

DEC 18 2023

TOWN OF WOODSTOCK  
LAND USE DEPT.

TOWN OF WOODSTOCK  
INLAND WETLANDS AND WATERCOURSES AGENCY

APPLICATION FOR PERMISSION TO CONDUCT A REGULATED ACTIVITY WITHIN AN INLAND WETLAND OR WATER COURSE AREA IN THE TOWN OF WOODSTOCK, CONNECTICUT.

(In accordance with the Woodstock Inland Wetlands and Watercourses Regulations, and the regulations of the Connecticut Department of Environmental Protection)

INSTRUCTIONS: All applicants must complete Section 1 of this application form for preliminary review. The Agency will then notify the applicant of any additional information that may be required and will schedule a public hearing, if necessary. In addition to the information supplied in Section 1, the applicant should submit other supporting facts or documents which may assist the Agency in its evaluation of this proposal.

NO PERMIT SHALL BE TRANSFERRED WITHOUT PERMISSION OF AGENCY.

SECTION I

1. Name of Applicant Kevin + Sonia Greene (if not applicant) Name of Property Owner \_\_\_\_\_  
Address PO Box 693, 286 Seneca Rd. Address \_\_\_\_\_  
Woodstock, CT 06201  
Telephone # 860-933-2347 Telephone # \_\_\_\_\_

2. Attach a written consent to the proposed activity by the owner, if applicant is not the property owner.  
3. Street Location of the Property: 52 County Rd., Woodstock, CT 06201  
Specific directions: 171 end of County

Utility Pole Number if present: \_\_\_\_\_  
(Use an additional sheet, if necessary, to draw a sketch showing the property in relation to surrounding roads.)

4. Purpose and Description of Activity for which Authorization is Requested  
a. Proposed activity will involve the following: (Check appropriate activity):  
Alteration \_\_\_\_\_ Construction  Deposition or \_\_\_\_\_ Removal of material \_\_\_\_\_ Waste Disposal \_\_\_\_\_  
b. Attach a general description of the proposal and identification of each regulated activity for which permit is sought. Include nature, area and a volume of material to be placed, removed or transferred. Lineal measurements of affected watercourses or wetlands must also be given.  
c. A detailed site plan of the proposal must be included.  
d. Purpose of the proposed activity (i.e., a new dwelling, addition to existing dwelling, new business, driveway, etc.):  
New dwelling

5. Attach a copy of soils map section and copy of U.S. Geological survey map section which contains the proposed activity if any watercourses are altered in any way.  
6. Names and Addresses of Adjacent Property Owners (attach separate sheet).

The undersigned applicant hereby consents to necessary and proper inspections of the above-mentioned property by Agents of the Inland Wetlands and Watercourses Agency, at reasonable times, both before and after the permit in question has been granted by the Agency. In evaluating this application, the Agency has relied on information provided by the applicant and, if such information subsequently proves to be false, deceptive, incomplete and/or inaccurate, this permit may be modified, suspended or revoked.

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

Somali Greene X 12/21/23  
Signature of Applicant Date

SECTION II

TO BE FILLED IN BY AGENCY

Date Filed 12/21/23 Application # 12-23-03 Fee: \$95

Approved with the following conditions: All erosion controls required are to be inspected and approved by the Enforcement Officer prior to the start of the approved activity. Failure to arrange for the inspection and secure approval may VOID the permit.

This approval covers only specific activities described in this application.

