Brooklyn Inland Wetlands Commission Regular Meeting Agenda Tuesday, June 9, 2020 Clifford B. Green Memorial Center 69 South Main Street 6:00 p.m.

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# To join this meeting via the web or phone, follow the below instructions:

Web <u>www.webex.com</u> On the top right, click Join Enter meeting information: 715450584 Enter meeting password: TrEEs2536 Click join meeting

Phone Dial 1-408-418-9388 Enter meeting number 715450584 You can bypass attendee number by pressing #

Call to Order:

Roll Call:

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Seating of Alternates:

Public Commentary:

Additions to Agenda:

**Approval of Minutes:** 

1. Regular Meeting Minutes March 10, 2020.

# **Continued Public Hearing:**

## Public Hearings:

1. 021120B Vachon Brooklyn, LLC, 512 Providence Road, Map 41, Lot 13A/14, PC Zone; Construction of (2) 16 ft. wide access driveways to access proposed new vehicle storage lots. Drive to the larger of the two proposed parking areas will be in an area historically used for an agricultural crossing. (public hearing suspended due to COVID 19)

## **Old Business:**

1. 021120B Vachon Brooklyn, LLC, 512 Providence Road, Map 41, Lot 13A/14, PC Zone; Construction of (2) 16 ft. wide access driveways to access proposed new vehicle storage lots. Drive to the larger of the two proposed parking areas will be in an area historically used for an agricultural crossing. (public hearing suspended due to COVID 19)

2.. 121019A Hearing for violation at 260 Woodward Road, Owner Richard and Sandra Duval. Cease and Desist order on 12/2/19 for site work consisting of excavating material from the channel of Sandy Brook, excavating material from an existing ford in Sandy Brook, and depositing excavated material on the bank of Sandy Brook, in the upland review area and/or wetlands.

3. 031020A Darko Krsulic/Owner, Evan Sigfridson/Applicant 293 Hartford Rd, Map 16, Lot 39, RA Zone; Demolish remainder of collapsed coop, dig and pour frost walls for proposed 24 x 32 ft accessory building.

4.. 031020B Jeffrey Weaver, Day Street, Map 43, Lot 6, RA/R30 Zone; 6 lot subdivision, work in upland review area, septic system, driveway, residential house, well, minor grading.

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## **New Business:**

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1. Ernest Robiliard, 509 Hartford Road, Agricultural exemption for two new barns near pond.

2. 051220A Patrick Riley, 211 Windham Road, Map 8, Lot 6-3, RA Zone; Construction of single-family dwelling, driveway, well, septic system, grading, tree clearing within 85 feet of a wetland.

3. DR20-002 Grant Hill Road, Map 4, Lot 4 Timber Harvest, Michael Sokolowsky/Owner, Donald Dubois/Forester

## **Communications:**

1. Budget Update.

2. Wetlands Agent Monthly Report.

**Public Commentary:** 

Adjourn:

Jeffrey Arends, Chairman

# ADDITIONS TO THE AGENDA 6/9/20

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Applications to be added under new business as #4, 5, 6

4) 060920A Paul R. Lehto, Allen Hill Road, Map 32, Lot 148 RA Zone; Excavation of sand and gravel

5) 060920B VBL Properties, LLC Beecher Road, Map 22, Lot 38, RA Zone; 5-Lot Subdivision

6) 060920C A. Kausch & Sons, Tripp Hollow Road, Map 15, Lot 4, RA Zone; 2 lot subdivision; single family homes, driveways, septic, well and minor grading.

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# INLAND WETLANDS & WATERCOURSES COMMISSION TOWN OF BROOKLYN, CONECTICUT

Application # 060920A

# **APPLICATION -- INLAND WETLANDS & WATERCOURSES**

APPLICANT Paul R. Lehto	MAILING	ADDRESS 40 Alma	da Drive, Brooklyn, CT 06234
APPLICANT'S INTEREST IN PROPERTY OWNER	PHONE 860-	208-9789	da Drive, Brooklyn, CT 06234 EMAIL <u>nzeh100@qmail.co</u> m
PROPERTY OWNER IF DIFFERENT Mailing Address		······	PHONEEMAIL
Engineer/Surveyor (if any) Provost & Rovero, Attorney (if any)	Inc., P.O. Box 191	I, Plainfield, CT 0	6374
PROPERTY LOCATION/ADDRESS Allen Hill Road MAP # 32 LOT # 148 ZONE RA TO	OTAL ACRES	ACRES OF WE	TLANDS ON PROPERTY
PURPOSE AND DESCRIPTION OF THE ACTIVITY Exce	vation of sand and	gravel.	
	····		
FILL PROPOSED       0       CUBIC YDS       0       Sd         EXCAVATION PROPOSED       0       CUBIC YDS       LOCATION WHERE MATERIAL WILL BE PLACED: ON         LOCATION WHERE MATERIAL WILL BE PLACED:       O       TOTAL REGULATED AREA ALTERED: SQ FT       0         EXPLAIN ALTERNATIVES CONSIDERED (REQUIRED):       0       CUBIC YDS       CUBIC YDS	0 SQ.FTC ISITEC ACRES_0		
MITIGATION MEASURES (IF REQUIRED): WETLAND	S/WATERCOURSES	created: CY_0	SQFT0ACRES0
IS PARCEL LOCATED WITHIN 500FT OF AN ADJOININ IS THE ACTIVITY LOCATED WITHIN THE WATERSHED			
	D ENFORCEMENT OF T	HE IWWC REGULAT	ND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE CIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION
			WWC DECISION AND RESULT IN ENFORCEMENT ACTION. $E = \frac{5}{20} \frac{202}{202}^{3}$ $E = \frac{5}{20} \frac{202}{202}^{3}$
OWNER: (Yew )	ehro	DAT	E_5/20/2020

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# INLAND WETLANDS & WATERCOURSES COMMISSION TOWN OF BROOKLYN, CONECTICUT

Date 0/4/20

Application # 060920B

# **APPLICATION -- INLAND WETLANDS & WATERCOURSES**

APPLICANT_VBLPROPERTY_DWDCRPHONE_860-823-9597EMAIL
PROPERTY OWNER IF DIFFERENTPHONEPHONEPHONE
ENGINEER/SURVEYOR (IF ANY) Paul Archer (Archer Surveying)
PROPERTY LOCATION/ADDRESS BEECHER ROad MAP # 22 LOT # 38 ZONE RA TOTAL ACRES 14.17 ACRES OF WETLANDS ON PROPERTY 2:77 ACRES ACRES PURPOSE AND DESCRIPTION OF THE ACTIVITY 5 LOT SUBDIVISION - SCACE FAMILY HEATES, DREWENARS, WELL, SEPTE & MILLION
- SI-16CE FAMILY HEATS DOWNING WELL SAFTLY & MIL
- GAADINIG
Excavation ProposedCubic YdsSQ FT         Location where material will be placed: On SiteOFF Site         Total Regulated Area Altered: SQ FTAcres         Explain Alternatives considered (required):
MITIGATION MEASURES (IF REQUIRED): WETLANDS/WATERCOURSES CREATED: CY SQFT ACRES
Is parcel located within 500ft of an adjoining Town? $ND_{}$ If yes, which Town(s) Is the activity located within the watershed of a water company as defined in CT General Statutes 25-32a? _ND
THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.
NOTE: DETERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE INVIC DECISION AND RESULT IN ENFORCEMENT ACTION.
OWNER: BEAD DATE 105 20

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# INLAND WETLANDS & WATERCOURSES COMMISSION TOWN OF BROOKLYN, CONECTICUT

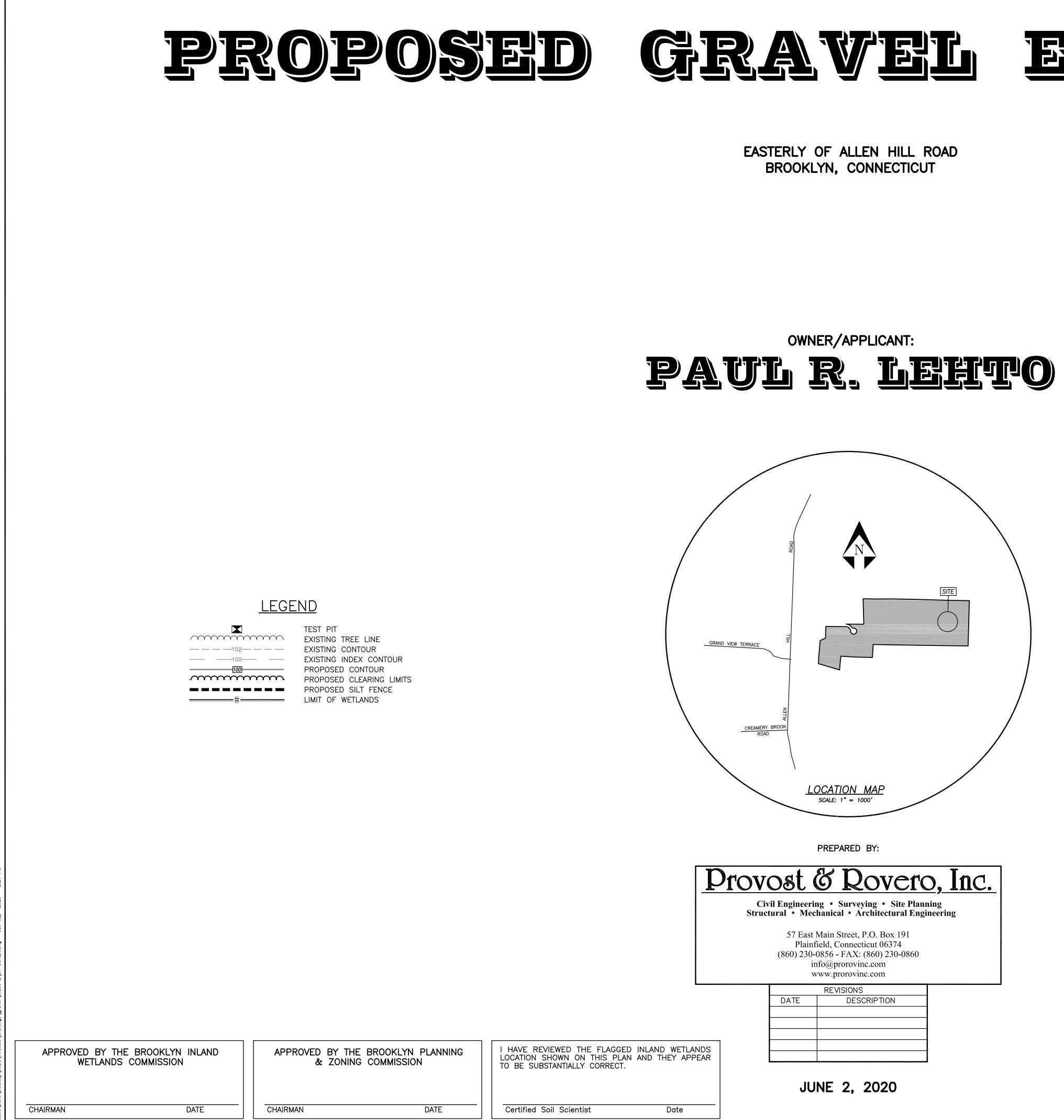
Date <u>642</u>0

Application # 060920C

# **APPLICATION --- INLAND WETLANDS & WATERCOURSES**

APPLICANTA.Kausch & Sons Mailing address 35 Suzanne (ane .Brooklyn CT Applicant's Interest in Property OWNCR Phone 200-230-7928 EMAIL
PROPERTY OWNER IF DIFFERENTPHONE
MAILING ADDRESSEMAIL
ENGINEER/SURVEYOR (IF ANY) Paul Archer (Archer Surveying)
PROPERTY LOCATION/ADDRESS TRipp Hollow Rd MAP # 15 LOT # 4 ZONE RA TOTAL ACRES 4.08 ACRES OF WETLANDS ON PROPERTY 92,106 / 2.11 ACRES
PURPOSE AND DESCRIPTION OF THE ACTIVITY 2 LOT SUBCIVISION -SINGLE FAMILY HOMES, DRUGUMYS, SOFTIC, WELL & M. YOU
-Smight FAMILY HOMES, DAWENNYS, SOME, WELL & Minor
GRADIYC
EXCAVATION PROPOSED CUBIC YDS SQ_FT LOCATION WHERE MATERIAL WILL BE PLACED: ON SITE OFF SITE TOTAL REGULATED AREA ALTERED: SQ_FT ACRES EXPLAIN ALTERNATIVES CONSIDERED (REQUIRED):
MITIGATION MEASURES (IF REQUIRED): WETLANDS/WATERCOURSES CREATED: CY SQFT ACRES IS PARCEL LOCATED WITHIN 500FT OF AN ADJOINING TOWN? <u>ND</u> IF YES, WHICH TOWN(S) IS THE ACTIVITY LOCATED WITHIN THE WATERSHED OF A WATER COMPANY AS DEFINED IN CT GENERAL STATUTES 25-32A? <u>ND</u>
THE OWNER AND APPLICANT HEREBY GRANT THE BROOKLYN IWWC, THE BOARD OF SELECTMAN AND THEIR AUTHORIZED AGENTS PERMISSION TO ENTER THE SUBJECT PROPERTY FOR THE PURPOSE OF INSPECTION AND ENFORCEMENT OF THE IWWC REGULATIONS OF THE TOWN OF BROOKLYN. IF THE COMMISSION DETERMINES THAT OUTSIDE REVIEW IS REQUIRED, APPLICANT WILL PAY CONSULTING FEE.
NOTE: DETERMINATION THAT THE INFORMATION PROVIDED IS INACCURATE MAY INVALIDATE THE IWWC DECISION AND RESULT IN ENFORCEMENT ACTION.
- APPLICANT: DATE $\frac{(0/3/20)}{20}$ , OWNER: DATE $\frac{(0/3/20)}{20}$

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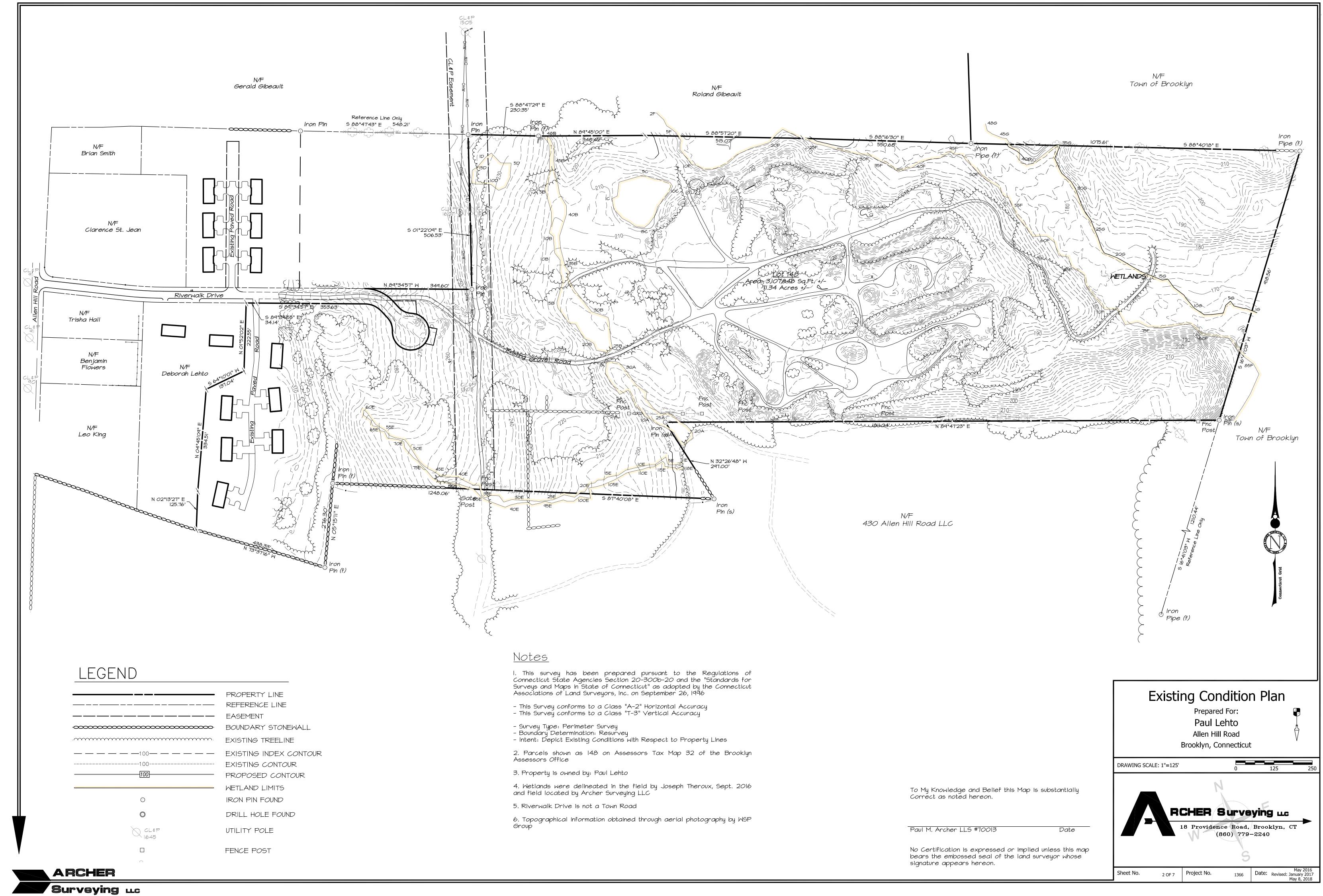
# INDEX TO DRAWINGS

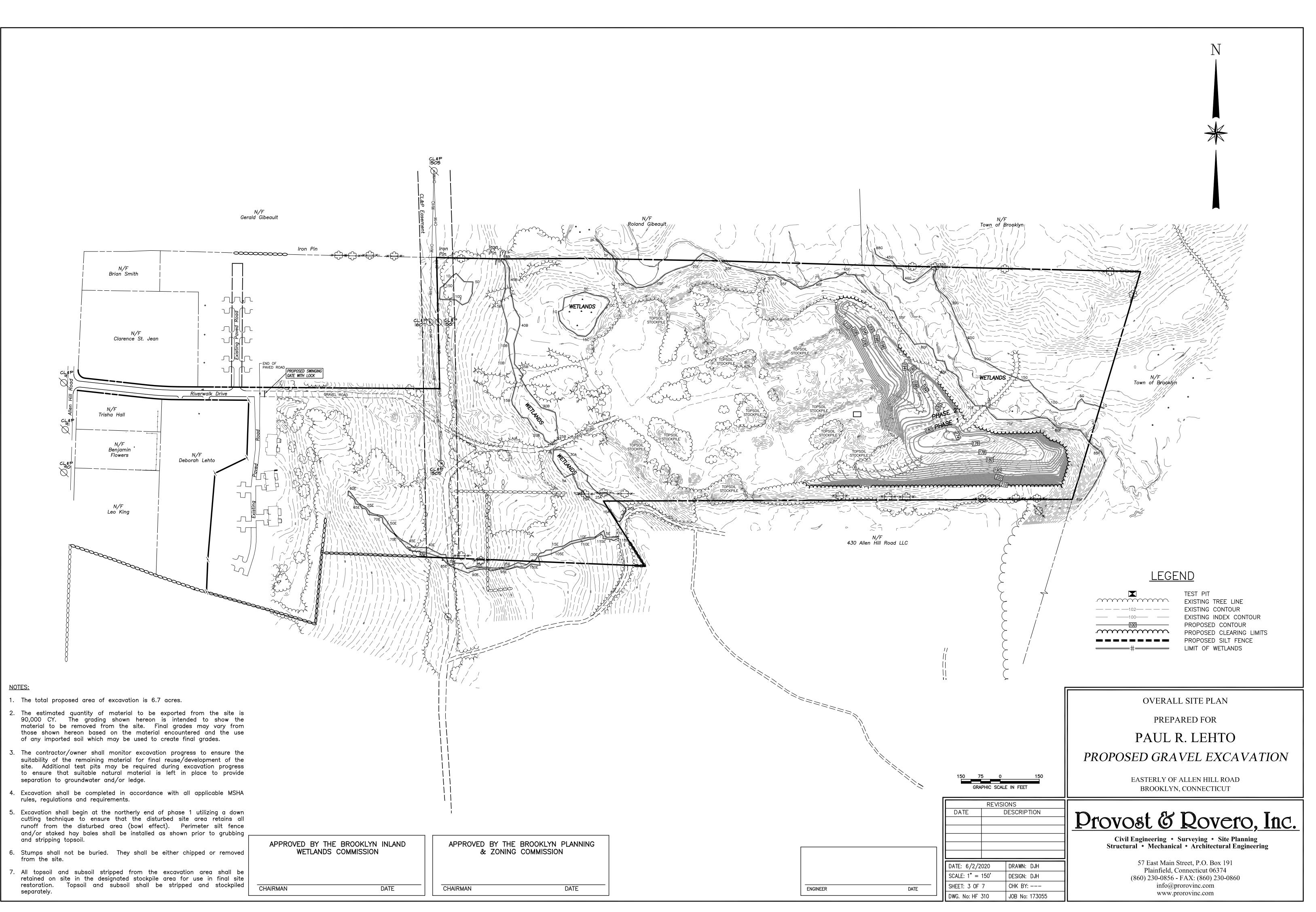
TITLE	SHEET No.
COVER SHEET	1 OF 7
EXISTING CONDITIONS PLAN	2 OF 7
OVERALL SITE PLAN	3 OF 7
PROPOSED EXCAVATION PLAN	4 OF 7
DETAIL SHEET	5 OF 7
SITE REUSE PLAN	6 OF 7
SITE RADIUS PLAN	7 OF 7

