



COMMONWEALTH OF MASSACHUSETTS
 EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
 DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

Property Address: 202 Harkness Rd.
Amherst MA.
 Owner's Name: Robert & Elizabeth Hart
 Owner's Address: 3 Chadwick Court
Amherst MA.
 Date of Inspection: 4-7-07

Name of Inspector: (please print) David P. Kodacz Sr
 Company Name: ACE Environmental
 Mailing Address: PO 158
Belcher-Town MA 01007
 Telephone Number: (413) 967-8174

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:

- Passes
- Conditionally Passes
- Needs Further Evaluation by the Local Approving Authority
- Fails

Inspector's Signature: David P. Kodacz Sr Date: 4-7-07

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 All system components were noted to be in proper working condition as of the date of this inspection. Typical wear was noted. Roots are a concern. Septic additives used historically.

****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 or different conditions of use.

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

Property Address: _____

Owner: _____

Date of Inspection: _____

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

A. System Passes:

X 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:

All system components were in proper working condition as of the date of this inspection

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: 202 Harkness Rdr
Amherst MA
Owner: Robert & Elizabeth Hoyt
Date of Inspection: 4-2-07

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

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:

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

Property Address: _____

Owner: _____

Date of Inspection: _____

D. System Failure Criteria applicable to all systems:

You must indicate "yes" or "no" to each of the following for all inspections:

- | Yes | No | |
|-----|-------------------------------------|--|
| ___ | <input checked="" type="checkbox"/> | Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool |
| ___ | <input checked="" type="checkbox"/> | Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool |
| ___ | <input checked="" type="checkbox"/> | Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool |
| ___ | <input checked="" type="checkbox"/> | Liquid depth in cesspool is less than 6" below invert or available volume is less than 1/2 day flow |
| ___ | <input checked="" type="checkbox"/> | Required pumping more than 4 times in the last year NOT due to clogged or obstructed pipe(s). Number of times pumped ____. |
| ___ | <input checked="" type="checkbox"/> | Any portion of the SAS, cesspool or privy is below high ground water elevation. |
| ___ | <input checked="" type="checkbox"/> | Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply. |
| ___ | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is within a Zone 1 of a public well. |
| ___ | <input checked="" type="checkbox"/> | Any portion of a cesspool or privy is within 50 feet of a private water supply well. |
| ___ | <input checked="" type="checkbox"/> | 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: 202 Harkness Rd
Amherst MA
Owner: Robert & Elizabeth Holt
Date of Inspection: 4-2-07

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

- Yes No
- Pumping information was provided by the owner, occupant, or Board of Health
 - Were any of the system components pumped out in the previous two weeks ?
 - Has the system received normal flows in the previous two week period ?
 - Have large volumes of water been introduced to the system recently or as part of this inspection ?
 - Were as built plans of the system obtained and examined? (If they were not available note as N/A)
 - Was the facility or dwelling inspected for signs of sewage back up ?
 - Was the site inspected for signs of break out ?
 - Were all system components, excluding the SAS, located on site ?
 - 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 ?
 - 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
- Existing information. For example, a plan at the Board of Health. 2002 inspection
 - 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)] confirmed with casing rods

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

Property Address: _____

Owner: _____

Date of Inspection: _____

FLOW CONDITIONS

RESIDENTIAL

Number of bedrooms (design): 3 ^{listed} Number of bedrooms (actual): 4

DESIGN flow based on 310 CMR 15.203 (for example: 110 gpd x # of bedrooms): 330

Number of current residents: 7

Does residence have a garbage grinder (yes or no): no

Is laundry on a separate sewage system (yes or no): no [if yes separate inspection required]

Laundry system inspected (yes or no): yes

Seasonal use: (yes or no): no

Water meter readings, if available (last 2 years usage (gpd)): Private well

Sump pump (yes or no): no

Last date of occupancy: current

COMMERCIAL/INDUSTRIAL

Type of establishment: _____

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: Occupant

Was system pumped as part of the inspection (yes or no): no

If yes, volume pumped: _____ gallons -- How was quantity pumped determined? _____

Reason for pumping: _____

TYPE OF SYSTEM

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): System includes lower level grinder pump

Approximate age of all components, date installed (if known) and source of information:
25-30 years

Were sewage odors detected when arriving at the site (yes or no): no

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

Property Address: _____

Owner: _____

Date of Inspection: _____

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: X (if present must be opened)(locate on site plan)

Depth of liquid level above outlet invert: 0"

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.):

Cover in good condition. Soil outside of box clean. No evidence of leakage. No identifiable solids observed.

PUMP CHAMBER: ____ (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.): _____

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

Property Address: 202 Harkness Rd.
Amherst MA
Owner: Robert & Elizabeth Hart
Date of Inspection: 4-7-07

BUILDING SEWER (locate on site plan)

Depth below grade: 24"
Materials of construction: cast iron 40 PVC other (explain): _____
Distance from private water supply well or suction line: _____
Comments (on condition of joints, venting, evidence of leakage, etc.):
JOINTS FUNCTIONAL WITH NO LEAKS, VENTING OK

SEPTIC TANK: (locate on site plan)

Depth below grade: 18"
Material of construction: 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: 8x5x5
Sludge depth: 3"
Distance from top of sludge to bottom of outlet tee or baffle: _____
Scum thickness: 1"
Distance from top of scum to top of outlet tee or baffle: _____ } negligible
Distance from bottom of scum to bottom of outlet tee or baffle: _____ }
How were dimensions determined: Direct observation
Comments (on pumping recommendations, inlet and outlet tee or baffle condition, structural integrity, liquid levels as related to outlet invert, evidence of leakage, etc.):
corner baffle in good condition, static liquid level was observed to be at outlet invert, typical signs of wear for age of system.

