#385

No. 99-9

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town OF Amherst

FEE 60 plans only 5-19-99 clk 4429 Not Pd

APPLICATION FOR DISPOSAL SYSTEM CONSTRUCTION PERMIT

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

385 Middle St. — Location	Ralph & Vickie Tate — Owner's Name
Map/Parcel #	1 Cypress Rd., Wellsley, MA 02481 — Address
Lot #	RICHARD COSTA PE Telephone # ROBERT STOVER
DMO Construction — Installer's Name	Amherst Civil Engineering — Designer's Name
Address	Box 3312 Amherst, MA 01004-3312 — Address
Telephone #	(413)256-3400 — Telephone #

Type of Building: single family house — Lot Size 45,400 Sq. feet

Dwelling — No. of Bedrooms 4 — Garbage Grinder (no)

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

Other fixtures _____

Design Flow (min. required) 440 x 1.25 = 550 gpd — Calculated design flow 561.5 gpd — Design flow provided _____ gpd

Plan: Date 4/16/99 — Number of sheets 1 — Revision Date _____

Title Plan of On-Site Sewage Disposal System

Description of Soil(s) Attached

Soil Evaluator Form No. _____ Name of Soil Evaluator Robert Stover Date of Evaluation 3-30-99 + 9-30-97

DESCRIPTION OF REPAIRS OR ALTERATIONS _____

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

Signed Robert Stover Date 4/16/99

Inspections _____

FORM 1 - APPLICATION FOR DSCP **DEP APPROVED FORM 5/96**

No. 99-9

THE COMMONWEALTH OF MASSACHUSETTS

Amherst BOARD OF HEALTH

FEE 60 as plans

CERTIFICATE OF COMPLIANCE

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

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

by: Ralph + Vicki Tate

at 385 Middle St. Ill & Clk 3/26/99

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. _____ dated _____. Approved Design Flow _____ (gpd)

Installer Mick Maxwell

Designer: Robert W. Stover 10/7/99 for Amherst Civil Engineering — Inspector David E. Jarzynski — Date 10/7/99

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

FORM 3 - CERTIFICATE OF COMPLIANCE **DEP APPROVED FORM 5/96**

No. 99-9

THE COMMONWEALTH OF MASSACHUSETTS

Amherst BOARD OF HEALTH

FEE 60.00 Plans

DISPOSAL SYSTEM CONSTRUCTION PERMIT

Permission is hereby granted to Construct ( ) Repair (X) Upgrade ( ) Abandon ( ) an individual sewage disposal system at 385 Middle Street as described in the application for Disposal System Construction Permit No. 99-9, dated 5-13-99.

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

Date 5-13-99 Board of Health David E. Jarzynski for Inspectional Services Dept.

FORM 2 - DSCP **DEP APPROVED FORM 5/96**

David Zanda w/Robt. Stover

Location Address or Lot No. 350 Middle St., Amherst, MA

On-site Review

Deep Hole Number 2 Date: 3/30/99 Time: 8:45 Weather 50°, Clear

Location (identify on site plan) see plan

Land Use lawn Slope (%) 10 Surface Stones none

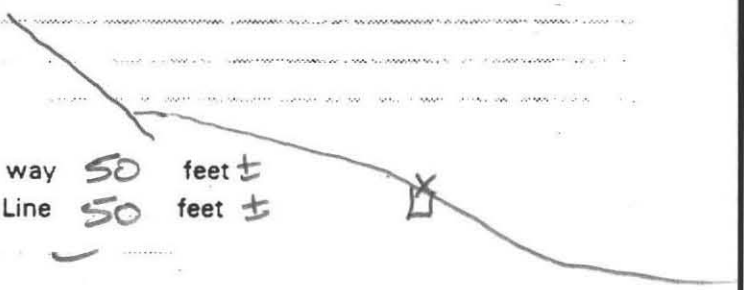
Vegetation grass

Landform outwash terrace

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	town water	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)
0-21	Ap	FSL	10YR3/3	none	Friable + Granular
21-33	Bw	FSL	2.5Y4/3	none	Massive-slightly Friable
33-120	C	FLS	@58" 2.5Y3/2	@58" 10YR5/8 + 5YR4/6	outwash w/ fine and medium gravel; slightly firm