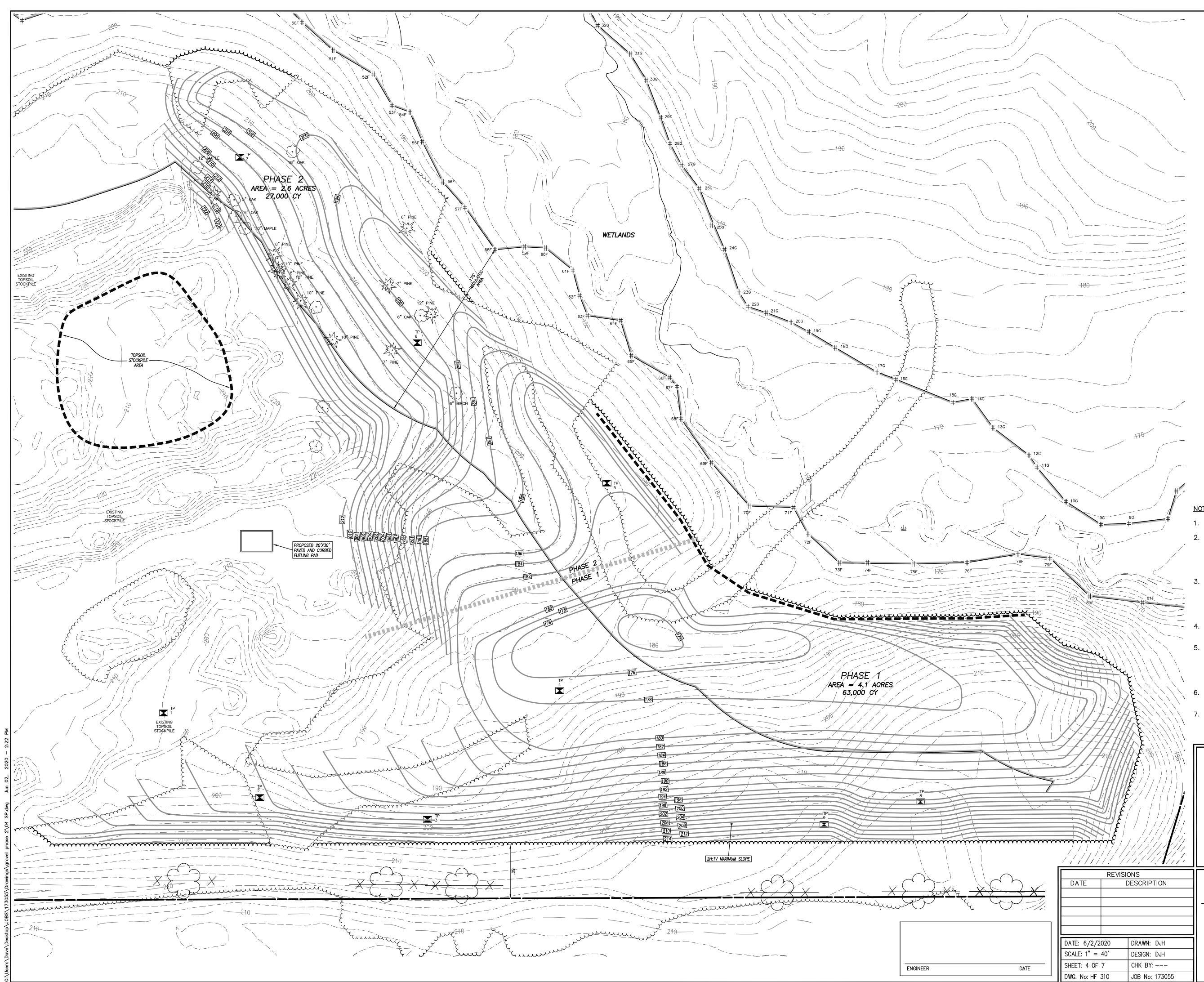
ENGINEER

DATE

SHEET 1 OF 7 JOB NO: 173055 DWG NO: HF 310







	40 20 0 40 GRAPHIC SCALE IN FEET
CHAIRMAN	DATE
APPROVED BY THE & ZONING	BROOKLYN PLANNING COMMISSION
CHAIRMAN	DATE
LEGE	ND
	TEST PIT EXISTING TREE LINE EXISTING CONTOUR EXISTING INDEX CONTOUR PROPOSED CONTOUR

# NOTES:

- 1. The total proposed area of excavation is 6.7 acres.
- 2. The estimated quantity of material to be exported from the site is 90,000 CY. The grading shown hereon is intended to show the material to be removed from the site. Final grades may vary from those shown hereon based on the material encountered and the use of any imported soil which may be used to create final grades.
- 3. The contractor/owner shall monitor excavation progress to ensure the suitability of the remaining material for final reuse/development of the site. Additional test pits may be required during excavation progress to ensure that suitable natural material is left in place to provide separation to groundwater and/or ledge.
- 4. Excavation shall be completed in accordance with all applicable MSHA rules, regulations and requirements.
- 5. Excavation shall begin at the northerly end of phase 1 utilizing a down cutting technique to ensure that the disturbed site area retains all runoff from the disturbed area (bowl effect). Perimeter silt fence and/or staked hay bales shall be installed as shown prior to grubbing and stripping topsoil.
- 6. Stumps shall not be buried. They shall be either chipped or removed from the site.
- All topsoil and subsoil stripped from the excavation area shall be retained on site in the designated stockpile area for use in final site restoration. Topsoil and subsoil shall be stripped and stockpiled separately.

PROPOSED EXCAVATION PLAN

# PREPARED FOR

# PAUL R. LEHTO

PROPOSED GRAVEL EXCAVATION

EASTERLY OF ALLEN HILL ROAD BROOKLYN, CONNECTICUT

# Provost & Rovero, Inc.

Civil Engineering • Surveying • Site Planning Structural • Mechanical • Architectural Engineering

> 57 East Main Street, P.O. Box 191 Plainfield, Connecticut 06374 (860) 230-0856 - FAX: (860) 230-0860 info@prorovinc.com www.prorovinc.com

EROSION AND SEDIMENT CONTROL PLAN:

# REFERENCE IS MADE TO:

- 1. Connecticut Guidelines for Soil Erosion and Sediment Control 2002 (2002 Guidelines).
- 2. Soil Survey of Connecticut. N.R.C.S.
- SILT FENCE INSTALLATION AND MAINTENANCE:
- 1. Dig a 6" deep trench on the uphill side of the barrier location.
- 2. Position the posts on the downhill side of the barrier and drive the posts 1.5 feet into the around.
- 3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
- 4. Inspect and repair barrier after heavy rainfall.
- 5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
- 6. Sediment deposits are to be removed when they reach a height of 1 foot behind the barrier or half the height of the barrier and are to be deposited in an area which is not regulated by the inland wetlands commission.
- 7. Replace or repair the fence within 24 hours of observed failure. Failure of the fence has occurred when sediment fails to be retained by the fence because: - the fence has been overtopped, undercut or bypassed by runoff water.
- the fence has been moved out of position (knocked over), or
- the geotextile has decomposed or been damaged.

# HAY BALE INSTALLATION AND MAINTENANCE:

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

# TEMPORARY VEGETATIVE COVER:

# SEED SELECTION

Grass species shall be appropriate for the season and site conditions. Appropriate species are outlined in Figure TS-2 in the 2002 Guidelines.

# TIMING CONSIDERATIONS

Seed with a temporary seed mixture within 7 days after the suspension of grading work in disturbed areas where the suspension of work is expected to be more than 30 days but less than 1 vear.

# SITE PREPARATION

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

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

# SEEDBED PREPARATION

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

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

# SEEDING

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

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

# MAINTENANCE

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

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

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

Refer to Permanent Seeding Measure in the 2002 Guidelines for specific applications and details related to the installation and maintenance of a permanent vegetative cover. In general, the following sequence of operations shall apply:

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

# EROSION AND SEDIMENT CONTROL NARRATIVE:

# PRINCIPLES OF EROSION AND SEDIMENT CONTROL

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

# KEEP LAND DISTURBANCE TO A MINIMUM

The more land that is in vegetative cover, the more surface water will infiltrate into the soil, thus minimizing stormwater runoff and potential erosion. Keeping land disturbance to a minimum not only involves minimizing the extent of exposure at any one time, but also the duration of exposure. Phasing, sequencing and construction scheduling are interrelated. Phasing divides a large project into distinct sections where construction work over a specific area occurs over distinct periods of time and each phase is not dependent upon a subsequent

phase in order to be functional. A sequence is the order in which c to occur during any particular phase. A sequence should be develo first things first" and "last things last" with proper attention given adequate erosion and sediment control measures. A construction sche time lines applied to it and should address the potential overlap of which may be in conflict with each other.

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

# SLOW THE FLOW

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

- Use diversions, stone dikes, silt fences and similar measures to dissipate storm water energy.
- Avoid diverting one drainage system into another without calculo downstream flooding or erosion.

# KEEP CLEAN RUNOFE SEPARATED

Clean runoff should be kept separated from sediment laden water and over disturbed areas without additional controls. Additionally, preven off-site generated runoff with sediment laden runoff generated on-si filtration of on-site waters has occurred.

- Segregate construction waters from clean water.
- Divert site runoff to keep it isolated from wetlands, watercourses flow through or near the development until the sediment in that detained.
- REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROL

While it may seem less complicated to collect all waters to one treatment and just install a perimeter control, it can be more eff controls to many small sub-drainage basins within the site. By refrom within the site, the chance of perimeter control failure and the po that it can cause is reduced. It is generally more expensive to correct it is to install proper internal controls.

- Control erosion and sedimentation in the smallest drainage area po control erosion than to contend with sediment after it has been deposited in unwanted areas.
- Direct runoff from small disturbed areas to adjoining undisturbed veg the potential for concentrated flows and increase settlement and filter
- Concentrated runoff from development should be safely conveyed to rapped channels, waterways, diversions, storm drains or similar measure
- Determine the need for sediment basins. Sediment basins o developments where major grading is planned and where it is impo control erosion at the source. Sediment basins are needed on larc sensitive areas such as wetlands, watercourses, and streets would I sediment deposition. Do not locate sediment basins in wetla intermittent watercourses. Sediment basins should be located to inter entry into the wetland or watercourse.
- Grade and landscape around buildings and septic systems to divert w

# EXCAVATION NOTES:

- . No blasting is anticipated for completion of the work shown. If owner is responsible for obtaining all necessary permits.
- There are no anticipated sales of excavated materials to the public
- 3. Bulk storage of fuel and lubricants for excavation equipment is n fueling and lubrication of equipment shall be completed on the fu shall be equipped with a spill kit and any spills shall be clea equipment service work which is likely to result in the release of take place on site.
- 4. The emergency contact for operations at this site is Paul Lehto (86
- The allowable hours of operation for excavation shall be 7:00 A through Friday and 7:00 AM to 12:00 noon on Saturday. No ope on Sundays, Christmas, New Years Day, Memorial Day, Fourth o Thanksaiving except by special permission of the Brooklyn Planning
- 6. The owner and/or site operator shall provide adequate dust control nuisance. The preferred dust control measure is the application travel areas. The application of calcium chloride may also be used
- 7. The owner/operator shall install any necessary barricades or barriers to provide protection around the perimeter of open excavation faces and steep slopes.
- 8. Excavation operations shall be completed in accordance with all appropriate Mine Safety & Health Administration (MSHA) rules and regulations.
- 9. There is to be no on-site processing of excavated materials.
- 10. The estimated total number of truck trip ends entering or exiting the site is 11,200 during the excavation duration. The estimated daily average number of truck trip ends entering or exiting the site is 60 during the excavation duration. The estimated maximum number of daily truck trip ends entering or exiting the site is 80.
- 11. The site operator is responsible for determining the most appropriate means and methods for excavating material. In general, excavation shall begin with stripping and stockpiling of topsoil and subsoil which will be utilized for site restoration. Topsoil (A horizon) and subsoil (B horizon) shall be stockpiled separately. Removal of material should be accomplished with a downcutting technique to ensure complete internal drainage at all times.
- 12. All trucks leaving the site shall have the loads covered.
- 13. Prior to the start of excavation work, two elevation bench marks shall be installed on the perimeter of the work area for monitoring purposes. Benchmarks shall be maintained or replaced as necessary as the work progresses.
- 14. It is anticipated that all excavation work will be completed with the use of one (1) wheel loader (Cat 980 or equivalent), one (1) 50 ton excavator (Cat 349 or equivalent). and triaxle dump trucks (16± CY capacity). Additional equipment may be utilized for final site restoration.

# RESTORATION NOTES:

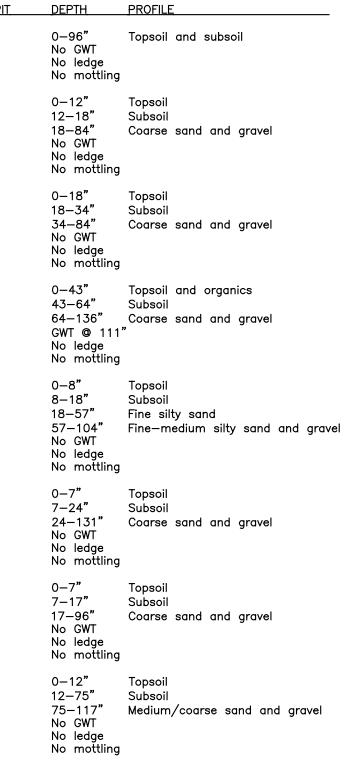
- The restoration requirements described below will be applicable to the 6.7 acre permitted area.
- Restoration of disturbed areas shall take place following the completion of excavation in the respective phase. The respective phase shall have subsoil and topsoil spread and be seeded and mulched no later than the end of the growing season for the calendar year following completion of excavation operations. Mulching and seeding shall be completed in accordance with the recommendations of the New York State Revegetation Procedures Manual for Surface Mining Reclamation. Sufficient restoration bonding should be maintained as required by the Town to cover the restoration cost for the permitted excavation area. The sediment/infiltration basin in the lowest part of the site shall not be restored with topsoil and vegetation until the completion of excavation in phase 2.
- Final restoration shall begin with establishing the required subgrade elevations. Proposed grades shown are approximate and may be adjusted to match field conditions at the time of restoration. In general, all disturbed slopes shall be graded to a 30% maximum

onstruction activities are ped on the premise of an to the inclusion of dule is a sequence with actions in a sequence a construction equipment ed vegetation. d at any one time are Clear only those areas are operational as soon before outletting storm completed as soon as num by absorbing and hereases as the volume runoff increases during he removal of existing of impervious surfaces. b break flow lines and ating the potential for	3. 4. 5. 6. 7. 8. 9.	Complete re minimum th stockpiles n topsoil as r Spread seed permanent of which is sui <u>Variety</u> Switchgras Big Blueste Little Bluest Sand Love Bird's-foot Hay or stro establishmer be allowable Fertilizer an based on lo Restoration minimum of In lieu of	estoration by s nickness of 6' nay be supple necessary to p d for a perm vegetative cov itable for use s (Blackwell, 3 em (Niagra, k stem (Blaze, A grass (NE-27 t Trefoil (Emp aw mulch sha t of permane s. d lime shall l boratory soil cover vegetat 24 months p the manual of	Aldous, Camper) , Bend) ire, Viking) III be utilized on ent vegetative cove testing results. tion shall be mai prior to the release application of mu
ating the potential for		planted with	hydroseeding	methods with a
should not be directed at the mixing of clean	]	TEST PIT OBS	SERVATIONS -	AUGUST 7, 2017
ite until after adequate	]	TEST PIT	DEPTH	PROFILE
and drainage ways that t runoff is trapped or	1	I	0–96" No GWT No ledge No mottling	Topsoil and subs
S point of discharge for	2	2	0-12" 12-18" 18-84" No GWT	Topsoil Subsoil Coarse sand and
ective to apply internal ducing sediment loading otential off—site damage ot off—site damage than ossible. It is easier to carried downstream and		3	No ledge No mottling 0–18" 18–34" 34–84" No GWT No ledge No mottling	Topsoil Subsoil Coarse sand and
getated areas to reduce ring of sediments. stable outlets using rip ures.	2	4	0–43" 43–64" 64–136" GWT @ 111 No ledge No mottling	Topsoil and orga Subsoil Coarse sand and "
are required on larger possible or impractical to ge and small sites when be impacted by off—site ands or permanent or prcept runoff prior to its	ţ	5	0-8" 8-18" 18-57" 57-104" No GWT No ledge No mottling	Topsoil Subsoil Fine silty sand Fine—medium silt
vater away from them.	e	5	0–7" 7–24" 24–131" No GWT No ledge No mottling	Topsoil Subsoil Coarse sand and
blasting is required, the from the subject site.	7	7	0-7" 7-17" 17-96"	Topsoil Subsoil Coarse sand and
ot allowed on site. All Jeling pad. Fuel trucks aned immediately. No fuel or lubricants shall	٤	3	No GWT No ledge No mottling 0–12"	Topsoil
60) 208—9789. M to 6:00 PM, Monday erations shall be allowed			12–75" 75–117" No GWT No ledge No mottling	Subsoil Medium/coarse s
to prevent any off-site of water to vehicular	ç	Э	0–10" 10–20" 20–138"	Topsoil Subsoil Coarse sand & o
I.				

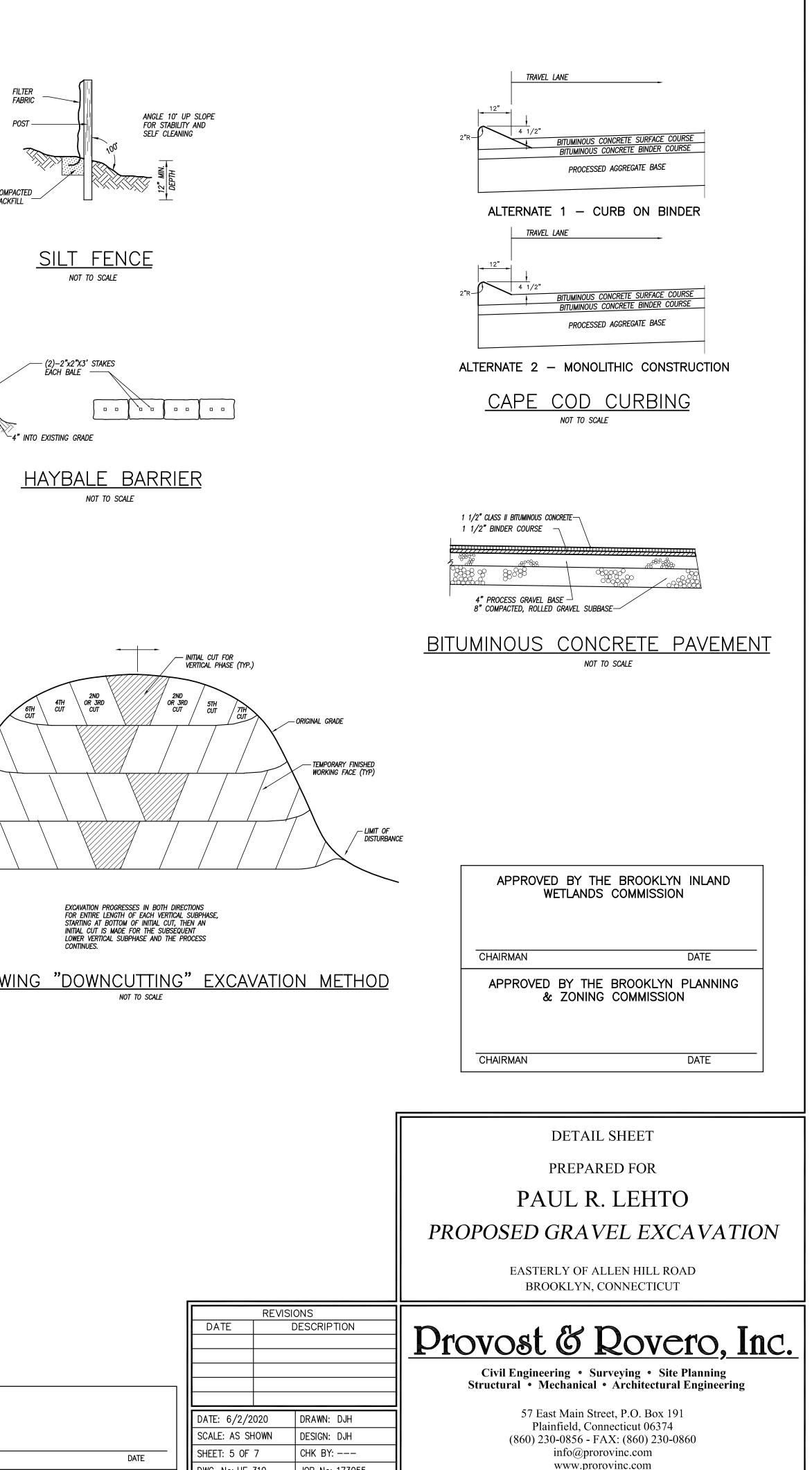
- spreading subsoil (B horizon) material to a uniform depth.
- ing on-site stockpiled topsoil (A horizon) to an approximate seeding for a permanent vegetative cover. On-site topsoil with composted organic matter, wood chips and imported a suitable planting medium.
- vegetative cover over the prepared restoration area. The be a suitable wildlife habitat mix or the following mixture locations:

