

TOWN OF MILLIS
Board of Health Agenda
Monday July 11th 2022 6:00 PM Remote
<https://us02web.zoom.us/j/88412739527>

- 6:00 p.m. Open BOH Meeting.**
- 6:10 p.m. Approval of Meeting Minutes.**
- 6:15 p.m. COVID-Flu Update**
- 6:30 p.m. 1480 Main St EHIR**
- 6:50 p.m. 50 Causeway St LUA Septic**
- 7:15 p.m. Appointments Agents**
- 7:30 p.m. Re-organization Chair BOH**

Director's report
Nurse's report
Payables Sign-off

- Approval of minutes (June 6th 2022)
- Food Recalls (website)
- Review of Monthly Activity
- Correspondence

Tentative Date of Next Meeting:
August 8th 2022

TOWN OF MILLIS
Notice of Meeting

The BOARD OF HEALTH

Will Remote Meet at 6:00 P.M.

On Monday July 11th 2022

Zoom Online meeting

Assistant Town Clerk

Posted _____, 2022

John McVeigh is inviting you to a scheduled Zoom meeting.

Topic: Board of Health Meeting

Time: Jul 11, 2022 06:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/88412739527>

Meeting ID: 884 1273 9527

One tap mobile

+13126266799,,88412739527# US (Chicago)

+19292056099,,88412739527# US (New York)

Dial by your location

+1 312 626 6799 US (Chicago)

+1 929 205 6099 US (New York)

+1 301 715 8592 US (Washington DC)

+1 346 248 7799 US (Houston)

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Meeting ID: 884 1273 9527

Find your local number: <https://us02web.zoom.us/j/88412739527>



April 26, 2022

Mr. John McVeigh, Health Director
Town of Millis
900 Main Street
Millis, MA 02054

Re: 1480 Main Street, Cultivation Facility
EHIR Peer Review

Dear Mr. McVeigh:

BETA Group, Inc. has reviewed documents for the Application for Environmental Health Permit for the property at 1480 Main Street, Cultivation Facility. This letter is provided to outline BETA's findings, comments, and recommendations.

BASIS OF REVIEW

BETA received the following items:

- *Cover Letter for Environmental Health Permit Application for 1480 Main Street in Millis, Massachusetts*, dated April 1, 2022, prepared by Strong Point Engineering Solutions, Inc., West Bridgewater, MA.
- *Application for Environmental Health Permit, 1480 Main Street, Millis, MA*, prepared by Strong Point Engineering Solutions, Inc., West Bridgewater, MA.
- *Summary of Hydrologic Analysis and Stormwater Management System Calculations*, dated February 21, 2022, prepared by Strong Point Engineering Solutions, Inc., West Bridgewater, MA.
- Plans (8 sheets) entitled *Notice of Intent Plans for Proposed Cultivation Facility 1480 Main Street Millis, Massachusetts, Map 21 Lots 9, 26, 28, 29, 30 Map 32 Lot 2*, revised February 21, 2022, prepared by Strong Point Engineering Solutions, Inc., West Bridgewater, MA.
- *Notice of Intent for Proposed Marijuana Cultivation Facility at 1480 Main Street in Millis, Massachusetts*, dated December 22, 2021, revised February 22, 2022, prepared by Strong Point Engineering Solutions, Inc., West Bridgewater, MA.
- *Order of Conditions*, dated March 25, 2022, prepared by Strong Point Engineering Solutions, Inc., West Bridgewater, MA.
- *Special Permit Approval with Conditions*, dated October 18, 2021, prepared by Town of Millis Planning Board

Review by BETA includes the above items in conformance with the following:

- *Millis Board of Health Public and Environmental Health Review Regulations and Standards* adopted January 10, 1990.
- *Massachusetts Stormwater Handbook*, effective January 2, 2008 by MassDEP

PROJECT DESCRIPTION

The parcels identified as making up the site include 6 lots totaling approximately 35.96 acres. There are two access points from Main Street. The project is proposed on 4 of the 6 lots, consisting of 7 acres with frontage ¼ mile east of the Medway townline – referred to herein as the “project site”. The other two lots

consist of a 50' wide lot consisting primarily of wetlands between and with frontage on Main Street and Cedar Street. Cedar Street is only a street on paper at this location and runs between the project site and remaining 28.5-acre parcel listed with this property. The existing project site is developed with a 7,700 SF single story block and metal panel warehouse building and associated paved parking and storage area. There are 4 driveway entrances to the existing parking lot off Main Street and a 40' right-of-way easement along the western property line between Main Street and Cedar Street. The remainder of the property to the south consists primarily of woods and wetland resource area that are part of the Great Black Swamp.

MassDEP Priority Resource Map indicates the project is located within a MassDEP Approved Zone II and is not within NHESP estimated habitats of rare wildlife or rare species. There are wetlands on the site which are included on the site plans. A portion of the site is located within the 100-year FEMA mapped flood zone (Zone A) and the Town's Special Flood Hazard District. The FEMA zone is shown on the plan and work is proposed within this area. The Applicant has indicated FEMA issued a letter of Map amendment removing this designation for the parcel.

The project includes razing the existing industrial building and construction a new 73,800 SF marijuana cultivation facility with associated parking areas, stormwater management system and utility connections.

The property is within the Industrial Park Two (I-P-2) Zoning District and is surrounded by other commercial/industrial uses in this district. The property parcel that is not proposed for development abuts the Commercial District to the south along Main Street and Residential-Suburban District to the southeast. The project includes a commercial/industrial development exceeding 3,000 sq. ft. which requires an Environmental Health Impact Report (EHIR) with the Board of Health.

ENVIRONMENTAL HEALTH IMPACT REPORT (EHIR) REVIEW

SECTION XII DRAINAGE

NRCS maps indicate soils consist mainly of Urban land with no hydrological soil group (HSG) rating. Adjacent areas indicate Swansea muck HGS B/D & Scarborough and Birdsall HSG A/D rating in the wetlands and Canton fine sandy loam HSG B rating to the east and southeast. Test pits previously done in 2007 on the site indicated 3-5 feet of Fill over Sand in the area of the existing parking lot and proposed infiltration fields.

Additional test pits were conducted on 4/20/2022, see attached test pit report for results. Groundwater levels, the amount of fill onsite and soil classifications differed slightly from test pits conducted in 2007. The Applicant indicated they will review findings and resubmit their stormwater design to the Board to accommodate these new findings.

The project proposes a stormwater management system consisting of catch basins, drain manholes, an area drain, trench drain, water quality treatment units, subsurface infiltration fields, stormwater management basins, flared-end structures, outlet-control structure, and concrete headwalls.

BOH1. Plan Comments:

- a. Sheet C-3 *Proposed Grading & Utility Plan*: Callout for OCS-200 is covered by a "50' Wetland Buffer" label.
- b. Sheet C-3 *Proposed Grading & Utility Plan*: Under the Stormwater Structure Schedule, for DMH-200, the Invert Out is indicated directed to DMH-200. Update to outlet destination.

