214 HENRY ST
Penn

GET NUMBER FOR LOTTA FROM BONNIE

CALL STACY SUCK
TO ARRANGE ROOM
TO DO DOTS
WITH PENCIL

BEN GOODACK

549-7918

CELL 531-0478

JACK

413-774-6698
EXT 25

CELL PHONE 413-834-7061

GAVE COPY TO:
CHRISTINE BRESTRUP
8/29/07

AMHERST HEALTH DEPT.
TOWN OF AMHERST
HEALTH PERMITS

1825

Received of _____ of _____
Name Address

For Property Located at: _____
Street Address Owner

HEA009	Bakery R6510 443509		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA001	Bed & Breakfast R6510 443516		HEA017	Septic Tank Permit-Private R6510 443510	
HEA002	Catering License R6510 443507		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA003	Food Handler R6510 443515		HEA019	Sub-Division Review Fee R6510 432306	
HEA004	Frozen Deserts R6510 443501		HEA012	Swimming Pool Permits R6510 443512	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA020	Tanning License R6510 443509	
HEA006	Massage Therapy License R6510 443504		HEA034	Immunization Clinic R6510 432307	
HEA008	Motel License R6510 443506		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA010	Removal of Offal R6510 443513		HEA022	Tobacco License R6510 443505	
HEA021	Removal of Rubbish R6510 443520		HEA042	Body Arts / Tatoo R6510 443521	
HEA011	Percolation Test Fees R6510 432300	$1500	HEA043	Food Service Plan Review R6510 432308	
HEA013	Recreation Camp License R6510 443503		HEA044	Porta Potties R6510 432309	
HEA014	Retail Store Permit R6510 443514		HEA045	Ice Rinks R6510 443522	
HEA015	Sanitary Code Booklets R6510 432305		HEA046	Rental Registration R6510 432310	
			HEA047	Fines R6510 48200	
			HEA		
			HEA		

TOTAL FEE: $1500

_____ _____
Amherst Health Department Date

OFFICE USE ONLY

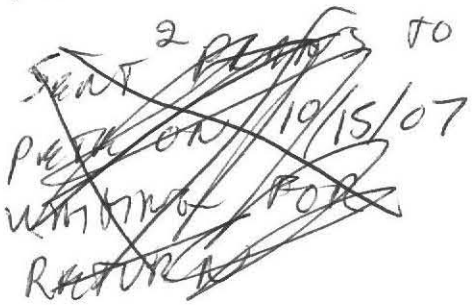
CHECK #	CASH

Must be Validated by the Collector's Office to be considered paid

WHITE – Applicant YELLOW – Collector PINK – Accounting GOLD – Health / Inspections

549-7919
Owes $150 -

Plans : Final



Commonwealth of Massachusetts
City/Town of AMHERST

Disposal System Construction Permit

Form 2A

07-12
Number

Permission is hereby granted to:

Name	Name of Company
	Karl's Excavating

327 River Road
Address

City/Town	State	Zip Code
Hadley	MA	01035

to perform the following work on an on-site sewage disposal system:

- ☒ Construction
- ☐ Repair or replacement
- ☐ Repair or replacement of system components

Henry Street
Facility Address

City/Town	State	Zip Code
Amherst	MA	01002

Owner	Telephone Number
The Center for Design Engagement	(413) 545-6910

The work to be performed is further described in the Application for Disposal System Construction Permit. The applicant recognizes his/her duty to comply with Title 5 and the following local provisions or special conditions:

see attached MeMo

All construction must be completed within three years of the date below.

Approved by	Date
Peter McElwain	Oct 08/07

Title: Public Health Consultant for the Amherst Board of Health

SPT 2008-00014

6A - 91

Peter J. McErlain, R.S., MPH
16 Coed Drive
Easthampton, MA 01027
Tel: (413) 527-8204

RECEIVED OCT 12 2007

MEMO

TO: ***Amherst Board of Health***

DATE: ***Oct. 8, 2007***

RE: ***Review of Plans for the construction of a new Soil Absorption System at Lot H, Henry St.., Amherst, MA***

Owner: The Center for Design Engagement
System UMASS Dept. of Art., Architecture and Art History
151 Presidents Dr., Amherst

Designer: Douglas MacLeay, SVE Associates

System Description: The proposed Soil Absorption System (SAS) is a Presby Enviro-Septic SAS, a MASS DEP Approved Alternative Technology system utilizing a unique design which pre-treats the septic tank effluent prior to disposal to the soil.

Conclusion: The design for the proposed SAS complies with all requirements of Title 5, 310 CMR 15.000 and the DEP Approval conditions for the Presby Alternative Technology system and I hereby approve the plans and issue the Disposal System Construction Permit with the following conditions:

1) This system must be installed by a contractor certified, by Presby Enviro-Septic, as being trained in the Presby installation techniques.
2) Utilization of the Presby system also requires that a notice of the use of Alternative Technology type SAS be recorded on the property deed.
3)

Please feel free to contact me with any questions concerning this review.

Thank you

Peter J. McErlain, R.S., MPH

Peter J. McErlain, R.S., MPH

Date 10/8/07

Commonwealth of Massachusetts
City/Town of AMHERST

Application for Disposal System Construction Permit

Form 1A

07-12
Number

$
Fee

A. Facility Information

Application is hereby made for a permit to: ☒ Construct a new on-site sewage disposal system
☐ Repair or replace an existing on-site sewage disposal system
☐ Repair or replace an existing system component

1. Location of Facility:

Henry Street
Address or Lot #

Amherst	MA	01002
City/Town	State	Zip Code

2. Owner Information

The Center of Design Engagement
Name

UMASS Department of Art, Architecture, and Art History; 151 Presidents Drive
Address (if different from above)

Amherst	MA	01003
City/Town	State	Zip Code

(413) 545-6910
Telephone Number

3. Installer Information

	Karl's Excavating
Name	Name of Company

327 River Drive
Address

Hadley	MA	01035
City/Town	State	Zip Code

(413) 549-5396
Telephone Number

4. Designer Information

Douglas J. MacLeay	SVE Associates
Name	Name of Company

377 Main Street
Address

Greenfield	MA	01301
City/Town	State	Zip Code

(413) 774-6698
Telephone Number

Commonwealth of Massachusetts
City/Town of AMHERST

Application for Disposal System Construction Permit

Form 1A

07-12
Number

$
Fee

A. Facility Information (continued)

5. Type of Building:

☒ Dwelling ☐ Garbage Grinder (check if present)

Other: Type of Building _____ Number of Persons Served

☐ Showers _____ Number of showers ☐ Cafeteria ☐ Other fixtures

Specify other fixtures: _____

6. Design Flow: 660 Gallons per Day

Calculated Daily Flow: 660 Gallons

7. Plan: June 4, 2007 Date of Original

2 Number of Sheets September 25, 2007 Revision Date

Subsurface Sewage Disposal Plan
Title of Plan

8. Description of Soil:

Parent material: sand / LOAMY SAND See plan for detailed test pit descriptions.

E.S.H.W.T.: 76" Percolation rate: 2 min/in., 5 MIN/IN

9. Nature of Repairs or Alterations (if applicable):

10. Date last inspected: _____ Date

Commonwealth of Massachusetts
City/Town of AMHERST

Application for Disposal System Construction Permit

Form 1A

07-12
Number

$
Fee

B. Agreement

The undersigned agrees to ensure the construction and maintenance of the aforedescribed on-site sewage disposal system in accordance with the provisions of Title 5 of the Environmental Code and not to place the system in operation until a Certificate of Compliance has been issued by this Board of Health.

X
Signature

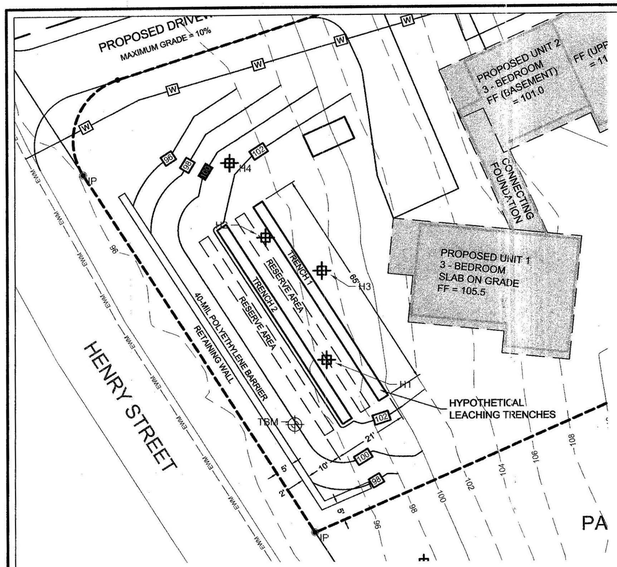
Date

Application Approved By:

Peter J McElwain
Name

10/8/07
Date

Application **Disapproved** for the following reasons:



THE PURPOSE OF THIS PLAN IS TO VERIFY THAT A LEACH FIELD IN FULL COMPLIANCE WITH 310 CMR 15.000 COULD BE DESIGNED FOR THIS SITE.

DESIGN DATA

DESIGN BASED ON MULTI FAMILY RESIDENCE (6 BEDROOM)
DESIGN FLOW 110 GALLON PER DAY PER BEDROOM
TOTAL DESIGN FLOW 660 GALLON PER DAY.

LEACHING TRENCHES

SIDEWALL:
2 X 65' LENGTH X 2.0' DEPTH = 260 SQUARE FEET.
260 SQ. FT. X .74 GAL. PER SQ.FT. = 192.4 GAL. LEACHING.

BOTTOM:
65' LENGTH X 3.0' WIDTH = 195 SQUARE FEET.
195 SQ. FT. X .74 GAL. PER SQ.FT. = 144.3 GAL. LEACHING.

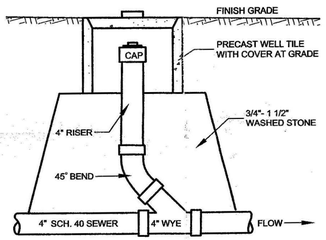
TOTAL NUMBER OF LEACHING TRENCHES 2
TOTAL LEACHING AREA = 910 SQUARE FEET.
TOTAL LEACHING CAPACITY = 673 GALLONS PER DAY.

	TRENCH 1	TRENCH 2
EXISTING GRADE	99.8	96.9
BOTTOM STONE	98.50	96.50
INV. OUT	100.50	98.50
INV. IN	100.83	98.83
BREAK OUT	101.17	99.17
TRENCH COVER	102.4	102.2

TITLE 5 SEPTIC SYSTEM IN ACCORDANCE WITH 310 CMR 15.000

SITE PLAN

SCALE: 1"= 20'



CLEANOUT

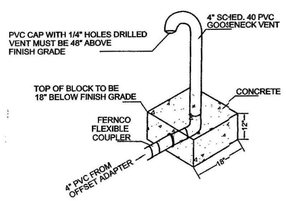
(CROSS SECTION - NOT TO SCALE)

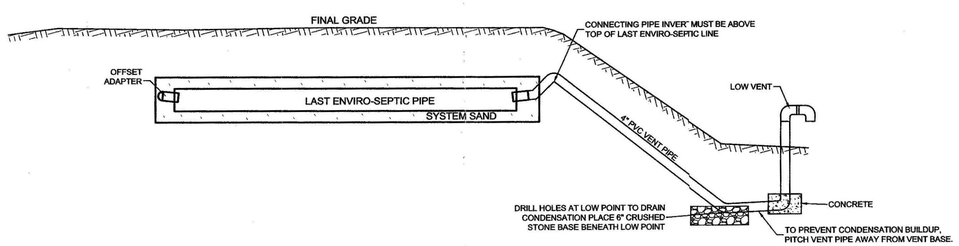
VENTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION J (PAGE 33) OF THE ENVIRO- SEPTIC MASSACHUSETTS DESIGN AND INSTALLATION MANUAL.

LOW AND HIGH VENTS ARE REQUIRED OF ALL SYSTEMS TO ENSURE THAT AIR IS DRAWN COMPLETELY THROUGH THE ENTIRE ENVIRO-SEPTIC SYSTEM. THE OPENING OF THE HIGH VENT MUST BE AT LEAST 10' ABOVE THE OPENING

THE ROOF VENT WILL FUNCTION AS THE HIGH VENT IF THERE ARE NO PUMPS, RESTRICTIONS, OR OTHER VENT BETWEEN THE LOW VENT AND THE ROOF VENT.

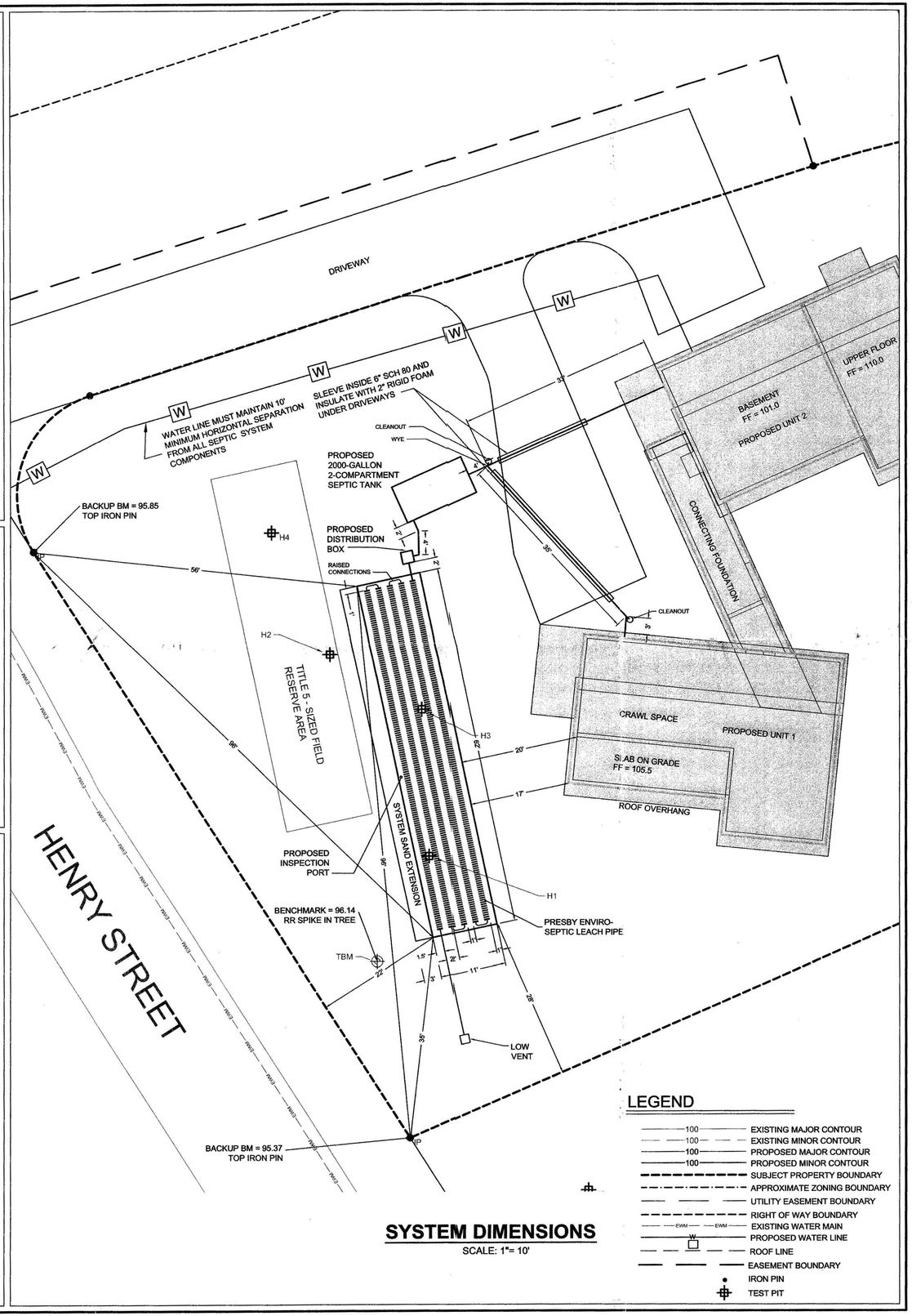
PRESBY ENVIRONMENTAL OFFERS BIRDBATHS AND HITCHING POSTS THAT CAN FIT OVER LOW VENTS TO MAKE THEM LESS OBTRUSIVE.





VENTING DETAIL

(CROSS SECTION - NOT TO SCALE)



SYSTEM DIMENSIONS

SCALE: 1"= 10'

LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- SUBJECT PROPERTY BOUNDARY
- APPROXIMATE ZONING BOUNDARY
- UTILITY EASEMENT BOUNDARY
- RIGHT OF WAY BOUNDARY
- EXISTING WATER MAIN
- PROPOSED WATER LINE
- ROOF LINE
- EASEMENT BOUNDARY
- IRON PIN
- TEST PIT

COMMONWEALTH OF MASSACHUSETTS
DOUGLAS J. MacLEAY
CIVIL
NO. 31203
REGISTERED PROFESSIONAL ENGINEER

9/25/07

DOUGLAS MACLEAY DATE
R.C.E. NUMBER: 31203

CONSTRUCTION SET

NO.	REVISION	DATE	DWN	CHK
1	MOVE DRIVEWAY; SHOW EASEMENT	31JUL07	JRM	DJM
2	ADDED TP'S H3 & H4, RENAMED PARCELS	25SEP07	JRM	DJM

SVE ©2007
Engineering
Planning
Landscape Architecture
Surveying

SVE Associates
377 Main Street
Greenfield, MA 01301
T 413.774.6698
F 413.773.0875
www.sveassoc.com

SUBSURFACE SEWAGE DISPOSAL PLAN

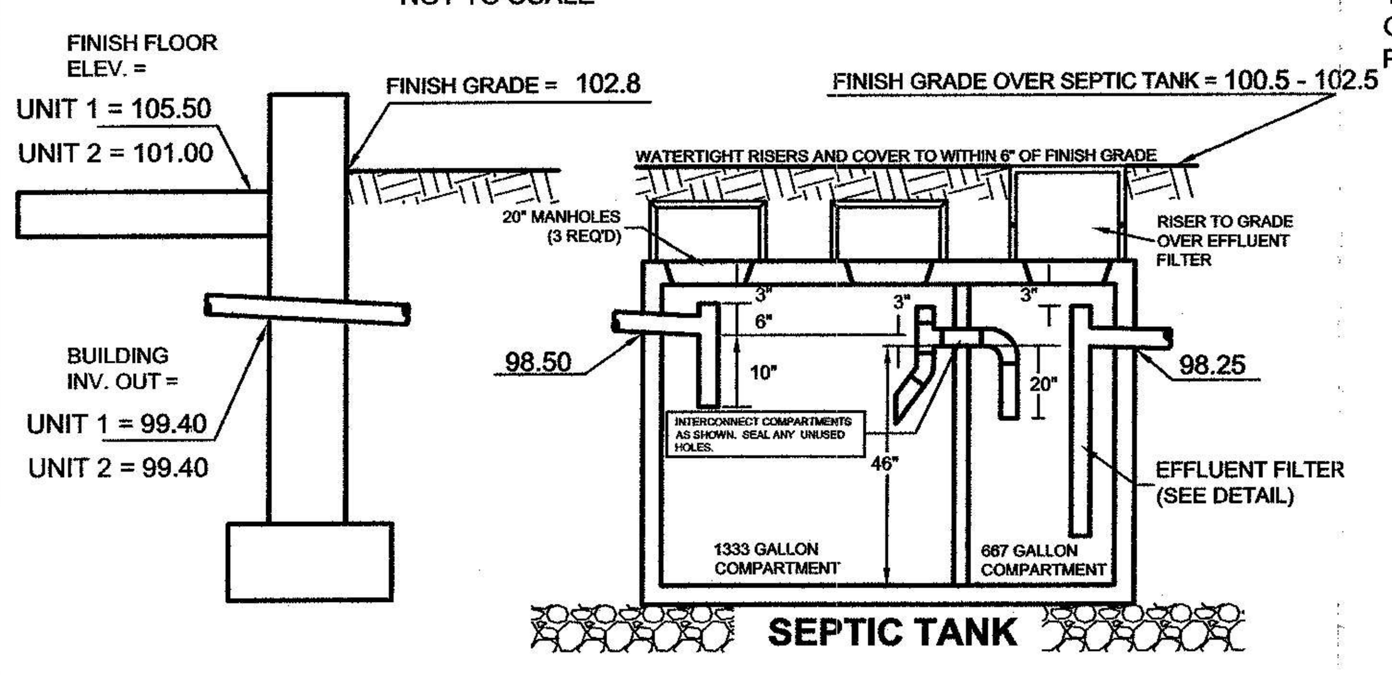
AT
HENRY STREET
AMHERST, MASSACHUSETTS

FOR
THE CENTER FOR DESIGN ENGAGEMENT
UMASS DEPARTMENT OF ART, ARCHITECTURE, AND ART HISTORY

PROJ. #: G1365
DATE: 4 - JUN - 07
DESIGN: DJM
DRAWN: JRM
CHECKED: DJM
DWG FILE: G1365
SHEET 2

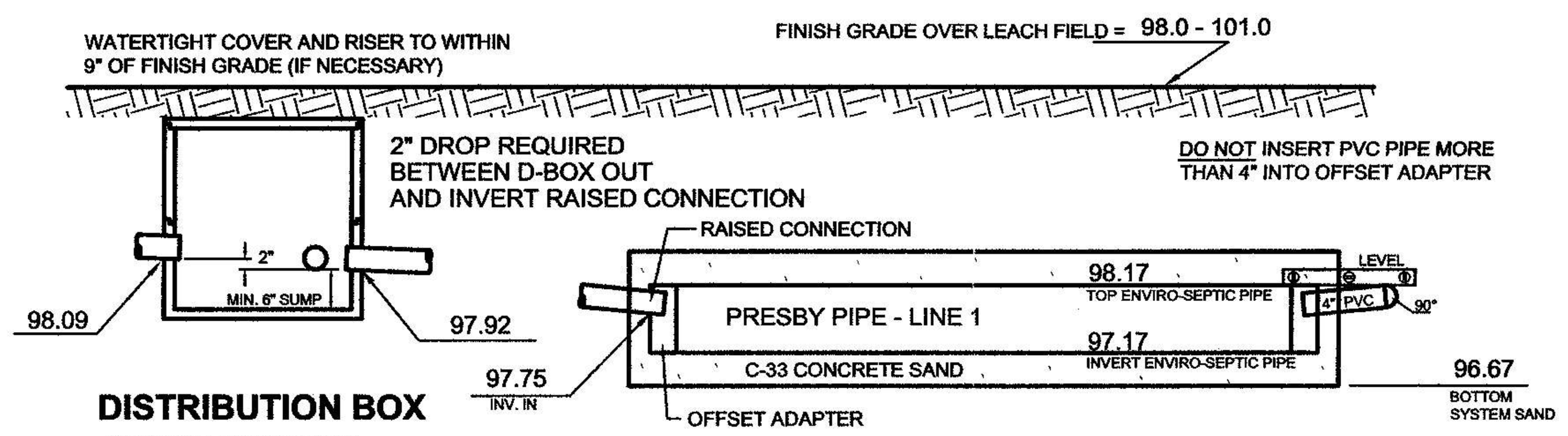
SANITARY SYSTEM PROFILE

NOT TO SCALE



2000 GALLON H20 REINFORCED CONCRETE SEPTIC TANK
LENGTH 12'-8", WIDTH 6'-8", DEPTH 5'-5"
TANK TO BE ON A STABLE LEVEL BASE (6" DEEP CRUSHED STONE)
INLET AND OUTLET TEES LOCATED ON THE CENTERLINE OF THE TANK.

ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED. PER 15.221:(12)



DISTRIBUTION BOX

BOX TO BE INSTALLED ON STABLE LEVEL BASE OF 6" OF CRUSHED STONE

LEACHING FIELD

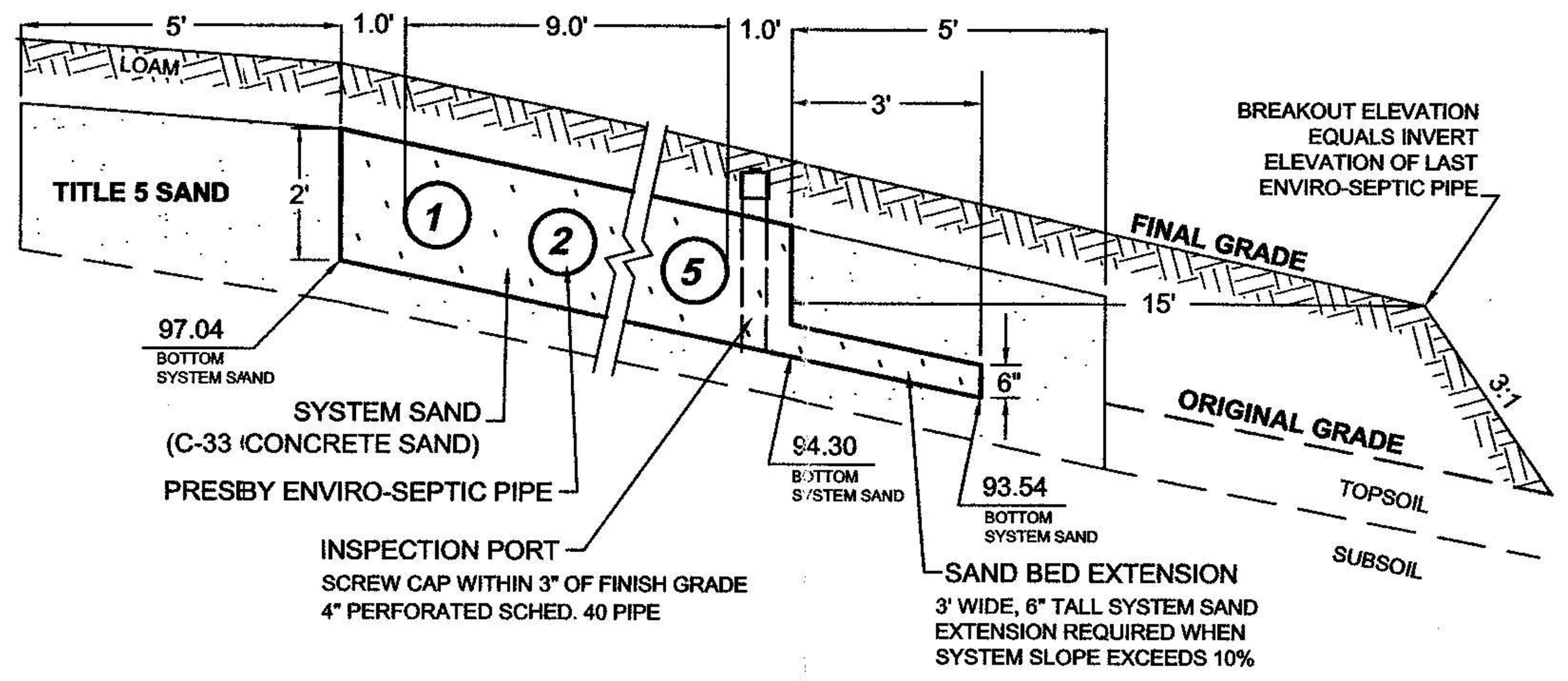
(LINE 1 SHOWN)
SEE TABLE BELOW

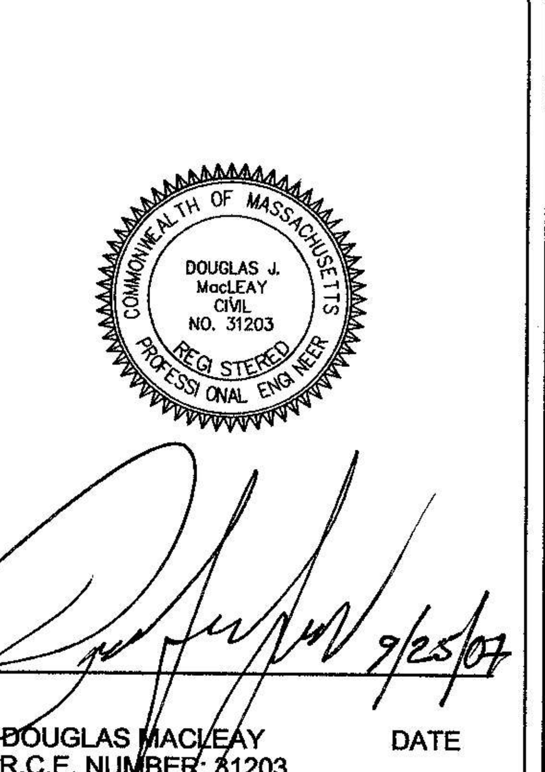
GROUND WATER ELEV.

