1581 NORTHEAST STREET

COPY

TITLE 5
OFFICIAL INSPECTION FOR - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM FORM
PART A
CERTIFICATION

Property Address: 1581 Northeast Street, Amherst , MA
Owner's Name: Stephen Ferrarone
Address: 1581 Northeast Street, Amherst MA 01002
Date of Inspection: May 3, 2006

Name of Inspector: *Alan E. Weiss, R.S # 933, Hydrogeologist, M.S.*
Company Name: *Cold Spring Environmental Inc.*
Mailing Address: *350 Old Enfield Road*
Belchertown, Massachusetts 01007
Telephone Number: (413) 323-5957 fax: 413-323-4916

CERTIFICATION STATEMENT

I certify that I have personally inspected the sewage disposal system at this address and that the information reported below is true, accurate and complete as of the time of the inspection. The inspection was performed based on my training and experience in the proper function and maintenance of on site sewage disposal systems. **I am a DEP approved system inspector pursuant to Section 15.340 of Title 5 (310 CMR 15.000).** The system:

_X_ Passes
__ Conditionally Passes
__ Needs Further Evaluation by the Local Approving Authority
__ Fails

Inspector's Signature: _____ **Date: May 3, 2006**

The system inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within 30 days of completing this inspection. If the system is a shared system or has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the DEP. The original should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

Notes and Comments:

Septic Tank had good level upon inspection. System otherwise appears to be fine. All levels were ok at D. box. Field is 20+/- yrs old, tank installed in 1986. Outlet & inlet baffles are are inplace with 1500 gal s. tank. Pumping of tank was completed. All staining was proper. All D. box levels and competent. With mulitple (3) lines out.

******This report only describes conditions at the time of inspection and under the conditions of use at that time. This inspection does not address how the system will perform in the future under the same different conditions of use.**

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

Inspection Summary: Check A,B,C,D or E / ALWAYS complete all of Section D

A. System Passes:

__yes__ I have not found any information which indicates that any of the failure criteria described in 310 CMR 15.303 or in 310 CMR 15.304 exist. Any failure criteria not evaluated are indicated below.

Comments: No signs of failure

B. System Conditionally Passes:

____ One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Answer yes, no or not determined (Y,N,ND) in the ____ for the following statements. If "not determined" please explain.

___ The septic tank is metal and over 20 years old* **or** the septic tank (whether metal or not) is structurally unsound, exhibits substantial infiltration or **exfiltration** or tank failure is imminent. System will pass inspection if the existing tank is replaced with a complying septic tank as approved by the Board of Health. *A metal septic tank will pass inspection if it is structurally sound, not leaking and if a Certificate of Compliance indicating that the tank is less than 20 years old is available.

ND explain:

____observation of sewage backup or break out or high static water level in the distribution box due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. System will pass inspection if (with approval of Board of Health):

____ broken pipe(s) are replaced
____ obstruction is removed
____ distribution box is leveled or replaced

ND explain:

___ The system required pumping more than 4 times a year due to broken or obstructed pipe(s). The system will pass inspection if (with approval of the Board of Health):

____ broken pipe(s) are replaced
____ obstruction is removed

ND explain:

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

C. Further Evaluation is Required by the Board of Health:

NO Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect public health, safety or the environment.

1. **System will pass unless Board of Health determines in accordance with 310 CMR 15.303(1)(b) that the system is not functioning in a manner which will protect public health, safety and the environment:**

   ___ Cesspool or privy is within 50 feet of a surface water
   ___ Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

2. **System will fail unless the Board of Health (and Public Water Supplier, if any) determines that the system is functioning in a manner that protects the public health, safety and environment:**

   ___ The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet of a surface water supply or tributary to a surface water supply.

