16.4%
17	Timakwa and Natchaug soils, 0 to 2 percent slopes	6.7	3.8%
46B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	7.1	4.0%
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	79.2	45.0%
52C	Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony	0.1	0.1%
73C	Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	2.5	1.4%
84B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes	1.0	0.5%
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony	13.8	7.8%
85C	Paxton and Montauk fine sandy loams, 8 to 15 percent slopes, very stony	26.9	15.3%
86D	Paxton and Montauk fine sandy loams, 15 to 35 percent slopes, extremely stony	9.9	5.6%
W	Water	0.1	0.0%
<b>Totals for Area of Interest</b>		<b>176.1</b>	<b>100.0%</b>

Brooklyn Inland Wetlands  
Commission

P.O. Box 356

Brooklyn, Connecticut 06234



9489 0090 0027 6215 8998 55

December 9, 2020

CERTIFIED #

Square 1 Building Associates  
101 Mackin Drive  
Griswold, CT 06351

RE: Notice of Decision – 090820A Square 1 Building Associates; Tripp Hollow Road, Map 7, Lot 12-1, RA Zone; 4-Lot Subdivision; Residential building construction consisting of houses, driveways, wells, septic systems and associated grading.

Dear Square 1 Building Associates:

At the recent December 1, 2020 special meeting of the Inland Wetlands and Watercourses Commission your application 090820A Square 1 Building Associates; Tripp Hollow Road, Map 7, Lot 12-1, RA Zone; 4-Lot Subdivision; Residential building construction consisting of houses, driveways, wells, septic systems and associated grading was approved because the plans as presented meet the requirements of the IWWC regulations, with the following conditions:

Modifications to the plans to meet the requirements of the town’s consulting engineer as contained in his memo dated 11/30/2020. A revised plan shall be submitted with the following revisions within 30 days of action by the commission:

1. The plan should be revised to show flared end sections on the ends of each 15” HDPE pipe to improve flow into and out of the pipes as well as protecting the ends of the pipe from scour.
2. The plan should be revised to show a flared end detail on the construction details plan.
3. The plan should be revised to show a construction detail showing the separation between the 15” pipes on the construction details plan.
4. The “Typical Driveway Cross Section” shown is for a paved driveway. The plan should be revised to show a construction detail for a gravel driveway.

5. The plan should be revised to show that gravel aggregate used for the gravel driveway has a material gradation designation as specified in Connecticut DOT Form 818.

6. The "Drainage Pipe Bedding Detail" specifies ¾" crushed stone for bedding and fill around the twin pipes up to the underside of the gravel surface of the driveway. The plan should be revised to change this to a well-graded gravel material to prevent water from flowing under and around the outside of the pipe, due to large spaces between stones.

7. The plan should be revised to show the gravel aggregate used under the pipes has a material designation as specified in Connecticut DOT Form 818.

8. The plan should be revised to show the pipe inside diameter size as 15."

#### 9. Standard Conditions

A legal notice of this approval was posted on the Town of Brooklyn's Website on December 2, 2020. Please note that this action of the Brooklyn Inland Wetlands and Watercourses Commission may be appealed for fifteen-day period following the publication of the legal notice.

If you have any questions, please call Margaret Washburn at 860-779-3411 Extension 31.

Signed,



Margaret Washburn  
Wetlands Agent

MW/acl

CC: File, CLA Engineers, Archer Surveying

Enc: Standard Conditions

#### Appendix:

- Application 090820A
- Site Plan Subdivision application proposed 4-Lot Subdivision  
Tripp Hollow Road, Brooklyn, CT, Property Owner Square 1 Building Assoc.,  
Dated 9/1/20; Received date 11/23/20, prepared by Archer Surveying and CLA  
Engineers, Inc. Sheets 1-8

BROOKLYN INLAND WETLANDS AND WATERCOURSES COMMISSION  
STANDARD CONDITIONS FOR IWWC PERMITS 12/13/16

**APPLICANT: READ CAREFULLY**

**IWWC Permit Document.** A copy of the IWWC approval motion and the conditions stated herein shall constitute the IWWC permit for the approved activity when the permit document is signed and dated by the IWWC Agent.

**Notice of Start and Finish.** Permittee shall notify the IWWC agent at least 48 hours before the approved activity commences and within 72 hours after completion of the activity.

**Permit Duration.** This permit is valid for a period in accordance with Section 11.6 of the Brooklyn Inland Wetlands and Watercourses Regulations and the Connecticut General Statutes. Any request to renew or extend the expiration date of a permit can be granted only as authorized by the IWWC Regulations. Expired permits may not be renewed.

**Erosion and Sedimentation Controls.** Permittee is responsible for implementing the approved erosion and sediment control plan. This responsibility includes the installation and maintenance of control measures, informing all parties engaged on the construction site of the requirements and objectives of the plan. The permittee shall inspect the erosion controls weekly and after rains and repair deficiencies within twenty-four hours. The IWWC and its staff may require additional erosion if needed to prevent erosion and sedimentation. Restabilization of the site shall take place as soon as possible.

**Stockpile locations.** During construction, piles of fill, erodible material and debris shall not be created within regulated areas. The locations of debris and other stockpiled materials shall be shown on the submitted plans. Any material excavated at the site shall be disposed of at upland or off-site locations reviewed and approved by staff.

**Permit Transfer.** The permittee shall not transfer this permit without the written permission of the IWWC.

**Work in Watercourse to Occur During Low Flow.** Work within a watercourse is limited to periods of low flow. Low flow periods normally occur between August and October. Upon request of permittee, wetlands staff can determine if the activity can occur at other times following an on-site field investigation.

**Scope of Permit.** This permit is for the approved activity ONLY. Additional activity may require an additional permit. Note that if an approval or permit is granted by another agency and

(1) the approved activity will affect wetlands and/or watercourses; and/or

(2) the activity occurs within 125 feet of flagged boundaries and 175 feet from watercourses;

and such activities have not been addressed by this permit, then the applicant shall resubmit the application for further consideration by the Inland Wetlands and Watercourses Commission before any work begins.

**Ongoing Compliance with Permit.** The permittee shall comply at all times with the permit.

**Other Approvals May be Required.** Other permits may be required from Town, state or federal agencies. An Army Corps of Engineers permit may be required: U.S. Army Corps of Engineers, 424 Trapelo Rd., Waltham, MA 02254 1-800-362-4367.

Brooklyn Conservation Commission

P. O. Box 356

Brooklyn, CT 06234

February 2, 2021

Attn: Planning and Zoning Commission, Town Planner

Re: SD21-001, Square 1 Building Associates, Tripp Hollow Road, Map #7, Lot #12-1, Zone RA, Total Acres 23+, Number of Lots 4

The Brooklyn Conservation Commission reviewed the above application on February 1, 2021, via Webex.

The Brooklyn Conservation Commission recommends a Permanent Conservation Easement Covenant as proposed by the attached Compilation Plan which shows 5.58 acres of open space adjacent to existing open space of 9.19 acres. The Permanent Conservation Easement Covenant would have the following restrictions:

- No structure of any kind may be built on said parcel;
- No motorized vehicles shall be operated, stored or parked on said parcel;
- No application of herbicides or pesticides shall be permitted on said parcel;
- No dumping of any debris, waste, vegetation, trash shall occur on said parcel;
- No fires shall be permitted on the parcel;
- No livestock shall be permitted and no clearing of land for agricultural purposes shall be permitted on said parcel;
- No mining or natural resources extraction shall occur on said parcel;
- No harvesting of timber for firewood except as part of a long-term management plan prepared by a professional forester and approved in advance of any activity by the Director of Community Development and the Wetlands Agent. No liquidation cuts or clear cutting are allowed at any time on said parcel; and
- The Town of Brooklyn shall have the right to inspect the property at any reasonable time to ensure compliance.

Respectfully submitted,

/s/Jeannine Noel

# NORTHEASTERN CONNECTICUT COUNCIL OF GOVERNMENTS

## ENGINEERING PLAN REVIEW PERTAINING TO 4-LOT SUBDIVISION (ASSESSOR'S MAP 7, LOT 12-1) TRIPP HOLLOW ROAD BROOKLYN, CT (September 5, 2020)

The comments contained herein pertain to my review of the revisions made to plans, consisting of eight (8) sheets, entitled "Subdivision Application, 4 Lot Subdivision, Tripp Hollow Road, Brooklyn, Connecticut, Property Owner/Applicant, Square One Building Associates," prepared by Archer Surveying, LLC and CLA Engineers, Inc., dated September 1, 2020. Most recent Town of Brooklyn Zoning, Subdivision and Wetlands Regulations and Public Improvement Specifications were researched for this review as well as the engineer's application of recognized civil engineering practice.

**(Comments in black are the Regional Engineer's original July 22, 2020 review comments.)**

**(The Regional Engineer's comments in red, made on November 30, 2020, reflect whether or not the consultant's most recently revised plans with Revision Date of November 23, 2020, included modifications based upon the Regional Engineers, October 27, 2020 plan review comments)**

**(The Regional Engineer's comments in green, made on January 8, 2021, reflect whether or not the consultant's most recently revised plans with Revision Date of December 20, 2020, included modifications based upon the Regional Engineer's November 30, 2020 comments [in red])**

### SHEET 2 of 8 – EXISTING CONDITION PLAN

1. The plans I reviewed did not bear the signature of the certified soil scientist.

**This comment has been addressed and no further response is necessary.**

2. Note 2 under "Notes" is incorrect and must be corrected to identify the correct town, assessor's map and lot number.

**This comment has been addressed and no further response is necessary.**

3. Note 3 under "Notes" needs correcting because those named have nothing to do with this project.

**This comment has been addressed and no further response is necessary.**

4. Due to the discrepancies in Notes 2 and 3 under "Notes," Note 1 needs to be verified to be sure everything stated in it is applicable to this project. If it is not, it needs to be corrected.

**This comment has been addressed and no further response is necessary.**

5. The sequential numbering of wetland flags appears to be incorrect on Lot 12-1 and the flag line that skirts the property line common to Lot No. 12 and 12-1 and then terminates on Lot No. 7. The flag line that begins with #1c and terminates at a stone wall with #18, appears to be numbered correctly, however, why isn't this line connected to the end of the first flag line mentioned in this paragraph? All flags need to be numbered.

The flag numbering sequence (#2-1-#2-53) on Lot 12-1 was NOT fully corrected and requires a response. The following flags are missing from the plan: 2-4, 2-6, 2-26, 2-34 & 2-41. Flag 2-45 needs its identification number shown.

**This comment has not been addressed.**

6. The wetland areas need labeling. Without any notation it is unclear where they exist on which side of the flag line.

This comment was NOT addressed and requires a response.

**This comment has not been addressed.**

7. USDA NRCS soil types, with their boundaries, need to be shown on the plan.

This comment was NOT addressed and requires a response.

**This comment has not been addressed.**

### **SHEET 3 of 8 – SUBDIVISION PLAN**

1. Note 6 under "NOTES" states that the parcel is not within 500' of a town line. This note needs to be revised to state that the parcel IS within 500' of a town line (Canterbury). Considering this, have the plans been submitted to the town of Canterbury for review and comment by their respective commissions?

This comment has been addressed and no further response is necessary.

2. Note 8 under "NOTES" states that wetlands shown on Sheet Nos. 2 and 5 of 8 were delineated and located by Archer Surveying, LLC (AS). I am unaware that AS has a certified soil scientist on staff that could do this. If this is not the case, the certified soil scientist who delineated the wetlands needs to be identified on the plan.

This comment has been addressed and no further response is necessary.

3. The front property line of proposed Lot 12-8 does not appear to be in conformity with Subdivision Regulation 10.6. The first paragraph of this regulation states "*Existing Streets: Proposed subdivisions abutting an existing Town street shall provide for proper widening of the right-of-way of such street to the width appropriate for the classification give such street in accordance with the Town Plan of Development.*" To conform to this regulation, the distance from the centerline of Tripp Hollow Road to the property line needs to be no more than 25' (see Public Improvement Specifications Figure No. 7, "Improvements to Existing Town Roads," on Page 29). The property line orientation in question needs verification by the Applicant's land surveyor and, if necessary, be brought into compliance with the regulation and the lot area recalculated to ensure compliance with minimum lot size.