BOH2. Proposed Watershed Plan and HydroCAD Comments:

- a. PWS-2A label on the *Proposed Watershed Plan* PWS-1 plan sheet is on Main Street, move to correct watershed location.
- b. Proposed Watershed PWS-2D Area number differs between the *Proposed Watershed Plan* PWS-1 plan sheet and HydroCAD calculations. Update accordingly.
- c. Proposed Watershed PWS-3B Area number differs between the *Proposed Watershed Plan* PWS-1 plan sheet and HydroCAD calculations. Update accordingly.
- d. HydroCAD Basin 100 invert for FES-100 is indicated at 140.40', plan detail shows FES-100 invert at 140.50'. Update accordingly.
- e. HydroCAD Basin 200 invert for emergency spillway is indicated at 145.05', plan detail shows at elevation 145.50'. Update accordingly.
- f. Minor discrepancies observed between pipe sizes/lengths for infiltration basins in HydroCAD vs the plans. Update for consistency.

Section XII 1. – *The proposed drainage for the subdivision or project shall not cause an increase or decrease in either the total volume of runoff discharge offsite, or total rate of runoff discharge offsite, as compared with the respective discharge offsite prior to the development. Such condition shall be required for storms of 1, 10, 50 and 100-year frequency events.*

The Applicant has provided calculations comparing runoff flows and volumes between pre- and post-development conditions for 2-, 10-, 25-, 50-, and 100-year storm events. The project results in a decrease in peak rate runoff in all design storms except for the 2- and 10-year storms within Watershed 3 and Watershed 1, respectively, where there are de minimis increases (0.07 cubic feet per second increase during the 2-year storm in Watershed 3 and 0.05 cubic feet per second increase during the 10-year storm in Watershed 1). This is within the margin of error of modeling and practically meets the requirement to match existing pre and post discharge rates.

BOH3. Add the 1-year storm event to the Stormwater Report per the regulation.

BOH4. The project proposes to reduce the peak rate and volume of stormwater flow from the project site through infiltration and detention consistent with MassDEP stormwater standards. The Applicant should request a variance to allow a decrease in the rate and volume of stormwater runoff from the overall project area for the 25-, 50- and 100-year storm events.

Section XII 2. – *No channelization of surface runoff shall be allowed offsite without the written consent of the owner of the land affected, in the form of a permanent grant of easement, recorded at the Registry of Deeds.*

All surface runoff is directed to pre-treatment and infiltration best management practices and most overflow discharge occurs within the limits of the site with measures to avoid channelization. A portion of impervious surface is proposed to be collected in a catch basin, routed through an infiltration field, with an overflow pipe connection to existing drainage on Main Street. This connection to the Town drainage requires a Municipal Storm Drain Permit Application to the Select Board under Town of Millis Stormwater Management Regulations Article II: Regulation Governing Discharges to the Municipal Storm Drain System.

BOH5. Submit Municipal Storm Drain Permit Application to the Select Board.

Section XII 3. – *In cases where runoff infiltration cannot, in the opinion of the Board of Health, be appropriately implemented because of the possibility of contamination of water supply, or because of extremely poor infiltrative and permeability characteristics of the soil, the requirement as regards volume may be waived by the Board of Health, provided the applicant provides such additional preventive measures to prevent any increase in elevation or duration of downstream flood elevations. Such additional measures may be, but are not restricted to, the construction of flood storage facilities and/or the creation of additional wetlands.*

BOH6. Awaiting revised drainage plan before providing comment.

Section XII 4. – *If detention or retention ponds are utilized, slopes shall be no steeper than 4 horizontal to 1 vertical, and design water depth shall not exceed three (3) feet. Minimum bottom slope for “dry” detention areas shall be two (2) percent.*

Two stormwater basins are proposed, with slopes 3 horizontal to 1 vertical. The bottom of the basins are designed to be flat with an infiltration water depth designed at 1' and 0.5' (Basin 1 and 2, respectively) and outlet control structure overflow depth is 3' for both basins.

BOH7. Revise side slopes to 4 horizontal to 1 vertical to meet the regulation.

BOH8. The Applicant should request a variance to allow for a flat bottom basin to provide uniform ponding and maximize exfiltration. Provide means and method for draining the flat bottom basin for maintenance if it does not drain within 72 hours as designed.

Section XII 5. – *Poor infiltrative and permeability conditions are defined as a soil permeability of less than 1×10^{-4} centimeters per second. Unless, in the opinion of the Board of Health, such testing is not applicable for a particular site, all permeability tests shall be in-situ field bore hole tests for permeabilities in the acceptable range as specified above. If permeability testing is desired to be performed in soils of lesser permeability, laboratory tests for hydraulic conductivity shall be performed on undisturbed samples by the Falling Head Permeability Test using flexible membrane triaxial test cells with back pressure (Army Corps of Engineering Manual EM 1110-2-1906 Appendix VII).*

No permeability tests have been conducted or planned at this time. Test pits have been conducted and results are being reviewed to determine infiltration and permeability conditions.

SECTION XIII EARTH REMOVAL STANDARDS

The Earth Removal Standards of the EHIR address proposed excavation, filling and earth operations, and potential adverse impacts to public health or safety.

Section XIII 1 – *Plans for any proposed earth removal operation exceeding 175 cubic yards of material per lot or 500 cubic yards per project, shall be filed with the Board of Health and shall contain the following information and meeting the following criteria... (a-o)*

This is not an earth removal operation project and the plans indicate the building will have a slab foundation at an elevation higher than the existing site grade.

BOH9. The Applicant should confirm that they will not be removing a significant amount of earth from the site or whether they will exceed the earth removal regulation threshold.

Section XIII 2.a – *In order to provide for potential subsurface sewage disposal systems, no excavation shall occur closer than 7.5 feet from the maximum groundwater elevation as determined by the procedure described in Section VIII of this regulation.*

- BOH10. There are no subsurface sewage disposal systems on-site or in the area. Sewage disposal is via connection to the Town sewer in Main Street for this and adjacent properties. The Applicant should request a variance to allow excavation within 7.5' of seasonal high groundwater for installation of the Stormwater Management Systems.

Section XIII 2.b. – *There shall be no increase or decrease of surface water flow off the site.*

The project results in a decrease in peak rate runoff in all design storms except for the 2- and 10-year storms within Watershed 3 and Watershed 1, respectively, where there are de minimis increases (0.07 cubic feet per second increase during the 2-year storm in Watershed 3 and 0.05 cubic feet per second increase during the 10-year storm in Watershed 1). This is generally consistent with the previously approved calculations.

Section XIII 2.c. – *There shall be no potential adverse effect on public health or safety, or the health or safety of persons living, working or otherwise present in the neighborhood, due to excessive noise, dust, or any other condition which may result from the proposed operation.*

It is BETA's understanding that odor and noise will be reviewed under a separate application to the Board of Health.

Section XIII 2.d. – *There shall be no potential adverse impact on surface waters, public or private wells, as a result of the proposed operation.*

Proposed work includes a restoration plan that is sufficient in protecting the interests of the AURA. Fruit-bearing species such as black huckleberry (*Gaylussacia baccata*) and lowbush blueberry (*Vaccinium angustifolium*) will provide food sources for wildlife, while the proposed native seed mixture will provide a source of cover and habitat.

Section XIII 2.e. – *Lateral support shall be maintained for all adjacent properties, and no banks shall be left after completion of operations with a slope which exceeds one foot vertical rise in four feet of horizontal distance.*

- BOH11. Two stormwater basins are proposed with slopes 3 horizontal to 1 vertical.