   ___ The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.

   ___ The system has a septic tank and SAS and the SAS is within 50 feet of a private water supply well.

   _____ The system has a septic tank and SAS and the SAS is less than 100 feet but 50 feet or more from a private water supply well**. Method used to determine distance _____

   **This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

3. Other:

   _____

   _____

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SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART A
CERTIFICATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

D. System Failure Criteria applicable to all systems:
You **must** indicate "yes" or "no" to each of the following for **all** inspections:

Yes	No	
___	x	Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool
___	x	Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool
___	x	Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool
___	x	Liquid depth in cesspool is less than 6" below invert or available volume is less than ½ day flow
___	x	Required pumping more than 4 times in the last year **NOT** due to clogged or obstructed pipe(s). Number of times pumped ____.
___	x	Any portion of the SAS, cesspool or privy is below high ground water elevation.
___	x	Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.
___	x	Any portion of a cesspool or privy is within a Zone 1 of a public well.
___	x	Any portion of a cesspool or privy is within 50 feet of a private water supply well.
___	x	Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. **[This system passes if the well water analysis, performed at a DEP certified laboratory, for coliform bacteria and volatile organic compounds indicates that the well is free from pollution from that facility and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.]**

- NO (Yes/No) **The system fails.** I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.

E. Large Systems:
To be considered a large system the system must serve a facility with a design flow of 10,000 gpd to 15,000 gpd.
You must indicate either "yes" or "no" to each of the following:
(The following criteria apply to large systems in addition to the criteria above)

yes	no	
___	___	the system is within 400 feet of a surface drinking water supply
___	___	the system is within 200 feet of a tributary to a surface drinking water supply
___	___	the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area - IWPA) or a mapped Zone II of a public water supply well

If you have answered "yes" to any question in Section E the system is considered a significant threat, or answered "yes" in Section D above the large system has failed. The owner or operator of any large system considered a significant threat under Section E or failed under Section D shall upgrade the system in accordance with 310 CMR 15.304. The system owner should contact the appropriate regional office of the Department.

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART B
CHECKLIST

Property Address: **1581 Northeast Street, Amherst, MA**
Owner: **Ferrarone**
Date of Inspection: **May 3 2006**

Check if the following have been done. You **must** indicate "yes" or "no" as to each of the following:

Yes No
YES ___ Pumping information was provided by the owner, occupant, or Board of Health

___ NO Were any of the system components pumped out in the previous two weeks ?

YES ___ Has the system received normal flows in the previous two week period ?

___ NO Have large volumes of water been introduced to the system recently or as part of this inspection ?

yes ___ Were as built plans of the system obtained and examined? (If they were not available note as N/A)

yes ___ Was the facility or dwelling inspected for signs of sewage back up ?

yes ___ Was the site inspected for signs of break out ?

yes ___ Were all system components, excluding the SAS, located on site ?

yes ___ Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum ?

yes ___ Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems ?

The **size and location of the Soil Absorption System (SAS)** on the site has been determined based on:

Yes no
YES _ Existing information. For example, a plan at the Board of Health.

yes ___ Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(3)(b)]

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

FLOW CONDITIONS

RESIDENTIAL

Number of bedrooms (design): _3 Number of bedrooms (actual): _3
DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 330
Number of current residents: 1,
Does residence have a garbage grinder (yes or no): YES *GRINDERS ARE NOT RECOMMENDED)*
Is laundry on a separate sewage system (yes or no): *no [if yes separate inspection required]
Laundry system inspected (yes or no): n/a
Seasonal use: (yes or no): *NO*
Water meter readings, if available (last 2 years usage (gpd)): *N/a*
Sump pump (yes or no): _NO
Last date of occupancy: Current

COMMERCIAL/INDUSTRIAL

Type of establishment: *N/A*
Design flow (based on 310 CMR 15.203): _____gpd
Basis of design flow (seats/persons/sqft,etc.): _____
Grease trap present (yes or no):__
Industrial waste holding tank present (yes or no): _____
Non-sanitary waste discharged to the Title 5 system (yes or NO):
Water meter readings, if available:_____
Last date of occupancy/use:_____

OTHER (describe)_____

GENERAL INFORMATION

Pumping Records

Source of information: (owner)
Was system pumped as part of the inspection (*YES* or no): *YES*
If yes, volume pumped: 1500 gallons -- How was quantity pumped determined? Measured
Reason for pumping: Time/Insp. 2 yrs

