772 Northeast St.

November 8, 2002

Amherst Board of Health 772 Northeast St.

RE: Septic System Installation Inspection
Lot 8 Henry Street (Residence)

On this date the writer inspected the installation of **a Soil Absorption System** (septic system). The writer found the installation to be complete (except for completion of cover material and final fill) and in compliance with our plans and 310 CMR 15.000. The installer representative **(Kohl Construction)** and my inspection noted that the system was built properly, in accordance with the state regulations and our plans.

Sincerely,

Cold Spring Environmental Consultants, Inc.

Alan E. Weiss, M.S., L.S.P.
President
Principal Hydrogeologist
Licensed Site Professional #6442
Registered Sanitarian #933

Cold Spring Environmental
350 Old Enfield Road
Belchertown, Ma. 01007

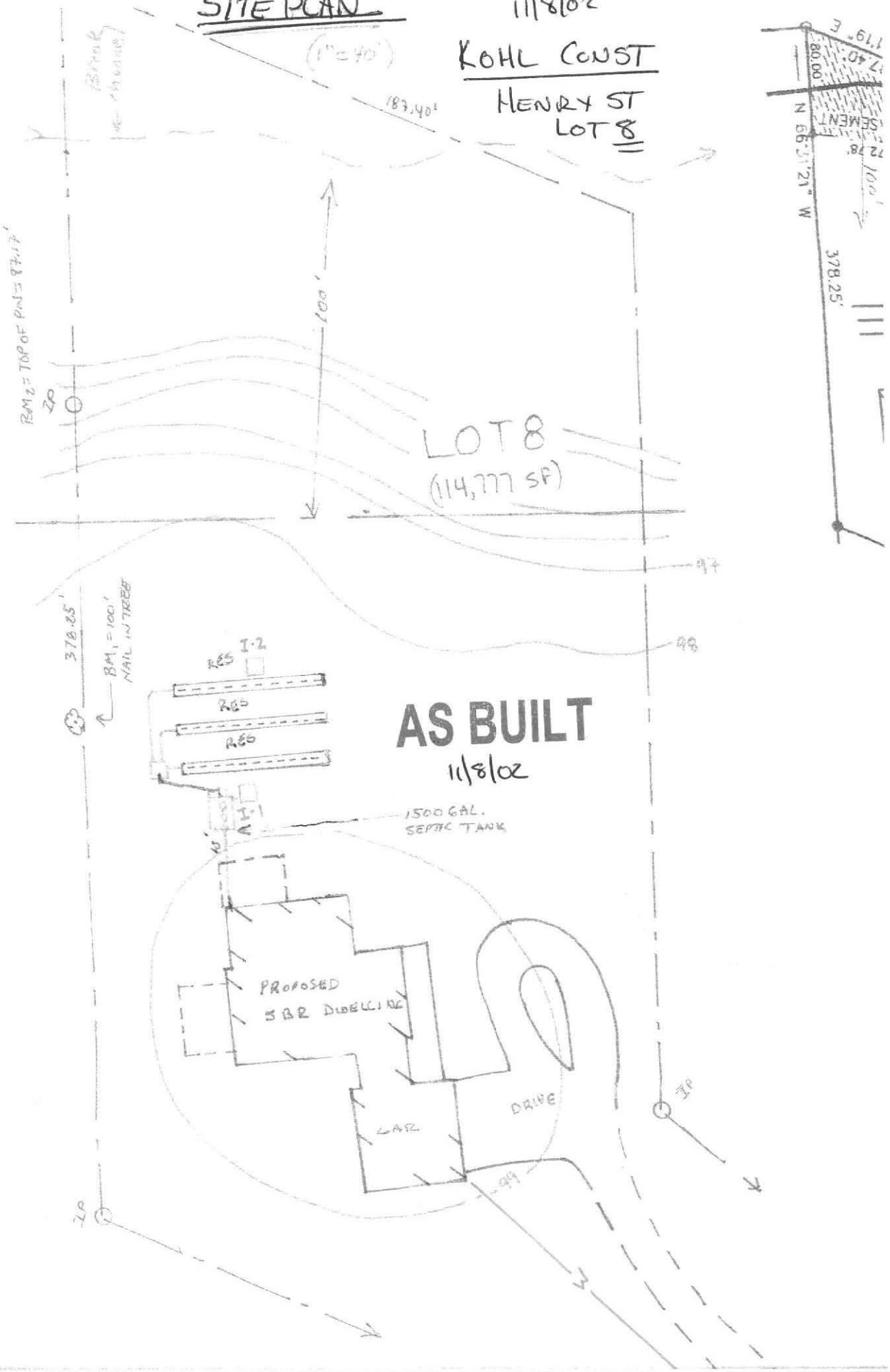
413-323-5957, phone
413-323-4916, fax

SITE PLAN

11/8/02

KOHL CONST

HENRY ST
LOT 8



Town of ~~Ludlow~~ Amherst
Board of Health

SUB-GRADE INSPECTION

Location: Lot 8 Henry ST

Property Owner: Kohl CONST

I certify that I have inspected the excavation to sub-grade of the proposed septic system leaching area prior placement of any fill or stone, or construction of any portion of the system.

I further certify that

1. All 'A' and 'B' horizon soils (topsoils and subscils) were removed in the area of the system.
2. There was no evidence of ground water in the excavation.
3. There was no evidence of "mottles" that would be in conflict with the findings of the deep hole soil profile.
