

NOTICE OF PUBLIC MEETING
SUDBURY CONSERVATION COMMISSION
Monday, September 12, 2022 at 6:45 PM
Virtual Meeting

The Sudbury Conservation Commission will hold a public meeting to review the Request for Determination of Applicability filing under the Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw to replace the septic system within the 100-foot Buffer Zone at 83 Maynard Farm Road, in Sudbury, MA. Arden & Suzanne Steinbach, Applicant. The meeting will be held on Monday, September 12, 2022 at 6:45 pm, via Zoom.

The application and meeting details may be reviewed on the Conservation Department web page at:

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-september-12-2022/>

Please contact the Conservation Office with any questions at 978-440-5470.

SUDBURY CONSERVATION COMMISSION
9/1/2022

MATTHEW S. MARRO ENVIRONMENTAL CONSULTING

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Leominster, Ma
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Fax (888) 435-5999
www.marro-consulting.com

Received

AUG 31 2022

Sudbury Conservation Department

**A Request for a
Determination of Applicability
83 Maynard Farm Road
Sudbury MA 01776**

Environmental Analysis Submitted on Behalf of The Steinbach Family



Matthew S. Marro
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(MSMEC)
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August 15, 2022

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Introduction

Summary

83 Maynard Farm Rd is a single-family home sitting on a 0.93 acre lot. The lot contains a Bordering Vegetated Wetland system. The project proposal is for the construction of a replacement subsurface sewage disposal system within the outer limits of the 100-foot buffer zone. Analysis of the lot reveals the grading to accommodate the septic upgrade is within the limits of the 100 foot buffer zone. No work is proposed within the 50 foot no touch zone as defined by local wetlands regulation. This proposal for minor grading greater than 90 feet from the wetland system. There is no work on the system within the buffer zone.

Specifics of the lot

The lot is a 0.93 acre lot consisting of approximately 0.85 acres of developed area, 0.08 acres of undeveloped area lot **does not** contain a flood Plain overlay on Mass GIS. The lot **does not** contain certified or potential vernal pools, area of Critical Environmental Concern nor rare species habitat. Work within the buffer zone would not result in minimal grading as there are no post development changes in elevation nor topography proposed, therefore, impact is limited to temporary soil disturbances.

Commencement of Construction Activities and Timelines:

All proposed construction is estimated to be completed through stabilization in a three-week maximum construction schedule. This schedule of course, may be adjusted due to weather related conditions.

Proposed Construction Mitigation and Sequencing

The formal plan submitted with this Notice of Intent is entitled Plan for 83 Maynard Farm Road, MA by Innovative Septic Design dated July 3, 2022 and is presented in a 1 inch = 20 feet scale.

The plan details outline a sequence of work as follows:

- Placement of erosion controls proposed is at the outer portion of the buffer zone. Erosion Protection will be placed closer to the limit of work to ensure work will not traverse within the 50-foot buffer zone.
- Excavate site for placement of sewer service, distribution box, tank and Leach field.
- Installation of system hardware.
- Restore disturbed lawn areas.
- Remove erosion controls once areas are stabilized

Mitigation Measures:

The following mitigation measures are proposed and noted on the accompanying plans:

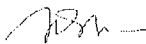
- Minimize newly disturbed areas of approximately 200 square feet of buffer zone.
- Maintain all structures and permanent work to ensure no encroachment within the 50 foot no touch zone.
- Erosion control installed prior to ground disturbance.
- Minimize construction duration to within three weeks as a maximum.
- Dewatering activities, if necessary, will be pumped out of the buffer zone in the northerly section of the lot by the driveway area labeled on the plan. The decant water will be pumped into a lined sump hole. This will ensure that no decant water that may have silt in it will make its way to the buffer zone or bordering vegetated wetland.

Conclusion.

With the considerations of a limited and minimized work area, optimally located and proposed mitigation for the protection of the resource area, it is the opinion of MSMEC , the proposal protects the resource areas from alteration. It is noteworthy, the work is within an **existing developed area**, adopting the construction sequence and mitigation noted on the accompanying plans respectfully on behalf of the Steinbach family, We hope the commission will agree a negative determination is appropriate for this plan.

Thank you for your consideration of this Request for a Determination.

Respectfully Submitted,



Matthew S. Marro,
Consulting Agent/Principal

Cc: File

ISD, INC.

