OLD MONTAGUE ROAD (Pending)

MAR 12 1990

Perc Test Plans CK 627 3/1/90 100.00
CK 73805 60.00
Fee 3/12/90

No. 9013

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST MASS

COMMONWEALTH OF MASSACHUSETTS WILLIAM JOHN SIERUTA CIVIL No. 30140 REGISTERED PROFESSIONAL ENGINEER

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct (✓) or Repair ( ) an Individual Sewage Disposal System at:

LOT 1 OLD MOUNTAGUE ROAD Amherst MA
Location - Address or Lot No.

D. H. JONES TRIANGLE ST AMHERST MA.
Owner Address

Installer Address

Type of Building 6 Duplex residential Size Lot 40,036 Sq. feet

Dwelling — No. of Bedrooms residential Expansion Attic (—) Garbage Grinder (—)

Other — Type of Building Resident No. of persons 12 Showers (4) — Cafeteria (—)

Other fixtures FULL BMT WITH DRAINS

Design Flow 110 gallons per ~~person~~ bed per day. Total daily flow 6×110×1.25% gallons 825

Septic Tank — Liquid capacity 1500 gallons Length 10'6" Width 5' Diameter Depth 5'

Disposal Trench — No. Width Total Length Total leaching area sq. ft.

Seepage Pit No. 2 Diameter 18×13 Depth below inlet 24 Total leaching area 240 sq. ft.

Other Distribution box (1) Dosing tank ( ) BOTTOM 468 FT2 SIDE 240 FT2

Percolation Test Results Performed by W. J. SIERUTA Date 3/1/90

Test Pit No. 1 2.0 minutes per inch Depth of Test Pit 79 Depth to ground water DNA

Test Pit No. 2 2.0 minutes per inch Depth of Test Pit 60 Depth to ground water DNA

Description of Soil TP1-1 0-19 OTS LOAM 19-27 SILTY gravel SUB SOIL 27-121 well graded gravel H20 121 TP1-2 0-19 OTS 19-27 SILTY GRAVEL SUB 27-121 well graded gravel

Nature of Repairs or Alterations — Answer when applicable H20 121"

Agreement:

The undersigned agrees to install the aforedescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary Code — The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the board of health.

Signed [signature] 3-12-90
Date

Application Approved By [signature] for the Board of Health 3/12/90
Date

Application Disapproved *for the following reasons:*

Date

Permit No. 90-3 Issued
Date

CHECK OR FILL IN WHERE APPLICABLE

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF Amherst

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed (✓) or Repaired ( )

by Installer

at LOT #1 Old Mountague Road

has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No. 90-3 dated 3/12/90

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORY.

DATE Inspector

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF Amherst

No. 90-3

CK 627-3/1/90 100.00 Perc

Fee 60.00 3/12/90 CK-73805

Disposal Works Construction Permit

Permission is hereby granted D. H. Jones

to Construct (✓) or Repair ( ) an Individual Sewage Disposal System

at No. LOT #1 Old Mountague Road
Street

as shown on the application for Disposal Works Construction Permit No. 90-3 Dated 3/12/90

[signature] for the Board of Health
Board of Health

DATE 3/12/90

FORM 1255 A. M. SULKIN, BOSTON

Perc CK 627 100.00
Test
Plans CK 73805 60.00
3/12/90

No. 9013

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

TOWN OF AMHERST MASS

Application for Disposal Works Construction Permit

Application is hereby made for a Permit to Construct (✓) or Repair ( ) an Individual Sewage Disposal System at:

LOT 1 OLD MOUNTAGUE ROAD Amherst MA
Location - Address or Lot No.

D.H. JONES TRIANGLE ST AMHERST MA.
Owner Address

Installer Address

Type of Building 6 Duplex residential Size Lot 40,036 Sq. feet

Dwelling — No. of Bedrooms residential Expansion Attic (—) Garbage Grinder (—)

Other — Type of Building Resident No. of persons 12 Showers (4) — Cafeteria ( )

Other fixtures FULL BMT WITH DRAINS

Design Flow 110 gallons per ~~person~~ bed per day. Total daily flow 6 x 110 x 1.25% gallons 825

Septic Tank — Liquid capacity 1500 gallons Length 10'6 Width 5' Diameter Depth 5'

Disposal Trench — No. Width Total Length Total leaching area sq. ft.

Seepage Pit No. 2 Diameter 18 x 13 Depth below inlet 24 Total leaching area 240 sq. ft.

Other Distribution box (1) Dosing tank ( ) Bottom 468 ft² Side 240 ft²

Percolation Test Results Performed by W. J. SIERUTA Date 3/1/90

Test Pit No. 1 2.0 minutes per inch Depth of Test Pit 79 Depth to ground water DWA

Test Pit No. 2 2.0 minutes per inch Depth of Test Pit 60 Depth to ground water DWA

Description of Soil TP1-1 0-19 OTS LOAM 19-27 SILTY gravel SUB SOIL 27-121 well graded gravel H2O 121 TP1-2 0-19 OTS 19-27 SILTY GRAVEL SUB 27-121 well graded gravel

Nature of Repairs or Alterations — Answer when applicable H2O 12½"

Agreement:

The undersigned agrees to install the aforedescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Sanitary Code — The undersigned further agrees not to place the system in operation until a Certificate of Compliance has been issued by the board of health.