ASSUMED AT 76" BELOW GRADE BASED ON THE ESHWT IN TP # H1

EFFLUENT DISPOSAL AREA
CROSS SECTION - NOT TO SCALE

SLOPE OF DISPOSAL AREA: 25%
NUMBER OF ENVIRO-SEPTIC LINES: 5
CENTER-TO-CENTER PIPE SPACING: 2.0'

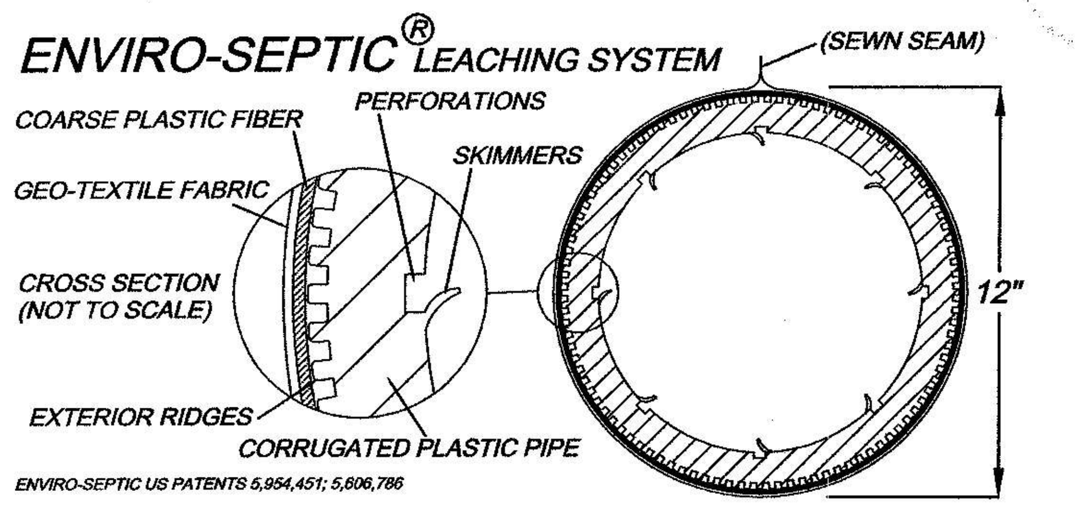


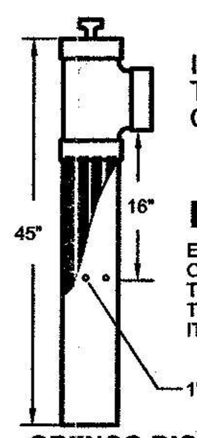


DOUGLAS MACLEAY
R.C.E. NUMBER: 31203
DATE

CONSTRUCTION SET

NO.	REVISION	DATE	DWN	CHK
1	MOVE DRIVEWAY, SHOW EASEMENT	31JUL07	JRM	DJM
2	ADDED TP'S H3 & H4, RENAMED PARCELS	25SEP07	JRM	DJM





INSTALL AT SEPTIC TANK OUTLET ON SCH 40 PIPE.

MAINTENANCE:

EACH TIME THE SEPTIC TANK IS PUMPED, OR AT LEAST ONCE PER YEAR, LIFT OUT THE FILTER CARTRIDGE AND HOSE OFF THE SCREEN. THE FILTER WILL CLOG IF IT IS NOT REGULARLY MAINTAINED.

ORENCO BIOTUBE EFFLUENT FILTER
MODEL # FT0436

AVAILABLE FROM WASTEWATER TECHNOLOGIES, INC., 18 PRECAST ROAD, MILTON, VT. 05468
(877) 212-3219

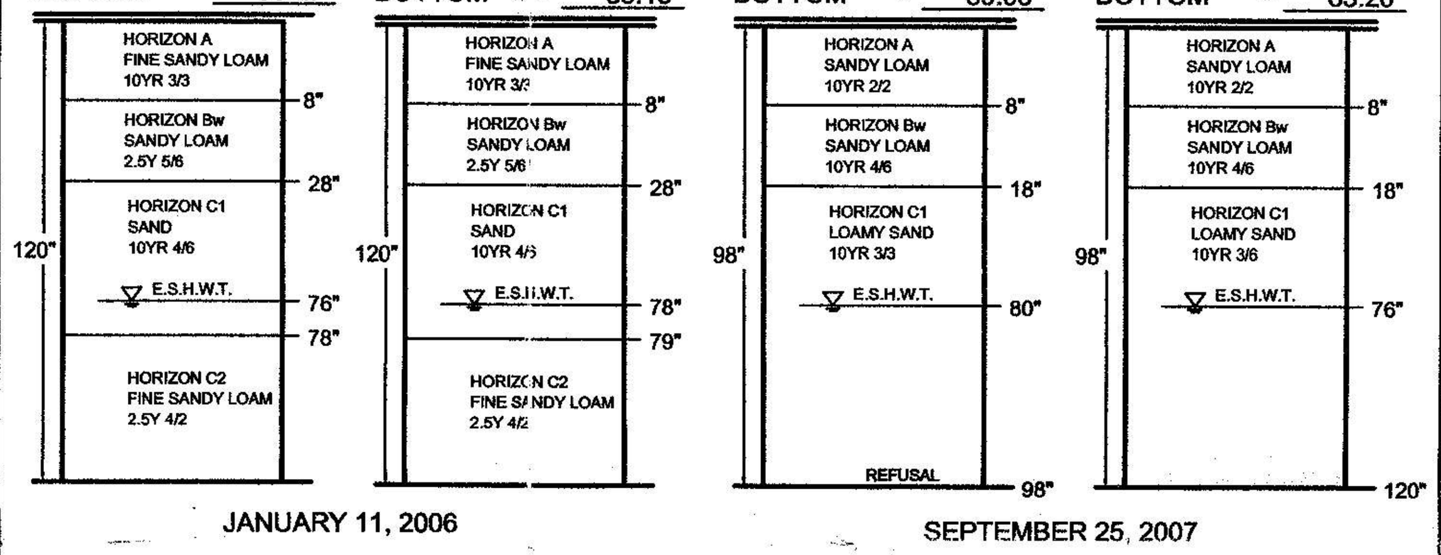
ENVIRO-SEPTIC PIPE ELEVATIONS					
	LINE 1	LINE 2	LINE 3	LINE 4	LINE 5
EXISTING GRADE	98.00	97.50	97.00	96.50	96.00
E.S.H.W.T.	91.67	91.17	90.67	90.17	89.67
BOTTOM SYSTEM SAND	96.67	96.17	95.67	95.17	94.67
INVERT ENVIRO-SEPTIC PIPE	97.17	96.67	96.17	95.67	95.17
INVERT RAISED CONNECTION	97.75	97.25	96.75	96.25	95.75
TOP ENVIRO-SEPTIC PIPE	98.17	97.67	97.17	96.67	96.17

TEST PIT DATA

BOARD OF HEALTH WITNESS: DAVID ZAROZINSKI, TOM DION
DATE: JANUARY 11, 2006; SEPTEMBER 25, 2007
SOIL EVALUATOR: ALLAN E. WEISS; JACK MELCHER

PERC TEST ID	PERC RATE (MIN/IN)	PERC DEPTH (IN)
H1	5	48
H2	<2	50

	TEST PIT # H1	TEST PIT # H2	TEST PIT # H3	TEST PIT # H4
ELEV. TOP =	96.27	95.13	97.20	95.20
ESHWT =	89.94	88.63	90.53	88.87
OBS. H20 =	NONE	NONE	NONE	NONE
BOTTOM =	86.27	85.13	89.03	85.20



JANUARY 11, 2006 — SEPTEMBER 25, 2007

CONSTRUCTION NOTES:

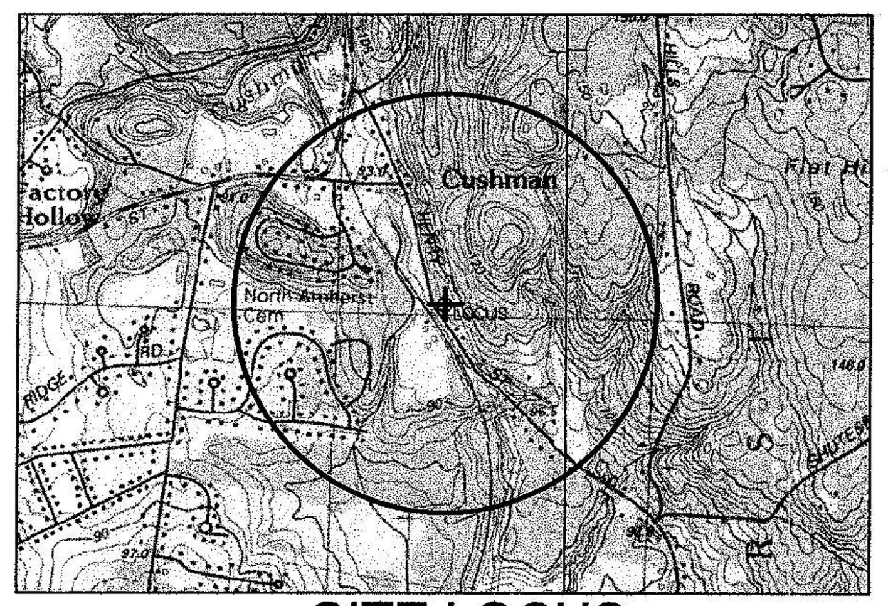
1. THIS PLAN IS FOR THE CONSTRUCTION OF A NEW SEPTIC SYSTEM.
2. REMOVE TOPSOIL BENEATH THE LEACH FIELD AND TO 5' ON ALL SIDES OF THE FIELD. REPLACE WITH MATERIAL MEETING THE SPECIFICATIONS OF 310 15.255(3). (TITLE 5 310 CMR 15.255(5).)
3. TITLE 5 REQUIRES OBSERVATION OF THE INSTALLED SYSTEM BY THE DESIGN ENGINEER AND A BOARD OF HEALTH MEMBER OF AGENT FOR THE BOARD OF HEALTH. THE SYSTEM MUST NOT BE BACKFILLED PRIOR TO OUR OBSERVATION. CONTACT OUR OFFICE AND THE BOARD OF HEALTH TWO BUSINESS DAYS BEFORE REQUESTED DATE FOR OBSERVATION.
4. ALL DISTURBED AREAS SHOULD BE LOAMED, RAKED, FERTILIZED, SEEDED, AND MULCHED AT THE COMPLETION OF CONSTRUCTION.

PROPERTY LINE REFERENCE:

PROPERTY LINES AS SHOWN ARE BASED ON A PLAN OF LAND IN AMHERST, MASSACHUSETTS. PREPARED FOR W.D. COWLS, INC.. PREPARED BY SVE ASSOCIATES, DATED APRIL 5, 2007.
PLAN HAS NOT YET BEEN APPROVED AND RECORDED.

PROPER SEPTIC SYSTEM USE:

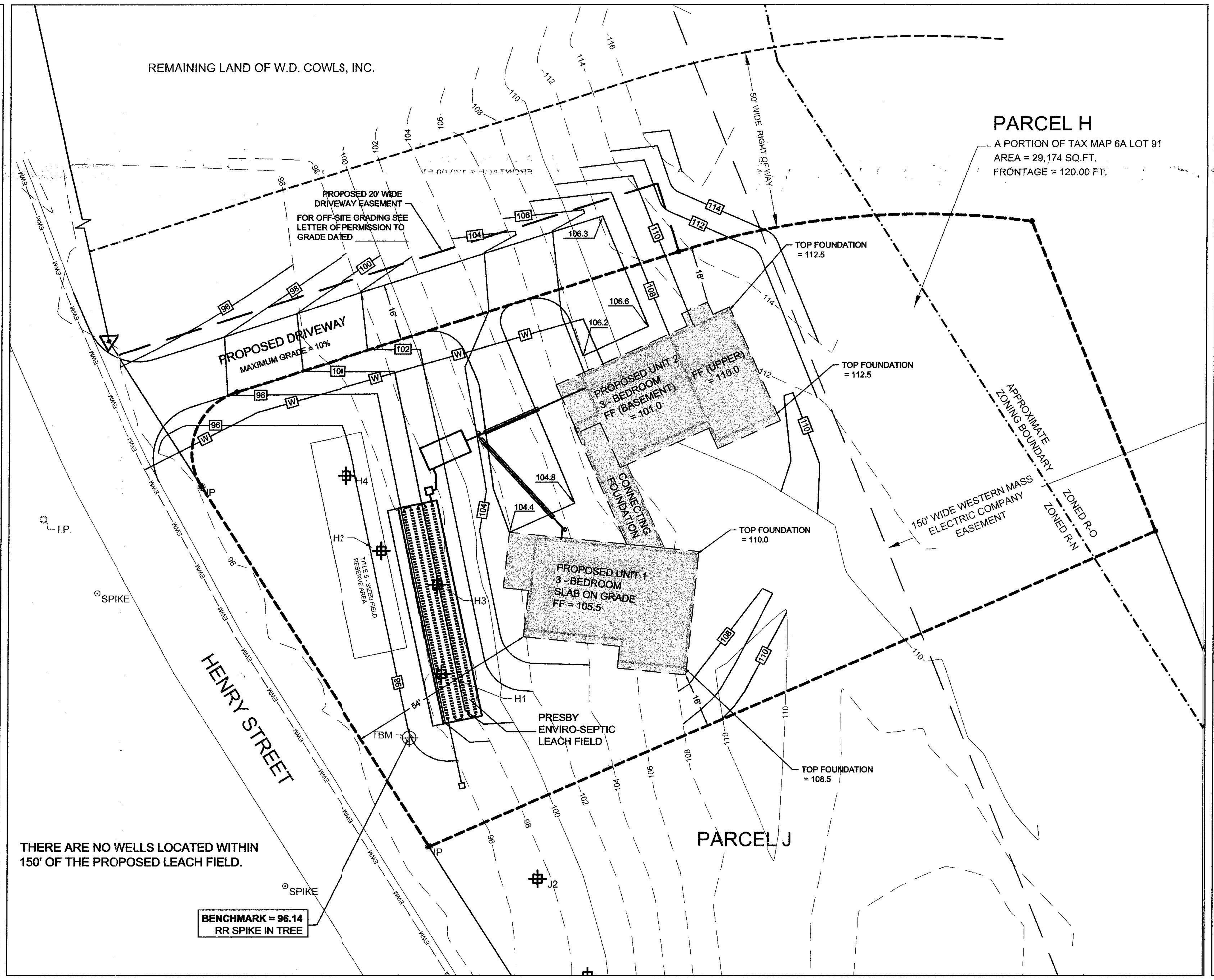
1. DO NOT POUR GREASE, OILS, OR CHEMICALS IN DRAINS
2. DO NOT WASH PAINT BRUSHES INTO DRAINS
3. DO NOT USE OR INSTALL GARBAGE DISPOSAL
4. USE LIQUID DETERGENTS LABELED "SEPTIC SYSTEM SAFE" OR "BIODEGRADABLE"
5. PUMP TANK EVERY 3 YEARS OR AS NEEDED



SITE LOCUS

LEGEND

- 100 EXISTING MAJOR CONTOUR
- 100 EXISTING MINOR CONTOUR
- 100 PROPOSED MAJOR CONTOUR
- 100 PROPOSED MINOR CONTOUR
- SUBJECT PROPERTY BOUNDARY
- APPROXIMATE ZONING BOUNDARY
- UTILITY EASEMENT BOUNDARY
- RIGHT OF WAY BOUNDARY
- EWM EXISTING WATER MAIN
- W PROPOSED WATER LINE
- ROOF LINE
- EASEMENT BOUNDARY
- IRON PIN
- UNMARKED POINT
- TEST PIT
- 104.8 PROPOSED SPOT ELEVATION



THERE ARE NO WELLS LOCATED WITHIN 150' OF THE PROPOSED LEACH FIELD.

DESIGN DATA

DESIGN BASED ON MULTIPLE FAMILY DWELLING (6 BEDROOM)
DESIGN FLOW 110 GALLON PER DAY PER BEDROOM
TOTAL DESIGN FLOW 660 GALLON PER DAY.

SEPTIC TANK

310 CMR 15.223 (1) (b): MULTIPLE FAMILY RESDIENCE REQUIRES TWO COMPARTMENT SEPTIC TANK.
A MULTIPLE COMPARTMENT TANK IN COMPLIANCE WITH 310 CMR 15.224 SHALL BE INSTALLED.
660 GALLONS X 200% = 1320 GALLON CAPACITY REQUIRED IN FIRST CHAMBER
660 GALLONS X 100% = 660 GALLON CAPACITY REQUIRED IN SECOND CHAMBER
USE 2000 GALLON 2-COMPARTMENT SEPTIC TANK:
1333 GALLON CAPACITY PROVIDED IN FIRST CHAMBER
667 GALLON CAPACITY PROVIDED IN SECOND CHAMBER

PRESBY ENVIRO-SEPTIC LEACH FIELD

DESIGN BASED ON: ENVIROSEPTIC WASTEWATER TREATMENT SYSTEM MASSACHUSETTS DESIGN AND INSTALLATION MANUAL, SECTION M - GUIDE FOR PERCOLATION RATES UP TO 60 MIN./INCH.

TABLE A - PAGE 37 PERC RATE: 5 MIN./INCH NUMBER OF BEDROOMS: 6
MINIMUM LINEAR FEET OF ENVIRO-SEPTIC PIPE REQUIRED: 300 FEET
LINEAR FEET OF ENVIRO-SEPTIC PIPE PROVIDED: 300 FEET

TABLE B - PAGE 38 PERC RATE: 5 MIN./INCH SYSTEM SLOPE: 25%
MINIMUM CENTER-TO-CENTER SPACING REQUIRED: 2.0 FEET
CENTER-TO-CENTER SPACING PROVIDED: 2.0 FEET

TABLE C - PAGE 39 **LINE LENGTH:** 60' + 2' = 62' **FIELD LENGTH**
LAYOUT WIDTH: 9.00' + 2' = 11.00' **FIELD WIDTH**

TABLE D - PAGE 40 NUMBER OF BEDROOMS: 6 SOIL CLASS: I
MINIMUM LEACH FIELD AREA REQUIRED: 535 SQUARE FEET
LEACH FIELD AREA PROVIDED: 682 SQUARE FEET

PRESBY ENVIRO-SEPTIC LEACHING SYSTEM HAS BEEN APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION SEE CERTIFICATION FOR GENERAL USE DATED NOVEMBER 21, 2005 TRANSMITTAL NUMBER #W055433.

SYSTEM TO BE INSTALLED IN ACCORDANCE WITH PRODUCT DESIGN AND INSTALLATION MANUAL, STATE AND LOCAL REGULATIONS. FOR PRODUCT INFORMATION OR THE NEAREST DEALER CONTACT PRESBY ENVIRONMENTAL, INC. ROUTE 117 - PO BOX 617 SUGAR HILL, NH 03585 - PHONE 1-800-473-5298 - WWW.PRESBYENVIRONMENTAL.COM

DESIGNER'S PRESBY ENVIRONMENTAL CERTIFICATE NO.: 1286MAES

GENERAL NOTES

1. FROM HOUSE OUT TO SEPTIC TANK, USE 4" SCHED. 40 PVC
   MINIMUM GRADE: 1/4 INCH PER FOOT (2%).
2. FROM SEPTIC TANK TO DISTRIBUTION BOX TO PRESBY FIELD, USE SDR 35 PVC
   MINIMUM GRADE: 1/8 INCH PER FOOT (1%).
3. 12" PRESBY ENVIRO-SEPTIC PIPE TO BE USED IN LEACHING AREA.
4. ALL PIPES IN THE DISPOSAL SYSTEM SHALL HAVE WATERTIGHT JOINTS.
5. AMHERST BOARD OF HEALTH MUST BE NOTIFIED WHEN SYSTEM IS NEARLY COMPLETE AND PRIOR TO BACKFILLING.
6. ELEVATIONS BASED ON ASSUMED DATUM
7. UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS SHALL BE INSTALLED IN ACCORDANCE WITH TITLE 5 OF THE STATE SANITARY CODE AND ANY APPLICABLE LOCAL RULES.
8. ANY CHANGE TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
9. THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.

Approved for the Amherst Board of Health by Peter McErlain 10/8/07

SVE © 2007
Engineering
Planning
Landscape Architecture
Surveying

SVE Associates
377 Main Street
Greenfield, MA 01301
T 413.774.6698
F 413.773.0875
www.sveassoc.com

SUBSURFACE SEWAGE DISPOSAL PLAN

AT

HENRY STREET
AMHERST, MASSACHUSETTS

FOR

THE CENTER FOR DESIGN ENGAGEMENT
UMASS DEPARTMENT OF ART, ARCHITECTURE, AND ART HISTORY

0 10 20 40
GRAPHIC SCALE
(IN FEET)
1" = 20'

N

PROJ. #: G1365
DATE: 4 - JUN - 07

DESIGN: DJM
DRAWN: JRM
CHECKED: DJM
DWG FILE: G1365

SHEET 1

Drawing name: P:\Project\G1365 Lugosch, UMASS\DESIGN\SITE\G1365site.dwg Sep 25, 2007 - 2:31pm

Weeks, Bonita

From: Weeks, Bonita
Sent: Friday, November 09, 2007 7:19 PM
To: Land Changes
Cc: 'Benjamin Goodale'
Subject: map 6A parcel 95 - Henry Street- Street Number

To all,

The lot shown on the Town Assessor's records as map 6A, Parcel 95 on Henry Street has been assigned the street address 214 Henry Street. A duplex has been proposed for this lot. The unit closest to Henry Street will be unit A, the unit farther back on the lot will be unit B.

Bonnie Weeks
Building Commissioner

ASK MARIA if you can add on the LAND CHANGES GROUP.

Dion, Thomas

From: Peter Jessop [jessop@integbuild.com]
Sent: Friday, October 19, 2007 10:30 AM
To: 'Cinda Jones'; Burgess@spunkymail-mx3.g.dreamhost.com; Burgess, David
Cc: 'Ben Goodale'; 'Max Page'; 'Peter MacConnell Weeks, Bonita'; Brestrup@spunkymail-mx3.g.dreamhost.com; Brestrup, Christine; Dion@spunkymail-mx3.g.dreamhost.com; Dion, Thomas
Subject: RE: Cowls Parcel 6A-91

We had assumed that this was being taken care of by legal counsel...

Peter Jessop
Integrity Development and Construction, Inc
110 Pulpit Hill Road
Amherst, MA 01002

-----Original Message-----
From: Cinda Jones [mailto:cjones@cowls.com]
Sent: Friday, October 19, 2007 9:38 AM
To: Burgess@spunkymail-mx3.g.dreamhost.com; David; Cinda Jones
Cc: Peter Jessop; Ben Goodale; Max Page; Peter MacConnell Weeks, Bonita; Brestrup@spunkymail-mx3.g.dreamhost.com; Christine; Dion@spunkymail-mx3.g.dreamhost.com; Thomas
Subject: RE: Cowls Parcel 6A-91

Yes. We agree w your assessment. This is not a cowls project. Peter macconnell is doing legal, peter jessop is building it, and umass owns project. I will leave this mess for them to clean up . :)
thanks for your help.

Sent with Wireless Sync from Verizon Wireless

---- Original Message ----
From: "Burgess, David" <BurgessD@amherstma.gov>
Date: 10/19/07 9:07 am
To: "Cinda Jones" <cjones@cowls.com>
Cc: "Weeks, Bonita" <WeeksB@amherstma.gov> ; "Brestrup, Christine" <BrestrupC@amherstma.gov> ; "Dion, Thomas" <DionT@amherstma.gov>
Subj: Cowls Parcel 6A-91
Good Morning Cinda,

I have been watching e-mails between departments about parcel 6A-91 and, after some inquiries, find that a portion is to be developed for a duplex. I want to make you aware that this parcel is under Chapter 61 Forestry protection and must, before any development, be released by the assessors. To accommodate this release you may need to offer the parcel to the town, as they may have right of first refusal, and pay rollback taxes on the portion that is being removed.

I would suggest you contact your attorney, but for now I believe you cannot develop this parcel without going through these steps and I am copying the permit issuing authorities to make them aware of my belief.

For us to calculate the rollbacks, assign a parcel number and a street address, we would need to see an approved plan with the sites broken out.

David W. Burgess

Principal Assessor, Town of Amherst

4 Boltwood Avenue, Amherst, Ma 01002

413-259-3024 FAX 413-256-4007

burgessd@amherstma.gov

OWES $150 FOR PLANS + FINAL

SOMEONE NEEDS TO SIGN CONSTRUCTION APPLICATION AS OWNER

TELL BEN

Taylor, Ruth

From: Weeks, Bonita
Sent: Thursday, October 18, 2007 7:07 PM
To: Land Changes
Cc: Taylor, Ruth
Subject: Montague Road lot 2A parcel 29

To all,

The new house number for Lot 2A, parcel 29, owned by William Pearson, is 525 Montague Road.

Bonnie Weeks

FORESTRY PROTECTION

To Ruth,

Parcel 6A 91 on Henry Street is the "parent parcel" it has since been subdivided, those divisions are not on the GIS (I do not know if they have been through planning yet, or if they have been recorded at the registry). If they need a house number they need to locate the drive and the units on the larger parcel for me.

Dion, Thomas

From: Cinda Jones [cjones@cowls.com]
Sent: Friday, October 19, 2007 9:38 AM
To: Burgess; Burgess, David; Cinda Jones
Cc: Peter Jessop; Ben Goodale; Max Page; Weeks, Bonita; Brestrup; Brestrup, Christine; Dion; Dion, Thomas
Subject: RE: Cowls Parcel 6A-91

Yes. We agree w your assessment. This is not a cowls project. Peter macconnell is doing legal, peter jessop is building it, and umass owns project. I will leave this mess for them to clean up . :)
thanks for your help.

Sent with Wireless Sync from Verizon Wireless

---- Original Message ----
From: "Burgess, David" <BurgessD@amherstma.gov>
Date: 10/19/07 9:07 am
To: "Cinda Jones" <cjones@cowls.com>
Cc: "Weeks, Bonita" <WeeksB@amherstma.gov> ; "Brestrup, Christine" <BrestrupC@amherstma.gov> ; "Dion, Thomas" <DionT@amherstma.gov>
Subj: Cowls Parcel 6A-91
Good Morning Cinda,

I have been watching e-mails between departments about parcel 6A-91 and, after some inquiries, find that a portion is to be developed for a duplex. I want to make you aware that this parcel is under Chapter 61 Forestry protection and must, before any development, be released by the assessors. To accommodate this release you may need to offer the parcel to the town, as they may have right of first refusal, and pay rollback taxes on the portion that is being removed.

I would suggest you contact your attorney, but for now I believe you cannot develop this parcel without going through these steps and I am copying the permit issuing authorities to make them aware of my belief.

For us to calculate the rollbacks, assign a parcel number and a street address, we would need to see an approved plan with the sites broken out.

David W. Burgess

Principal Assessor, Town of Amherst

4 Boltwood Avenue, Amherst, Ma 01002

413-259-3024 FAX 413-256-4007

burgessd@amherstma.gov

Dion, Thomas

From: Burgess, David
Sent: Friday, October 19, 2007 9:07 AM
To: 'Cinda Jones'
Cc: Weeks, Bonita; Brestrup, Christine; Dion, Thomas
Subject: Cowls Parcel 6A-91

Good Morning Cinda,

I have been watching e-mails between departments about parcel 6A-91 and, after some inquiries, find that a portion is to be developed for a duplex. I want to make you aware that this parcel is under Chapter 61 Forestry protection and must, before any development, be released by the assessors. To accommodate this release you may need to offer the parcel to the town, as they may have right of first refusal, and pay rollback taxes on the portion that is being removed.

I would suggest you contact your attorney, but for now I believe you cannot develop this parcel without going through these steps and I am copying the permit issuing authorities to make them aware of my belief.

For us to calculate the rollbacks, assign a parcel number and a street address, we would need to see an approved plan with the sites broken out.