By: \_\_\_\_\_ Date Approved \_\_\_\_\_ Expires: \_\_\_\_\_  
Chairperson

Erosion controls inspected on \_\_\_\_\_ by \_\_\_\_\_  
Date

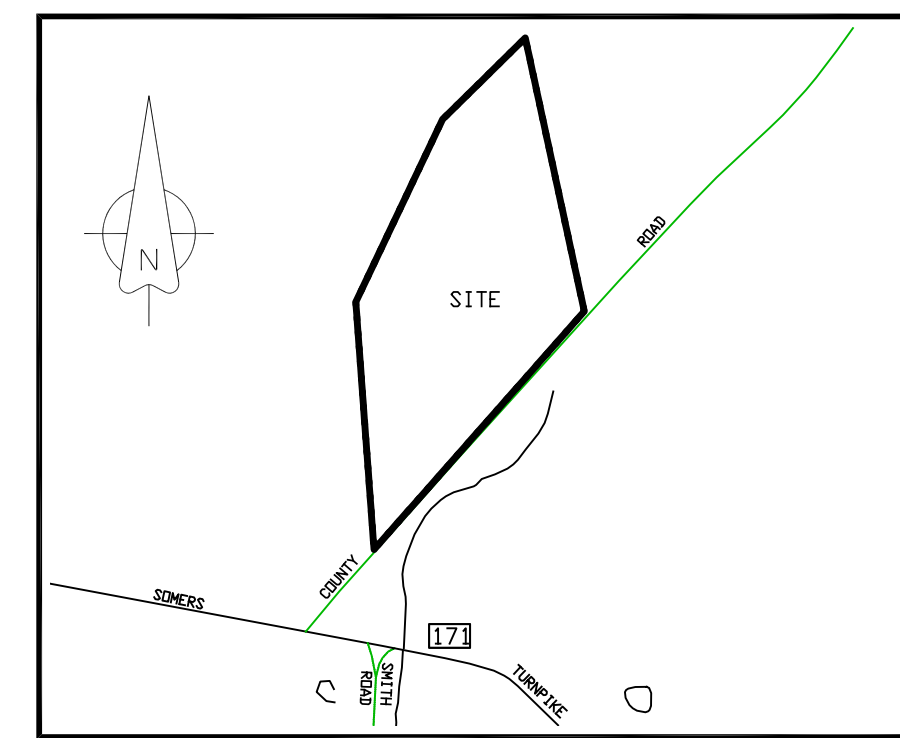
Bonding (if required) posted on \_\_\_\_\_ by \_\_\_\_\_ release date \_\_\_\_\_  
Date

Property Owners Adjacent to 52 County Road:

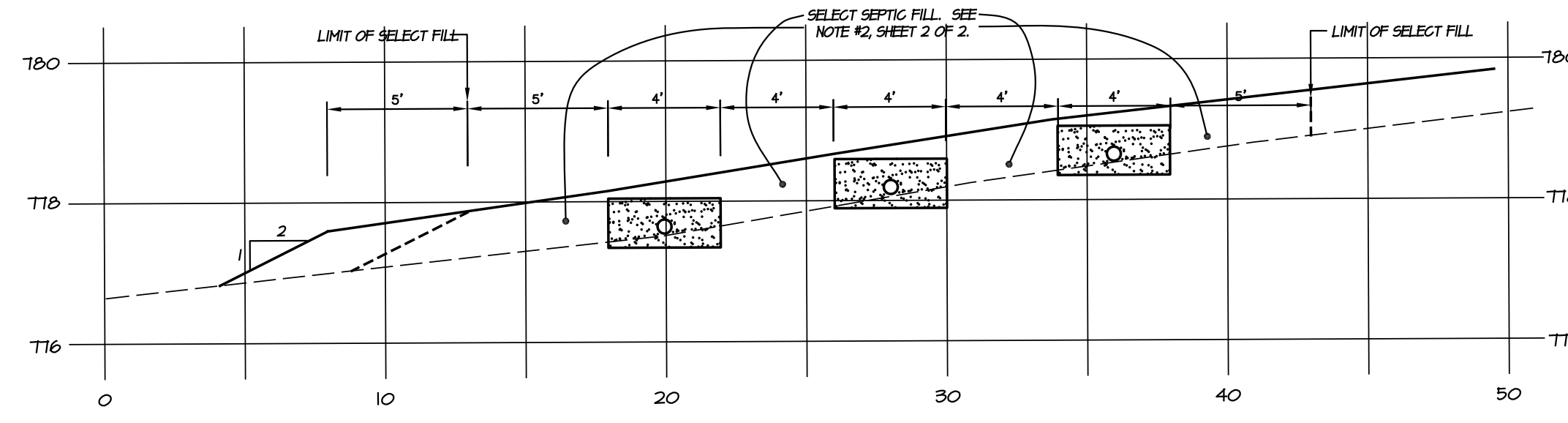
County Road            Norman Sr., Jason & Matthew Heckler  
79 Bradford Corner Rd.  
Woodstock Valley, CT 06282

