



BOARD OF HEALTH
577 Bay Road, P.O. Box 429
Hamilton, MA 01936

Tel: 978-468-5579

Fax: 978-468-5582

**Local Septic Regulations Pertaining to
Septic Sand and Vents for Pumped Systems**

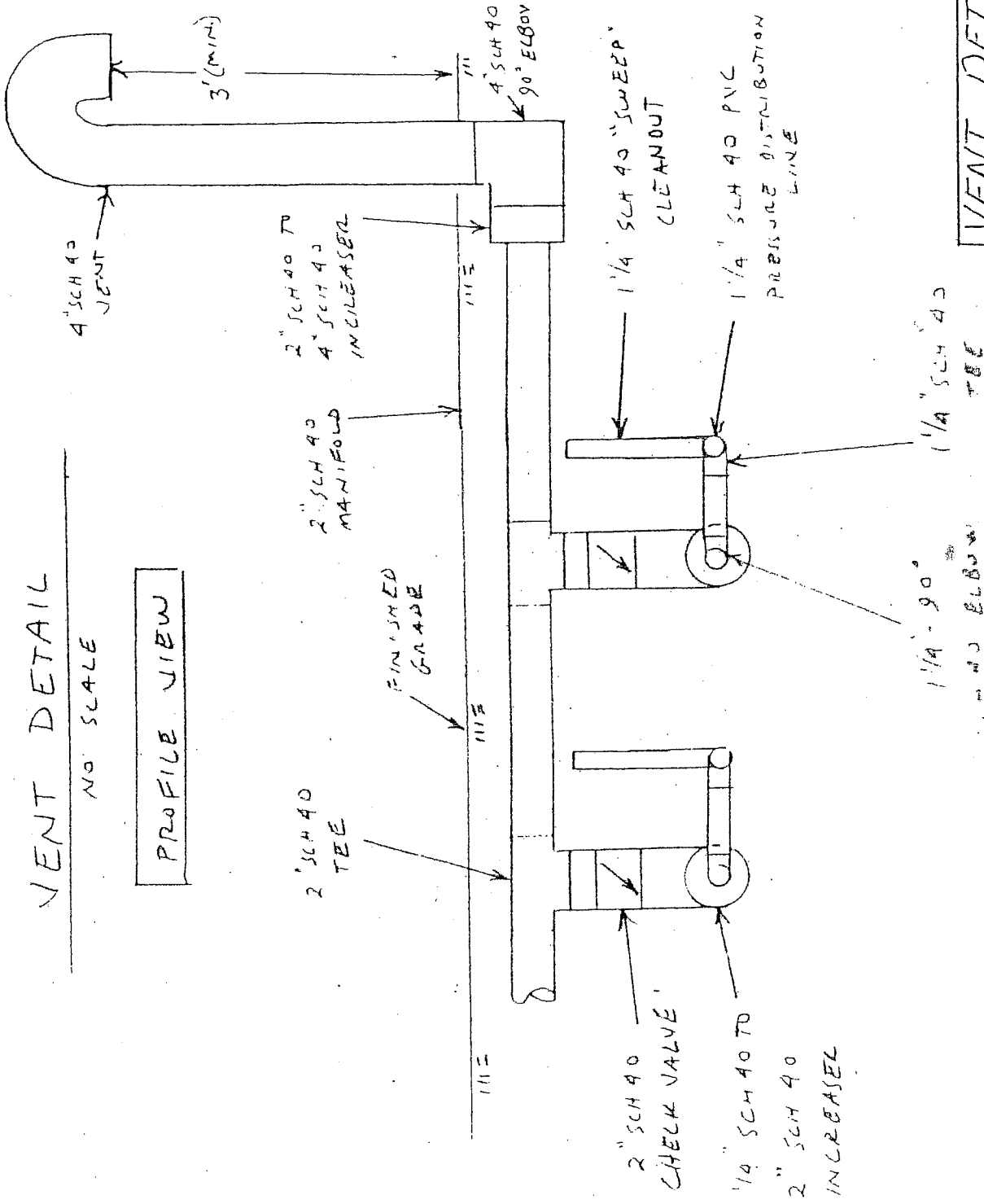
1. Title 5 sand replacement currently is governed by section 15.255 construction in fill: which specifies that up to 5% of the sample may include fines. This material may be the cause of premature septic failure due to the inability of both the designer and installer to monitor the quality of each load of fill. The shift to sand which meets the requirement of ASTM C-33 affords a more uniform material which is coarser in grain size and subsequently more porous by nature. Since the main reason behind providing for a Soil Absorption System no deeper than three feet below grade is to assist in oxygenation it is apparent that the use of a higher porosity sand mixture in the septic field is a given. Therefore, all sand used as fill in a SAS in the Town of Hamilton shall be ASTM C-33 sand.
2. In an effort to continue to provide oxygenation of constructed leaching fields, adequate venting should be a requirement. Title 5, section 15.241 controls the use of auxiliary venting of leaching systems. However, this section is deficient in providing venting if pumps are used with either a pressure distribution system or a pump to d-box for gravity distribution system. Since the pump is usually located in a wet well, there is no transfer of air from the SAS back through the house stack vent. There is a short circuit in venting due to the pumps location in a wet well or below the water level. Therefore, venting of the SAS must be self contained. A vent at the distribution box and one manifold vent at the distal end of the SAS will allow for adequate cross circulation by convection within the septic laterals. The vent located at the distribution box is to be no higher in height from grade of twelve inches. The vent at the distal manifold should be at least three times the height of the small vent. Therefore, any mechanical septic system consisting of pumps shall be required to install venting as described above.

Adopted: 7/8/08

VENT DETAIL

NO SCALE

PROFILE VIEW



VENT DETAIL FOR
PRESSURE SYSTEMS

WENHAM / HARTKON

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