4. That the excavation was accomplished to the proper depth and in conformance with the approved plans.

ALAN WEISS
Designer's Name

Designers Signature

350 OLD Enfield Rd.
Belchertown, MA 01007
Street Address

Town, State, Zip Code

323-5957
Telephone Number

No. 02-05

FEE

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

Application for a Permit to Construct(✓) Repair( ) Upgrade( ) Abandon( ) - ☑ **Complete System** ☐ **Individual Components**

Location	LOT 8, Northeast ST	Owner's Name	Tofino Assoc. (Kuhl)
Map/Parcel#	9A, 67 (772 Northeast)	Address	35 Campus Plaza
Lot#	8	Telephone#	413-256-0371
Installer's Name	Karl's Excavating	Designer's Name	Alan Weiss, RS
Address	327 River Road Hadley	Address	Belchertown, MA
Telephone#	549-5396	Telephone#	323-5957

Type of Building Residence Lot Size 105,576 sq. ft.

Dwelling - No. of Bedrooms 5 Garbage grinder (N)

Other - Type of Building _____ No. of persons _____ Showers ( ), Cafeteria ( )

Other Fixtures _____

Design Flow (min. required) 110 gpd Calculated design flow 550 Design flow provided 619 gpd

Plan: Date 5/28/02 Number of sheets 4 Revision Date _____

Title SEPTIC SYSTEM DESIGN FOR LOT 8

Description of Soil(s) Class I!

Soil Evaluator Form No. _____ Name of Soil Evaluator Alan Weiss Date of Evaluation 5/15/2000

DESCRIPTION OF REPAIRS OR ALTERATIONS Complete New System

The undersigned agrees to install the above described Individual Sewage Disposal System in accordance with the provisions of TITLE 5 and further agrees to not to place the system in operation until a Certificate of Compliance has been issued by the Board of Health.