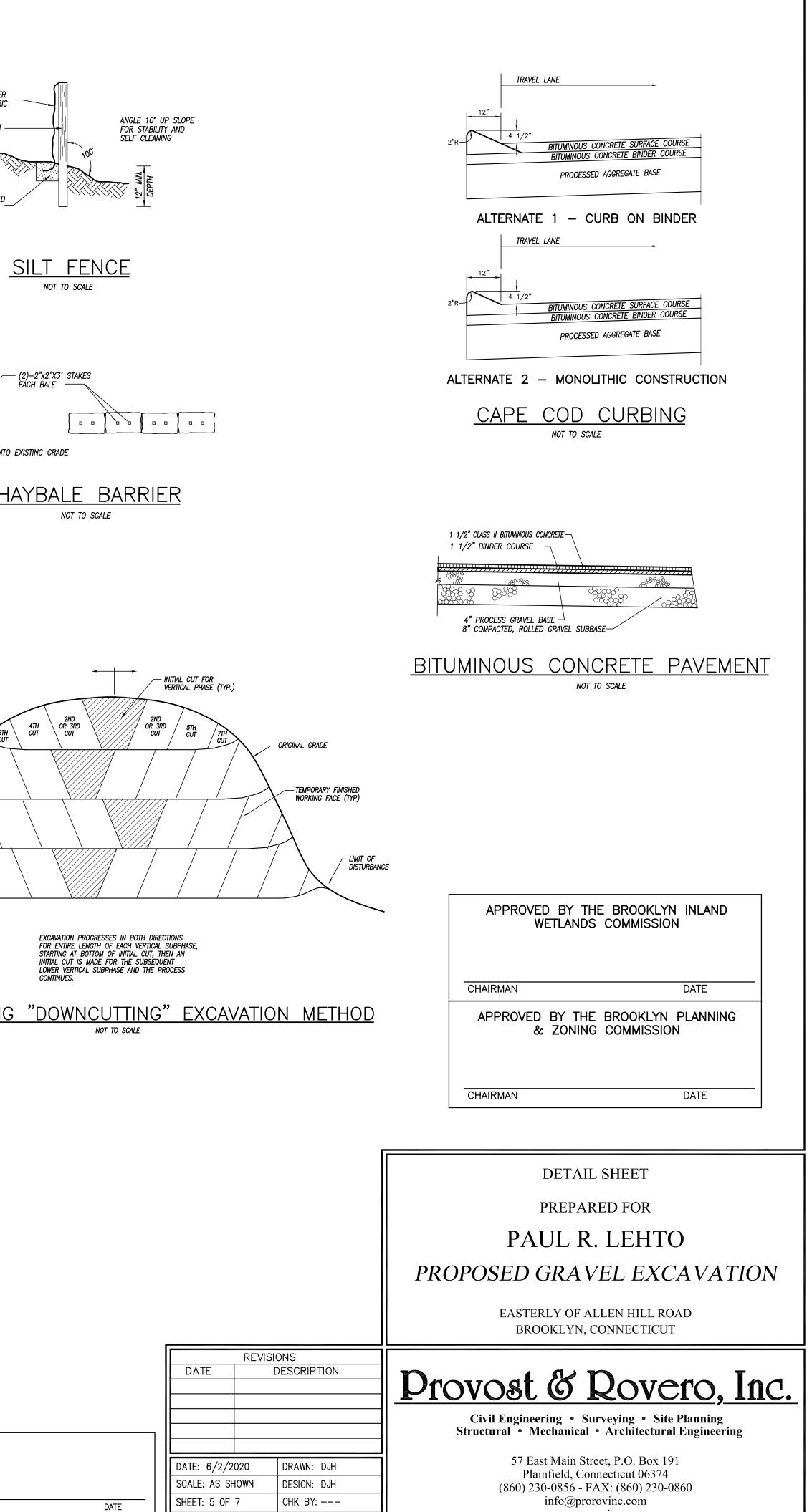
Variety	Lbs/Acre
Switchgrass (Blackwell, Shelter, Cave-in-rock)	4.0
Big Bluestem (Niagra, Kaw)	4.0
Little Bluestem (Blaze, Aldous, Camper)	2.0
Sand Lovegrass (NE-27, Bend)	1.5
Bird's-foot Trefoil (Empire, Viking)	2.0
· · · · · · · · · · · · · · · · · · ·	TOTAL 13.5

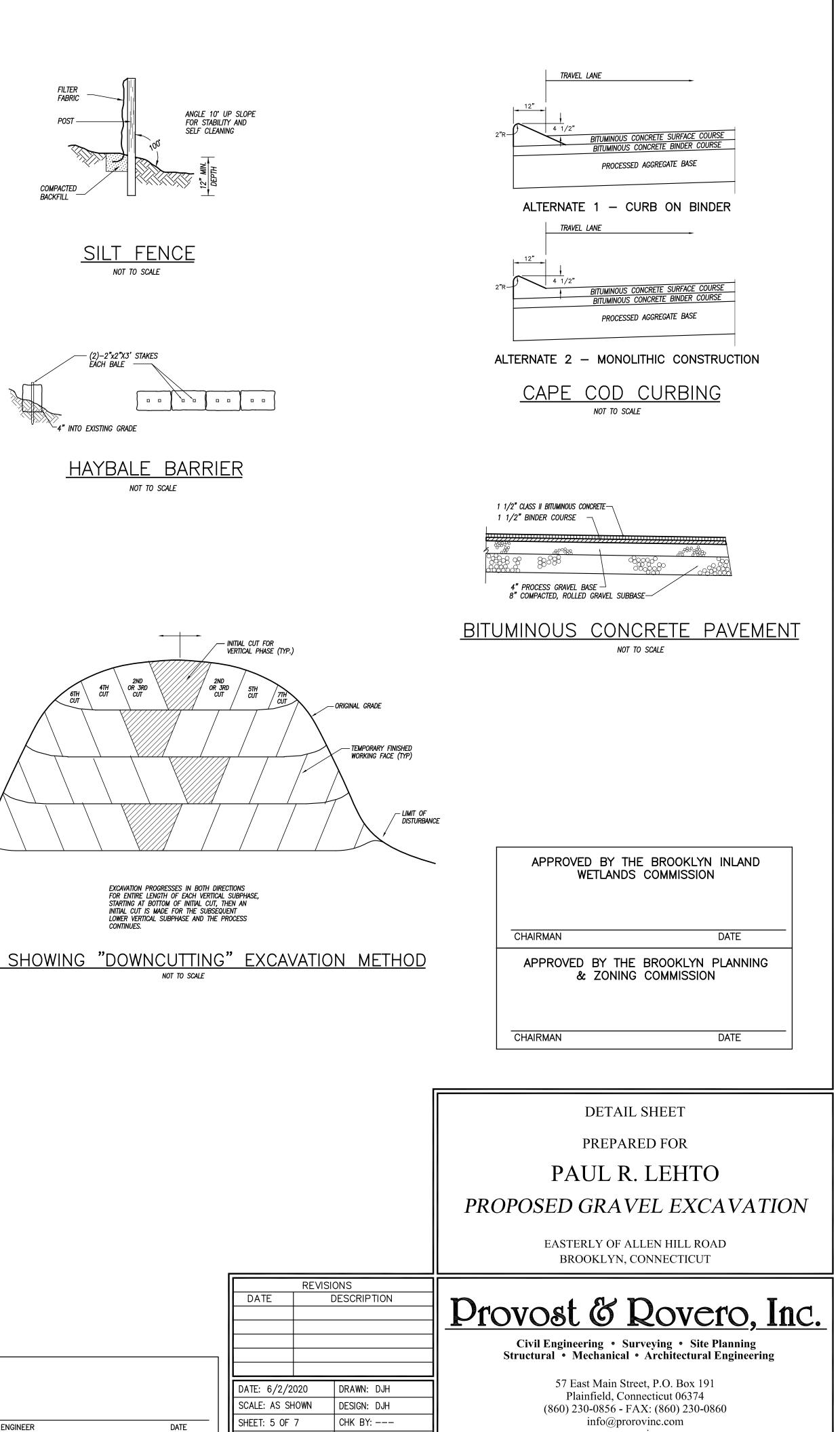
- utilized on slopes to provide temporary stabilization during etative cover. In general, no slopes greater than 2H:1V will
- vided as required to establish a permanent vegetative cover results all be maintained by the permit holder or applicant for a
- the release of any restoration bonding. tion of mulch and fertilizer, the restoration area may be ods with a suitable tackifier, mulch and fertilizer mix.

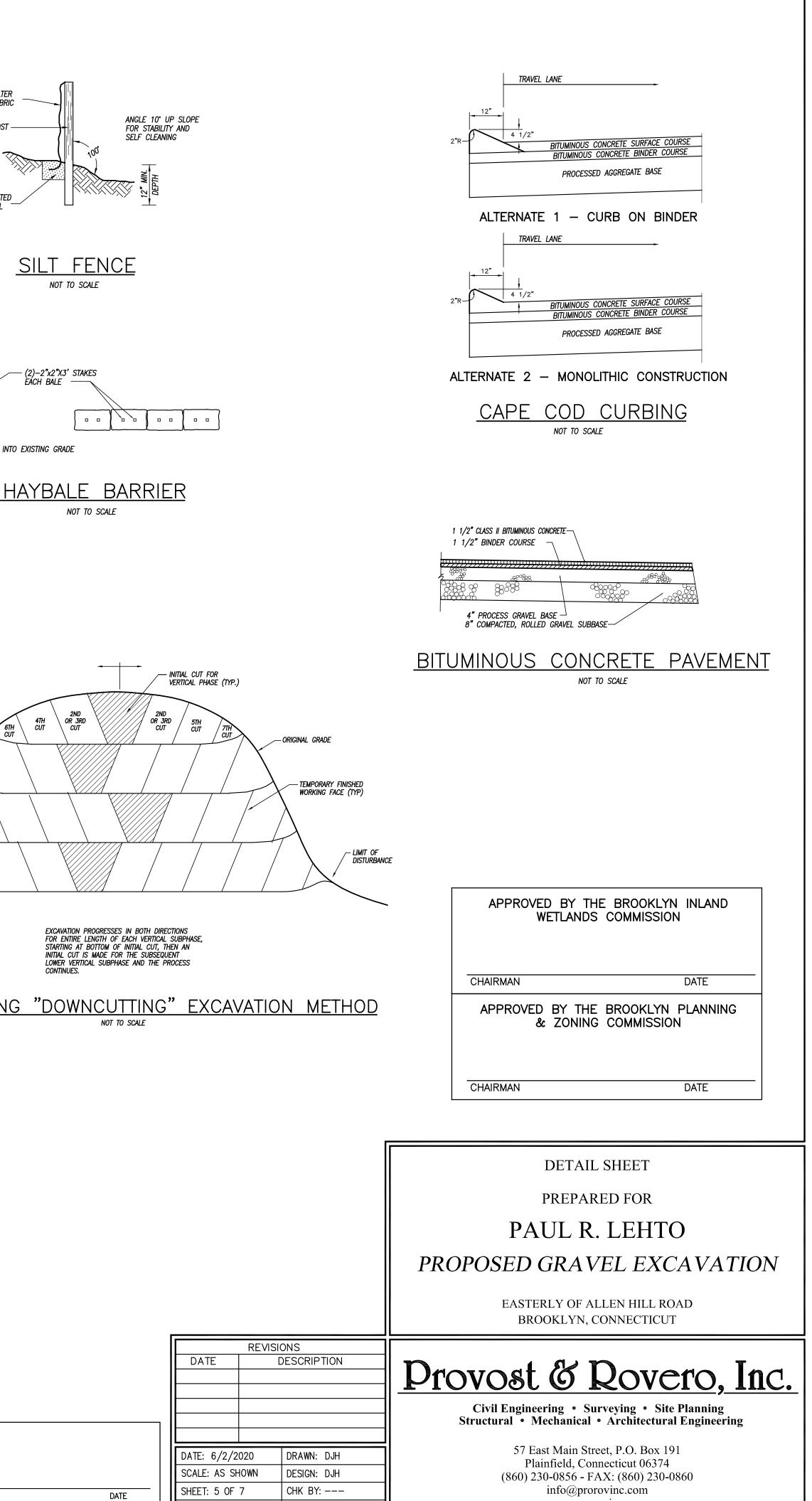


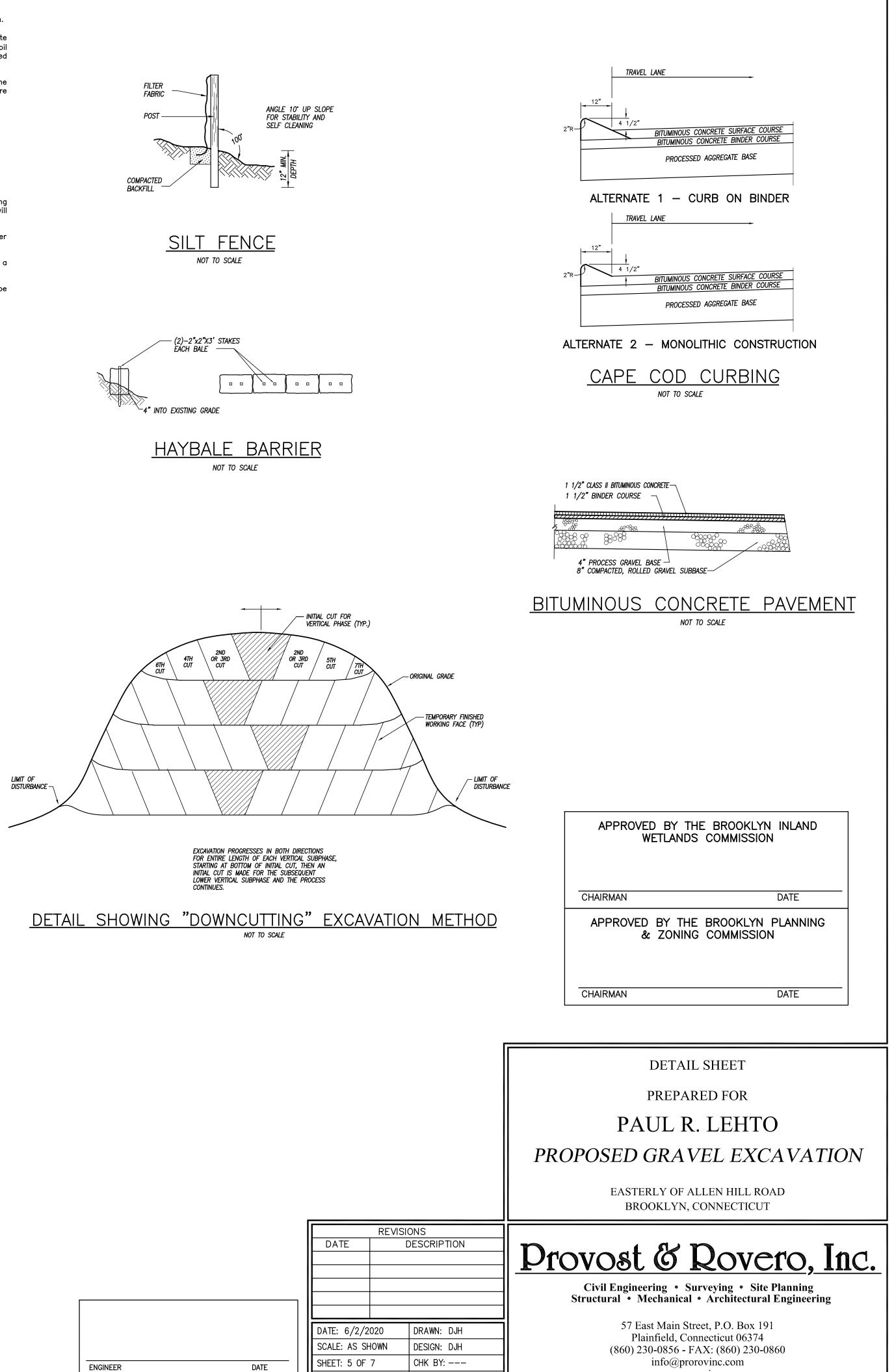
sand & gravel









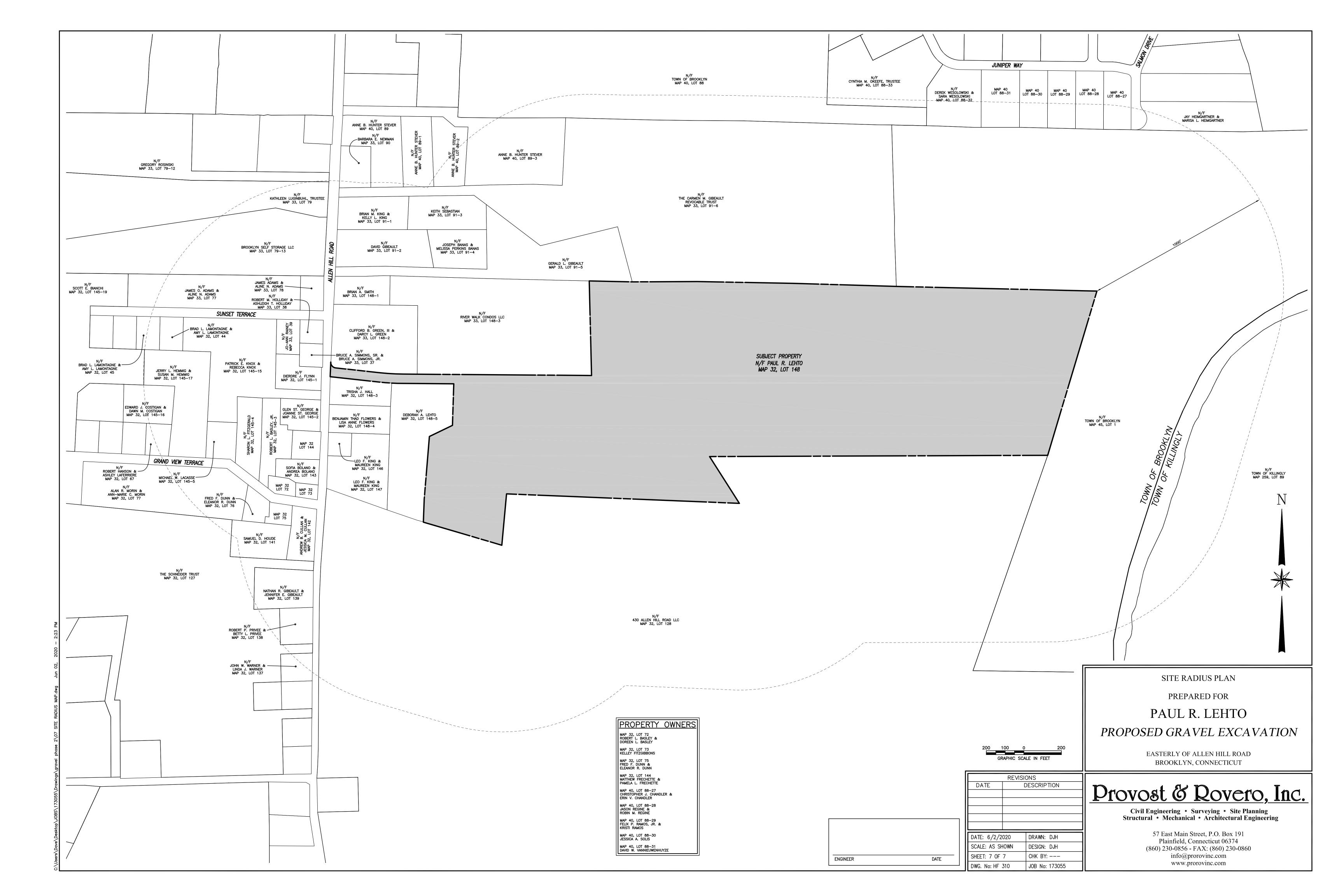


JOB No: 173055

DWG. No: HF 310



	N X X
OPEN SPACE           J.J.BOT AC.           (1,653,854 S.F.)	
	SITE REUSE PLAN CONCEPTUAL CONSERVATION SUBDIVISION PREPARED FOR
150 75 0 150 GRAPHIC SCALE IN FEET	PAUL R. LEHTO PROPOSED GRAVEL EXCAVATION EASTERLY OF ALLEN HILL ROAD
DATE DATE DESCRIPTION DATE DESCRIPTION DATE DATE: 6/2/2020 DRAWN: DJH SCALE: 1" = 150' DESIGN: DJH SHEET: 6 OF 7 CHK BY: DWG. No: HF 310 JOB No: 173055	BROOKLYN, CONNECTICUT Drovost & Dovero, Inc. Civil Engineering • Surveying • Site Planning Structural • Mechanical • Architectural Engineering 57 East Main Street, P.O. Box 191 Plainfield, Connecticut 06374 (860) 230-0856 - FAX: (860) 230-0860 info@prorovinc.com www.prorovinc.com



# SUBDIVISION APPLICATION **PROPOSED 5 LOT SUBDIVISION** PREPARED FOR

# APPROVED BY THE BROOKLYN INLAND WETLANDS COMMISSION

CHAIRMANDATEExpiration date per section 22A-42A of the ConnecticutGeneral Statutes.Date:

APPROVED BY THE BROOKLYN PLANNING AND ZONING COMMISSION

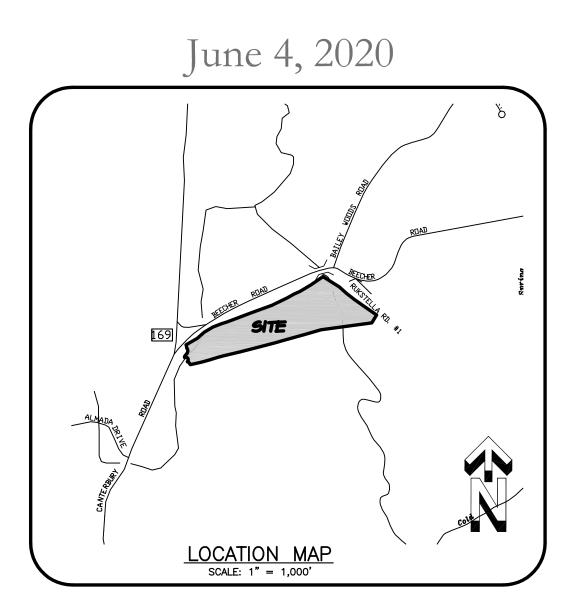
CHAIRMANDATEExpiration date per section 8.26C of the ConnecticutGeneral Statutes.Date:

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.