Arden and Suzanne Steinbach

GIS OVERLAY

83 Maynard Farm Road GIS



Q3 Flood Zones (from Paper FIRMs, All Available Areas)

- A
- AE
- AE Floodway
- AH
- AO
- D
- V
- VE
- Area Not Included
- X500

FEMA National Flood Hazard Layer Polygons

- A: 1% Annual Chance of Flooding, no BFE
- AE: 1% Annual Chance of Flooding, with BFE
- AE: Regulatory Floodway
- AH: 1% Annual Chance of 1-3ft Pending, with BFE
- AO: 1% Annual Chance of 1-3ft Sheet Flow Flooding, with BFE
- VE: High Risk Coastal Area
- D: Possible but Undetermined Hazard
- X: 0.2% Annual Chance of Flooding
- X: 1% Drainage Area < 1 Sq. MI
- X: Reduced Flood Risk due to Levee
- Area Not Included
- Area with no DFIRM - Paper FIRMs in Effect

Q3 Flood Zones (from Paper FIRMs, where NFHL Unavailable)

- A
- AE
- AE Floodway
- AH
- AO
- D
- VE
- Area Not Included
- X500

Potential Vernal Pools

-

NHESP Priority Habitats of Rare Species

-

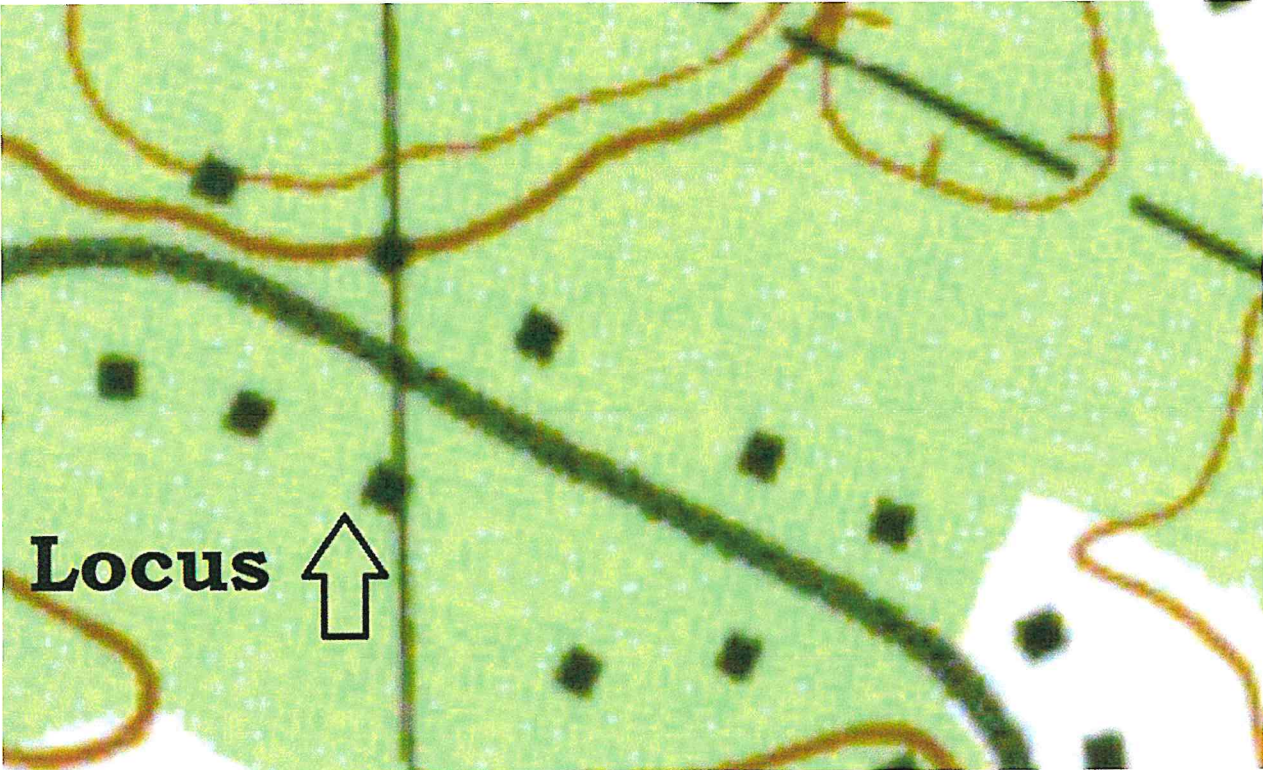
NHESP Natural Communities

-

NHESP Estimated Habitats of Rare Wildlife

-

USGS LOCUS PLAN





Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Sudbury
City/Town

WPA Form 1- Request for Determination of Applicability

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Applicant:

Arden & Suzanne Steinbach
Name ardensteinbach@gmail.com
E-Mail Address

83 Maynard Farm Road
Mailing Address

Sudbury
City/Town MA
State 01720
Zip Code

978-433-2619
Phone Number Fax Number (if applicable)

2. Representative (if any):

Matthew S. Marro Environmental Consulting
Firm

Matthew S. Marro
Contact Name matt@marro-consulting.com
E-Mail Address

45 Lisa Drive
Mailing Address

Leominster
City/Town MA
State 01453
Zip Code

978-314-7858
Phone Number 775-521-7083
Fax Number (if applicable)

B. Determinations

1. I request the Sudbury Conservation Commission make the following determination(s). Check any that apply:

- a. whether the **area** depicted on plan(s) and/or map(s) referenced below is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced below are accurately delineated.
- c. whether the **work** depicted on plan(s) referenced below is subject to the Wetlands Protection Act.
- d. whether the area and/or work depicted on plan(s) referenced below is subject to the jurisdiction of any **municipal wetlands ordinance** or **bylaw** of:

Sudbury
Name of Municipality

- e. whether the following **scope of alternatives** is adequate for work in the Riverfront Area as depicted on referenced plan(s).



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C. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

83 Maynard Farm Road	Sudbury
Street Address	City/Town
B08	0332
Assessors Map/Plat Number	Parcel/Lot Number

b. Area Description (use additional paper, if necessary):

c. Plan and/or Map Reference(s):

83 Maynard Farm Rd	7/3/22
Title	Date
_____	_____
Title	Date
_____	_____
Title	Date

2. a. Work Description (use additional paper and/or provide plan(s) of work, if necessary):

See Narrative



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Sudbury
City/Town

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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

C. Project Description (cont.)

b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



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Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Name and address of the property owner:

Name Arden Steinbach
Mailing Address 83 Maynard Farm Rd.
Sudbury
City/Town MA State 01776-1012 Zip Code

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Signature of Applicant Arden Steinbach 8.15.22 Date
Signature of Representative (if any) MS Marro 8.15.22 Date

SITE PLAN

Location Map No Scale

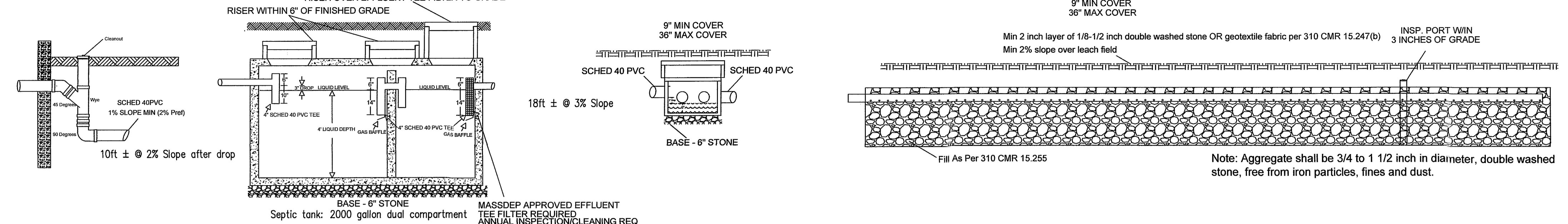
NOT FOR CONSTRUCTION SUBJECT TO TOWN APPROVAL

Innovative Septic Design, Inc.
 93 Maynard Farm Rd., Suite 101, MA 01770
 Phone: 508-251-1212
 Fax: 508-251-1212