Signed [signature] 3-12-90
Date

Application Approved By [signature] Board of Health 3/12/90
Date

Application Disapproved *for the following reasons:*

Date

Permit No. 90-3 Issued
Date

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town OF Amherst

Certificate of Compliance

THIS IS TO CERTIFY, That the Individual Sewage Disposal System constructed (✓) or Repaired ( )

by
Installer

at LOT #1 Old Mountague Road

has been installed in accordance with the provisions of TITLE 5 of The State Sanitary Code as described in the application for Disposal Works Construction Permit No. 90-3 dated 3/12/90

THE ISSUANCE OF THIS CERTIFICATE SHALL NOT BE CONSTRUED AS A GUARANTEE THAT THE SYSTEM WILL FUNCTION SATISFACTORY.

DATE Inspector

THE COMMONWEALTH OF MASSACHUSETTS

BOARD OF HEALTH

Town OF Amherst

CK 627-3/1/90
100.00 Perc

No. 90-3

FEE 60.00
3/12/90
CK-73805

Disposal Works Construction Permit

Permission is hereby granted D.H. Jones

to Construct (✓) or Repair ( ) an Individual Sewage Disposal System

at No. LOT #1 Old Mountague Road
Street

as shown on the application for Disposal Works Construction Permit No. 90-3 Dated 3/12/90

[signature] Board of Health

DATE 3/12/90

FORM 1255 A. M. SULKIN, BOSTON

CHECK OR FILL IN WHERE APPLICABLE

AMHERST HEALTH DEPARTMENT

TITLE V FEES

CK 627
3/1/90 100.00
3/12/90 60.00 plans

Owner: D. H Jones

Site: Old Montague Rd. CK 73805

Percolation Test: Per Lot

1 Date: 3/1/90 pd 100.00

_____ Date: _____

_____ Date: _____

_____ Date: _____

_____ Date: _____

Disposal Works Construction Permit 60.00 pd

Plan Review Date 3/12/90

Final Inspection Date _____

Subsequent Plan Review

Date _____

Date _____

Date _____

Reinspection of Installation

Date _____

Date _____

Date _____

EH: 89 15 01

March 1, 1990
CK. 627
Perc Pit.
100.00
Bill Sieruta

TOWN OF AMHERST

PERC TEST DATA SHEET

DATE 3/1/90 LOCATION 016 Montague Road LOT SIZE

OWNER D. H Jones ADDRESS 200 Triangle Street TELE # 549-3780

P.E./RS Bill Sieruta FIRM Bill Sieruta OBSERVED BY D Zarzinski

BACK HOE OPERATOR Sieruta BENCH MARK

PERC (1) DEPTH 79" PRE SOAK TIME Cant Hold PERC (2) DEPTH 63" PRE SOAK TIME Cant Hold

TEST

RATE (2) RATE (2)

#1

TOP 14"	
SUB 37"	
gravel	
11'	

#2

TOP 14	
SUB 27	
gravel	
11'	