Certified Soil Scientist

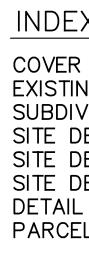
# **VBL Properties LLC**

Beecher Road Brooklyn, Connecticut



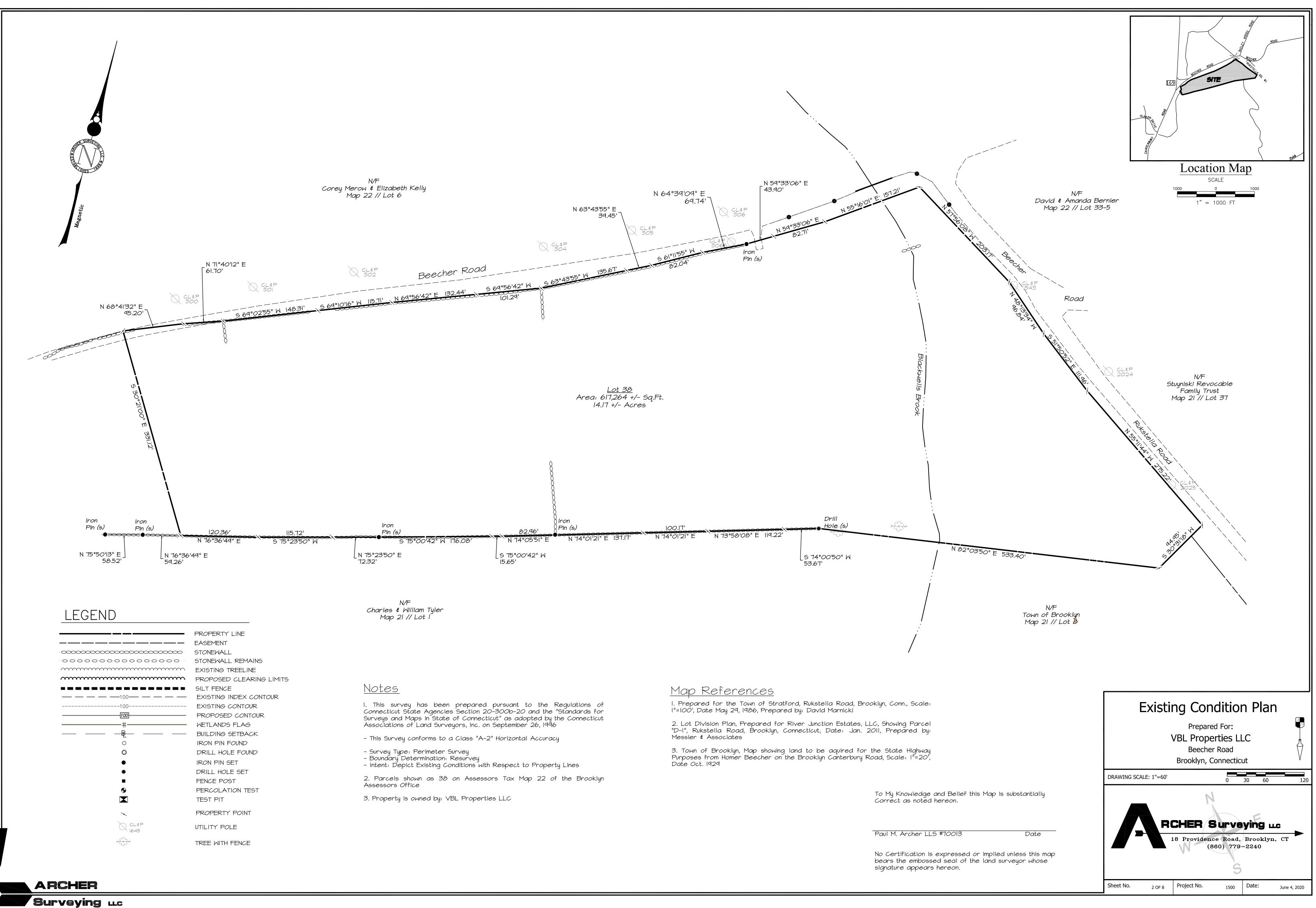
PREPARED BY





INDEX OF DRAWINGS

SHEET	SHEET	1	OF	8
NG CONDITION PLAN	SHEET	2	OF	8
VISION PLAN	SHEET	3	OF	8
EVELOPMENT PLAN #1	SHEET	4	OF	8
EVELOPMENT PLAN #2	SHEET	5	OF	8
EVELOPMENT PLAN $#2$	SHEET	6	OF	8
SHEET	SHEET	7	OF	8
L HISTORY PLAN	SHEET	8	OF	8



# **CONCEPT SEPTIC SYSTEM DESIGN**

LOT 38-2 PRIMARY LEACHING AREA 3 BEDROOM RESIDENCE PERCOLATION RATE: 13 MIN./INCH (NDDH FILE #18000188) 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 = 27" SLOPE = 5.1% HYDRAULIC FACTOR (HF) = 30FLOW FACTOR (FF) = 1.5PERCOLATION FACTOR (PF) = 1.25 (10.1 TO 20.0 MIN./INCH) MLSS REQUIRED:  $30 \times 1.5 \times 1.25 = 56.25 \text{ LF}$ 

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

<u>RESERVE LEACHING AREA</u> USE SAME AS PRIMARY SYSTEM

# LOT 38-3 PRIMARY LEACHING AREA 3 BEDROOM RESIDENCE PERCOLATION RATE: 14 MIN./INCH (NDDH FILE #18000188) 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 = 21" SLOPE = 3.3%HYDRAULIC FACTOR (HF) = 48FLOW FACTOR (FF) = 1.5PERCOLATION FACTOR (PF) = 1.25 (10.1 TO 20.0 MIN./INCH) MLSS REQUIRED: $48 \times 1.5 \times 1.25 = 90$ LF PROPOSED SYSTEM USE 3 ROWS OF 90 LF LEACHING AREA PROVIDED = 810 SF

<u>RESERVE LEACHING AREA</u> USE SAME AS PRIMARY SYSTEM

# LOT 38-4 PRIMARY LEACHING AREA 3 BEDROOM RESIDENCE

PERCOLATION RATE: 10 MIN./INCH (NDDH FILE #18000188) 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 = 23" SLOPE = 10.2%HYDRAULIC FACTOR (HF) = 26FLOW FACTOR (FF) = 1.5PERCOLATION FACTOR (PF) = 1.00 (UP TO 10.0 MIN./INCH) MLSS REQUIRED:  $26 \times 1.5 \times 1.00 = 39$ \_LF PROPOSED SYSTEM USE 3 ROWS OF 60 LF

LEACHING AREA PROVIDED = 540 SF

RESERVE LEACHING AREA USE SAME AS PRIMARY SYSTEM

# 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:

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 FOLLOWIG CRITERIA:

SIEVE SIZE #4 #10 #40 #100 #200	PERCENT PASSING WET SIEVE 100 70-100 10-50* 0-20 0-5	DRY SIEVE 100 70-100 10-75 0-5 0-2 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

CLA

- 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.

PERCOLATION DATA PERC # 2A - DEPTH 31"			PERCOLATION DATA PERC # 3A - DEPTH 29"		PERCOLATION DATA PERC # 4A - DEPTH 26"	
TIME	READING (INCHES)	TIME	TIME READING (INCHES)		READING (INCHES)	
9:33 9:49 10:19 10:39	6.75 10.0 13.0 14.5	9:35 9:56 10:11 10:46	5.75 10.0 14.5 17.0	10:23 10:48 10:58 11:08	3.0 9.5 11.0 12.0	
PERCOLATION RATE > 13.3 MIN./IN.		PERCOLATION	PERCOLATION RATE > 14 MIN./IN.		PERCOLATION RATE > 10 MIN./IN.	
NOTES: PERCOLATION TEST PERFORMED ON 5/17/2018 PERFORMED BY Terre Bombard		ON 5/17/2018	NOTES: PERCOLATION TEST PERFORMED ON 5/17/2018 PERFORMED BY Terre Bombard		N TEST PERFORMED 8 BY Terre Bombard	

# DEEP TP DATA / SOIL DESCRIPTIONS

PERFORMED BY: Terre Bombard

WITNESSED BY: Northeast District Department of Health

'P: 2A	
1"-30" 30"-40" 40"-69"	TOPSOIL Very Fine Sandy Loam Medium Sand Compact Gray Loamy Sand/Mottled
MOTTLE	S: 40"

NO

NO

NO

NO

GROUNDWATER:

LEDGE:

ROOTS:

RESTRICTIVE:

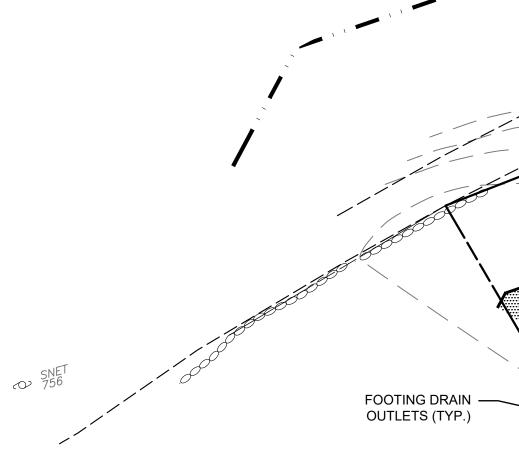
TP: 2B	
0"-14" TOPSOIL	
14"-32" Fine Loamy Sand	
32"-75" Gray very Fi /Mottled	ne Loamy Sand
MOTTLES:	27"
GROUNDWATER:	NO
LEDGE:	NO
ROOTS:	NO
RESTRICTIVE:	NO

DATE: March 20, 201

TP: 3A	ТР: 3В
0"-7" TOPSOIL 7"-21" Very fine Sandy Loam 21"-38" Gray Compact Very Fine Sandy Loam 38"-73" Hardpan	0"-8" TOPSOIL 8"-30" Fine Loamy Sand 30"-45" Gray Medium Sand 30"-45" Hardpan
MOTTLES: 21"	MOTTLES: 45"
GROUNDWATER: NO	GROUNDWATER: NO
LEDGE: NO	LEDGE: NO
ROOTS: NO	ROOTS: NO
RESTRICTIVE: NO	RESTRICTIVE: NO

TP: 4A	
0"-8" TOPSOIL 8"-37" Fine Sandy Lo 37"-60" Gray Compac	
MOTTLES:	NO
GROUNDWATER:	NO
LEDGE:	NO
ROOTS:	NO
RESTRICTIVE:	37"

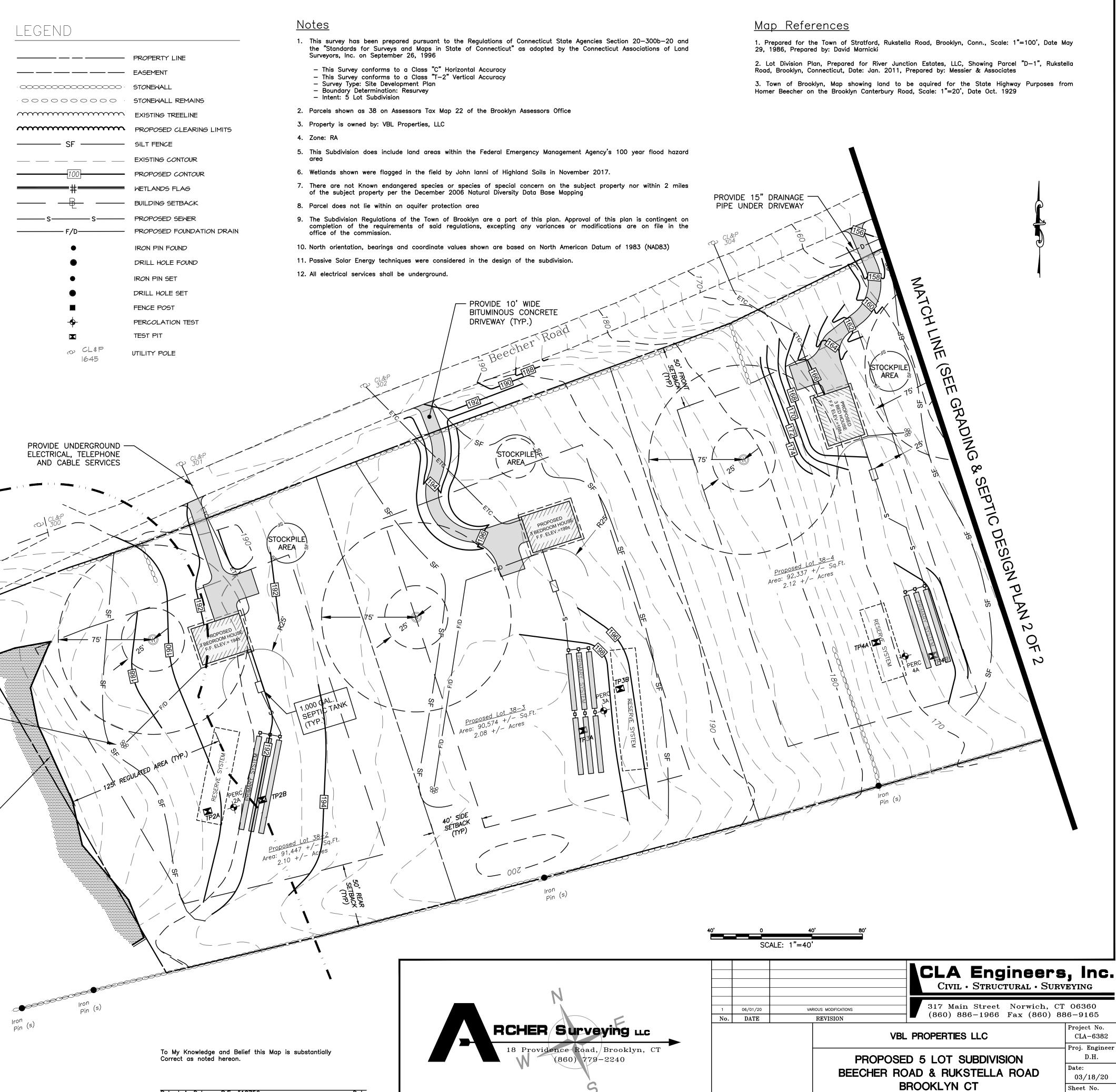
RESTRICTIVE:	NO
TP: 4B	
0"-8" TOPSOIL 8"-23" Loamy Sand 23"-37" Gray very Fi 37"-66" Gray Compa Sand/Coarse	ne Loamy Sand ct Very Fine
MOTTLES:	37"
GROUNDWATER:	64"
LEDGE:	NO
ROOTS:	NO
RESTRICTIVE:	NO



LIMITS (TYP.)

INLAND WETLAND -

Existing Lot 38-1



Robert A. DeLuca, P.E. #18756

Date

GRADING & SEPTIC DESIGN PLAN 1 OF 2

# <u>Notes</u>

- 1. 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 "C" Horizontal Accuracy
   This Survey conforms to a Class "T-2" Vertical Accuracy
- Survey Type: Site Development Plan
   Boundary Determination: Resurvey
- Intent: 5 Lot Subdivision
- 2. Parcels shown as 38 on Assessors Tax Map 22 of the Brooklyn Assessors Office
- 3. Property is owned by: VBL Properties, LLC
- 4. Zone: RA
- 5. This Subdivision does include land areas within the Federal Emergency Management Agency's 100 year flood hazard area
- 6. Wetlands shown were flagged in the field by John lanni of Highland Soils in November 2017. 7. 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
- 8. Parcel does not lie within an aquifer protection area
- 9. 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.
- 10. North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD83)

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- 11. Passive Solar Energy techniques were considered in the design of the subdivision.
- 12. All electrical services shall be underground.

50'x20' ANTI-TRACKING PAD ----(SEE DETAIL)

> PROVIDE 15" DRAINAGE PIPE UNDER DRIVEWAY

> > Beecher

 $\mathcal{O}$ 

STOCKPILE AREA

# **CONCEPT SEPTIC SYSTEM DESIGN**

LOT 38-5 PRIMARY LEACHING AREA 3 BEDROOM RESIDENCE

PERCOLATION RATE: 7 MIN./INCH (NDDH FILE #18000188) LEACHING AREA REQUIRED: 495<u>SF</u>

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 = 28" SLOPE = 6.1%HYDRAULIC FACTOR (HF) = 28

FLOW FACTOR (FF) = 1.5PERCOLATION FACTOR (PF) = 1.00 (UP TO 10.0 MIN./INCH) MLSS REQUIRED:  $28 \times 1.5 \times 1.00 = \underline{42 \text{ LF}}$ 

<u>PROPOSED\_SYSTEM</u> USE 3 ROWS OF 55 LF LEACHING AREA PROVIDED = <u>495 SF</u>

<u>RESERVE LEACHING AREA</u> USE SAME AS PRIMARY SYSTEM

CLA

# Map References

1. Prepared for the Town of Stratford, Rukstella Road, Brooklyn, Conn., Scale: 1"=100', Date May 29, 1986, Prepared by: David Marnicki

2. Lot Division Plan, Prepared for River Junction Estates, LLC, Showing Parcel "D—1", Rukstella Road, Brooklyn, Connecticut, Date: Jan. 2011, Prepared by: Messier & Associates

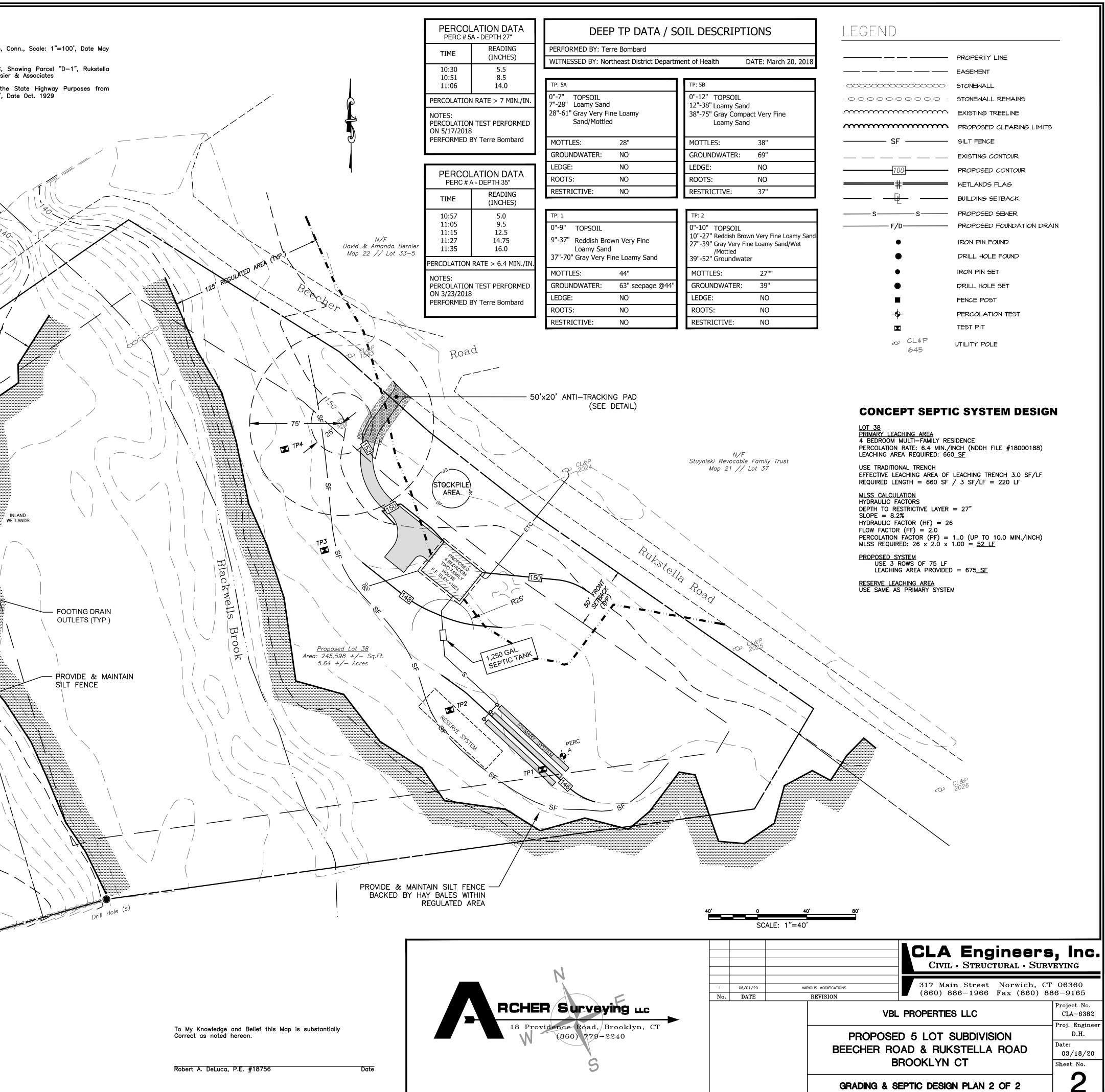
3. Town of Brooklyn, Map showing land to be aquired for the State Highway Purposes from Homer Beecher on the Brooklyn Canterbury Road, Scale: 1"=20', Date Oct. 1929

THERE

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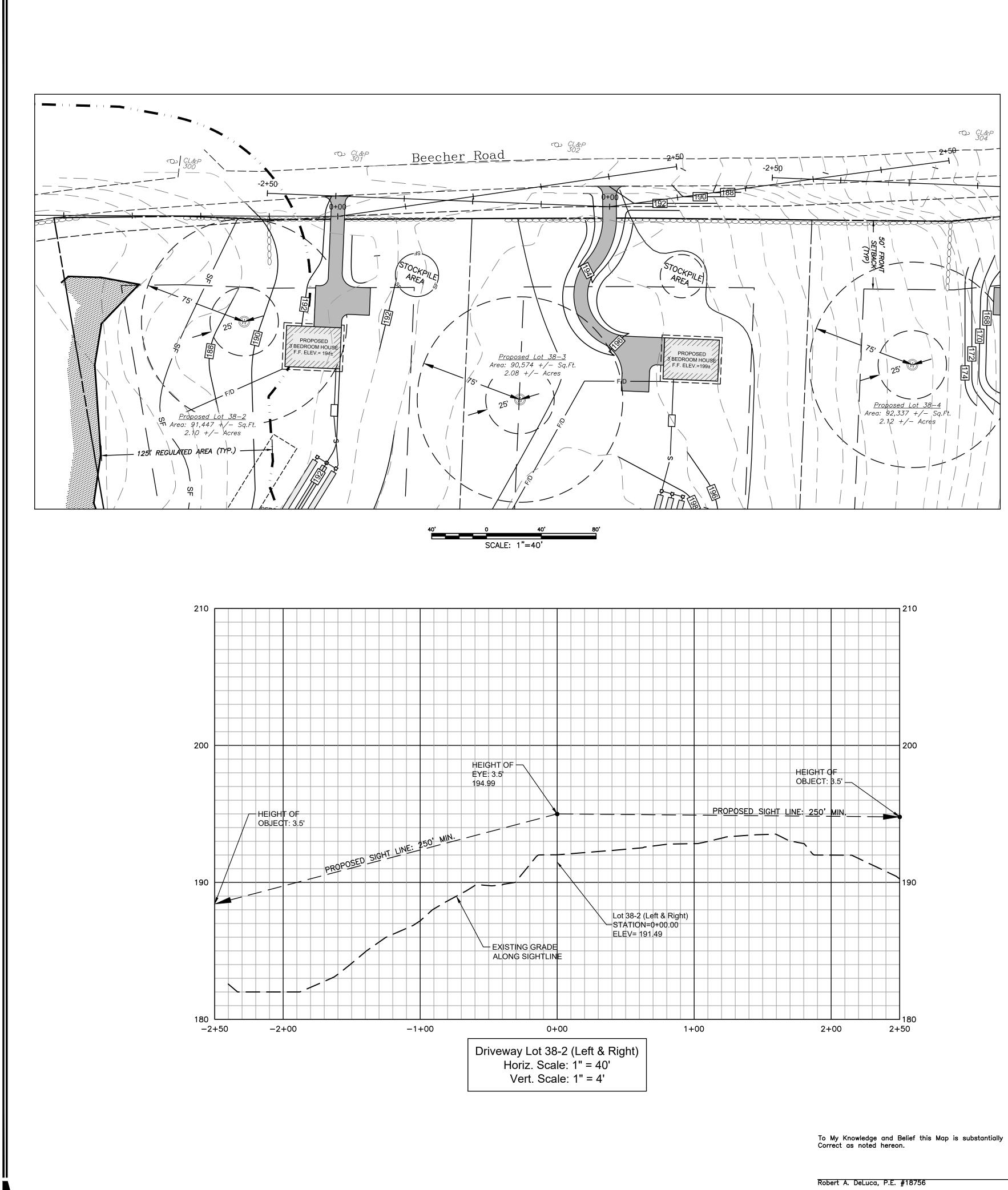
40' SIDE SETBACK (TYP)