Section XIII 2.f. – *Any access to an excavated area or areas shall be adequately posted with "Keep Out" and "Danger" signs.*

- BOH12. Include this requirement in "Minimum Construction Requirements and Sequencing", sheet C-4.

Section XIII 2.g. – *During operations, any excavation, quarry, bank, or work face having a depth of ten feet or more and/or creating a slope of more than thirty degrees downward shall be fenced.*

Proposed work will not be ten feet or more in depth.

Section XIII 2.h. – *No boulders in excess of a volume of 20 cubic yards and no trees or stumps or demolition or construction waste materials shall be buried on-site.*

- BOH13. Add this requirement as a note to "Minimum Construction Requirements and Sequencing", sheet C-4.

Section XIII 2.i. – *Notwithstanding any standard otherwise required in this regulation, the operation and restoration shall comply with the standards contained in the Massachusetts Conservation Guide, Volumes I, and II, United States Department of Agriculture, Soil Conservation Service.*

Refer to Proposed Site Layout Plan (C-2), Proposed Erosion Control Plan (C-4), and SWPPP.

Section XIII 2.j. – *At the time of restoration, the areas subject to this regulation shall be covered with a minimum of four inches of compacted topsoil and seeded with an appropriate grass or legume.*

BOH14. Add loam and seed detail to plan set, add requirement to Note #6 on sheet C-2.

SECTION XIV EHIR SCOPE AND GENERAL SUBMITTAL REQUIREMENTS

The Applicant has provided the information for submittal requirements, other than as noted in the comments above, within the documents listed above in the "Basis of Review" including plans, drainage report and long-term stormwater pollution and operation and maintenance preventions plans.

If we can be of any further assistance regarding this matter, please contact us at our office.

Very truly yours,
BETA Group, Inc.



Melissa Recos, PE
Associate



Katelyn Burke, EIT
Staff Engineer



MILLIS PLANNING BOARD
CONSTRUCTION OBSERVATION REPORT
1480 Main Street

Report No.:	10422 - 1	Date:	April 20, 2022	Arrive:	8:30 AM
Observer:	Dan Hammerberg, Engineer	Weather:	Clear ~45°	Leave:	1:00 PM
Owner:	GTE Millis, LLC 251 N. Pearl Street Brockton, MA 02301	Engineer:	Strongpoint Engineering 340 Manley Street, Unit 2 West Bridgewater, MA 02379 508-682-0229		

Items Observed: **Infiltration Basin Soils**

OBSERVATIONS

Observation Requested By: Eric Dias – Strongpoint Engineering

Met/walked site with: Eric Dias – Strongpoint Engineering

Items Observed:

BETA arrived on site to observe test pits at 1480 Main Street in Millis, MA. BETA met with Eric Dias and Stephanie Hoban of Strongpoint Engineering and John McVeigh of Millis Board of Health to discuss locations of proposed test pits.

The contractor excavated seven test pits while onsite including one test pit in Stormwater Basin 100, stormwater basin 200, Infil-300, Infil-400, and Infil-100, and two test pits in infiltration basin 200,

Stormwater basin 100 excavation was conducted just outside the proposed basin due to encountering a concrete slab 12" below the parking lot. The testpit was excavated north of the basin near the east entrance to the site. Excavation encountered fill 0-60", weeping at 92", and fine loamy sand material.

Infil-200 excavation was conducted in the center of the proposed location. Excavation encountered fill 0-48", weeping at 20", and loamy sand material. Another excavation was conducted to determine if weeping at 20" was ground water, or water perched from the previous days rainstorm. The second testpit was conducted at the south edge of the proposed system. Testpit encountered fill 0-20", mottles at 36", and similar gravelly loamy sand.

Stormwater basin 200 excavation was conducted in the center of the proposed basin. Excavation encountered fill 0-48", buried A layer 48"-54", weeping at 48", and loamy sand material.

Infil-300 excavation was conducted in the center of the proposed system. Excavation encountered a plowed A layer 0-9", weeping at 80", and gravelly loamy sand material.

Infil-400 excavation was conducted in the center of the proposed system. Excavation encountered a plowed A layer 0-6", weeping at 60", and gravelly loamy sand material with cobbles.

Infil-100 excavation was conducted in the center of the proposed system. Excavation encountered fill 0-72", buried a layer 72"-78", weeping at 54", and fine loamy sand material. A layer of gleysole material was encountered within the C layer and will be removed prior to installed the stormwater system.

1480 Main Street
Site Observation Report No. 1
April 20, 2022

The engineers from Strongpoint engineering indicated they would review this testpit information and resubmit their stormwater design to the board of health.

John inquired if the contractor had pulled a trench permit from the town prior to excavation. Eric from Strongpoint indicated he was not aware it was necessary, but would file a trench permit after leaving the site after the fact.

Site Photos



Infil-200 Testpit, water weeping into test pit at 20"