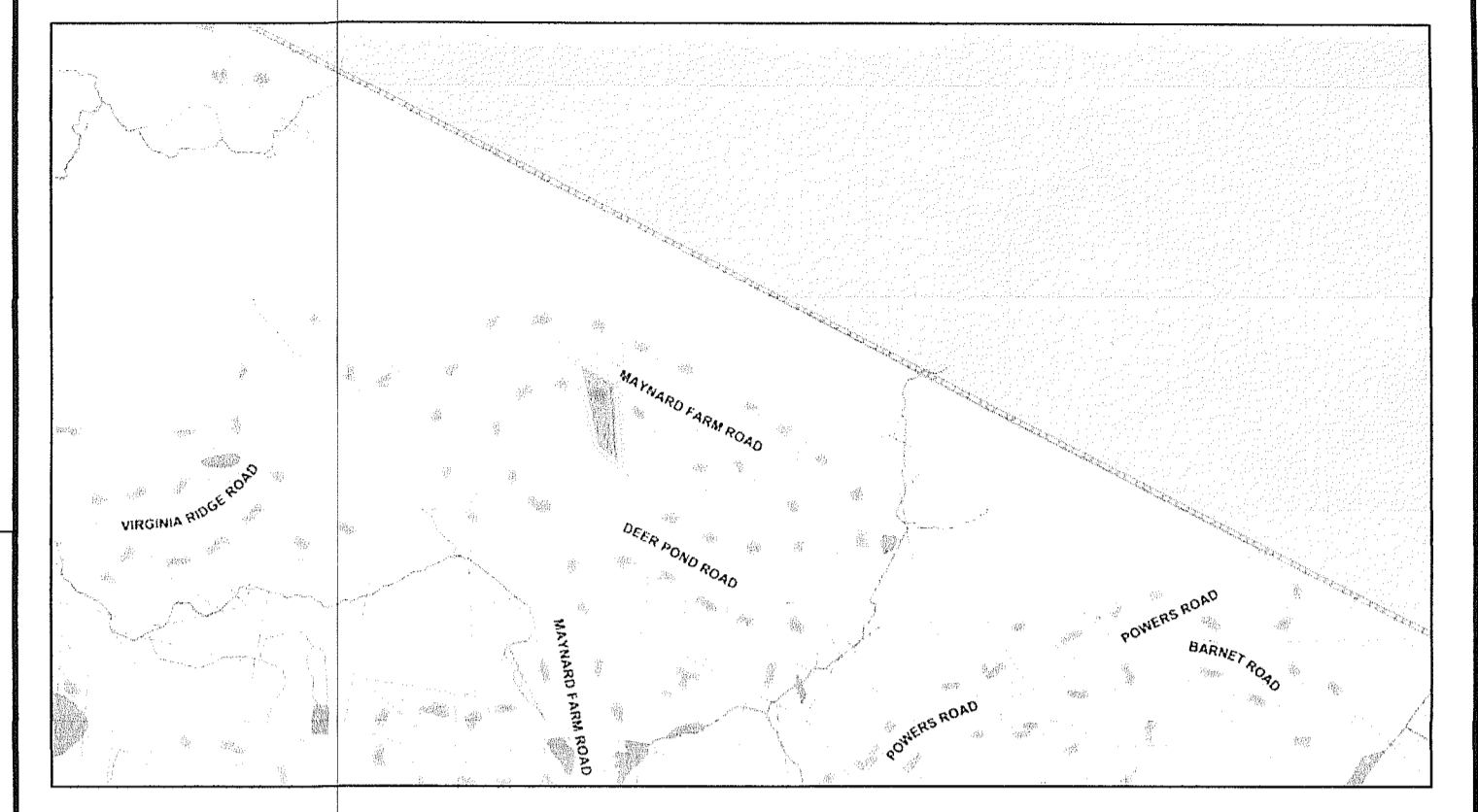
NOT FOR CONSTRUCTION SUBJECT TO TOWN APPROVAL

County: Middlesex, District: 1, Pg: 1 of 1
 Lot Area: 6,124 ACRES, Subdivided: [] Date: 08/11/2022
 Lot & Map #: [], Map No.: 2022051201
 Street: [], Subdiv: [], Plan #: 2022051201
 1:1000 SCALE. SEE PLAN FOR ALL DIMENSIONS. SEE SHEET 2022051201-2 FOR ALL DIMENSIONS, NOTES AND ALL CITY, STATE REGULATIONS. SEE SHEET 2022051201-3 FOR ALL DIMENSIONS, NOTES AND ALL CITY, STATE REGULATIONS.