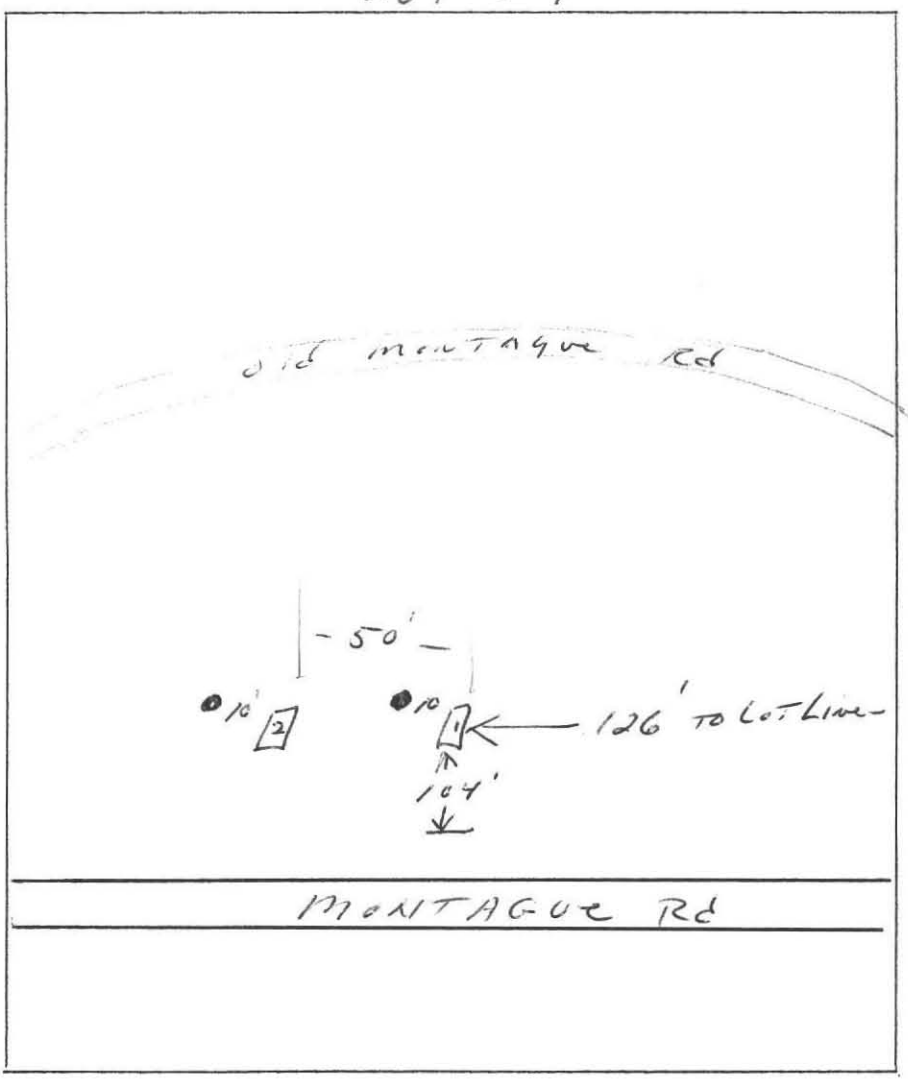
TOP	
SUB	

TOP	
SUB	

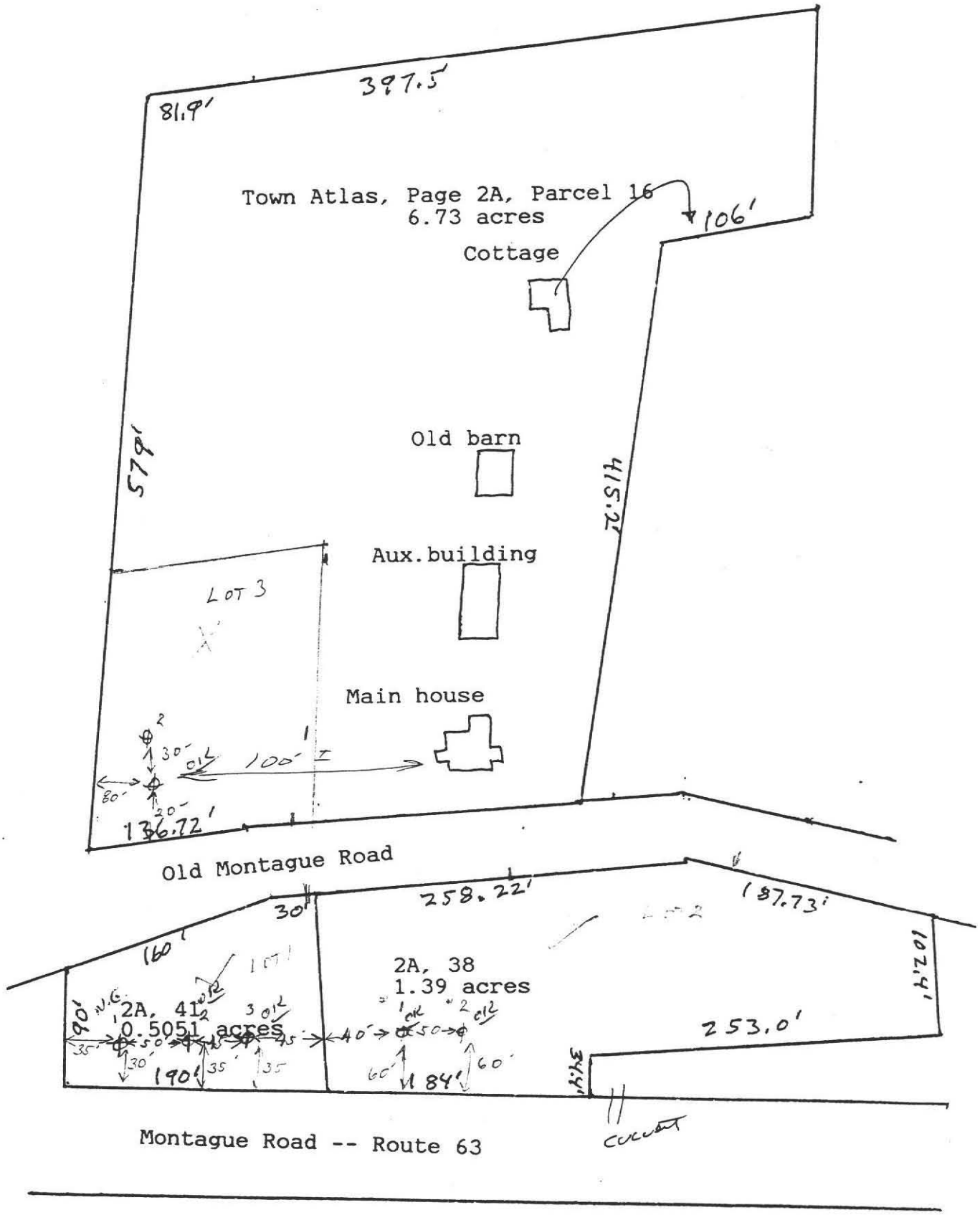
TOP	
SUB	

TOP	
SUB	

LOT #1



MAXSON PROPERTY, 401 Old Montague Road, Amherst



Percolation Test

Test No. PERC 1
Reading Time
Saturation (15 min) 25 gal
12
9 1/3 = .33
6
Perc Rate 2.0 Min/inch
Ground Elev. —
Depth of Hole 99"

Test No. PERC 2
Reading Time
Saturation (15 min)
12 350
9 1/3 = .33 351
6 352
Perc. Rate 2.0 Min/inch
Ground Elev.
Depth of Hole 60

Deep Test Pit/s TP1-2

Test Pit TP1-1

Depth	Soil Description
0-14"	OTS LOAM
14-27"	SILTY SUB SOIL
27-121	WELL GRADED GRAVEL Firm/mod.

Groundwater Depth 121 Elev.
Bedrock Depth — Elev.
Ground Elev.

Test Pit TP1-2

Depth	Soil Description
0-19	OTS LOAM
14-27	SILTY SUB SOIL
27-121	WELL GRADED GRAVEL

Groundwater Depth 121 Elev.
Bedrock Depth — Elev.
Ground Elev.