Signed [signature] Date 5/31/02

Inspections _____

No. 02-05

FEE 100.00 Plans 022220

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

CERTIFICATE OF COMPLIANCE

Description of Work: ☐ **Individual Component(s)** ☑ **Complete System**

The undersigned hereby certify that the Sewage Disposal System; Constructed ( ), Repaired ( ), Upgraded ( ), Abandoned ( )

by: _____

at LOT 8 Northeast ST

has been installed in accordance with the provisions of 310 CMR 15.00 (Title 5) and the approved design plans/as-built plans relating to application No. 02-05, dated _____. Approved Design Flow _____(gpd)

Installer [signature]

Designer: [signature] Inspector: [signature] Date: 11/8/02

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

No. 02-05

FEE 100.00 Pl 022220

COMMONWEALTH OF MASSACHUSETTS

Board of Health, Amherst, *MA.*

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to; Construct(✓) Repair( ) Upgrade( ) Abandon( ) an individual sewage disposal system at LOT #8 Northeast ST as described in the application for Disposal System Construction Permit No. 02-05, dated 5/28/02

Provided: Construction shall be completed within three years of the date of this permit. All local conditions must be met.

Form 1255 Rev. 5/96 A.M. Sulkin Co. Boston, MA

Date 6/11/02 Board of Health [signature]

TOWN OF AMHERST
HEALTH PERMITS/INSPECTION SERVICES

No. 2596

Received of Kohl Construction, Inc. (Name) of 31 Campus Plaza Rd. Hadley, MA 01035 (Address)

For Property Located at: Lot 8, Northeast St. (Street Address) Same (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	(1) 100.00
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		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: $100.00

Kelli Kydd
~~Inspeciton Services~~/Health Department

6/12/02
Date

KOHL CONSTRUCTION, INC.
31 CAMPUS PLAZA ROAD, SUITE 3
HADLEY, MA 01035
(413) 256-0321

PEOPLES BANK
Holyoke, MA 01040
53-7177/2188

022220

Pay: **********One hundred dollars and no cents

DATE	CHECK NO.	AMOUNT
6-11-2002	22220	$******100.00

PAY TO THE ORDER OF
Town of Amherst
Town Hall
4 Boltwood Avenue
Amherst, MA 01002

AUTHORIZED SIGNATURE

⑈022220⑈ ⑆211871772⑆05 21 719455⑈

KOHL CONSTRUCTION, INC.
31 CAMPUS PLAZA ROAD, SUITE 3
HADLEY, MA 01035
(413) 256-0321

PEOPLES BANK
Holyoke, MA 01040

53-7177/2188

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Pay: **********One hundred dollars and no cents

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6-11-2002	22220	$******100.00

PAY TO THE ORDER OF

Town of Amherst
Town Hall
4 Boltwood Avenue
Amherst, MA 01002

AUTHORIZED SIGNATURE

⑈022220⑈ ⑆211871772⑆05 21 719455⑈

FORM 11 - SOIL EVALUATOR FORM
Page 1 of 3

No. _____ Date: 5/15/00

Commonwealth of Massachusetts
Amherst, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A. Weiss Date: 5/15/00
Witnessed By: D. ZAROZINSKI

Location Address or Lot # I1 + I2 Henry St. New Construction ☑ Repair ☐	Owner's Name c/o D. Kohl Address and Telephone # Tofino Assoc Hadley, MA.

Office Review

Published Soil Survey Available: No ☐ Yes ☑

Year Published 1981 Publication Scale 1:15,840 Soil Map Unit MeA

Drainage Class RAPID Soil Limitations N/A

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: _____

I-1
I-2

N. East St

No. _____ Date: 5/15/00

Commonwealth of Massachusetts
, Massachusetts

Soil Suitability Assessment for On-site Sewage Disposal

Performed By: A L Weiss Date: 5/15/00
Witnessed By: David Zarozinski

Location Address or Lot # ~~A~~-1 I-2	Owner's Name, Address, and Telephone # Estate of Carlson Doug Kohl
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 References Reviewed: _____

Henry St

Location Address or Lot No. I-1 / I-2

On-site Review

Deep Hole Number I-1 I-2 Date: 5/18/00 Time: Weather Sunny 60°

Location (identify on site plan)

Land Use Ranch Slope (%) / Surface Stones Few

Vegetation Pine

Landform Terrace

Position on landscape (sketch on the back)

Distances from:

Open Water Body 100+ feet Drainage way — feet

Possible Wet Area 100+ feet Property Line feet

Drinking Water Well 100+ 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)
I #1	7	A	FSL	10YR 3/2		Friable
	30	Bw	SL	10YR 5/6	—	Friable
	144	C	S	10YR 6/4		15% med + coarse stones cobble
#2	9	A	FSL	10YR 3/2		Friable
	30	Bw	SL	10YR 5/6	—	Friable 15% med to coarse
	145	C	S	10YR 6/4		sand stones cobble

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) Outwash Depth to Bedrock: 145+

Depth to Groundwater: Standing Water in the Hole: — Weeping from Pit Face: —

Estimated Seasonal High Ground Water: 145+

I-1 I-2

FORM 12 - PERCOLATION TEST

Location Address or Lot No. HARRY ST

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*

Date: 5/15/00 Time:

Observation Hole #	I-1	I-2
Depth of Perc	48"	49"
Start Pre-soak	12:01	12:10
End Pre-soak	12:01	12:10
Time at 12"	12:01	12:10
Time at 9"	12:02	12:11
Time at 6"	12:03	12:12
Time (9"-6")		
Rate Min./Inch	<2	<2

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

Site Passed ☑ Site Failed ☐

Performed By: AL WEISS

Witnessed By: David Tarozzi

Comments:

DEP

DEP APPROVED FORM - 12/07/95

FORM 12 - PERCOLATION TEST

Location Address or Lot No. I1 + I2, Henry St.

COMMONWEALTH OF MASSACHUSETTS

Amherst, Massachusetts

Percolation Test*

Date: 5/15/00 Time: 12:00

Observation Hole #	I1	I2
Depth of Perc	48	49"
Start Pre-soak	12:01 CANT HOLD SOAK	12:10
End Pre-soak	12:01	12:10
Time at 12"	12:01	12:10
Time at 9"	12:02	12:11
Time at 6"	12:03	12:12
Time (9"-6")	1	1
Rate Min./Inch	<2 MIN/IN	<2 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: 6' SEPARATION

DEP APPROVED FORM - 12/07/95

Location Address or Lot No. Lot I, Henry St.

On-site Review

Deep Hole Number I1 + I2 Date: 5.5.00 Time: 11:50 Weather Sun 60°F
Location (identify on site plan)
Land Use Rural Slope (%) <2 Surface Stones
Vegetation Deciduous / Pine
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 100'+ feet
Drinking Water Well 100'+ 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)
1	0-7"	A	FSL	10YR3/2	Not obs	Friable.
	7-30"	Bw	SL	10YR5/6		Friable
	30"-144"	C	S	10YR6/4		MED-COARSE SAND + gravel, loose 15% Cobbles + Stones
2	0-9"	A	FSL	10YR3/2	Not obs.	Friable
	9-30"	Bw	SL	10YR5/6		Friable
	30"-144"	C	S	10YR6/4		MED-COARSE SAND + GRAVEL. LOOSE, 15% COBBLES + STONES

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) OUTWASH Depth to Bedrock: 144"+
Depth to Groundwater: Standing Water in the Hole: Not obs. Weeping from Pit Face: Not obs.
Estimated Seasonal High Ground Water: 144"+

Location Address or Lot No. Lot I, 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 144" + 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~~ yes

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

Certification

I certify that on June, 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 5/15/00

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

Town of

AMHERST Massachusetts

AMHERST HEALTH DEPARTMENT, 70 BOLTWOOD WALK, AMHERST, MA 01002
(413) 256-4077

(413) 256-4033 ENVIRONMENTAL HEALTH SERVICES
(413) 256-4053 (FAX)

SUB-GRADE INSPECTION

Location: LOT 8 Northeast ST

Property Owner: TOFINO ASSOC.

I certify that I have inspected the excavation to sub-grade of the proposed septic system leaching area prior placement of any fill of stone, or construction of any portion of the system.

