ARTICLE I
Sewage Disposal

INTRODUCTION

These regulations are adopted in accordance with Title 1, Regulation 2, of the State Environmental Code[1] and Article 1 of the State Sanitary Code[2] and are intended to supplement the state codes. The state codes have the force of state law and establish minimum requirements. Where a local regulation is more strict, the local regulation shall prevail. The provisions of these regulations are based on General Law and the particular physical, environmental, hydrogeological, demographic and land use information and projections relative to the Town of Sherborn. No system or facility to be used for treating, neutralizing, stabilizing or disposing of wastewater from homes, public buildings, commercial or industrial buildings or any other types of establishments shall be located, constructed, altered, repaired or installed until a disposal works construction permit for such work shall have been issued by the Board of Health.

§ 305-1.1. General regulations.

A. Required permits.

(1) Construction under a building permit or foundation permit shall not proceed until the Board of Health permits for water supply and subsurface sewage disposal have been issued. No building permit or other permit has precedence over a Board of Health permit in this instance. All installers of sewage disposal systems shall have the required Board of Health permits and a copy of the signed and approved plan shall be in their possession on the site while installing the system, to be available for the Board of Health or their designated agent at the time of inspection.

(2) No structure for which a disposal works construction permit or a well permit from the Board of Health is required shall be constructed or placed on any property within the town until such Board of Health permits shall have been issued.

B. Builder responsibility. Issuance of a Board of Health permit does not relieve the builder of his responsibility to conform to the Sherborn Regulations for Domestic Water Supply and Sewage Disposal.[3] The construction of cesspools or leaching beds is prohibited. The Board of Health will allow leaching beds only with alternative systems that utilize pressure dosing and have received state approval. An abandoned well shall not be used for any part of a subsurface sewage disposal system. The Board of Health strongly recommends against the installation of domestic garbage grinders.

C. Approved plan. No permit shall be issued until an approved plan has been signed by a majority of the members of the Board of Health, following a vote at a regular meeting.

D. Water discharge and drainage. Water discharge and drainage must comply with Title 5 of the State Environmental Code. No cooling water, groundwater, discharge of roof drains, cellar

1. **Editor's Note: See 310 CMR 15.00.**
2. **Editor's Note: See 105 CMR 400.000.**
3. **Editor's Note: See Art. II of this chapter.**

drains or other liquids shall be discharged into the sanitary subsurface sewage disposal system. Any dry well for such purpose shall be located not less than 25 feet from any portion of any leaching area.

E. Interceptor drains. Lowering the water table through the use of interceptor or curtain drains to permit marginal or unacceptable conditions to be improved to meet minimum requirements for the installation of subsurface sewage disposal systems is prohibited by the Board of Health. The Board of Health reserves the right to approve the installation of an interceptor drain for rehabilitation of an existing, failed system, provided the following conditions are met to the Board's satisfaction:

(1) The bottom of any leaching area shall be six feet above the high-groundwater table thus established, to the satisfaction of the Board of Health.

(2) No less than three monitor wells shall be installed one year prior to the approval and installation of the subsurface sewage disposal system.

(3) Location and installation of the monitor wells shall have the prior approval of the Board of Health.

(4) No less than three inspections shall be conducted in three separate months during the period from December 15 to April 27 during the year the monitor wells are in place. At least one of the inspections shall occur during the period from March 30 to April 27.

(5) Measurement of the water levels in each monitor well shall be witnessed and recorded by the Board of Health or the Board's Agent as well as the applicant's engineer.

F. Septic system abandonment. Only a disposal works installer licensed by the Board of Health may perform septic abandonment.

§ 305-1.2. Agent.

An "agent" of the Board of Health is any person authorized by the Board to act under these regulations. No action required by these regulations shall be taken by the agent without the approval of the Board of Health. The agent may not vary these regulations without specific approval. Wherever reference is made to the "Board of Health," it shall mean the Board of Health or its agent.

§ 305-1.3. Permits and plans.

A. Types of permits.

(1) Disposal works permits. A disposal works construction permit shall be required prior to the start of any construction from which wastewaters will be generated. Such construction shall be performed only by persons or firms holding a current disposal works installers permit from the Board of Health.