Profile (not to scale):



Location Map No Scale:



Tank/Pump Chamber/Distribution Box (DBox) Notes:

- Components must be from approved manufacturer by Board of Health and Designer.
- Manholes shall be minimum 24" diameter, medium duty, cast iron frame and cover, and all manholes brought to finished grade shall be secured to prevent unauthorized access.
- Components deeper than 9" under finished grade shall be equipped with a riser to within 6" of finished grade.
- Components shall be water tight. DBox shall have a water tight cover.
- First 2 feet of line out of DBox shall be level.
- Components must be water tight and all pipe joints and boots must be hydraulically sealed with hydraulic cement or installed with water tight sleeves.
- Inlet and outlet tees to rectangular tanks shall be set in the end walls or into a side wall within 12 inches of the end wall.
- There shall be an air space of at least three inches between the tops of the tees and the inside of the tank cover. The tops of the tees shall be left open to provide ventilation or separate ventilation shall be provided.

Prior to construction:

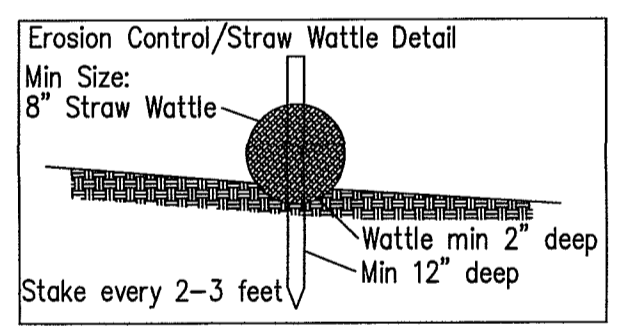
- Contractor shall notify Dig Safe (888) 344-7233 at least 72 hours prior to construction or abandonment of existing system. It shall be the responsibility of the contractor to locate any utilities not delineated by Dig Safe.
- Contractor shall notify designer 48 hours prior to construction for septic system to be staked.
- Contractor shall verify all existing site conditions and elevations prior to initiating construction. Any discrepancies shall be reported to the Designer prior to construction.
- Contractor shall contact designer 48 hours before an inspection.
- Prior to the commencement of construction, the System Installer must certify in writing to the Designer, the LAA, and the System Owner that (s)he is a locally approved System Installer and, if required by the Company, is certified by or has received appropriate training by the Company.

Construction Notes:

- All components of this system shall be marked with magnetic tape or comparable in order to locate components once buried.
- All disturbed surfaces shall be restored with 4" of loam and seed.
- All connections shall be glued.
- The existing septic system shall be abandoned in accordance with 310 CMR 15.354.
- All contaminated soil in the vicinity of the proposed leaching area shall be excavated and removed by the contractor.
- Contractor shall notify designer and Approving Authority when conditions are found during construction which would alter the approved septic design plan.
- Where portions of the existing building sewer are to remain, building sewer shall be inspected for slope, bellies, turns and anything which may prevent it from functioning as required by Title 5.

Plan Information:

- This plan was created for the purposes of showing a proposed sewage disposal system and is NOT intended to be used for the reproduction of property lines. If property lines are in question, a survey should be performed by a Professional Land Surveyor.
- This plan is for the design and construction of the sewage disposal facility only.
- The underground utilities denoted on this plan are based off of markings from proper entities and available records. The Designer is not responsible for any subsurface structures not accurately depicted on this plan.
- Water softener/roof runoff/sump pump discharge shall not be tied into proposed septic system.
- Any alteration of wetlands or disturbance within the 100-foot buffer zone shall require a filing with the local conservation commission and the department of environmental protection. This project may require such a filing.
- This plan may not be revised without the consent of the Designer and without Local Board of Health approval.
- All known wells within 150 feet of this system have been identified.
- System shall be pumped per 15.351.
- The designers only warranty is that the system was designed in accordance with Title 5 and the local BOH regulations.