David W. Burgess
Principal Assessor, Town of Amherst
4 Boltwood Avenue, Amherst, Ma 01002
413-259-3024 FAX 413-256-4007

burgessd@amherstma.gov

Town of AMHERST Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

MEMO

To: Zoning Board of Appeals
From: Tom Dion (Assistant Sanitarian Amherst Health Department)
Date: 8/29/07
Re: Septic System Maintenance for Henry Street Application No. ZBA FY2007-00016

It is my understanding that the proposed two-family dwelling to be located at Henry Street (Map 6A, Parcel91R-N Zone) that has been granted a special permit is going to be two condominium units. These units will be owned by two separate parties and served by a single septic system. If this is the case then I would like to know if there is a designated authority that is legally responsible for the septic system and has the financial ability to accomplish any necessary maintenance, repair, or upgrade of said system in case the system fails to protect the public health, safety, welfare or environment. I believe this information should be included in the condominium documents.

cc: Board of Health
Epi Bodhi
Bonnie Weeks

Sanitary Sewage or Sewage – Either greywater or blackwater or a combination of greywater and blackwater from domestic, commercial and other non-industrial sources. Sanitary sewage does not include stabilized waste.

Sanitary Sewer - Any system of pipes, conduits, pumping stations, force mains and all other structures and devices used for collecting and conveying wastewater to a public or private treatment works.

Saturated Zone - Any portion of the earth below the land surface where available openings (pore, fissure, joint or solution cavity) are filled with water.

Scum - A mass of light solids, such as hair, grease, oils and soaps, floating on the surface of the wastewater in a septic tank.

Separation Distance - The clear distance between system components.

Septage - Material physically removed from any part of an on-site system, including, but not limited to, the solids, semi-solids, scum, sludge and liquid contents of a septic tank, privy, chemical toilet, cesspool, holding tank, or other sewage waste receptacle. It does not include any material which is hazardous waste.

Septage Hauler - A person licensed by an Approving Authority to remove septage from on-site sewage disposal systems and transport it to an approved disposal location in accordance with 310 CMR 15.500.

Septage Hauler Permit - A permit issued pursuant to the authority of M.G.L. c. 111, § 31 and 310 CMR 15.500 entitling a person to transport septage within the Commonwealth.

Septic System Additive - Any solid or liquid material or biological agent intended or used primarily for cleaning, treating, degreasing, unclogging, disinfecting, deodorizing or otherwise affecting the performance of any component of an on-site system.

Septic Tank - A watertight receptacle to receive sewage from a building sewer which is designed and constructed to allow for the separation of scum and sludge and the partial digestion of organic matter before discharge of the liquid portion to a soil absorption system or other intermediate structure in the treatment sequence.

Septic Tank Effluent - The liquid portion of settled sewage which is discharged from the outlet of a septic tank.

Shared System - A system sited and designed in accordance with 310 CMR 15.100 through 15.293 which serves, or is proposed to serve, more than one facility and which has been approved in accordance with 310 CMR 15.290 through 15.293. A system serving a condominium located on the same facility is not a shared system.

Soil Absorption System - A system of trenches, galleries, chambers, pits, field(s) or bed(s) together with effluent distribution lines and aggregate which receives effluent from a septic tank or treatment system.

handwashing sinks, janitorial basins and drinking water fountains, the Department may approve a design flow for the greywater system based on water meter readings from the same or similar facilities with a safety factor to assimilate maximum daily flows. An existing cesspool may serve as a leaching pit for these purposes where:

1. the cesspool is pumped and cleaned when the other components of the system are installed;
2. the bottom of the cesspool does not extend below the high groundwater elevation as determined by a Soil Evaluator in accordance with 310 CMR 15.103(3);
3. the cesspool meets the design criteria of 310 CMR 15.253 (pits, chambers, and galleries) with respect to effective depth, separation between units, and inspection access, or the cesspool is replaced by a precast concrete leaching pit meeting those requirements; and
4. the hydraulic loading requirements of 310 CMR 15.242 (effluent loading rates) are satisfied; and

(c) The system shall be designed to store compostable and composted solids for at least two years, unless otherwise is approved by the Department. Residuals from the system shall be disposed of either:

a. by burial on-site or in another manner and location approved by the local Approving Authority, covered with a minimum of six inches of clean compacted earth; or
b. by a licensed septage hauler.

(2) Humus/Composting Toilets are certified for general use in new construction for residential facilities subject to the conditions set forth at 310 CMR 15.289(1)(a), where a system in full compliance with 310 CMR 15.000 could otherwise be installed on the site

(3) For commercial and public facilities or private organizations, humus/composting toilets are certified for general use subject to the conditions at 310 CMR 15.289(1)(a) without the need to demonstrate that a system in full compliance with 310 CMR 15.000 could otherwise be installed on the site.

15.290: Shared Systems

(1) An Approving Authority may allow the use of shared systems, subject to any special conditions established pursuant to 310 CMR 15.293, to serve two or more facilities that will result from division of a Facility, for upgrade of existing systems, for new construction, or for increased flow to an existing system, in accordance with 310 CMR 15.290 through 15.292.

(2) Any application for use of a shared system shall include the following:

(a) complete plans and specifications for the system as required by 310 CMR 15.201 through 15.255;
(b) a proposed operation and maintenance plan for the shared system;

(c) a description of the form of ownership which each component of the system serving more than one Facility will take, together with relevant legal documentation describing or establishing that ownership including, without limitation, easements, condominium master deed, or homeowners' association documents. All forms of private ownership of system components serving more than one Facility shall establish that each user of the system has the legal ability to accomplish any necessary maintenance, repair, or upgrade of the component;
(d) a description of the financial assurance mechanism proposed to ensure effective long-term operation and maintenance of the system. Acceptable financial assurance mechanisms may include, but are not limited to, an escrow account, letter of credit, performance bond, or insurance policy, which names the Approving Authority as beneficiary, and which provides for upgrade of the shared system in the event the shared system fails to protect public health, safety, welfare or environment pursuant to the criteria established in 310 CMR 15.303,A copy of the final financial assurance mechanism shall be provided to the local Approving Authority and the Department prior to construction of the system; and
(e) a copy of a proposed Grant of Title 5 Covenant and Easement essentially identical to that contained in 310 CMR 15.000 Appendix 1 shall be recorded and/or registered with the appropriate Registry of Deeds and/or Land Registration Office within 30 days of the latter of the following: receipt from the local Approving Authority of the approved Covenant and Easement or the expiration of the 30-day DEP constructive approval period pursuant to 310 CMR 15.293. The applicant shall file a certified Registry copy of this Covenant and Easement with the local Approving Authority and the Department within 30 days of its date of recordation and/or registration, and prior to construction of the system.

(3) Local Approving Authorities shall provide the Department with notice of all shared systems approved by them pursuant to 310 CMR 15.290. No approval of a shared system shall be final prior to Department review pursuant to 310 CMR 15.293.

(4) A local Approving Authority may impose additional conditions on the use of shared systems under 310 CMR 15.000 only in accordance with regulations adopted pursuant to 310 CMR 15.003(3).

15.291: Division of a Facility and Upgrades Using Shared Systems

(1) The Approving Authority may allow use of shared systems, subject to any special conditions established pursuant to 310 CMR 15.293, for upgrade of existing systems or to serve two or more facilities that will result from division of a Facility without granting a variance pursuant to 310 CMR 15.410 through 15.413 only where:
(a) the proposed shared system satisfies all technical requirements of 310 CMR 15.100 through 15.293 without the need for a variance except setbacks from property lines between facilities served by the shared system;
(b) there will be no new construction or increase in design flow from the facility or facilities to be served by the shared system;
(c) the applicant proposes institutional arrangements as described in 310 CMR 15.290(2)(c); through documents essentially identical to those contained in 310 CMR 15.000 Appendix 1(Grant of Title 5 Covenant and Easement); and

(d) the applicant provides the local Approving Authority and the Department with the insurance policy or other comparable financial assurance mechanism required pursuant to 310 CMR 15.290(2)(d).

(2) The use of shared systems for upgrade of existing systems in any situation not described in 310 CMR 15.291(1) may only be approved through a variance.

(3) Local Approving Authorities shall provide the Department with notice of all shared systems approved by them pursuant to 310 CMR 15.291.

(4) A local Approving Authority may impose additional conditions on the use of shared systems under 310 CMR 15.000 only in accordance with regulations adopted pursuant to 310 CMR 15.003(3).

15.292: New Construction or Increased Flow to Existing Systems and Division of a Facility Using Shared Systems

(1) The Approving Authority may allow use of shared systems, subject to any special conditions established pursuant to 310 CMR 15.293, for new construction or increased flow to existing systems or to serve two or more Facilities that will result from division of a Facility without granting a variance only where:

(a) the proposed shared system satisfies all technical requirements of 310 CMR 15.100 through 15.293 except setbacks from property lines between facilities served by the shared system; and

(b) with the exception of a shared system serving a cluster development as defined in 310 CMR 15.002, the applicant demonstrates that the design flow from the facility or facilities to be served by the shared system does not exceed the design flow which could have been constructed in compliance with 310 CMR 15.000 without the use of a shared system; and

(c) the applicant proposes institutional arrangements as described in 310 CMR 15.290(c) and provides documents essentially identical to those contained in Appendix 1 (Grant of Title 5 Covenant and Easement); and

(d) the applicant provides the local Approving Authority and the Department with the financial assurance mechanism required pursuant to 310 CMR 15.290(2)(d);and

(e) an application for shared system approval of an existing system to serve two or more facilities resulting from division of a Facility is presumed to be for new construction where construction of any building served by the system was completed within the five years prior to the filing of the application.

(2) The use of shared systems for new construction, for increased flow to existing systems or to serve two or more facilities that will result from division of a Facility in any situation not described in 310 CMR 15.292(1) may only be approved through a variance.

(3) Local approving authorities shall provide the Department with notice of all shared systems approved by them pursuant to 310 CMR 15.292.

(4) A local Approving Authority may impose additional conditions on the use of shared systems under 310 CMR 15.000 only in accordance with regulations adopted pursuant to 310 CMR 15.003(3).

15.293: Department Approval of Shared Systems

(1) Prior to construction of any shared system, the applicant shall submit to the Department the written approval of the local Approving Authority together with a copy of the complete application submitted to the local Approving Authority. The application for the shared system shall be deemed approved by the Department if, within 30 days from a determination of administrative completeness, the Department fails, in writing:

(a) to request additional information from the applicant; or

(b) grant a written approval, which may include any special conditions the Department believes appropriate to protect public health, safety, or welfare or the environment; or

(c) to deny the approval of the shared system.

In the event the Department requests additional information from the applicant, the 30 day period for Department review shall commence upon receipt of such additional information.

(2) In the event the Department denies the approval of the shared system, that determination may be appealed in accordance with 310 CMR 15.422.

SUBPART D: INSPECTION AND MAINTENANCE OF SYSTEMS

15.300: Purpose and General Provisions

(1) The proper operation and maintenance of all systems is essential to their proper functioning, to the avoidance of public health hazards and to the protection of the environment. 310 CMR 15.300 is intended to ensure the proper operation and maintenance of all systems.

(2) The provisions of 310 CMR 15.303 and 15.304 represent an initial effort to identify and upgrade those failed systems which pose the greatest risk to public health and safety and to the waters of the Commonwealth.

(3) The Department shall produce educational materials suitable for distribution to the general public describing the importance of proper maintenance and operation of on-site systems and the impact of such systems on public health and the environment. In addition to its own distribution, the Department shall make such materials available to local approving authorities and other interested persons.

(4) Any person owning or operating a facility on which an on-site subsurface sewage treatment and disposal system is installed shall be responsible for the inspection and maintenance of, and any necessary upgrades to, the system.

(5) Facilities with an increase in the nitrogen loading rate in accordance with 310 CMR 15.262(6) and (7) shall be inspected annually. The inspection shall document at a minimum the continued operation of the system as approved, if the system consists of a

THINGS TO DO TODAY

Date _____

✓	
	HENRY STREET IS
A 1	JOINT PROJECT BETWEEN
2	UMASS, PETER JESUP AND
3	~~FACT~~ CINTA JONES.
4	IT WILL BE A CONDO
5	WITH 2 SEPARATE OWNERS
6	WHO TOGETHER WILL FORM
7	A HOMEOWNERS ASSOCIATION
8	THAT WILL BE RESPONSIBLE
9	FOR THE COMMON DRIVEWAY
10	MAINTENANCE AND THE SEPTIC
11	SYSTEM MAINTENANCE.
12	

KATHLEEN LUGASH 658-3777

Commonwealth of Massachusetts
City/Town of Amherst

Certificate of Compliance

Form 3

This is to Certify that the following work on an On-Site Sewage Disposal System

☒ Construction of a new system
☐ Repair or replacement of an existing system
☐ Repair or replacement of an existing system component

Has been done in accordance with Title 5 and the Disposal System Construction Permit (DSCP):

DSCP Number | DSCP Date

The Center for Design Engagement
Facility Owner

UMASS Department of Art, Architecture, and Art History; 151 Presidents Drive
Street Address or Lot #

Amherst | MA | 01003
City/Town | State | Zip Code

Designer Information:

DOUGLAS J. MACLEAY | SVE ASSOCIATES
Name | Name of Company

Designer's issuance of System Installation Observation Report shall constitute certification of work performed.

Installer Information:

Name | Karl's Excavating
Name | Name of Company

Signature | Date

Use of this system is conditioned on compliance with the provisions set forth below:

The issuance of this certificate shall not be construed as a guarantee that the system will function as designed.

Approving Authority

Signature | Date

TOWN OF AMHERST
HEALTH PERMITS/INSPECTION SERVICES

No. 2891

Received of INTEGRITY DEVELOPMENT + CONSTRUCTION INC. (Name) of 110 PULPIT HILL ROAD (Address)

For Property Located at: HENRY STREET (Street Address) W. D. COULS (Owner)

HEA009	Bakery R6510 443508		HEA015	Sanitary Code Booklets R6510 432305	
HEA001	Bed & Breakfast R6510 443516		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA002	Catering License R6510 443507		HEA017	Septic Tank Permit-Private R6510 443510	
HEA003	Food Handler R6510 443515		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA004	Frozen Deserts R6510 443501		HEA019	Sub-Division Review Fee R6510 432306	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA012	Swimming Pool Permits R6510 443512	
HEA006	Massage Therapy License R6510 443504		HEA020	Tanning License R6510 443509	
HEA007	Milk & Cream License R6510 443500		HEA024	Funeral Director License R6510 443502	
HEA008	Motel License R6510 443506		HEA034	Immunization Clinic R6510 432307	
HEA010	Removal of Offal R6510 443513		HEA030	Car Seats 8407 258004	
HEA021	Removal of Rubbish R6510 443520		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA011	Percolation Test Fees R6510 432300	$50.00	HEA023	TB Clinic R6510 432303	
HEA013	Recreation Camp License R6510 443503		HEA022	Tobacco License R6510 443505	
HEA014	Retail Store Permit R6510 443514		HEA		
			HEA		

TOTAL FEE: $50

Thomas Stern
Inspeciton Services/Health Department

9/25/07
Date

CK # 15159

FOR 2 NEW DEEP HOLES

15159

INTEGRITY DEVELOPMENT
& CONSTRUCTION, INC.
110 PULPIT HILL ROAD
AMHERST, MA 01002
(413) 549-7919

TD Banknorth
Massachusetts
53-7054/2113

9/13/2007

PAY TO THE ORDER OF Town of Amherst $ **50.00

Fifty and 00/100********** DOLLARS

Town of Amherst
~~Attn: Claire McGinnis~~
4 Boltwood Avenue

Security features. Details on back.

TOWN OF AMHERST
HEALTH PERMITS/INSPECTION SERVICES

No. 2891

Received of INTEGRITY DEVELOPMENT + CONSTRUCTION INC. (Name) of 110 PULPIT HILL ROAD (Address)

For Property Located at: HENRY STREET (Street Address) W. D. COULS (Owner)

HEA009	Bakery R6510 443508		**HEA015**	Sanitary Code Booklets R6510 432305	
HEA001	Bed & Breakfast R6510 443516		**HEA016**	Septic Tank Permit-Installers R6510 443511	
HEA002	Catering License R6510 443507		**HEA017**	Septic Tank Permit-Private R6510 443510	
HEA003	Food Handler R6510 443515		**HEA018**	Septic Tank Reinspection Fee R6510 432301	
HEA004	Frozen Deserts R6510 443501		**HEA019**	Sub-Division Review Fee R6510 432306	
HEA005	Health Dept. Housing Isp. R6510 432302		**HEA012**	Swimming Pool Permits R6510 443512	
HEA006	Massage Therapy License R6510 443504		**HEA020**	Tanning License R6510 443509	
HEA007	Milk & Cream License R6510 443500		**HEA024**	Funeral Director License R6510 443502	
HEA008	Motel License R6510 443506		**HEA034**	Immunization Clinic R6510 432307	
HEA010	Removal of Offal R6510 443513		**HEA030**	Car Seats 8407 258004	
HEA021	Removal of Rubbish R6510 443520		**HEA026**	Smoking & Tobacco Reg. Violations R6510 443518	
HEA011	Percolation Test Fees R6510 432300	$50.00	**HEA023**	TB Clinic R6510 432303	
HEA013	Recreation Camp License R6510 443503		**HEA022**	Tobacco License R6510 443505	
HEA014	Retail Store Permit R6510 443514		**HEA**		
			HEA		

TOTAL FEE: $50

Thomas Stern
Inspeciton Services/Health Department

9/25/07
Date

CK# 15159
FOR 2 NEW DEEP HOLES

RECEIVED
SEP 26 2007
TOWN OF AMHERST
COLLECTOR

Must be Validated by the Collector's Office to be considered paid

White - Applicant *Yellow - Collector* *Pink - Accounting* *Gold - Health/Inspections*

Commonwealth of Massachusetts
City/Town of AMHERST

Application for Disposal System Construction Permit

Form 1A

Number

$
Fee

A. Facility Information

Application is hereby made for a permit to:
- ☒ Construct a new on-site sewage disposal system
- ☐ Repair or replace an existing on-site sewage disposal system
- ☐ Repair or replace an existing system component

1. Location of Facility:

Henry Street
Address or Lot #

Amherst	MA	01002
City/Town	State	Zip Code

2. Owner Information

The Center of Design Engagement
Name

UMASS Department of Art, Architecture, and Art History; 151 Presidents Drive
Address (if different from above)

Amherst	MA	01003
City/Town	State	Zip Code

(413) 545-6910
Telephone Number

3. Installer Information

	Karl's Excavating
Name	Name of Company

327 River Drive
Address

Hadley	MA	01035
City/Town	State	Zip Code

(413) 549-5396
Telephone Number

4. Designer Information

Douglas J. MacLeay	SVE Associates
Name	Name of Company

377 Main Street
Address

Greenfield	MA	01301
City/Town	State	Zip Code

(413) 774-6698
Telephone Number

Commonwealth of Massachusetts
City/Town of AMHERST

Application for Disposal System Construction Permit

Form 1A

Number

$ Fee

A. Facility Information (continued)

5. Type of Building:

☒ Dwelling ☐ Garbage Grinder (check if present)

Other: Type of Building _____ Number of Persons Served

☐ Showers _____ Number of showers ☐ Cafeteria ☐ Other fixtures

Specify other fixtures: _____

6. Design Flow: 660 Gallons per Day

Calculated Daily Flow: 660 Gallons

7. Plan: June 4, 2007 Date of Original

2 Number of Sheets July 31, 2007 Revision Date

Subsurface Sewage Disposal Plan Title of Plan

8. Description of Soil:

Parent material: sand See plan for detailed test pit descriptions.

E.S.H.W.T.: 76" Percolation rate: 2 min/in.

9. Nature of Repairs or Alterations (if applicable):

10. Date last inspected: _____ Date

Commonwealth of Massachusetts
City/Town of AMHERST

Application for Disposal System Construction Permit

Form 1A

Number

$
Fee

B. Agreement

The undersigned agrees to ensure the construction and maintenance of the aforedescribed on-site sewage disposal system in accordance with the provisions of Title 5 of the Environmental Code and not to place the system in operation until a Certificate of Compliance has been issued by this Board of Health.

Signature | Date

Application Approved By:

Name | Date

Application **Disapproved** for the following reasons:

SPT 2008-00014

No. _____ Date: 9/25/07

Commonwealth of Massachusetts
, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: JACK MELCHER Date: 9/25/07
Witnessed By: Tom DiON

Location Address or Lot # LOT H HENRY STREET New Construction ☑ Repair ☐	Owner's Name, Address, and Telephone # WD COWLS 134 MONTAGUE RD AMHERST, MA 01002 549-1403

Office Review

Published Soil Survey Available: No ☐ Yes ☑
Year Published 1981 Publication Scale 1:25000 Soil Map Unit HgB
Drainage Class RAPID Soil Limitations
Surficial Geologic Report Available: No ☑ Yes ☐
Year Published Publication Scale
Geologic Material (Map Unit)
Landform
Flood Insurance Rate Map:
Above 500 year flood boundary No ☐ Yes ☑
Within 500 year flood boundary No ☑ Yes ☐
Within 100 year flood boundary No ☑ Yes ☐
Wetland Area:
National Wetland Inventory Map (map unit)
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month
Range: ~~Above Normal~~ ☑ ~~Normal~~ ☑ ~~Below Normal~~ ☑
Other References Reviewed:

Location Address or Lot No. HENRY STREET

On-site Review

Deep Hole Number H3 + H4 Date: 9/25/07 Time: 9:30AM Weather SUNNY CLEAR
Location (identify on site plan)
Land Use WOODS Slope (%) 10% Surface Stones PRESENT
Vegetation DECIDUOUS MAPLES, OAKS
Landform ~~TERRACED~~ BACKSLOPE
Position on landscape (sketch on the back)
Distances from:
Open Water Body 200+ feet Drainage way ~~100+~~ 40 feet
Possible Wet Area 200+ feet Property Line 40 feet
Drinking Water Well TOWN feet Other

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
SWPR 10%					
H3 0-8"	A	SL	10YR 2/2	—	FR, GRANULAR
9:30 8"-18"	Bw	SL	10YR 4/6	—	FRIABLE
18"-98"	C	LS	~~@80"~~ 10YR 3/3	@ 80" 7.5YR 4/6	FIRM 20% GRAVEL 10% STONES
98- LEDGE					
H4 0-8"	A	SL	10YR 2/2	—	FR. GR
8"-18"	Bw	SL	10YR 4/6	—	FR
10:00AM 18-120"	C	LS	10YR 3/6	@ 76" 10YR 4/6	FIRM 20% GRAVEL 10% STONES
SWPR 4%					

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH Depth to Bedrock: 98" · H4-120"
Depth to Groundwater: Standing Water in the Hole: — Weeping from Pit Face: —
Estimated Seasonal High Ground Water: 76"

Location Address or Lot No. _____

Determination for Seasonal High Water Table

Method Used:

- ☐ Depth observed standing in observation hole ..... inches
- ☐ Depth weeping from side of observation hole ..... inches
- ☑ Depth to soil mottles 76 inches
- ☐ Ground water adjustment ..... feet

Index Well Number ..... Reading Date ..... Index well level .....

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

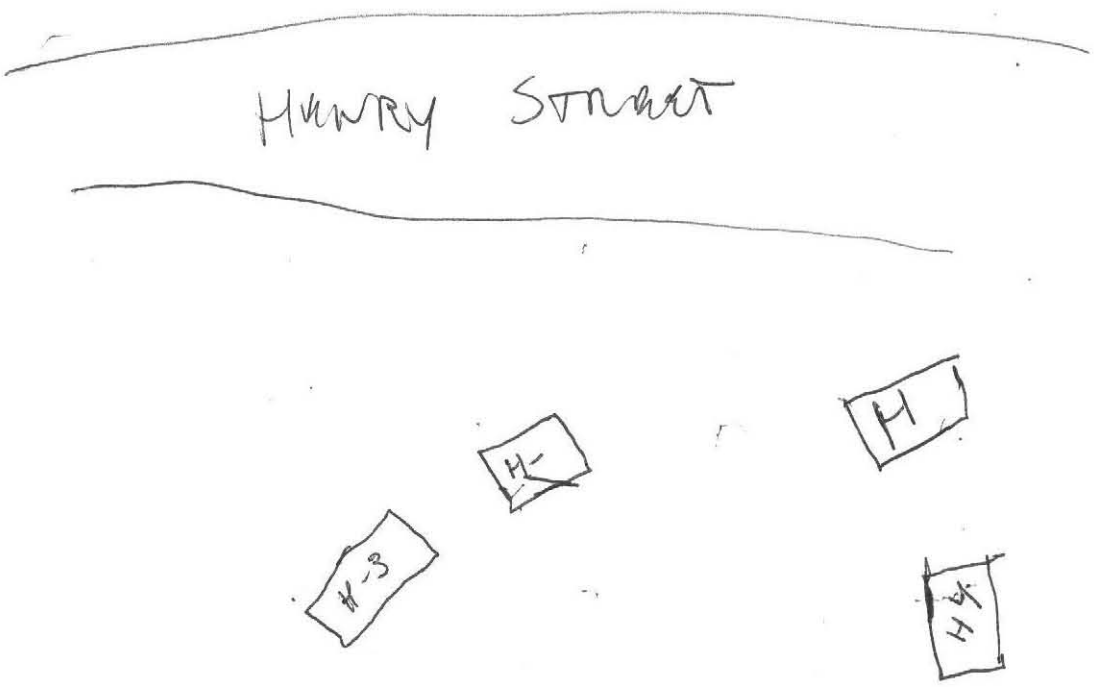
Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? Yes

If not, what is the depth of naturally occurring pervious material? _____

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature _____ Date _____


HENRY STREET
H
H-
H-3
H-4

Location Address or Lot No. _____

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date:	Time:	
Observation Hole #		
Depth of Perc		
Start Pre-soak		
End Pre-soak		
Time at 12"		
Time at 9"		
Time at 6"		
Time (9"-6")		
Rate Min./Inch		

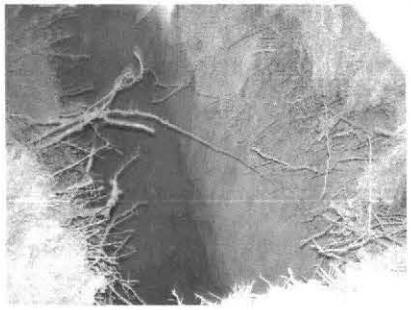
* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☐ Site Failed ☐

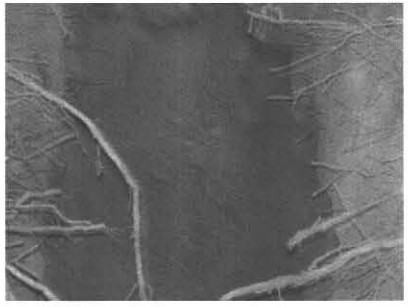
Performed By: _____

Witnessed By: _____

Comments: .....




Deep Hole H-3 9/25/07
Engineer Jack Mulcher

Deep Hole H-4 9/25/07

New Deep Holes for W.D Cowls property on Henry Street
Engineer Jack Mulcher (SVE Associates)
Witness: Tom Dion

Town of AMHERST Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 259-3077 (413) 259-2404 - FAX Environmental Health Division (413) 259-3078

MEMO

To: Zoning Board of Appeals
From: Tom Dion (Assistant Sanitarian Amherst Health Department)
Date: 8/29/07
Re: Septic System Maintenance for Henry Street Application No. ZBA FY2007-00016

It is my understanding that the proposed two-family dwelling to be located at Henry Street (Map 6A, Parcel91R-N Zone) that has been granted a special permit is going to be two condominium units. These units will be owned by two separate parties and served by a single septic system. If this is the case then I would like to know if there is a designated authority that is legally responsible for the septic system and has the financial ability to accomplish any necessary maintenance, repair, or upgrade of said system in case the system fails to protect the public health, safety, welfare or environment. I believe this information should be included in the condominium documents.

cc: Board of Health
Epi Bodhi
Bonnie Weeks

6A - 91

Peter J. McErlain, R.S., MPH
16 Coed Drive
Easthampton, MA 01027
Tel: (413) 527-8204

MEMO

TO: *Amherst Board of Health*

DATE: *Oct. 8, 2007*

RE: ***Review of Plans for the construction of a new Soil Absorption System at Lot H, Henry St.., Amherst, MA***

Owner: The Center for Design Engagement
System UMASS Dept. of Art., Architecture and Art History
151 Presidents Dr., Amherst

Designer: Douglas MacLeay, SVE Associates

System Description: The proposed Soil Absorption System (SAS) is a Presby Enviro-Septic SAS, a MASS DEP Approved Alternative Technology system utilizing a unique design which pre-treats the septic tank effluent prior to disposal to the soil.