TYPE OF SYSTEM

_x_ Septic tank, distribution box, soil absorption system
___ Single cesspool
___ Overflow cesspool
___ Privy
___ Shared system (yes or no) (if yes, attach previous inspection records, if any)
___ Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner)
_____ Tight tank ___ Attach a copy of the DEP approval
___ Other (describe): _____
Approximate age of all components, date installed (if known) and source of information: 19-20 years+/- *(town BOH called), .-*
Were sewage odors detected when arriving at the site (yes or no): NO

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
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PART C
SYSTEM INFORMATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

BUILDING SEWER (locate on site plan)

Depth below grade: 12"
Materials of construction: ___cast iron X 40 PVC ___other (explain):___
Distance from private water supply well or suction line: 10'+
Comments (on condition of joints, venting, evidence of leakage, etc.):

SEPTIC TANK: Yes (locate on site plan)

Depth below grade: 8"
Material of construction: X concrete ___metal ___fiberglass ___polyethylene
___other(explain)___
If tank is metal list age: ___ Is age confirmed by a Certificate of Compliance (yes or no): ___ (attach a copy of certificate)
Dimensions: *4.5'w x10.5'l x5'd*
Sludge depth: 2"
Distance from top of sludge to bottom of outlet tee or baffle: 49"
Scum thickness: 2"
Distance from top of scum to top of outlet tee or baffle: 5 "
Distance from bottom of scum to bottom of outlet tee or baffle: 14"
How were dimensions determined: *MEASURED*
Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.): *TANK CONDITION OK*
baffles in place, Should be pumped (every 2 year).

GREASE TRAP: N/A (locate on site plan)

Depth below grade: ___
Material of construction: ___concrete ___metal ___fiberglass ___polyethylene ___other (explain):___
Dimensions: ___
Scum thickness: ___
Distance from top of scum to top of outlet tee or baffle: ___
Distance from bottom of scum to bottom of outlet tee or baffle: ___
Date of last pumping: ___
Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

TIGHT or HOLDING TANK: _____(tank must be pumped at time of inspection)(locate on site plan)

Depth below grade: ____
Material of construction: ___concrete ____metal ____fiberglass ____polyethylene ____other(explain):
_____
Dimensions: _____
Capacity:_____gallons
Design Flow:____ gallons/day
Alarm present (yes or no):____
Alarm level:_____Alarm in working order (yes or no): ___
Date of last pumping:_____
Comments (condition of alarm and float switches, etc.): _____
_____.
_____

DISTRIBUTION BOX: YES (if present must be opened)(locate on site plan)

Depth of liquid level above outlet invert: ***boxes found all levels @ inv. 28"+ cover material .***
Comments (note if box is level and distribution to outlets equal, any evidence of solids carryover, any evidence of leakage into or out of box, etc.): ***level equal, OK condition***

PUMP CHAMBER: NO (locate on site plan)

Pumps in working order (yes or no): ____
Alarms in working order (yes or no):____
Comments (note condition of pump chamber, condition of pumps and appurtenances, etc.): _
_____

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

SOIL ABSORPTION SYSTEM (SAS): *YES* **(locate on site plan, excavation not required)**

If SAS not located explain why:

_____

_____

Type
____ leaching pits, number: ____
____ leaching chambers, number: ____
____ leaching galleries, number: ____
__ Leaching trenches, number, length: _____
_1_ leaching fields, number, dimensions: 18' x 27' +/-
____ overflow cesspool, number: ____
____ innovative/alternative system Type/name of technology: _____
Comments (note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.): ***No signs of failure (stone not saturated), no Groundwater observed, No staining above piping inverts of system, stone not in EHGW.***

CESSPOOLS: N/A (cesspool must be pumped as part of inspection)(locate on site plan)

Number and configuration: _____
Depth - top of liquid to inlet invert: _____
Depth of solids layer: _____
Depth of scum layer: _____
Dimensions of cesspool: _____
Materials of construction: _____
Indication of groundwater inflow (yes or no): ____
Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

_____

_____

PRIVY: N/A (locate on site plan)

Materials of construction: _____
Dimensions: _____
Depth of solids: _____
Comments (note condition of soil, signs of hydraulic failure, level of ponding, condition of vegetation, etc.):

_____

OFFICIAL INSPECTION FORM - NOT FOR VOLUNTARY ASSESSMENTS
SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

SKETCH OF SEWAGE DISPOSAL SYSTEM
Provide a sketch of the sewage disposal system including ties to at least two permanent reference landmarks or benchmarks. Locate all wells within 100 feet. Locate where public water supply enters the building.