GREASE TRAP: _____ (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)

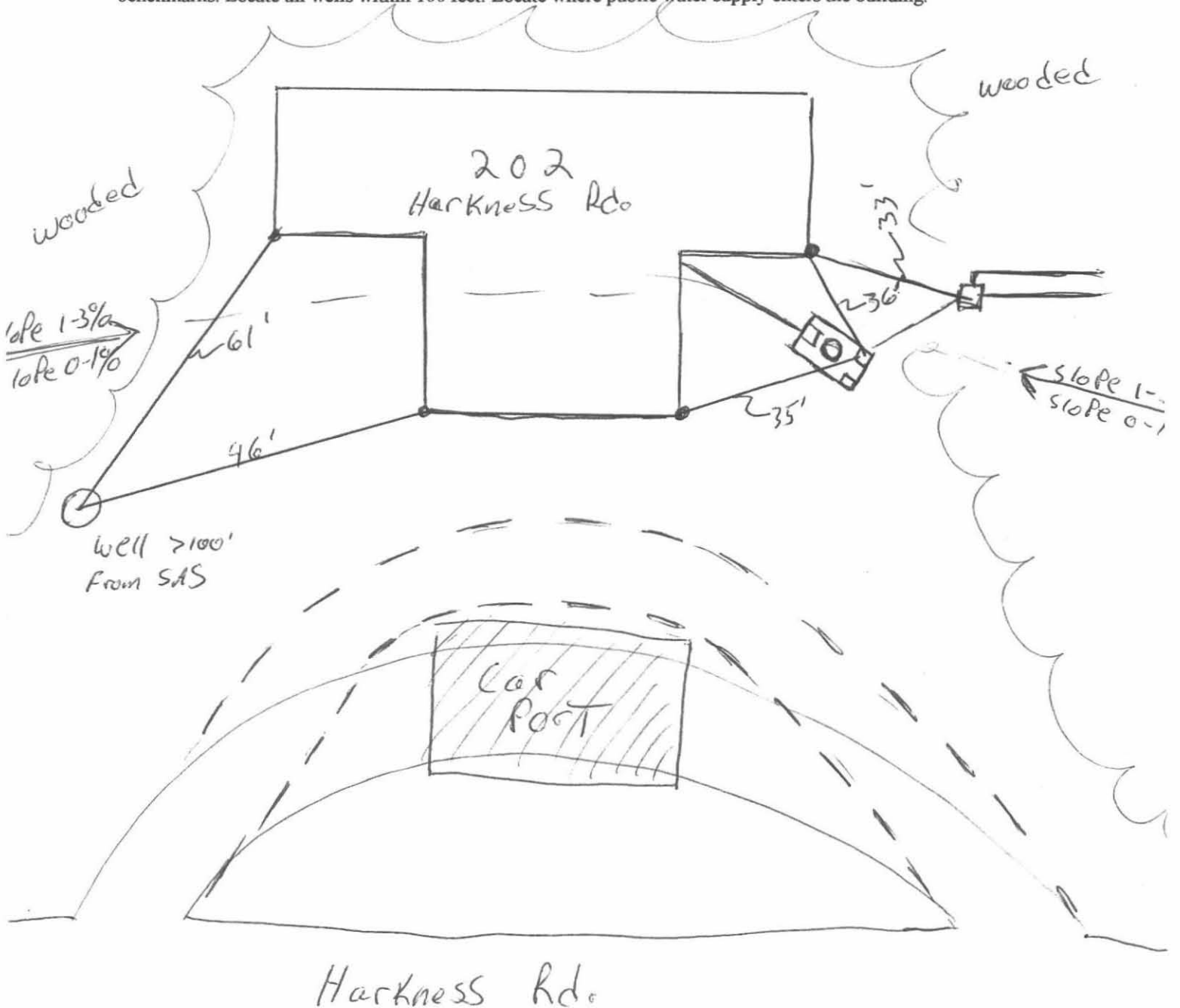
Property Address: _____

Owner: _____

Date of Inspection: _____

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.



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

Property Address: 202 Harkness Rd.
Amherst Rd.
Owner: Robert & Elizabeth Hart
Date of Inspection: 4-7-07

SOIL ABSORPTION SYSTEM (SAS): (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: 2 40'
- leaching fields, number, dimensions: _____
- 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 hydraulic failure or ponding observed. Tree root infiltrating into the leaching area likely

CESSPOOLS: _____ (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: _____ (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: 202 Harkness Rd.
Amherst MA
Owner: Robert & Elizabeth Hart
Date of Inspection: 4-7-07

SITE EXAM

Slope 0-3%
Surface water >200'
Check cellar Finished/dry
Shallow wells were observed

Estimated depth to ground water 5 feet

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

- 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:

Given the location of the SAS, with respect to local topography, I estimate the seasonal high groundwater level to be 35'. Soil conditions appear to be well drained and permeable. Lower levels of the home were finished with no signs of water.