Conclusion: The design for the proposed SAS complies with all requirements of Title 5, 310 CMR 15.000 and the DEP Approval conditions for the Presby Alternative Technology system and I hereby approve the plans and issue the Disposal System Construction Permit with the following conditions:

1) This system must be installed by a contractor certified, by Presby Enviro-Septic, as being trained in the Presby installation techniques.
2) Utilization of the Presby system also requires that a notice of the use of Alternative Technology type SAS be recorded on the property deed.
3)

Please feel free to contact me with any questions concerning this review.

Thank you.

Peter J. McErlain, R.S., MPH

Peter J. McErlain, R.S., MPH

Date 10/8/07

SVE

Engineering
Planning
Landscape Architecture
Surveying

SVE Associates
377 Main Street
Greenfield, MA 01301
T. 413.774.6698
F. 413.773.0875
www.sveassoc.com

received
10.2.07

LETTER OF TRANSMITTAL

Date 9/28/07 Job No. G1472

To: Amherst Health Department
70 Boltwood Walk
Amherst, MA 01002

Attn: Tom Dion

Regarding: Henry St

WE ARE SENDING YOU AS CHECKED BELOW:

☒ **Attached** ☐ **Under separate cover via _____ the following items:**
☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☐ Forms ☐ Special permit

COPIES	DATE	NO.	DESCRIPTION
1			Application for Disposal System Construction Permit
2	6/4/07	G1365	Subsurface Sewage Disposal Plan (Revised 9/25/07)
1	9/25/07	G1472	Form 11: Soil Evaluation Form

THESE ARE TRANSMITTED AS CHECKED BELOW:

☐ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☒ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ For bids due _____ (date) ☐ Prints returned after loan to us

REMARKS:

SIGNED: _____
Angeline Rosa
Administrative Assisstant

COPY TO: File

If enclosures are not as noted, kindly notify us at once.

8. Each unit shall be owner-occupied.
9. All exterior lighting shall be downcast.

EDWARD RISING, Chair
Amherst Zoning Board of Appeals

DATE 2/22/07

Application No. ZBA FY2007-00016

Town of Amherst
Zoning Board of Appeals
SPECIAL PERMIT

The Amherst Zoning Board of Appeals hereby grants a Special Permit, under Section 3.321 of the Zoning Bylaw to construct a two-family dwelling, as applied for by Thomas Lane, at Henry Street, (Map 6A, Parcel 91, R-N Zone), with conditions as follows:

1. The building shall be a unitary structure containing no more than two (2) dwelling units.
2. **Prior to the issuance of a Building Permit** the following conditions shall be met:
   a. A revised set of floor plans and elevations, including labels and square footage for each room, egress and window locations and the entrance to the storage sheds, shall be submitted to the Board for review and approval at a public meeting.
   c. Final site plans, including property line information and proposed square footage for the new parcel, frontage and setback information, the footprints of the structure(s), the proposed paved areas, the common driveway including the easement or right-of-way on land of W. D. Cowls, the area of trees to be removed, the location of the septic system leach field, existing topography, proposed grading and a landscape plan, shall be submitted to the Board for review and approval at a public meeting.
   d. Both of the storage sheds shall be enclosed, weather-tight structures that can be securely locked. The exterior design of the two storage sheds shall be compatible with one another and with the exterior of the dwelling units. The applicant shall submit final plans and elevations of the storage sheds to the Board for approval at a public meeting.
   e. Evidence of an easement over the property of W. D. Cowls Inc. for the purpose of ensuring access to the dwelling units shall be submitted to the Board for approval at a public meeting.
3. **Prior to the issuance of a Certificate of Occupancy** the following conditions shall be met:
   a. Condominium documents shall be submitted for review and approval by the Board at a public meeting.
   b. A common driveway maintenance agreement (among the owners of the two units and W. D. Cowls, the owner of the driveway right-of-way) shall be submitted for review and approval by the Board at a public meeting.
4. If any substantial changes are proposed to the approved site plans (including changes to the property lines) or to the floor plans or exterior of the buildings the applicant shall submit the changes to the Board for review and approval at a public meeting. The determination concerning whether or not a proposed change is substantial enough to require approval by the Board shall be made by the Building Commissioner.
5. An animal-proof enclosure shall be provided for trash and recyclables.
6. The proposed fuel tank(s) shall be either underground or enclosed in the basement.
7. All utilities connecting the two units shall be underground.

Site Visit: November 28, 2006
At the first site visit the Board was met by Tom Lane, the applicant. The Board observed:

- The location of the site on a narrow country road in North Amherst, across the street from a line of railroad tracks;
- The approximate location of the property lines on the north, west and south sides of the property;
- The ridge line that runs through the center of the site, where the houses are proposed to be built;
- The steep topography that leads from the roadway up to the proposed home sites;
- The proximity of the adjacent homes to the south;
- The approximate location of the proposed driveway;
- The approximate location of the proposed septic system and leach field;
- The wooded nature of the site, including mature evergreens and hardwoods.

Site Visit: January 29, 2007
The Board conducted a second site visit to view a new parcel of land that is approximately 120 feet further north along Henry Street than the previously-proposed parcel. The applicant is now proposing to build the two-family house on this parcel because of its more gentle topography. The Board was met by Peter Jessop of Integrity Construction and Kathleen Lugosch, Professor of Architecture at UMass. The Board observed:

- The proposed right-of-way over land of Cowls Lumber that will provide access to the dwelling units;
- The low point on the site, near Henry Street, where the septic system leach field and the drainage catchment area will be located;
- The heavily wooded nature of the existing site;
- The large trees along the perimeter of the site that are proposed to be saved;
- The proposed location for each unit;
- The power line easement that runs behind the house location;
- The changing topography of the site, including a flat, low area near the road and a gentle hill rising up towards the power line easement to the east.

Public Hearing: November 30, 2006
Tom Lane presented the application. He made the following comments:

- The project is a joint effort by the University of Massachusetts Architecture Department and Cowls Lumber, the landowner;
- Cowls will donate the parcel of land on which the duplex will be built;
- The University is providing design expertise; Mr. Lane is the student designer for the homes; he is being advised by faculty at UMass;
- The project is intended to be a solution to the trend of homes that are too expensive for purchase by those who work here in Amherst;
- The houses are proposed to be about 1,500 square feet, which is less than many of the homes being built today, many of which are more than 2,000 square feet;
- The homes are proposed to be built as a duplex, on one parcel, so that the two homeowners can split the cost of the land;
- Each unit will contain three bedrooms, including one master bedroom and two smaller bedrooms;
- The design includes passive-solar features which will aid in energy consumption;
- The site faces south and the pitch of the roof and siting of the homes will help to increase solar gain and reduce energy costs;
- There is an exterior covered, enclosed storage area provided for each unit;
- This storage structure which connects the dwelling units can be used to store bulky items;

Town of Amherst
Zoning Board of Appeals - Special Permit
DECISION

Applicant: Thomas Lane
24 Summer Street, Amherst, MA 01002

Owner: W. D. Cowls, Inc., 134 Montague Road, North Amherst, MA 01059

Date Application filed with the Town Clerk: November 3, 2006

Nature of request: Petitioner seeks a Special Permit under Section 3.321 of the Zoning Bylaw to construct a two-family dwelling.

Location of property: Henry Street, Map 6A, Parcel 91, R-N Zone.

Legal notice: Published in the Daily Hampshire Gazette on November 15 and 22, 2006, and sent to abutters on November 15, 2006.

Board members: Ted Rising, Hilda Greenbaum and Jane Ashby

Submissions:
The applicant submitted the following documents:

- Management Plan;
- Site Plan, prepared by Thomas Lane Designer, dated November 1, 2006;
- Building Elevations showing South, East, North and West Facades, undated;
- Floor Plan, undated;
- Revised Site Plan, prepared by Thomas Lane Designer, dated November 30, 2006;
- Email from Tom Lane to Christine Brestrup, dated December 14, 2006, requesting a continuation of the public hearing due to lack of information;
- Revised plans, undated, submitted prior to January 25, 2007, continued public hearing;
- Revised plans, undated, submitted prior to January 31, 2007, continued public hearing, including cross section through site, showing driveway grading.

Town staff and other boards and commissions submitted the following documents:

- Memorandum from the Planning Department dated November 22, 2006, commenting on the application;
- Email from Christine Brestrup, Land Use Planner to Jonathan Tucker, Planning Director, with embedded comments from Mr. Tucker, dated December 6, 2006, commenting on sections of the Zoning Bylaw regarding the steepness of driveways;
- Email to applicant from Christine Brestrup to the applicant, dated December 4, 2006, listing questions posed by one of the Zoning Board members;
- Various plans from the Amherst GIS system showing the site in context with the surrounding area;
- Memorandum from the Fire Department, dated November 27, 2006, commenting on the application;
- Email from Christine Brestrup to the Board dated January 24, 2007, commenting on revised plans submitted by applicant.

There was discussion of the fact that the base topography used for the Site Plan was generated from the Amherst GIS system rather than an on-site survey by a registered land surveyor. The Board members stated that they would be satisfied with the use of the GIS topography if the Town Engineer was satisfied.

The Board members noted that they would like to have more information on trees to be removed and those that would stay. They requested that the trees to be removed be shown by flagging the trees in the field. They noted that the trees that were removed should be replaced with landscaping.

Ms. Greenbaum stated that there were mature pine trees on the north and east sides of the site. She requested that a plan be submitted showing where the septic system and leach field would be located. She noted that the leach field will have an aesthetic impact on the site because of the grading and tree removal required.

Two members of the public spoke in opposition to the application.

Alton Acker of 53 Henry Street stated that there should be a ban on duplexes, stating that building a duplex will affect the neighborhood in a negative manner. The proposed duplex is too close to the salamander crossing, too near the Cushman School and he disagreed that workers need to live near their work places.

Sean Burke of 50 Henry Street stated that he was opposed to the application because it is incompatible with the neighborhood of single-family homes. He disagreed that the units will be affordable at the price that has been quoted. He noted that there is ledge on the site.

Bonnie Weeks, Building Commissioner, stated that a Special Permit from the Zoning Board of Appeals is required to build a duplex. Mr. Rising noted that there were four duplexes at the end of Market Hill Road.

Ms. Greenbaum MOVED to continue the evidentiary portion of the public hearing to Thursday, December 14, 2006, at 7:45 p.m. Ms. Ashby SECONDED the motion. The Board VOTED unanimously to continue the evidentiary portion of the public hearing.

Continued Public Hearing: December 14, 2006
The applicant submitted an email on December 14, 2006, requesting that the hearing be rescheduled to a later date due to lack of information on the septic system. Ms. Greenbaum continued the public hearing to January 10, 2006, at 7:30 p.m., at the request of the applicant.

Continued Public Hearing: January 10, 2007
The applicant requested that the hearing be continued to a later date due to lack of information. At the pubic hearing Ms. Greenbaum continued the public hearing to January 25, 2007, at 8:00 p.m.

Continued Public Hearing: January 25, 2007
At the continued public hearing Kathleen Lugosch, professor of architecture at the University of Massachusetts, and Ben Goodale, Master of Architecture student and project manager for Integrity Construction, presented the petition. They explained that the location for the house had been moved 120 feet north along Henry Street because of problems with topography at the original site. The new site is not as steep and has a larger flat area near the road to accommodate drainage and the septic system. Mr. Goodale will manage a group of students who will build the duplex.

Ms. Lugosch and Mr. Goodale explained that the driveway leading into the site had been redesigned. It would now run along the north side of the parcel, on land of Cowls Lumber. Cowls would grant an easement for use of this driveway to the owners of the two units. Individual driveways will provide access to each unit

- Each unit will have the feel of a single-family home;
- There is adequate parking, at two spaces per unit, to satisfy Zoning requirements;
- The exterior cladding of the buildings will probably be "hardi-board" or "hardi-plank" siding which is a cementitious composite material that looks like wood clapboards.

Mr. Lane described the floor plan. There was a discussion of door locations and circulation through the units as well as circulation on site between the units and the storage structure and between the units and the parking area. Mr. Lane noted that both units will be identical. He stated that there will be a covered walkway in front of the storage structure.

Mr. Lane noted that there will be clerestory windows on the north side of the homes for ventilation and cooling in summer. (Clerestory windows are windows in the upper part of a wall.) The rear of the buildings will be partially buried in the earth for insulation. The applicant showed revised elevation drawings.

Ms. Greenbaum asked about the trees on the site, specifically which ones would stay and which ones would go. Mr. Rising noted that many trees would need to be cut down to accommodate construction of the homes and for passive solar gain as well as for grading for the septic system and the driveway. Ms. Greenbaum commented that a landscape plan was needed, especially in light of the amount of existing vegetation that would need to be cut to allow the homes to be built.

Ms. Greenbaum asked why there were no windows on the west façade. There was a discussion regarding the location of windows.

Mr. Lane stated that the roof pitch had been revised from the drawings originally submitted. The proposed roof pitch is now 3 to 12, more steep than originally proposed, allowing for the use of standard roofing materials. There will be metal roofing throughout the buildings.

Christine Brestrup of the Planning Department commented on the steepness of the driveway and noted concerns about the lack of a storm water management system. Mr. Rising noted that the grading of the driveway was an issue and he asked the applicant to speak with the Town Engineer about the grading and drainage plan.

Ms. Greenbaum stated that 80 square feet of storage is not big enough for the residents of the homes to store all of their things, including yard maintenance equipment, bicycles, baby carriages, garbage cans, recycling containers, etc. Mr. Lane stated that there would be storage provided inside of the units, in closets.

Ms. Ashby inquired about the size of the interior closets and noted that there was one closet proposed for each bedroom, plus one coat closet and one extra closet in each unit. She commented that there appears to be enough storage inside the units.

Mr. Lane noted that there are areas on the site where porches could be added and that the slab-on-grade will act as a "heat sink" for passive solar gain.

There was discussion about the type of heating system to be used, questions about the proposed floor covering and comments about the possibility of heating the slab.

Ms. Greenbaum noted that a Homeowners' Agreement would be required by the Board along with a revised Management Plan.

Ms. Lugosch and Mr. Goodale made the following statements:

- The land for the project is being donated by Cowls Lumber;
- Cowls will also give an easement for a driveway that will serve the new two-family house;
- There will be two small driveways off the Cowls easement, serving each of the proposed units;
- The main driveway will be graded so that it is relatively flat at the bottom, as it approaches Henry Street; this will give cars a place to rest before they enter the roadway;
- The sight distance is good in this location;
- The two units will be identical; each will have three (3) bedrooms and a main living space;
- The basements will be slightly different due to the expectation of ledge below ground;
- Each unit will have a basement on the west side and a crawl space on the east side;
- The basements will provide additional storage as suggested by the Board at previous meetings;
- Each unit will have its own entrance and outdoor space and will feel like a single-family house;
- The septic system, shared by both units has been designed and located on the site plan;
- There is a public utility power line easement directly behind the proposed houses;
- The northernmost unit sits just inside of the 15 foot setback limit from the north property line;
- There will be an entry for each unit on the north side and an interior stair will be added to provide access to the basement; the mechanical room will be in the basement;
- The units will be 1,380 square feet each, not including the storage sheds;
- There will be two sheds of different sizes; the one between the units will be 22 feet by 6 feet; the one on the south side will be 16 feet by 6 feet; there will be adequate interior and exterior storage;
- The budget for the units does not provide for a large planting plan;
- The purchase price will be approximately $280,000, so the landscaping will be minimal;
- The areas of the two driveways can be reduced, providing for more lawn area.

The Board asked the applicants to explain how this proposal fits the definition of a duplex or two-family house as defined by the Zoning Bylaw. There was extensive discussion regarding this topic. The applicants stated that the storage shed between the units is the point of connection and that it is part of the structure because it shares a foundation wall and includes a roof.

Bonnie Weeks, Building Commissioner, presented information on the definition of a two-family house from the Building Code. The Building Code classifies the proposed building as a two-family house or duplex because of the connection. It has a continuous foundation wall, a wood vertical wall and a roof structure. Ms. Weeks noted that the definition of a building includes accessory structures such as the proposed storage shed. She referred to a section of the Massachusetts Building Code, 780 CMR 3602. Ms. Weeks noted that it was up to the Board to decide whether this proposal meets the intention of the Zoning Bylaw with respect to two-family houses. She stated that in the past the Board has allowed two-family houses in which the two units are connected by a deck with a roof or a breezeway that includes a roof.

Ms. Greenbaum stated that the Board should include a condition requiring the submission of condominium documents.

Ms. Ashby asked about the intended purpose of the storage sheds and whether they would be used to store trash, as described in the previous presentation of the project. Ms. Lugosch noted that the sheds will not function as storage for trash and recycling. They will provide storage for bicycles, grills and other types of large items. There will be no entrance to the storage sheds from inside the units. The sheds will face the east or hill side of the property and will have an entry from that side. They will act as a buffer from the road to form private open spaces behind each of the units.

from the main driveway. The site conditions are different on this new site. The ridge-line on which the homes will be built contains ledge. Because of the need to accommodate storage and utilities the homes will have basements, however the basements will be partial basements because of the ledge.

The Board inquired about whether the proposed reconstruction of Henry Street would affect plans for this site. Ms. Brestrup stated that she had discussed this issue with the Town Engineer, Jason Skeels and that there would not be an impact on this site as a result of the reconstruction of Henry Street.

The Board discussed drainage on the site. A new dry well would be added to the east side of the Henry Street, north of this site, to collect runoff from the roadway. The driveway for the site has been graded so that there will be a low spot just east of the entry to Henry Street. The low spot will prevent storm water from flowing out onto the road. From the low spot, drainage will be directed to an on-site retention basin. Mr. Goodale noted that the soil report showed that the site could handle on-site retention and infiltration.

The driveway will be almost flat at the bottom of the hill. The grade in the middle of the drive will be about 7% with a short stretch (about 15 to 20 feet) to be graded at 15%.

The Board expressed concern that it had visited one site but that the structure was now being proposed for another site. The Board stated that it would like to schedule a second site visit to view the new site.

The Board discussed the need for an ANR (Approval Not Required) plan for the new site which is to be carved out of a larger Cowls Lumber lot. The Board also discussed whether this structure should be considered a duplex or two single-family homes.

Ms. Lugosch stated that there will be a connector between the two units, but the connector is not shown on this set of drawings. The floor plan has not changed substantially since the previous hearing. The individual driveways will be level, with connections to decks that will lead to the main entry door for each unit.

The Board stated that it will need up-to-date, completed drawings, including sections through the site showing the grading of the driveway and the entryways. The Board would like the structure to look like a single structure, not two homes.

The revised drawings should show appropriate grading, existing topography, a turnaround area for parking, trees to be removed and to remain and a section through the site. The Board recommended that the applicant speak with the Board of Health about the septic system. Ms. Lugosch stated that there would be one septic tank and one leach field to serve the two homes so that the units will be more affordable.

The Board scheduled a second site visit for 10:00 a.m. on Monday, January 29, 2007.

Ms. Greenbaum MOVED to continue the evidentiary portion of the public hearing to January 31, 2007, at 5:00 p.m. Ms. Ashby SECONDED the motion. The Board VOTED unanimously to continue the evidentiary portion of the public hearing.

Continued Public Hearing: January 31, 2007

Mr. Goodale stated that the new lot will have frontage along Henry Street of 120 feet. The lot will be approximately 180 feet deep, but it is not a regular shape. He was unsure of the total square footage of the proposed lot. Christine Brestrup of the Planning Department noted that the lot previously proposed for development met the zoning requirements because it was 26,000 square feet, 20,000 square feet for the first dwelling unit and 6,000 square feet for the second unit.

has been designed to prevent stormwater from flowing onto Henry Street, the conditions require that exterior lights be downcast and the conditions require that final floor plans and elevations of the structure be approved by the Board.

10.383 and 10.387 – The proposal would not be a substantial inconvenience or hazard to abutters, vehicles or pedestrians and provides convenient and safe vehicular and pedestrian movement within the site and in relation to adjacent streets because there will be only two families living on the premises so the number of cars entering and leaving will be limited, and the driveway has been designed to include a flat, resting place at the bottom of the slope, before the entry onto Henry Street, to allow for a place to stop before entering the roadway. In addition the on-site parking spaces will be adjacent to the entry to each unit, with access to the doorway via a stairway and deck..

10.384 – Adequate and appropriate facilities would be provided for the proper operation of the proposed use because the dwelling units have been carefully designed to provide adequate living space, storage space and utility space for two families.

10.386 – The proposal ensures that it is in conformance with the Parking and Sign regulations because there is space to park two cars per unit adjacent to each dwelling, as required by Section 7.000 of the Zoning Bylaw and there are no signs proposed.

10.388 – The proposal ensures adequate space for off-street loading and unloading of vehicles because each unit will have a flat driveway area adjacent to the unit for loading and unloading.

10.389 – The proposal provides adequate methods of disposal and /or storage for sewage, refuse, recyclables and other wastes because animal-proof sheds will be provided for the proper storage of trash and recyclables between pick-up and the site will be provided with a properly designed septic system.

10.390 – The proposal ensures protection from flood hazards because the driveway has been graded with a low point and a drainage catchment area adjacent to Henry Street, to prevent flooding of Henry Street by run-off from the site.

10.391 – The proposal protects, to the extent feasible, unique or important natural, historic or scenic features because some of the larger existing trees around the perimeter of the site will be preserved and the basements have been designed to prevent substantial interference with the bedrock of the site by creating partial basements in addition to crawl spaces rather than full basements.

10.392 – The proposal provides adequate landscaping because a landscape plan has been provided that shows the addition of deciduous and evergreen trees to be planted between the structures and the street.

10.393 – The proposal provides protection of adjacent properties by minimizing the intrusion of lighting, because the conditions require that exterior lighting be downcast and they require that the lighting shall not shine onto adjacent properties or streets.

10.394 – The proposal avoids to the extent feasible, impact on steep slopes, floodplains, scenic views, grade changes and wetlands because, although there will be substantial grading to construct the driveways and the dwelling units, the houses are sited to fit into the slopes that exist on the site. There are no wetlands or buffer zones nearby.

10.395 – The proposal does not create disharmony with respect to the terrain and to the use, scale and architecture of existing buildings in the vicinity because the structure had been designed to appear as a single structure when viewed from off-site and the Board has imposed a condition requiring that final floor plans and elevations be submitted for approval by the Board.

10.396 – The proposal provides screening for storage areas because storage sheds will be provided for yard maintenance equipment, large toys and strollers, and other large items and the storage sheds will be closed to views from the road and from adjacent neighbors and the Board has imposed a condition requiring that trash and recyclables be stored in animal-proof enclosures.

The Board expressed concern that the wall of the larger shed would be long and would not have any articulation, such as windows or other ways of breaking up the long expanse of wall. The Board and the applicants discussed the design of the sheds.

Ms. Greenbaum noted that the only access to the cellar or basement is through the living space of the house and that this may be an obstacle for bringing large items into the basements. There is no bulkhead planned for entry into the basement. Ms. Lugosch reminded the Board that the designers are trying to keep the costs low and that installing a bulkhead would add to the cost.

Ms. Ashby asked about passive solar design and whether this was still a feature of the structures. Ms. Lugosch and Mr. Goodale stated that some of the passive solar design had been compromised because of the addition of basements; however the intent to incorporate passive solar design was still part of the proposal. The buildings will be south-facing, some of the trees will be cleared to allow solar gain, there will be a roof overhang to protect the interiors from excess solar gain, but there may problems in obtaining enough thermal mass for heat storage. The heating system will be fueled by propane or oil. The tanks will be in the basement or underground.

The Board and the applicants discussed the proposed color of the different parts of the building and concluded that the colors would be coordinated with each other.

Jane Ashby MOVED to close the evidentiary portion of the public hearing. Hilda Greenbaum SECONDED the motion. The Board VOTED unanimously to close the evidentiary portion of the public hearing.

Public Meeting – Discussion
The Board discussed potential conditions that would be imposed and findings that would be made if the application were to be approved. The Board noted its desire to have the duplex look like one single building from the street. The Board discussed the relationship of the roof lines of the sheds and the roof lines of the units. The Board discussed what the building would look like.

Public Meeting – Zoning Board Decision
Ms. Ashby MOVED to approve the application with conditions. Mr. Rising SECONDED the motion. The Board VOTED unanimously to approve the application with conditions. The Board then drafted conditions.

The Board agreed to continue its discussion of the conditions on February 9, 2007, at 1:00 p.m.

Continued Public Meeting – Discussion February 9, 2007
The Board discussed and amended the conditions that it had drafted at the previous meeting. The Board also discussed its findings under Section 10.38.

Public Meeting – Findings:
Under Zoning Bylaw Section 10.38 the Board found that:

10.380 and 10.381 – The proposal is suitably located in the neighborhood and is compatible with existing uses because, although the neighborhood is made up primarily of single-family homes, there is an existing two-family home at the intersection of Henry Street and Market Hill Road and the Board has worked with the applicant to ensure that the two units will appear from the road to be one united structure.

10.382 and 10.385 – The proposal would not constitute a nuisance and reasonably protects the adjoining premises against detrimental or offensive uses on the site because the use of the property will be residential as are the other properties in the vicinity, the grading of the driveway and the property

10.397 – The proposal provides adequate recreational facilities, open space and amenities for the proposed use because the lot is large enough (over 26,000 square feet) to provide ample open space for recreation for two families.

10.398 – The proposal is in harmony with the general purpose and intent of this Bylaw because it protects the health, safety, convenience and general welfare of the inhabitants of the Town of Amherst.

10.395 – The proposal does not create disharmony with respect to the scale and architecture of existing buildings because the size and location of the units are appropriate to the site and the units are a single-story design that will appear to blend with the landscape.

10.398 – The proposal is in harmony with the general purpose and intent of the Zoning Bylaw for the reasons enumerated above.

Ms. Greenbaum MOVED to approve the Findings under Section 10.38 and the Conditions as amended. Ms. Ashby SECONDED the motion. The Board VOTED unanimously to approve the findings under Section 10.38 of the Zoning Bylaw and the conditions as amended.

For all the reasons stated above the Board VOTED unanimously to grant a Special Permit with conditions, under Sections 3.321 of the Zoning Bylaw to construct a two-family dwelling, as applied for by Thomas Lane, at Henry Street (Map 6A, Parcel 91, R-N Zone).

EDWARD RISING HILDA GREENBAUM JANE ASHBY

FILED THIS 23rd day of February, 2007, at 10:00 a.m.,

in the office of the Amherst Town Clerk Sandra J. Burgess.

TWENTY-DAY APPEAL period expires, March 15, 2007.

NOTICE OF DECISION mailed this 26th day of February, 2007 to the attached list of addresses by Christine Mershon, for the Board.

NOTICE OF PERMIT or Variance filed this _____ day of _____, 2007, in the Hampshire County Registry of Deeds.

Taylor, Ruth

From: Weeks, Bonita
Sent: Thursday, October 18, 2007 7:07 PM
To: Land Changes
Cc: Taylor, Ruth
Subject: Montague Road lot 2A parcel 29

To all,

The new house number for Lot 2A, parcel 29, owned by William Pearson, is 525 Montague Road.

Bonnie Weeks

To Ruth,

Parcel 6A 91 on Henry Street is the "parent parcel" it has since been subdivided, those divisions are not on the GIS (I do not know if they have been through planning yet, or if they have been recorded at the registry). If they need a house number they need to locate the drive and the units on the larger parcel for me.

I believe the lot # 1011 you are referring to on Bay Road is really Map 30 A /parcel 21. The owner was in looking for a street number and I believe the number assigned was 1011 Bay Road – please check with the owner.

Bonnie

Application No. ZBA FY2007-00016

Town of Amherst
Zoning Board of Appeals
SPECIAL PERMIT

The Amherst Zoning Board of Appeals hereby grants a Special Permit, under Section 3.321 of the Zoning Bylaw to construct a two-family dwelling, as applied for by Thomas Lane, at Henry Street, (Map 6A, Parcel 91, R-N Zone), with conditions as follows:

1. The building shall be a unitary structure containing no more than two (2) dwelling units.
2. **Prior to the issuance of a Building Permit** the following conditions shall be met:
   a. A revised set of floor plans and elevations, including labels and square footage for each room, egress and window locations and the entrance to the storage sheds, shall be submitted to the Board for review and approval at a public meeting.

   c. Final site plans, including property line information and proposed square footage for the new parcel, frontage and setback information, the footprints of the structure(s), the proposed paved areas, the common driveway including the easement or right-of-way on land of W. D. Cowls, the area of trees to be removed, the location of the septic system leach field, existing topography, proposed grading and a landscape plan, shall be submitted to the Board for review and approval at a public meeting.

   d. Both of the storage sheds shall be enclosed, weather-tight structures that can be securely locked. The exterior design of the two storage sheds shall be compatible with one another and with the exterior of the dwelling units. The applicant shall submit final plans and elevations of the storage sheds to the Board for approval at a public meeting.

   e. Evidence of an easement over the property of W. D. Cowls Inc. for the purpose of ensuring access to the dwelling units shall be submitted to the Board for approval at a public meeting.
3. **Prior to the issuance of a Certificate of Occupancy** the following conditions shall be met:
   a. Condominium documents shall be submitted for review and approval by the Board at a public meeting.

   b. A common driveway maintenance agreement (among the owners of the two units and W. D. Cowls, the owner of the driveway right-of-way) shall be submitted for review and approval by the Board at a public meeting.
4. If any substantial changes are proposed to the approved site plans (including changes to the property lines) or to the floor plans or exterior of the buildings the applicant shall submit the changes to the Board for review and approval at a public meeting. The determination concerning whether or not a proposed change is substantial enough to require approval by the Board shall be made by the Building Commissioner.
5. An animal-proof enclosure shall be provided for trash and recyclables.
6. The proposed fuel tank(s) shall be either underground or enclosed in the basement.
7. All utilities connecting the two units shall be underground.