8 County Road        Jane B. Ellis & Jeffrey R. Backstrand  
111 Prospect Place  
South Orange, NJ 07079

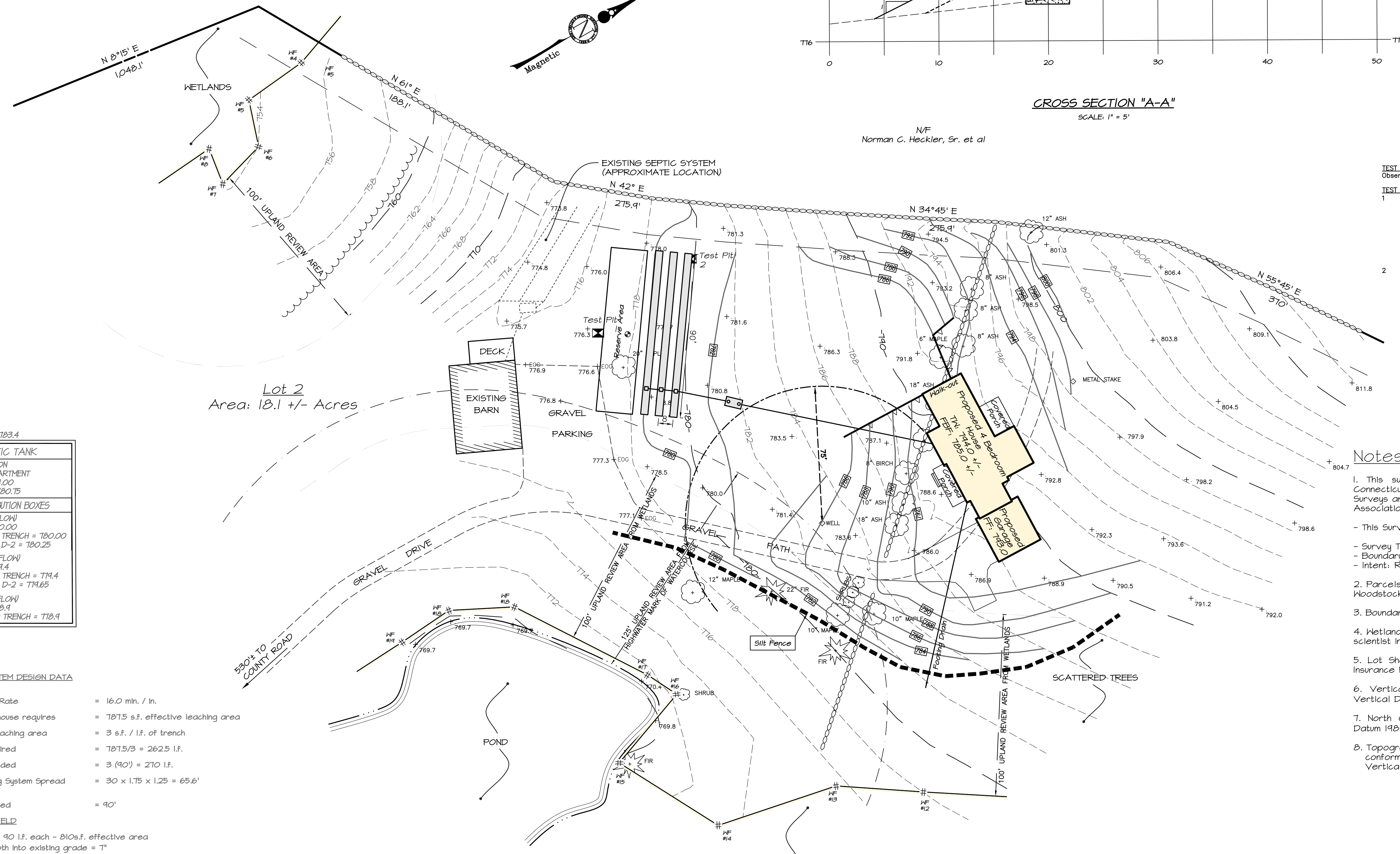
74 County Road       Donald A. Hebert



**Location Map**  
SCALE  
1" = 1000 FT



NF  
Norman C. Heckler, Sr. et al



Inv. @ House: 783.4

SEPTIC TANK	
1250 GALLON	
TWO COMPARTMENT	
F.L. IN = 781.00	
F.L. OUT = 780.75	
DISTRIBUTION BOXES	
D-1 (OVERFLOW)	
F.L. IN = 780.00	
F.L. OUT TO TRENCH = 780.00	
F.L. OUT TO D-2 = 780.25	
D-2 (OVERFLOW)	
F.L. IN = 779.4	
F.L. OUT TO TRENCH = 779.4	
F.L. OUT TO D-2 = 779.65	
D-1 (OVERFLOW)	
F.L. IN = 778.9	
F.L. OUT TO TRENCH = 778.9	