(2) Trench permit. No soil testing shall be conducted, and no septic installation shall begin until the Board of Health receives a copy of the trench permit issued by the Town.

B. Preconstruction requirements. The disposal works installer, with a current disposal works

installer permit issued by the Board of Health, shall participate in a preconstruction conference with the Health agent, and the design engineer if necessary, prior to the start of any work. Subsurface sewage disposal systems shall not be constructed until all major plumbing has been installed in a dwelling or structure generating sanitary wastes.

C. Permit expiration. All disposal works construction permits and well permits shall expire two years from the date of issue. After a permit has expired, the applicant shall submit a new application, a complete set of plans as required by this regulation, and shall pay a fee as may be set from time to time by the Board of Health. The permit application and plans shall show the applicant's name and shall comply with all regulations in force at the time of the renewal. Renewals shall not be accepted for a date prior to the expiration date of two years from the date of issuance. New maximum water table elevations and soil testing shall be required when, in the opinion of the Board of Health, the site conditions have undergone such modifications that make such retesting necessary, or when new data has indicated that such initial testing may not appropriately describe the true conditions.

D. Sewage system design plans.

(1) Plan requirements. The following shall be placed on the plan:

(a) A drawing to scale (one inch equals 10 feet; one inch equals 20 feet; one inch equals 30 feet, as the situation may warrant), indicating dimensions of the building and building lot showing placement of the proposed building, individual subsurface sewage disposal system and additional area for 100% expansion of the disposal area (as defined in § 305-1.10B of these regulations), driveway, well site and water service.

(b) The location of all drains, natural features such as ledge or rock outcropping, distance to existing wells and sewage disposal systems on adjacent lots and any other type of construction which may be pertinent for placement and design of a proper disposal system.

(c) The location of any watercourses, including streams, brooks, ponds, swamps, marsh or other wetlands.

(d) The precise locations of all manholes, catch basins, clean-out drain plugs, drains or known sources of water supply within 200 feet of the proposed sewage disposal system.

(e) Two bench marks and datum plane notation. One of the bench marks shall be within 50 feet of the proposed leaching area.

(f) A locus map, including the distance to the nearest intersecting street.

(g) The results of the soil logs, as provided by the soil evaluator, soil classification and maximum water table elevations encountered for all test holes and the name of the individual who witnessed the tests for the Board of Health.

(2) Design requirements. The design of the proposed individual subsurface sewage disposal system shall be shown in detail, with bench marks and datum plane notes, including the

following:

(a) Elevation of existing and proposed contours at two-foot intervals, bottom of leach lines or pits, ledge, hardpan, till or any watercourses. Streams, ponds, swamps, marsh or other wetlands (as defined in MGL c. 131, § 40), or any surface or subsurface drains shall also be included.

(b) Invert elevation of the house sewer, inlet and outlet pipes of septic tank, inlet and outlet pipes of distribution box, elevation of the trench bottoms (base of stone), beginning and end of pipes in the trenches and proposed elevations of the system in the expansion area.

(3) As-built plans.

(a) As-built plans shall be required showing the exact location of the on-site subsurface sewage disposal system and well after each system has been installed. These shall be submitted on a new plot plan signed by a registered sanitarian, civil or sanitary engineer. There shall be included a certification by said sanitarian or engineer that the system, including final grading, has been constructed in accordance with the approved plan and the terms of the permit. This plan shall be submitted before the final inspection is made by the Board of Health and before a certificate of compliance is issued. This as-built plan shall remain on file at the Board of Health office.

(b) A computerized copy of all as-built plans (or, if as-built plans are not computerized, final approved septic plans) shall be submitted when such plans are produced on computerized systems. Copies to be submitted shall be in a commonly accepted format able to be "read" by the Town of Sherborn GIS system.

(4) Plan changes. A new application and fee shall be required when, in the opinion of the Board of Health:

(a) A plan is substantially changed; or

(b) Additional soil test(s) must be conducted.