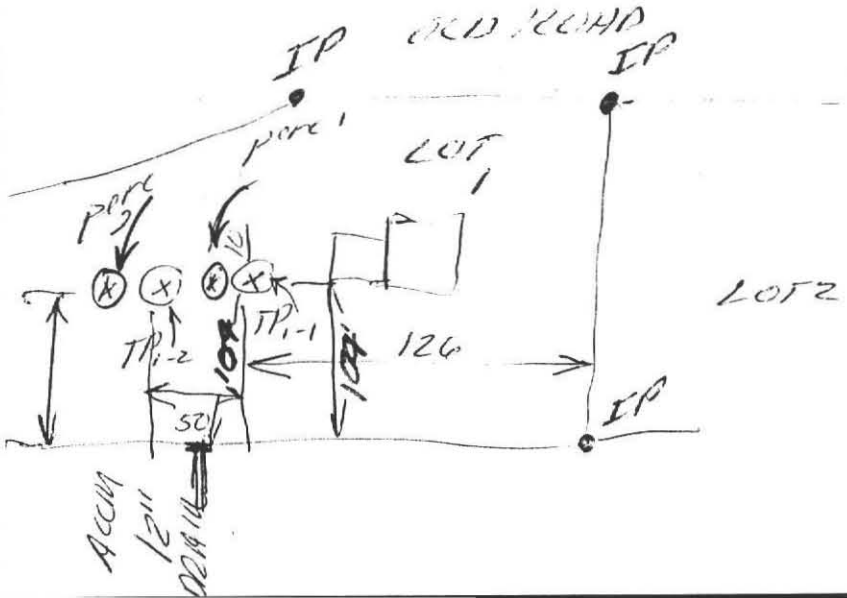
S.C.S. Soil Description GRAVEL Seasonal High Water Table? AS NOTED

Bench Mark: Elev. SET AT PROP PIN Description N.W. PROP PIN 200.00

COMMENTS:

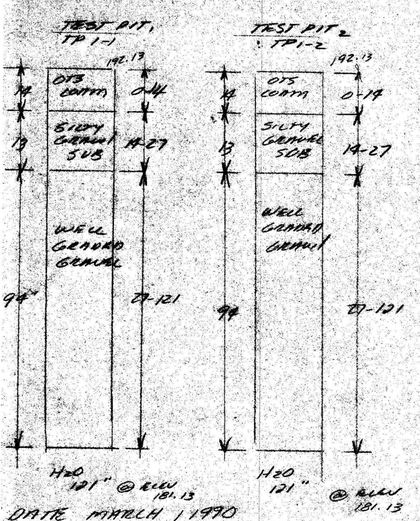
Date: MARCH 1 1990
Client: D.H JONES
OLD MONTAGUE MA
N. AMHERST MA
Engineer: W.J. SIERUTA
Witness: O. ZARZINSKI
Location of Perc: ZAROZINSKI
OLD MONTAGUE RD
N. AMHERST