I further certify that:

1. All 'A' and 'B' horizon soils (topsoils and subsoils) were removed in the area of the system.
2. There was no evidence of ground water in the excavation.
3. There was no evidence of "mottles" that would be in conflict with the findings of the deep hole soil profile.
4. That the excavation was accomplished to the proper depth and in conformance with the approved plans.

ALAN E. WEISS, RS
COLD SPRING
ENVIRONMENTAL, INC.
~~350 OLD ENFIELD RD.~~
BELCHERTOWN, MA 01007

Designers Name

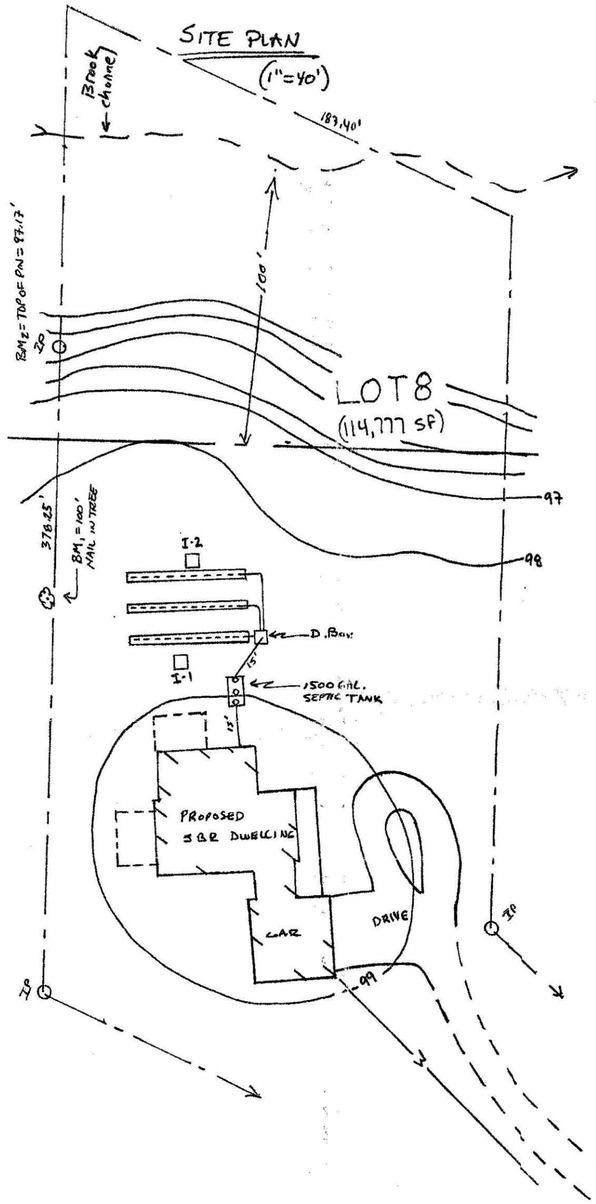
Designers Signature

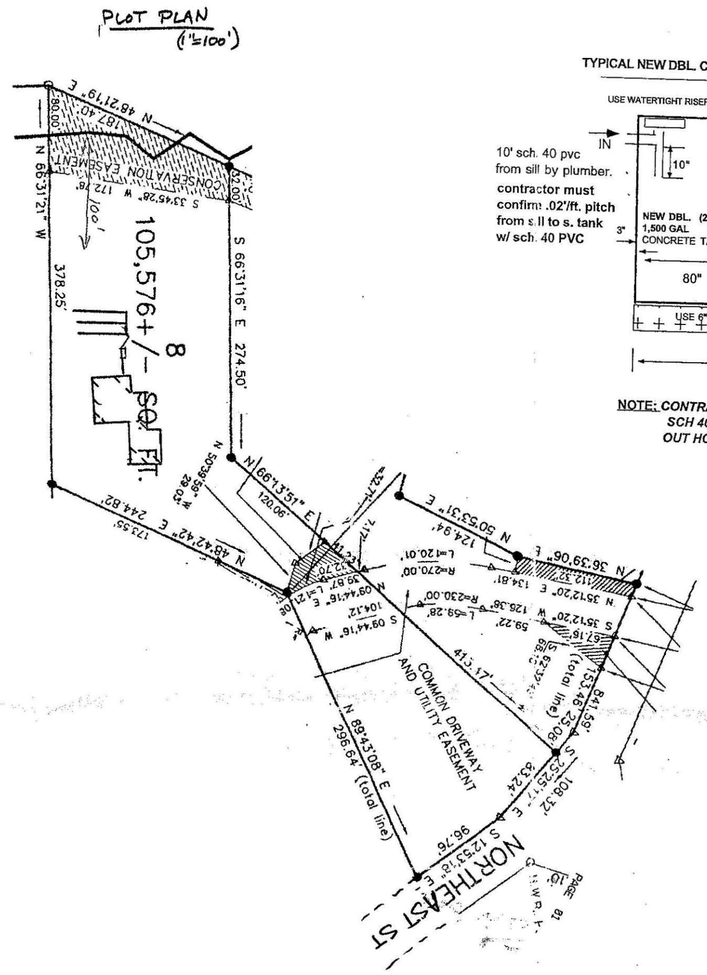
Street Address

Town, State, Zip Code

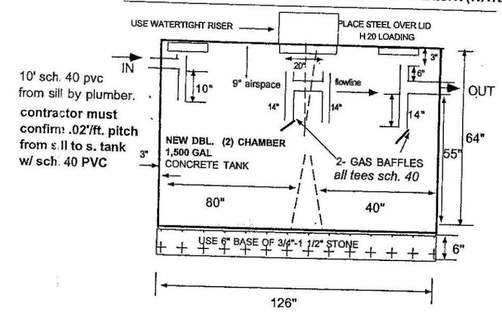
413-323-5957

Telephone Number



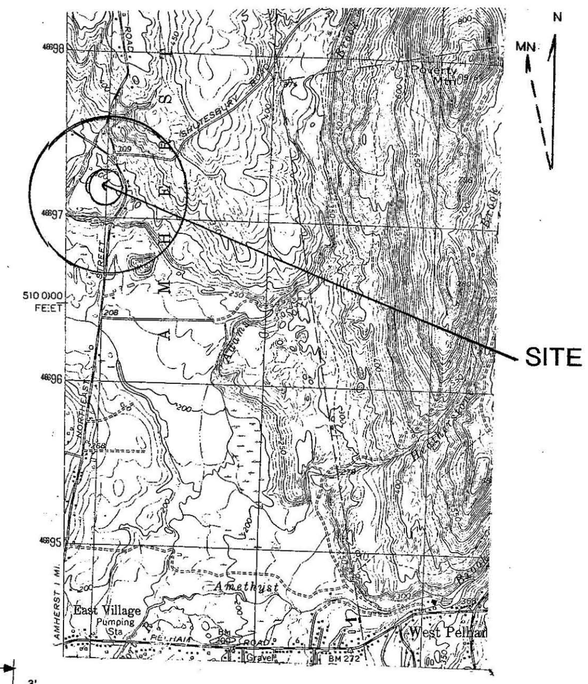


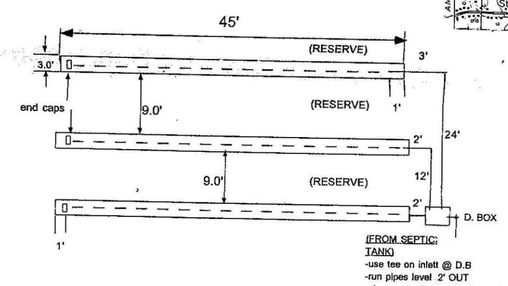
TYPICAL NEW DBL. CHAMBER 1,500 GAL. S. TANK OR EQUIV. (WATERTIGHT)



NOTE: CONTRACTOR MUST also PIPE MIDDLE TEE WITH SCH 40 PVC AS SHOWN, USE TANK WITH 4" ID knock OUT HOLE BETWEEN CHAMBERS FOR TEES.