E. Alterations and abandonment. Alterations and abandonment of wells, septic tanks, seepage pits, leaching trenches or other means of subsurface sewage disposal shall not be performed, constructed or installed until a permit has first been obtained from the Board of Health. If a system or any part of a system is to be abandoned, all tanks, manholes, boxes over six inches deep inside, or any system component whose collapse could create a danger, shall be pumped out (with proper disposal of the contents), the top of the structure crushed, and the structure filled with clean, compacted, naturally occurring earth or soil free of any vegetation such as branches and tree stumps, etc. (construction debris is not acceptable).

F. Certificate of compliance. The owner or other person or persons having control of any existing building or buildings shall not add to or alter to increase bedroom space as defined in § 305-1.7 of these regulations without prior approval of the Board of Health. Construction shall not commence until a permit for alteration or approval of the adequacy of the sewage disposal system has been obtained from the Board of Health. Occupancy of any such

construction shall not take place until a certificate of compliance has been issued by the Board of Health.

G. Permit fees. A fee for the issuance of permits shall be charged and the rate shall be established by the Board of Health from time to time.

H. Suitability. Foundation, building or plumbing permits for a dwelling or other structure shall not be issued until the Board of Health has approved the proposed lot as suitable for subsurface sewage disposal.

I. Permit conditions. All permits issued shall be subject to the conditions that all facilities shown shall be constructed in the location approved by the Board of Health. All permits issued shall be subject to the requirements of these regulations, and to such further conditions as the Board of Health shall prescribe.

§ 305-1.4. Application procedures.

A. Soil testing plan requirements. A completed application shall consists of the application for water table and percolation tests signed by the property owner; the required fee; and a drawn-to-scale locus plan, no smaller than drawn on a scale of 50 feet to an inch, showing the proposed lot, the proposed location of the test holes, the distance to the nearest intersecting street, and shall indicate generally the location of any water supplies, disposal systems, or wetlands within 200 feet of the lot being tested. If there are no water supplies, disposal systems or wetlands within that distance, it shall be so stated on the plan.

B. Septic system plan requirements. As required by MGL c 111, § 31E, the Board of Health shall act upon a complete disposal works construction permit application within 45 days of the date upon which such complete application is filed with the Board of Health. If a determination on a complete application is not rendered within 45 days, the said permit shall be deemed to have been granted. A complete application shall include:

(1) A completed disposal works construction application form signed by the property owner and the associated fee, which is set by the Board of Health from time to time;

(2) Plans described in § 305-1.3D(1) and (2) above;

(3) A written copy of an administrative approval, negative determination of applicability, or order of conditions from the Sherborn Conservation Commission pursuant to the application being submitted;

(4) A permit approving the suitable source of water supply pursuant to Article II, Water Supply, or a complete application for the same as defined therein. This requirement shall not apply to replacement systems in which the existing well is not being changed.

(5) An environmental health impact and environmental health permit, if required under Article III, Public and Environmental Health Review Regulations and Standards for Selected Site Development Activities, or for Other Special Conditions or Other Than Single-Family Dwelling on Single Lot.

C. Sewage system design plan submittal. An application for a well construction permit and for

a disposal works construction permit shall be on such form and in such detail as the Board of Health shall prescribe and shall be submitted simultaneously if both are required with the required fee(s). The application(s) and plan shall conform to the state codes and the Sherborn Board of Health regulations. Before a permit can be issued, the applicant shall submit five copies of such plans, prepared by a qualified registered sanitarian, civil or sanitary engineer, bearing their stamp and signature, with street and Assessors' map.

§ 305-1.5. Siting of systems.