**SEPTIC SYSTEM DESIGN DATA**

Percolation Rate	= 16.0 min. / in.
4 bedroom house requires	= 787.5 s.f. effective leaching area
Effective Leaching area	= 3 s.f. / l.f. of trench
Length Required	= 787.5/3 = 262.5 l.f.
Length Provided	= 3 (90') = 270 l.f.
Min. Leaching System Spread (MLSS)	= 30 x 1.75 x 1.25 = 65.6'
MLSS Provided	= 90'
<b>LEACHING FIELD</b>	
3 Trenches @ 90 l.f. each - 810 s.f. effective area	
Maximum depth into existing grade = 7"	

**TEST PIT OBSERVATIONS 04/07/2021**  
Observed by: M. Marcoux, R.S., NDDH

TEST PIT	DEPTH	PROFILE
1	0-10"	topsoil, roots
	10-29"	Fine Sandy Loam, roots, some stone
	29-79"	wet mod compact pan, mottles Matting
	79-82"	Groundwater
	GW1	74" (seeps @ 29")
	Ledge	N/A
2	0-11"	Organics, topsoil, roots
	11-25"	Sandy Loam few roots
	25-67"	Wet Mod compact sandy pan
	67"	Groundwater
	Matting	25"
	GW2	67" (seeps 25")
Ledge	N/A	
	Roots	25"
	Restrictive	25"

**PERCOLATION TESTS 04/07/2021**  
Observed by: M. Marcoux, R.S., NDDH

TIME	DEPTH
10:24	5.25"
10:33	7"
10:50	8.75"
11:07	10"
11:15	10.5"

Percolation Rate: 16 min/inch

- 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: Site Development Plan
  - Boundary Determination: Resurvey
  - Intent: Residential Development
- Parcels shown as Lot 2, Block 22 on Assessors Tax Map T276 of the Woodstock Assessors Office
  - Boundary Line courses taken from current deed of record
  - Wetlands shows were flagged in the field by Rick Zullick, certified soil scientist in January 2021
  - Lot Shown is located in Flood Hazard Zone "C" as shown on FIRM Insurance Rate Map #040115 0010 B, Effective Date May 16, 1983
  - Vertical Datum Depicted Hereon is Approximate North American Vertical Datum 1988 (NAVD88) Based on Global Positioning System
  - North Orientation Depicted Hereon is approximate North American Datum 1983 (NAD83), Based on Global Positioning System Observation.
  - Topographic features depicted were taken from NOAA Lidar Data and conforms to Topographic Accuracy Class "T-D", Contour Interval = 2', Vertical Datum = Approx. NAVD 88.

**LEGEND**

	PROPERTY LINE		WETLANDS FLAG
	EASEMENT		BUILDING SETBACK
	STONEWALL		IRON PIN
	STONEWALL REMAINS		DRILL HOLE
	SILT FENCE		PERCOLATION TEST
	EXISTING INDEX CONTOUR		TEST PIT
	EXISTING CONTOUR		PROPERTY POINT
	PROPOSED CONTOUR		UTILITY POLE

SURVEYOR SHALL SET A BENCH MARK IN THE AREA OF THE SEPTIC SYSTEM AT THE TIME OF CONSTRUCTION STAKE-OUT.

DAVID A. SMITH, P.E. #14173 DATE  
NOT VALID UNLESS SEAL IS AFFIXED HERETO

Paul M. Archer, Conn. L.S. #70013  
No certification is expressed or implied unless this map bears the embossed seal of the land surveyor whose signature appears hereon.

REVISIONS	
DATE	DESCRIPTION

**Site Development Plan**  
Prepared For:  
**Kevin & Sonia Greene**  
52 County Road  
Woodstock, Connecticut

DRAWING SCALE: 1"=30'

**ARCHER Surveying LLC**  
18 Providence Road, Brooklyn, CT  
(860) 779-2240 / (860) 928-1921

**LOUIS J. SOJA, JR.**  
LAND SURVEYOR - LAND PLANNING

**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 Windham County Connecticut, U.S.D.A. Soil Conservation Service 1983.