Application No. ZBA FY2007-00016

8. Each unit shall be owner-occupied.
9. All exterior lighting shall be downcast.

EDWARD RISING, Chair
Amherst Zoning Board of Appeals

DATE 2/22/07

KATHLEEN LUGASH - 658-3777
PETER JESUP - 549-7919
CINDA (PAUL) JONES - 549-3989
COWLS ~~WA COWLS~~ - 549-0001
BEN GOODALE - 549-7919
DOUG MACLAY - 625-9774
EXT 34

8/28/07

Tom -
Here is the Zoning Board special Permit for the Henry St. property.
Chris B.

Town of Amherst
Zoning Board of Appeals - Special Permit
DECISION

Applicant: Thomas Lane
24 Summer Street, Amherst, MA 01002

Owner: W. D. Cowls, Inc., 134 Montague Road, North Amherst, MA 01059

Date Application filed with the Town Clerk: November 3, 2006

Nature of request: Petitioner seeks a Special Permit under Section 3.321 of the Zoning Bylaw to construct a two-family dwelling.

Location of property: Henry Street, Map 6A, Parcel 91, R-N Zone.

Legal notice: Published in the Daily Hampshire Gazette on November 15 and 22, 2006, and sent to abutters on November 15, 2006.

Board members: Ted Rising, Hilda Greenbaum and Jane Ashby

Submissions:
The applicant submitted the following documents:

- Management Plan;
- Site Plan, prepared by Thomas Lane Designer, dated November 1, 2006;
- Building Elevations showing South, East, North and West Facades, undated;
- Floor Plan, undated;
- Revised Site Plan, prepared by Thomas Lane Designer, dated November 30, 2006;
- Email from Tom Lane to Christine Brestrup, dated December 14, 2006, requesting a continuation of the public hearing due to lack of information;
- Revised plans, undated, submitted prior to January 25, 2007, continued public hearing;
- Revised plans, undated, submitted prior to January 31, 2007, continued public hearing, including cross section through site, showing driveway grading.

Town staff and other boards and commissions submitted the following documents:

- Memorandum from the Planning Department dated November 22, 2006, commenting on the application;
- Email from Christine Brestrup, Land Use Planner to Jonathan Tucker, Planning Director, with embedded comments from Mr. Tucker, dated December 6, 2006, commenting on sections of the Zoning Bylaw regarding the steepness of driveways;
- Email to applicant from Christine Brestrup to the applicant, dated December 4, 2006, listing questions posed by one of the Zoning Board members;
- Various plans from the Amherst GIS system showing the site in context with the surrounding area;
- Memorandum from the Fire Department, dated November 27, 2006, commenting on the application;
- Email from Christine Brestrup to the Board dated January 24, 2007, commenting on revised plans submitted by applicant.

Site Visit: November 28, 2006
At the first site visit the Board was met by Tom Lane, the applicant. The Board observed:

- The location of the site on a narrow country road in North Amherst, across the street from a line of railroad tracks;
- The approximate location of the property lines on the north, west and south sides of the property;
- The ridge line that runs through the center of the site, where the houses are proposed to be built;
- The steep topography that leads from the roadway up to the proposed home sites;
- The proximity of the adjacent homes to the south;
- The approximate location of the proposed driveway;
- The approximate location of the proposed septic system and leach field;
- The wooded nature of the site, including mature evergreens and hardwoods.

Site Visit: January 29, 2007
The Board conducted a second site visit to view a new parcel of land that is approximately 120 feet further north along Henry Street than the previously-proposed parcel. The applicant is now proposing to build the two-family house on this parcel because of its more gentle topography. The Board was met by Peter Jessop of Integrity Construction and Kathleen Lugosch, Professor of Architecture at UMass. The Board observed:

- The proposed right-of-way over land of Cowls Lumber that will provide access to the dwelling units;
- The low point on the site, near Henry Street, where the septic system leach field and the drainage catchment area will be located;
- The heavily wooded nature of the existing site;
- The large trees along the perimeter of the site that are proposed to be saved;
- The proposed location for each unit;
- The power line easement that runs behind the house location;
- The changing topography of the site, including a flat, low area near the road and a gentle hill rising up towards the power line easement to the east.

Public Hearing: November 30, 2006
Tom Lane presented the application. He made the following comments:

- The project is a joint effort by the University of Massachusetts Architecture Department and Cowls Lumber, the landowner;
- Cowls will donate the parcel of land on which the duplex will be built;
- The University is providing design expertise; Mr. Lane is the student designer for the homes; he is being advised by faculty at UMass;
- The project is intended to be a solution to the trend of homes that are too expensive for purchase by those who work here in Amherst;
- The houses are proposed to be about 1,500 square feet, which is less than many of the homes being built today, many of which are more than 2,000 square feet;
- The homes are proposed to be built as a duplex, on one parcel, so that the two homeowners can split the cost of the land;
- Each unit will contain three bedrooms, including one master bedroom and two smaller bedrooms;
- The design includes passive-solar features which will aid in energy consumption;
- The site faces south and the pitch of the roof and siting of the homes will help to increase solar gain and reduce energy costs;
- There is an exterior covered, enclosed storage area provided for each unit;
- This storage structure which connects the dwelling units can be used to store bulky items;

- Each unit will have the feel of a single-family home;
- There is adequate parking, at two spaces per unit, to satisfy Zoning requirements;
- The exterior cladding of the buildings will probably be "hardi-board" or "hardi-plank" siding which is a cementitious composite material that looks like wood clapboards.

Mr. Lane described the floor plan. There was a discussion of door locations and circulation through the units as well as circulation on site between the units and the storage structure and between the units and the parking area. Mr. Lane noted that both units will be identical. He stated that there will be a covered walkway in front of the storage structure.

Mr. Lane noted that there will be clerestory windows on the north side of the homes for ventilation and cooling in summer. (Clerestory windows are windows in the upper part of a wall.) The rear of the buildings will be partially buried in the earth for insulation. The applicant showed revised elevation drawings.

Ms. Greenbaum asked about the trees on the site, specifically which ones would stay and which ones would go. Mr. Rising noted that many trees would need to be cut down to accommodate construction of the homes and for passive solar gain as well as for grading for the septic system and the driveway. Ms. Greenbaum commented that a landscape plan was needed, especially in light of the amount of existing vegetation that would need to be cut to allow the homes to be built.

Ms. Greenbaum asked why there were no windows on the west façade. There was a discussion regarding the location of windows.

Mr. Lane stated that the roof pitch had been revised from the drawings originally submitted. The proposed roof pitch is now 3 to 12, more steep than originally proposed, allowing for the use of standard roofing materials. There will be metal roofing throughout the buildings.

Christine Brestrup of the Planning Department commented on the steepness of the driveway and noted concerns about the lack of a storm water management system. Mr. Rising noted that the grading of the driveway was an issue and he asked the applicant to speak with the Town Engineer about the grading and drainage plan.

Ms. Greenbaum stated that 80 square feet of storage is not big enough for the residents of the homes to store all of their things, including yard maintenance equipment, bicycles, baby carriages, garbage cans, recycling containers, etc. Mr. Lane stated that there would be storage provided inside of the units, in closets.

Ms. Ashby inquired about the size of the interior closets and noted that there was one closet proposed for each bedroom, plus one coat closet and one extra closet in each unit. She commented that there appears to be enough storage inside the units.

Mr. Lane noted that there are areas on the site where porches could be added and that the slab-on-grade will act as a "heat sink" for passive solar gain.

There was discussion about the type of heating system to be used, questions about the proposed floor covering and comments about the possibility of heating the slab.

Ms. Greenbaum noted that a Homeowners' Agreement would be required by the Board along with a revised Management Plan.

There was discussion of the fact that the base topography used for the Site Plan was generated from the Amherst GIS system rather than an on-site survey by a registered land surveyor. The Board members stated that they would be satisfied with the use of the GIS topography if the Town Engineer was satisfied.

The Board members noted that they would like to have more information on trees to be removed and those that would stay. They requested that the trees to be removed be shown by flagging the trees in the field. They noted that the trees that were removed should be replaced with landscaping.

Ms. Greenbaum stated that there were mature pine trees on the north and east sides of the site. She requested that a plan be submitted showing where the septic system and leach field would be located. She noted that the leach field will have an aesthetic impact on the site because of the grading and tree removal required.

Two members of the public spoke in opposition to the application.

Alton Acker of 53 Henry Street stated that there should be a ban on duplexes, stating that building a duplex will affect the neighborhood in a negative manner. The proposed duplex is too close to the salamander crossing, too near the Cushman School and he disagreed that workers need to live near their work places.

Sean Burke of 50 Henry Street stated that he was opposed to the application because it is incompatible with the neighborhood of single-family homes. He disagreed that the units will be affordable at the price that has been quoted. He noted that there is ledge on the site.

Bonnie Weeks, Building Commissioner, stated that a Special Permit from the Zoning Board of Appeals is required to build a duplex. Mr. Rising noted that there were four duplexes at the end of Market Hill Road.

Ms. Greenbaum MOVED to continue the evidentiary portion of the public hearing to Thursday, December 14, 2006, at 7:45 p.m. Ms. Ashby SECONDED the motion. The Board VOTED unanimously to continue the evidentiary portion of the public hearing.

Continued Public Hearing: December 14, 2006
The applicant submitted an email on December 14, 2006, requesting that the hearing be rescheduled to a later date due to lack of information on the septic system. Ms. Greenbaum continued the public hearing to January 10, 2006, at 7:30 p.m., at the request of the applicant.

Continued Public Hearing: January 10, 2007
The applicant requested that the hearing be continued to a later date due to lack of information. At the pubic hearing Ms. Greenbaum continued the public hearing to January 25, 2007, at 8:00 p.m.

Continued Public Hearing: January 25, 2007
At the continued public hearing Kathleen Lugosch, professor of architecture at the University of Massachusetts, and Ben Goodale, Master of Architecture student and project manager for Integrity Construction, presented the petition. They explained that the location for the house had been moved 120 feet north along Henry Street because of problems with topography at the original site. The new site is not as steep and has a larger flat area near the road to accommodate drainage and the septic system. Mr. Goodale will manage a group of students who will build the duplex.

Ms. Lugosch and Mr. Goodale explained that the driveway leading into the site had been redesigned. It would now run along the north side of the parcel, on land of Cowls Lumber. Cowls would grant an easement for use of this driveway to the owners of the two units. Individual driveways will provide access to each unit

from the main driveway. The site conditions are different on this new site. The ridge-line on which the homes will be built contains ledge. Because of the need to accommodate storage and utilities the homes will have basements, however the basements will be partial basements because of the ledge.

The Board inquired about whether the proposed reconstruction of Henry Street would affect plans for this site. Ms. Brestrup stated that she had discussed this issue with the Town Engineer, Jason Skeels and that there would not be an impact on this site as a result of the reconstruction of Henry Street.

The Board discussed drainage on the site. A new dry well would be added to the east side of the Henry Street, north of this site, to collect runoff from the roadway. The driveway for the site has been graded so that there will be a low spot just east of the entry to Henry Street. The low spot will prevent storm water from flowing out onto the road. From the low spot, drainage will be directed to an on-site retention basin. Mr. Goodale noted that the soil report showed that the site could handle on-site retention and infiltration.

The driveway will be almost flat at the bottom of the hill. The grade in the middle of the drive will be about 7% with a short stretch (about 15 to 20 feet) to be graded at 15%.

The Board expressed concern that it had visited one site but that the structure was now being proposed for another site. The Board stated that it would like to schedule a second site visit to view the new site.

The Board discussed the need for an ANR (Approval Not Required) plan for the new site which is to be carved out of a larger Cowls Lumber lot. The Board also discussed whether this structure should be considered a duplex or two single-family homes.

Ms. Lugosch stated that there will be a connector between the two units, but the connector is not shown on this set of drawings. The floor plan has not changed substantially since the previous hearing. The individual driveways will be level, with connections to decks that will lead to the main entry door for each unit.

The Board stated that it will need up-to-date, completed drawings, including sections through the site showing the grading of the driveway and the entryways. The Board would like the structure to look like a single structure, not two homes.

The revised drawings should show appropriate grading, existing topography, a turnaround area for parking, trees to be removed and to remain and a section through the site. The Board recommended that the applicant speak with the Board of Health about the septic system. Ms. Lugosch stated that there would be one septic tank and one leach field to serve the two homes so that the units will be more affordable.

The Board scheduled a second site visit for 10:00 a.m. on Monday, January 29, 2007.

Ms. Greenbaum MOVED to continue the evidentiary portion of the public hearing to January 31, 2007, at 5:00 p.m. Ms. Ashby SECONDED the motion. The Board VOTED unanimously to continue the evidentiary portion of the public hearing.

Continued Public Hearing: January 31, 2007

Mr. Goodale stated that the new lot will have frontage along Henry Street of 120 feet. The lot will be approximately 180 feet deep, but it is not a regular shape. He was unsure of the total square footage of the proposed lot. Christine Brestrup of the Planning Department noted that the lot previously proposed for development met the zoning requirements because it was 26,000 square feet, 20,000 square feet for the first dwelling unit and 6,000 square feet for the second unit.

Ms. Lugosch and Mr. Goodale made the following statements:

- The land for the project is being donated by Cowls Lumber;
- Cowls will also give an easement for a driveway that will serve the new two-family house;
- There will be two small driveways off the Cowls easement, serving each of the proposed units;
- The main driveway will be graded so that it is relatively flat at the bottom, as it approaches Henry Street; this will give cars a place to rest before they enter the roadway;
- The sight distance is good in this location;
- The two units will be identical; each will have three (3) bedrooms and a main living space;
- The basements will be slightly different due to the expectation of ledge below ground;
- Each unit will have a basement on the west side and a crawl space on the east side;
- The basements will provide additional storage as suggested by the Board at previous meetings;
- Each unit will have its own entrance and outdoor space and will feel like a single-family house;
- The septic system, shared by both units has been designed and located on the site plan;
- There is a public utility power line easement directly behind the proposed houses;
- The northernmost unit sits just inside of the 15 foot setback limit from the north property line;
- There will be an entry for each unit on the north side and an interior stair will be added to provide access to the basement; the mechanical room will be in the basement;
- The units will be 1,380 square feet each, not including the storage sheds;
- There will be two sheds of different sizes; the one between the units will be 22 feet by 6 feet; the one on the south side will be 16 feet by 6 feet; there will be adequate interior and exterior storage;
- The budget for the units does not provide for a large planting plan;
- The purchase price will be approximately $280,000, so the landscaping will be minimal;
- The areas of the two driveways can be reduced, providing for more lawn area.

The Board asked the applicants to explain how this proposal fits the definition of a duplex or two-family house as defined by the Zoning Bylaw. There was extensive discussion regarding this topic. The applicants stated that the storage shed between the units is the point of connection and that it is part of the structure because it shares a foundation wall and includes a roof.

Bonnie Weeks, Building Commissioner, presented information on the definition of a two-family house from the Building Code. The Building Code classifies the proposed building as a two-family house or duplex because of the connection. It has a continuous foundation wall, a wood vertical wall and a roof structure. Ms. Weeks noted that the definition of a building includes accessory structures such as the proposed storage shed. She referred to a section of the Massachusetts Building Code, 780 CMR 3602. Ms. Weeks noted that it was up to the Board to decide whether this proposal meets the intention of the Zoning Bylaw with respect to two-family houses. She stated that in the past the Board has allowed two-family houses in which the two units are connected by a deck with a roof or a breezeway that includes a roof.

Ms. Greenbaum stated that the Board should include a condition requiring the submission of condominium documents.

Ms. Ashby asked about the intended purpose of the storage sheds and whether they would be used to store trash, as described in the previous presentation of the project. Ms. Lugosch noted that the sheds will not function as storage for trash and recycling. They will provide storage for bicycles, grills and other types of large items. There will be no entrance to the storage sheds from inside the units. The sheds will face the east or hill side of the property and will have an entry from that side. They will act as a buffer from the road to form private open spaces behind each of the units.

The Board expressed concern that the wall of the larger shed would be long and would not have any articulation, such as windows or other ways of breaking up the long expanse of wall. The Board and the applicants discussed the design of the sheds.

Ms. Greenbaum noted that the only access to the cellar or basement is through the living space of the house and that this may be an obstacle for bringing large items into the basements. There is no bulkhead planned for entry into the basement. Ms. Lugosch reminded the Board that the designers are trying to keep the costs low and that installing a bulkhead would add to the cost.

Ms. Ashby asked about passive solar design and whether this was still a feature of the structures. Ms. Lugosch and Mr. Goodale stated that some of the passive solar design had been compromised because of the addition of basements; however the intent to incorporate passive solar design was still part of the proposal. The buildings will be south-facing, some of the trees will be cleared to allow solar gain, there will be a roof overhang to protect the interiors from excess solar gain, but there may problems in obtaining enough thermal mass for heat storage. The heating system will be fueled by propane or oil. The tanks will be in the basement or underground.

The Board and the applicants discussed the proposed color of the different parts of the building and concluded that the colors would be coordinated with each other.

Jane Ashby MOVED to close the evidentiary portion of the public hearing. Hilda Greenbaum SECONDED the motion. The Board VOTED unanimously to close the evidentiary portion of the public hearing.

Public Meeting – Discussion
The Board discussed potential conditions that would be imposed and findings that would be made if the application were to be approved. The Board noted its desire to have the duplex look like one single building from the street. The Board discussed the relationship of the roof lines of the sheds and the roof lines of the units. The Board discussed what the building would look like.

Public Meeting – Zoning Board Decision
Ms. Ashby MOVED to approve the application with conditions. Mr. Rising SECONDED the motion. The Board VOTED unanimously to approve the application with conditions. The Board then drafted conditions.

The Board agreed to continue its discussion of the conditions on February 9, 2007, at 1:00 p.m.

Continued Public Meeting – Discussion February 9, 2007
The Board discussed and amended the conditions that it had drafted at the previous meeting. The Board also discussed its findings under Section 10.38.

Public Meeting – Findings:
Under Zoning Bylaw Section 10.38 the Board found that:

10.380 and 10.381 – The proposal is suitably located in the neighborhood and is compatible with existing uses because, although the neighborhood is made up primarily of single-family homes, there is an existing two-family home at the intersection of Henry Street and Market Hill Road and the Board has worked with the applicant to ensure that the two units will appear from the road to be one united structure.

10.382 and 10.385 – The proposal would not constitute a nuisance and reasonably protects the adjoining premises against detrimental or offensive uses on the site because the use of the property will be residential as are the other properties in the vicinity, the grading of the driveway and the property

has been designed to prevent stormwater from flowing onto Henry Street, the conditions require that exterior lights be downcast and the conditions require that final floor plans and elevations of the structure be approved by the Board.

10.383 and 10.387 – The proposal would not be a substantial inconvenience or hazard to abutters, vehicles or pedestrians and provides convenient and safe vehicular and pedestrian movement within the site and in relation to adjacent streets because there will be only two families living on the premises so the number of cars entering and leaving will be limited, and the driveway has been designed to include a flat, resting place at the bottom of the slope, before the entry onto Henry Street, to allow for a place to stop before entering the roadway. In addition the on-site parking spaces will be adjacent to the entry to each unit, with access to the doorway via a stairway and deck..

10.384 – Adequate and appropriate facilities would be provided for the proper operation of the proposed use because the dwelling units have been carefully designed to provide adequate living space, storage space and utility space for two families.

10.386 – The proposal ensures that it is in conformance with the Parking and Sign regulations because there is space to park two cars per unit adjacent to each dwelling, as required by Section 7.000 of the Zoning Bylaw and there are no signs proposed.

10.388 – The proposal ensures adequate space for off-street loading and unloading of vehicles because each unit will have a flat driveway area adjacent to the unit for loading and unloading.

10.389 – The proposal provides adequate methods of disposal and /or storage for sewage, refuse, recyclables and other wastes because animal-proof sheds will be provided for the proper storage of trash and recyclables between pick-up and the site will be provided with a properly designed septic system.

10.390 – The proposal ensures protection from flood hazards because the driveway has been graded with a low point and a drainage catchment area adjacent to Henry Street, to prevent flooding of Henry Street by run-off from the site.

10.391 – The proposal protects, to the extent feasible, unique or important natural, historic or scenic features because some of the larger existing trees around the perimeter of the site will be preserved and the basements have been designed to prevent substantial interference with the bedrock of the site by creating partial basements in addition to crawl spaces rather than full basements.

10.392 – The proposal provides adequate landscaping because a landscape plan has been provided that shows the addition of deciduous and evergreen trees to be planted between the structures and the street.

10.393 – The proposal provides protection of adjacent properties by minimizing the intrusion of lighting, because the conditions require that exterior lighting be downcast and they require that the lighting shall not shine onto adjacent properties or streets.

10.394 – The proposal avoids to the extent feasible, impact on steep slopes, floodplains, scenic views, grade changes and wetlands because, although there will be substantial grading to construct the driveways and the dwelling units, the houses are sited to fit into the slopes that exist on the site. There are no wetlands or buffer zones nearby.

10.395 – The proposal does not create disharmony with respect to the terrain and to the use, scale and architecture of existing buildings in the vicinity because the structure had been designed to appear as a single structure when viewed from off-site and the Board has imposed a condition requiring that final floor plans and elevations be submitted for approval by the Board.

10.396 – The proposal provides screening for storage areas because storage sheds will be provided for yard maintenance equipment, large toys and strollers, and other large items and the storage sheds will be closed to views from the road and from adjacent neighbors and the Board has imposed a condition requiring that trash and recyclables be stored in animal-proof enclosures.

10.397 – The proposal provides adequate recreational facilities, open space and amenities for the proposed use because the lot is large enough (over 26,000 square feet) to provide ample open space for recreation for two families.

10.398 – The proposal is in harmony with the general purpose and intent of this Bylaw because it protects the health, safety, convenience and general welfare of the inhabitants of the Town of Amherst.

10.395 – The proposal does not create disharmony with respect to the scale and architecture of existing buildings because the size and location of the units are appropriate to the site and the units are a single-story design that will appear to blend with the landscape.

10.398 – The proposal is in harmony with the general purpose and intent of the Zoning Bylaw for the reasons enumerated above.

Ms. Greenbaum MOVED to approve the Findings under Section 10.38 and the Conditions as amended. Ms. Ashby SECONDED the motion. The Board VOTED unanimously to approve the findings under Section 10.38 of the Zoning Bylaw and the conditions as amended.

For all the reasons stated above the Board VOTED unanimously to grant a Special Permit with conditions, under Sections 3.321 of the Zoning Bylaw to construct a two-family dwelling, as applied for by Thomas Lane, at Henry Street (Map 6A, Parcel 91, R-N Zone).

EDWARD RISING HILDA GREENBAUM JANE ASHBY

FILED THIS 23rd day of February, 2007, at 10:00 a.m., in the office of the Amherst Town Clerk Sandra J. Burgess.

TWENTY-DAY APPEAL period expires, March 15, 2007.

NOTICE OF DECISION mailed this 26th day of February, 2007 to the attached list of addresses by Christine Mochnick, for the Board.

NOTICE OF PERMIT or Variance filed this _____ day of _____, 2007, in the Hampshire County Registry of Deeds.

SVE Associates
377 Main Street
Greenfield, MA 01302
Phone 413-774-6698
Fax 413-773-0875

SVE Associates
Engineering / Surveying / Landscape Architecture / Planning

Fax

To:	Tom, Amherst BOH	From:	Doug MacLeay
Fax:	259-2404	Pages:	6 attached
Phone:	259-3153	Date:	8/28/07
Re:	Henry St.	CC:	

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

See attached soil evaluation for Lot H, Cowls' lot on Henry St. currently being developed by UMASS / Integrity.

Kathleen Lueck

- Title V Inspections
- 21E Site Investigations
- Hydrogeological Consultation
- Pollution Remediation

COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

- Percolation Tests and Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Expert Witness Testimony

January 11, 2006

Cinda Jones
WD Cowls
134 Montague Road
Amherst MA. 01002

$1200 pd

RE: Test Pit & Soil Evaluation Results
Henry Street Property:
Amherst, MA
CSEC Reference File #106-2397-0111

Dear Cinda:

Background:

Cold Spring Environmental, Inc. was contracted to install test pits and perform soil evaluations (to evaluate development soil characteristics) at the above referenced property. This work, contracted by you, was to attempt to estimate the suitability of soils at the site for septic systems and buildability and review the layout of the parcels relative to the above. A Site Locus Map (Figure I) is attached as Attachment I. The approximate test pit locations are pinned on the property to be picked up by your surveyor.

On Site Field Investigation:

Test Pit locations were determined on January 11th, 2006 at the site based on topographic geometry of the property and proposed layout by your civil engineer. Six lots, with twelve test pits (lots D, E, F, G, H J) were installed favoring the street side of the lot. Soil descriptions are provided as Attachment II. Water was also run for actual percolation rates and noted Most lots (E, G,H, J, & D) had slightly elevated groundwater conditions and mod firm to loose outwash texture. Lot F had poorly sorted more firm fine to medium sandy glacial till and elevated groundwater conditions (32"). All test pits were excavated using a full size tire mounted back-hoe provided by Chuck Walker. We recommend that your Surveyor pick up all marker flags of the percs and overlay on the lot survey for permanent documentation.

Please feel free to contact us with any questions you may have.

Sincerely,

Cold Spring Environmental Consultants, Inc.