See Attached.

SUBSURFACE SEWAGE DISPOSAL SYSTEM INSPECTION FORM
PART C
SYSTEM INFORMATION (continued)

Property Address: 1581 Northeast Street, Amherst, MA
Owner: Ferrarone
Date of Inspection: May 3 2006

SITE EXAM
Slope *YES*
Surface water
Check cellar *YES '*
Shallow wells_____

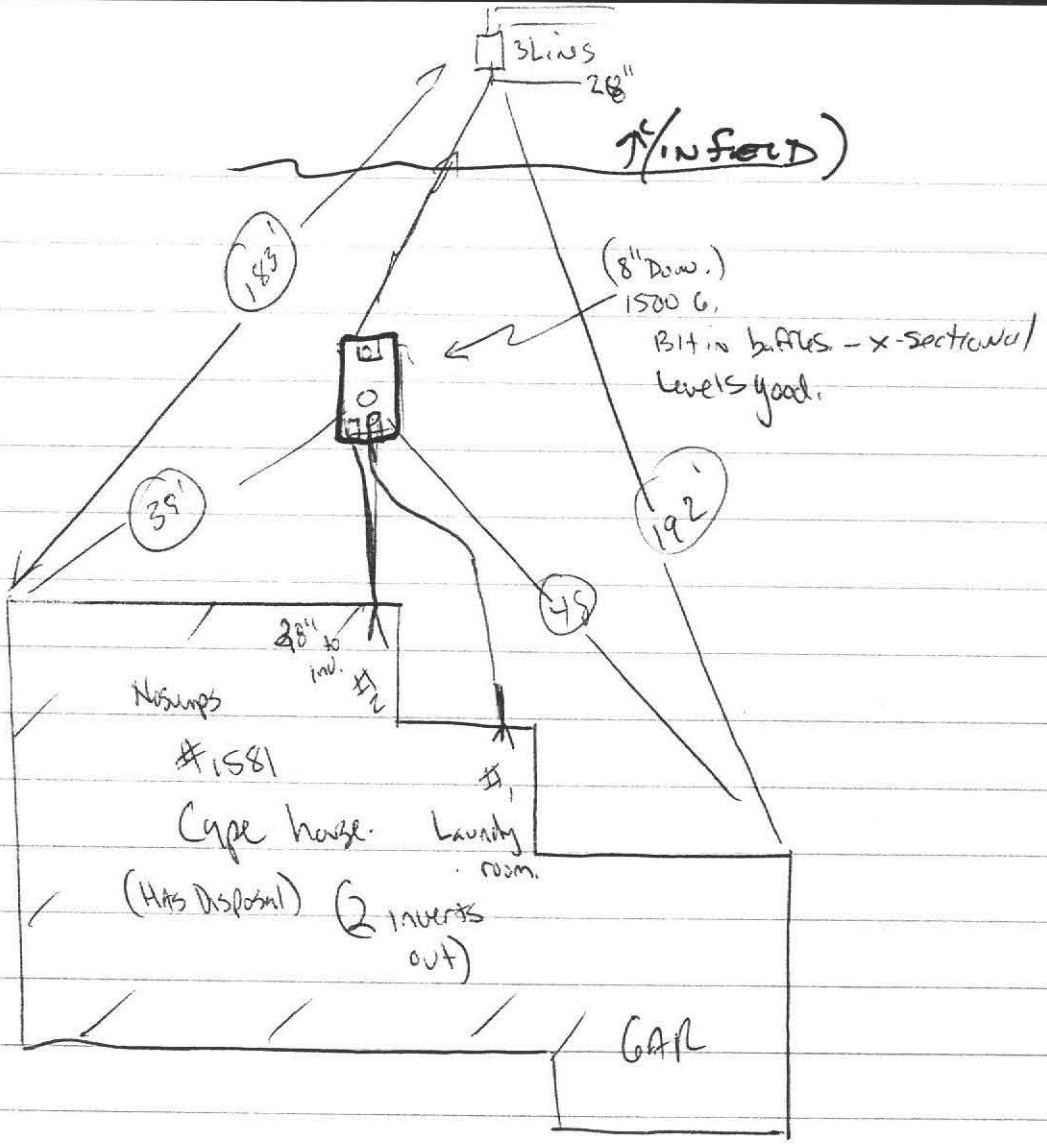
Estimated depth to ground water 5' + feet