**DEVELOPMENT SCHEDULE (Individual Lots):**

1. Prior to any work on site, the limits of disturbance shall be clearly flagged in the field by a Land Surveyor, licensed in the State of Connecticut. Once the limits of clearing are flagged, they shall be reviewed and approved by an agent of the Town.
2. Install and maintain erosion and sedimentation control devices as shown on these plans. All erosion control devices shall be inspected by an agent of the Town. Any additional erosion control devices required by the Town's Agent shall be installed and inspected prior to any construction on site. (See silt fence installation notes.)
3. Install construction entrance.
4. Construction will begin with clearing, grubbing and rough grading of the proposed site. The work will be confined to areas adjacent to the proposed building, septic system and driveway. Topsoil will be stockpiled on site and utilized during final grading.
5. Begin construction of the house, septic system and well.
6. Disturbed areas shall be seeded and stabilized as soon as possible to prevent erosion.
7. The site will be graded so that all possible trees on site will be saved to provide buffers to adjoining lots.

**DEVELOPMENT CONTROL PLAN:**

1. Development of the site will be performed by the individual lot owner, who will be responsible for the installation and maintenance of erosion and sediment control measures required throughout construction.
2. The sedimentation control mechanisms shall remain in place from start of construction until permanent vegetation has been established. The representative for the Town will be notified when sediment and erosion control structures are initially in place. Any additional soil & erosion control measures requested by the Town or its agent, shall be installed immediately. Once the proposed development, seeding and planting have been completed, the representative shall again be notified to inspect the site. The control measures will not be removed until this inspection is complete.
3. All stripping is to be confined to the immediate construction area. Topsoil shall be stockpiled so that slopes do not exceed 2 to 1. A hay bale sediment barrier is to surround each stockpile and a temporary vegetative cover shall be provided.
4. Dust control will be accomplished by spraying with water and if necessary, the application of calcium chloride.
5. The proposed planting schedule is to be adhered to during the planting of disturbed areas throughout the proposed construction site.
6. Final stabilization of the site is to follow the procedures outlined in "Permanent Vegetative Cover". If necessary a temporary vegetative cover is to be provided until a permanent cover can be applied.

**SILT FENCE INSTALLATION AND MAINTENANCE:**

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 15 feet into the ground.
3. Lay the bottom 6" of the fabric in the trench to prevent undermining and backfill.
4. Inspect and repair barrier after heavy rainfall.
5. Inspections will be made at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater to determine maintenance needs.
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 gaps between bales shall be wedged with straw to prevent water from passing between the bales.
3. Inspect bales at least once per week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inches or greater to determine maintenance needs.
4. Remove sediment behind the bales when it reaches half the height of the bale and deposit in an area which is not regulated by the Inland Wetlands Commission.
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 15-2 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 year.

**SITE PREPARATION**

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

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

**SEEDBED PREPARATION**

Loosen the soil to a depth of 3-4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a 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 to the anticipated direction of the flow of surface water.

If soil testing is not practical or feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 15 pounds per 1,000 square feet of 10-10-10 or equivalent. Additionally, lime may be applied using rates given in Figure 15-1 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 recurrence of erosion.

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

**PERMANENT VEGETATIVE COVER:**

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

1. Topsoil will be replaced once the excavation and grading has been completed. Topsoil will be spread at a minimum compacted depth of 4".
2. Once the topsoil has been spread, all stones 2" or larger in any dimension will be removed as well as debris.
3. 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 15 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, retilled 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 construction activities are to occur during any particular phase. A sequence should be developed on the premise of "first things first" and "last things last" with proper attention given to the inclusion of adequate erosion and sediment control measures. A construction schedule is a sequence with time lines applied to it and should address the potential overlap of actions in a sequence which may be in conflict with each other.

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

**SLOW THE FLOW**

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

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

**KEEP CLEAN RUNOFF SEPARATED**

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

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

**REDUCE ON SITE POTENTIAL INTERNALLY AND INSTALL PERIMETER CONTROLS**

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

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

**SEPTIC SYSTEM CONSTRUCTION NOTES**

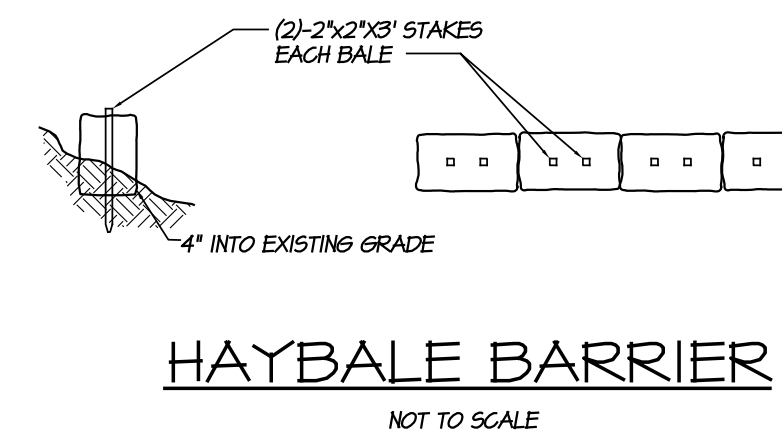
1. The building, septic system and well shall be accurately staked in the field by a licensed Land Surveyor in the State of Connecticut, prior to construction.
2. Topsoil shall be removed and in the area of the primary leaching field scarified, prior to placement of septic fill. Septic fill specifications are as follows:
  - Max. percent of gravel (material between No. 4 & 3 inch sieves) = 45%