* 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: 120" Weeping from Pit Face: 58"

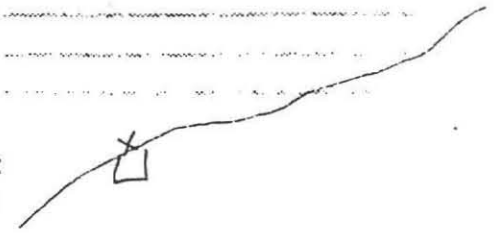
Estimated Seasonal High Ground Water: 52"

Location Address or Lot No. 385 Middle St.
Amherst, MA

On-site Review

Deep Hole Number 1 **Date:** 9/30/97 **Time:** 9:00 AM **Weather** overcast 70°
Location (identify on site plan) see plan
Land Use lawn **Slope (%)** 5% **Surface Stones** none
Vegetation grass
Landform hillside
Position on landscape (sketch on the back)
Distances from:

Open Water Body	200 feet	Drainage way	100 feet
Possible Wet Area	100 feet+	Property Line	50 feet
Drinking Water Well	Town Water 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)
0 - 14	Ap	FSL	10YR3/3	none	Friable
14 - 26	Bw	FSL	10YR4/6	none	Friable / Massive
26 - 40	C1	FLS gravelly	2.5Y 7/4	10YR6/8	Loose Boulder - 15% gravel
40 - 90	C2	FSL	10YR5/4	@ 54" 5-10% 7.5YR5/8	Firm fine gravel
90 - 109	C3	FSL	10YR4/3	5% 7.5YR5/6	Compact

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash over till **Depth to Bedrock:** >109"
Depth to Groundwater: **Standing Water in the Hole:** none **Weeping from Pit Face:** none
Estimated Seasonal High Ground Water: 54"

Location Address or Lot No. 385 Middle St.
Amherst, MA

On-site Review

Deep Hole Number 2 Date: 9/30/97 Time: 9:45 AM Weather Overcast

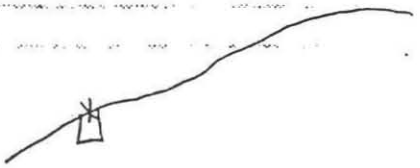
Location (identify on site plan)

Land Use field Slope (%) 5% Surface Stones none

Vegetation grasses

Landform hillside

Position on landscape (sketch on the back)



Distances from:

Open Water Body	200	feet	Drainage way	100	feet
Possible Wet Area	100	feet	Property Line	40	feet
Drinking Water Well	Town Water	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)
0 - 11	Ap	Same			Friable
11 - 24	Bw	Same			Friable / Massive
24 - 36	C1	Same			outwash loose
36 - 96	C2	Same			ablation till Firm
96 - 123"	C3	FSL	10YR4/3	5% 7.5YR5/6	Compact - w/ fine gravel Basal till.

* MINIMUM OF 2 HOLES REQUIRED AT EVERY PROPOSED DISPOSAL AREA

Parent Material (geologic) outwash on till Depth to Bedrock: >123"

Depth to Groundwater: Standing Water in the Hole: none Weeping from Pit Face: none

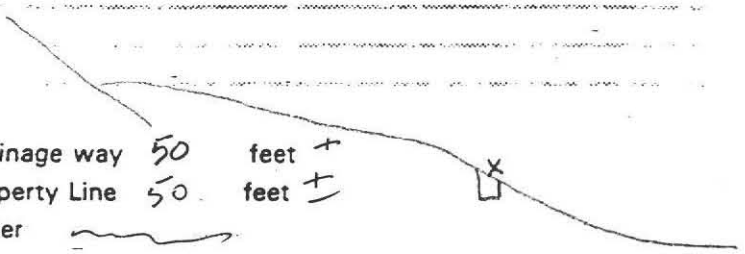
Estimated Seasonal High Ground Water: 42"