Please indicate (check) all methods used to determine the high ground water elevation:

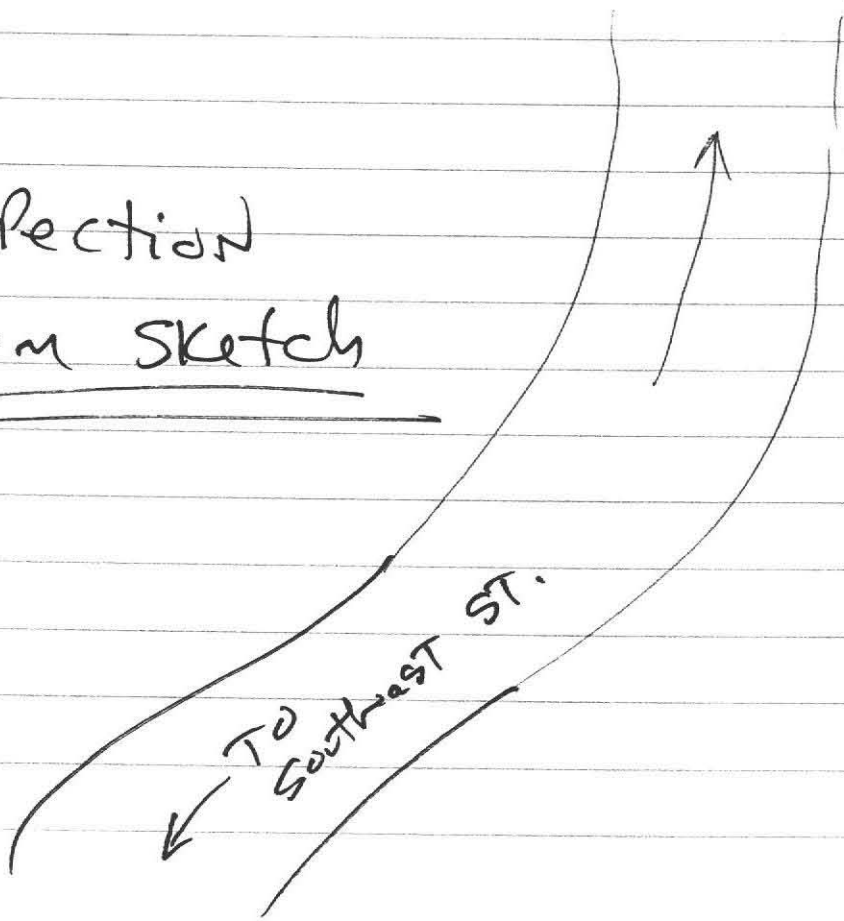
_X_ Obtained from system design plans on record - If checked, date of design plan reviewed: ___
___ Observed site (abutting property/observation hole within 150 feet of SAS)
___Checked with local Board of Health-explain: _____
____ Checked with local excavators, installers- (attach documentation)
____ Accessed USGS database-explain: _____