Alan E. Weiss, M.S.,
President
Principal Hydrogeologist
Licensed Site Professional
Registered Sanitarian
MA Soil Evaluator

350 Old Enfield Road • Belchertown, MA 01007 • (413) 323-5957
Fax : 323-4916 • aeweiss@charter.net

...ONMENTAL
...INC.
...WEISS, M.S., L.S.P.
...ed Site Professional
Registered Sanitarian
Hydrogeologist
President

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

•Subsurface Investigations
•21E Site Investigations
•Pollution Remediation
•Percolation Tests and Septic Designs

COMMONWEALTH OF MASSACHUSETTS
ALAN E. WEISS
REG #933
REGISTERED SANITARIAN

FORM 11 - SOIL EVALUATOR FO
Page 1

Date: 1/11/06

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: D. Zarozinski Date: 1/11/06

Location Address or Lot #	LOTS: A, E, F, G, H, J Henry ST
New Construction ☑ Repair ☐	Owner's Name, Address, and Telephone # ATTN: Cinda Jones WD Cowls 134 Montague Rd. Amherst, MA. 01002 549-1403

Office Review

Published Soil Survey Available: No ☐ Yes ☑
Year Published 1951 Publication Scale 1:25000 Soil Map Unit HgB.
Drainage Class Rapid. Soil Limitations —
Surficial Geologic Report Available: No ☑ Yes ☐
Year Published Publication Scale
Geologic Material (Map Unit)
Landform
Flood Insurance Rate Map:
Above 500 year flood boundary No ☐ Yes ☑
Within 500 year flood boundary No ☑ Yes ☐
Within 100 year flood boundary No ☑ Yes ☐
Wetland Area:
National Wetland Inventory Map (map unit)
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month
Range: Above Normal ☑ Normal ☐ Below Normal ☐
Other References Reviewed:

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Lot H, Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 11/1/06	Time: 9:00	
Observation Hole #	H1	H2
Depth of Perc	48"	50"
Start Pre-soak	9:05	9:24
End Pre-soak	9:20	9:39
Time at 12"	9:20	9:39
Time at 9"	9:27	9:41
Time at 6"	9:40	9:43
Time (9"-6")	13 MIN	2
Rate Min./Inch	5 MIN/IN	2

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Lapinski

Comments:

DEP

DEP APPROVED FORM - 12/07/95

FORM 11 - SOIL EVALUATOR FORM
Page 2 of

Location Address or Lot No. LOT H1 + H2 Henry ST

On-site Review

Deep Hole Number H1 H2 Date: 11/1/06 Time: 7:00 Weather Sun 40°s

Location (identify on site plan) _____

Land Use Field Slope (%) 3 Surface Stones Many

Vegetation Deciduous

Landform Terraced

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100's feet Drainage way 100'+ feet

Possible Wet Area 100'+ feet Property Line _____ feet

Drinking Water Well Town feet Other _____

DEEP OBSERVATION HOLE LOG*

96.27

H1

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSL	10yr 3/3		Friable
8-28"	Bw	SL	2.5y 5/6		Friable
28-78"	C1	S	10yr 4/6		F-C. Sand. Some gravel
78"-120"	C2	FSL	2.5y 4/2	2.5y 4/6 76" 10yr 6/8	FIRM. F-M. Sandy Hill 15% Stones

H2

95.13

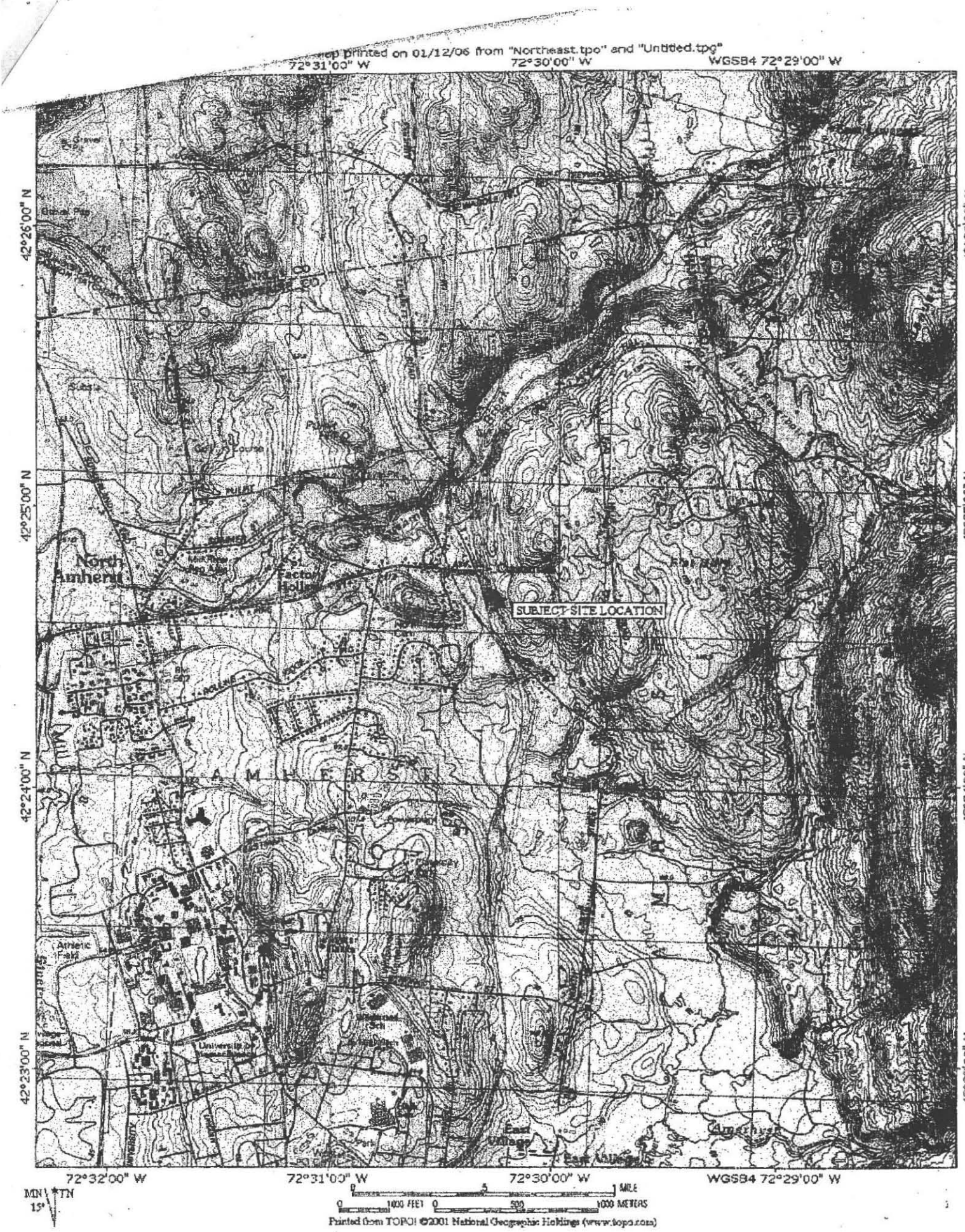
Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSL	10yr 3/3		Friable
8-28"	Bw	SL	2.5y 5/6		Friable.
28"-79"	C1	S	10yr 4/6	2.5y 4/2 78"	F-C. Sand, some gravel
79"-120"	C2	FSL	2.5y 4/2	10yr 6/8	F. F. to C. Sandy Hill 15% Stone

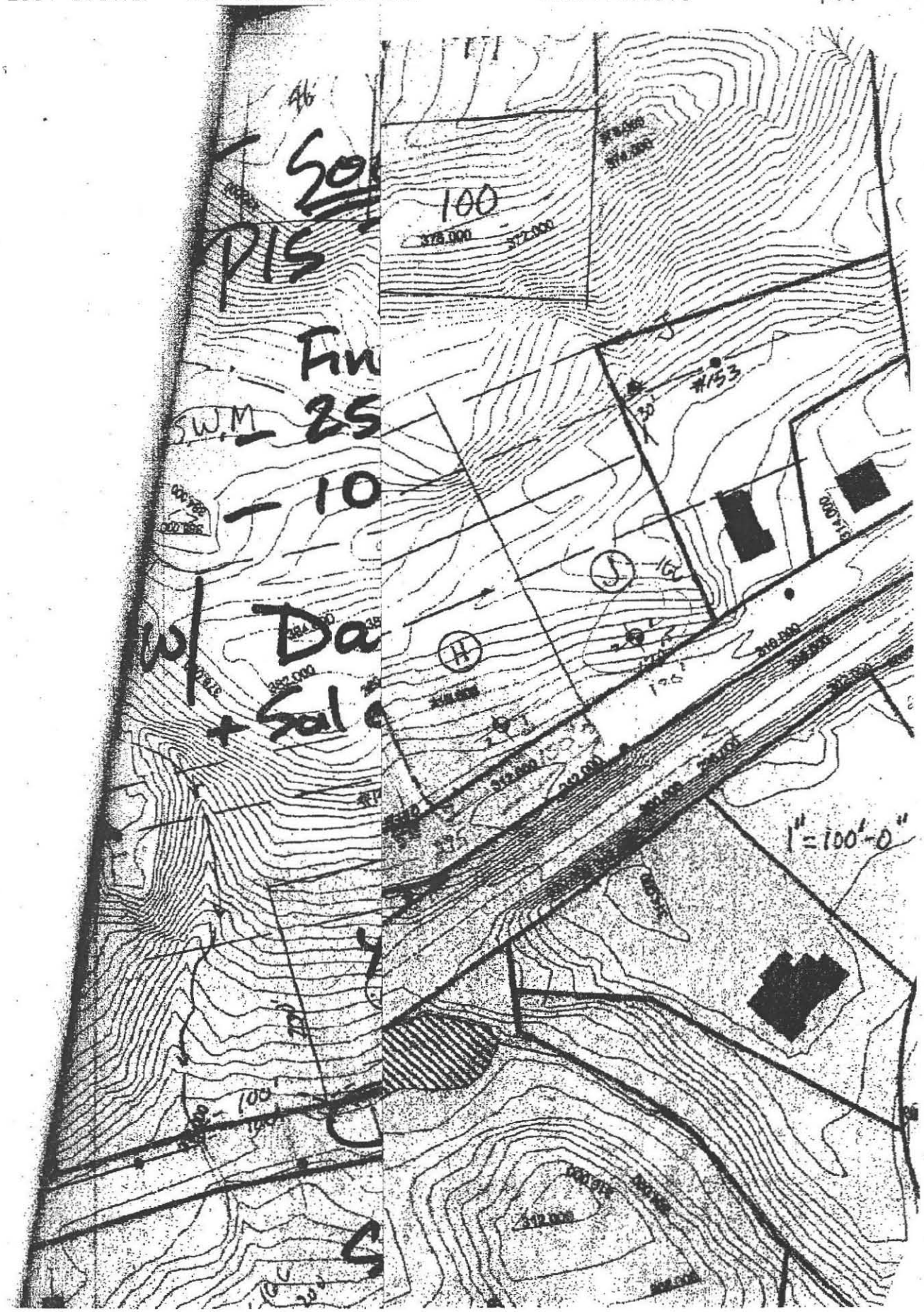
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

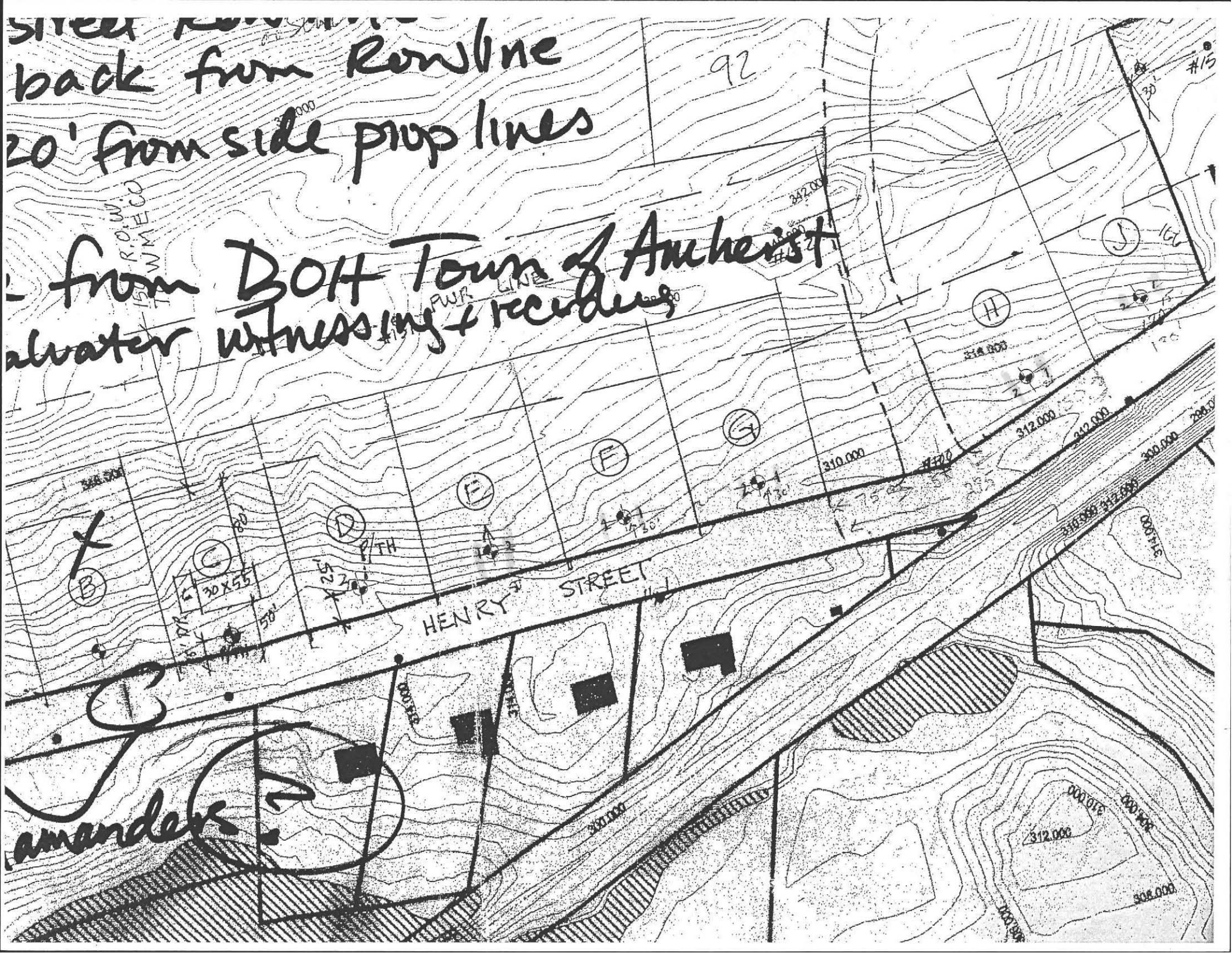
Parent Material (geologic) Outwash Depth to Bedrock: 120"

Depth to Groundwater: Standing Water in the Hole: Not Weeping from Pit Face: Not

Estimated Seasonal High Ground Water: 76" - 78"


Map printed on 01/12/06 from "Northeast.tpo" and "Untitled.tpg"
72°31'00" W
72°30'00" W
WGS84 72°29'00" W
42°26'00" N
42°25'00" N
42°24'00" N
42°23'00" N
SUBJECT SITE LOCATION
North Amherst
Factory Hollow
AMHERST
Amherst Falls
East Village
Amethyst
72°32'00" W
72°31'00" W
72°30'00" W
WGS84 72°29'00" W
MN 15°
TN
0 1 MILE
0 1000 FEET 0 500 1000 METERS
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)


100
#153
1"=100'-0"


back from Roadline
20' from side prop lines
- from BOTH Town of Amherst
alwater witnessing + recording
HENRY STREET
amander

SVE Associates
377 Main Street
Greenfield, MA 01302
Phone 413-774-6698
Fax 413-773-0875

SVE Associates
Engineering / Surveying / Landscape Architecture / Planning

Fax

To:	Tom, Amherst BOH	From:	Doug MacLeay
Fax:	259-2404	Pages:	6 attached
Phone:	259-3153	Date:	8/28/07
Re:	Henry St.	CC:	

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

See attached soil evaluation for Lot H, Cowls' lot on Henry St. currently being developed by UMASS / Integrity.

Kathleen Lurgio

- Title V Inspections
- 21E Site Investigations
- Hydrogeological Consultation
- Pollution Remediation

COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

- Percolation Tests and Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Expert Witness Testimony

January 11, 2006

Cinda Jones
WD Cowls
134 Montague Road
Amherst MA. 01002

RE: Test Pit & Soil Evaluation Results
Henry Street Property:
Amherst, MA
CSEC Reference File #106-2397-0111

$1200 pd

Dear Cinda:

Background:

Cold Spring Environmental, Inc. was contracted to install test pits and perform soil evaluations (to evaluate development soil characteristics) at the above referenced property. This work, contracted by you, was to attempt to estimate the suitability of soils at the site for septic systems and buildability and review the layout of the parcels relative to the above. A Site Locus Map (Figure I) is attached as Attachment I. The approximate test pit locations are pinned on the property to be picked up by your surveyor.

On Site Field Investigation:

Test Pit locations were determined on January 11th, 2006 at the site based on topographic geometry of the property and proposed layout by your civil engineer. Six lots, with twelve test pits (lots D, E, F, G, H J) were installed favoring the street side of the lot. Soil descriptions are provided as Attachment II. Water was also run for actual percolation rates and noted Most lots (E, G,H, J, & D) had slightly elevated groundwater conditions and mod firm to loose outwash texture. Lot F had poorly sorted more firm fine to medium sandy glacial till and elevated groundwater conditions (32"). All test pits were excavated using a full size tire mounted back-hoe provided by Chuck Walker. We recommend that your Surveyor pick up all marker flags of the percs and overlay on the lot survey for permanent documentation.

Please feel free to contact us with any questions you may have.

Sincerely,

Cold Spring Environmental Consultants, Inc.

Alan E. Weiss, M.S.,
President
Principal Hydrogeologist
Licensed Site Professional
Registered Sanitarian
MA Soil Evaluator

350 Old Enfield Road • Belchertown, MA 01007 • (413) 323-5957
Fax : 323-4916 • aeweiss@charter.net

...ONMENTAL
..., INC.
...WEISS, M.S., L.S.P.
...ed Site Professional
Registered Sanitarian
Hydrogeologist
President
350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 321-4916 (FAX)
•Subsurface Investigations
•21E Site Investigations
•Pollution Remediation
•Percolation Tests and Septic Designs

COMMONWEALTH OF MASSACHUSETTS ALAN E. WEISS REG #933 REGISTERED SANITARIAN

FORM 11 - SOIL EVALUATOR FO
Page 1

Date: 1/11/06

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: D. Zavozinski Date: 1/11/06

Location Address of Lot: LOTS: A, E, F, G, H, J Henry ST	Owner's Name, Address, and Telephone: Attn: Cinda Jones WD Cowls 134 Montague Rd. Amherst, MA. 01002 549-1403

New Construction ☑ Repair ☐

Office Review

Published Soil Survey Available: No ☐ Yes ☑
Year Published 1951 Publication Scale 1:25000 Soil Map Unit HgB.
Drainage Class Rapid. Soil Limitations —
Surficial Geologic Report Available: No ☑ Yes ☐
Year Published Publication Scale
Geologic Material (Map Unit)
Landform
Flood Insurance Rate Map:
Above 500 year flood boundary No ☐ Yes ☑
Within 500 year flood boundary No ☑ Yes ☐
Within 100 year flood boundary No ☑ Yes ☐
Wetland Area:
National Wetland Inventory Map (map unit)
Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month
Range: Above Normal ☐ Normal ☑ Below Normal ☐
Other References Reviewed:

DEP APPROVED FORM - 12/07/95

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Lot H, Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 8/11/06	Time: 9:00	
Observation Hole #	H1	H2
Depth of Perc	48"	50"
Start Pre-soak	9:05	9:24
End Pre-soak	9:20	9:39
Time at 12"	9:20	9:39
Time at 9"	9:27	9:41
Time at 6"	9:40	9:43
Time (9"-6")	13 MIN	2
Rate Min./Inch	5 MIN/IN	2

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Lindsey

Comments:

DEP APPROVED FORM - 12/07/95

FORM 11 - SOIL EVALUATOR FORM
Page 2 of

Location Address or Lot No. LOT H_1 + H_2 Henry ST

On-site Review

Deep Hole Number H_1H_2 Date: 1/4/06 Time: 9 AM Weather Sun 40°s

Location (identify on site plan) _____

Land Use Rural Slope (%) 3 Surface Stones Many

Vegetation Deciduous

Landform Terraced

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100'+ feet Drainage way 100'+ feet

Possible Wet Area 100'+ feet Property Line _____ feet

Drinking Water Well Town feet Other _____

DEEP OBSERVATION HOLE LOG*

96.27

H1

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSL	10yr 3/3		Friable
8-28"	Bw	SL	2.5y 5/6		Friable
28-78"	C_1	S	10yr 4/6	2.5y 4/2 76" 10yr 6/8	F-C. SAND. some gravel
78"-120"	C_2	FSL	2.5y 4/2		FRM. F-M. Sandy Hill 15% Stones

H2

95.13

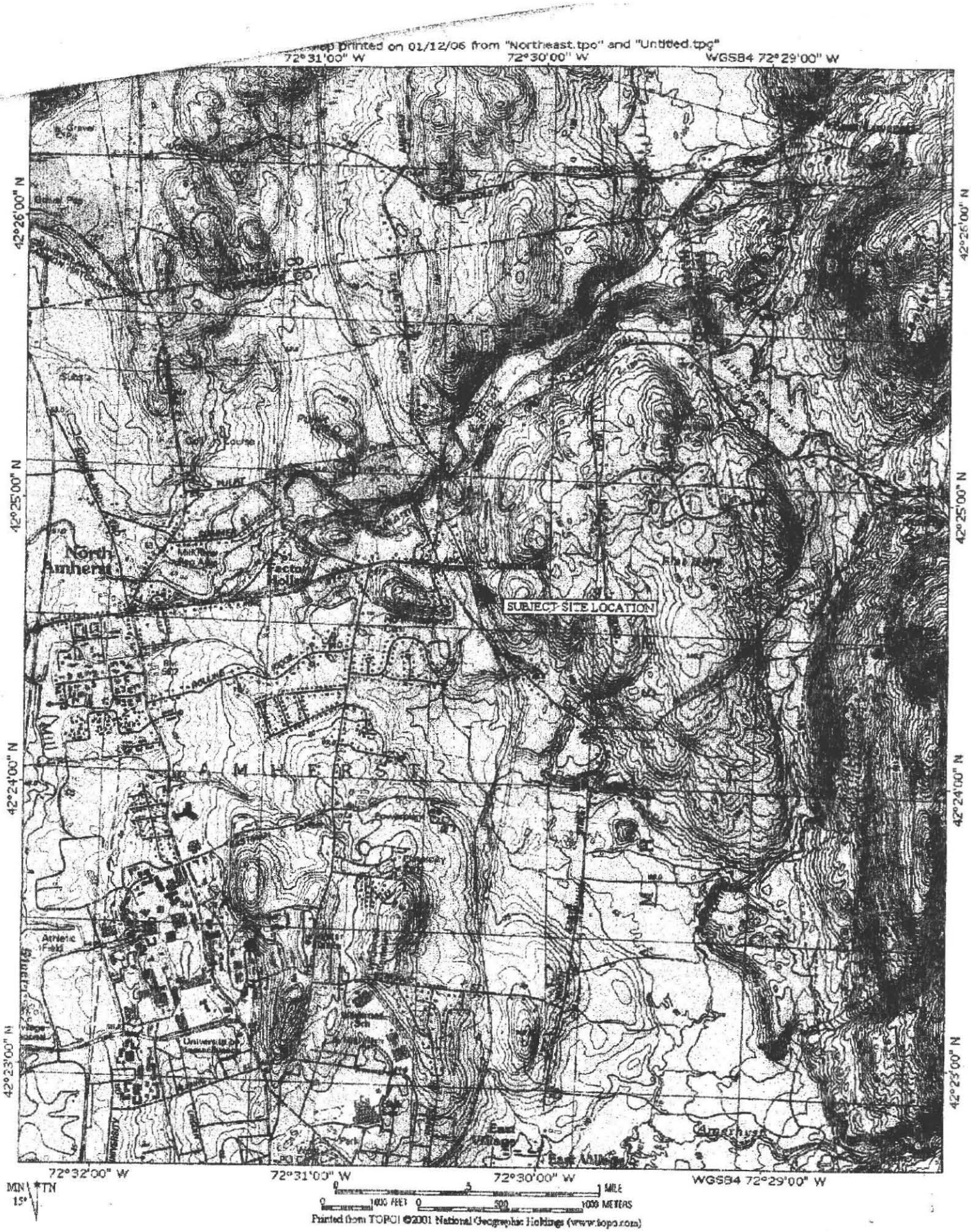
Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-8"	A	FSL	10yr 3/3		Friable
8-28"	Bw	SL	2.5y 5/6		Friable
28"-79"	C_1	S	10yr 4/6	2.5y 4/2 78" 10yr 6/8	F-C. Sand, some gravel
79"-120"	C_2	FSL	2.5y 4/2		F. F. to C. Sandy Hill 15% Stone

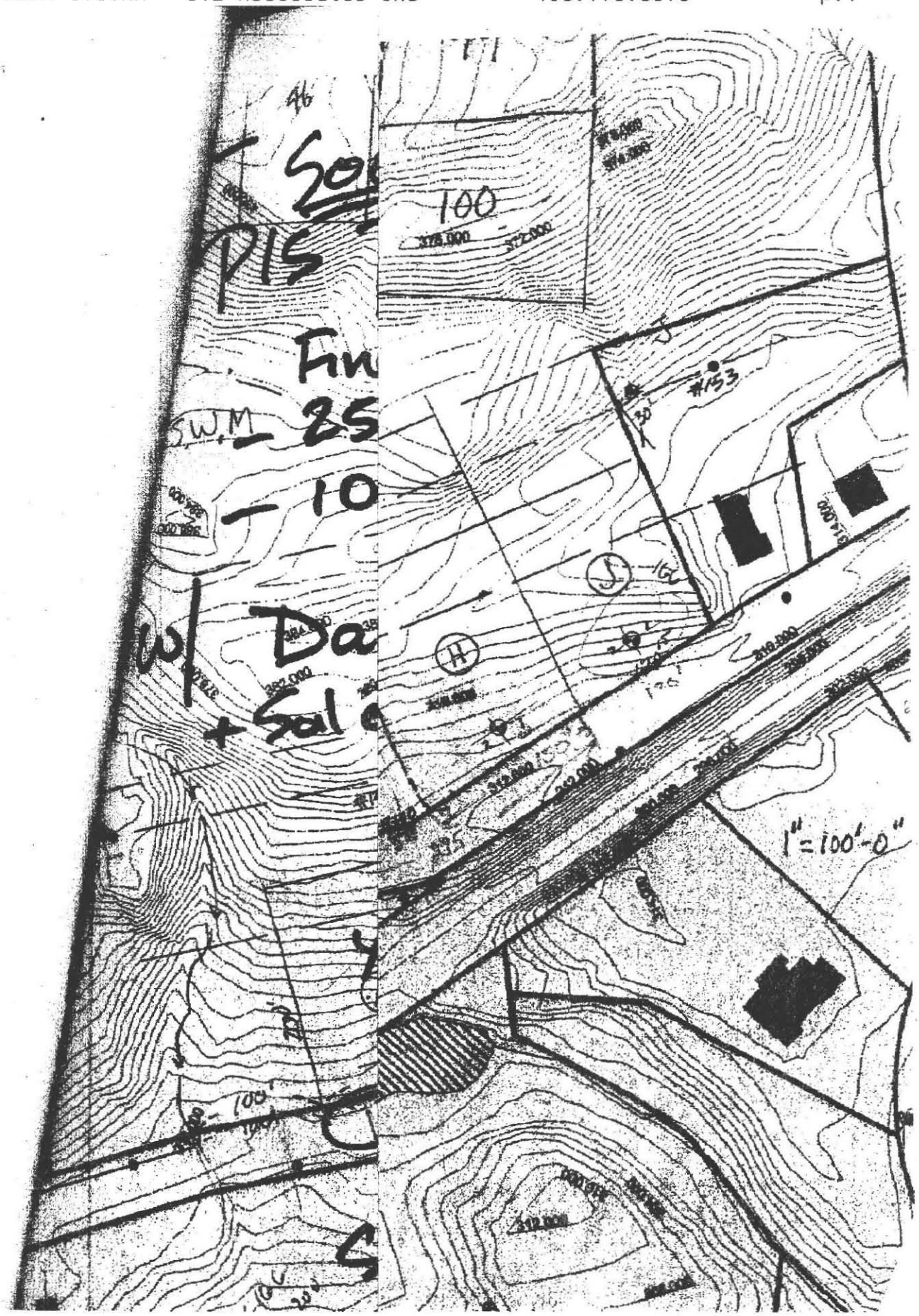
* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash Depth to Bedrock: 120"

Depth to Groundwater: Standing Water in the Hole: Not Weeping from Pit Face: No

Estimated Seasonal High Ground Water: 76" - 78"


Map printed on 01/12/06 from "Northeast.tpo" and "Untitled.tpg"
72°31'00" W
72°30'00" W
WGS84 72°29'00" W
42°26'00" N
42°25'00" N
42°24'00" N
42°23'00" N
SUBJECT SITE LOCATION
North Amherst
AMHERST
Athletic Field
East Village
Amherst
72°32'00" W
72°31'00" W
72°30'00" W
WGS84 72°29'00" W
MN 15°
TN
MILE
1000 FEET
500
1000 METERS
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)


100
#153
1"=100'-0"

FORM 11: Soil Evaluation Form NO: G1472

Commonwealth of Massachusetts
Town of AMHERST

Soil Suitability Assessment: On-Site Sewage Disposal

Performed By: JACK MELCHER Date: 9/25/07
Witnessed By: TOM DION

Location Address of: HENRY STREET
Lot #: H
Owner's Name: W.D. COWLS
Address of: 134 MONTAGUE RD
AMHERST, MA 01002
New Construction ☒ Repair ☐ Telephone: (413) 549-1403

Number of bedrooms:

Office Review

Published Soil Survey Available? No ☐ Yes ☒
Year Published 1981 Publication Scale 1:25000 Soil Map Unit HgB
Soil Name HINCKLEY

Surficial Geologic Report Available? No ☒ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☒
Within 500 year flood boundary? No ☒ Yes ☐
Within 100 year flood boundary? No ☒ Yes ☐