The Applicant's engineer provided a written response. However, it is not in conformity with Subdivision Regulation 10.6. There is no provision in the Regulations, which I found, allowing the Planning and Zoning Commission to waive or not require this provision. Accordingly, the Applicant is required to meet the requirements of Subdivision Regulation 10.6.

**This comment has not been addressed.**

4. At the northeast corner of Lot 12-8 there is a delineation of a 5,700± sq. ft. parcel. Is this part of Lot 12-8 and included in the 90,983± sq. ft. lot area? If not, why has this delineation been made and its purpose needs to be noted.

**This comment has been addressed and no further response is necessary.**

#### **SHEET 4 of 8 – GRADING & CONCEPT DESIGN**

1. Additional silt fence is needed along the north side of the entire length of common driveway.

The Applicant's engineer substituted a haybale check dam at his own discretion in lieu of providing additional silt fence as requested. However, a silt fence is still required along the north side of the entire length of common driveway provides more positive protection against sediment transport than just a couple of haybale check dams.

**This comment has not been addressed.**

2. How is the entrance to the gravel driveway serving Lot No. 12-9 going to be protected from erosion caused by runoff from the common driveway, which is shown to have a 4% grade toward this driveway? From proposed grading and existing contour lines depicted on the plan it appears that the flow could become a shallow concentrated flow during heavy storm events and cause soil erosion.

**This comment has been addressed and no further response is necessary.**

#### **SHEET 5 of 8 – GRADING & CONCEPT DESIGN**

1. The area of the wetland eliminated by the proposed driveway construction and culvert installation with riprap needs to be noted on the plan.

**This comment has been addressed and no further response is necessary.**

2. The majority of wetland flag numbers are missing. Some sequential numbering of wetland flags is incorrect. All wetland flag numbers need to be verified and noted on the plans where they appear.

**This comment has been addressed and no further response is necessary.**

3. Additional silt fence needs to be extended along the north side of the common driveway, easterly, from STA 3+00 to STA 5+85±.

The Applicant's engineer substituted a haybale check dam at his own discretion in lieu of providing additional silt fence. However, a silt fence is still required along the north side of the entire length of common driveway provides more positive protection against sediment transport than just a couple of haybale check dams.

**This comment has not been addressed.**

4. How is the entrance to the gravel driveway serving Lot No. 12-10 going to be protected from erosion caused by runoff from the common driveway, which is shown to have a 8%± grade toward this driveway? From proposed grading and existing contour lines depicted on the plan it appears that the flow could become a shallow concentrated flow during heavy storm events and cause soil erosion.

This comment has been addressed and no further response is necessary.

5. The common driveway wetland crossing cross-section indicates that the twin 15" HDPE pipes will be laid on the existing ground without any bedding or other special preparation. How was it determined that the existing ground in the wetland can provide adequate support without for the pipes without them deforming when subjected to dead and live loads (H2O)? What is the consistency of the existing ground?

The Applicant's engineer did not provide any information as to the consistency and depth of unsuitable material in his response. This needs to be addressed to ensure adequate support is provided for the triple pipe installation by the contractor because HDPE pipe is flexible and if not supported properly will not perform as expected and cause maintenance issues. Gravel aggregate used under the pipes must have a material gradation designation as specified in Connecticut DOT Form 818.

This comment has been addressed and no further response is necessary.

6. The twin pipes need to have a gravel bottom to connect the wildlife corridor of wetlands remaining on each side of the proposed common driveway. A detail showing this will need to be added to the Construction Details plan.

This comment has been addressed and no further response is necessary.

7. Flared end sections are needed on the ends of each 15" HDPE pipe to improve flow into and out of the pipes as well as protecting the ends of the pipe from scour. A flared end detail is needed to be included on the Construction Details plan.

This comment was NOT addressed and requires a response. Flared ends protect the end of the pipe as well as providing support to the embankment formed around the end of the pipe. Flared end sections are necessary. If a flared end is not used then a poured concrete headwall must be installed to provide the same protection. A detail is needed in either case. How and why did IWWC commission members discuss and make a determination during a site visit meeting that a third pipe was necessary?

This comment has been addressed and no further response is necessary.

8. A construction detail showing the separation between the 15" pipes needs to be included on the Construction Details plan.

This comment was NOT addressed and requires a response. It is important to maintain proper spacing between pipes to prevent water from finding a pathway around the exterior of the pipe and for future ease of maintenance, if required. A construction detail is necessary.

This comment has not been addressed.

9. Underground electric, telephone and cable service is shown on the plan crossing the proposed twin 15" HDPE pipes. How this crossing will be made is not shown in the wetlands crossing driveway cross-section. If the services are installed over the pipes, there appears to only be about 16" cover over the crowns of the pipes for that installation. If service lines are to be enclosed in a conduit, telephone and

cable cannot be in the same conduit as electric. The driveway wetland crossing cross-section needs modification to show how underground utilities will cross the twin pipes.

This comment has been addressed and no further response is necessary.

#### SHEET 7 of 8 – CONSTRUCTION DETAILS

1. The “Typical Driveway Cross Section” shown is for a paved driveway. The detail needs to be changed to a gravel driveway. The gradation of the gravel needs to be specified, too.

This comment has been addressed somewhat. Gravel aggregate used must have a material gradation designation as specified in Connecticut DOT Form 818.

This comment has been addressed and no further comment is necessary.

2. The “Drainage Pipe Bedding Detail” specifies 3/4” crushed stone for bedding and fill around the twin pipes up to the underside of the gravel surface of the driveway. Change this to a well-graded gravel material to prevent water from flowing under and around the outside of the pipe, due to large spaces between stones. Also, change the pipe inside diameter to 15”.

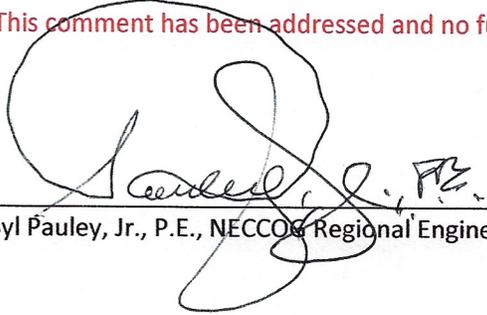
This comment has been addressed somewhat. Gravel aggregate used under the pipes must have a material designation as specified in Connecticut DOT Form 818.

This comment has been addressed and no further comment is necessary.

#### DRAINAGE CALCULATIONS

1. It is customary for culverts crossing a road to be designed to accommodate a 25-year storm. The twin 15” cross-culvert drainage calculations presented for review are for a 10-year storm. Furthermore, the design does not appear to take into account the decrease in the area of the pipe due to the volume of gravel that needs to be placed in the pipes to allow for the passage of wildlife. The pipe calculations need to be revised for gravel filled pipes with a minimum 25-year design storm.

This comment has been addressed and no further response is necessary.

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

# CLA Engineers, Inc.

Civil • Structural • Survey

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

January 28, 2021

Jana Butts Roberson, AICP  
Director of Community Development/Town Planner  
Town of Brooklyn  
69 South Main Street  
Suite 22  
Brooklyn, CT 06234

RE: Square 1 Building Associates Subdivision  
Tripp Hollow Rd, Brooklyn  
CLA 6503

Dear Jana:

In response to engineering plan review comments dated 1/8/21, attached are revised plans. Please note the following:

- a) Sheet 2 of 8 – Comment 5 – wetland flags have been corrected.
- b) Sheet 2 of 8 – Comment 6 – wetland designation has been added.
- c) Sheet 2 of 8 - Comment 7 – Soil types are shown on Sheet 8.
- d) Sheet 3 of 8 – Comment 3 - The land surveyor has stated that the Town did not require this for the recent adjacent subdivision to the North on the same unimproved Town Road. Town to clarify the need for this as it relates to consistency with the adjacent property.
- e) Sheet 4 of 8 – Comment 1- Silt fence has been added.
- f) Sheet 5 of 8 – Comment 3 - Silt fence has been added.
- g) Sheet 5 of 8 – Comment 8 – Pipe separation information is currently shown in the Driveway Profile Detail on this sheet.

Please contact me if you have any questions.

Sincerely,



Robert A. DeLuca, P.E.

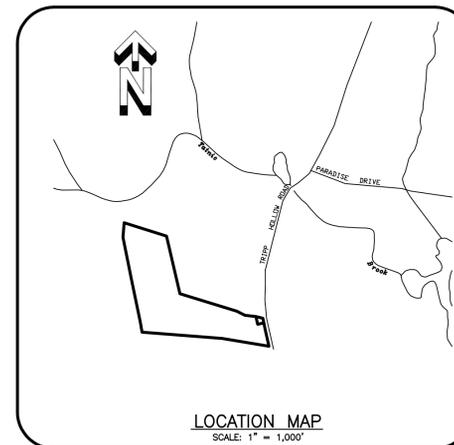
SUBDIVISION APPLICATION

# PROPOSED 4 LOT SUBDIVISION

TRIPP HOLLOW ROAD  
BROOKLYN, CONNECTICUT

PROPERTY OWNER/APPLICANT:  
**SQUARE 1 BUILDING ASSOCIATES**

September 1, 2020



PREPARED BY:



**ARCHER Surveying LLC**  
18 Providence Road, Brooklyn, CT  
(860) 779-2240



**CLA Engineers, Inc.**  
CIVIL • STRUCTURAL • SURVEYING  
317 Main Street Norwich, Connecticut  
(860) 886-1966 Fax (860) 886-9165  
e-mail: cla@claengineers.com

INDEX OF DRAWINGS

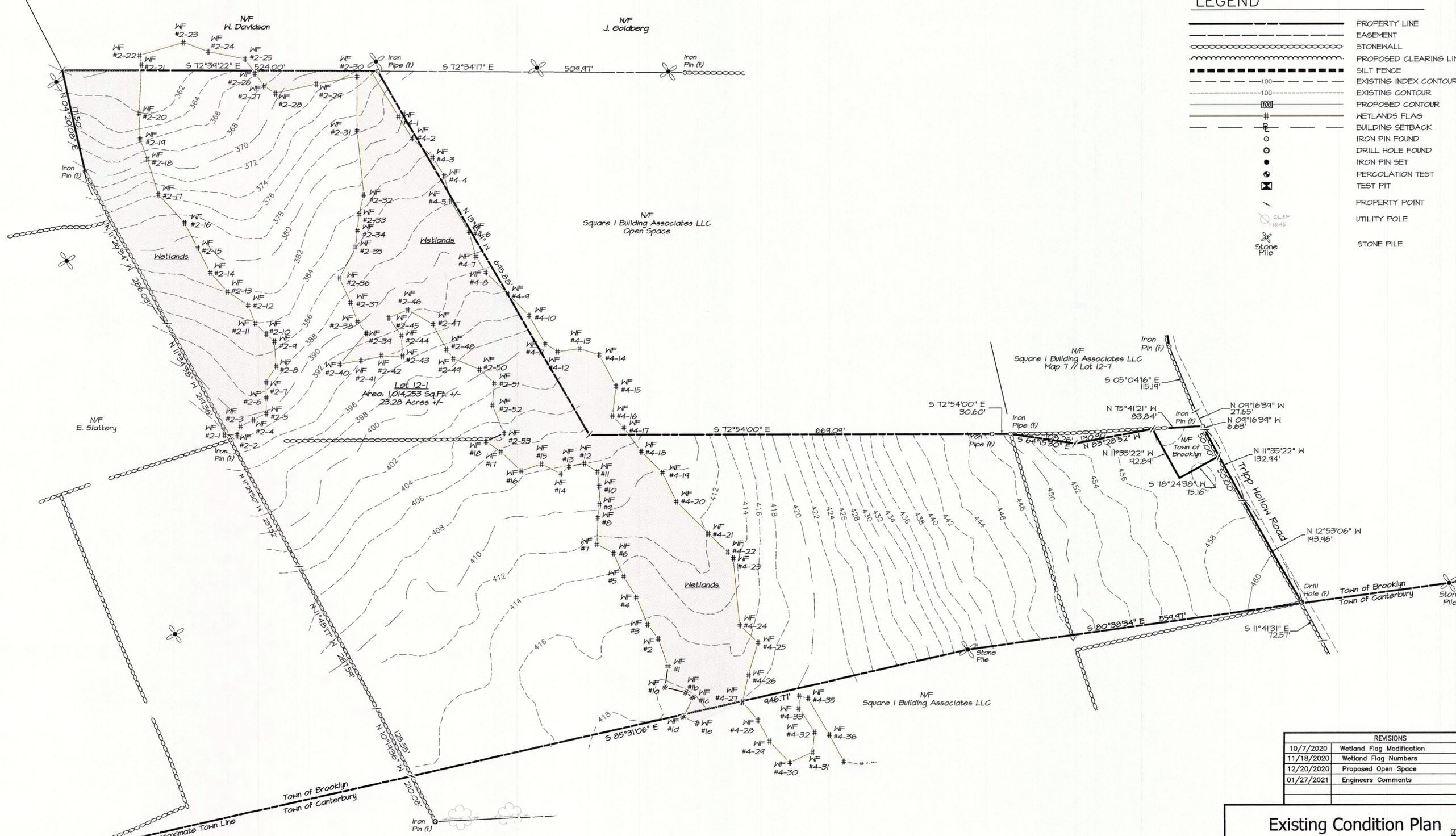
COVER SHEET	SHEET 1 OF 8
EXISTING CONDITION PLAN	SHEET 2 OF 8
SUBDIVISION	SHEET 3 OF 8
SITE DEVELOPMENT PLAN 1	SHEET 4 OF 8
SITE DEVELOPMENT PLAN 2	SHEET 5 OF 8
DETAIL SHEET	SHEET 6 OF 8
PARCEL HISTORY PLAN	SHEET 7 OF 8
SITE ANALYSIS	SHEET 8 OF 8