**GRADATION OF FILL (MINUS GRAVEL)**

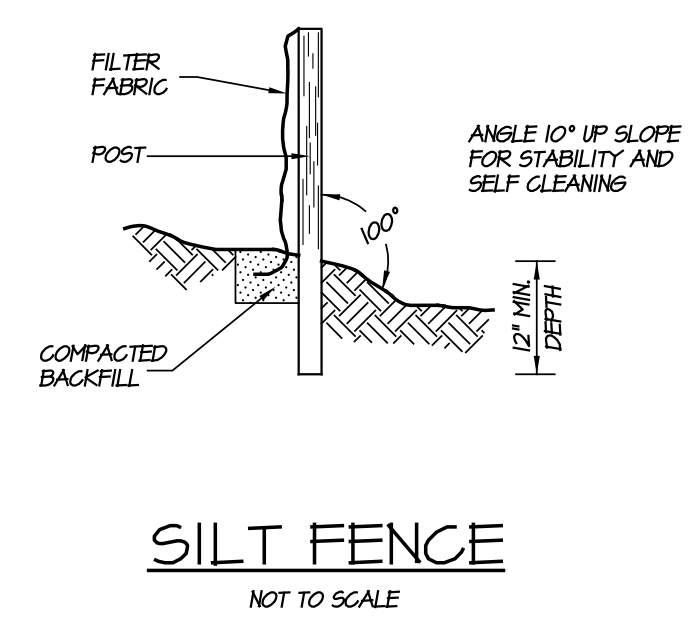
SIEVE SIZE	PERCENT PASSING (NET SIEVE)	PERCENT PASSING (DRY SIEVE)
No. 4	100%	100%
No. 10	10% - 100%	10% - 100%
No. 40	10% - 50%	10% - 75%
No. 100	0% - 20%	0% - 5%
No. 200	0% - 5%	0% - 2.5%