Basin 200, note buried A layer



Basin – 200, Fine loamy sand



Infil-300



Infil-400



Infil-100, note 72" of fill



Material from Infil-100, note Gleysol soil



Infil-100, note buried A layer



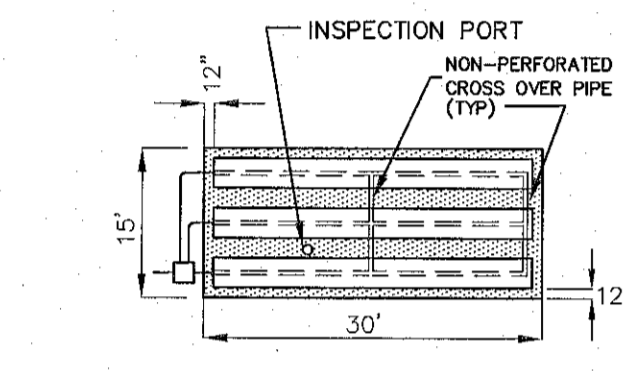
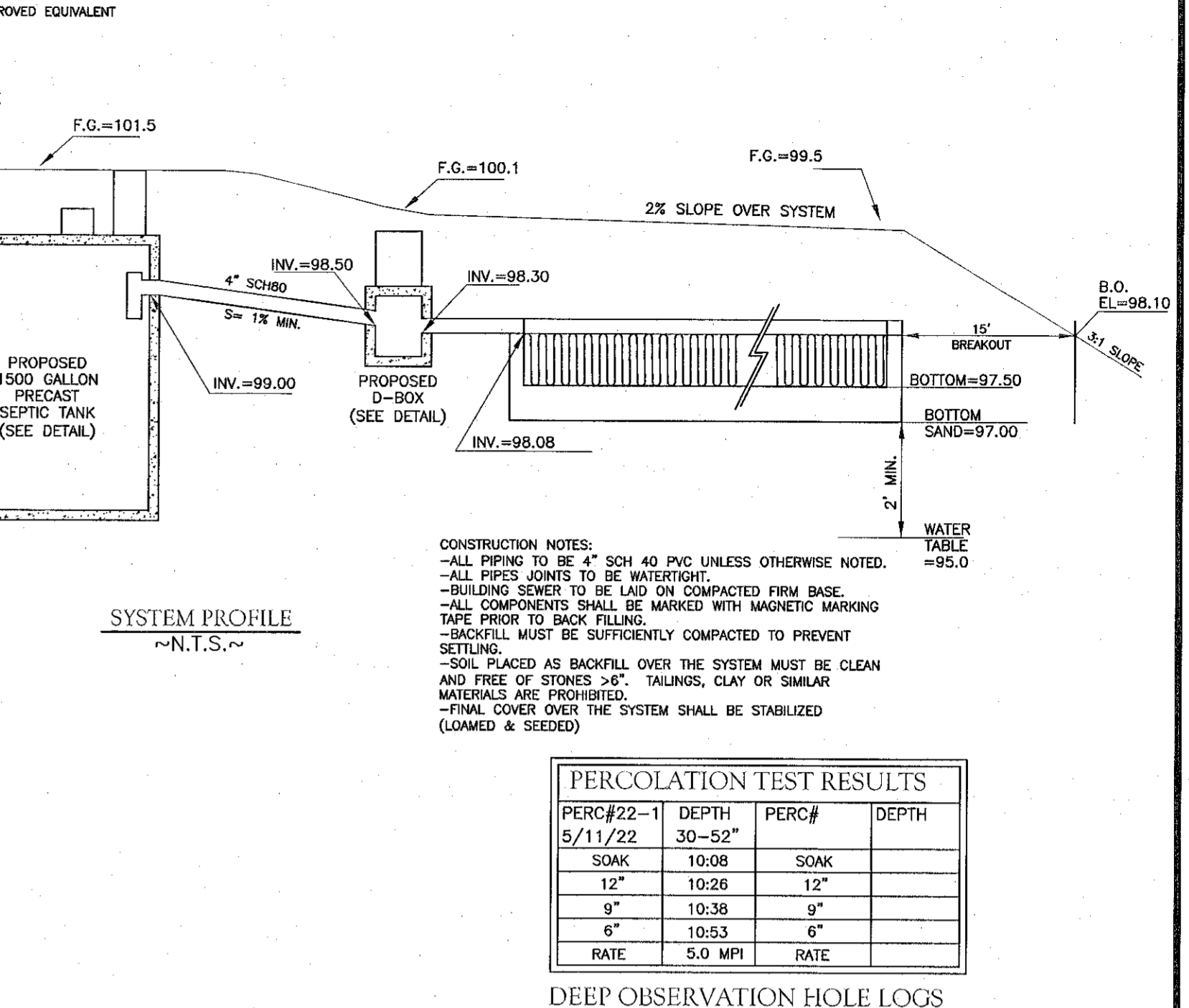
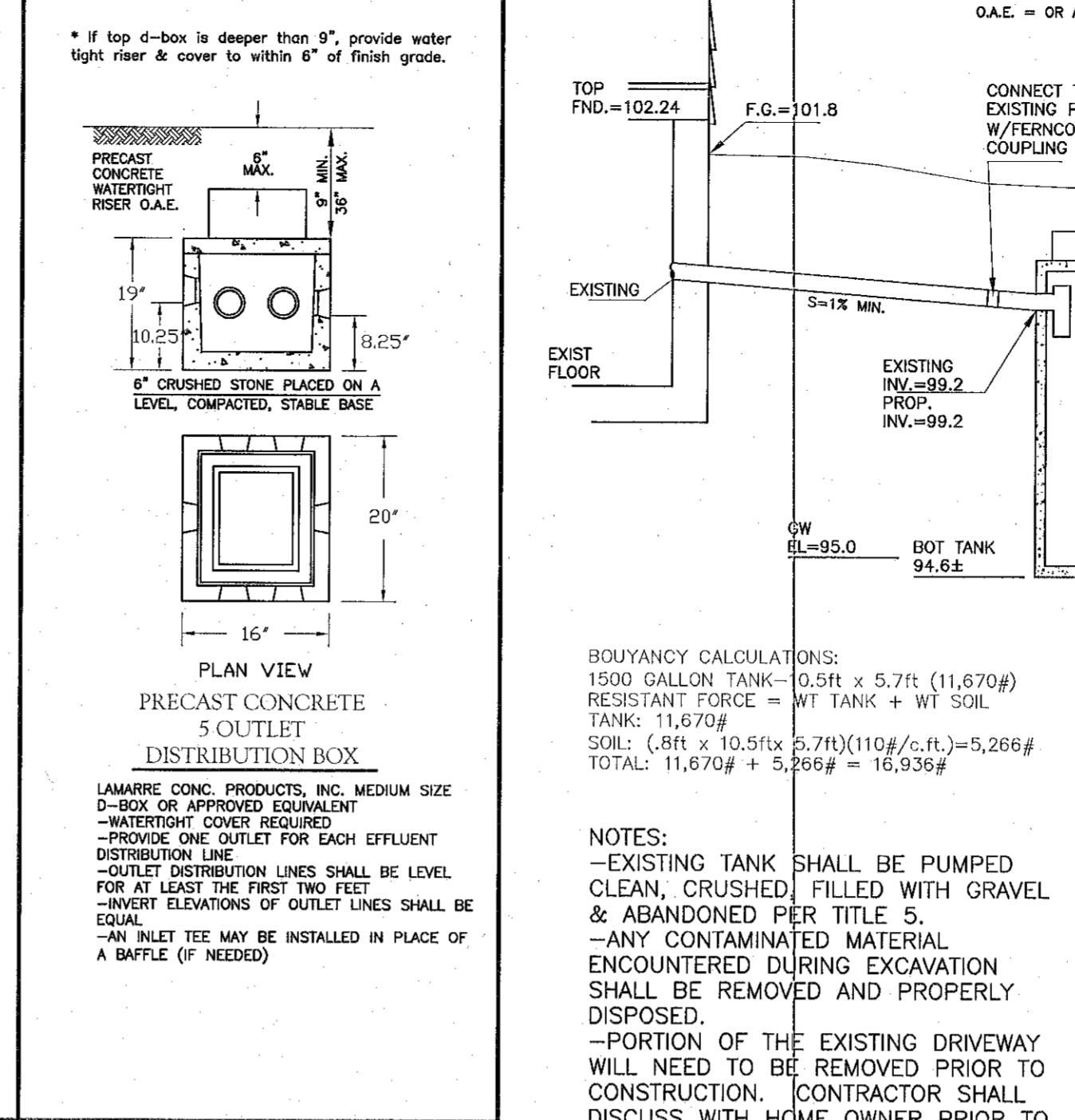
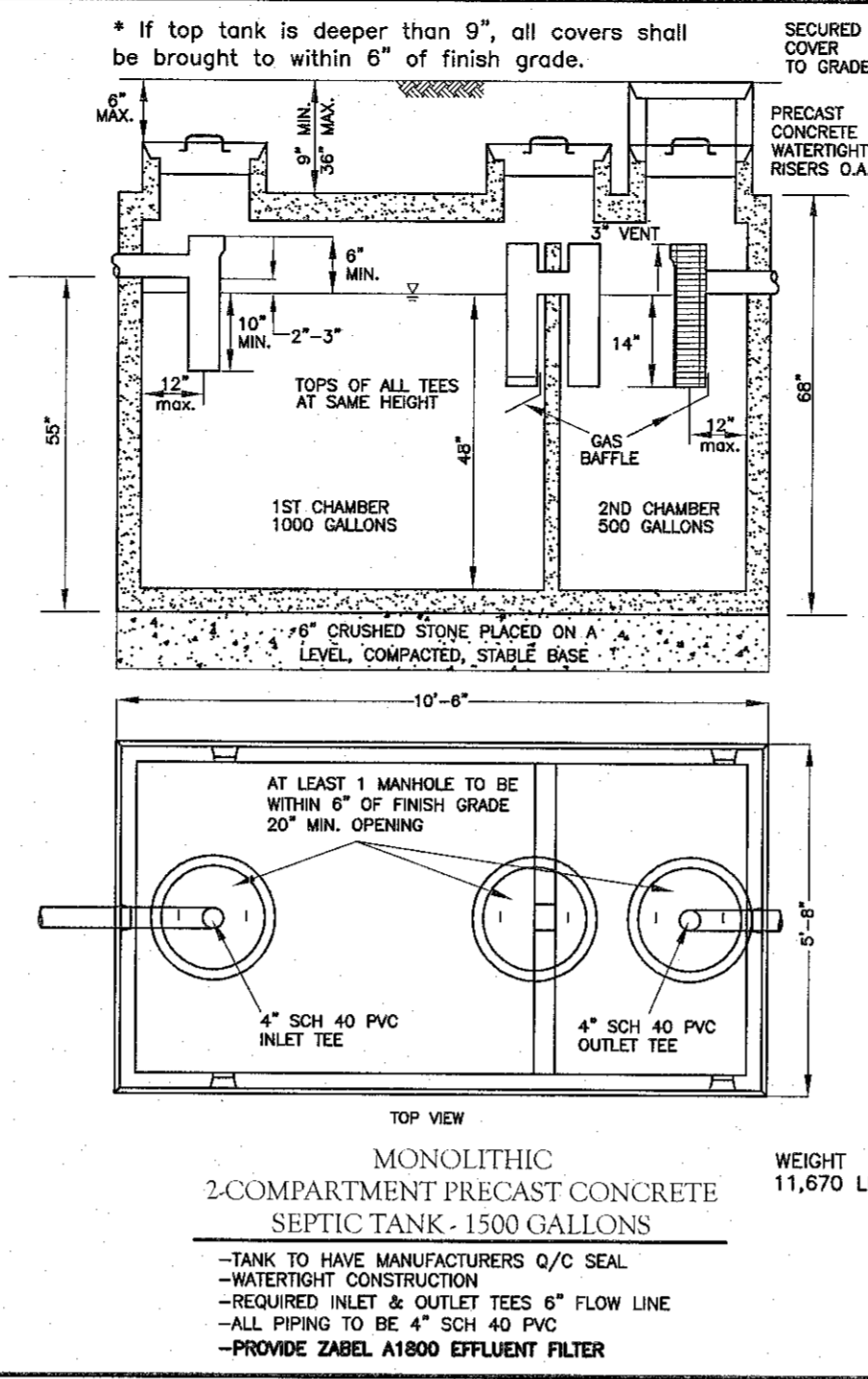
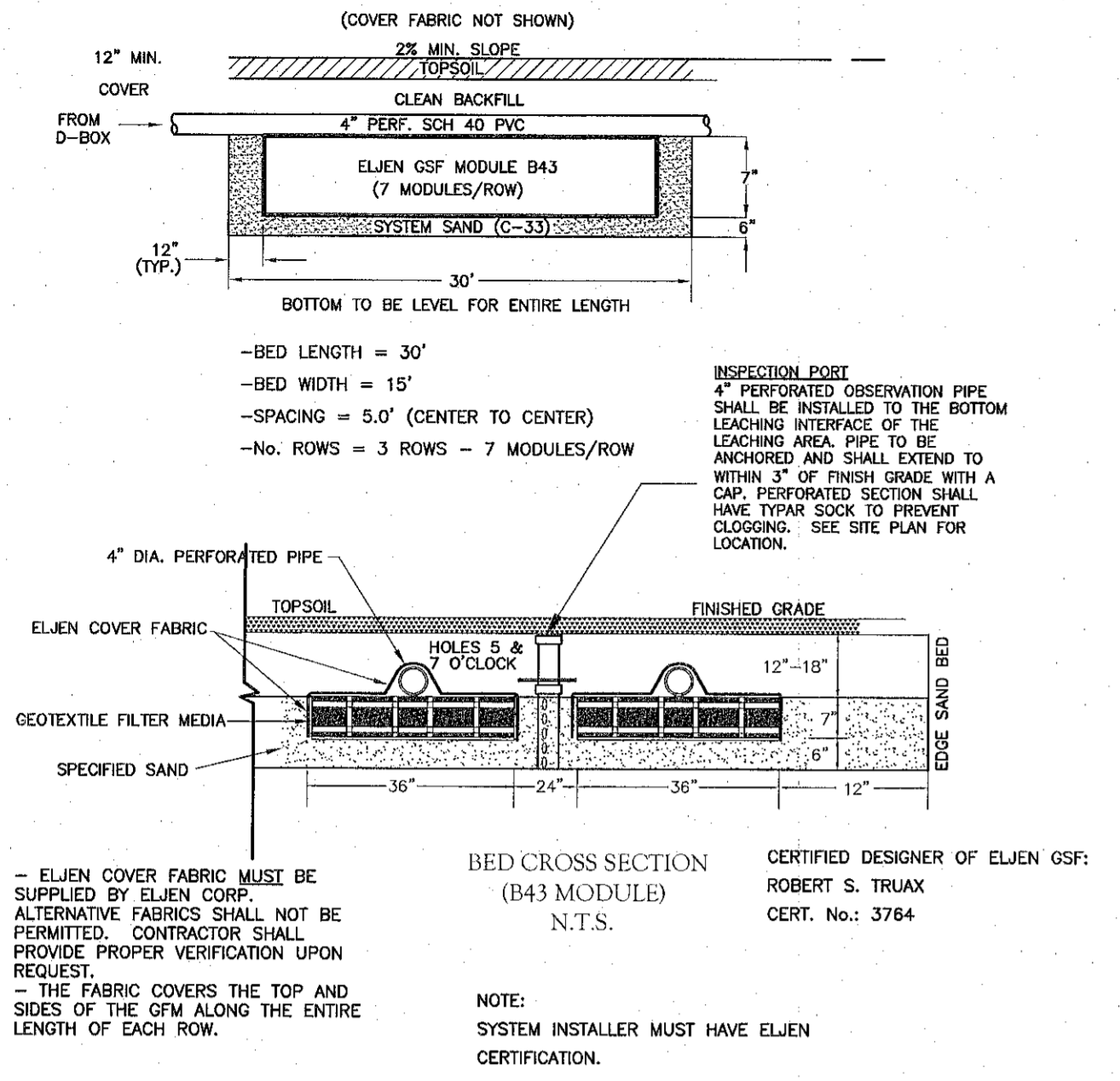
Concrete slab encountered 12" below surface near Basin 1