6 BEDROOMS
2 BATHROOMS
ATTACHED

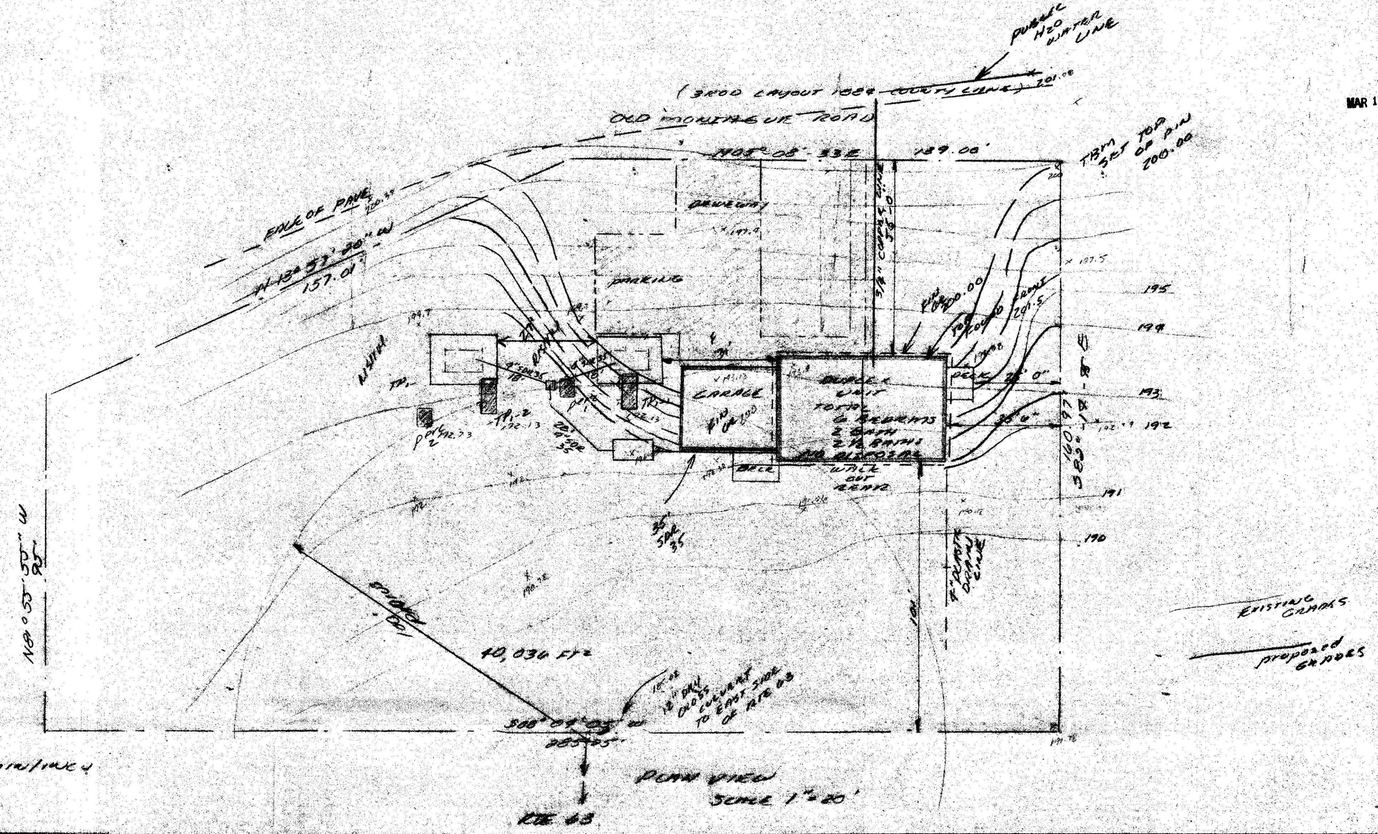


COMMONWEALTH OF MASSACHUSETTS
WILLIAM JOHN SIERUTA
CIVIL No. 30146
REGISTERED PROFESSIONAL ENGINEER

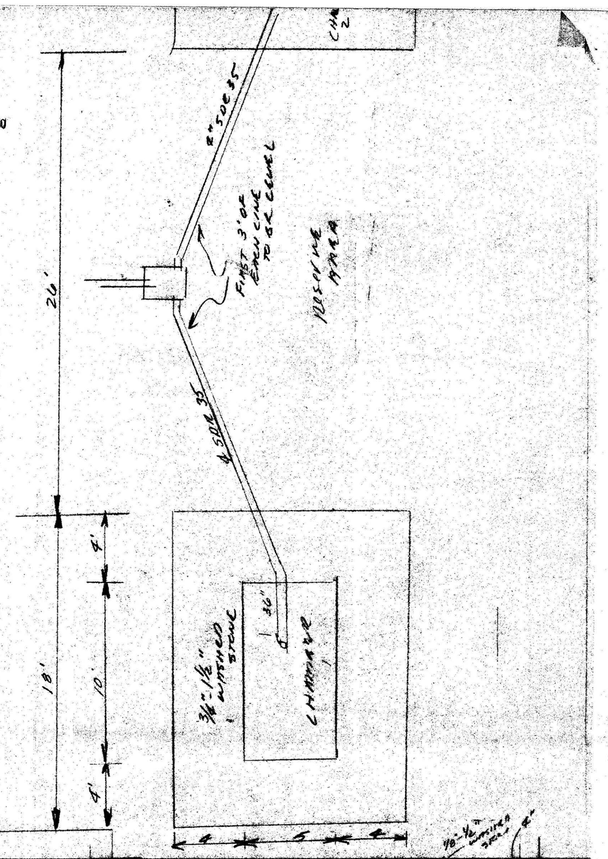
PERCOLATION TEST INFORMATION



DATE MARCH 1, 1990
D.H. JONES
OLD MONTAGUE RD
AMHERST MASS.
ENGR W.J. SIERUTA
WITNESS D. ZAROZINSKI 20 MARCH
PERMEABILITY
RETURN RATE
PERC 1 .33 min/inch PERC 2 .33 min/inch
DESIGN RATE
2.0 min/inch