A. Testing requirements.

(1) Percolation tests shall be conducted after November 1 and completed before June 30. Percolation test results shall not be accepted nor shall tests be observed at other times of the year except for the repair of overflowing or "backing up" septic systems, or when the existing system is a cesspool, or when the interests of public health are of priority as determined by the Board of Health. When soil testing is permitted at other than the times noted in the regulations, maximum groundwater determination shall be by the soils investigation technique approved by the state Title 5.[4]

(2) All soil testing to determine maximum groundwater elevation for septic system design and permits for a given year shall be conducted after November 1 and completed before April 29, unless that date is extended by a vote of the Board of Health. If soil morphology is inconclusive for determining maximum high groundwater, testing engineers shall place monitor wells in the deep test pits. Groundwater levels shall be measured by the engineer in such monitor wells between the 22nd and 29th of each allowed testing month for groundwater as may be applicable. All water levels measured are subject to a seasonal groundwater adjustment as determined by the Board of Health using the method as described in "U.S. Geological Survey, Water Resources Investigations, Open File Report 80-1205 — Probable High Groundwater Levels in Massachusetts." Other adjustment values may be allowed by the Board on a case-by-case basis if supported by a preponderance of technical evidence to support such proposal by the design engineer. Applications for such testing during the groundwater season shall be submitted on or before April 1. Testing shall not be performed for applications received after that date.

(3) There shall be a minimum of three deep test pits evenly distributed within the limits of the proposed leaching area and integrated expansion area, plus any others that might be designated by the Board of Health agent, either at the time of testing or during the plan review period. If ledge is encountered or indicated, a total of five test holes shall be dug, one at each corner of the proposed leaching area and one in the center. An additional test pit shall be dug at the location of a proposed new structure. Deep test pits shall be dug to a minimum depth of five feet below the bottom of the proposed leaching area, and in no event less than 10 feet deep. The results of the deep tests shall be shown in a graphical "log" format, showing soil strata with elevation, elevation of the ground surface, elevation of the bottom of the hole, elevation of any ledge or refusal encountered, the elevation of groundwater if encountered, or indicate "none

4. **Editor's Note: See 310 CMR 15.00.**

encountered" when applicable, the date of the test and the name of the Board of Health representative who observed such test. Deep test pit results shall not be accepted or observed by the Board of Health at other times of the year from that designated above, except for the repair of overflowing or "backing up" septic systems when the interests of the public health are of priority as determined by the Board of Health. The observation well shall consist of four-inch Schedule 40 PVC pipe. The observation well section placed within the deep observation test holes shall be perforated and wrapped with a filter material or backfilled with crushed stone, sand, etc., which will prevent the fine soil material (silts and clay) from clogging the well.

(4) A minimum of two stabilized percolation tests shall be performed at an elevation that is representative of the soil extending for a depth of five feet below the leaching field and along its sidewalls. Additional tests shall be required, either at the time of testing or during the plan review period, when, in the opinion of the Board of Health or its agent, the percolation rate is not consistent or similar between the two tests, when large disposal areas are required or where the soil structure varies. Percolation tests shall be conducted after November 1 and completed before June 30. Percolation test results shall not be accepted nor shall tests be observed at other times of the year except for the repair of overflowing or "backing up" septic systems when the interests of the public health are of priority as determined by the Board of Health. Percolation tests shall be conducted in accordance with Title 5 of the State Environmental Code with the following modifications:

(a) Percolation rates shall be expressed to the nearest integer minute per inch.

(b) (Reserved)

(c) The results of the percolation tests shall be tabulated on an inch-by-inch basis and that data shall be inscribed on the design plan. If the rate of water drop is not uniform, in the opinion of the Board of Health or its agent, the test shall be repeated until such uniform rate is achieved.

(d) The sewage application rates as designed in Title 5 shall not be interpolated. Measured values shall be rounded up to the next percolation rate value as stated in Title 5.

(e) All tests shall be observed by an authorized representative of the Board of Health. A minimum of 10 days' notice shall be required to schedule the Board of Health agent to witness any tests. A test date shall then be established according to the Board of Health agent's schedule. All tests shall be performed in natural soil that has not been disturbed or altered by previous filling, excavation, blasting or other means. All test pits shall be adequately protected by the applicant to prevent accidents to both humans and animals. The pits shall not be filled in until they have been inspected by the Board of Health agent. After the tests are completed and all data has been recorded, the test holes shall be filled. Test holes shall not be left open overnight.

B. Percolation rate. The maximum allowable percolation rate shall be 40 minutes per inch in order for soil to be considered suitable for the subsurface disposal of sewage. A rate

exceeding 40 minutes per inch shall not be accepted.