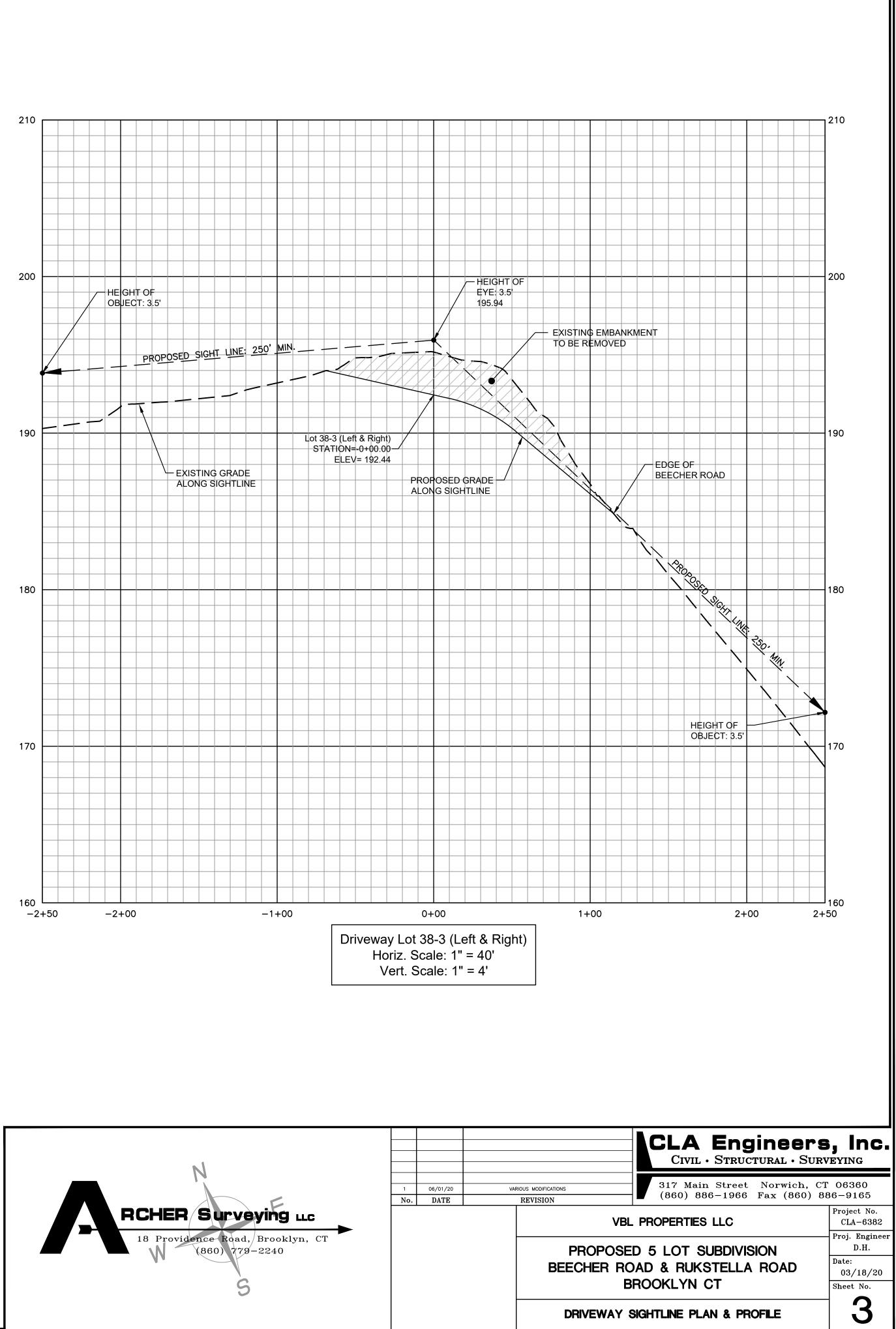
theast District Departm	nent of Health	DATE: March 20, 2018		
	TP: 5B			
ne Loamy d	0"-12" TOPSOI 12"-38" Loamy S 38"-75" Gray Co Loamy S	Sand mpact Very Fine		
28"	MOTTLES:	38"		
NO	GROUNDWATER	k: 69"		
NO	LEDGE:	NO		
NO	ROOTS:	NO		
NO	RESTRICTIVE:	37"		

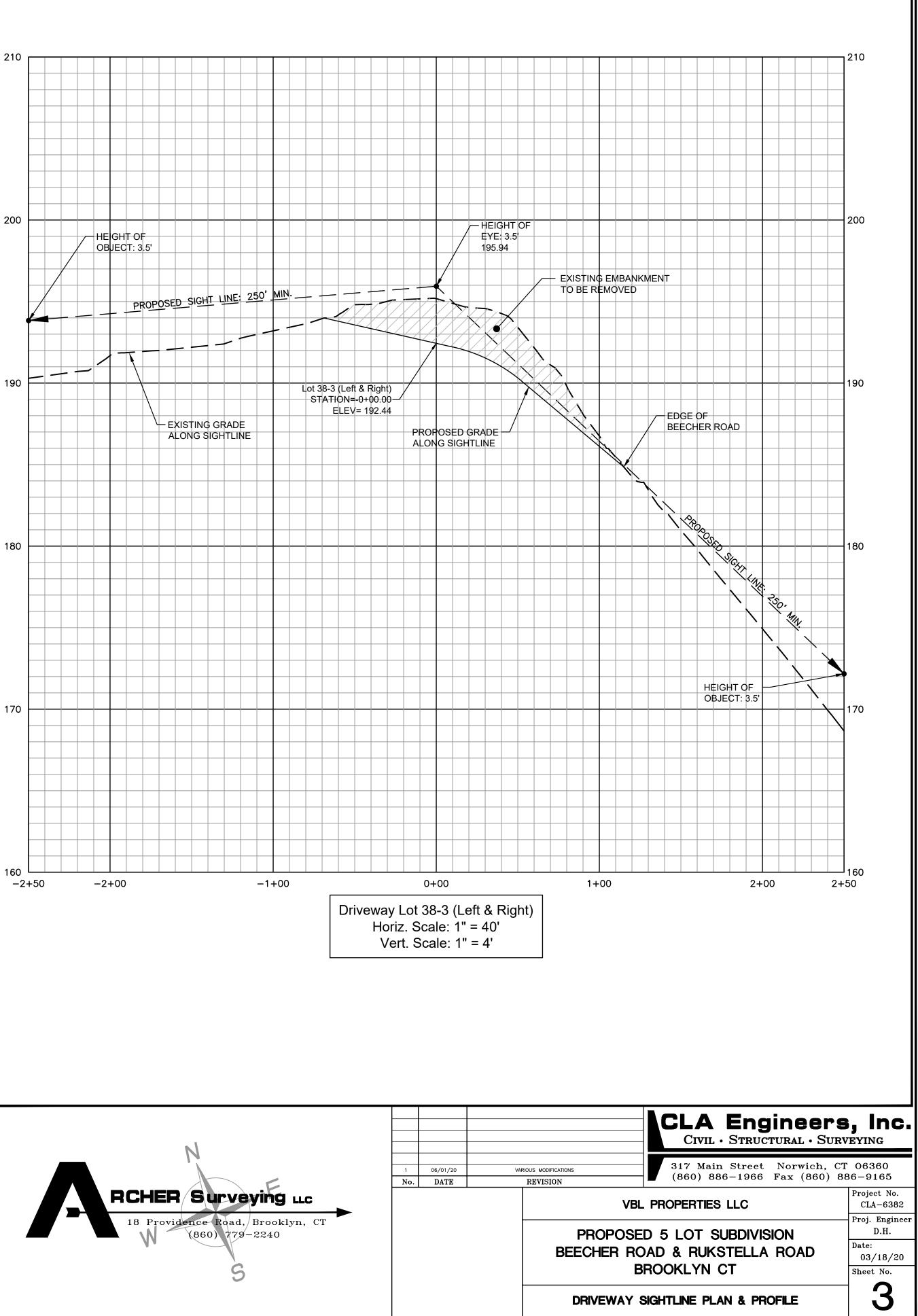
TP: 2		
0"-10" TOPSOIL 10"-27" Reddish Brown Very Fine Loamy S 27"-39" Gray Very Fine Loamy Sand/Wet /Mottled 39"-52" Groundwater		
MOTTLES:	27""	
GROUNDWATER:	39"	
LEDGE:	NO	
ROOTS:	NO	
RESTRICTIVE:	NO	

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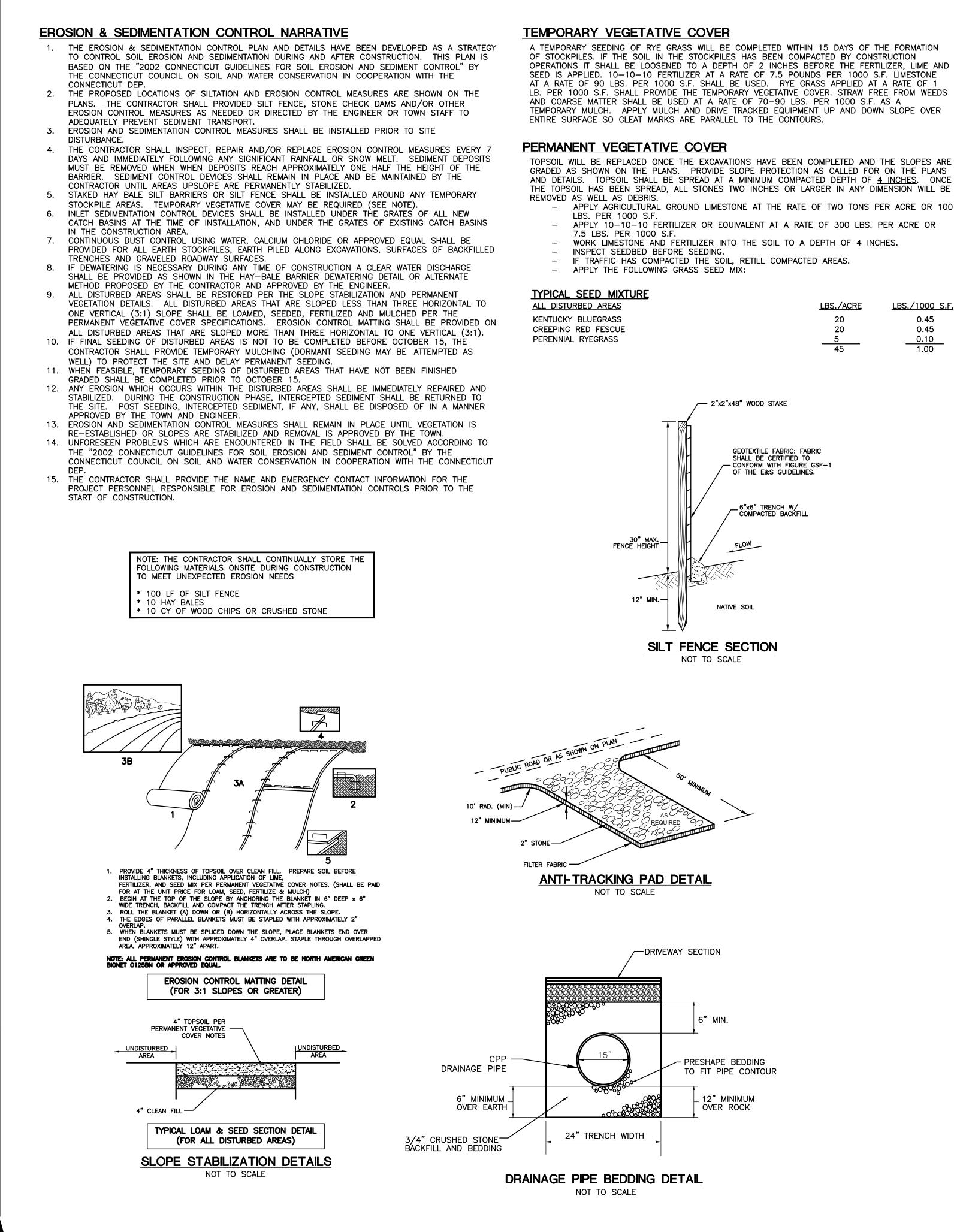


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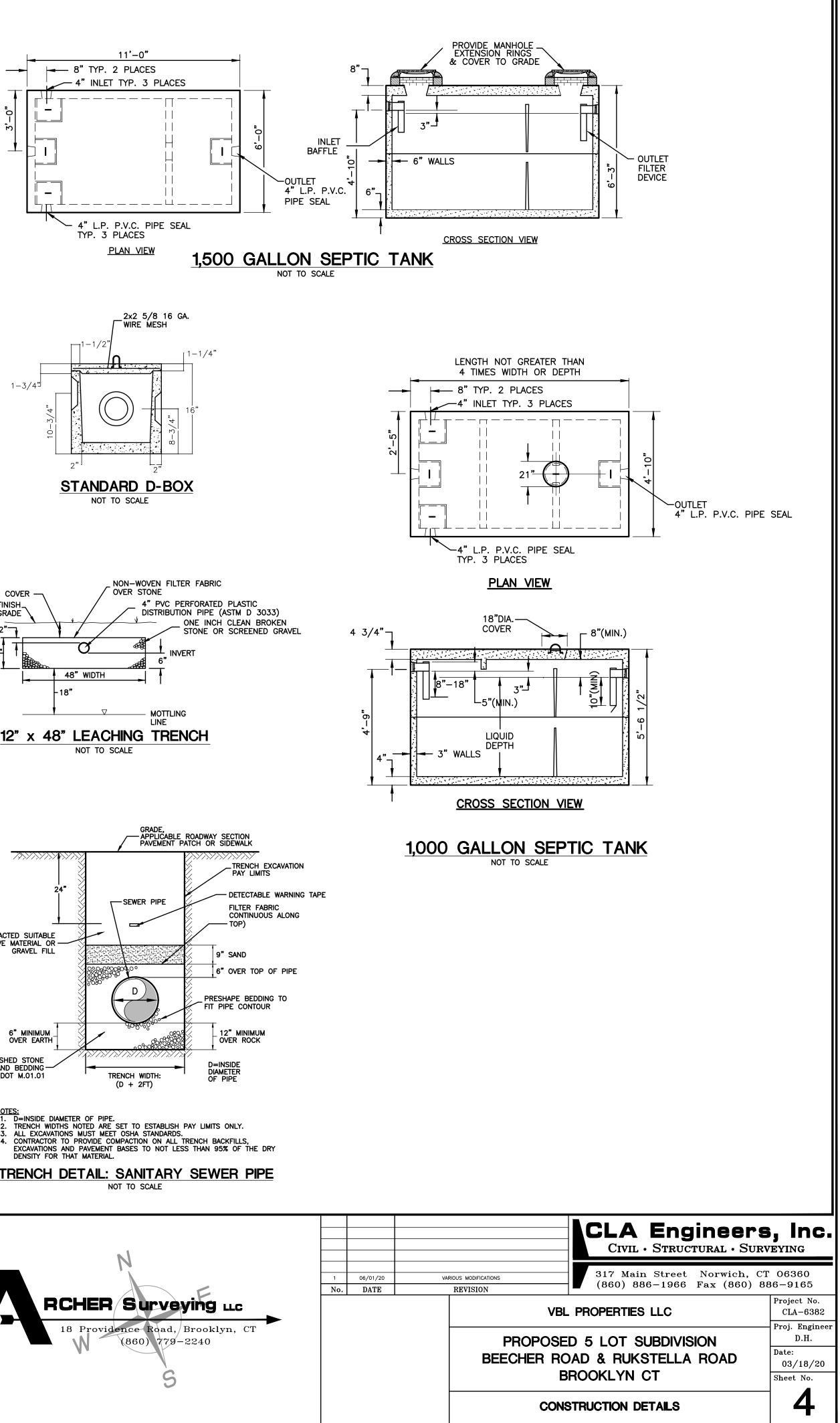