Proposed Bed Corner Ties

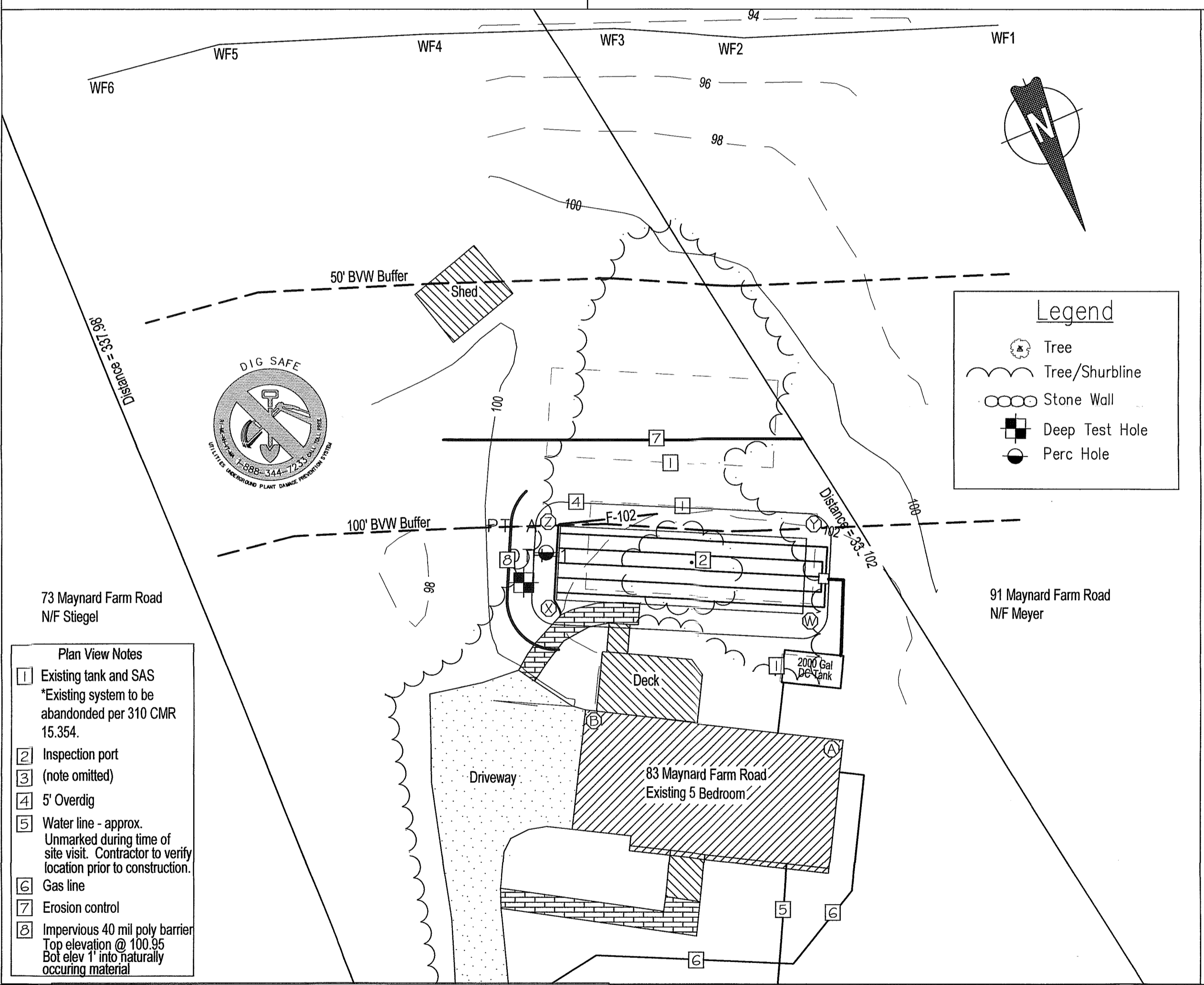
	A	B
W	26' 6"	48' 2"
X	64' 4"	22' 9"
Y	41' 1"	56' 7"
Z	71' 6"	37' 4"

Leach Field Notes:

- Where fill is required to replace unsuitable or impervious material, the excavation of the unsuitable material shall extend a minimum of 5 feet laterally in all directions beyond the outer perimeter of the soil absorption system to a depth of naturally occurring pervious material and shall be replaced with suitable Title 5 fill (310 CMR 15.255).
- A capped inspection port wrapped in filter fabric shall be installed in leaching area.
- Surface drainage shall be directed away from leaching area. Finished grade over leaching area shall have a minimum 2% slope.
- Fill shall be free of clay, tailings or stones larger than 6".
- Trees should be removed if the roots could reach the leach field, or an impervious barrier should be placed in between field and tree.