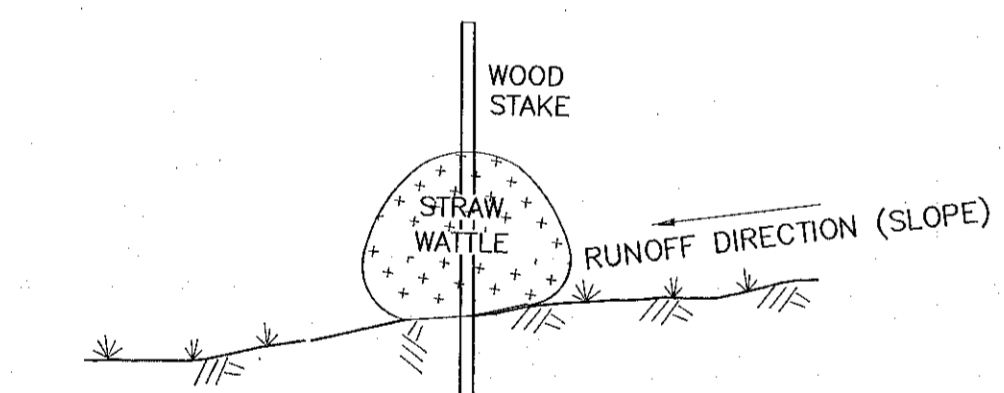
Second test pit in Infil-200, note 20" of fill mottles at 36"