MAR 12 1990



DESIGN INFORMATION

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH 310 CMR 15.0 AND LOCAL BOARD OF HEALTH REGULATIONS

FINISH GRADING TO REMAIN SIMILAR TO EXISTING PROFILE. ALL DISTURBED AREAS TO BE LOAMED AND SEEDED

DESIGN CRITERIA

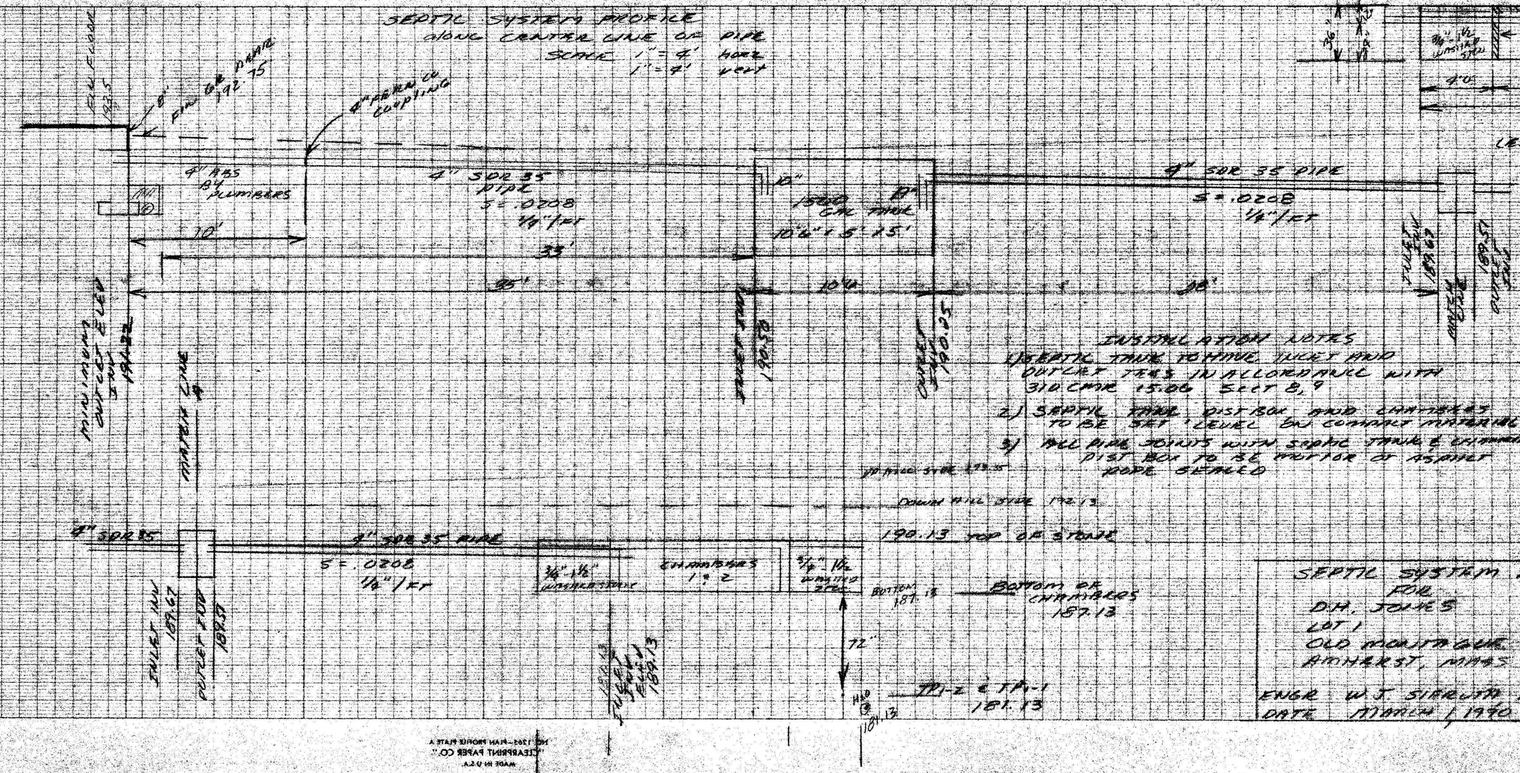
USE: DUPLEX RESIDENTIAL STRUCTURE
EACH UNIT
3 BEDROOMS
1½ BATH
WALK OUT W/ GARAGE
WITH FOUNDATION DRAINS
NO DISPOSAL
TOTAL 6 BEDROOMS
NO DISPOSAL

DESIGN FLOW: 310 CMR 15.02 & BOARD OF HEALTH REGULATIONS
6 x 110 GPD/BDRM x 1.25 = 825 GALS/DAY

SEPTIC TANK: 310 CMR 15.00
825 GALS x 150% = 1237
USE 1500 GAL TANK PRECAST CONC.
10½" x 5' x 5' — 54" FROM BASE TO INLET SEW ELEV.

LEACHING SYSTEM
DUE TO SOIL CONDITION AND DEPTH TO H2O A LEACHING PIT DESIGN IS TO BE USED
310 CMR 15.03
USE 2 LEACHING CHAMBERS
APT STONE ALL SIDES
EFFECTIVE DEPTH 24"
EFFECTIVE WIDTH 13'
EFFECTIVE LENGTH 18'
BOTTOM AREA 13' x 18' = 234 FT²
SIDE WALL AREA
13' x 2 x 2 + 18' x 2 x 2 = 124 FT²
TOTAL AREA
234 x 2 x 1.0 GAL/FT² + 124 x 2 x 2.5 =
468 + 620 = 1088 GAL/DAY
510
239
749