SITE LOCUS





(FROM SEPTIC TANK)
-use tee on inlett @ D.B
-run pipes level 2' OUT
-place water in tbox for inspection
-use flow levelers on outlets

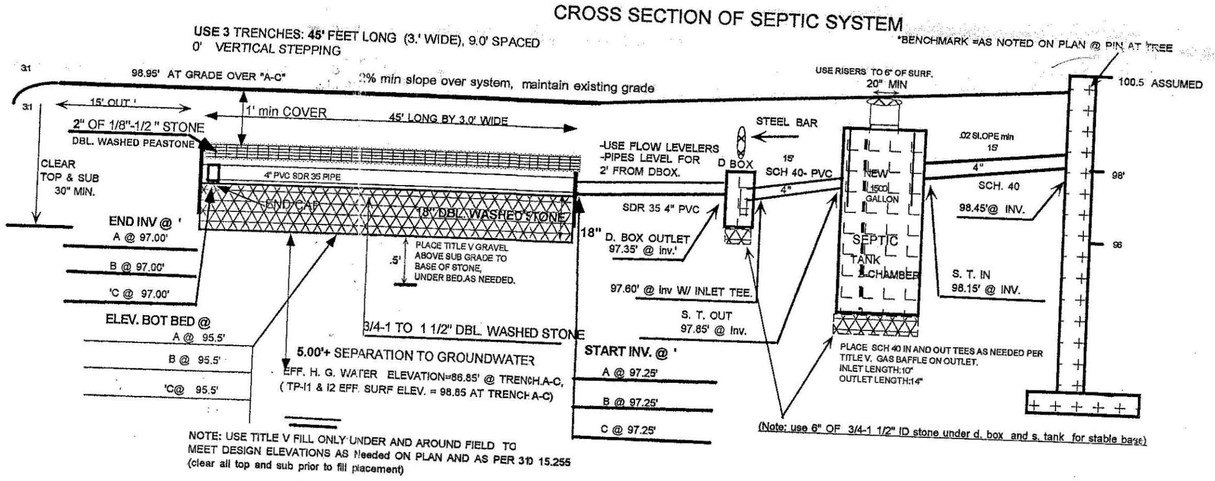
TEST PIT LOGS

TP-1-1 EFF ELEV. 98.85' EFF FOR DESIGN OF "A-C" — TP-1-2 98.85'

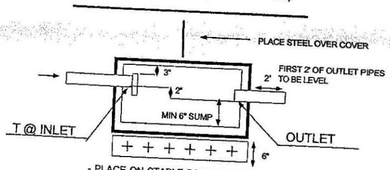
0-7" "A"	FINE SANDY LOAM,	10 YR 3/2	0-7"
7-30" "Bw"	SANDY LOAM	10 YR 5/6	7-30"
30-144 "C1"	MED. COARSE SAND (15% COBBLES & BOULDERS)	10 YR 6/4	30-144"

OXIDES (NOT OBS.)
ASSUMED ESHGW @ 144", USED IN TP-1+2 FOR DESIGN @ "TRENCH A-C"= 86.85'
SEEPS AND STATIC= NOT OBS.".
BEDROCK @ NOT OBS. (>144")

CROSS SECTION OF SEPTIC SYSTEM



TYPICAL D. BOX (WATERTIGHT)



- PLACE ON STABLE BASE OF 6" 3/4-1 1/2 " CRUSHED STONE
- USE CONCRETE BOX W/ 2" MIN WALL THICKNESS
- FILL WITH WATER FOR FINAL INSPECTION.
- USE SPEED LEVELERS ON OUTLET PIPES

DESIGN NOTES:

1. 5 BR. x 1110 gal/day x =550 gal/day (5 bedroom design)
2. Use THREE Leach Trenches: 45' long x 3.0' wide x 18" stone below invert.
   Bot. Area: 3.0' wide x 45' long x 3= 405 sf.
   Side Area: 1.50' x 45' long x 3 x 2= 405 sf.
   Side Area 1.50' x 3.0' wide x 2 x 3= 27.0 sf
   Tot. Area: 837 sf x 0.74 gal.sf. = 619 gal./day.
3. NO GARBAGE DISPOSAL ALLOWED
4. ALL D. BOX OUTLET PIPES LEVEL FOR 2'; TEE AT D. BOX. INLET
5. NO WELLS WITHIN 150 FEET OF SYSTEM. (water line shown) ,
6. NO WETLANDS WITHIN 150 FEET OF SYSTEM
7. PRE & POST CONTOURS NOTED AS NECESSARY.
8. RESERVE AREA (BEWEEN TRENCHES).
9. SLOPE CALCS APPLIC, REGRADE OVER TRENCHES AS NOTED.
9A SUBGRADE INSPECTION REQUIRED
10. PLACE (TITLE V FILL ONLY as needed) OVER SUBGRADE as SHOWN
11. SOIL EVAILUATION TP- I1 & I2 BY A. WEISS, 05/15/00 , D. ZAROZINSKI, INSP.
12. 2% MIN. SLOPE OVER SAS UPON FINAL.
    PERCS by A. WEISS 48" & 49, RATE= <2 MIN./IN. "SAND"
13. INSTALL GAS BAFFLES AT BOTH CHAMBER OUTLETS AS NOTED
14. INSTALL/INSPECT TEES SCH. 40, (10" INLET, 14" OUTLET) ON 1,500 GAL. S. TANK
15. USE NEW 2 CHAMBER , 1,500 GAL S. TANK W/ BAFFLES/TEES IN PLACE.
16. USE APPROVED (1.5") ID DbI WASHED STONE UNDER PIPE & D. BOX CONTRACTOR TO CONFIIRM STONE PROPER..Y WASHED (WITH BUCKET /H2O TEST) PRIOR TO PLACEMENT.
17. NO TREES WITHIN 10 FT. OF NEW LEACHING TRENCH STONE.
18 NO FILL WITHIN 10 FEET OF PROPERTY LINE .
19. T.B.M. 100.00 TOP OF PIN IN TREE AS NOTED ON PLAN

GRAVITY SLOPE SEPTIC SYSTEM OPERATION AND MAINTENANCE NOTES FOR HOMEOWNER:

1. HAVE SEPTIC TANK PUMPED EVERY SECOND (2) YEARS.
2. MAINTAIN AREA OVER SEPTIC AS GRASSY OR SIMILAR GROUND COVER ATTEMPTING TO MAXIMIZE SUNLIGHT TO AREA.
3. DO NOT PLANT ANY TREES OR DEEP ROOTING SHRUBS WITHIN 5 FEET OF LEACHFIELD.
4. USE ONLY LIQUID DETERGENTS IN WASHER OR DISHWASHER.
5. CONSERVE WATER WHEREVER POSSIBLE TO LENGTHEN LIFE OF SYSTEM.
6. KEEP ALL RUNOFF DRAINS SUCH AS GUTTERS OR CURTAIN DRAINS AT LEAST 25 FEET FROM LEACHING FIELD.

SEPTIC SYSTEM DESIGN FOR TOFINO ASSOCIATES
LOT 8 NORTHEAST STREET
AMHERST, MA

SCALE: NOTED	APPROVED BY:	DRAWN BY	AW
DATE: 5/28/02		REVISED	
COLD SPRING ENVIRONMENTAL, INC.		DRAWING NUMBER	100-1206-LOT8

CHARRETTE PRO-FORM 920PF PRINTED ON 820H CHARPRINT VELLUM