EIJEN CORP.
GEOTEXTILE SAND FILTER (GSF)

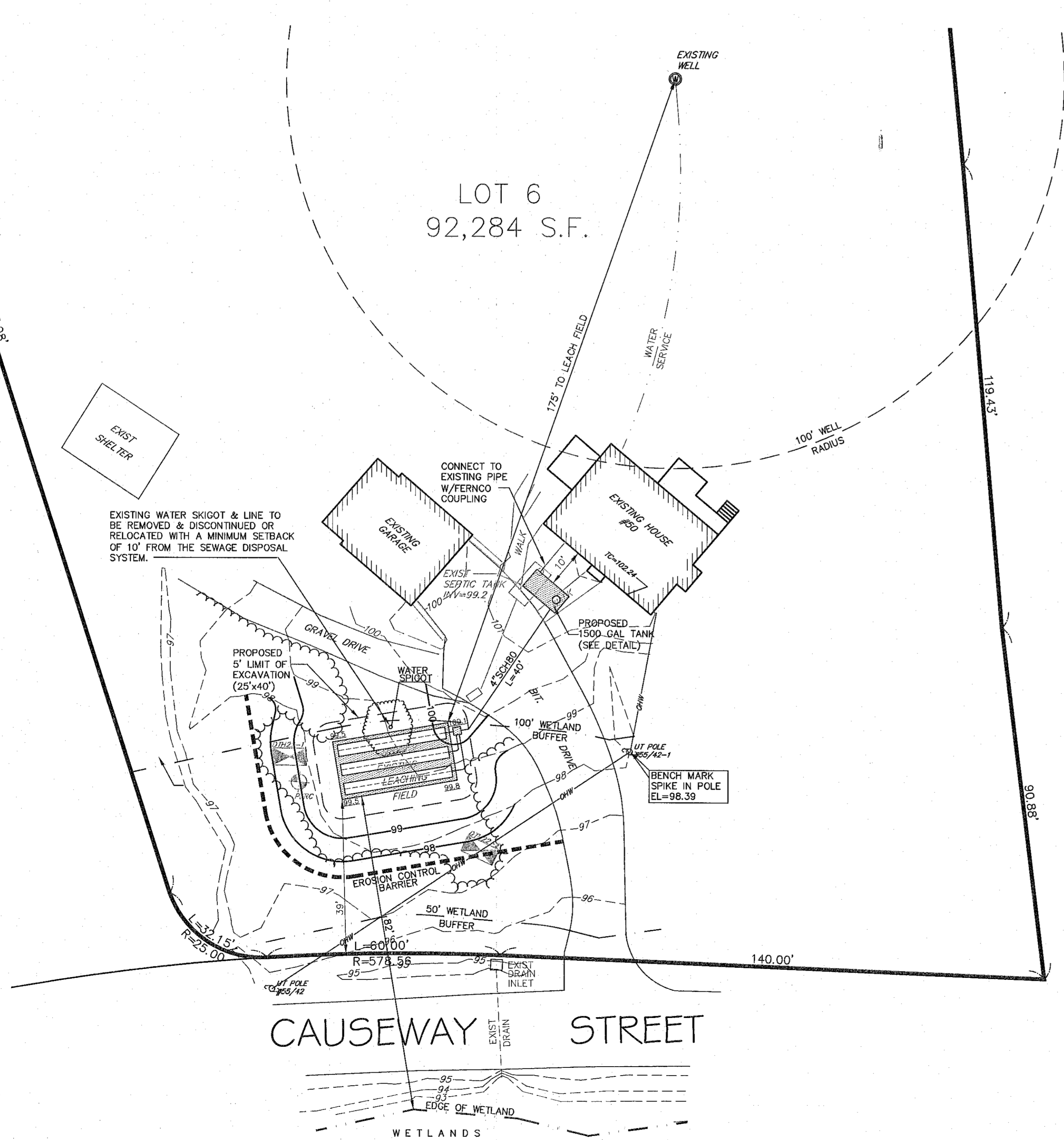
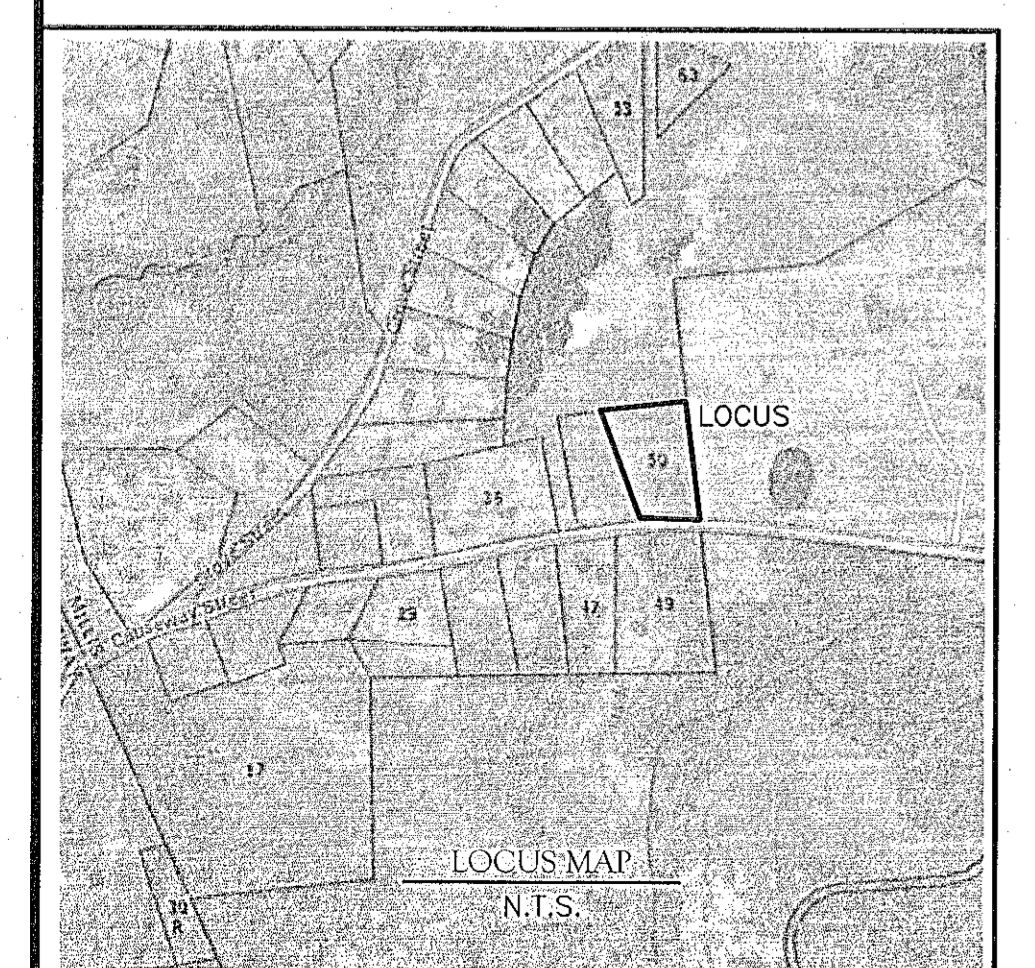
- 1) System to be installed in accordance with product design and installation manual, state and local regulations. For product information or the nearest dealer contact Eljen Corp. 125 McKee Street, East Hartford, CT 06108 - Phone 1-800-444-1359 - www.eljen.com
- 2) Each installer shall install the System in accordance with Company training on the installation of the System and the conditions of this Certification.
- 3) No installer shall install the System unless the installer has been trained by the Company on installation of the System or the installation is overseen by a Company representative(s).
- 4) Prior to construction, the system installer must certify in writing to the Designer, the local approving authority and the system owner that (s)he is a locally approved System installer. The System Installer shall certify the (s)he has received appropriate training by Eljen or the System installer shall identify the Eljen trained representative who will oversee the installation.
- 5) Installers shall complete the System Installation Form and forward a copy to the Company and the local approving authority.
- 6) The System installer shall provide the System owner and the local approving authority with a bill of lading certifying that the sand fill meets ASTM C-33.
- 7) System sand shall meet ASTM C-33 with less than 10% passing the #100 sieve and less than 5% passing the #200 sieve.
- 8) Surrounding sand (5' limit of excavation) shall be system sand (ASTM C-33) or Title 5 fill, 310CMR 15.255(3).
- 9) The System shall not be required to be inspected at any greater frequency than would be required if the facility was served by a conventional system per Title 5, unless in accordance with any DEP, Designer or local requirements or recommendations.
- 10) Prior to the issuance of a Certificate of Compliance for the System, the System owner shall record and/or register in the appropriate Registry of Deeds and/or Land Registration Office, a Notice disclosing both the existence of the alternative septic system subject to this Approval on the property and the Department's approval of the System. If the property subject to the Notice is unregistered land, the Notice shall be marginally referenced on the owner's deed to the property. Within 30 days of recording and/or registering the Notice, the System owner shall submit the following to the local approving authority: (i) a certified Registry copy of the Notice bearing the book and page/instrument number and/or document number; and (ii) if the property is unregistered land, a Registry copy of the owner's deed to the property, bearing the marginal reference.