C. Watercourses and wetlands. No portion of any septic system, including fill material, shall be constructed within the boundary of any watercourse or wetland.

§ 305-1.6. (Reserved)

§ 305-1.7. System size and design.

A. Pipe and trench specifications.

(1) All septic systems shall consist of a septic tank, a distribution box and a leaching area along with an expansion leaching area. There shall be a minimum of 100 linear feet of pipe, plus such additional length as indicated by the percolation tests. There shall be a minimum of 400 square feet of leaching area, plus such additional area as indicated by the percolation tests.

(2) The pipes installed in the trenches shall be of four-inch diameter and of a material approved by the Sherborn Board of Health. Pipe from the septic tank to the distribution box shall be rigid PVC pipe, Schedule 40. The depth of a leaching trench shall be a minimum of 12 inches and a maximum of 24 inches below the invert of the distribution piping. The maximum width of a leaching trench shall be three feet.

(3) The distribution piping in leaching trenches shall be laid in a layer of washed crushed or washed gravel stone 1 1/4 to 1 3/4 inches in size, free from fines, iron or dust. The pipe shall be covered with four inches of the same size stone. Upon this layer shall be placed at least a two-inch layer of washed crushed stone or washed gravel stone ranging from 1/8 to 1/2 inches in size, free from fines, iron or dust.

(4) Clear spacing between leaching trenches shall be a minimum of six feet (minimum distance between walls of adjacent trenches). The difference in elevation of successive adjacent leaching trenches shall be a maximum of 12 inches.

(5) (Reserved)

(6) No leaching trench or line shall be greater than 100 feet in length. The surface above the leaching area shall remain permeable and shall have no construction upon it.

(7) The area over the leaching area shall not be made impermeable.

B. Leaching area size.

(1) The maximum daily flow for a household for design purposes shall be based on water use of 55 gallons per capita per day. The number of people housed shall be based on two persons per bedroom.

(a) A "bedroom" is any room other than a kitchen, dining room, living room, bathroom, den, playroom, family room, and/or library on the first floor. Any room (not equipped as a kitchen) on any level that has a door leading directly into a bathroom with a tub or shower is considered a bedroom. Any room above the first floor shall be considered to be a bedroom. In all cases the number of bedrooms

shall not be less than one-half the total number of rooms in the house rounded down (if necessary) to the closest whole number. To be counted as a room, the space must be habitable per the Massachusetts Housing Code. For systems installed after March 31, 1995 (implementation date of state Title 5 revisions), the calculations of one-half the total number of rooms rounded down (if necessary) shall only apply to dwellings of more than 8 rooms.

(b) All single-family dwellings shall be designed for a minimum of three bedrooms.

(c) If the residential leaching area has not been designed with sufficient capacity to accommodate a garbage grinder, proof of a deed restriction shall be required prior to release of the approved plan.

(2) The minimum leaching area to be installed shall be determined from the following table.

(a) The slowest percolation measured in the natural soil in the leaching field area shall govern the leaching area requirements.

Percolation Rate (minutes per inch)	Side Wall and Bottom Area (gpd/square foot)	Side Wall and Bottom Area (gpd/square foot)	Side Wall and Bottom Area (gpd/square foot)
Title 5 soil classes	Class I soils	Class II soils	Class III soils
Less than or equal to 5	.74	.60	—
6	.70	.60	—
7	.68	.60	—
8	.66	.60	—
9	—	.60	—
10	—	.60	—
15	—	.56	.37
20	—	.53	.34
25	—	.40	.33
30	—	.33	.29
40	—	—	.25
Greater than 40	Not permitted	Not permitted	Not permitted

(b) The minimum size leaching trench shall be 100 linear feet of trench.

(3) Additional leaching area for leaching trenches or seepage pits shall be as required by the Board of Health.

C. Septic tanks.

(1) Residential. Single-family dwellings: The effective liquid capacity shall be 200% of the design flow or a minimum hydraulic detention flow of 48 hours, whichever is greater. Minimum effective liquid capacity of the tank as measured below the outlet invert elevation shall not be less than 1,500 gallons.