Location Address or Lot No. 385 Middle St., Amherst, MA

On-site Review

Deep Hole Number 3 Date: 3/30/99 Time: 8:45 Weather 50° Clear
Location (identify on site plan) see plan
Land Use lawn Slope (%) 10 Surface Stones none
Vegetation grass, hemlock, fir
Landform out wash terrace
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	town water	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)
0 - 21"	Ap	FSL	10YR3/3	none	Friable - granular
21-33"	B w	FSL	2.5Y4/3	none	Massive - slightly friable
33-120"	C	FLS	@58" 2.5Y3/2	@58" 10YR5/8 + 5YR4/6	outwash w/ fine to medium gravel slightly firm

* 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: 120" Weeping from Pit Face: 58"
Estimated Seasonal High Ground Water: 54"

FORM 12 - PERCOLATION TEST

Location Address or Lot No. 385 Middle St.

COMMONWEALTH OF MASSACHUSETTS

Amherst , Massachusetts

Percolation Test*		
Date: 9/30/97	Time: 9:22	
Observation Hole #	1	
Depth of Perc	57"	
Start Pre-soak	9:22	
End Pre-soak	9:42	
Time at 12"	9:42	
Time at 9"	10:14	
Time at 6"	11:08	
Time (9"-6")	54	
Rate Min./Inch	18	