Natural Heritage & Endangered Species Protection:
Priority Habitat present? No ☒ Yes ☐

Current Water Resource Conditions (USGS): month SEPTEMBER
Range: Above Normal ☐ Normal ☐ Below Normal ☒

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

☐ Depth observed standing in observation hole _____ inches
☐ Depth weeping from side of observation hole _____ inches
☒ Depth to soil mottles 76 inches
☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water _____

Depth of Naturally Occurring Pervious Material

Does at least four feet of naturally occurring pervious materials exist in all areas observed throughout the area proposed for this soil absorption system? YES

If not, what is the depth of naturally occurring pervious material?
_____

Certification

I certify that on 10/2005 *(date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.*

Signature _____

Date 9/25/07

On-Site Review

Deep Hole Number: H3 Date: 9/25/07 Time 9:30
Weather CLEAR
Land Use WOODS Slope (%) 10
Surface Stone PRESENT
Vegetation:
OAK, MAPLE

Landform:
BACKSLOPE

Position on Landscape (sketch on back)
Distances from:

Open Water Body 200+ feet	Drainageway 40± feet
Possible Wet Areas 200+ feet	Property Line 40± feet
Drinking Water Well TOWN feet	Other

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) consistency, % gravel
0-8	A	SANDY LOAM	10YR 2/2	-	FRIABLE, GRANULAR
8-18	Bw	SANDY LOAM	10YR 4/6	-	FRIABLE
18-98	C	LOAMY SAND	10YR 3/3	@ 80" 7.5YR 4/6	FIRM; 20% GRAVEL, 10% STONES
98-	R	REFUSAL			
-					
-					
-					
-					
-					

Parent Material (geologic) OUTWASH
Depth to Bedrock 98"
Depth to Groundwater:
Standing Water in the Hole -
Weeping from Pit Face -
Estimated Seasonal High Water 80"
Comments: VERY DRY

On-Site Review

Deep Hole Number H4 Date: 9/25/07 Time 10:00
Weather CLEAR
Land Use WOODS Slope (%) 4
Surface Stone PRESENT
Vegetation:
OAK, MAPLE

Landform:
BACKSLOPE

Position on Landscape (sketch on back)
Distances from:

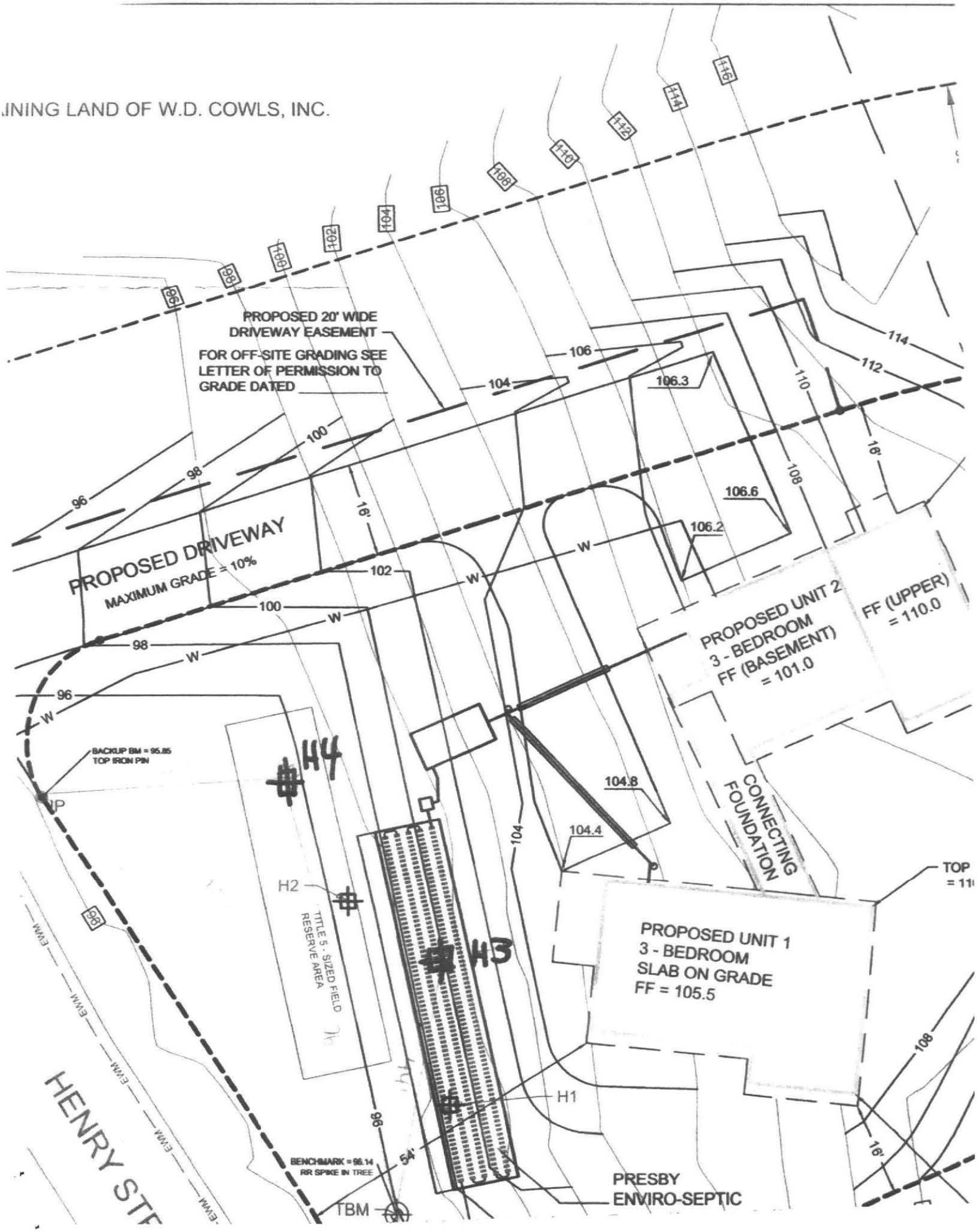
Open Water Body 200+ feet	Drainageway 40± feet
Possible Wet Areas 200+ feet	Property Line 40± feet
Drinking Water Well TOWN feet	Other

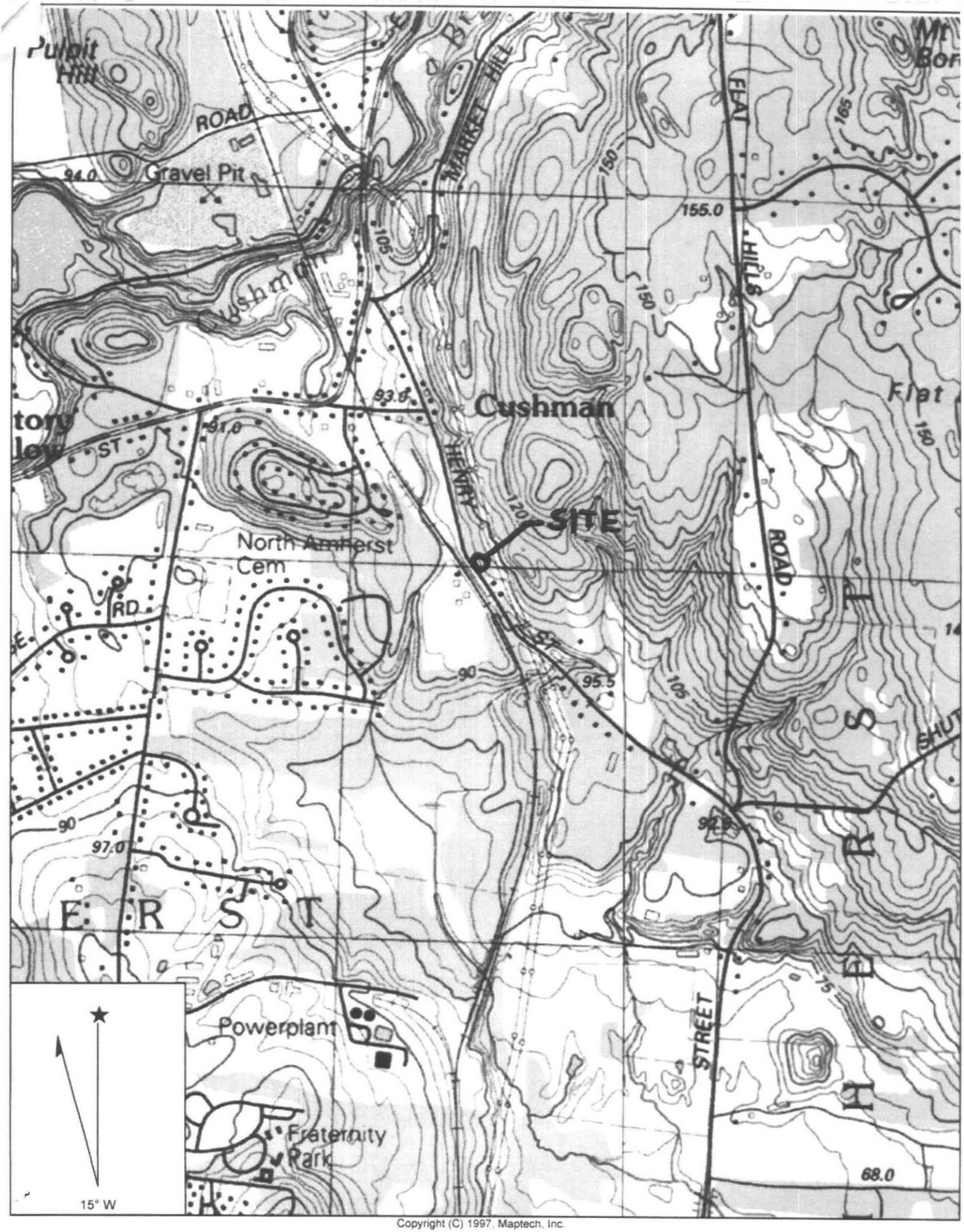
DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) consistency, % gravel
0-8	A	SANDY LOAM	10YR 2/2	-	FRIABLE, GRANULAR
8-18	Bw	SANDY LOAM	10YR 4/6	-	FRIABLE
18-120	C	LOAMY SAND	10YR 3/6	@ 76" 10YR 4/6	FIRM; 20% GRAVEL, 10% STONES
-					
-					
-					
-					
-					
-					

Parent Material (geologic) OUTWASH
Depth to Bedrock > 120"
Depth to Groundwater:
Standing Water in the Hole -
Weeping from Pit Face -
Estimated Seasonal High Water 76"

Comments:


.INING LAND OF W.D. COWLS, INC.
PROPOSED 20' WIDE DRIVEWAY EASEMENT
FOR OFF-SITE GRADING SEE LETTER OF PERMISSION TO GRADE DATED
PROPOSED DRIVEWAY
MAXIMUM GRADE = 10%
PROPOSED UNIT 2
3 - BEDROOM
FF (BASEMENT)
= 101.0
FF (UPPER)
= 110.0
CONNECTING FOUNDATION
PROPOSED UNIT 1
3 - BEDROOM
SLAB ON GRADE
FF = 105.5
TOP
= 11
BACKUP BM = 95.85
TOP IRON PIN
#44
#43
H2
H1
TITLE 5 - SIZED FIELD RESERVE AREA
BENCHMARK = 96.14
RR SPIKE IN TREE
TBM
PRESBY
ENVIRO-SEPTIC
HENRY ST
16'
54'
106.3
106.6
106.2
104.8
104.4



FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of Amherst

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: AL WOLFF Date: 11/11/05
Witnessed By: DAVE ZAPOROWSKI

Location Address of:
Lot #

Owner's Name: Charles Jones
Address of: 40 D. Cowls
Telephone:

New Construction ☑ Repair ☐

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

EL

Determination: Seasonal High Water Table

Methods Used:

☐ Depth observed standing in observation hole _____ inches
☐ Depth weeping from side of observation hole _____ inches
☐ Depth to soil mottles _____ inches
☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ *(date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.*

Signature _____
Date _____

H

On-Site Review

Deep Hole Number H1 Date: 1/11/06 Time 9:00
Weather 40°
Location (identify on site plan) _____
Land Use Rural Slope (%) 3
Surface Stone many
Vegetation:
Deciduous

Landform:
Terrace

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body 100 feet Drainageway 100+ feet
Possible Wet Ares 100 feet Property Line _____ feet
Drinking Water Well ~~Tom~~ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
8	A	FSL	10yr 3/3		Friable
28	Bw	SL	2.5Y 5/6	2.5Y 4/2	Friable
78"	C_1	S	10YR 4/6	76"	F-C Sand Some gravel
120	C_2	FSL	2.5Y 4/2	10YR 6/8	Firm F-m Sandy Till 15% Stone

Parent Material (geologic) Outwash
Depth to Bedrock 120
Depth to Groundwater :
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 76"

On-Site Review

Deep Hole Number H2 Date: 1/11/06 Time 9:00
Weather _____
Location (identify on site plan) _____
Land Use _____ Slope (%) _____
Surface Stone _____
Vegetation:

Landform:

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body _____ feet Drainageway _____ feet
Possible Wet Ares _____ feet Property Line _____ feet
Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
8	A	FSL	10yr 3/3		Friable
28	Bw	LS	2.5Y 5/6	2.5Y 4/2	Friable
79	C_1	S	10yr 4/6	78"	F-C Sand Some gravel
120	C_2	FSL	10YR 6/8	10YR 6/8	F, F, To Coarse Sandy Till 15% Stone

Parent Material (geologic) Outwash
Depth to Bedrock 120
Depth to Groundwater :
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 78"

H

FORM 12: Percolation Test
Location Address or Lot # (H)

Commonwealth of Massachusetts
Town of Amherst

PERCOLATION TEST *		
DATE: 11/6/06		TIME:
Observation Hole #	H1	H2
Depth of Perc	48"	50"
Start Pre-soak	9:05	9:24
End Pre-soak	9:20	9:39
Time at 12"	9:20	9:39
Time at 9"	9:27	9:41
Time at 6"	9:40	9:43
Time (9"-6")	13	<2
Rate Min./Inch	(5)	<2

*Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed ☑ Site failed ☐

Performed by AL WEISS

Witnessed by Dave Farnsworth

Comments:

Location B-1 parcel

- Title V Inspections
- 21E Site Investigations
- Hydrogeological Consultation
- Pollution Remediation

COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

- Percolation Tests and Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Expert Witness Testimony

January 11, 2006

Cinda Jones
WD Cowls
134 Montague Road
Amherst MA. 01002

COPY

RE: Test Pit & Soil Evaluation Results
Henry Street Property:
Amherst, MA
CSEC Reference File #106-2397-0111

Dear Cinda:

Background:

Cold Spring Environmental, Inc. was contracted to install test pits and perform soil evaluations (to evaluate development soil characteristics) at the above referenced property. This work, contracted by you, was to attempt to estimate the suitability of soils at the site for septic systems and buildability and review the layout of the parcels relative to the above. A Site Locus Map (Figure I) is attached as Attachment I. The approximate test pit locations are pinned on the property to be picked up by your surveyor.

On Site Field Investigation:

Test Pit locations were determined on January 11th, 2006 at the site based on topographic geometry of the property and proposed layout by your civil engineer. Six lots, with twelve test pits (lots D, E, F, G, H J) were installed favoring the street side of the lot. Soil descriptions are provided as Attachment II. Water was also run for actual percolation rates and noted Most lots (E, G,H, J, & D) had slightly elevated groundwater conditions and mod firm to loose outwash texture. Lot F had poorly sorted more firm fine to medium sandy glacial till and elevated groundwater conditions (32"). All test pits were excavated using a full size tire mounted back-hoe provided by Chuck Walker. We recommend that your Surveyor pick up all marker flags of the percs and overlay on the lot survey for permanent documentation.

Please feel free to contact us with any questions you may have.

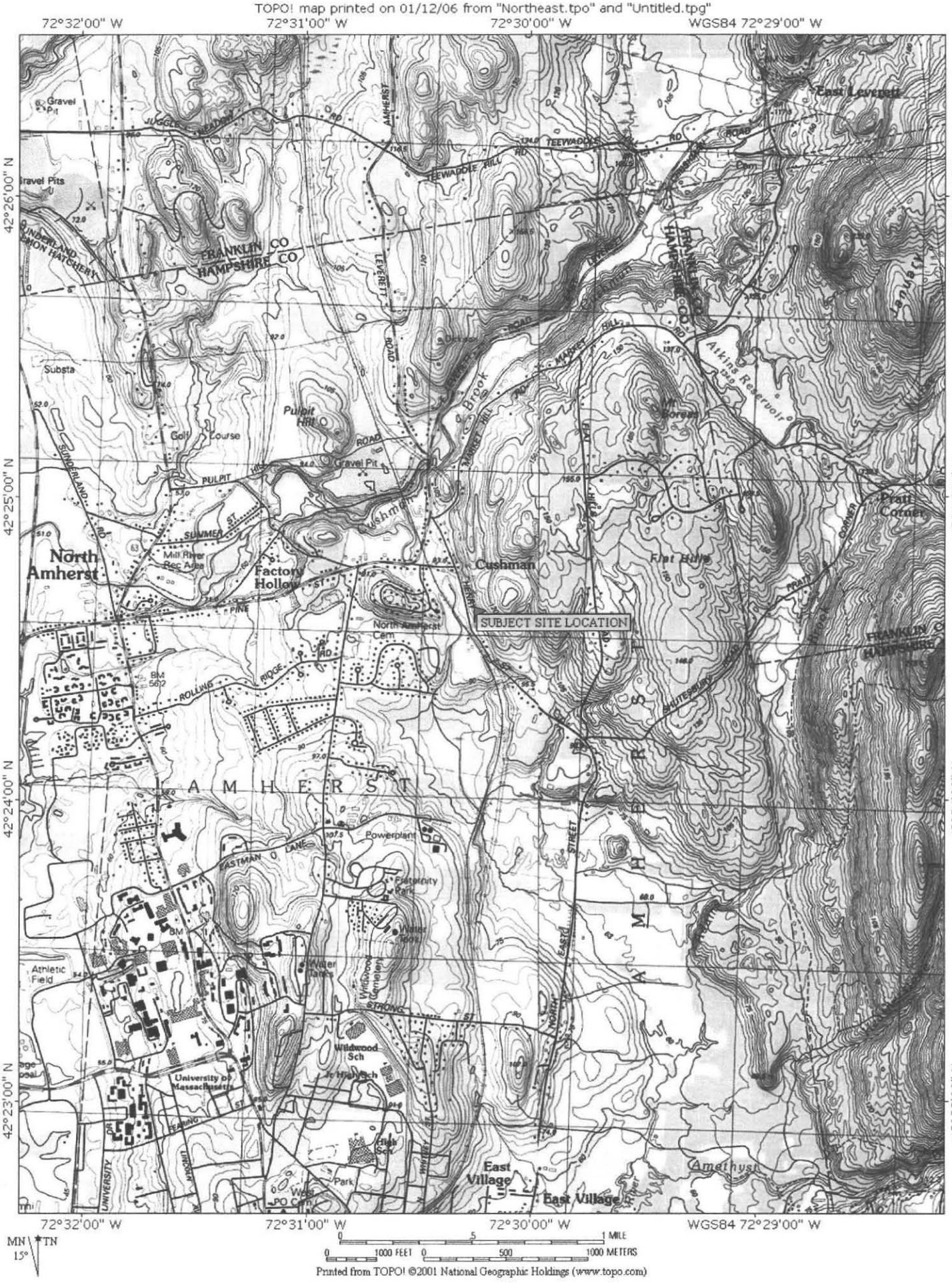
Sincerely,

Cold Spring Environmental Consultants, Inc.

Alan E. Weiss, M.S.,
President
Principal Hydrogeologist
Licensed Site Professional
Registered Sanitarian
MA Soil Evaluator

350 Old Enfield Road • Belchertown, MA 01007 • (413) 323-5957
Fax : 323-4916 • aeweiss@charter.net

ATTACHMENT I
FIGURE I: SITE LOCUS


TOPO! map printed on 01/12/06 from "Northeast.tpo" and "Untitled.tpg"
72°32'00" W
72°31'00" W
72°30'00" W
WGS84 72°29'00" W
42°26'00" N
42°25'00" N
42°24'00" N
42°23'00" N
SUBJECT SITE LOCATION
North Amherst
Cushman
East Leverett
Atkins Reservoir
Pratt Corner
Flat Hills
Factory Hollow
Mill River Rec Area
North Amherst Cem
Pulpit Hill
Golf Course
Gravel Pit
Gravel Pits
Substa
Powerplant
Fraternity Park
Water Tank
Wildwood Cemetery
Wildwood Sch
Jr High Sch
University of Massachusetts
Athletic Field
East Village
Amethyst
Park
Hills Sch
FRANKLIN CO
HAMPSHIRE CO
AMHERST
MARKET HILL ROAD
TEEWADDLE HILL RD
SUNDERLAND ROAD
PULPIT ROAD
SUMMER ST
PINE
ROLLING RIDGE
EASTMAN LANE
STRONG ST
EAST ST
NORTH ST
PRATT CORNER ROAD
SHUTESBURY RD
BM 562
BM
Ushmans Brook
MN 15°
TN
0 .5 1 MILE
0 1000 FEET 0 500 1000 METERS
Printed from TOPO! ©2001 National Geographic Holdings (www.topo.com)

CEO - Soon:
PIS Perc test A-J
Find street Row line
- 25' back from Row line
- 10-20' from side prop lines
w/ Dave from BOH Town of Amherst
+ Sal evaluator witnessing + recording

HENRY STREET

Salamanders

1" = 100'-0"

ATTACHMENT II
Perc test logs

COLD SPRING ENVIRONMENTAL CONSULTANTS, INC.

ALAN E. WEISS, M.S., L.S.P.
Licensed Site Professional
Registered Sanitarian
Hydrogeologist
President

•Subsurface Investigations
•21E Site Investigations
•Pollution Remediation
•Percolation Tests and Septic Designs

350 Old Enfield Rd.
Belchertown, MA 01007
(413) 323-5957 & 323-4916 (FAX)

COMMONWEALTH OF MASSACHUSETTS
ALAN E. WEISS
REG #933
REGISTERED SANITARIAN

Date: 1/11/06

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss
Witnessed By: D. Zavozinski
Date: 1/11/06

Location Address or Lot #	Owner's Name, Address, and Telephone #
LOTS: B, E, F, G, H, J Henry ST	Attn: Cinda Jones WD Cowls 134 Montague Rd. Amherst, MA. 01002 549-1403
New Construction ☑ Repair ☐	

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published 1981 Publication Scale 1:25000 Soil Map Unit HgB

Drainage Class Rapid. Soil Limitations —

Surficial Geologic Report Available: No ☑ Yes ☐

Year Published Publication Scale

Geologic Material (Map Unit)

Landform

Flood Insurance Rate Map:

Above 500 year flood boundary No ☐ Yes ☑

Within 500 year flood boundary No ☐ Yes ☐

Within 100 year flood boundary No ☐ Yes ☐

Wetland Area:

National Wetland Inventory Map (map unit)

Wetlands Conservancy Program Map (map unit)

Current Water Resource Conditions (USGS): Month

Range: Above Normal ☑ Normal ☐ Below Normal ☐

Other References Reviewed: —

Location Address or Lot No. E1 + E2 Harry ST.

On-site Review

Deep Hole Number E1 + E2 Date: 1/11/06 Time: _____ Weather H. rain 40°F

Location (identify on site plan) _____

Land Use Wooded Slope (%) 3 Surface Stones Few

Vegetation deciduous

Landform Terraced.

Position on landscape (sketch on the back) _____

Distances from:

Open Water Body 100'+ feet Drainage way 50'+ feet

Possible Wet Area 100'+ feet Property Line 50' feet

Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG*

	Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
E1	0-10"	A	FSL	10yr3/3		Friable, Loose
	10"-28"	Bw	SL	2.5y4/6	78" 10yr6/8	Friable.
	28"-86"	C1	LS	2.5y4/4	2.5y4/2	F.C. Sad, 15% Ang. Stones
E2	0-8"	A	FSL	10yr3/3		Friable, Loose
	8"-30"	Bw	SL	2.5y5/6	76"	Friable.
	30"-120"	C1	LS	2.5y4/4	10yr6/8 2.5y4/2	F-C. Sand. 15% Angular stones.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash Depth to Bedrock: 86"-120"

Depth to Groundwater: Standing Water in the Hole: Not Weeping from Pit Face: Not

Estimated Seasonal High Ground Water: 76"

FORM 12 - PERCOLATION TEST

Location Address or Lot No. E LOT E, Hemyst

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*

Date: 1/11/06 Time:

Observation Hole #	E1	E2
Depth of Perc	46"	48"
Start Pre-soak	12:01	12:17
End Pre-soak	12:16	12:32
Time at 12"	12:16	12:32
Time at 9"	12:18	12:34
Time at 6"	12:20	12:36
Time (9"-6")	2	2
Rate Min./Inch	2	2

CANT HOLD H2O ↓ ↓

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Zaruzoski

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. Lot F1 + F2, Henry. ST.

On-site Review

Deep Hole Number F1 + F2 Date: 1/11/06 Time: 11:00 Weather Clouds

Location (identify on site plan) _____

Land Use Vacl Slope (%) 3 Surface Stones many

Vegetation deciduous

Landform Terrace

Position on landscape (sketch on the back) ...

Distances from:

Open Water Body 100' + feet Drainage way 100 + feet

Possible Wet Area 100' feet Property Line 25' feet

Drinking Water Well Tbm feet Other _____

DEEP OBSERVATION HOLE LOG*

F1

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0 - 10"	A	FSL	10YR3/2		Friable, Loose
10" - 25"	Bw	FSL	2.5Y5/6	32" 10YR6/8	Friable, Loose
25" - 110"	C1	LS	2.5Y4/3		SLIGHTLY/MOD. FIRM F. Sand.