APPROVED BY THE BROOKLYN  
INLAND WETLANDS COMMISSION

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_  
Expiration date per section 22A-42A of the Connecticut  
General Statutes. Date: \_\_\_\_\_

APPROVED BY THE BROOKLYN  
PLANNING AND ZONING COMMISSION

CHAIRMAN \_\_\_\_\_ DATE \_\_\_\_\_  
Expiration date per section B.26C of the Connecticut  
General Statutes. Date: \_\_\_\_\_



LEGEND	
	PROPERTY LINE
	EASEMENT
	STONEWALL
	PROPOSED CLEARING LIMIT
	SILT FENCE
	EXISTING INDEX CONTOUR
	EXISTING CONTOUR
	PROPOSED CONTOUR
	WETLANDS FLAG
	BUILDING SETBACK
	IRON PIN FOUND
	DRILL HOLE FOUND
	IRON PIN SET
	PERCOLATION TEST
	TEST PIT
	PROPERTY POINT
	UTILITY POLE
	STONE PILE

**Notes**

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-20 and the "Standards for Surveys and Maps in State of Connecticut" as adopted by the Connecticut Associations of Land Surveyors, Inc. on September 26, 1996.
  - This Survey conforms to a Class "A-2" Horizontal Accuracy Class "T-2" Vertical Accuracy
  - Survey Type: Existing Condition Plan
  - Boundary Determination: Resurvey
  - Intent: 4 Lot Subdivision
- Parcels shown as 12-1 on Assessors Tax Map 7 of the Brooklyn Assessors Office
- Wetlands were partially flagged by Joseph Theroux and Re-flagged & verified by Bob Russo of GLA Engineers. Field located by Archer Surveying LLC

**Map References**

- Perimeter Survey - First Time Split, Prepared for Shane Pollock, Tripp Hollow Road, Brooklyn/Canterbury, Connecticut, Dated: September 2016, Scaled: 1"=80', Prepared by Archer Surveying LLC
- 6 Lot Conservation Subdivision Prepared for Square 1 Building Associates, Tripp Hollow Road, Brooklyn, Connecticut, Dated: December 2016, Scaled: 1"=50', Prepared by Archer Surveying LLC
- Boundary Line Modification Prepared for Square 1 Building Associates, Tripp Hollow Road, Brooklyn, Connecticut, Dated: January 2020, Scaled: 1"=40', Prepared by Archer Surveying LLC

I have reviewed the inland-wetlands shown on this plan and they appear to be substantially the same as those which I delineated in the field.

*RC Russo*  
Certified Soil Scientist

To My Knowledge and Belief this plan is substantially correct as noted hereon.

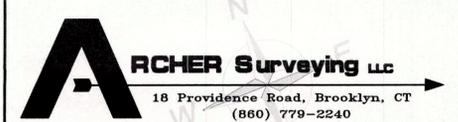
*Paul M. Archer*  
Paul M. Archer LLS #10018, LAND SURVEYOR  
Date: 1-28-2021

REVISIONS	
10/7/2020	Wetland Flag Modification
11/18/2020	Wetland Flag Numbers
12/20/2020	Proposed Open Space
01/27/2021	Engineers Comments

**Existing Condition Plan**

Prepared For:  
Square 1 Building Associates  
Tripp Hollow Road  
Brooklyn, Connecticut

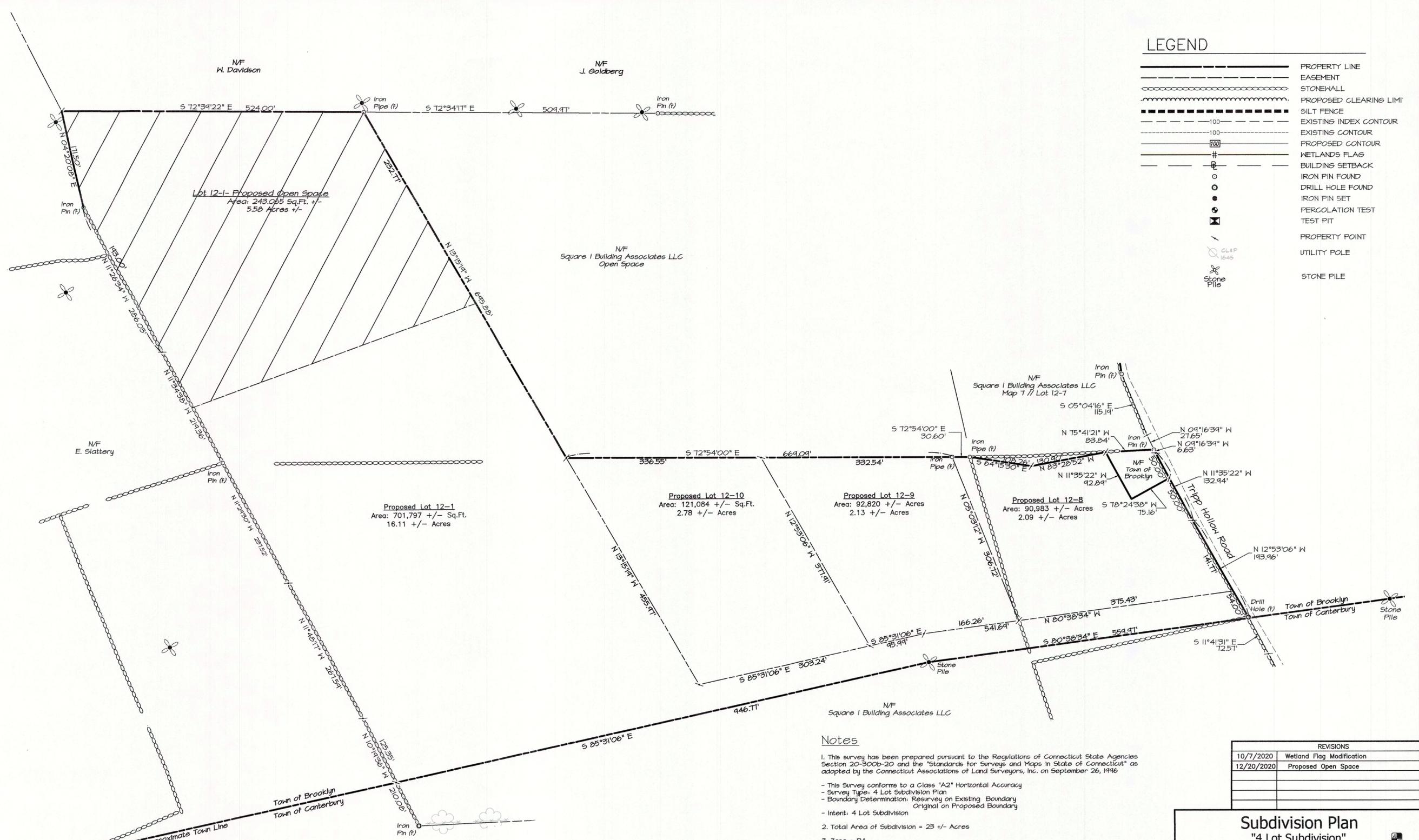
DRAWING SCALE: 1"=80'





**LEGEND**

	PROPERTY LINE
	EASEMENT
	STONEWALL
	PROPOSED CLEARING LIMIT
	SILT FENCE
	EXISTING INDEX CONTOUR
	100
	PROPOSED CONTOUR
	100
	WETLANDS FLAG
	BUILDING SETBACK
	IRON PIN FOUND
	DRILL HOLE FOUND
	IRON PIN SET
	PERCOLATION TEST
	TEST PIT
	PROPERTY POINT
	UTILITY POLE
	STONE PILE



**Notes**

- This survey has been prepared pursuant to the Regulations of Connecticut State Agencies Section 20-300b-20 and the "Standards for Surveys and Maps in State of Connecticut" as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.
  - This Survey conforms to a Class "A2" Horizontal Accuracy
  - Survey Type: 4 Lot Subdivision Plan
  - Boundary Determination: Resurvey on Existing Boundary
  - Intent: 4 Lot Subdivision
- Total Area of Subdivision = 23 +/- Acres
- Zone = RA
- Owner / Applicant = Shane Pollock  
101 Mackin Drive  
Griswold, CT 06351
- Parcel is shown as Lot #12-1 on Assessor's Map #7
- Parcel is within 500 feet of a Town line
- This Subdivision does not include land areas within the Federal Emergency Management Agency's 100 year flood hazard area
- There are not known endangered species or species of special concern on the subject property nor within 2 miles of the subject property per the December 2006 Natural Diversity Data Base Mapping
- Parcel does not lie within an aquifer protection area
- The Subdivision Regulations of the Town of Brooklyn are a part of this plan. Approval of this plan is contingent on completion of the requirements of said regulations, excepting any variances or modifications are on file in the office of the commission.
- North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD83)
- Passive Solar Energy techniques were considered in the design of the subdivision

**Map References**

- Perimeter Survey - First Time Split, Prepared for Shane Pollock, Tripp Hollow Road, Brooklyn/Canterbury, Connecticut, Dated: September 2016, Scaled: 1"=80', Prepared by Archer Surveying LLC
- 6 Lot Conservation Subdivision Prepared for Square 1 Building Associates, Tripp Hollow Road, Brooklyn, Connecticut, Dated: December 2016, Scaled: 1"=50', Prepared by Archer Surveying LLC
- Boundary Line Modification Prepared for Square 1 Building Associates, Tripp Hollow Road, Brooklyn, Connecticut, Dated: January 2020, Scaled: 1"=40', Prepared by Archer Surveying LLC

REVISIONS	
10/7/2020	Wetland Flag Modification
12/20/2020	Proposed Open Space

**Subdivision Plan**  
"4 Lot Subdivision"

Prepared For:  
**Square 1 Building Associates**  
Tripp Hollow Road  
Brooklyn, Connecticut

DRAWING SCALE: 1"=80'

**ARCHER Surveying LLC**  
18 Providence Road, Brooklyn, CT  
(860) 779-2240

Sheet No. 3 OF 8    Project No. 1783    Date: September 3, 2020

To My Knowledge and Belief, this Map is substantially Correct as noted hereon.