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

Site Passed ☒ Site Failed ☐

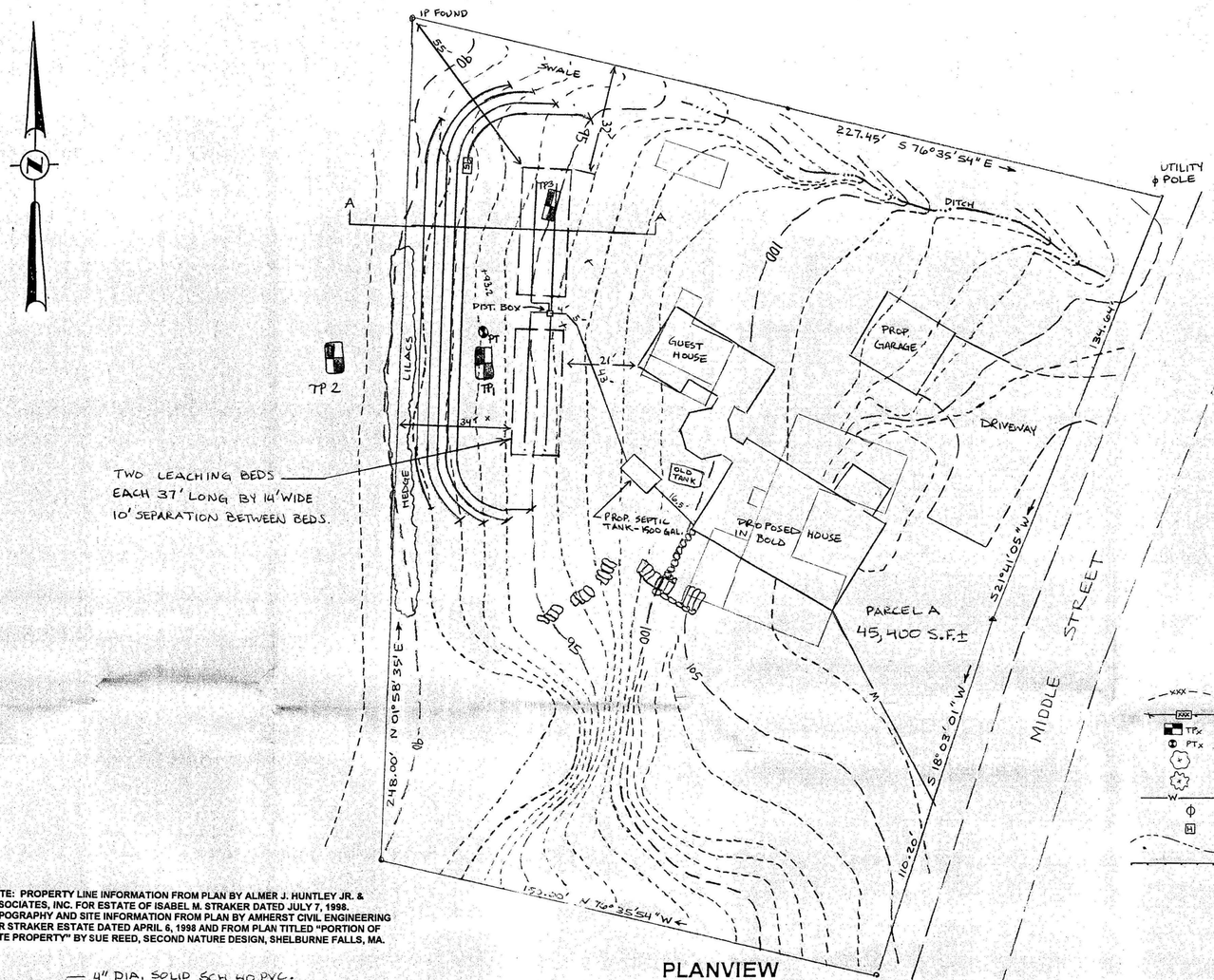
Performed By: Robert Stover

Witnessed By: David Zarozinski

Comments: Design for 25% extra

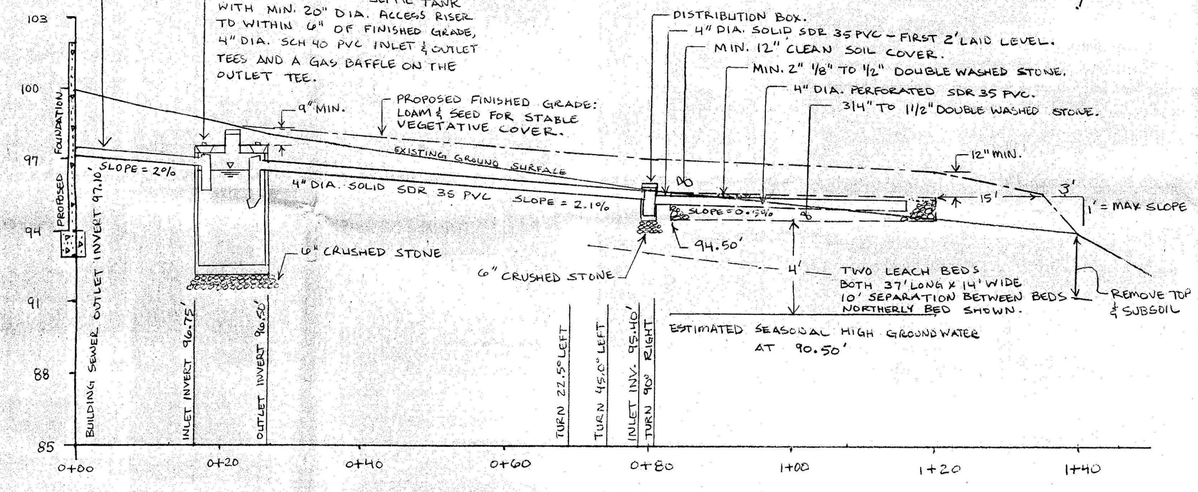
DEP

DEP APPROVED FORM - 12/[illegible]