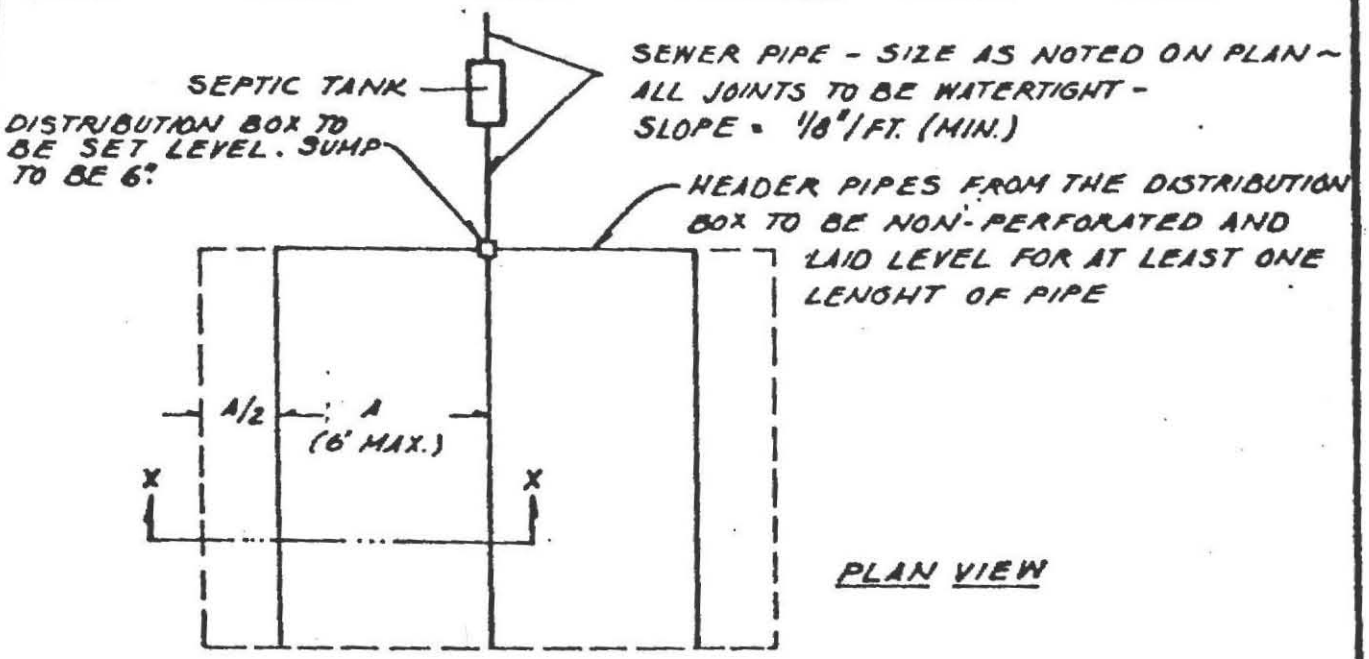
You must describe how you established the high ground water elevation:

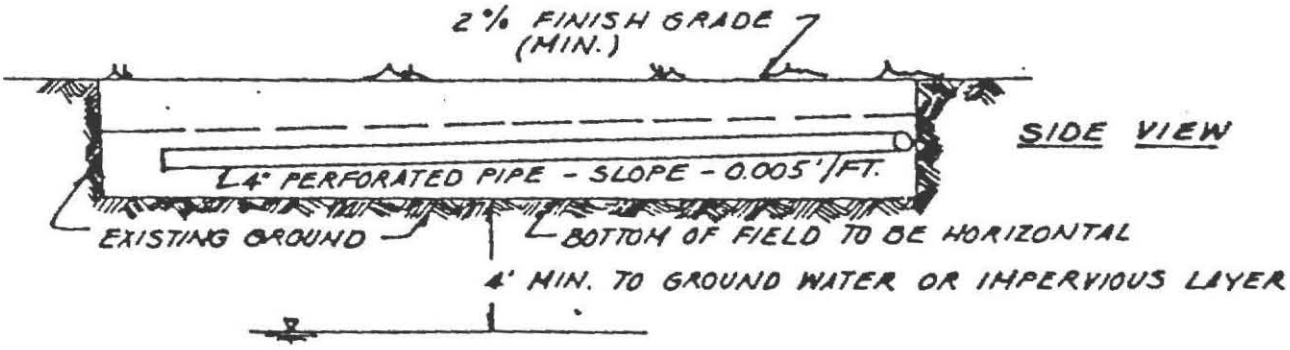
Water level based on on-site data & from topography & vegetation and soil type (NO evidence of high g. water observed in area of field, deep holes done in area 19-20 yrs ago, see record).