RETURN RATE 2.0 min/inch
BOTTOM 1.0 GAL/FT²
SIDE WALL 2.5 GAL/FT²

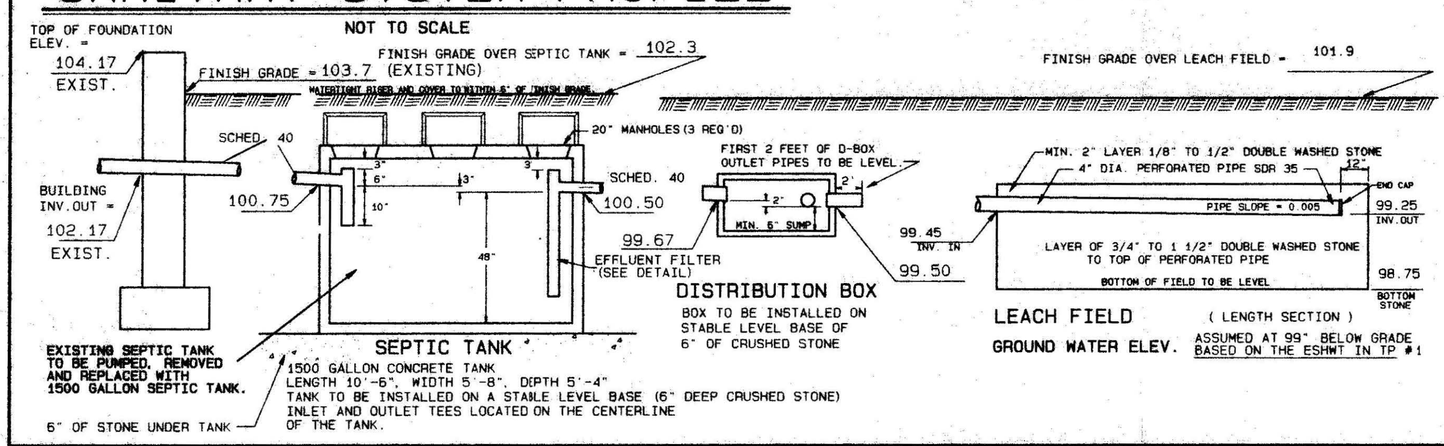


SEPTIC SYSTEM DESIGN
FOR
D.H. JONES
LOT 1
OLD MONTAGUE ROAD
AMHERST, MASS

ENGR W.J. SIERUTA P.E.
DATE MARCH 1, 1990

SANITARY SYSTEM PROFILE

NOT TO SCALE

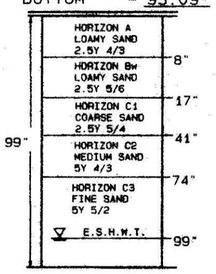


TEST PIT DATA

BOARD OF HEALTH WITNESS: DAVID ZAROZINSKI
DATE: AUGUST 26, 2002
SOIL EVALUATOR: DOUGLAS J. MacLEAY, P.E.

PERC TEST ID	PERC RATE (MIN/IN)	PERC DEPTH (IN)
1	2	36

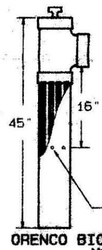
TEST PIT # 1
ELEV. TOP = 101.34
ESHWT = 93.09
OBS. H2O = NONE
BOTTOM = 93.09



NOTES:

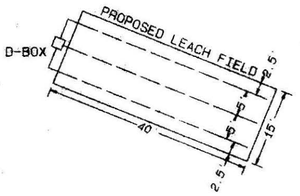
1. THIS PLAN IS FOR THE REPAIR OF AN EXISTING FAILED SEPTIC SYSTEM.
2. REMOVE TOPSOIL & SUBSOIL BENEATH THE LEACHING FIELD AND TO 5' ON ALL SIDES OF THE FIELD. REPLACE WITH FILL MATERIAL MEETING THE SPECIFICATIONS OF 310 CMR 15.255(3). (TITLE 5 310 CMR 15.255(5).)
3. TITLE 5 REQUIRES OBSERVATION OF THE INSTALLED SYSTEM BY THE DESIGN ENGINEER AND A BOARD OF HEALTH MEMBER OR 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 DEED OF LAND IN AMHERST MASSACHUSETTS.

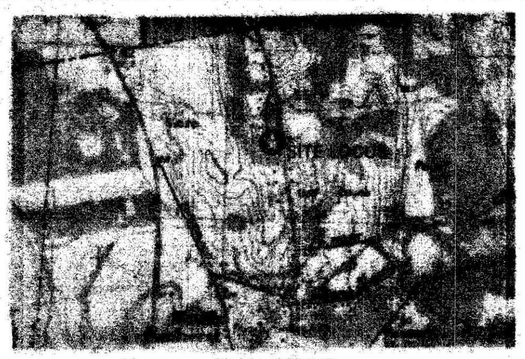


MAINTENANCE:
EACH TIME THE SEPTIC TANK IS PUMPED, LIFT OUT THE FILTER CARTRIDGE AND HOSE OFF THE SCREEN.
THE FILTER WILL CLOG IF IT IS NOT REGULARLY MAINTAINED.