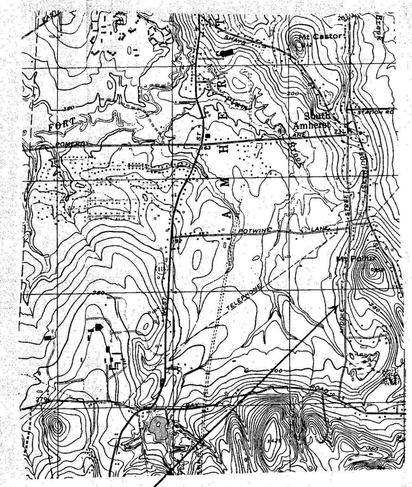


NOTE: PROPERTY LINE INFORMATION FROM PLAN BY ALMER J. HUNTLEY JR. & ASSOCIATES, INC. FOR ESTATE OF ISABEL M. STRAKER DATED JULY 7, 1998. TOPOGRAPHY AND SITE INFORMATION FROM PLAN BY AMHERST CIVIL ENGINEERING FOR STRAKER ESTATE DATED APRIL 6, 1998 AND FROM PLAN TITLED "PORTION OF TATE PROPERTY" BY SUE REED, SECOND NATURE DESIGN, SHELBURNE FALLS, MA.

PLANVIEW
SCALE: 1" = 20'



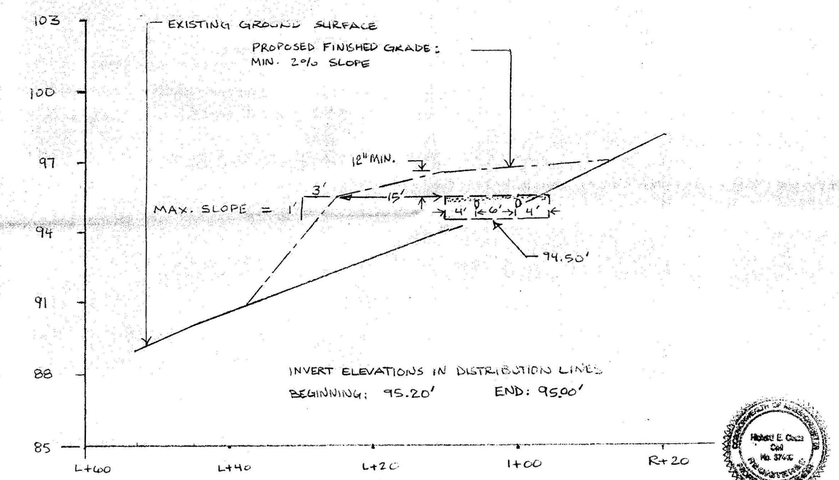
PROFILE OF SYSTEM
SCALE: H: 1" = 10' V: 1" = 3'



LOCUS PLAN
USIGS MT. HOLYOKE, MASS QUAD
SCALE = 1: 25 000

LEGEND

- CONTOUR LINE (1' INTERVAL)
- PROPOSED CONTOUR (1' INTERVAL)
- TPx — DEEP OBSERVATION HOLE
- PTx — PERCOLATION TEST
- DECIDUOUS TREE
- CONIFEROUS TREE
- W — WATER SUPPLY LINE (PRESSURE)
- UTILITY POLE
- FIRE HYDRANT
- WETLAND BOUNDARY
- SILT FENCE/EROSION BARRIER



SECTION AT "A – A": LEACH BED
SCALE: H: 1" = 10' V: 1" = 3'

Robert E. Cross Civil No. 37436 Registered Professional Engineer

Robert E. Cross 4/27/99

Richard Costa 4/16/99

SOIL INVESTIGATION

Test Pit 1 EL. 98.00'
Estimated Seasonal High Ground Water EL. 87.50'
Bedrock EL. > 88.92'
Class 2 soils.

Test Pit 3 EL. 95.00'
Estimated Seasonal High Ground Water EL. 90.50'
Bedrock EL. > 85.00'
Class 2 soils.

Water supply wells within 200 feet and wetland resource areas within 100 feet of the proposed soil absorption system are as shown on the planview. Deep observation hole log and percolation test results are in attached Soil Suitability Report. Soil investigation and percolation testing by Robert Stover, Certified Soil Evaluator, and witnessed for the Board of Health by David Zarozinski on Sept. 30, 1997 & March 30, 1999

DESIGN CRITERIA

Design flow is for a 4 bedroom house without a garbage grinder.
Proposed septic tank: 1500 gallons.