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

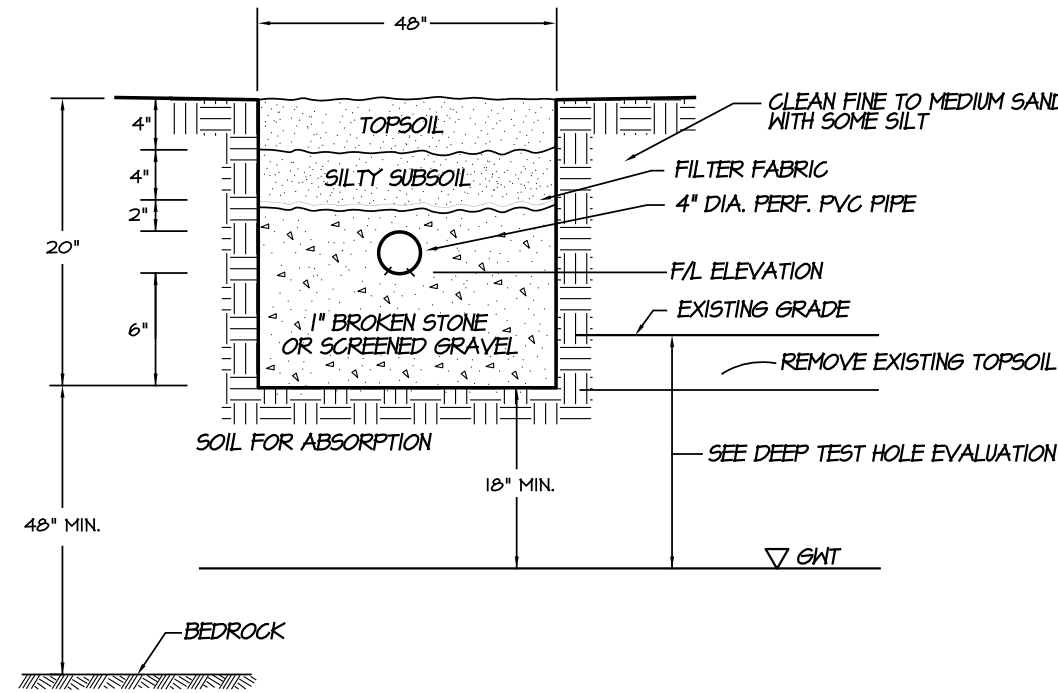
3. Septic tank shall be two compartment precast 1000 gallon tank with gas deflector and outlet filter as manufactured by Jolley Precast, Inc. or equal.
4. Distribution boxes shall be 4 hole precast concrete as manufactured by Jolley Precast, Inc. or equal.
5. All precast structures such as septic tanks, distribution boxes, etc. shall be set level on six inches (6") of compacted gravel base at the elevations specified on the plans.
6. Solid distribution pipe shall be 4" diameter PVC meeting ASTM D-3034 SDR 35 with compression gasketed joints. It shall be laid true to the lines and grades shown on the plans and in no case have a slope less than 0.125 inches per foot.
7. Perforated distribution pipe shall be 4" diameter PVC meeting ASTM D-2121 or ASTM D-3350, 1500 lb. minimum crush.
8. Sewer pipe from the foundation wall to the septic tank shall be schedule 40 PVC meeting ASTM D 1185. It shall be laid true to the grades shown on the plans and in no case shall have a slope less than 0.25 inches per foot.
9. Force main pressure pipe from pump chamber to the leaching field shall be 2" diameter pvc meeting ASTM D 2241 SDR 21.
10. Solid footing drain outlet pipe shall be 4" Diameter PVC meeting ASTM D 3034, SDR 35 with compression gasketed joints. Footing drain outlet pipe shall not be backfilled with free circulating material, such as gravel, broken stone, rock fragments, etc.



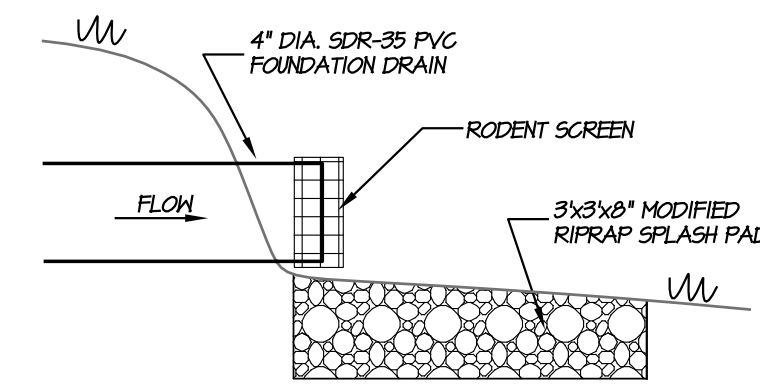
**HAYBALE BARRIER**  
NOT TO SCALE



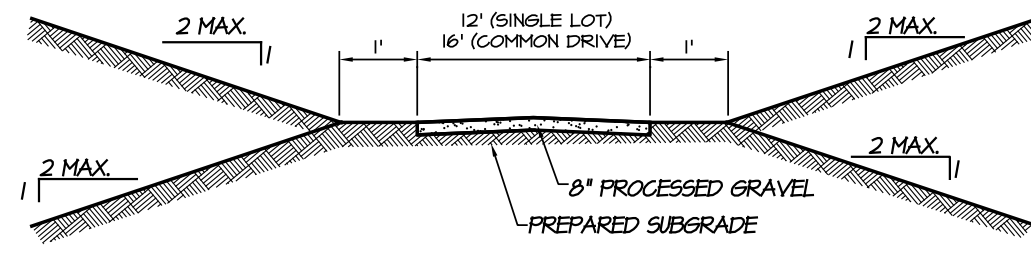
**SILT FENCE**  
NOT TO SCALE



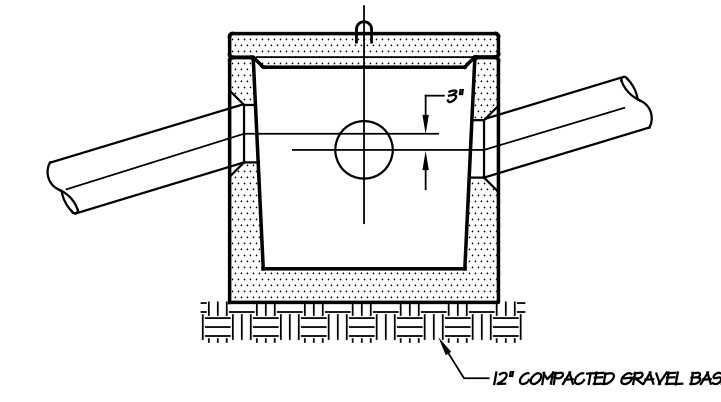
**TYPICAL LEACHING TRENCH SECTION**  
NOT TO SCALE