1-28-2021  
Paul M. Archer LLS #10083    Date

**SELECT FILL SPECIFICATION**

SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS PER THE CONNECTICUT PUBLIC HEALTH CODE FOR USE WITHIN THE LEACHING AREA:

1. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SLEEVE.
2. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SLEEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING CRITERIA:

SIEVE SIZE	PERCENT PASSING WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50*	10-75
#100	0-20	0-5
#200	0-5	0-2.5

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

**SEPTIC NOTES**

1. PROPOSED SEPTIC SYSTEM TO BE STAKED IN THE FIELD BY A LAND SURVEYOR LICENSED IN THE STATE OF CONNECTICUT.
2. A BENCHMARK SHALL BE SET WITHIN 10'-15' OF THE PROPOSED SEPTIC SYSTEM PRIOR TO CONSTRUCTION.
3. ALL WORK AND MATERIAL (SEPTIC TANK, DISTRIBUTION BOX, PIPE) SHALL CONFORM TO THE CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEM.
4. SEWER LINE FROM FOUNDATION WALL TO SEPTIC TANK SHALL BE 4" SCHEDULE 40 PVC - ASTM D 1785 AND JOINTS PER HEALTH DEPT. CODE. PIPE FROM SEPTIC TANK TO DISTRIBUTION LINES SHALL BE 4" SOLID PVC CONFORMING TO STD-3034 AND SDR-35.
5. SYSTEMS SHALL BE SET LEVEL FOR ENTIRE LENGTH AND HAVE A CENTER TO CENTER SPACING AS CALLED FOR IN THE CONNECTICUT PUBLIC HEALTH CODE. THERE ARE PRESENTLY NO KNOWN WATER WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEMS.
6. CLEAR AND GRUB THE AREA WHERE THE SEPTIC SYSTEMS AND HOUSES ARE TO BE CONSTRUCTED. ALL TOPSOIL IS TO BE STRIPPED AND STOCKPILED FOR FUTURE USE.
7. ALL FILL MATERIAL SHALL BE CLEAN EARTH FREE OF STUMPS, ORGANICS, CONSTRUCTION DEBRIS AND TOPSOIL.
8. TOPSOIL SHALL BE RE-APPLIED OVER ALL FILL AREAS AND ALL DISTURBED AREAS TO PROVIDE A MINIMUM DEPTH OF FOUR INCHES IN ACCORDANCE WITH THE SLOPE STABILIZATION DETAILS.

**CONCEPT SEPTIC SYSTEM DESIGN**

**LOT 12-8**  
 PRIMARY LEACHING AREA  
 3 BEDROOM RESIDENCE  
 PERCOLATION RATE: 13.3 MIN./INCH (NDDH FILE #21000003)  
 LEACHING AREA REQUIRED: 675 SF

USE TRADITIONAL TRENCH  
 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF  
 REQUIRED LENGTH = 675 SF / 3 SF/LF = 225 LF

**MLSS CALCULATION**  
 HYDRAULIC FACTORS  
 DEPTH TO RESTRICTIVE LAYER = 28"  
 SLOPE = 4.0%  
 HYDRAULIC FACTOR (HF) = 34  
 FLOW FACTOR (FF) = 1.5  
 PERCOLATION FACTOR (PF) = 1.25 (10.1 TO 20.0 MIN./INCH)  
 MLSS REQUIRED: 34 x 1.5 x 1.25 = 63.75 LF

**PROPOSED SYSTEM**  
 USE 3 ROWS OF 75 LF  
 LEACHING AREA PROVIDED = 675 SF

**RESERVE LEACHING AREA**  
 USE SAME AS PRIMARY SYSTEM

**LOT 12-9**  
 PRIMARY LEACHING AREA  
 3 BEDROOM RESIDENCE  
 PERCOLATION RATE: 10 MIN./INCH (NDDH FILE #21000003)  
 LEACHING AREA REQUIRED: 495 SF

USE TRADITIONAL TRENCH  
 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF  
 REQUIRED LENGTH = 495 SF / 3 SF/LF = 165 LF

**MLSS CALCULATION**  
 HYDRAULIC FACTORS  
 DEPTH TO RESTRICTIVE LAYER = 24"  
 SLOPE = 10.5%  
 HYDRAULIC FACTOR (HF) = 26  
 FLOW FACTOR (FF) = 1.5  
 PERCOLATION FACTOR (PF) = 1.00 (UP TO 10.0 MIN./INCH)  
 MLSS REQUIRED: 26 x 1.5 x 1.00 = 39 LF

**PROPOSED SYSTEM**  
 USE 3 ROWS OF 55 LF  
 LEACHING AREA PROVIDED = 495 SF

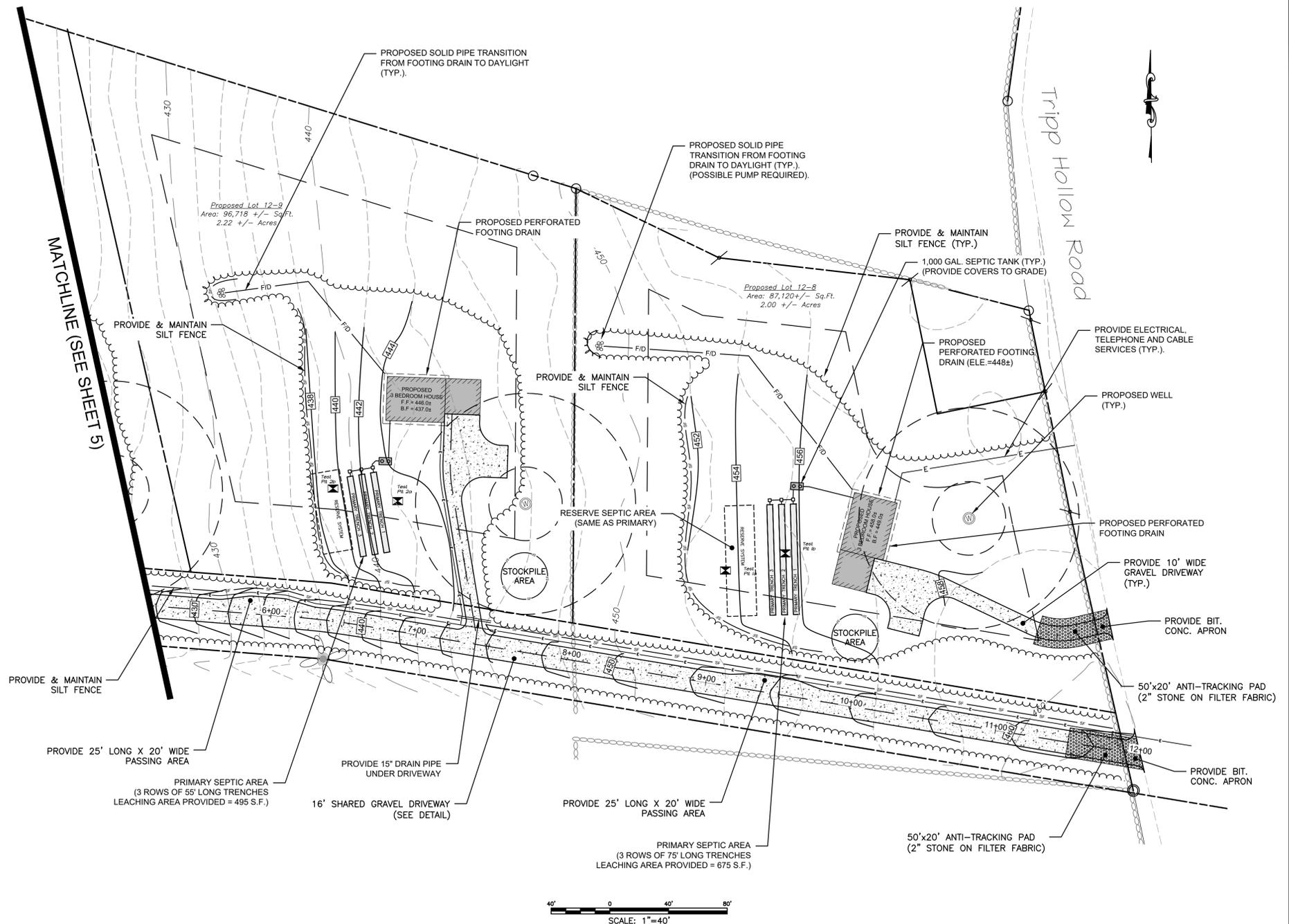
**RESERVE LEACHING AREA**  
 USE SAME AS PRIMARY SYSTEM

Soil Test Data (NDDH File #21000003)  
 Soil Testing Conducted on 8/26/20 by Sherry McGann, R.S. & Sherry Vallone, E.H.S.

Lot 12-8	Lot 12-9
TP 1-A Mottles: 28" Ground Water: N/O Roots: 28" Ledge: N/O 0-11" Topsoil 11-28" OB Very Fine Sandy Loam 28-86" GR Mottled Sandy Loam Till	TP 2-A Mottles: 24" Ground Water: N/O Roots: 24" Ledge: N/O 0-8" Topsoil 8-24" OB Fine Sandy Loam 24-92" GR Mottled Sandy Loam Till

TP 1-B	TP 2-B
Mottles: 28" Ground Water: N/O Roots: 28" Ledge: N/O 0-10" Topsoil 10-28" OB Very Fine Sandy Loam 28-91" GR Mottled Sandy Loam Till	Mottles: 26" Ground Water: N/O Roots: 26" Ledge: N/O 0-9" Topsoil 9-26" OB Fine Sandy Loam 26-91" GR Mottled Sandy Loam Till

Perc 1A	Perc 2A
10.36 3"	1.38 2"
10.46 5"	1.48 5 1/2"
10.56 7 1/2"	1.58 7 1/4"
11.05 8 3/4"	2.08 9"
11.15 9 1/2"	2.18 10"
11.25 10 1/4"	10.0 minutes/inch
13.33 minutes/inch	



**LEGEND**

	PROPERTY LINE
	EASEMENT
	STONEHALL
	BOUNDARY STONEHALL
	STONEHALL REMAINS
	100 YEAR FLOOD LIMIT
	EXISTING TREELINE
	PROPOSED CLEARING LIMITS
	SILT FENCE
	STAKED HAYBALES
	EXISTING INDEX CONTOUR
	EXISTING CONTOUR
	PROPOSED CONTOUR
	WETLANDS FLAG
	BUILDING SETBACK
	IRON PIN FOUND
	DRILL HOLE FOUND
	MONUMENT FOUND
	IRON PIN SET
	DRILL HOLE SET
	MONUMENT SET
	PERCOLATION TEST
	TEST PIT
	PROPERTY POINT
	UTILITY POLE

**ARCHER Surveying LLC**  
 18 Providence Road, Brooklyn, CT  
 (860) 779-2240

No.	DATE	REVISION
5	01/26/21	NCCG COMMENTS ADDRESSED
4	12/10/20	NCCG COMMENTS ADDRESSED
3	11/23/20	NCCG COMMENTS ADDRESSED
2	09/28/20	WETLAND FLAGS CALLOUTS ADDED
1	09/20/20	VARIOUS MODIFICATIONS

**CLA Engineers, Inc.**  
 CIVIL • STRUCTURAL • SURVEYING  
 317 Main Street Norwich, CT 06360  
 (860) 886-1966 Fax (860) 886-9165

**SQUARE 1 BUILDING ASSOCIATES, LLC**

**4-LOT SUBDIVISION  
 BROOKLYN, CT**

**GRADING & CONCEPT SITE DESIGN**

Project No. CLA-6503  
 Proj. Engineer D.H.  
 Date: 08/24/20  
 Sheet No. 4 of 8

**SELECT FILL SPECIFICATION**

SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS PER THE CONNECTICUT PUBLIC HEALTH CODE FOR USE WITHIN THE LEACHING AREA:

1. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SLEEVE.
2. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SLEEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE).
3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING CRITERIA:

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70-100	70-100
#40	10-50*	10-75
#100	0-20	0-5
#200	0-5	0-2.5

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

**SEPTIC NOTES**

1. PROPOSED SEPTIC SYSTEM TO BE STAKED IN THE FIELD BY A LAND SURVEYOR LICENSED IN THE STATE OF CONNECTICUT.
2. A BENCHMARK SHALL BE SET WITHIN 10'-15' OF THE PROPOSED SEPTIC SYSTEM PRIOR TO CONSTRUCTION.
3. ALL WORK AND MATERIAL (SEPTIC TANK, DISTRIBUTION BOX, PIPE) SHALL CONFORM TO THE CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEM.
4. SEWER LINE FROM FOUNDATION WALL TO SEPTIC TANK SHALL BE 4" SCHEDULE 40 PVC - ASTM D 1785 AND JOINTS PER HEALTH DEPT. CODE. PIPE FROM SEPTIC TANK TO DISTRIBUTION LINES SHALL BE 4" SOLID PVC CONFORMING TO STMD-3034 AND SDR-35.
5. SYSTEMS SHALL BE SET LEVEL FOR ENTIRE LENGTH AND HAVE A CENTER TO CENTER SPACING AS CALLED FOR IN THE CONNECTICUT PUBLIC HEALTH CODE. THERE ARE PRESENTLY NO KNOWN WATER WELLS WITHIN 75' OF THE PROPOSED SEPTIC SYSTEMS.
6. CLEAR AND GRUB THE AREA WHERE THE SEPTIC SYSTEMS AND HOUSES ARE TO BE CONSTRUCTED. ALL TOPSOIL IS TO BE STRIPPED AND STOCKPILED FOR FUTURE USE.
7. ALL FILL MATERIAL SHALL BE CLEAN EARTH FREE OF STUMPS, ORGANICS, CONSTRUCTION DEBRIS AND TOPSOIL.
8. TOPSOIL SHALL BE RE-APPLIED OVER ALL FILL AREAS AND ALL DISTURBED AREAS TO PROVIDE A MINIMUM DEPTH OF FOUR INCHES IN ACCORDANCE WITH THE SLOPE STABILIZATION DETAILS.