DESIGN CALCULATION

Required Flow: 110 gpd per bedroom. x 1.25% Town safety factor.
Total required flow = 550 gpd.

Effluent Loading Rate: Percolation Rate = 18 minutes per inch.
Class 2 soils.
Effluent Loading Rate = 0.542 gpd/sf.

Proposed soil absorption system: 2 Leach beds; Each 37' Long x 14' wide.

Bottom Area:	(37' x 14') 2 beds	= 1036 sf
Sidewall Area:	not allowed	= 0 sf
Total Leaching Area:		= 1036 sf
1036 sf x 0.542 gpd/sf		= 561.5 gpd
Total Required Capacity		= 550.0 gpd (o'k)

GENERAL CONDITIONS

1. This system design plan is prepared in accordance with Title 5, 310 CMR 15.00. Construction shall conform to these regulations.
2. The installer shall notify the designer of any unusual conditions and shall not modify the plan without the written consent of the designer.
3. All debris in the site area shall be removed and disposed of in accordance with the law.
4. There is no guarantee expressed or implied to any user of a system installed pursuant to this plan.
5. The installer shall notify the designer when the system excavation is ready for inspection and the designer and the Board of Health when the system installation is complete and prior to placement of the cover material for final inspection. Notification shall be 48 hours prior to the time of inspection.
6. The on-site sewage disposal system shall be pumped and inspected as necessary and at least once every 3 years.

CONSTRUCTION NOTES

1. Any topsoil, subsoil, stumps, stones, debris or other impervious materials encountered during excavation shall be removed from the area of the leaching trenches, from five feet around the trenches and from wherever fill is to be placed. Any fill placed in or adjacent to the trenches shall be a clean granular sand & conform to the specifications of Title 5, 310 CMR 15.255(3).
2. The finished grade above the soil absorption system shall have a minimum two percent slope to shed surface runoff away from the system.
3. Disturbed areas shall be loamed, seeded and mulched until stable vegetation is established.
4. The pipes exiting the distribution box shall have the same invert elevation and shall be level for a minimum of the first two feet.
5. Existing septic tank shall be pumped, crushed, and filled with sand.
6. Any part of existing soil absorption system encountered during excavation shall be disposed of in accordance with the requirements of the Board of Health.
7. Any part of the system that shall be located in an area subject to vehicular traffic shall be capable of withstanding H-20 wheel loads.

PLAN OF ON-SITE SEWAGE DISPOSAL SYSTEM
385 MIDDLE STREET, AMHERST, MASS

RALPH AND VICKIE TATE
1 CYPRESS RD., WELLSLEY, MA 02481

SCALE:	APPROVED BY	DRAWN BY
DATE:		

AMHERST CIVIL ENGINEERING
RICHARD COSTA, P.E. / ROBERT STOVER
P.O. BOX 3312, AMHERST, MA 01004-3312
(413)256-3400
DRAWING NUMBER

RECEIVED MAY 1 3 1999

WRIGHT BUILDERS, INC. 4429

DATE	INVOICE NO.	JOB NO.	COMMITMENT NO.	AMOUNT	DISCOUNT	NET AMOUNT
5-13-99	051399	98-910		60.00	.00	60.00

385 MIDDLE STREET
Ralph + Vicki TATE

CHECK DATE	CHECK NO.	TOTAL GROSS	TOTAL DISCOUNT	CHECK AMOUNT
5-13-99	4429	60.00	.00	60.00

4429

WRIGHT BUILDERS, INC.
48 BATES STREET
NORTHAMPTON, MA 01060
413-586-8287

FLORENCE SAVINGS BANK
FLORENCE, MA 01062
53-7168/2118

Pay: **********Sixty dollars and no cents

DATE	CHECK NO.	CHECK AMOUNT
May 13, 1999	4429	$**********60.00

TWO SIGNATURES REQUIRED ON CHECKS OVER $5000.00

TOWN OF AMHERST

AUTHORIZED SIGNATURE

AUTHORIZED SIGNATURE

Security features. Details on back.

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