ELJEN GSF MODULE B43
BED CONFIGURATION
3 ROWS - 7 MODULES/ROW



(EROSION CONTROL BARRIER)
STRAW WATTLES
N.T.S.



- 1) Local Upgrade Approvals:
 1. 310CMR 15.284 - To allow the soil absorption system to be installed 2 feet above seasonal high groundwater with the installation of the Eljen GSF system. Per DEP's "Remedial Use Approval" dated Sept. 26, 2014. (DEP approval is not required)
- 2) Town of Millis Variances: none
- 3) D.E.P. Variances: none
- 4) Deed Restrictions Required:
 1. Notice of an alternative system subject to DEP's "Standard Conditions for Alternative Soil Absorption Systems with General Use Certification and/or Approved for Remedial Use - Revised Sept. 26, 2014" (prior to C.O.C.) - see Eljen Corp. GSF note #10.

ASSESSOR'S REFERENCE:
MAP 13, LOT 27
*NO GARBAGE GRINDER ALLOWED
UPGRADE
TYPE OF FACILITY SERVED
SINGLE FAMILY DWELLING - 4 BEDROOMS
DESIGN FLOW :
4 BEDROOMS x 110 GAL/DAY/BEDROOM = 440 G.P.D.
SEPTIC TANK PROPOSED: 1500 GALLON 2-COMPARTMENT
DESIGN FLOW x 200%
440 GAL. x 200% = 880 GALLONS
SEPTIC TANK SIZING:
DESIGN FLOW = 440 GPD
EFFLUENT LOADING RATE = 0.60 GPD/SF
LEACHING AREA REQUIRED = 440 GPD/0.33 GPD/SF = 733 S.F.

ELJEN SYSTEM DESIGN
NUMBER OF B43 MODULES REQUIRED (BED): 20 UNITS
MINIMUM AREA REQUIRED: 320 S.F.
USE 3 ROWS x 7 MODULES/ROW = 21 MODULES
SYSTEM SAND BED AREA:
LENGTH = 30'
WIDTH = 15'
TOTAL AREA PROVIDED = 450 S.F.

LEGEND

- 166 --- EXISTING CONTOUR ELEVATION
- 166 --- PROPOSED CONTOUR ELEVATION
- ◻ DEEP TEST SOIL PIT
- ◊ PERCOLATION TEST
- ◻ PROPOSED SPOT ELEVATION

- NO PUBLIC WELLS WITHIN 400 FEET EXCEPT AS SHOWN.
- NO PRIVATE WELLS WITHIN 200 FEET EXCEPT AS SHOWN.
- NO WETLANDS, INLAND BANKS, OR SURFACE WATERS WITHIN 150 FEET EXCEPT AS SHOWN.
- NO SURFACE WATER SUPPLIES WITHIN 400 FEET EXCEPT AS SHOWN.
- NO SURFACE DRAINS EXCEPT AS SHOWN.
- NO SURFACE OR SUBSURFACE DRAINS WHICH INTERCEPT GROUND WATER EXCEPT AS SHOWN.
- LOCATION OF FLOODWAY SHOWN IF ANY.
- NO 100 YEAR FLOOD LIMIT, EXCEPT IF SHOWN.
- SITE IS NOT WITHIN A NITROGEN SENSITIVE AREA.

IT SHALL BE THE RESPONSIBILITY OF THE APPLICANT AND/OR CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. ALL UTILITIES WITHIN A BUILDING SHALL BE REVIEWED BY THE APPROPRIATE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY INTERIOR OR EXTERIOR WORK. DIG SAFE IS TO BE NOTIFIED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION (1-888-344-7233)

DEEP OBSERVATION HOLE LOGS

DEEP HOLE -- 22-1			DEEP HOLE -- 22-2		
HORIZ DEPTH	DATE: 5/11/22	ELEV.	HORIZ DEPTH	DATE: 5/11/22	ELEV.
0"	A SANDY LOAM 10R5/2	97.7	0"	A SANDY LOAM 10R5/2	97.5
9"	FILL	96.9	22"	B SANDY LOAM 10R5/2	95.7
18"	FILL	96.2	37"	B SANDY LOAM 10R5/2	94.5
96"	C SANDY LOAM Very Fine Sand 2.9S/2	89.7	112"	C SANDY LOAM Very Fine Sand 2.9S/2	88.2
69"	GROUNDWATER MONITORED	92.0	80"	GROUNDWATER MONITORED	90.8
32"	SOIL MOTTLING	95.0	32"	SOIL MOTTLING	94.8
32"	GROUNDWATER MONITORED	95.0	32"	GROUNDWATER MONITORED	94.8
32"	ESTIMATED SEASONAL HIGH GROUNDWATER	95.0	32"	ESTIMATED SEASONAL HIGH GROUNDWATER	94.8

CERTIFIED SOIL EVALUATOR: CHRIS GABORIAULT
WITNESSED BY B.O.H. AGENT: JOHN MCVIEGH
DESIGN PERCOLATION RATE: 5.0 M.P.I.