**CONCEPT SEPTIC SYSTEM DESIGN**

**LOT 12-1**  
**PRIMARY LEACHING AREA**  
 3 BEDROOM RESIDENCE  
 PERCOLATION RATE: 5.7 MIN./INCH (NDDH FILE #21000003)  
 LEACHING AREA REQUIRED: 495 SF

USE TRADITIONAL TRENCH  
 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF  
 REQUIRED LENGTH = 495 SF / 3 SF/LF = 165 LF

**MLSS CALCULATION**  
 HYDRAULIC FACTORS  
 DEPTH TO RESTRICTIVE LAYER = 24" (POSSIBLE LEDGE)  
 SLOPE = 2.7%  
 HYDRAULIC FACTOR (HF) = 48  
 FLOW FACTOR (FF) = 1.5  
 PERCOLATION FACTOR (PF) = 1.00 (UP TO 10.0 MIN./INCH)  
 MLSS REQUIRED: 48 x 1.5 x 1.00 = 72 LF

**PROPOSED SYSTEM**  
 USE 2 ROWS OF 84 LF  
 LEACHING AREA PROVIDED = 504 SF

**RESERVE LEACHING AREA**  
 USE SAME AS PRIMARY SYSTEM

**LOT 12-10**  
**PRIMARY LEACHING AREA**  
 3 BEDROOM RESIDENCE  
 PERCOLATION RATE: 10.0 MIN./INCH (NDDH FILE #21000003)  
 LEACHING AREA REQUIRED: 495 SF

USE TRADITIONAL TRENCH  
 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 3.0 SF/LF  
 REQUIRED LENGTH = 495 SF / 3 SF/LF = 165 LF

**MLSS CALCULATION**  
 HYDRAULIC FACTORS  
 DEPTH TO RESTRICTIVE LAYER = 24" (MOTTLES)  
 SLOPE = 5.5%  
 HYDRAULIC FACTOR (HF) = 34  
 FLOW FACTOR (FF) = 1.5  
 PERCOLATION FACTOR (PF) = 1.0 (UP TO 10.0 MIN./INCH)  
 MLSS REQUIRED: 34 x 1.5 x 1.0 = 51.0 LF

**PROPOSED SYSTEM**  
 USE 3 ROWS OF 85 LF  
 LEACHING AREA PROVIDED = 495 SF

**RESERVE LEACHING AREA**  
 USE SAME AS PRIMARY SYSTEM

Soil Test Data (NDDH File #21000003)  
 Soil Testing Conducted on 8/26/20 by Sherry McGann, R.S. & Sherry Vallone, E.H.S.

**Lot 12-10**

**TP-3A**  
 Mottles: 24"  
 Ground Water: N/O  
 Roots: 24"  
 Ledge: N/O  
 0-6" Topsoil  
 6-24" OB Fine Sandy Loam  
 24-82" GR Mottled Sandy Loam Till

**TP-3B**  
 Mottles: 25"  
 Ground Water: N/O  
 Roots: 25"  
 Ledge: N/O  
 0-8" Topsoil  
 8-25" OB Fine Sandy Loam  
 25-84" GR Mottled Sandy Loam Till

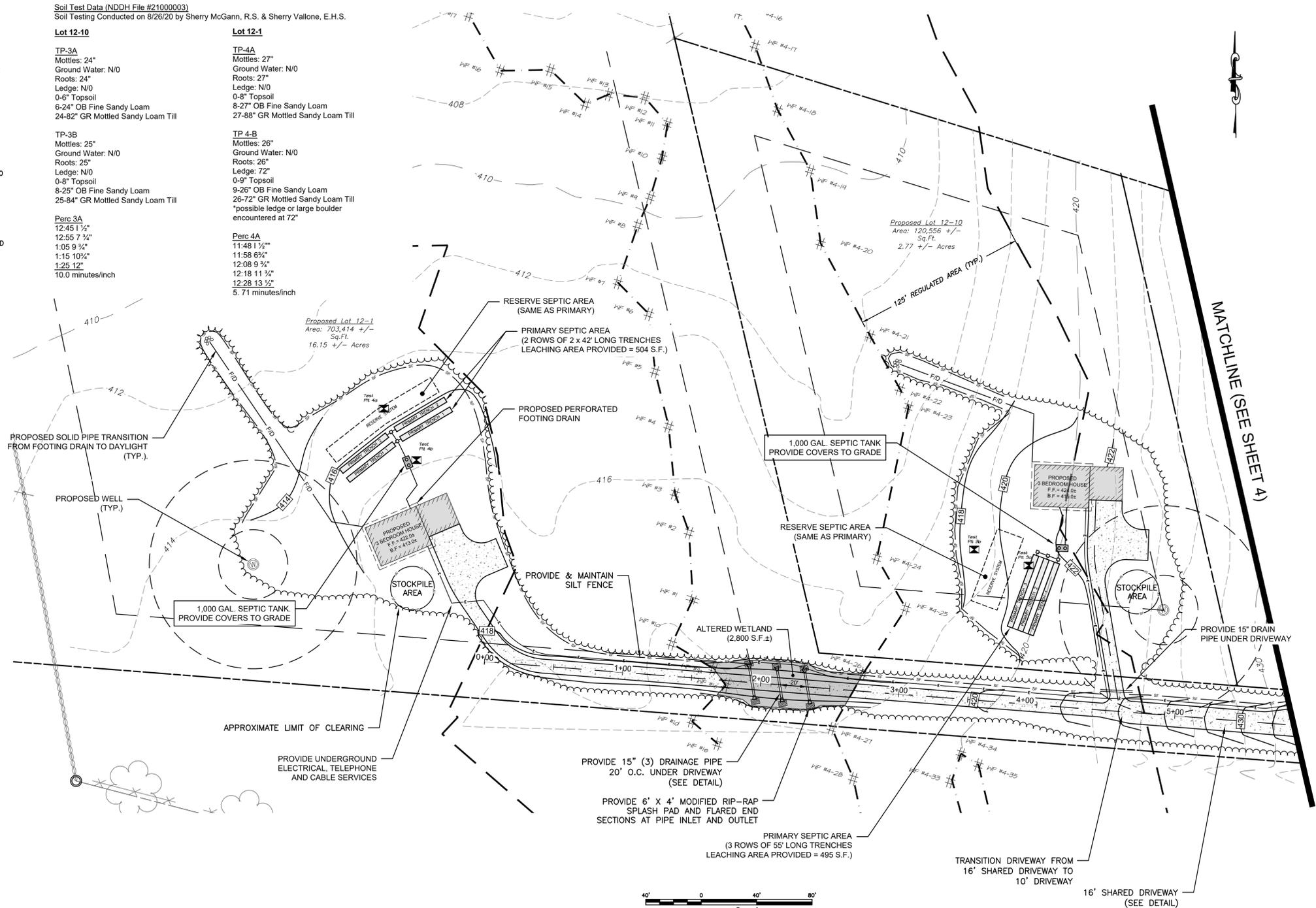
**Perc 3A**  
 12:45 1 1/2"  
 12:55 7 3/4"  
 1:05 9 3/4"  
 1:15 10 3/4"  
 1:25 12"  
 10.0 minutes/inch

**Lot 12-1**

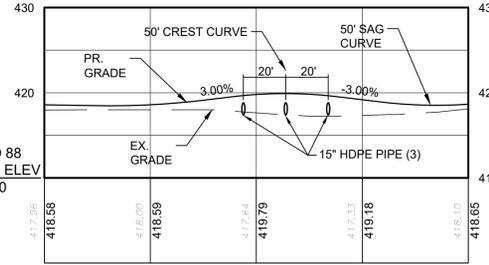
**TP-4A**  
 Mottles: 27"  
 Ground Water: N/O  
 Roots: 27"  
 Ledge: N/O  
 0-8" Topsoil  
 8-27" OB Fine Sandy Loam  
 27-88" GR Mottled Sandy Loam Till

**TP-4B**  
 Mottles: 26"  
 Ground Water: N/O  
 Roots: 26"  
 Ledge: 72"  
 0-9" Topsoil  
 9-26" OB Fine Sandy Loam  
 26-72" GR Mottled Sandy Loam Till  
 \*possible ledge or large boulder encountered at 72"

**Perc 4A**  
 11:48 1 1/2"  
 11:58 6 3/4"  
 12:08 9 3/4"  
 12:18 11 3/4"  
 12:28 13 1/2"  
 5.71 minutes/inch

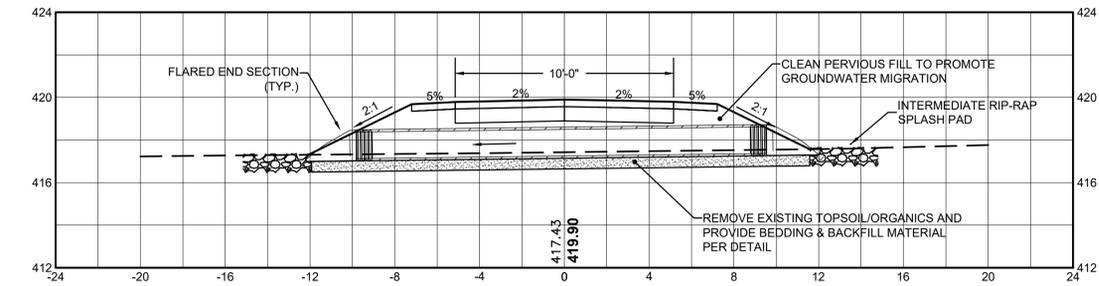


MATCHLINE (SEE SHEET 4)



**DRIVEWAY - PROFILE**  
 STA 1+00 TO STA 3+00  
 Horiz. Scale: 1" = 40'  
 Vert. Scale: 1" = 10'

**Driveway - Cross Section at Wetland Crossing (Typical)**



**LEGEND**

- PROPERTY LINE
- EASEMENT
- STONEWALL
- BOUNDARY STONEWALL
- STONEWALL REMAINS
- 100 YEAR FLOOD LIMIT
- EXISTING TREELINE
- PROPOSED CLEARING LIMITS
- SILT FENCE
- STAKED HAYBALES
- EXISTING INDEX CONTOUR
- EXISTING CONTOUR
- PROPOSED CONTOUR
- HETLANDS FLAG
- BUILDING SETBACK
- IRON PIN FOUND
- DRILL HOLE FOUND
- MONUMENT FOUND
- IRON PIN SET
- DRILL HOLE SET
- MONUMENT SET
- PERCOLATION TEST
- TEST PIT
- PROPERTY POINT
- UTILITY POLE

**ARCHER Surveying LLC**  
 18 Providence Road, Brooklyn, CT  
 (860) 779-2240

5	01/26/21	NCCG COMMENTS ADDRESSED
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No.	DATE	REVISION

**CLA Engineers, Inc.**  
 CIVIL • STRUCTURAL • SURVEYING  
 317 Main Street Norwich, CT 06360  
 (860) 886-1966 Fax (860) 886-9165

**SQUARE 1 BUILDING ASSOCIATES, LLC**

**4-LOT SUBDIVISION**  
**BROOKLYN, CT**

**GRADING & CONCEPT SITE DESIGN**

Project No.  
 CLA-6503

Proj. Engineer  
 D.H.