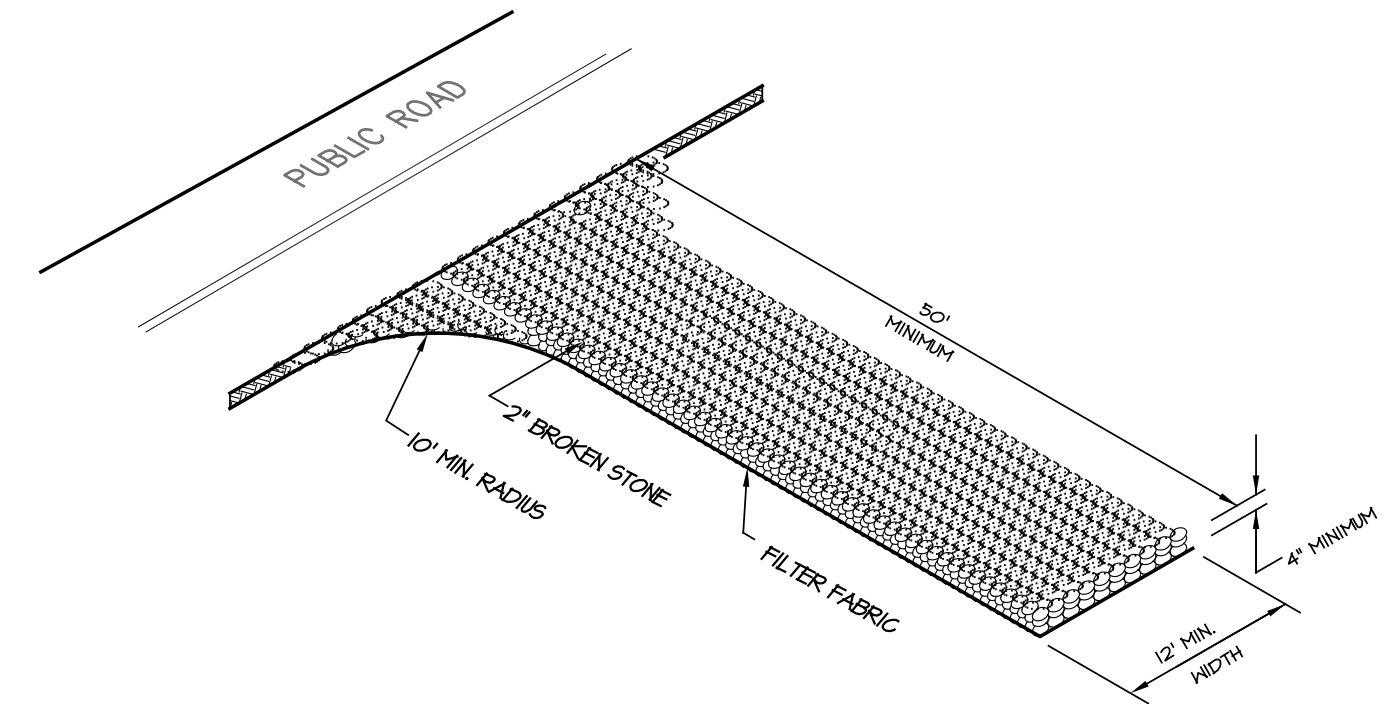
**FOUNDATION DRAIN OUTLET**  
NOT TO SCALE



**GRAVEL DRIVE DETAIL**  
NOT TO SCALE



**OVERFLOW / DISTRIBUTION BOX DETAIL**  
NOT TO SCALE



**CONSTRUCTION ENTRANCE**  
NOT TO SCALE

**Detail Sheet**

Prepared For:  
Kevin & Sonia Greene  
52 County Road  
Woodstock, Connecticut



LOUIS J. SOJA, JR.  
LAND SURVEYOR - LAND PLANNING

REVISIONS	
DATE	DESCRIPTION