Soil Evaluator Certification: I certify that I am currently approved by the D.E.P. pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation are accurate and in accordance with 310 CMR 15.100 through 15.107.

- GENERAL CONSTRUCTION NOTES:
1. THE DETAILS SHOWN ARE GENERAL IN NATURE AND ARE NOT INTENDED TO SHOW EVERY POSSIBLE INSTALLATION REQUIREMENT. THE CONTRACTOR SHALL BE KNOWLEDGABLE IN THE REFERENCED CODES, INSTALLATION REQUIREMENTS AND PROVIDE NECESSARY LABOR, MATERIALS AND EQUIPMENT TO INSTALL FUNCTIONAL SYSTEM.
 2. COMPONENTS SHALL NOT BE BACKFILLED OR CONCEALED WITHOUT INSPECTION BY AND PERMISSION FROM BOARD OF HEALTH.
 3. IT IS THE RESPONSIBILITY OF THE APPLICANT TO OBTAIN THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE PROPER INSPECTIONS FOR CERTIFICATIONS AND AS-BUILT PLANS.
 4. INSTALLER REQUIRED TO PROVIDE PROPER CERTIFICATION.
 5. LEACHING AREA TO BE FLAGGED FOR PROTECTION UNTIL CERTIFICATE OF COMPLIANCE IS OBTAINED.
 6. NO STOCKPILING OF MATERIALS OVER SYSTEM.
 7. NO TRAFFIC OR PARKING OVER SYSTEM.
 8. BOTTOM AND SIDES OF EXCAVATION AREA SHALL BE SCARIFIED.
 9. PLACEMENT OF FILL SHALL BE DONE BY STOCKPILING AT THE EDGE OF THE EXCAVATION AREA AND PUSHED OR CAST IN PLACE.
 10. FILL SHALL NOT BE PLACED IN THE EXCAVATION AREA DURING RAIN OR SNOW STORM.
 11. IF ANY FILL IS TO BE PLACED BELOW THE WATER TABLE, Dewatering IS REQUIRED PRIOR TO PLACEMENT.
- TO ENSURE THE PERFORMANCE OF THE SYSTEM, MAINTENANCE SHOULD BE PERFORMED ANNUALLY BY A LICENSED SEWAGE PUMPING CONTRACTOR.
- GLM ENGINEERING CONSULTANTS, INC. WILL NOT BE RESPONSIBLE FOR THE PERFORMANCE OF THIS SYSTEM UNLESS CONSTRUCTED AND INSPECTED IN ACCORDANCE WITH THIS PLAN. INSPECTIONS TO BE DONE AFTER EXCAVATION FOR SYSTEM AND AFTER CONSTRUCTION, BUT PRIOR TO BACKFILLING. ANY ALTERATION MUST BE APPROVED IN WRITING BY GLM ENGINEERING CONSULTANTS, INC.

5' LIMIT OF EXCAVATION (25' x 40')
ALL TOPSOIL, SUBSOIL AND ANY DELETERIOUS MATERIAL MUST BE REMOVED FROM THE AREA OF THE SYSTEM AND OTHER DESIGNATED LIMITS AND FILLED WITH APPROVED, CLEAN, GRANULAR SAND. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES AND BE GRADED SO NOT MORE THAN 45% OF THE SAMPLE IS RETAINED IN A #4 SIEVE. OF THAT PASSING, 20% OR LESS SHALL PASS A #100 SIEVE AND 5% OR LESS SHALL PASS THE #200 SIEVE. NOT MORE THAN 90% SHALL BE RETAINED ON THE #50 SIEVE. SAMPLE FOR SIEVE ANALYSIS TO BE TAKEN FROM SAMPLE IN PLACE.

BENCH MARK SPIKE SET IN POLE; ELEV=98.39
(DATUM = ASSUMED)

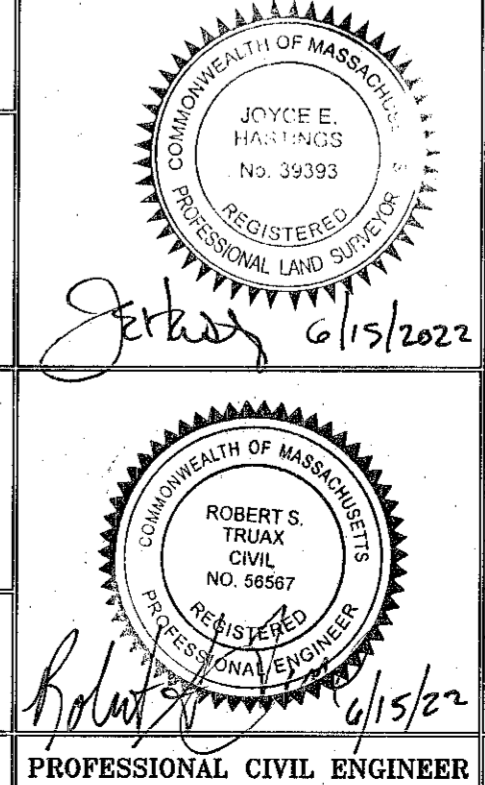
**PROPOSED SEWAGE DISPOSAL SYSTEM
50 CAUSEWAY STREET
MILLIS, MASSACHUSETTS**

APPLICANT/OWNER:
JOAN NICHOLS
50 CAUSEWAY STREET
MILLIS, MA 02054

DATE: JUNE 3, 2022
REVISED: JUNE 9, 2022
JUNE 14, 2022

GLM Engineering Consultants, Inc.
19 EXCHANGE STREET
HOLLISTON, MA 01746
P: 508-429-1100
F: 508-429-7160
www.GLMEngineering.com

DES: RST SCALE: 1" = 20' JOB #17,297 SHEET #1 of 1
50 CAUSEWAY STREET



List of Appointment of Agents for FY 22 July 2021

Health Agent	John P. McVeigh, MBA, CHO, RS	Weekend, evening events
Health Agent	Matthew Fuller PHD, Member	Weekend, evening events
Health Agent	Kathleen Lannon, RNMS, Member	Weekend, evening events
Health Agent	Jaikaur LeBlanc, Member	Weekend, evening events
Health Agent	Angelo DeLuca	Food Inspections
Health Agent	Mark Awdycki HS Principle	Student smoking
Health Agent	James White, 5 Brookview Road	Regulations, BOH experience
Health Agent	James McKay, 416 Village Street	Sewer Issues
Burial Agent	Lisa Hardin	Burial Agent
Burial Agent	Susan Vara	Burial Agent
Burial Agent	Kathy Smith	Burial Agent
Tobacco Agent	Olivia Dufour	Tobacco Agent
Tobacco Agent	Robert Griffin	Tobacco Agent
Burial Agent	Thomas Caruso	Burial Agent
Health Agent	Donna Scotland	Weekend, evening events