Date:  
 08/24/20

Sheet No.  
**5 of 8**

**EROSION & SEDIMENTATION CONTROL NARRATIVE**

1. THE EROSION & SEDIMENTATION CONTROL PLAN AND DETAILS HAVE BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEP.
2. THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL MEASURES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE SILT FENCE, STONE CHECK DAMS AND/OR OTHER EROSION CONTROL MEASURES AS NEEDED OR DIRECTED BY THE ENGINEER OR TOWN STAFF TO ADEQUATELY PREVENT SEDIMENT TRANSPORT.
3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE.
4. THE CONTRACTOR SHALL INSPECT, REPAIR AND/OR REPLACE EROSION CONTROL MEASURES EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT. SEDIMENT DEPOSITS MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.
5. STAKED HAY BALE SILT BARRIERS OR SILT FENCE SHALL BE INSTALLED AROUND ANY TEMPORARY STOCKPILE AREAS. TEMPORARY VEGETATIVE COVER MAY BE REQUIRED (SEE NOTE).
6. INLET SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED UNDER THE GRATES OF ALL NEW CATCH BASINS AT THE TIME OF INSTALLATION, AND UNDER THE GRATES OF EXISTING CATCH BASINS IN THE CONSTRUCTION AREA.
7. CONTINUOUS DUST CONTROL USING WATER, CALCIUM CHLORIDE OR APPROVED EQUAL SHALL BE PROVIDED FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS, SURFACES OF BACKFILLED TRENCHES AND GRAVELED ROADWAY SURFACES.
8. IF DEWATERING IS NECESSARY DURING ANY TIME OF CONSTRUCTION A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS SHOWN IN THE HAY-BALE BARRIER DEWATERING DETAIL OR ALTERNATE METHOD PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
9. ALL DISTURBED AREAS SHALL BE RESTORED PER THE SLOPE STABILIZATION AND PERMANENT VEGETATION DETAILS. ALL DISTURBED AREAS THAT ARE SLOPED LESS THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) SLOPE SHALL BE LOAMED, SEED, FERTILIZED AND MULCHED PER THE PERMANENT VEGETATIVE COVER SPECIFICATIONS. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL DISTURBED AREAS THAT ARE SLOPED MORE THAN THREE HORIZONTAL TO ONE VERTICAL (3:1).
10. IF FINAL SEEDING OF DISTURBED AREAS IS NOT TO BE COMPLETED BEFORE OCTOBER 15, THE CONTRACTOR SHALL PROVIDE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY PERMANENT SEEDING.
11. WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISHED GRADED SHALL BE COMPLETED PRIOR TO OCTOBER 15.
12. ANY EROSION WHICH OCCURS WITHIN THE DISTURBED AREAS SHALL BE IMMEDIATELY REPAIRED AND STABILIZED. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT SHALL BE RETURNED TO THE SITE. POST SEEDING, INTERCEPTED SEDIMENT, IF ANY, SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE TOWN AND ENGINEER.
13. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION IS RE-ESTABLISHED OR SLOPES ARE STABILIZED AND REMOVAL IS APPROVED BY THE TOWN.
14. UNFORESEEN PROBLEMS WHICH ARE ENCOUNTERED IN THE FIELD SHALL BE SOLVED ACCORDING TO THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEP.
15. THE CONTRACTOR SHALL PROVIDE THE NAME AND EMERGENCY CONTACT INFORMATION FOR THE PROJECT PERSONNEL RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROLS PRIOR TO THE START OF CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL CONTINUALLY STORE THE FOLLOWING MATERIALS ON SITE DURING CONSTRUCTION TO MEET UNEXPECTED EROSION NEEDS

- \* 100 LF OF SILT FENCE
- \* 10 HAY BALES
- \* 10 CY OF WOOD CHIPS OR CRUSHED STONE

**TEMPORARY VEGETATIVE COVER**

A TEMPORARY SEEDING OF RYE GRASS WILL BE COMPLETED WITHIN 15 DAYS OF THE FORMATION OF STOCKPILES. IF THE SOIL IN THE STOCKPILES HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS IT SHALL BE LOOSENED TO A DEPTH OF 2 INCHES BEFORE THE FERTILIZER, LIME AND SEED IS APPLIED. 10-10-10 FERTILIZER AT A RATE OF 7.5 POUNDS PER 1000 S.F. LIMESTONE AT A RATE OF 90 LBS. PER 1000 S.F. SHALL BE USED. RYE GRASS APPLIED AT A RATE OF 1 LB. PER 1000 S.F. SHALL PROVIDE THE TEMPORARY VEGETATIVE COVER. STRAW FREE FROM WEEDS AND COARSE MATTER SHALL BE USED AT A RATE OF 70-90 LBS. PER 1000 S.F. AS A TEMPORARY MULCH. APPLY MULCH AND DRIVE TRACKED EQUIPMENT UP AND DOWN SLOPE OVER ENTIRE SURFACE SO GLEAT MARKS ARE PARALLEL TO THE CONTOURS.

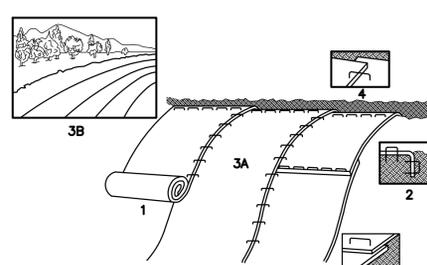
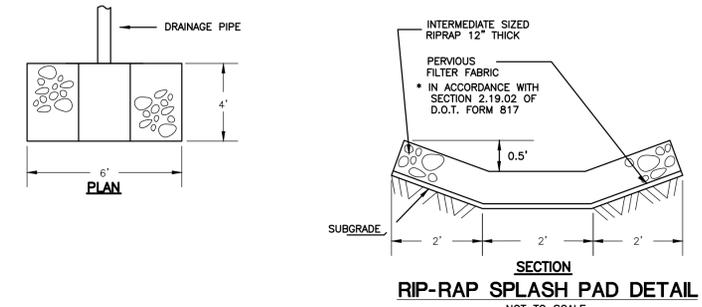
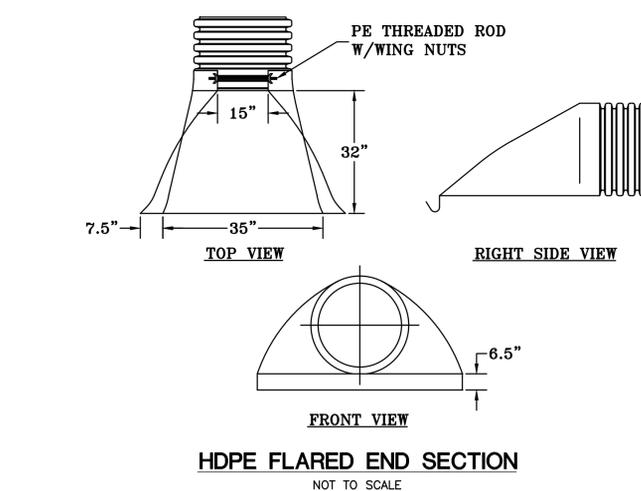
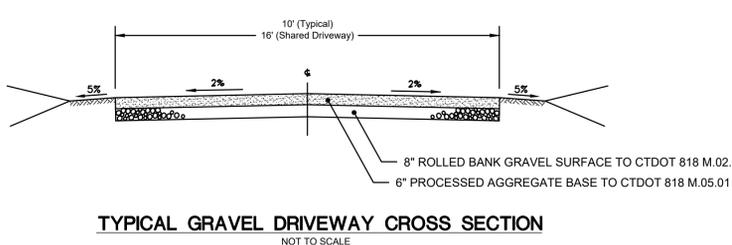
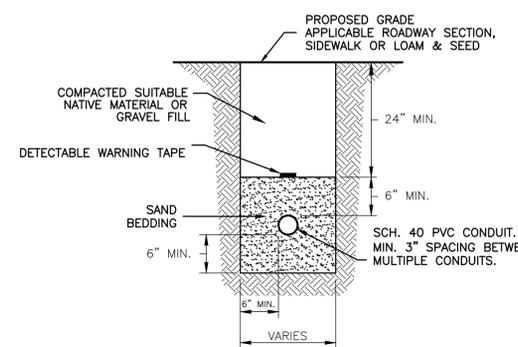
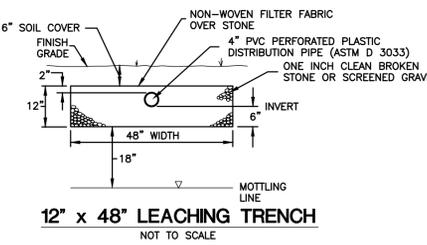
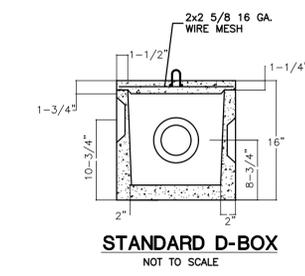
**PERMANENT VEGETATIVE COVER**

TOPSOIL WILL BE REPLACED ONCE THE EXCAVATIONS HAVE BEEN COMPLETED AND THE SLOPES ARE GRADED AS SHOWN ON THE PLANS. PROVIDE SLOPE PROTECTION AS CALLED FOR ON THE PLANS AND DETAILS. TOPSOIL SHALL BE SPREAD AT A MINIMUM COMPACTED DEPTH OF 4 INCHES. ONCE THE TOPSOIL HAS BEEN SPREAD, ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION WILL BE REMOVED AS WELL AS DEBRIS.

- APPLY AGRICULTURAL GROUND LIMESTONE AT THE RATE OF TWO 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 LIMESTONE AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES.
- INSPECT SEEDBED BEFORE SEEDING.
- IF TRAFFIC HAS COMPACTED THE SOIL, RETILL COMPACTED AREAS.
- APPLY THE FOLLOWING GRASS SEED MIX:

**TYPICAL SEED MIXTURE**

ALL DISTURBED AREAS	LBS./ACRE	LBS./1000 S.F.
KENTUCKY BLUEGRASS	20	0.45
CREeping RED FESCUE	20	0.45
PERENNIAL RYEGRASS	5	0.10
	45	1.00



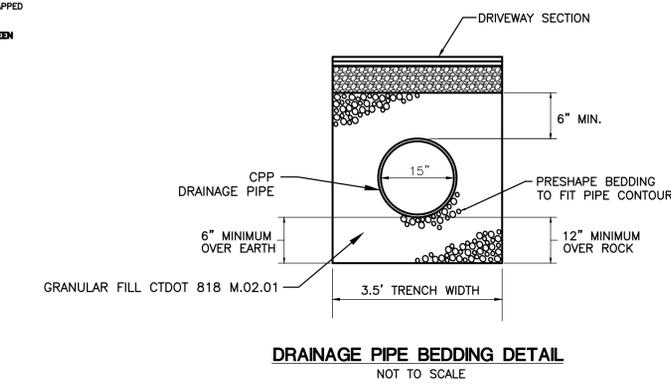
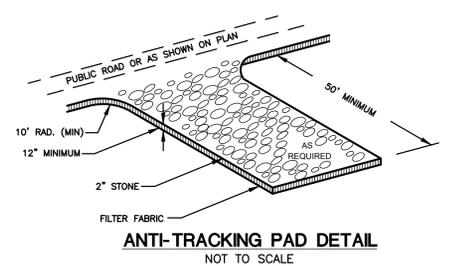
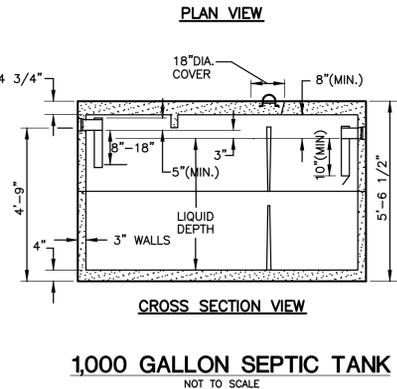
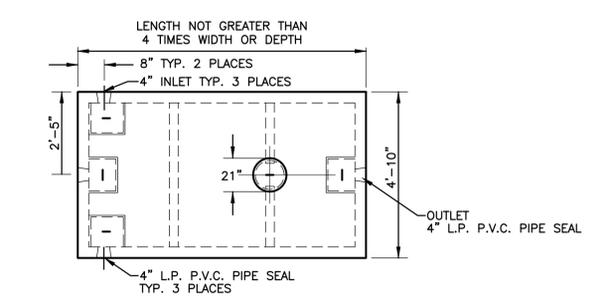
**EROSION CONTROL MATTING DETAIL (FOR 3:1 SLOPES OR GREATER)**

1. PROVIDE 4" THICKNESS OF TOPSOIL OVER CLEAN FILL. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED MIX PER PERMANENT VEGETATIVE COVER NOTES. (SHALL BE PAD FOR AT THE UNIT PRICE FOR LOAM, SEED, FERTILIZER & MULCH)
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" DEEP x 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKET (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

NOTE: ALL PERMANENT EROSION CONTROL BLANKETS ARE TO BE NORTH AMERICAN GREEN BIONET C1258N OR APPROVED EQUAL.