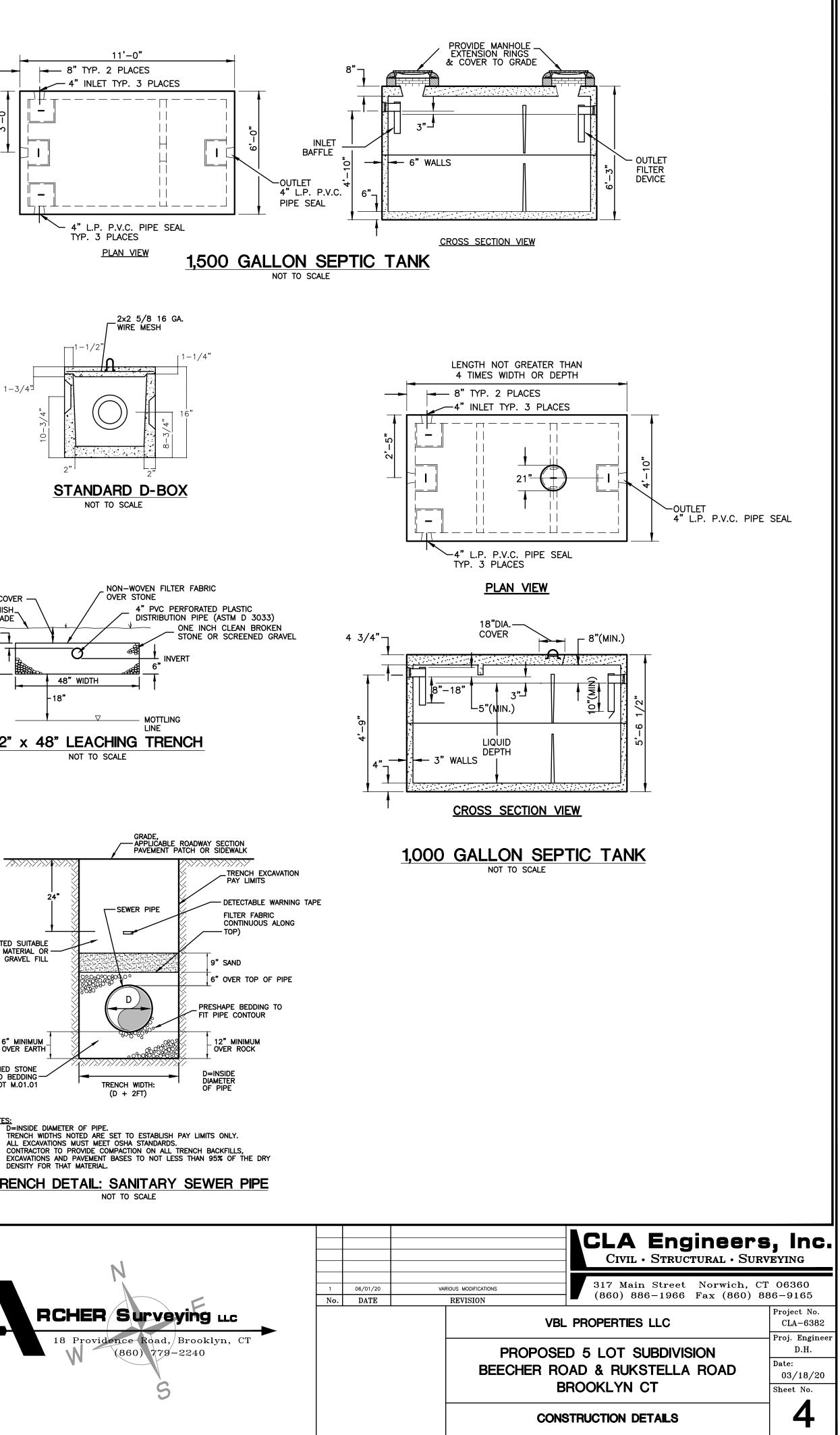


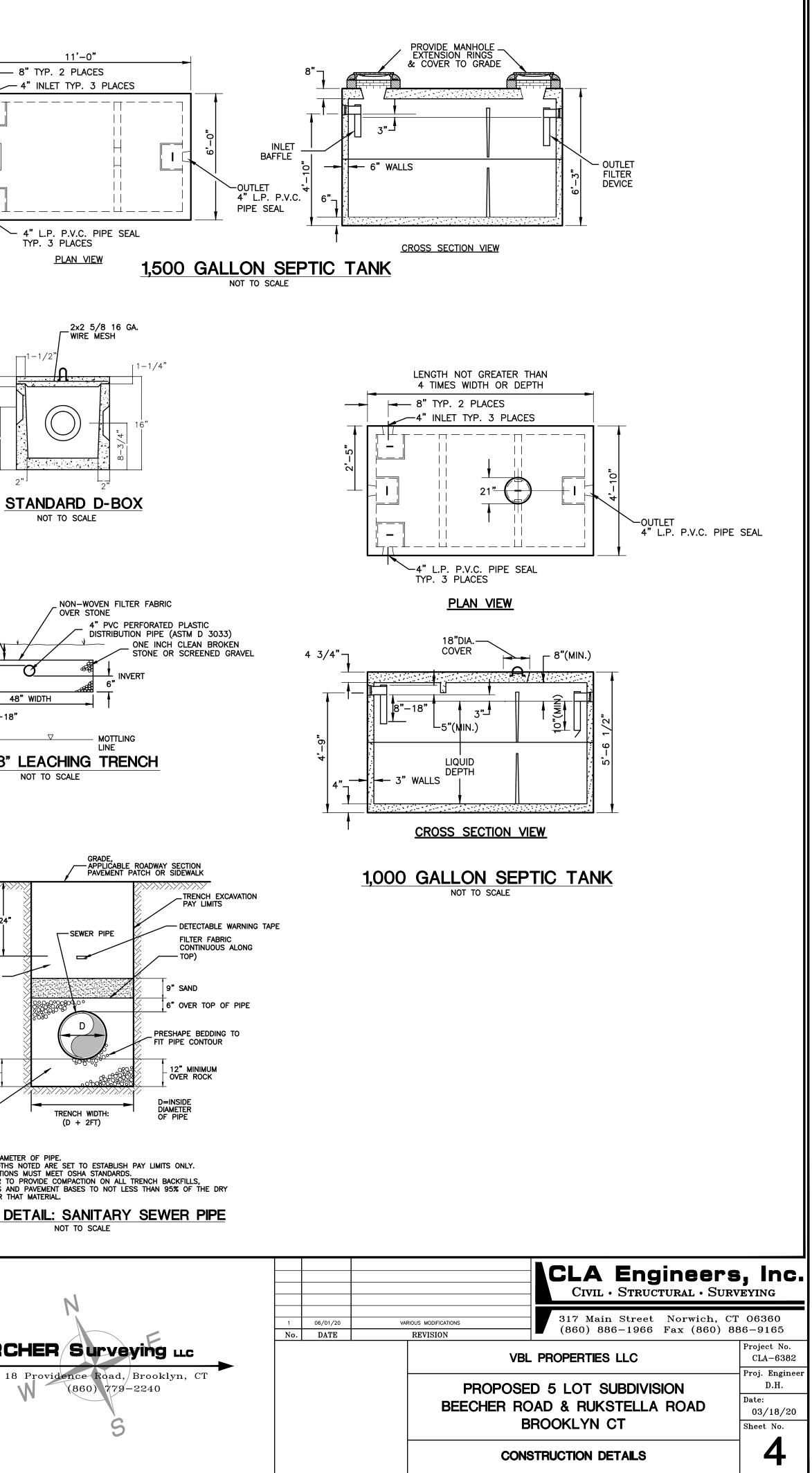
Date

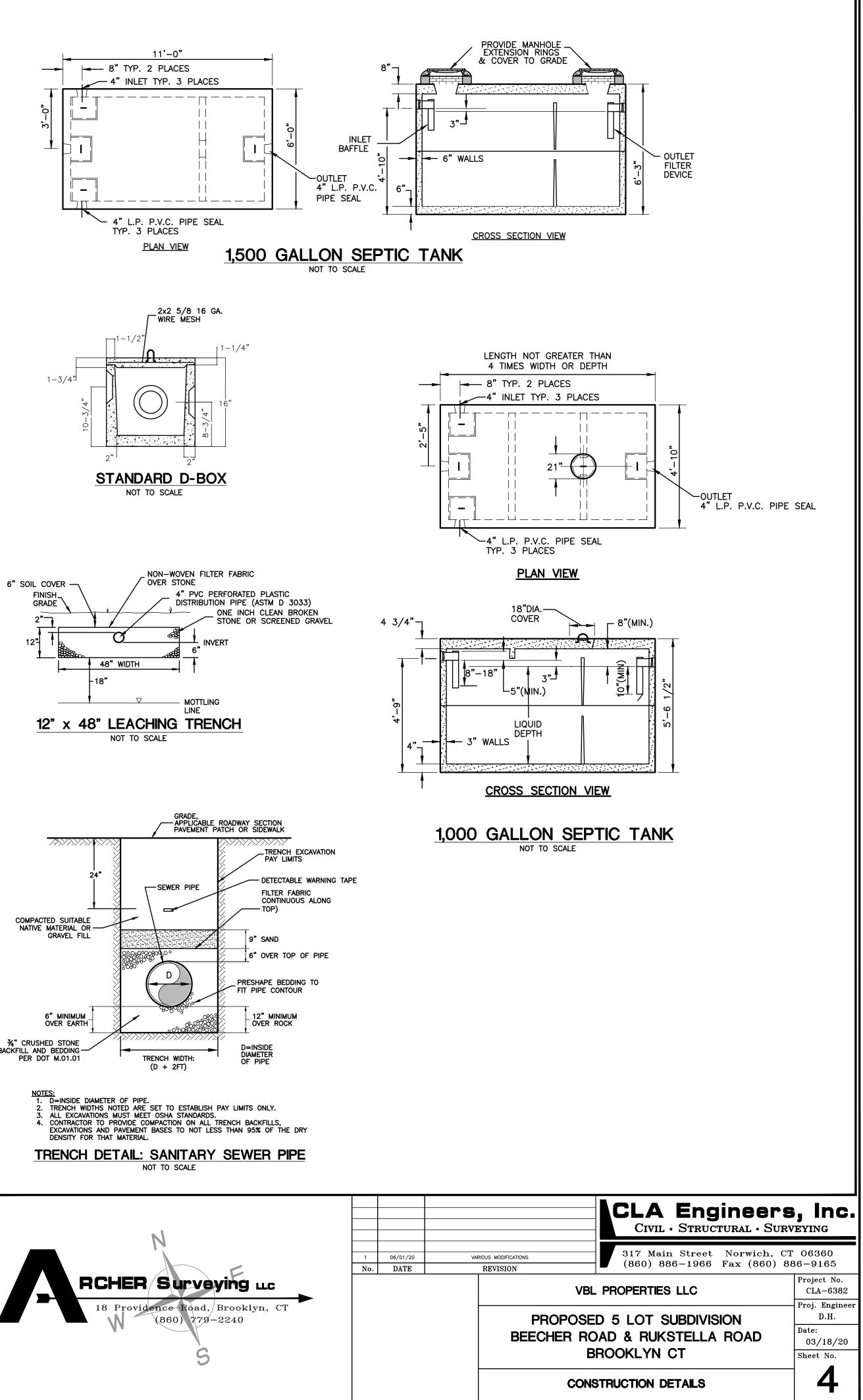


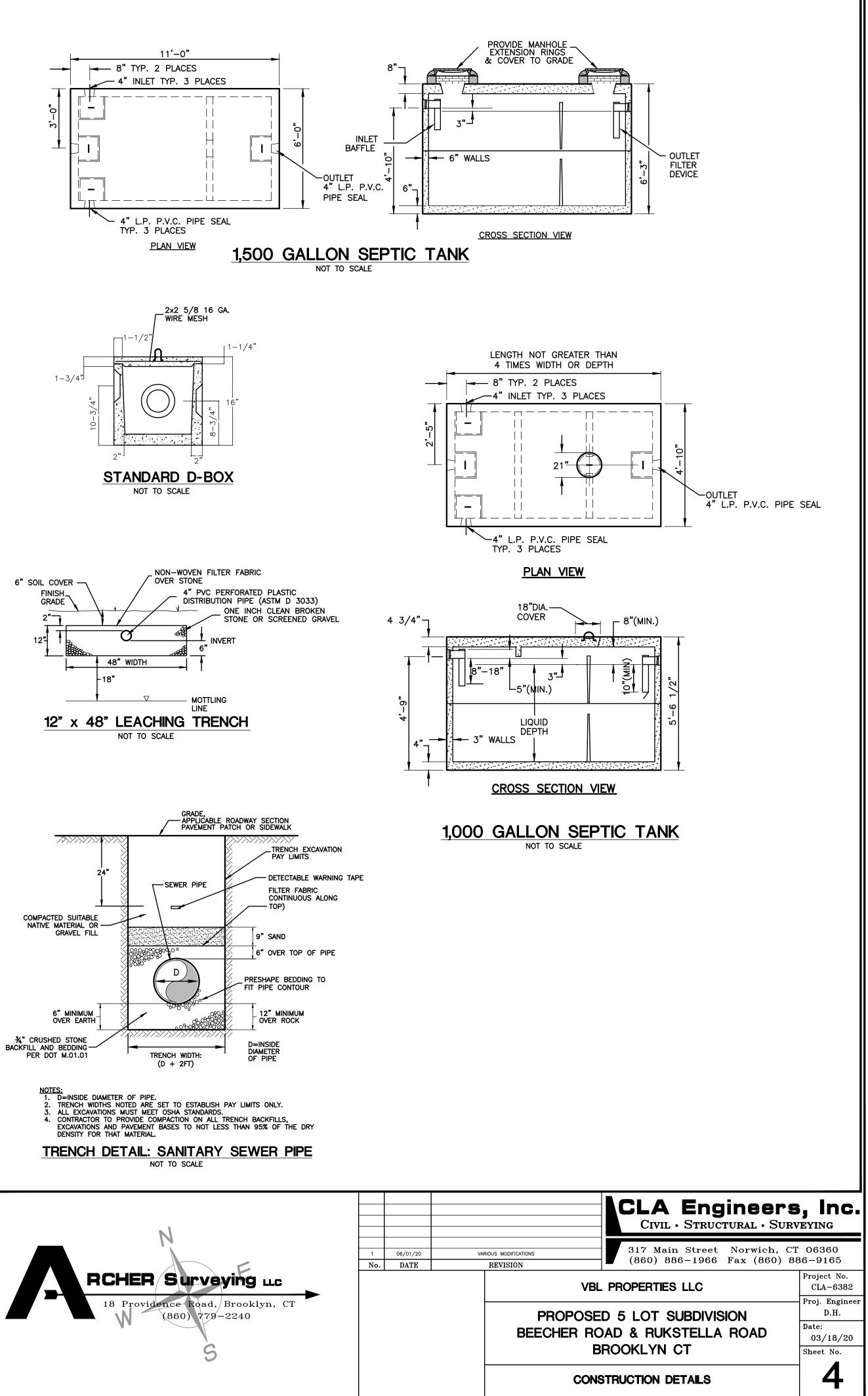
CLA

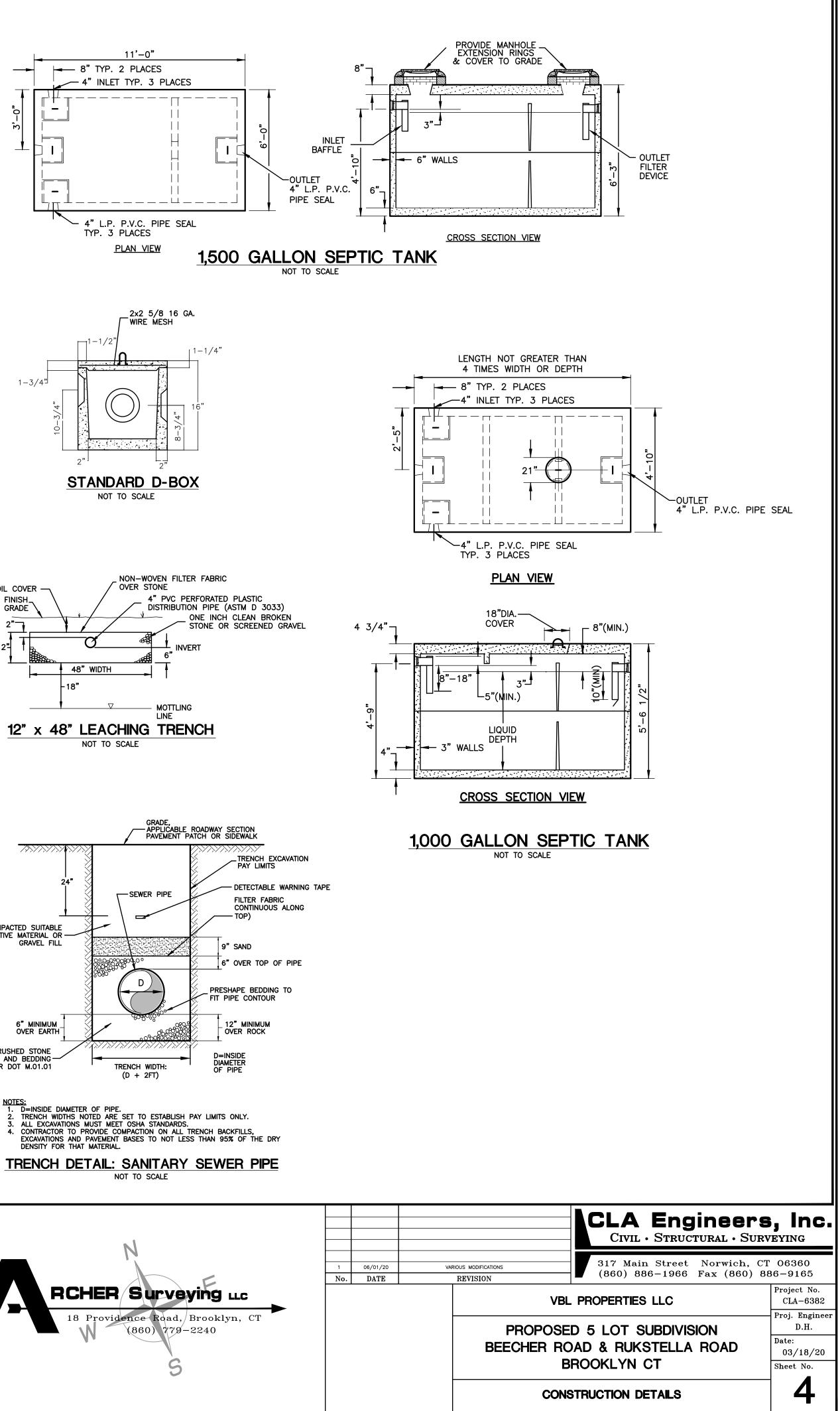


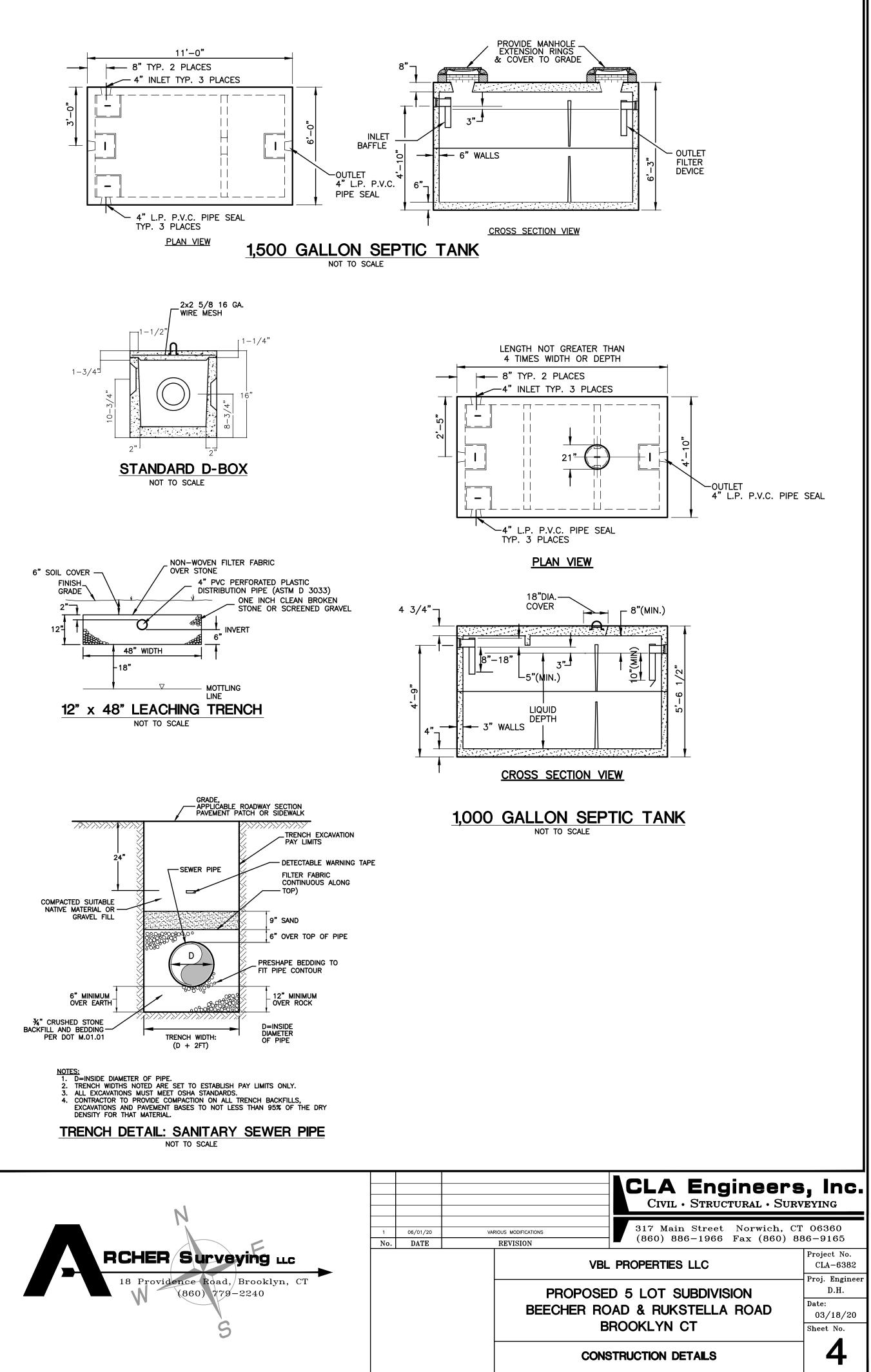


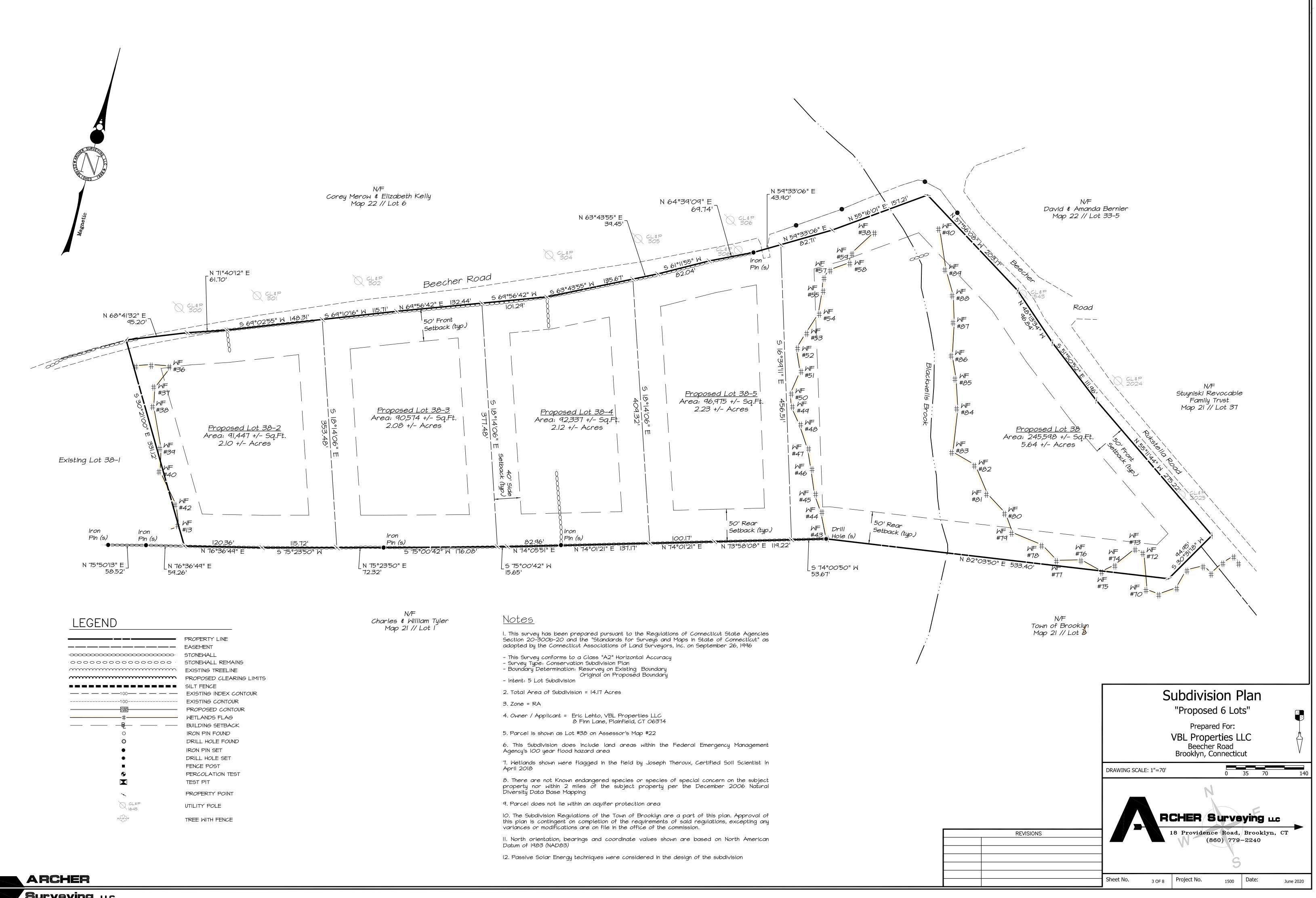


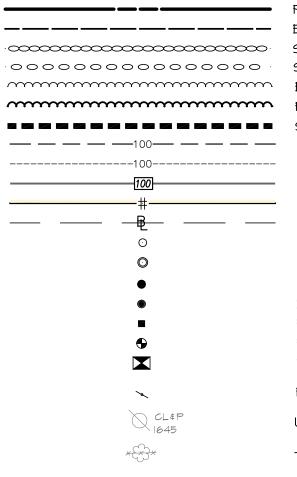




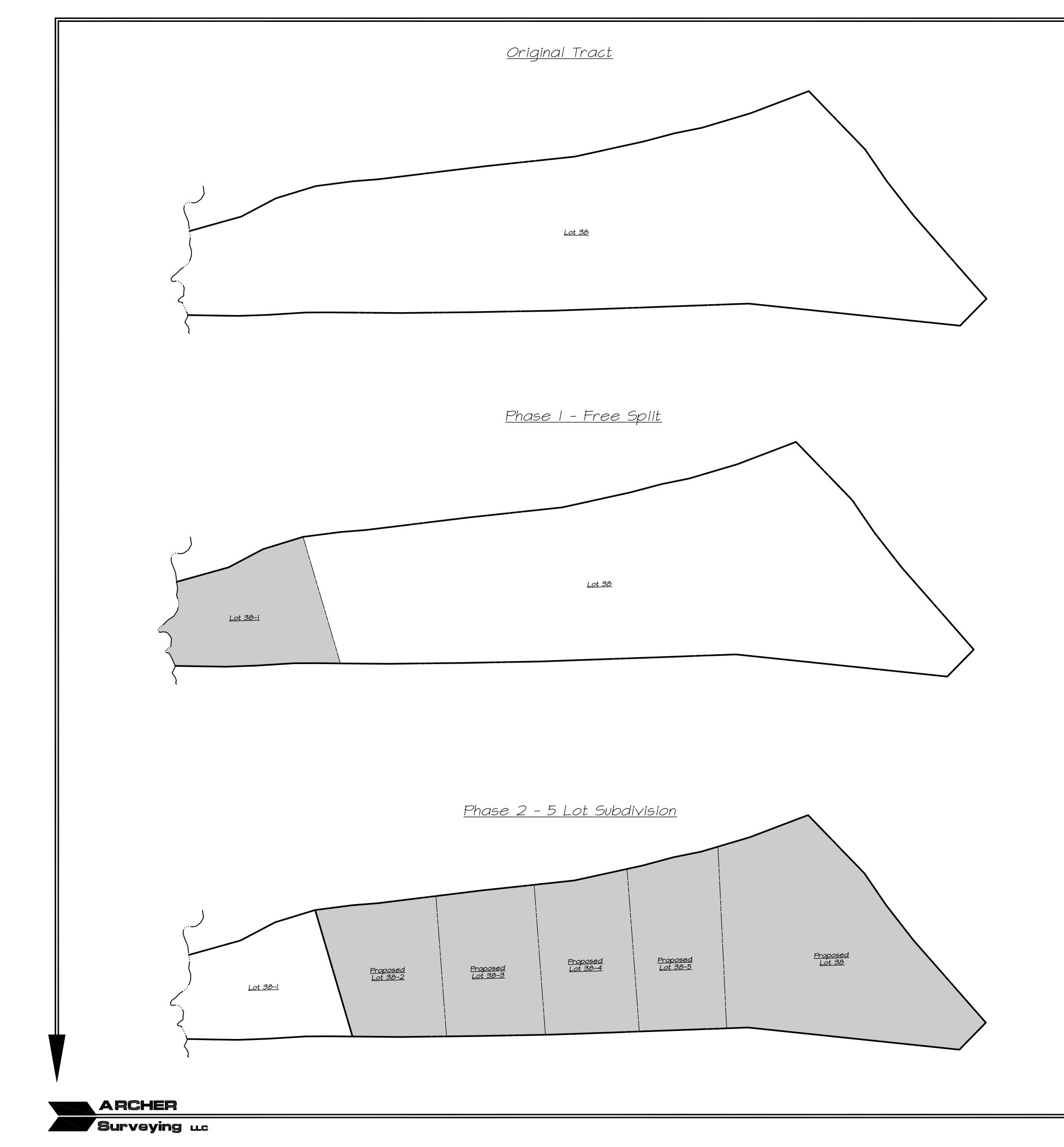




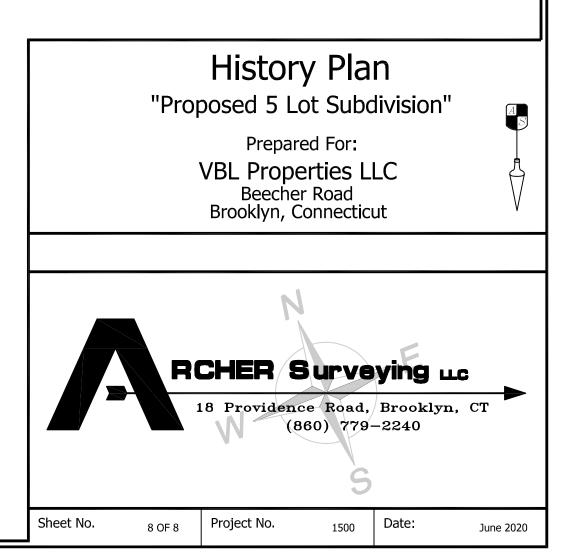




Surveying LLC



## Vol. / Pg. Grantee Grantor Date 129 / 87 Paul Ashworth September 1992 142 / 211 Paul Ashworth Bruce Ashworth & Judith Mullaney September 1993 Bruce Ashworth # Judith Mullaney 204 / 263 Judith Mullaney Trust January 1999 Judith Mullaney Trust 583 / 259 VBL Properties LLC October 2016



# APPROVED BY THE BROOKLYN INLAND WETLANDS COMMISSION

DATE CHAIRMAN 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 8.26C of the Connecticut General Statutes. Date: \_

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.

Certified Soil Scientist

# **2 LOT SUBDIVISION**

# **PREPARED FOR**

# **A.Kausch and Sons LLC**

Tripp Hollow Road Brooklyn, Connecticut

May 28, 2020 APPELL RD #1  $\left\{ \widetilde{6} \right\}$ LOCATION MAP SCALE: 1" = 1,000'

**PREPARED BY** 



COVER SHEET SUBDIVISION DETAIL SHEET HISTORY & PARCEL MAP

Sheet 1 of 5

SITE DEVELOPMENT PLAN

SHEET 1 OF 5 SHEET 2 OF 5 SHEET 3 OF 5 SHEET 4 OF 5 SHEET 5 OF 5

INDEX OF DRAWINGS

# **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. 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). THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED. 4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWIG CRITERIA:

PERCENT PASSING WET SIEVE DRY SIEVE 100 100 70–100 70 - 10010-75

SIEVE SIZE 10-50\* 0–20 0–5 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

#100

#200

- 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. 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 ..

# DEEP TEST PIT DATA / SOIL DESCRIPTIONS PERFORMED BY:Sherry McGann

WITNESSED BY:NORTHEAST DISTRICT DEPARTMENT OF HEALTH DATE: 11/19/20

TEST PIT: 1	TEST PIT: 2	
0" - 6" Topsoil 6" - 30" OB Fine Sandy Loam 30" - 39" Mottled GR Very Fine Loamy Sand 39" - 63" TW Gravelly Med - Coarse Sand	0" - 15" Topsoil 15" - 33" OB Fine Sandy Loam 33" - 59" Mottled TW/GR Gravelly Med-Coarse Sand	
MOTTLES: 30"	MOTTLES: 33"	
GROUNDWATER: NO	GROUNDWATER: NO	
LEDGE: 63"	LEDGE: 59"	
ROOTS: NO	ROOTS: NO	
RESTRICTIVE: NO	RESTRICTIVE: NO	
TEST PIT: 3	TEST PIT: 4	
0" - 7" Topsoil 7" - 29" OB Fine Sandy Loam 29" - 80" Mottled, TW/GR Loamy Fine Sand with Gravel	0" - 8" Topsoil 8" - 28" OB Fine Sandy Loam 28" - 79" Mottled, GR Loamy Fine Sand with Gravel	
MOTTLES: 29"	MOTTLES: 28"	
GROUNDWATER: Seep at 59"	GROUNDWATER: Seeps at 70"	
LEDGE: NO	LEDGE: NO	
ROOTS: 29"	ROOTS: 28"	
RESTRICTIVE: NO	RESTRICTIVE: NO	