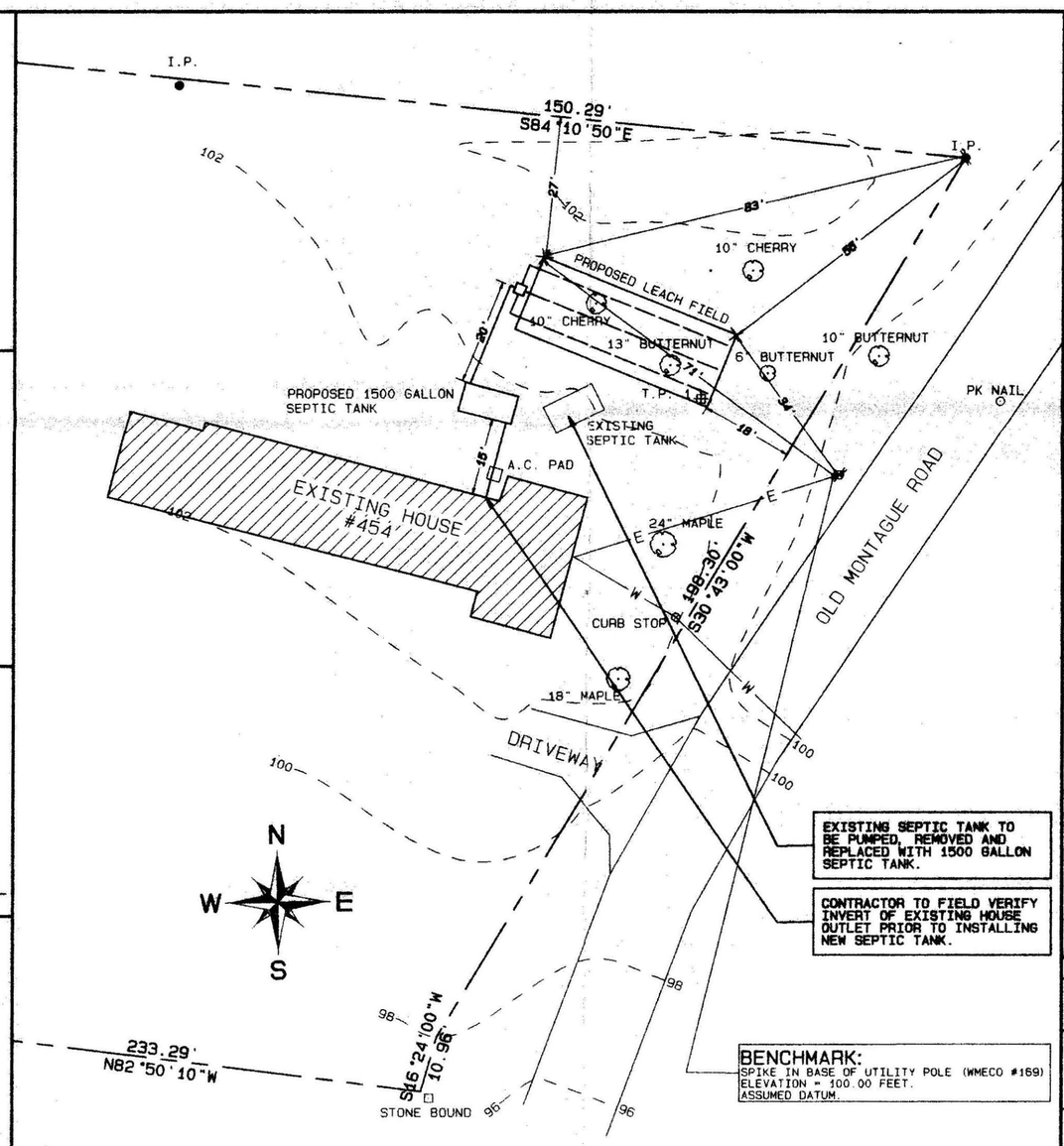
ORENCO BIOTUBE EFFLUENT FILTER
MODEL # FT0436
AVAILABLE FROM WASTEWATER TECHNOLOGIES, INC., 18 PRECAST ROAD, MILTON, VT. 05468
(802) 869-3219



SYSTEM DIMENSIONS
SCALE 1" = 20'



SITE LOCUS
SCALE 1" = 2000'



SITE PLAN
GRAPHIC SCALE 1"=20'
0 20 40 60

DESIGN DATA

DESIGN BASED ON SINGLE FAMILY RESIDENCE (EXPANSION)
DESIGN FLOW 110 GALLON PER DAY PER BEDROOM
TOTAL DESIGN FLOW 440 GALLON PER DAY.

SEPTIC TANK
440 GALLONS X 200% = 880 GALLONS DESIGN CAPACITY.
USE 1500 GALLON SEPTIC TANK.

LEACHING FIELD
BOTTOM:
40' LENGTH X 15' WIDTH = 600 SQUARE FEET.
600 SQ. FT. X .74 GAL. PER SQ.FT. = 444 GAL. LEACHING.
TOTAL LEACHING CAPACITY = 444 GALLONS PER DAY.

NOTE: PER TITLE 5, 310 CMR 15.240(6): A FIELD IS DESIGNED FOR THIS SITE DUE TO THE AREA LIMITATIONS CAUSED BY THE HOUSE LOCATION AND PROPERTY LINES.

GENERAL NOTES

1. 4" PIPE WITH TIGHT JOINTS TO BE USED IN DISPOSAL SYSTEM EXCEPT WHERE OTHERWISE NOTED.
2. 4" SDR 35 PERFORATED PIPE TO BE USED IN LEACHING AREA.
3. 1500 GALLON REINFORCED CONCRETE SEPTIC TANK.
4. AMHERST BOARD OF HEALTH MUST BE NOTIFIED WHEN SYSTEM IS NEARLY COMPLETE AND PRIOR TO BACKFILLING.
5. ELEVATIONS BASED ON ASSUMED DATUM
6. UNLESS OTHERWISE NOTED, ALL SYSTEM COMPONENTS SHALL BE INISTALLED IN ACCORDANCE WITH TITLE 5 OF THE STATE SANITARY CODE AND ANY APPLICABLE LOCAL RULES.
7. ANY CHANGE TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
8. THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE GRINDER.

LEGEND

- 100 — EXISTING CONTOURS
- 100 — PROPOSED CONTOURS
- 4" SDR 35 PERFORATED PIPE
- 4" SDR 35 SOLID PIPE
- WATER LINE
- FENCE
- EDGE OF WETLAND
- CENTERLINE STREAM
- PROPERTY LINE
- STONEWALL

SHEET NO. 1 OF 1.

REV.	DATE	BY	DESCRIPTION	APPR.
1.	9/16/02	J.H.	REVISED NOTES	D.M.

SCALE AS SHOWN
DRN. BY J.H.
CHECKED D.M.
APPROVED: COMMONWEALTH OF MASSACHUSETTS DOUGLAS J. MacLEAY CIVIL No. 31423 PROFESSIONAL ENGINEER

TITLE: SUBSURFACE SEWAGE DISPOSAL PLAN IN AMHERST, MASS.
FOR: JIM WALD
454 OLD MONTAGUE ROAD
DATE: AUGUST 27, 2002
JOB NO. 2002-071

MacLEAY ASSOCIATES, INC.
102 BRIDGE STREET, SHELBURNE FALLS, MA 01370
TELEPHONE: (413) 625-9774 FAX: (413) 625-9704