**TYPICAL LOAM & SEED SECTION DETAIL (FOR ALL DISTURBED AREAS)**

**SLOPE STABILIZATION DETAILS**  
NOT TO SCALE



18 Providence Road, Brooklyn, CT  
(860) 779-2240

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**SQUARE 1 BUILDING ASSOCIATES, LLC**

**4-LOT SUBDIVISION**  
**BROOKLYN, CT**

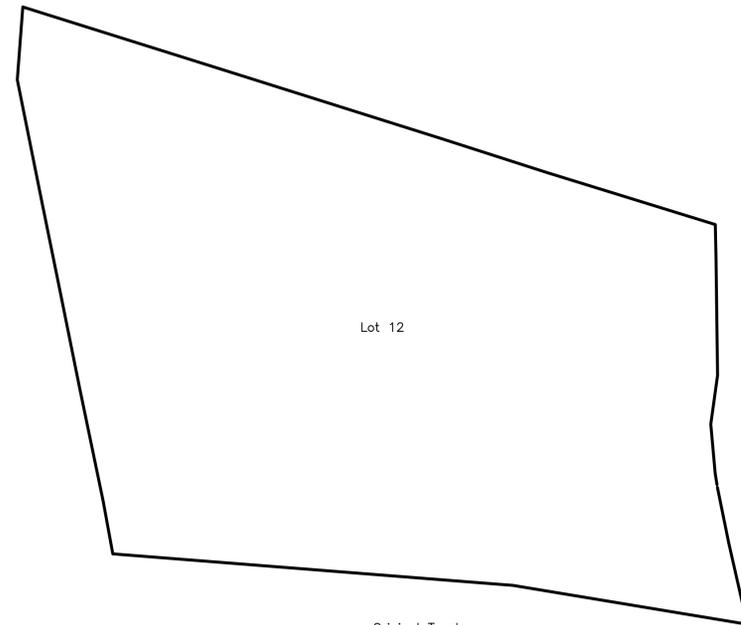
**CONSTRUCTION DETAILS**

Project No.  
CLA-6503

Proj. Engineer  
D.H.