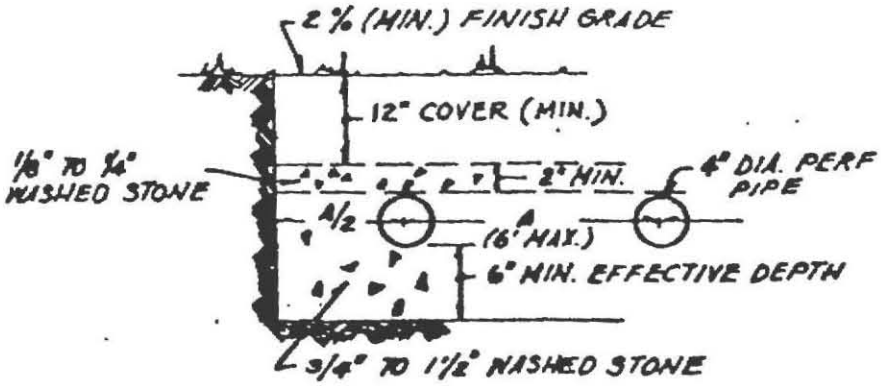


Inspection System Sketch









SECTION - X

ALL WORK TO BE DONE IN ACCORDANCE

ALMER HUNTLEY, JR. & ASSOCIATES, INC.

SURVEYORS - ENGINEERS - PLANNERS

125 PLEASANT STREET

NORTHAMPTON, MASS

PROPOSED DOMESTIC SUBSURFACE DISPOSAL SYSTEM DESIGN

Prepared For: PETER BLUCKNER

Location: LOT 1 SOUTH EAST ST

Number of Bedrooms: 3 Garbage Disposal: X

LEACH AREA DESIGN

3 Bedrooms x 2 persons/bedroom = 6 persons

6 Persons x 55 gallons of wastewater/person/day = 330 total gallons of wastewater/day.

Percolation Rate: 2.0 min/inch

Gallon of wastewater/square feet of leach area for a Percolation Rate of:

2.0 min/inch = 2.50 Gal/SF Sidewall Area

= 1.0 Gal/SF Bottom Area

* If a leach bed is to be installed, no sidewall is allowed.
* If percolation rate exceeds 20 min/inch, no bottom area is allowed.

- SEPTIC TANK -

* WITHOUT GARBAGE DISPOSAL:

_____ Gallons of wastewater/day x 150% = _____ REQUIRED effective liquid capacity of septic tank.

RECOMMENDED: _____ Septic Tank

* In no case will the septic tank be less than 1,000 gallons (effective liquid capacity).

** WITH GARBAGE DISPOSAL:

330 Gallons of wastewater/day x 200% = 660 REQUIRED effective liquid capacity of septic tank.

RECOMMENDED: 1500 Septic Tank

** In no case will the septic tank be less than 1,500 gallons (effective liquid capacity)

ALMER HUNTLEY, JR., & ASSOCIATES, INC.
LAND SURVEYORS - PROFESSIONAL ENGINEERS - LANDSCAPE ARCHITECTS

LEACHING FIELD DESIGN

USING BOTTOM AREA ONLY:

330 Gallons (Total Daily Flow) ÷ 1.0 gal/SF = 330 SF Leaching Field (REQUIRED)

* With Garbage Disposal: 330 SF Leaching Field x 1.5 = 495 SF Leaching Field (REQUIRED)

750 SF Leaching Field (Designed): 30 ' Long x 25 ' Wide

LEACHING TRENCH DESIGN

SIDEWALL AREA:

_____ Gal/SF x _____' of effective depth x 1' length x 2 sides = _____ Gal/LF of trench (sidewall).

BOTTOM AREA:

_____ Gal/SF x _____' wide x 1' length = _____ Gal/LF of trench (bottom).

_____ Gal/LF (Sidewall)
\+ _____ Gal/LF (Bottom)
= _____ TOTAL Gal/LF of trench

Total of _____ Gal/Day (flow) ÷ _____ Total Gal/Day/LF = _____ LF of trench (REQUIRED)
trench

* With Garbage Disposal: _____ LF of trench x 1.5 = _____ LF of trench (REQUIRED)

_____ LF of trench (Designed): _____ Trenches, _____' Wide x _____' Long with _____' Effective Depth.