(2) Other. When designed to serve facilities other than a single-family dwelling unit, and whenever the calculated design capacity is greater than 1,000 gallons per day, a two-

compartment tank or two tanks in series which meet(s) the design criteria of the State Environmental Code Section 310 CMR 15.203 are required. The minimum effective liquid capacity of each tank in series shall be 200% of the design flow. In no case shall the effective liquid capacity of each tank be less than 1,500 gallons. **[Amended 7-17-2024]**

(a) Restaurants: The septic tank capacity shall be 300% of the estimated maximum daily flow as estimated from the State Environmental Code or from actual water meter readings using a peak flow factor, whichever is larger. The peak flow factor shall be 2.0 times the average annual daily flow of days in use, unless data is otherwise available.

(b) Schools: The septic tank capacity shall be 200% of the estimated maximum daily flow as estimated from the State Environmental Code or from actual water meter readings using a peak flow factor, whichever is larger. The peak flow factor shall be 2.0 times the average annual daily flow of days in use, unless data is otherwise available.

(3) Septic tank design shall conform to all Title 5 requirements in effect as of April 1, 1996, shall be a two-compartment tank, and, in addition, all residential septic system tanks shall be designed as if a garbage grinder were installed.

(4) Pump chambers. Whenever and wherever a system requires the pumping of liquid material to a leaching facility, the use of dual alternating pumps will be required. There shall be an alarm upon the failure of either pump.

D. Pressure dosing systems. Pressure dosing systems for distribution of septic tank effluent may be permitted if the pressure dosing system meets all state-published guidelines.

§ 305-1.8. Vertical grades and clearances.

A. The bottom of any leaching area shall be a minimum of five feet above the maximum high-groundwater table.

B. Subsurface sewage disposal systems shall not be constructed in fill that is to be placed directly on or near ledge, hardpan or other impervious materials or in any area where peat is present or when the maximum groundwater level is five feet or less below natural surface grade. A depth of at least five feet of pervious material (determined by percolation test) in natural soil shall be maintained below the bottom of the leaching area. The vertical distance from any leaching surface of a subsurface disposal system to bedrock, ledge, fractured ledge or impervious soil shall be a minimum of six feet.

C. The finished grade over the disposal area shall not be more than two feet and not less than 12 inches from the top of the stone forming the distribution lines in the leaching field or from the inlet pipe of seepage pits. The disposal area shall be located and graded so that no surface water will accumulate in the area. The area within 25 feet of the disposal area shall be sloped to drain with at least 2% grade. All other grading shall comply with the State Environmental and Sanitary Codes.

D. Wetland and floodplains: water table limits. No subsurface sewage disposal system shall be

constructed less than six feet above the high water level in any area that is subject to periodic flooding. No basement floor shall be constructed less than two feet above the high water level or groundwater table. If a foundation drain is planned or existing, it must be shown on the plan along with its discharge point. Foundation drainage systems shall not terminate below the surface of the ground.

§ 305-1.9. Backfill.

To avoid sewage disposal problems resulting from improper backfill practices, there shall be strict adherence to Title 5 of the State Environmental Code[5] and all other sections of the state codes that relate to backfill.

§ 305-1.10. Distance requirements.

A. Well distance. No leach line, seepage pit or other means of subsurface disposal shall be placed closer than 125 feet from any private well or other private source of water supply to be used for drinking purposes or culinary uses. The distance from a well to a sewage disposal system shall be maximized as follows:

(1) No leaching area shall be less than 125 feet from a well located uphill from such leaching area.

(2) No leaching area shall be less than 150 feet from a well located downhill from such leaching area.

(3) When the soil percolation rate is less than three minutes per inch, the distances noted in Subsection A(1) and (2) above shall be increased by a minimum of 25 feet.