PERCOLATION DATA PERC A - DEPTH 24"			PE F
TIME	DROP (INCHES)		TIM
1:49 1:59 2:11 2:21 2:31 2:41	6.0 12.5 15.25 17.0 18.25 19.5		2:0 2:0 2:1 2:2 2:3 2:4
PERCOLATION RATE > 8.0 MIN./IN.			PERCOL
NOTES: PERCOLATION TEST PERFORMED ON 11/19/2019 PERFORMED BY Sherry McGann		NOTES PERCO ON 11/ PERFOF	

# **ERCOLATION DATA** PERC B - DEPTH 25" DROP (INCHES) 2.25 7.5 12.5 15.25 17.0 18.5 LATION RATE > 6.67 MIN./IN. LATION TEST PERFORMED

/19/2019 RMED BY Sherry McGann

# CONCEPT SEPTIC SYSTEM DESIGN

PRIMARY LEACHING AREA 3 BEDROOM RESIDENCE PERCOLATION RATE: 6.7 MIN./INCH (NDDH FILE #20000128) LEACHING AREA REQUIRED: 675<u>SF</u> USE ELJEN'S MANTIS 536-8 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 11.0 SF/LF REQUIRED LENGTH = 675 SF / 11 SF/LF = 61.4 LF

MLSS CALCULATION HYDRAULIC FACTORS DEPTH TO RESTRICTIVE LAYER = 28" SLOPE = 3.0%HYDRAULIC FACTOR (HF) = 42FLOW FACTOR (FF) = 1.5PERCOLATION FACTOR (PF) = 1.0 (UP TO 10 MIN./INCH) MLSS REQUIRED:  $42 \times 1.5 \times 1.0 = 63.0 \text{ LF}$ 

PROPOSED SYSTEM USE 1 ROW OF 63 LF LEACHING AREA PROVIDED = 693 SF

RESERVE LEACHING AREA USE SAME AS PRIMARY SYSTEM

PRIMARY LEACHING AREA 3 BEDROOM RESIDENCE

PERCOLATION RATE: 8 MIN./INCH (NDDH FILE #20000128) LEACHING AREA REQUIRED: 675 SF

USE ELJEN'S MANTIS 536-8 EFFECTIVE LEACHING AREA OF LEACHING TRENCH 11.0 SF/LF REQUIRED LENGTH = 675 SF / 11.0 SF/LF = 61.4 LF

MLSS CALCULATION HYDRAULIC FACTORS

DEPTH TO RESTRICTIVE LAYER = 30" SLOPE = 10.0%HYDRAULIC FACTOR (HF) = 26FLOW FACTOR (FF) = 1.5

PERCOLATION FACTOR (PF) = 1.0 (UP TO 10 MIN./INCH) MLSS REQUIRED:  $26 \times 1.5 \times 1.0 = 39 \text{ LF}$ 

PROPOSED SYSTEM USE 1 ROW OF 62 LF LEACHING AREA PROVIDED = 682 SF

RESERVE LEACHING AREA USE SAME AS PRIMARY SYSTEM

<u>Notes</u>

1. 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 "C" Horizontal Accuracy

- This Survey conforms to a Class "T-2" Vertical Accuracy

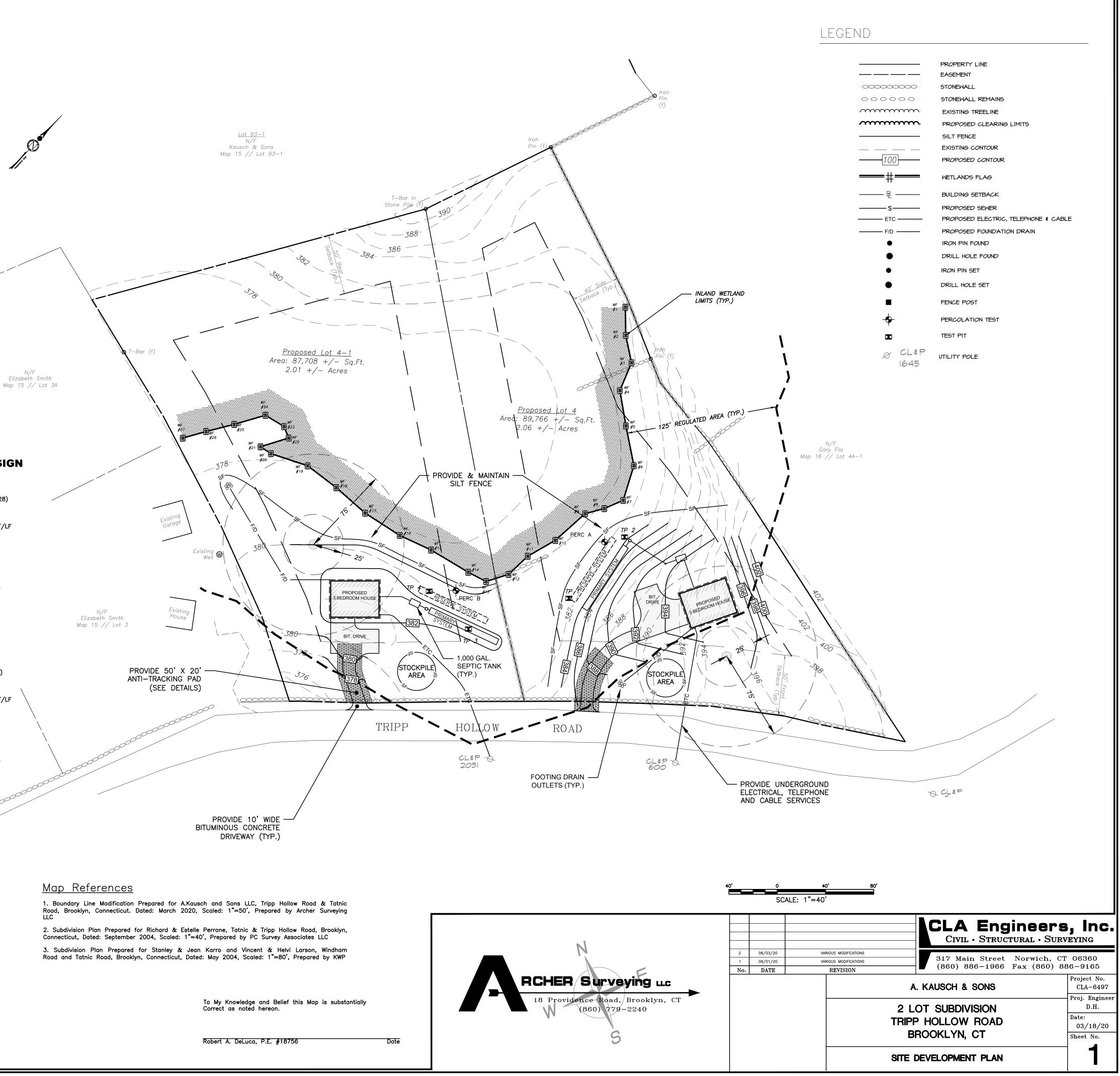
- Survey Type: Site Development Plan - Boundary Determination: Resurvey

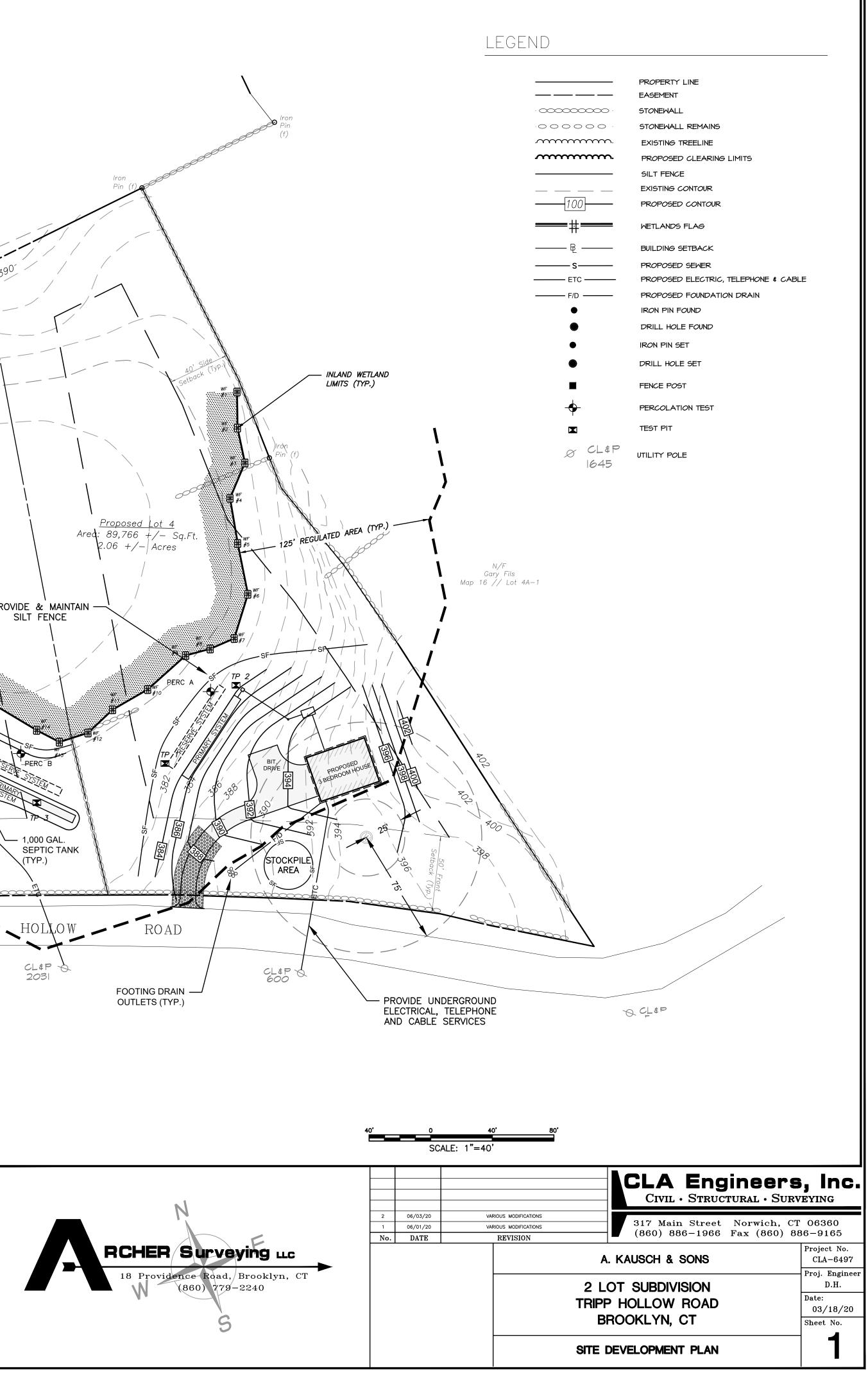
- Intent: 2 Lot Subdivision

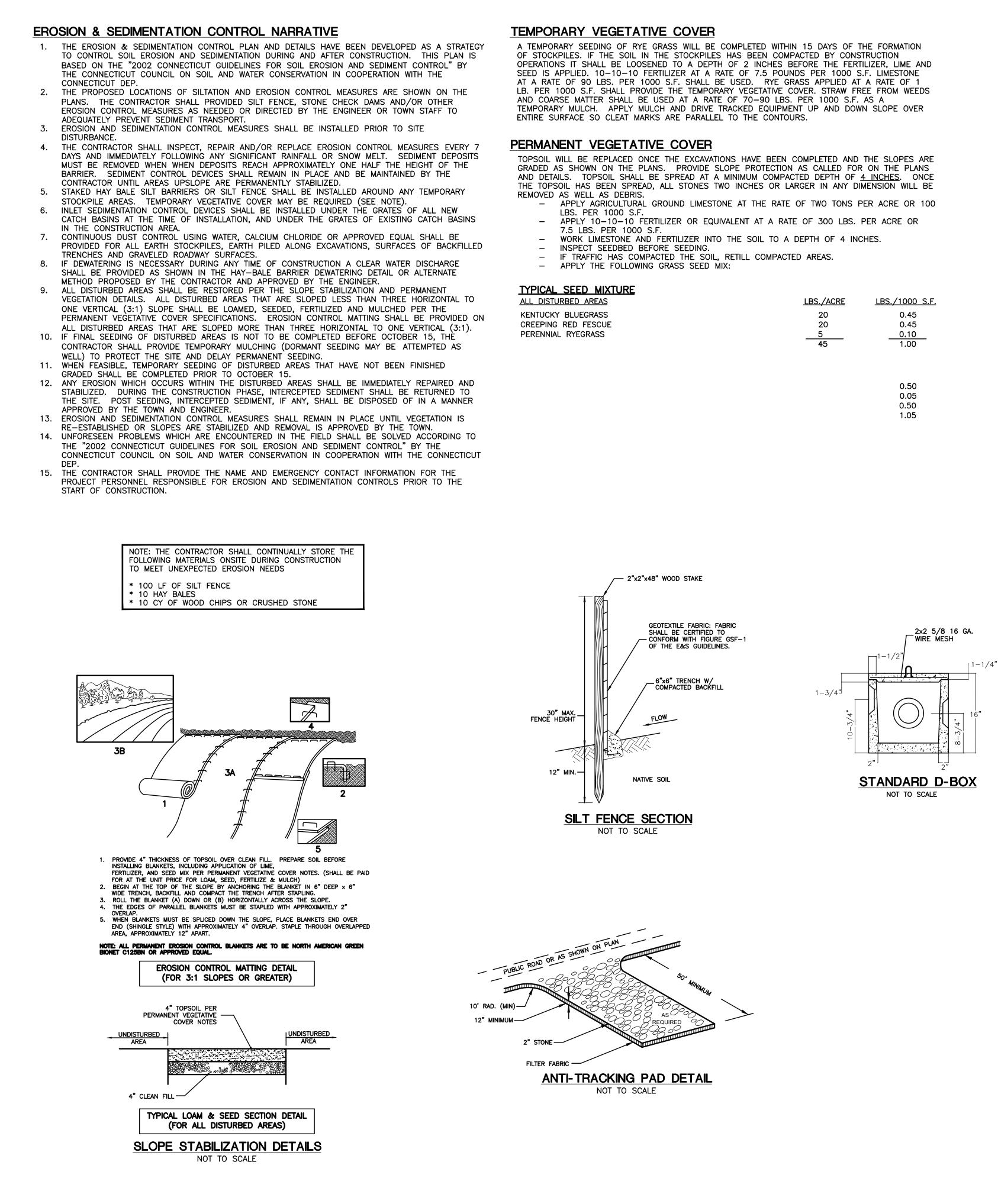
2. Parcels shown as Lots 4 on Assessors Tax Map 15 of the Brooklyn Assessors Office

3. Zone: RA

- 4. This Subdivision does include land areas within the Federal Emergency Management Agency's 100 year flood hazard area
- 5. Wetlands shown were flagged in the field by Joseph Theroux in December 2019.
- 6. 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
- 7. Parcel does not lie within an aquifer protection area
- 8. 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.
- 9. North orientation, bearings and coordinate values shown are based on North American Datum of 1983 (NAD83)
- 10. Passive Solar Energy techniques were considered in the design of the subdivision.
- 11. All electrical services shall be underground.