1. Title 5 surrounding sand - Shall meet requirements of 310 CMR 15.255(3). Sand shall be comprised of clean granular sand, free from organic matter and deleterious substances and shall not contain Remediation Waste. Fill shall not contain any material larger than 2 inches. Up to 45% by weight of fill material may be retained on the #4 sieve. Sieve analysis must comply with the following chart:

SIEVE SIZE:	EFFECTIVE PARTICLE SIZE:	% THAT MUST PASS SIEVE:
# 4	4.75 mm	100%
# 50	0.30 mm	100% - 100%
#100	0.15 mm	0% - 20%
#200	0.075 mm	0% - 5%



- Plan View Notes**
- Existing tank and SAS
*Existing system to be abandoned per 310 CMR 15.354.
 - Inspection port (note omitted)
 - 5' Overdig
 - Water line - approx. Unmarked during time of site visit. Contractor to verify location prior to construction.
 - Gas line
 - Erosion control
 - Impervious 40 mil poly barrier. Top elevation @ 100.95. Bot elev 1' into naturally occurring material.

Schedule of Elevations

Elevation	Proposed	As-Built
Invert @ Building:	-103.25	
Tank Inlet:	101.72	
Tank Outlet:	101.47	
D-Box Inlet:	100.92	
D-Box Outlet:	100.75	
Bed Line Start:	100.65	
Bed Line End:	100.40	
Bottom of Stone:	99.90	

Design Criteria

SAS Sizing Design Data:
 Existing 5 bedroom home @ 110 GPD/bedroom = 550 GPD
 Perc Rate = 3 minutes per inch
 LTAR Title 5: 0.74 gpd/sqft
 Conventional Size Required: 550 gpd/0.74 gpd/sqft = 744 sqft
 Conventional Shown: 50 ft x 15 ft = 750 sqft
 0.5' feet of double washed 3/4 - 1 1/2 inch diameter stones, which shall be free of iron particles, fines and dust in place.
 5 Leach lines @ 3.0' OC spacing. Lateral distance between edge line and edge of bed = 1.5'

Tank Calcs:
 Required: 550 GPD x 2 = 1100 Gallons
 Provided: 2000 Gallon Dual Compartment Tank

Lot Information:

Water Source: Town Water
 Garbage Grinder: This septic system has NOT been designed for a garbage grinder. Any existing grinders shall be removed.
 Nitrogen Sensitive Areas: Zone II - YES; IWPA - no
 Flood Plain: This property is not located in a flood plain.

Soil Data

Depth	Soil Description	Elevation
0"	DTH-1	101.18
60"	Fill	96.18
62"	A-SL-10YR3/2	96.01
64"	EHGW	95.84
96"	Weeping	93.18
110"	Standing	92.01
122"	C-Fine Sand-2.5Y6/3	91.01

Percolation Tests

Depth	PT-A
78"	
3 mpi	

Date of soil evaluation: 5/12/2022
 Soil Evaluator: Evan Carloni (#13784)
 Approving Authority Witness:
 Bill Murphy and Rob Lazo

Local Upgrade Approval (LUA) Requested

Reg	Request

Variations Requested

Reg	Request
Sudbury Rules & Regulations Governing the Subsurface Disposal of Sewage: Section III	Allow for leach bed to be designed and installed to replace existing leach bed.

Updates

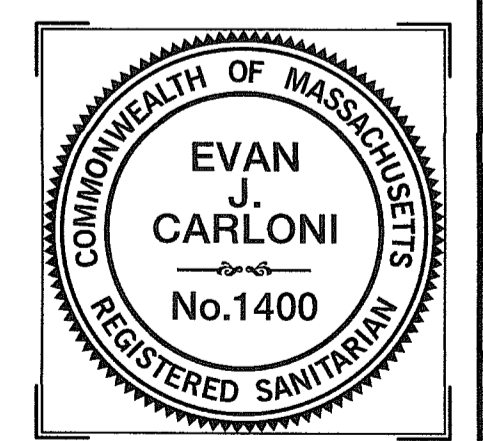
Date	Update
7/17/2022	Proposed Plan

Steinbach
 83 Maynard Farm Road, Sudbury, MA 01776
 Existing 5 Bedroom House

Innovative Septic Design, Inc.
 51 Carter Street
 Berlin, MA 01503
 978-621-8278
 RS #1400

Deed Information:
 County: Middlesex Bk.79497 Pg.:
 Lot Area: 0.928 Acres Scale: 1"=20' Date: May 12, 2024
 Lot & Map #: Map: B08 Lot: 0332

Street: Maynard Farm Road
Town: Sudbury
Plan #: 2022051201



I HEREBY CERTIFY THAT THIS PLAN MEETS ALL REQUIREMENTS OF 310 CMR 15.000, TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND ALL APPLICABLE REGULATIONS OF THE TOWN OF Sudbury BOARD OF HEALTH.