B. Minimum distances. All proposed subsurface sewage disposal areas and expansion areas shall be not less than 10 feet from any solid subsurface drain pipe if that drain invert is above the invert of the closest leaching trench, line, or bed, and 25 feet from any solid subsurface drainpipe if the invert of that solid subsurface drainpipe is at or below the invert of the closest leaching trench, line, or bed. All subsurface sewage disposal areas and expansion areas shall also be 25 feet from any curtain drain designed for that system, 20 feet from any property line and 125 feet from any open surface drain or any watercourse, including streams, brooks, ponds, swamps or other wetlands (as defined in MGL c. 131, § 40).

C. Other distances. All other distance requirements shall be as specified under Title 5 of the State Environmental Code. All distances shall be increased where required by conditions peculiar to a location or by other Town regulations or bylaws.

§ 305-1.11. Inspections.

A. Agent inspections. Before issuing any of the permits required, the authorized agent for the Board of Health shall inspect the property as shown on the submitted plan. The Board of Health or its agent may require such further plans and tests, as they consider necessary.

B. Inspection limitations. Inspections shall not be made when snow covers the ground, nor shall

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5. Editor's Note: See 310 CMR 15.00.

tests be performed in frozen soil.

C. Number of inspections.

(1) Prior to any construction of the septic system, the builder shall submit to the Board of Health two copies of the foundation plan certified by a registered surveyor, civil or sanitary engineer, showing elevations of the top of the cellar floor and top of the foundation and the location of the well.

(2) There shall be a minimum of three in-progress inspections of the disposal works. One inspection shall be conducted when the disposal area is excavated and the septic tank is in place, one when the construction of the septic system is completed except for backfilling and one when the finished grading of the lot is completed. The design engineer shall place the schedule of required inspections on the plan.

D. Inspection requirements. All stone to be used in the leaching area shall be inspected prior to placement. The entire system, including the building sewer, shall remain exposed for the second inspection, and the distribution box shall be level and filled with water. A reasonable period of notification shall be given the Board of Health for an examination request.

§ 305-1.12. Location record.

The builder shall submit to the Board of Health two copies of the house certification plan as submitted to the Building Inspector. This plan shall include the location of the well and sewage disposal system with respect to the foundation with sufficiently accurate dimensions to locate both in the future.

§ 305-1.13. Manholes and cleanouts.

A. A manhole or cleanout shall be required at any change of slope or at any change in direction of the principle sewage distribution line greater than 45°, and in any event, there shall be cleanouts or manholes at a minimum of 150 feet apart. No septic tank shall be located more than 50 feet from the structure that it serves.

B. Line and grade. Both the building sewer and the pipeline from the septic tank to the distribution box shall be laid in a straight line in a uniform slope unless provided with cleanouts and manholes as in Subsection A.

§ 305-1.14. (Reserved)

§ 305-1.15. Construction in fill.

A. Construction of disposal areas in clean granular fill shall be permissible under the following conditions:

(1) Where the impervious material can be excavated to pervious material below and replaced with clean gravel fill, and a pervious strata at least five feet thick in natural soil can be maintained below the bottom of the disposal area.

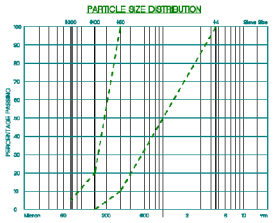
(2) Where a depth of at least five feet of pervious material in natural soil can be maintained

below the bottom of the leaching area. In no case shall excavation be allowed into impervious material without penetrating into pervious materials. Penetration shall be made beyond any soil that is organic, such as loam, peat or subsoil.

(3) Fill material for systems constructed in fill shall consist of select on-site or imported soil material. The fill shall be comprised of clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil shall not be used. The fill shall not contain any material larger than two inches. A sieve analysis, using a No. 4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the No. 4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the No. 4 sieve; such analyses must demonstrate that and material meets each of the following specifications:

SIEVE SIZE	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
No. 4	4.75 mm	100%
No. 50	0.30 mm	10% - 100%
No. 100	0.15 mm	0% - 20%
No. 200	0.075 mm	0% - 5%

B. A plot of the sieve analyses of the portion of the sample passing the No. 4 sieve shall fall on or between the lines on the following graph:



C. It shall be the responsibility of the engineer to show that this requirement is met, by submission to the Board of Health the results of a sieve analysis of a sample taken from the installed fill.