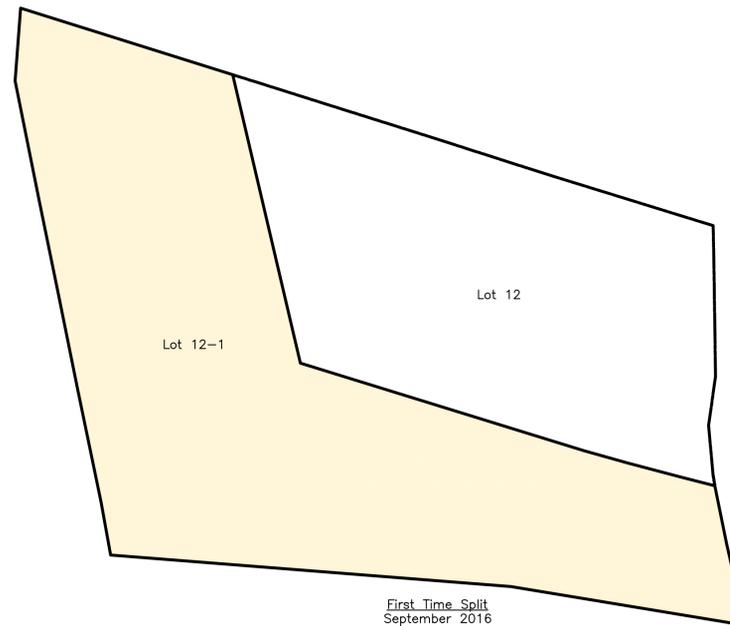
Date:  
08/24/20

Sheet No.  
**6 of 8**



Lot 12

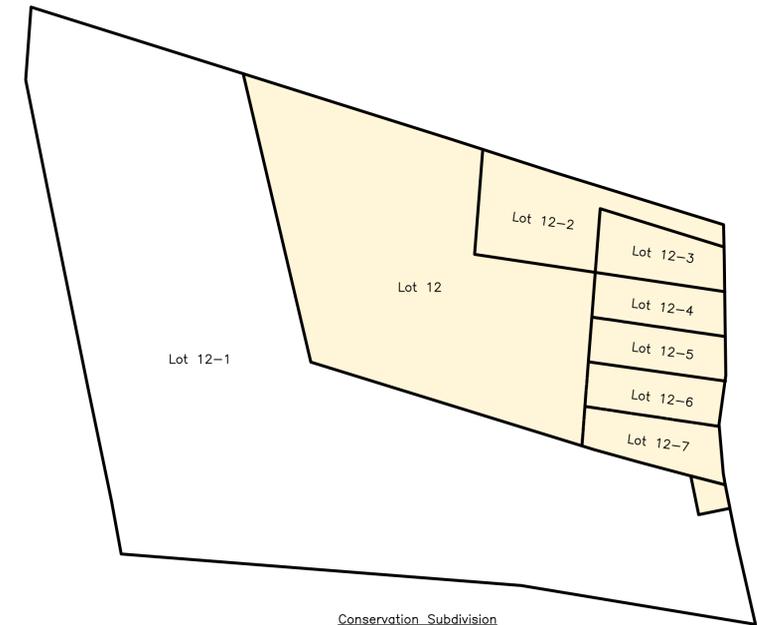
Original Tract



Lot 12-1

Lot 12

First Time Split  
September 2016



Lot 12-2

Lot 12-3

Lot 12-4

Lot 12-5

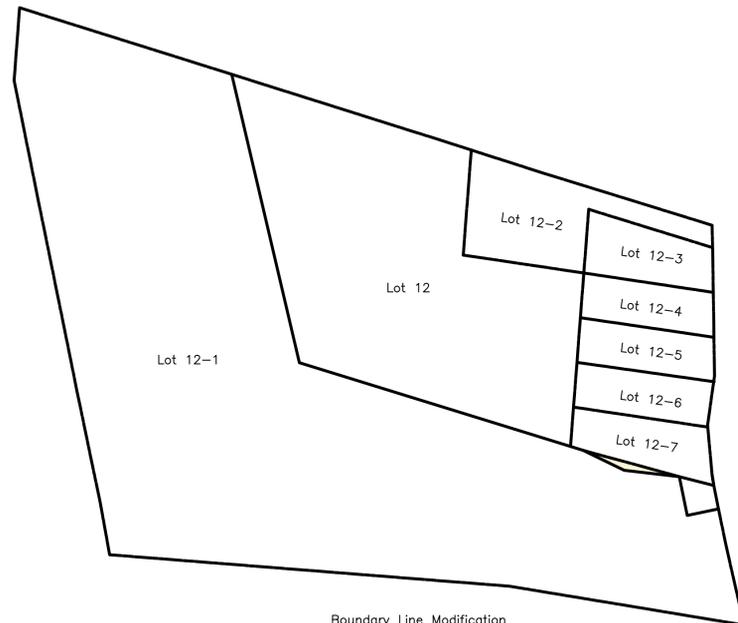
Lot 12-6

Lot 12-7

Lot 12-1

Lot 12

Conservation Subdivision  
December 2016



Lot 12-2

Lot 12-3

Lot 12-4

Lot 12-5

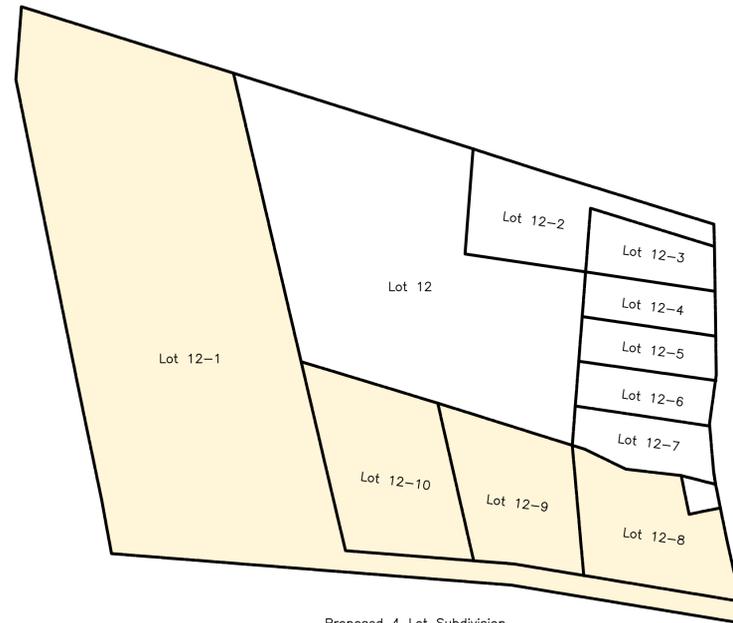
Lot 12-6

Lot 12-7

Lot 12

Lot 12-1

Boundary Line Modification  
January 2020



Lot 12-2

Lot 12-3

Lot 12-4

Lot 12-5

Lot 12-6

Lot 12-7

Lot 12-1

Lot 12-10

Lot 12-9

Lot 12-8

Lot 12

Proposed 4 Lot Subdivision

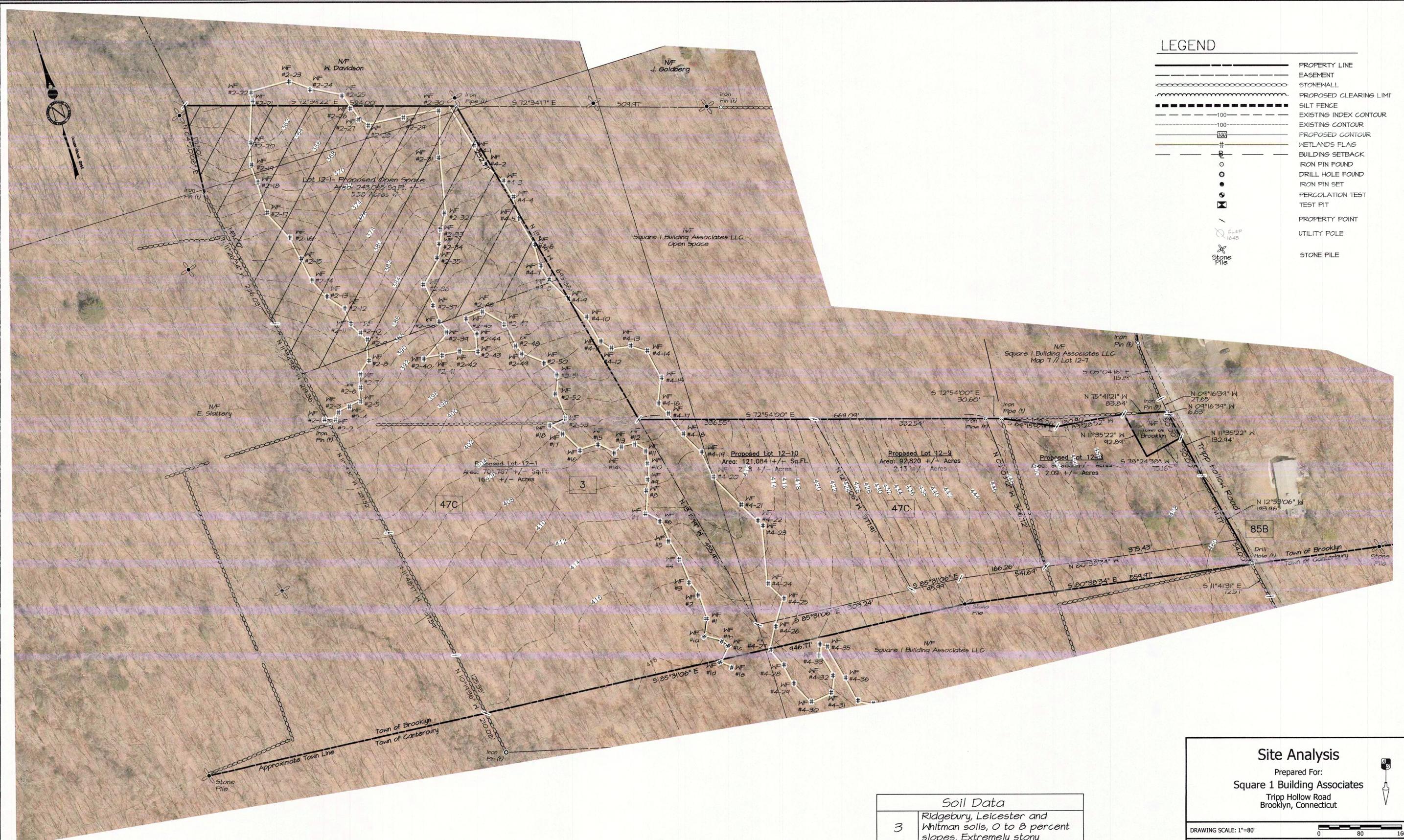
### Parcel History Plan

Prepared For:  
Square 1 Building Associates  
Tripp Hollow Road  
Brooklyn, Connecticut



DRAWING SCALE: 1"=80'





**LEGEND**

	PROPERTY LINE
	EASEMENT
	STONEWALL
	PROPOSED CLEARING LIMIT
	SILT FENCE
	EXISTING INDEX CONTOUR
	EXISTING CONTOUR
	PROPOSED CONTOUR
	WETLANDS FLAG
	BUILDING SETBACK
	IRON PIN FOUND
	DRILL HOLE FOUND
	IRON PIN SET
	PERCOLATION TEST
	TEST PIT
	PROPERTY POINT
	UTILITY POLE
	STONE PILE

*Soil Data*

3	Ridgebury, Leicester and Whitman soils, 0 to 8 percent slopes, Extremely stony
47C	Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony
85B	Paxton and Montauk fine sandy loams, 3 to 8 percent slopes, very stony

**Site Analysis**

Prepared For:  
**Square 1 Building Associates**  
 Tripp Hollow Road  
 Brooklyn, Connecticut

DRAWING SCALE: 1"=80'

**ARCHER Surveying LLC**  
 18 Providence Road, Brooklyn, CT  
 (860) 779-2240

Sheet No. 8 of 8    Project No. 1783    Date: September 3, 2020

PLANNING AND ZONING COMMISSION

RECEIVED

FEB 01 2020

REQUEST FOR CHANGE  
IN  
ZONING BOUNDARY

Date 1-25-2021

FEE \$ 250.00

State Fee \$ 60.00

Application # ZC 21-001

Check # 647

Public Hearing Date \_\_\_\_\_ Commission Action \_\_\_\_\_  
Effective Date \_\_\_\_\_

Name of Applicant Robert H. Perry, Sr. Phone 860-234-7279

Mailing Address 253 Mashamoguet Rd. Pomfret Center, CT 06259

Applicants Interest in the Property Purchasing

Property Owner Estate of Bernard O. Bessette Phone \_\_\_\_\_

Mailing Address 202 South Street, Brooklyn, CT 06234

MAP <u>46</u>	LOT <u>13</u>	LOT SIZE <u>3 acres</u>
MAP _____	LOT _____	LOT SIZE _____
MAP _____	LOT _____	LOT SIZE _____

More lots , repeat above on separate sheet

ZONE: R10\_\_ R30\_\_ RA\_\_ VCD\_\_ NC\_\_ RB\_\_ PC\_\_ I\_\_

REQUEST CHANGE: FROM R30 TO RA

REQUEST CHANGE: FROM \_\_\_\_\_ TO \_\_\_\_\_

REQUEST CHANGE: FROM \_\_\_\_\_ TO \_\_\_\_\_

More changes , repeat above on separate sheet

REASON FOR REQUEST: It is our intent to maintain 2 family horses for the sole purpose of our own enjoyment and developing interest of our grandchildren.

Note: A petition may be filed at the Hearing by 20% or more of the area lots included in such a change within 500 ft of the property under Section 16.5 of the Zoning Regulations



Forth Dr

Elin Dr

© 2020 Google

Imagery Date: 4/22/2018 41°47'16.49" N 71°53'58.88" W elev 0 ft

## **Margaret's Report 2/1/2021**

### **Final Certificates of Zoning Compliance issued:**

**196 Stetson Road - James Mioduszewski.** New 28 ft x 32 ft addition; relocation of master bedroom, living room, family room, and bathroom; including a new garage.

**64 Bailey Street – Cody Menard.** New a 6 x 6 ft rear deck.

**29 Canterbury Road – 29 Realty LLC.** Strip and re-roof in the VC Zone.

### **Zoning Permits issued:**

**709 Hartford Road – Susan Wasstrom.** New 20 x 24 ft addition for an indoor endless swimming pool.

**Sign Permits issued: None.**

**Home Office Permits Issued: None.**

### **Zoning and Blight Complaints:**

**4 Elm Street – Aaron-James Puzzo Kerouac.** I received a complaint about two unregistered vehicles on the subject property. On 9/24, I inspected and took photographs. The property is blighted due to widespread litter, a dilapidated building and untrimmed vegetation. A Notice of Violation (NOV) for both Blight and Zoning violations was issued on 10/20/2020. This original NOV was withdrawn on 12/16/2020. A NOV for Blight violations only and an Order to correct Blight conditions was issued on 12/15/2020. A NOV for only Zoning violations was issued on 12/16/2020.

I inspected on 1/11/2021. Two unregistered trucks were still present. None of the Blight violations had been corrected. On 1/19/2020, I issued a citation for a Zoning violation and a separate citation for Blight violations. On 1/27, I received requests for a Blight citation hearing and a Zoning citation hearing. The Zoning citation hearing has been scheduled for Thursday, 2/25 at 1:00 pm. The Blight citation hearing has been scheduled for Thursday, 3/4 at 1:00 pm.

**99 Brown Road – Gordon and Lynn Briggs.** I received a completed complaint form regarding unregistered vehicles and junk on the subject property. On 1/19, I inspected and took photographs. There were widespread blighted conditions (discarded items and debris) and five vehicles parked outside. Chain-link fence had been cut in a number of places, and fencing and outbuildings were in disrepair. A neighbor approached me and told me that Mr. Briggs had had a caretaker, but that Mr. Briggs and the caretaker had a falling out. The state police were involved. Mr. Briggs called me on 1/20 to explain that one vehicle belonged to the former caretaker and would be towed immediately. Mr. Briggs and his wife own the other four vehicles. Of these, the

Ford Taurus and Grand Cherokee are unregistered, according to Mr. Briggs. Mr. Briggs said he would register the Taurus in FL and nail the license plate to a neighbor, who will attach it to the car. Mr. Briggs was very upset about the mess made by the caretaker, who he said cut his fence, ruined his coops, burned his furniture, dug up his yard and stole many items from him. Mr. Briggs said that he would clean up the mess as soon as possible and report to me as soon as one of the two unregistered vehicles was registered.

According to CT MVD, three of the vehicles owned by Mr. Briggs are unregistered: the Ford Taurus, Grand Cherokee and the Ford Expedition (an SUV with a CT farm license plate). A Notice of Violation will be forthcoming.

**134 Mason Road – Jonathan Lisee.** I signed a renewal of the permit to sell pistols or revolvers at retail.

**Proposed modification of open space dedication for SD 20-002 – 3-lot Subdivision on Church Street.**

This proposal is in your packet. If you choose to amend the open space dedication, you may use the motion below: (Modify as appropriate)

Move to modify the approval of SD 20-002 to include a revised conservation deed restriction for Lot 19 and to amend the final recorded subdivision plans to reflect this change.

OR

Move to modify the approval of SD 20-002 to include a fee-in-lieu of open space in accordance with the requirements of CT General Statutes 8-25 and Brooklyn Subdivision Regulation Sec. 8. instead of a conservation deed restriction. An open space lien may be placed on the building lots to ensure that the fee-in-lieu of open space is paid at the time of sale.

**SD 21-001 – 4-lot Subdivision, Applicant: Square One Building Associates; 23 acres on the west side of Tripp Hollow Road (Map 7, Lot 12-1) in the RA Zone; Proposed creation of 4 residential building lots.**

- Regional Engineer and Conservation Commission comments included. Wetlands approval has been obtained.

**Sample motion**

Move to approve the Subdivision application of Square One Building Associates, identified in the files of the Brooklyn Land Use Office as SD 21-001, to create four residential lots and a shared driveway on 23 acres on the west side of Tripp Hollow Road, (Map 7, Lot 12-1) in the RA Zone in accordance with all final plans, documents and testimony submitted with the application and including the following conditions:

1. Prior to the endorsement by the Commission of the Final Subdivision Plan(s) for filing in the office of the Town Clerk:

- a. The Health Department approval, the Inland Wetlands and Watercourses Commission approval with conditions and the Planning and Zoning Commission approval with conditions must be included on the final recorded subdivision plans. Draft final approved plans shall be submitted to town staff for review prior to printing on archival material. The final approved plans bearing the seal and signature of the appropriate professionals, signed by Commission Chairs, and shall be recorded in the office of the Town Clerk.
  - b. A Shared Driveway and Maintenance Agreement for the shared driveway in a form acceptable to the Town Attorney shall be filed simultaneously with the recording of the subdivision mylars in the office of the Town Clerk.
  - c. A Conservation Deed Restriction for the conservation area comprising 5.58 acres on Lot 12-1 in a form acceptable to the Town Attorney shall be filed simultaneously with the recording of the subdivision mylars in the office of the Town Clerk.
  - d. All boundary pins and monuments shall be set and field verified by the surveyor.
2. Prior to the issuance of a Zoning Permit on any lot:
    - a. The developer shall notify the Zoning Enforcement Office and Town Planner at least seven days in advance of any site work to schedule a pre-construction meeting.
    - b. Driveway permits must be obtained from the Road Foreman in accordance with the adopted policy concerning driveways.
    - c. The applicant and/or individual lot developers shall minimize impacts to natural features both on private lots and in the Town of Brooklyn r.o.w. to the greatest extent possible. This shall include but is not limited to the preservation of stonewalls, the protection of mature trees lining any public road, and the minimization of clearing and grading.
    - d. No stonewalls, mature trees, or ledge within the r.o.w. shall be removed or modified unless necessary for safety. The responsibility of clearing, grubbing, blasting, and earthmoving within the Town of Brooklyn r.o.w. shall be the responsibility of the individual lot developer.

- e. Any cutting of trees greater than 30” d.b.h. for sightlines shall require prior approval by the Town of Brooklyn Tree Warden upon finding that the removal of trees is unavoidable to guarantee adequate driveway sightlines.
3. Stonewalls must be finished on the edges prior to the issuance of a Certificate of Zoning Compliance on any lot containing a stone wall.

**ZC 21-001 – Zone Boundary Change from R-30 to RA; Robert Perry, Location: 202 South Street, Three acres at the intersection of South Street and Fortin Drive (Map 40, Lot 13).**

**Sample Motion**

Move to schedule a public hearing for ZC 21-001 – A proposal to change the zoning designation for 202 South Street (Assessor’s Map 40, Lot 13) from R-30 to RA for the regular meeting of the Planning and Zoning Commission to be held on March 3, 2021 at 6:30 p.m. via Webex meeting.