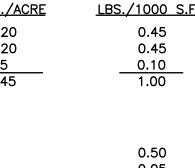




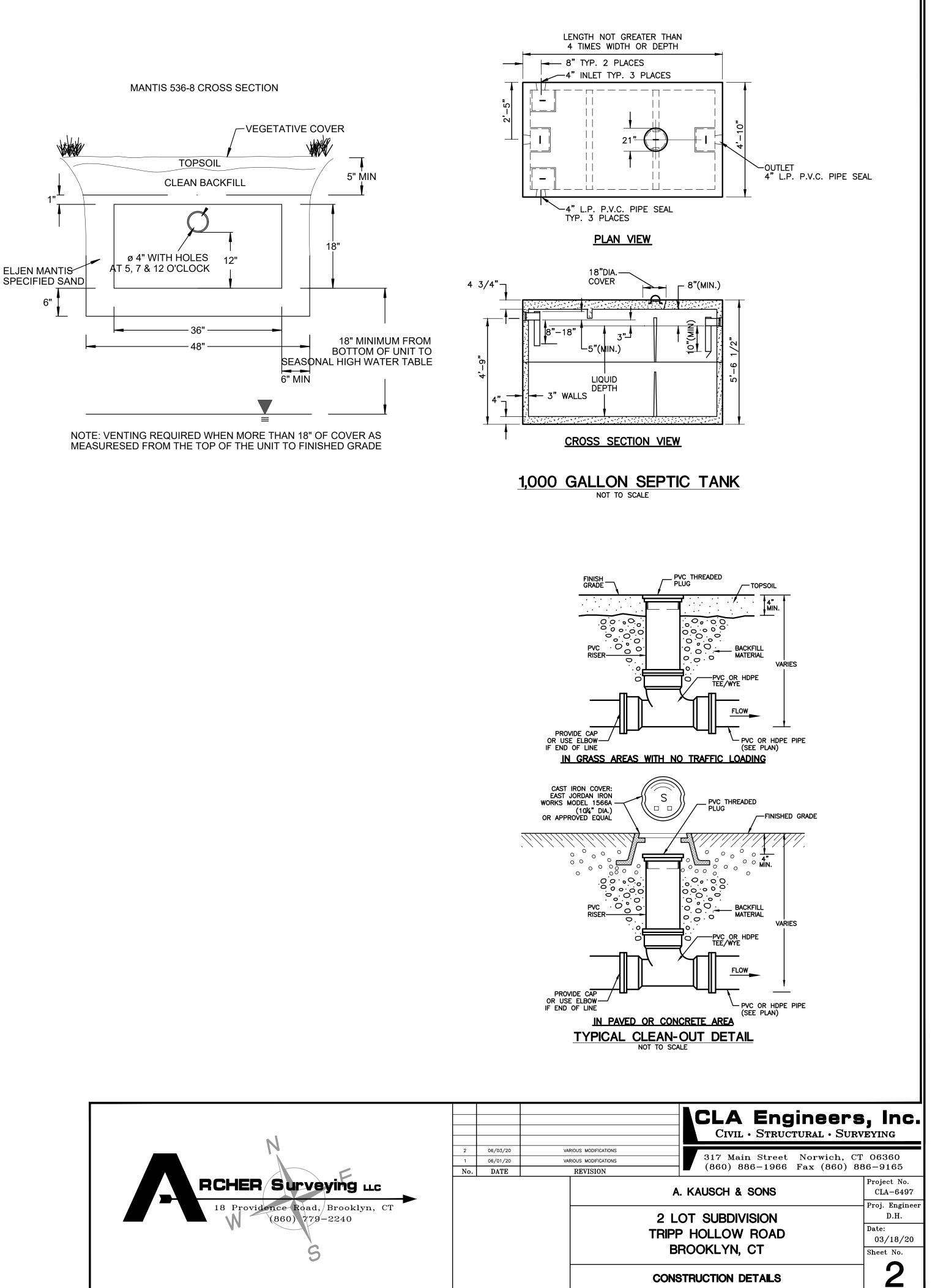
CLA

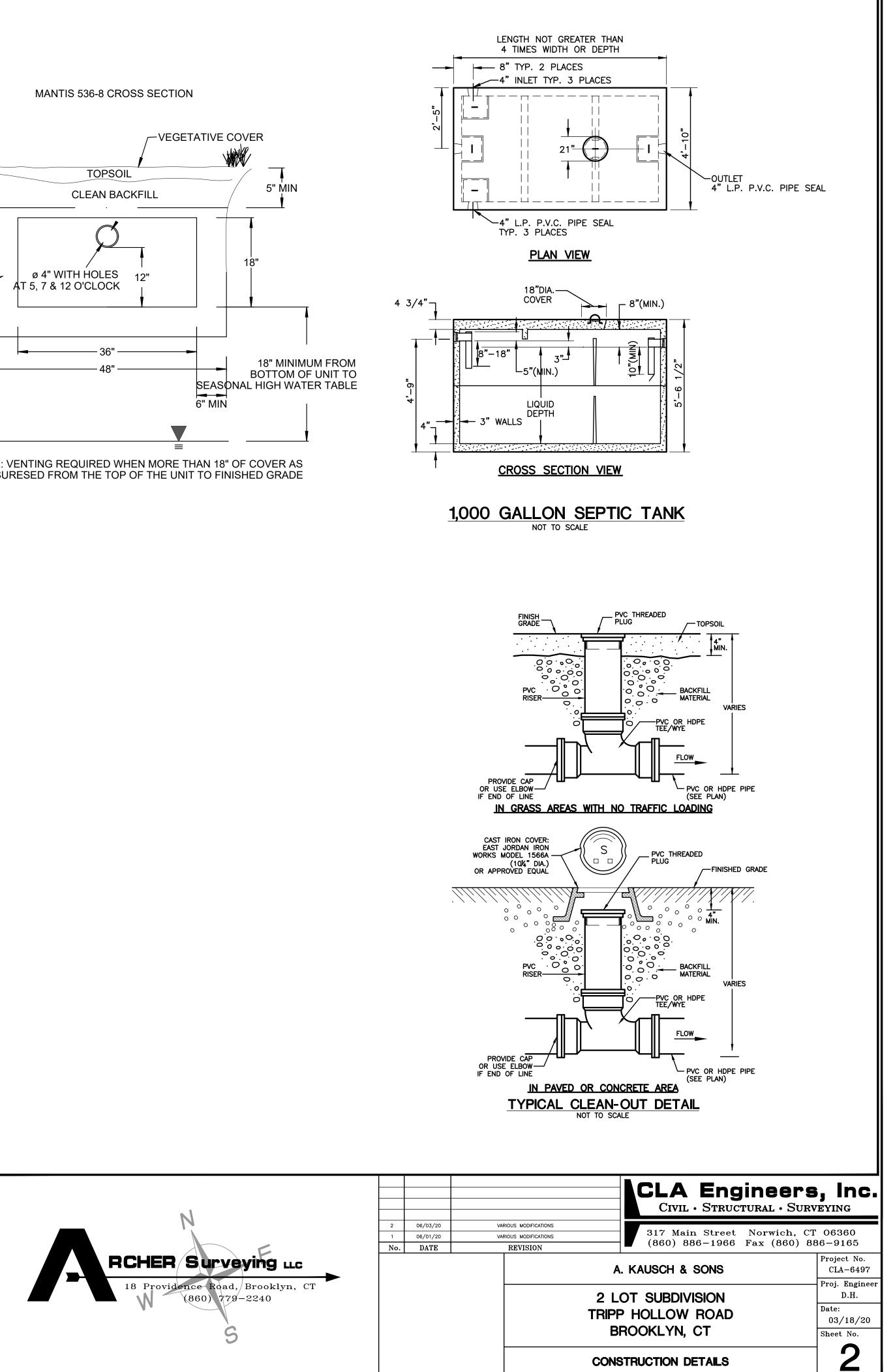
D ONCE THE EXCAVATIONS HAVE BEEN COMPLETED AND THE SLOPES ARE	
E PLANS. PROVIDE SLOPE PROTECTION AS CALLED FOR ON THE PLANS	
IALL BE SPREAD AT A MINIMUM COMPACTED DEPTH OF <u>4 INCHES</u> . ONCE	
PREAD, ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION WILL BE	
IRIS.	
IRAL CROLIND LIMESTONE AT THE PATE OF TWO TONS PER ACRE OR 100	

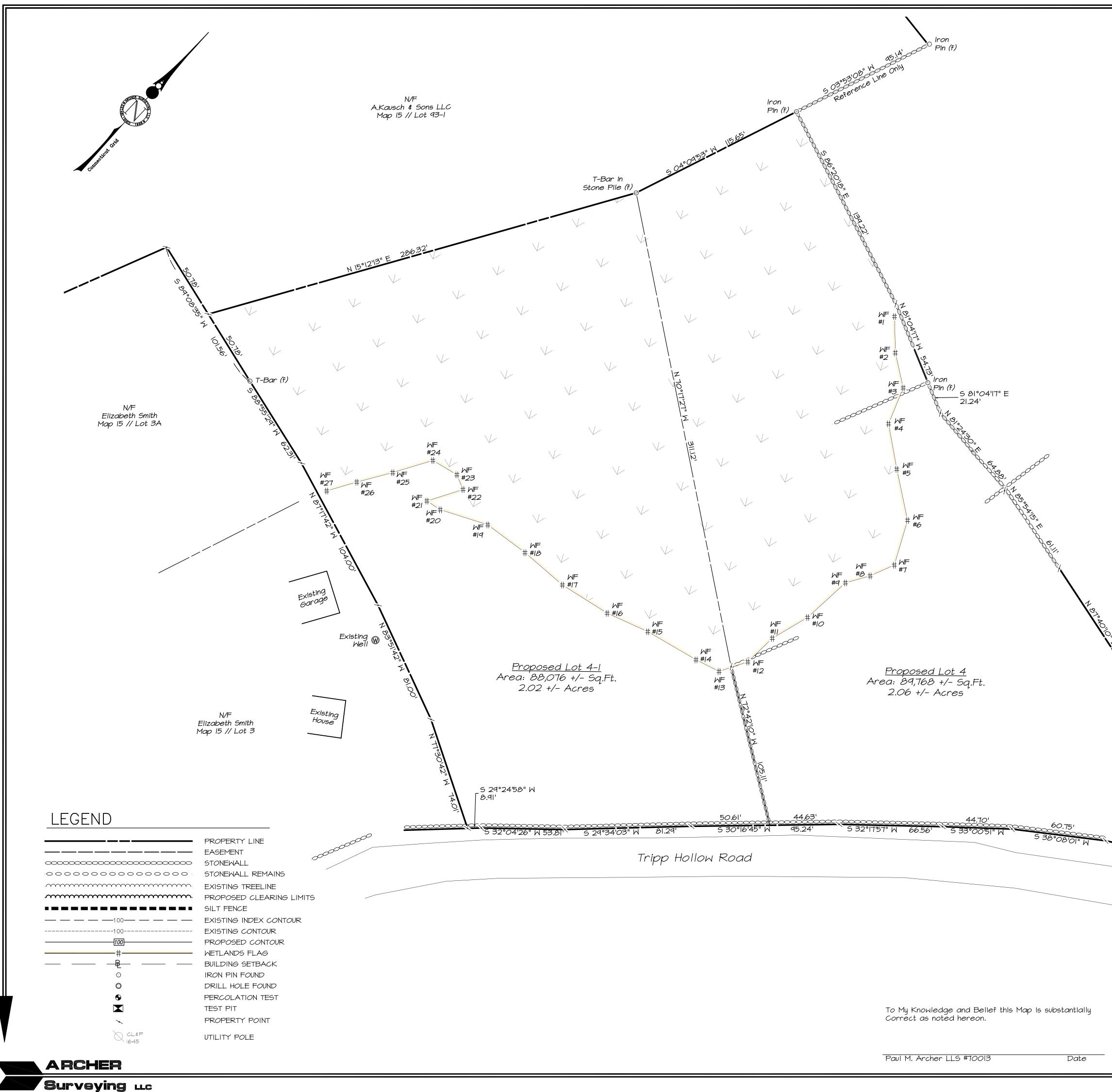
L

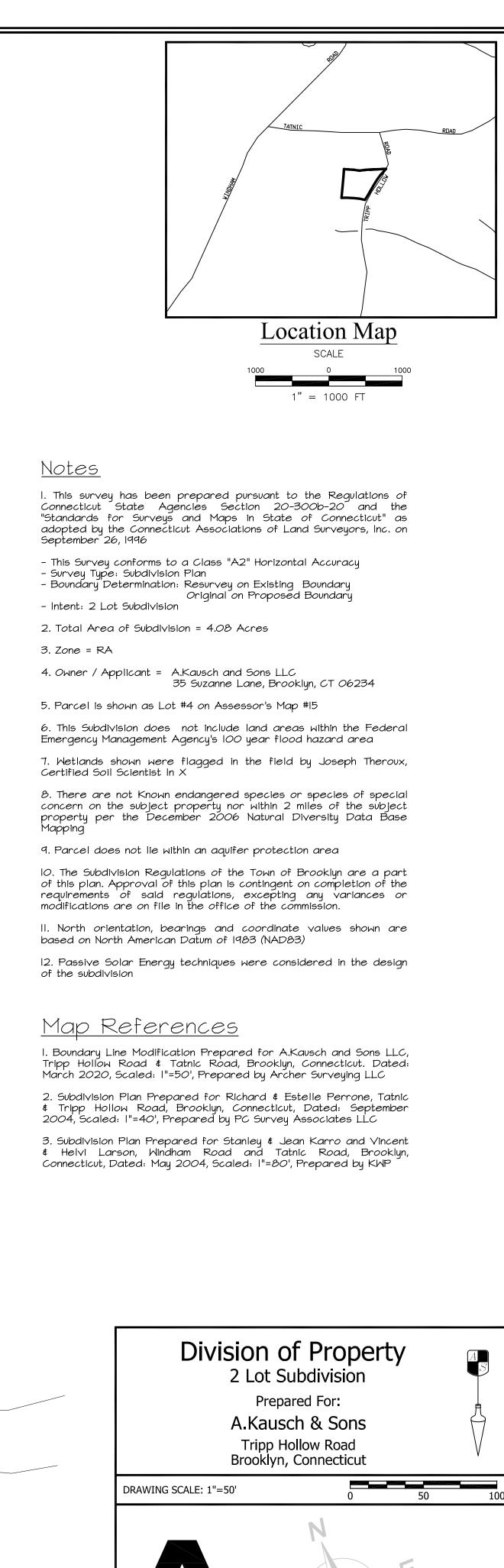












RCHER Surveying LLC

<sub>2 OF 5</sub> Project No.

Sheet No.

18 Providence Road, Brooklyn, CT

(860) 779-2240

1755 Date:

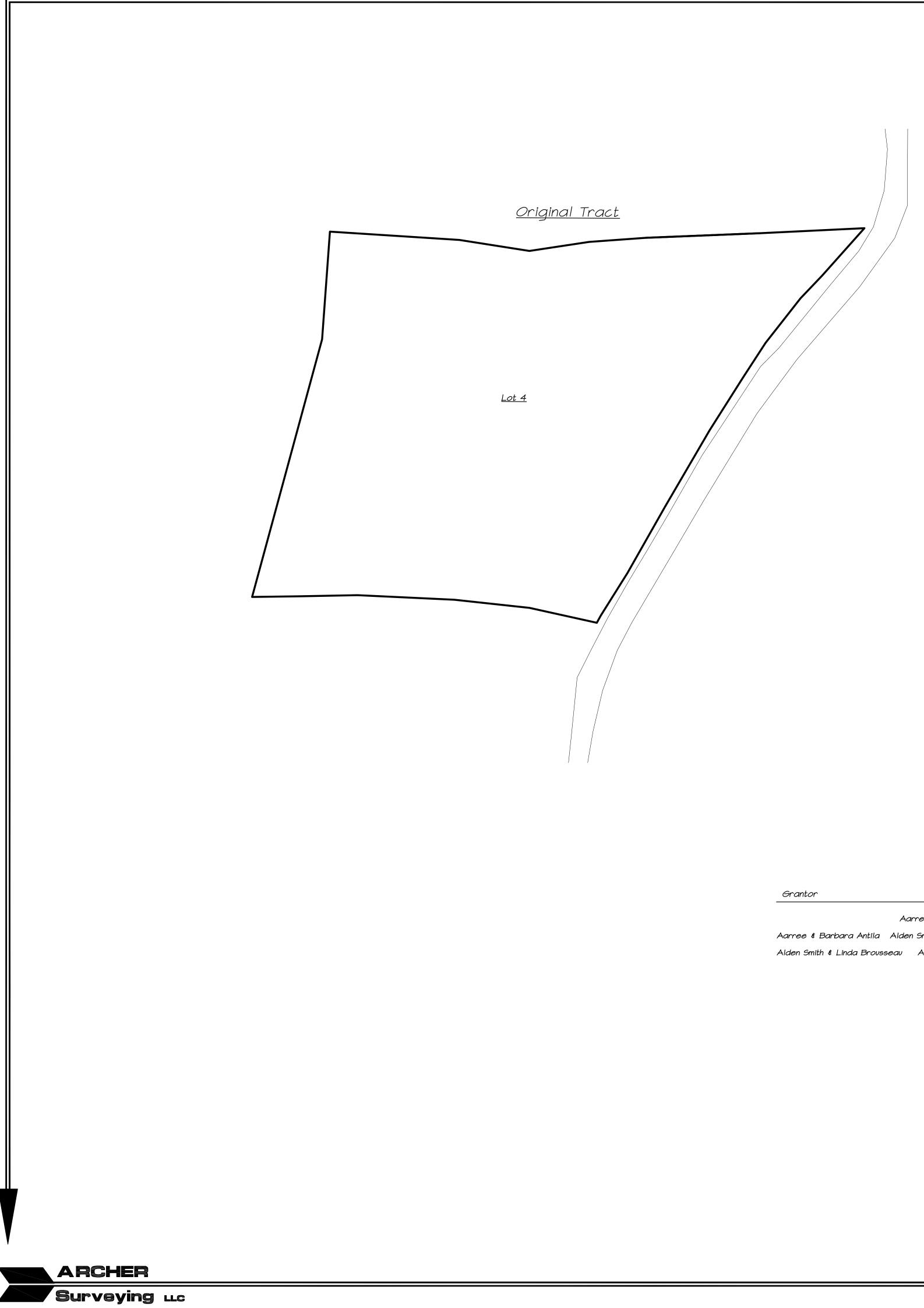
May 28, 2020

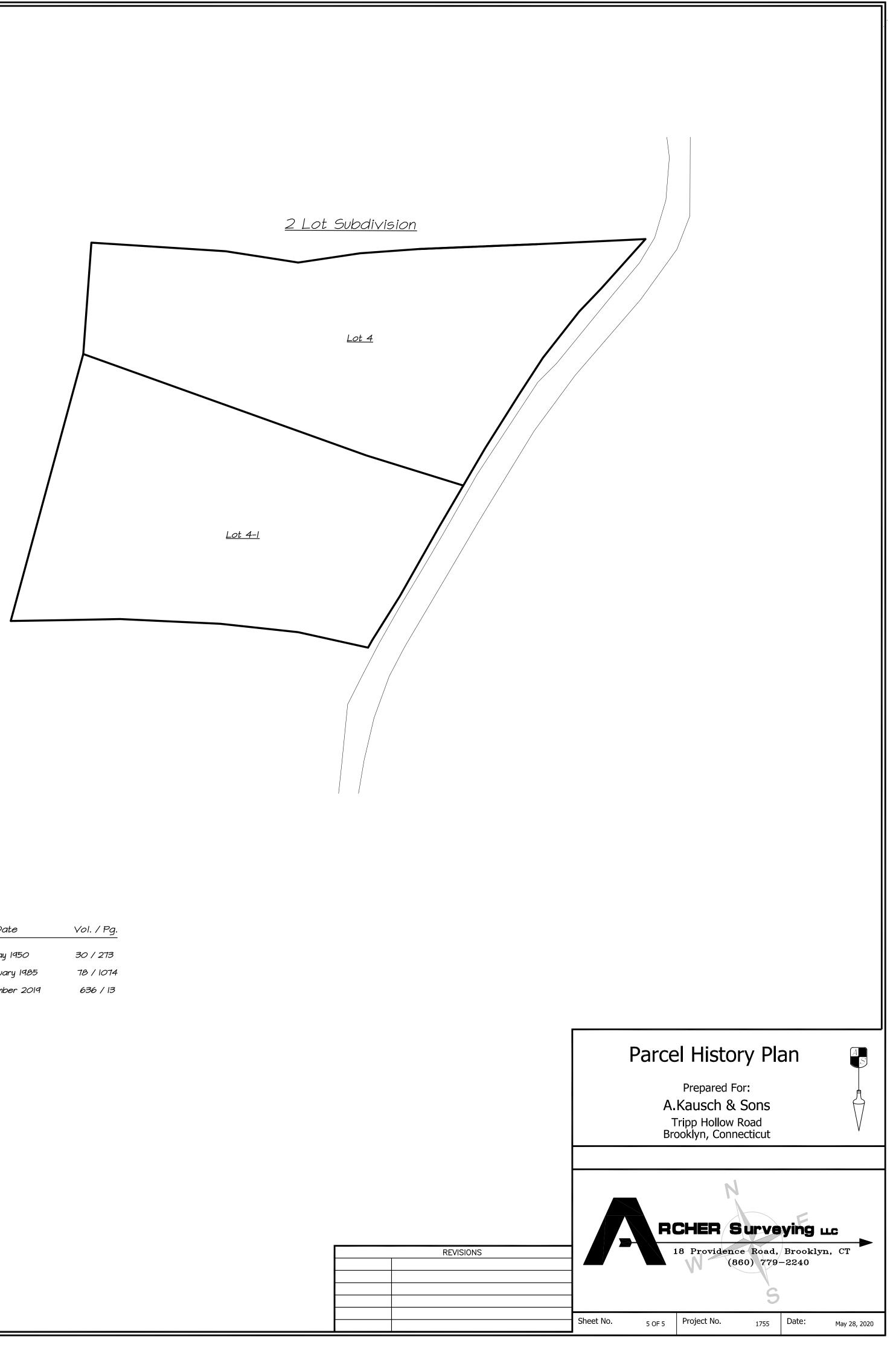
N/F Gary Fils Map 16 // Lot 4A-1

5 43°38'|3" W 33.46'

683

REVISIONS





Grantor	Grantee	Date	Vol. / Pg.
	Aarree & Barbara Antila	May 1950	30 / 273
Aarree & Barbara Antila	Alden Smith & Linda Brousseau	February 1985	78 / 1074
Alden Smith & Linda Brous	seau A.Kausch and Sons	December 2019	636 / 13