§ 305-1.16. Fill restrictions.

The filling, dredging or altering of land that is submerged during any portion of the year in order to provide a sufficient area to make it suitable for building purposes shall not be considered acceptable. Such lands (MGL c. 131, § 40) shall be considered as not suitable for subsurface sewage disposal.

§ 305-1.17. Purchase warning.

Anyone contemplating the purchase of land for building purposes should make careful inquiry into the problems of maximum water table, drainage and soil conditions with a registered

sanitarian, civil or sanitary engineer before committing themselves to an irrevocable purchase agreement.

§ 305-1.18. Privies and chemical toilets.

A. Privies. Permanent privies shall not be allowed.

B. (Reserved)

C. Temporary facilities. When no approved sanitary facilities exist on the site, all builders and contractors shall provide approved temporary sanitary facilities at their work sites. These facilities shall remain on the site from the first day of operation until completion of the contract.

§ 305-1.19. (Reserved)

§ 305-1.20. Maintenance.

A. Requirement for advice to occupants. Prior to the issuance of a certificate of compliance by the Board of Health, the applicant shall:

(1) Provide a permanent chart at a location in the dwelling near the water supply pressure tank which shows the as-built location on the lot of the well, septic tank, distribution box and leaching area.

(2) The chart shall also contain a written advisory as follows: "The Board of Health recommends that the septic tank be inspected annually. The septic tank shall be pumped when the depth of the sludge at the bottom of the tank plus the depth of scum at the top of the tank are one-third or more of the total tank liquid depth below the outlet pipe."

(3) Instruction and directions as applicable for any water supply treatment units or sewage pumps shall be provided. Manufacturer's technical data for all such equipment and the location and telephone number at which maintenance and emergency assistance may be obtained shall be included.

B. Cleaners or additives. Chemical cleaners or additives shall not be used in septic systems. Such cleaners or additives can contaminate groundwater and be drawn into well water supplies.

§ 305-1.21. Secondary treatment units.

The use of state-approved secondary treatment units shall be permitted without a variance hearing unless specifically in conflict with the intent of these regulations, as determined by the Board of Health.

§ 305-1.22. Variance procedures.

A. The Board of Health may vary the application of any of its rules and regulations, or of State Regulation, Title 5, the Environmental Code,[6] when so empowered to do so, for any case, when, in its opinion, the enforcement thereof would do manifest injustice; and the applicant

has proved that the same degree of environmental protection required under the regulations can be achieved without strict application of the particular provision.

(1) Every request for a variance shall be in writing and shall state the specific variance sought and the reasons therefor. No variance shall be granted except after the applicant has notified all abutters, i.e., owners of any property within 300 feet, including properties outside the Town of Sherborn, if applicable, by certified mail, return receipt requested, at his/her own expense at least 10 days before the Board of Health meeting at which the variance request will be on the agenda. No hearing date for a variance shall be scheduled until a negative determination of applicability or order of conditions has been received by the Board of Health from the Conservation Commission.

(2) When a variance to the required distance to a property line is requested, a registered land surveyor shall verify the property line(s) for inclusion on the plot plan.

(3) Any variance granted or denied shall be in writing and shall be conspicuously posted for 30 days following its issuance and shall be available to the public at all reasonable hours in the office of the Board of Health while it is in effect.

(4) When, in its opinion, it is in the public health interest, the Board may require that the variance granted be placed on record by a document filed at the Registry of Deeds.

B. Any variance or other modification authorized to be made by these regulations may be subject to such qualification, revocation, suspension or expiration as the Board of Health expresses in its grant. A variance or modification authorized to be made by these regulations may otherwise be revoked, modified or suspended, in whole or in part, only after the holder thereof has been notified in writing and has been given an opportunity to be heard.

§ 305-1.23. Violations and penalties.

Violation and penalty shall be as in Title 5 of the State Environmental Code.[7]

6. **Editor's Note: See 310 CMR 15.00.**
7. **Editor's Note: See 310 CMR 15.00.**