F2

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0 - 10"	A	FSL	10YR3/3		Friable Loose
10" - 25"	Bw	FSL	2.5Y5/6	36" 10YR6/8	Friable.
25" - 120"	C1	SL	2.5Y4/3		MOD FIRM F. Sand. Some interlayed c. SAND.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Ablation Till Depth to Bedrock: _____

Depth to Groundwater: Standing Water in the Hole: 80", +110" Weeping from Pit Face: 78"

Estimated Seasonal High Ground Water: 32" - 36"

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Lot F., Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 1/11/06	Time:	
Observation Hole #	F1	F2
Depth of Perc	43"	46"
Start Pre-soak	10:45	11:00
End Pre-soak	11:00	11:15
Time at 12"	11:00	CANT HOLD
Time at 9"	11:30	
Time at 6"	12:15	
Time (9"-6")	45 min	<2
Rate Min./Inch	15 min/in	<2

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Zarzinski

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. G1 + G2 Henry ST

On-site Review

Deep Hole Number G1, G2 Date: 1/11/06 Time: 1/11/06 Weather Clouds 40°F
Location (identify on site plan)
Land Use Rural Slope (%) 2 Surface Stones Many
Vegetation deciduous
Landform Terrace
Position on landscape (sketch on the back)
Distances from:

Open Water Body 100'+ feet
Possible Wet Area 100'+ feet
Drinking Water Well Town feet
Drainage way 100'+ feet
Property Line 20' feet
Other

DEEP OBSERVATION HOLE LOG*

	Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
G1	0-10"	A	FSL	10yr 3/3		Friable Loose
	10"-26"	Bw	SL	2.5Y 5/6	72"	Friable
	26"-120"	C	S	2.5Y 6/6	2.5Y 7/1	c. sand & gravel Interlayed
G2	0-10"	A	FSL	10yr 3/3		Friable Loose
	10"-26"	Bw	SL	2.5Y 5/6	56"	Friable.
	26"-108"	C1	S	2.5yr 6/6	2.5Y 7/1	c. sand & gravel Interlayed.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash
Depth to Groundwater: Standing Water in the Hole: (78") ( )
Depth to Bedrock: 108-120"
Weeping from Pit Face: (72") (60")
Estimated Seasonal High Ground Water: 56"

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Lot G, Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 11/1/06	Time:	
Observation Hole #	43" P1	P2
Depth of Perc	43"	43"
Start Pre-soak	10:00	10:13
End Pre-soak	10:15	10:20
Time at 12"	10:15	
Time at 9"	10:17	
Time at 6"	10:19	
Time (9"-6")	<2	<2
Rate Min./Inch	<2	<2

What a hold water

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Zovorinski

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. LOT H1 + H2 Henry ST

On-site Review

Deep Hole Number H1, H2 Date: 1/11/06 Time: 9:00 Weather SUN 40°F

Location (identify on site plan)

Land Use Rural Slope (%) 3 Surface Stones Many

Vegetation Deciduous

Landform Terraced

Position on landscape (sketch on the back)

Distances from:

Open Water Body 100'+ feet Drainage way 100'+ feet

Possible Wet Area 100'+ feet Property Line feet

Drinking Water Well TOWN feet Other

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
H1					
0-8"	A	FSL	10YR 3/3		Friable
8-28"	Bw	SL	2.5Y 5/6		Friable
~~28~~-~~78~~"	C1	S	10YR 4/6		F-C. SAND. some gravel.
~~78~~"-120"	C2	FSL	2.5Y 4/2	2.5Y 4/2 76" 10YR 6/8	FIRM. F-M. SANDY HILL 15% Stones
H2					
0-8"	A	FSL	10YR 3/3		Friable
8-28"	Bw	SL	2.5Y 5/6		Friable.
28"-79"	C1	S	10YR 4/6	2.5Y 4/2 78" 10YR 6/8	F-C. SAND, some gravel
79"-120"	C2	FSL	2.5Y 4/2		F. F. to C. SANDY HILL. 15% Stone

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash

Depth to Groundwater: Standing Water in the Hole: Not Depth to Bedrock: 120"

Estimated Seasonal High Ground Water: 76" - 78" Weeping from Pit Face: Not

FORM 12 - PERCOLATION TEST

Location Address or Lot No. Lot H, Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 1/11/06	Time: 9:00	
Observation Hole #	H1	H2
Depth of Perc	48"	50"
Start Pre-soak	9:05	9:24
End Pre-soak	9:20	9:39
Time at 12"	9:20	9:39
Time at 9"	9:27	9:41
Time at 6"	9:40	9:43
Time (9"-6")	13 MIN	<2
Rate Min./Inch	5 MIN/IN	<2

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Lazlowski

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. J1 + J2 Henry ST

On-site Review

Deep Hole Number J1+J2 Date: 1/11/06 Time: 9:00 Weather Sun 40 °F
Location (identify on site plan) _____
Land Use Wooded Slope (%) 3 Surface Stones May
Vegetation Deciduous
Landform Terraced.
Position on landscape (sketch on the back) _____
Distances from:

Open Water Body	100'+ feet	Drainage way	____ feet
Possible Wet Area	100'+ feet	Property Line	20' feet
Drinking Water Well	Town feet	Other	_____

DEEP OBSERVATION HOLE LOG*

Depth from Surface (inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistency, % Gravel)
(South) J1					
0-8"	A_p	FSC	10YR 3/3		Friable.
8"-30"	Bw	SL	2.5Y 5/6	Not obs.	Friable - Moist (Frost to 10")
30"-120"	C	LS	10YR 4/6		F-M. Sand, Mod. Loose. 20% Avg. Stones
J2					
0-7"	A	FSC	10YR 3/3		Friable.
7"-26"	Bw	SL	2.5Y 5/6	—	Friable - Moist
26"-120"	C	LS	10YR 4/6		F-Ma. Sand, Mod. Loose., 20% Avg. Stones.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash. Depth to Bedrock: 120"+
Depth to Groundwater: Standing Water in the Hole: Not obs Weeping from Pit Face: Not obs.
Estimated Seasonal High Ground Water: 100"

FORM 12 - PERCOLATION TEST

Location Address or Lot No. J. + J2 Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 11/11/06	Time: 8:00	
Observation Hole #	J1	J2
Depth of Perc	46"	48"
Start Pre-soak	8:40	8:50
End Pre-soak	8:55	9:05
Time at 12"	8:55	9:05
Time at 9"	9:03	9:06
Time at 6"	9:13	9:07
Time (9"-6")	10 MIN	<2
Rate Min./Inch	4 MIN/IN	<2

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. WEISS

Witnessed By: D. ZARUZINSK.

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. Lot D, Henry ST

On-site Review

Deep Hole Number D.+D2 Date: 1/11/06 Time: 12'30 Weather CLOUDS. 40°F
Location (identify on site plan)
Land Use wooded Slope (%) 3 Surface Stones many
Vegetation deciduous
Landform Terraced
Position on landscape (sketch on the back)
Distances from:

Open Water Body 100'+ feet Drainage way 100'+ feet
Possible Wet Area 100'+ feet Property Line 50' feet
Drinking Water Well Town feet Other

DEEP OBSERVATION HOLE LOG*

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Mottling	Other (Structure, Stones, Boulders, Consistancy, % Gravel)
D1					
0-12"	A	FSL	10YR 3/3		Friable.
12"-29"	Bw	SL	2.5Y 5/6		Friable
29"-100"	C1	LS	2.5Y 4/4	25Y 4/2 10YR 4/6 78"	F-C. SAND, 25% Angular rounded Stones
D2					
0-10"	A	FSL	10YR 3/3		
10"-28"	Bw	SL	2.5Y 5/6	64"	
28"-96"	C1	LS	2.5Y 4/4	10YR 6/8 2.5Y 4/2	F-C. SAND. 25% Angular + rounded stones

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Depth to Bedrock: 100'+
Depth to Groundwater: Standing Water in the Hole: Not obs Weeping from Pit Face: Not obs
Estimated Seasonal High Ground Water: 64"

FORM 12 - PERCOLATION TEST

Location Address or Lot No. LOT D. Henry ST

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*		
Date: 1/11/06	Time:	13:00
Observation Hole #	D1	D2
Depth of Perc	46"	44"
Start Pre-soak	12:50	13:15
End Pre-soak	13:05	13:30
Time at 12"	13:05	13:30
Time at 9"	13:13	13:35
Time at 6"	13:28	13:43
Time (9"-6")	15	8
Rate Min./Inch	5 MIN/IN	3 MIN/IN

* Minimum of 1 percolation test must be performed in both the primary area AND reserve area.

Site Passed ☑ Site Failed ☐

Performed By: A. Weiss

Witnessed By: D. Zarozinski

Comments:

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. LOTS: D, E, F, G, H, J Henry ST

Determination for Seasonal High Water Table

Method Used:

- ☐ Depth observed standing in observation hole ..... inches
- ☐ Depth weeping from side of observation hole ..... inches
- ☑ Depth to soil mottles Noted inches
- ☐ Ground water adjustment ..... feet

Index Well Number ..... Reading Date ..... Index well level

Adjustment factor ..... Adjusted ground water level .....

Depth of Naturally Occurring Pervious Material

Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system? yes

If not, what is the depth of naturally occurring pervious material? ——

Certification

I certify that on 6/95 (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017.

Signature _____ Date 1/11/06

COMMONWEALTH OF MASSACHUSETTS
ALAN E. WEISS
REG. #933
REGISTERED SANITARIAN

DEP APPROVED FORM - 12/07/95

Henry St.
06A000095

LOT G

HENRY ST

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of Amherst

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: AL Weiss Date: 11/11/06
Witnessed By: David Zaremski

Location Address of: Lot #	Owner's Name: Cinda Jones
	Address of: W/D. Cowls
	Telephone: M. Amherst

New Construction ☑ Repair ☐

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

☑ Depth observed standing in observation hole _____ inches
☐ Depth weeping from side of observation hole _____ inches
☐ Depth to soil mottles _____ inches
☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.

Signature _____
Date _____

G

On-Site Review

Deep Hole Number 1 Date: 11/16/06 Time 10:50
Weather cold 40°
Location (identify on site plan) _____
Land Use Rural Slope (%) 2
Surface Stone Many
Vegetation: deciduous

Landform: Terraced

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body 100+ feet Drainageway 100+ feet
Possible Wet Ares 100 feet Property Line 28 feet
Drinking Water Well Town feet Other Front

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
10	A	FSL	10YR 3/3		FRIABLE
26	Bw	SL	2.5Y 5/6	72"	FRIABLE
120	C	S	2.5Y 4/6	2.5Y 4/1	SAND + GRAVEL STRATIFIED

Parent Material (geologic) OUTWASH
Depth to Bedrock 120
Depth to Groundwater:
Standing Water in the Hole 78"
Weeping from Pit Face 60
Estimated Seasonal High Water 60

G

On-Site Review

Deep Hole Number 2 Date: _____ Time _____
Weather _____
Location (identify on site plan) _____
Land Use _____ Slope (%) _____
Surface Stone _____
Vegetation: _____

Landform: _____

Position on Landscape (sketch on back) _____
Distances from:
Open Water ~~Body~~ _____ feet Drainageway _____ feet
Possible Wet Ares _____ feet Property Line _____ feet
Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
10	A	FSL	10YR 3/3		FRIABLE
26	Bw	SL	2.5Y 5/6	56"	FRIABLE
108	C	S	2.5Y 4/1		C SAND + GRAVEL STRATIFIED

Parent Material (geologic) ~~OUTWASH~~ OUTWASH
Depth to Bedrock 120
Depth to Groundwater:
Standing Water in the Hole _____
Weeping from Pit Face 60
Estimated Seasonal High Water 56"

Location
B-1
Correct

FORM 12: Percolation Test
Location Address or Lot # G

Commonwealth of Massachusetts
Town of Amherst

PERCOLATION TEST *		
DATE: 11/11/06		TIME: 10AM
Observation Hole #	(1)	(2)
Depth of Perc	43"	43
Start Pre-soak	10:00	10:30
End Pre-soak	10:15	10:20
Time at 12"	10:15	
Time at 9"	10:17	
Time at 6"	10:19	can't hold water
Time (9"-6")	<2	
Rate Min./Inch	<2	<2

*Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed ☑ Site failed ☐

Performed by Al Weiss

Witnessed by David Ziroomski

Comments:

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of _____

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: AL Weiss Date: 11/11/05
Witnessed By: Dave Zinn Cinda Jones

Location Address of:
Lot #

Owner's Name: W. D Cowls
Address of: N. Amherst
Telephone:

New Construction ☑ Repair ☐

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

1

Determination: Seasonal High Water Table

Methods Used:

- ☐ Depth observed standing in observation hole _____ inches
- ☐ Depth weeping from side of observation hole _____ inches
- ☐ Depth to soil mottles _____ inches
- ☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.

Signature _____
Date _____

On-Site Review

Deep Hole Number T1 Date: 11/11/06 Time 9:AM
Weather Snow/Sun 40°
Location (identify on site plan) _____
Land Use wooded Slope (%) 3
Surface Stone MANY
Vegetation: Deciduous

Landform: Terraced

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body 100 feet Drainageway _____ feet
Possible Wet Ares 10' feet Property Line 20' feet
Drinking Water Well ~~700~~ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
8	A_p	FSL	10yr 3/3	—	Friable
30	Bw	SL	2.5Y 5/6	—	Friable — Frost to 10"
120	C_1	LS	10yr 4/6	—	F M Stand Loose 20% Ang. Stones

Parent Material (geologic) Outwash
Depth to Bedrock 120
Depth to Groundwater:
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water _____

On-Site Review

Deep Hole Number T2 Date: _____ Time _____
Weather _____
Location (identify on site plan) _____
Land Use _____ Slope (%) _____
Surface Stone _____
Vegetation: _____

Landform: Same

Position on Landscape (sketch on back) _____
Distances from:
Open Water Body _____ feet Drainageway _____ feet
Possible Wet Ares _____ feet Property Line _____ feet
Drinking Water Well _____ feet Other _____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
7"	A	FSL	10yr 3/3	—	Friable
26"	Bw	SL	2.5Y 5/6	—	Friable — Moist Med Sand Med Cobble 20%
120	C_1	LS	10yr 4/6		

Parent Material (geologic) Outwash
Depth to Bedrock 120
Depth to Groundwater:
Standing Water in the Hole —
Weeping from Pit Face _____
Estimated Seasonal High Water 100

FORM 12: Percolation Test
Location Address or Lot # J lots 1 + 2

Commonwealth of Massachusetts
Town of Amherst

PERCOLATION TEST *		
DATE: 6/11/06		TIME:
Observation Hole #	(1)	J (2)
Depth of Perc	46	48
Start Pre-soak	8:40	8:50
End Pre-soak	8:55	9:05
Time at 12"	8:55	9:05
Time at 9"	9:03	9:06
Time at 6"	9:13	9:07
Time (9"-6")	10	<
Rate Min./Inch	4	<2

**Minimum of one percolation test must be performed in both the primary area and reserve area.*

Site Passed ☑ Site failed ☐

Performed by Al Wass

Witnessed by Dave Zaleski

Comments:

Holes To Be Located By Gamma

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of Amherst

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: A.L. Weiss Date: 1/10/06
Witnessed By: David Zuwiniski

Location Address of:
Lot #

Owner's Name: U.D. Courts
Address of: c/o Amherst
Telephone:

New Construction ☐ Repair ☐

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

Lot D

Determination: Seasonal High Water Table

Methods Used:

☐ Depth observed standing in observation hole _____ inches
☐ Depth weeping from side of observation hole _____ inches
☐ Depth to soil mottles _____ inches
☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ *(date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.*

Signature _____
Date _____

D

On-Site Review

Deep Hole Number (1) Date: 1/11/06 Time _____
Weather _____
Location (identify on site plan) _____
Land Use wooded Slope (%) 3
Surface Stone none
Vegetation:
deciduous

Landform:
Terraced

Position on Landscape (sketch on back) _____
Distances from:

Open Water Body	100 feet	Drainageway	100 feet
Possible Wet Ares	100 feet	Property Line	50 feet
Drinking Water Well	Pond feet	Other	_____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
12	A	FSL	10YR 3/3		FRIABLE
29	Bw	SL	2.5Y 5/6	78" 10YR 4/8	FRIABLE
100	C	LS	2.5Y 4/4	2.5Y 4/2	F. C SAND 25% STONES Angular/rounded STONES

Parent Material (geologic) Ablation Till (Line of outwash)
Depth to Bedrock 100
Depth to Groundwater:
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 79

On-Site Review

Deep Hole Number (2) Date: _____ Time _____
Weather _____
Location (identify on site plan) _____
Land Use _____ Slope (%) _____
Surface Stone _____
Vegetation:
same

Landform:

Position on Landscape (sketch on back) _____
Distances from:

Open Water Body	_____ feet	Drainageway	_____ feet
Possible Wet Ares	_____ feet	Property Line	_____ feet
Drinking Water Well	_____ feet	Other	_____

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
10	A	FSL	10YR 3/3		FRIABLE
28	B	SL	2.5Y 5/6	64" 10YR 4/6	FRIABLE
96"	C	LS	2.5Y 4/4	2.5Y 4/2	F. C SAND 25% STONES

Parent Material (geologic) Alula new Till
Depth to Bedrock 96"
Depth to Groundwater:
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 64"

FORM 12: Percolation Test
Location Address or Lot # D

Commonwealth of Massachusetts
Town of Ashby

PERCOLATION TEST *		
DATE: 1/11/06		TIME:
Observation Hole #	D 1	D 2
Depth of Perc	46	44"
Start Pre-soak	12:50	1:15
End Pre-soak	1:05	1:30
Time at 12"	1:05	1:30
Time at 9"	1:13	1:35
Time at 6"	1:28	1:43
Time (9"-6")	15	8
Rate Min./Inch	5	3

*Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed ☑ Site failed ☐

Performed by AC Weiss

Witnessed by David Farrar, ASH

Comments:

FORM 11: Soil Evaluation Form NO: _____

E

Commonwealth of Massachusetts
Town of: Mark St

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: NL Weiss Date: 11/11/06
Witnessed By: David Zaremba

Location Address of:
Lot #

Owner's Name: W D Coates
Address of:
Telephone:

New Construction ☐ Repair ☐

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (USGS): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

- ☐ Depth observed standing in observation hole _____ inches
- ☐ Depth weeping from side of observation hole _____ inches
- ☐ Depth to soil mottles _____ inches
- ☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.

Signature _____
Date _____

E

On-Site Review

Deep Hole Number 1 Date: 1/11/06 Time 12:30
Weather
Location (identify on site plan)
Land Use Wood-lot Slope (%) 3
Surface Stone Few
Vegetation: Fernal

Landform:

Position on Landscape (sketch on back)
Distances from:
Open Water Body 200 feet Drainageway feet
Possible Wet Ares feet Property Line 50' feet
Drinking Water Well Town feet Other

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
10"	A	FSL	10YR 3/3		Friable Loose
28"	Bw	SL	2.5YR 5/6	28" 10YR 4/8	Friable
86	C1	LS	2.5Y 4/4	2.5Y 4/2	F.L.Sand 15% Avg. Stone

Parent Material (geologic) OUTWASH
Depth to Bedrock 86
Depth to Groundwater :
Standing Water in the Hole —
Weeping from Pit Face "
Estimated Seasonal High Water 78

On-Site Review

Deep Hole Number 2 Date: Time
Weather
Location (identify on site plan)
Land Use Slope (%)
Surface Stone
Vegetation:

Landform:

Position on Landscape (sketch on back)
Distances from:
Open Water Body feet Drainageway feet
Possible Wet Ares feet Property Line feet
Drinking Water Well feet Other

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
8	A	FSL	10YR 3/3		Friable
30	Bw	SL	2.5Y 5/6	76" 10YR 4/8	Friable
120	C1	LS	2.5Y 4/4	2.5Y 4/2	F.L.Sand 15%

Parent Material (geologic) OUTWASH
Depth to Bedrock 120
Depth to Groundwater :
Standing Water in the Hole —
Weeping from Pit Face —
Estimated Seasonal High Water 76"

E

FORM 12: Percolation Test
Location Address or Lot # Hook St

Commonwealth of Massachusetts
Town of Ashburnham

PERCOLATION TEST * DATE: 1/11/06 TIME:		
Observation Hole #	(1) 46"	(2) 48"
Depth of Perc	46"	(2) 48"
Start Pre-soak	12:01	12:17
End Pre-soak	12:16	12:32
Time at 12"	12:16	12:32
Time at 9"	12:18	12:34
Time at 6"	12:20	12:36
Time (9"-6")	2	2
Rate Min./Inch	2	2

*Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed ☑ Site failed ☐

Performed by PC Lorcss

Witnessed by David Turcotte

Comments:

Location By Garrett

F

FORM 11: Soil Evaluation Form NO: _____

Commonwealth of Massachusetts
Town of Amherst

Soil Suitability Assessment : On-Site Sewage Disposal

Performed By: AL Weiss Date: 11/11/06
Witnessed By: David Farrish Cynda Jones

Location Address of: Lot #
Owner's Name: C&D Cowls
Address of: M. Amherst
Telephone: Henry St

New Construction ☐ Repair ☐

Office Review

Published Soil Survey Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____ Soil Map Unit _____
Drainage Class _____ Soil Limitations _____

Surficial Geologic Report Available? No ☐ Yes ☐
Year Published _____ Publication Scale _____
Geologic Material (map unit) _____
Landform _____

Flood Insurance Rate Map:
Above 500 year flood boundary? No ☐ Yes ☐
Within 500 year flood boundary? No ☐ Yes ☐
Within 100 year flood boundary? No ☐ Yes ☐

Wetland Area:
National Wetland Inventory Map (map unit) _____
Wetlands Conservancy Program Map (map unit) _____

Current Water Resource Conditions (usgs): month _____
Range: Above Normal ☐ Normal ☐ Below Normal ☐

Other Reference Reviewed:

Determination: Seasonal High Water Table

Methods Used:

- ☐ Depth observed standing in observation hole _____ inches
- ☐ Depth weeping from side of observation hole _____ inches
- ☐ Depth to soil mottles _____ inches
- ☐ Ground water adjustment _____ feet

Index Well No. _____ Reading Date _____ Index Well Level _____
Adjustment factor _____ Adjusted ground water level _____

Depth of Naturally Occurring Previous Material

Does at least four feed of naturally occurring previous materials exist in all areas observed throughout the area proposed for this soil absorption system? _____

If not, what is the depth of naturally occurring previous material?
_____

Certification

I certify that on _____ (date) I have passed the soil evaluator examination approved by the Department of Environmental Protection and that the above analysis was performed by me consistent with the required training, expertise, and experience described in 310 CMR 15.017.

Signature _____
Date _____

(F)

On-Site Review

Deep Hole Number F1 Date: 11/16/06 Time 11:00
Weather Cold 37°
Location (identify on site plan)
Land Use Rural Slope (%) 3
Surface Stone many
Vegetation: deciduous

Landform: Terraced

Position on Landscape (sketch on back)
Distances from:
Open Water Body 100 feet Drainageway 100 feet
Possible Wet Ares 100 feet Property Line 20 feet
Drinking Water Well few feet Other

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
10	A	FSL	10yr 3/3		
28	Bw	FSL	2.5Y 5/6	32" 10yr 6/8	
110	C1	LS	2.5Y 4/3		mod Firm Fine Sand some

Parent Material (geologic) outwash/ Ablation Till
Depth to Bedrock 110
Depth to Groundwater :
Standing Water in the Hole 110
Weeping from Pit Face 78"
Estimated Seasonal High Water 32"

On-Site Review

Deep Hole Number F2 Date: 11/16/06 Time 10:45
Weather cold 37°
Location (identify on site plan)
Land Use Rural Slope (%) 3
Surface Stone many
Vegetation: deciduous

Landform: Terraced

Position on Landscape (sketch on back)
Distances from:
Open Water Body feet Drainageway feet
Possible Wet Ares feet Property Line feet
Drinking Water Well feet Other

DEEP OBSERVATION HOLE LOG

depth from surface (inches)	soil horizon	soil texture (USDA)	soil color (Munsel)	soil mottling	other (structure, stones, boulders) Consistency, % gravel
10	A	FSL	10yr 3/3		
25	Bw	FSL	2.5Y 5/6	36" 10yr 6/8	
120	C1	LS	2.5Y 4/3		mod Firm Fine Sand some interlayered C. Sand

Parent Material (geologic) outwash/ Ablation Till
Depth to Bedrock 120
Depth to Groundwater :
Standing Water in the Hole 120"
Weeping from Pit Face 78
Estimated Seasonal High Water 36"

F

FORM 12: Percolation Test
Location Address or Lot # Henry St

Commonwealth of Massachusetts
Town of Amherst

PERCOLATION TEST * DATE: 11/11/06 TIME:		
Observation Hole #	(F)	(2)
Depth of Perc	43"	46"
Start Pre-soak	10:45	11:00
End Pre-soak	11:00	11:15
Time at 12"	11:00	11:15
Time at 9"	11:30	CONT
Time at 6"	12:15	Hold
Time (9"-6")	45	Under
Rate Min./Inch	15	< 2

*Minimum of one percolation test must be performed in both the primary area and reserve area.

Site Passed ☑ Site failed ☐

Performed by AL Weiss

Witnessed by Paul Zaroznski

Comments:

LOCATION BY Garrett

AMHERST HEALTH DEPT.
TOWN OF AMHERST
HEALTH PERMITS

1825

Received of _____ of _____
Name Address

For Property Located at: _____ _____
Street Address Owner

HEA009	Bakery R6510 443509		HEA016	Septic Tank Permit-Installers R6510 443511	
HEA001	Bed & Breakfast R6510 443516		HEA017	Septic Tank Permit-Private R6510 443510	
HEA002	Catering License R6510 443507		HEA018	Septic Tank Reinspection Fee R6510 432301	
HEA003	Food Handler R6510 443515		HEA019	Sub-Division Review Fee R6510 432306	
HEA004	Frozen Deserts R6510 443501		HEA012	Swimming Pool Permits R6510 443512	
HEA005	Health Dept. Housing Isp. R6510 432302		HEA020	Tanning License R6510 443509	
HEA006	Massage Therapy License R6510 443504		HEA034	Immunization Clinic R6510 432307	
HEA008	Motel License R6510 443506		HEA026	Smoking & Tobacco Reg. Violations R6510 443518	
HEA010	Removal of Offal R6510 443513		HEA022	Tobacco License R6510 443505	
HEA021	Removal of Rubbish R6510 443520		HEA042	Body Arts / Tatoo R6510 443521	
HEA011	Percolation Test Fees R6510 432300	$100.-	HEA043	Food Service Plan Review R6510 432308	
HEA013	Recreation Camp License R6510 443503		HEA044	Porta Potties R6510 432309	
HEA014	Retail Store Permit R6510 443514		HEA045	Ice Rinks R6510 443522	
HEA015	Sanitary Code Booklets R6510 432305		HEA046	Rental Registration R6510 432310	
			HEA047	Fines R6510 48200	
			HEA		
			HEA		

TOTAL FEE: $100.-

Amherst Health Department

Date

OFFICE USE ONLY

CHECK #	CASH

Must be Validated by the Collector's Office to be considered paid

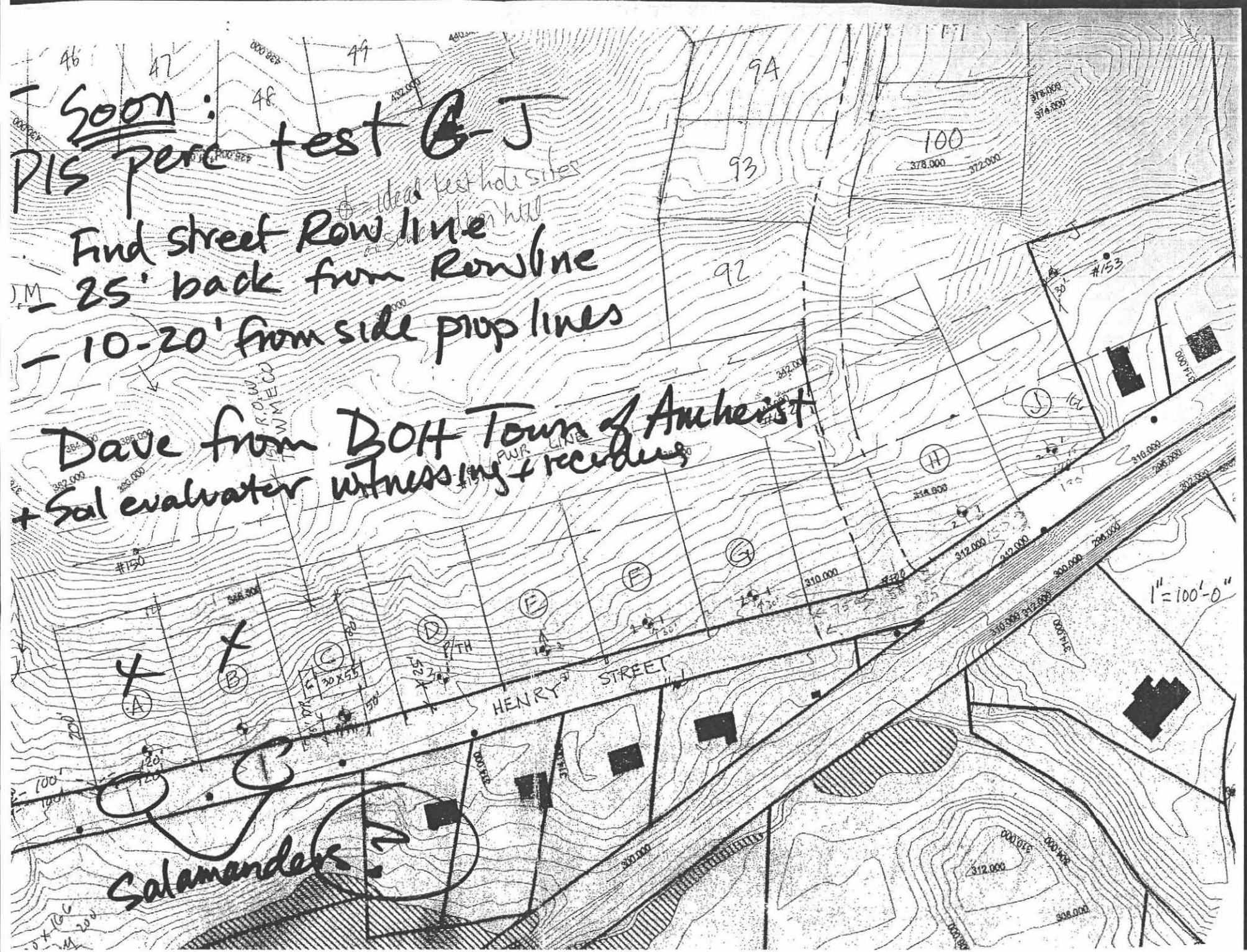
WHITE – Applicant YELLOW – Collector PINK – Accounting GOLD – Health / Inspections

CK# 21785

RCT #1825

6 Perc Henry St.

WD COWS.


Soon:
PIS perc test A-J
Find street Row line
- 25' back from Row line
- 10-20' from side prop lines
Dave from BOH Town of Amherst
+ Sal evaluator witnessing + recording
Salamanders
HENRY STREET
1"=100'-0"