

MONTAGUE ROAD

TAYLOR BROOK
COAL POLLUTION

451

WILLIAM J. SIERUTA, P.E.
REGISTERED PROFESSIONAL ENGINEER
46 UPLAND ROAD
HOLYOKE, MASSACHUSETTS 01040
(413) 532-8525

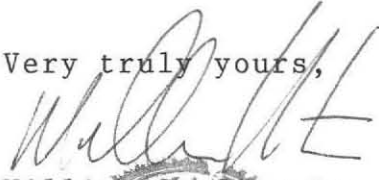
Dave Zarazinski
Board of Health
Town Hall
Amherst, MA. 01002

Subject: Stan Ingerston
451 Montague Road
Amherst, MA.
Septic system installation

The subject septic system has been installed in accordance with the approved plans, 310 CMR 15 and local Board of Health regulations.

If you need any additional information please do not hesitate to contact me.

Very truly yours,


William J. Sieruta, P.E.



cc: S. Ingerston

124

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FEE 160⁰⁰
4/23/96

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:

STAN INGERSTON 451 MONTAGUE RD Amherst
STAN INGERSTON 451 MONTAGUE RD Amherst
Richard Roberts
Owner Address
Installer

Type of Building 4 Bedroom
Dwelling — No. of Bedrooms Expansion Attic (NO) Garbage Grinder (NO)
Other — Type of Building Resident No. of persons Showers (2) — Cafeteria (NO)
Other fixtures FULL BMT
Design Flow 110 gallons per person per day. Total daily flow 110 x 4 x 125 = 5500 gallons
Septic Tank — Liquid capacity 500 gallons Length 10'6" Width 5' Diameter 5' Depth 5'
Disposal Trench — No. FIELD Width 24' Total Length 31' Total leaching area 744 sq. ft.
Seepage Pit No. Diameter Depth below inlet 36" Total leaching area sq. ft.
Other Distribution box (1) Dosing tank ()
Percolation Test Results Performed by WILLIAM SIERUT Date 4/23/96
Test Pit No. 1 5.0 minutes per inch Depth of Test Pit 54" Depth to ground water DWA
Test Pit No. 2 5.0 minutes per inch Depth of Test Pit 56" Depth to ground water DWA

Description of Soil BU SANDY LOAM 10YR 5-6 18-68 SAND CL LOAM SAND 10YR 5-3 48-89 FINE SAND CL SANDY LOAM 10YR 6-2 89-103 SAND LAYERED CL 10YR 5-4 103 RI REFUSAL NO H2O NO MOTTING

Nature of Repairs or Alterations — Answer when applicable TH-2 0-70TS AP SANDY LOAM 10YR 7/13 SUB BU SANDY LOAM 10YR 5-6 13-48 SAND CL LOAM SAND 10YR 5-3 48-66 FINE SAND CL SANDY LOAM 10YR 5-4 66-90 3-3 C3 SAND LAYERED CL 10YR 5-4 90 ROCK NO H2O NO MOTTING

Agreement: The undersigned agrees to install the aforescribed Individual Sewage Disposal System in accordance with the provisions of TITLE 5 of the State Environmental 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 Stan Ingerston 5/10/96
Application Approved By David Ziegler for Inspr 5-20-96
Application Disapproved for the following reasons:

Permit No. 96-2 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 Richard Roberts

at 451 MONTAGUE RD
has been installed in accordance with the provisions of TITLE 5 of The State Environmental Code as described in the application for Disposal Works Construction Permit No. 96-2 dated

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. 96-2

Disposal Works Construction Permit

FEE 160⁰⁰
4/23/96

Permission is hereby granted STAN INGERSTON
to Construct () or Repair (✓) an Individual Sewage Disposal System
at No. 451 MONTAGUE RD

as shown on the application for Disposal Works Construction Permit No. 96-2 Dated 5/20/96

DATE 5/20/96 Board of Health David Ziegler for Inspr

CHECK OR FILL IN WHERE APPLICABLE

AMERICAN MEDICAL ASSOCIATION

PUBLISHED WEEKLY

CHICAGO, ILL., U.S.A.

VOLUME 12

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On-site Review

Deep Hole Number TP-1 Date: 4/23/96 Time: 8:00 Weather Sunny Clear
 Location (identify on site plan) _____
 Land Use LAWN Slope (%) 1% Surface Stones NOTED OUT CRIP
 Vegetation LAWN
 Landform TERRACE OUT CRIP
 Position on landscape (sketch on the back) _____
 Distances from:
 Open Water Body 210 feet Drainageway 210 feet
 Possible Wet Area 210 feet Property Line 25 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)
8	Ap	Sandy loam	10YR 3/3		
18	Bw	"	10YR 5/6		
68	C ₁	Loamy sand	10YR 5/6		
89	C ₂	Sandy loam	10YR 6-2		STRUCTURAL CASE
103	C ₃	Loamy sand	10YR 5-4		10% Stones
103	R ₁	Rock	10YR 6-1		Rock

Parent Material (geologic)

Depth to Bedrock:

Depth to Groundwater:

Standing Water in the Hole:

Weeping from Pit Face:

Estimated Seasonal High Ground Water:

On-site Review

Deep Hole Number (2) Date: _____ Time: _____ Weather _____
 Location (identify on site plan) _____
 Land Use _____ Slope (%) _____ Surface Stones _____
 Vegetation SAME AS 1
 Landform _____
 Position on landscape (sketch on the back) _____
 Distances from:
 Open Water Body _____ feet Drainageway _____ feet
 Possible Wet Area _____ feet Property Line _____ 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)
7	Ap	Sandy loam	10YR 3/3		
13	Bw	Loamy sand	10YR 5/6		
40	C ₁	Loamy sand	10YR 6-2		
66	C ₂	Sandy loam	10YR 6-2		
90	C ₃	Loamy sand	10YR 5-4		
90	R ₁	Rock	6-1		MARSHALL BLOCK

Parent Material (geologic)

Depth to Bedrock:

Depth to Groundwater:

Standing Water in the Hole:

Weeping from Pit Face:

Estimated Seasonal High Ground Water:

Determination for Seasonal High Water Table Town WaterMethod 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 Number _____ Reading Date _____ Index well level _____
 Adjustment factor _____ Adjusted ground water level _____

Percolation Test		
Date: <u>4/23/88</u>		Time: <u>8:50</u>
Observation Hole #	<u>TP 1</u>	<u>TP 2</u>
Depth of Perc	<u>54"</u>	<u>52"</u>
Start Pre-soak	<u>8:50</u>	<u>8:50</u>
End Pre-soak	<u>9:05</u>	<u>9:05</u>
Time at 12"	<u>9:05</u>	<u>9:05</u>
Time at 9"	<u>9:06</u>	<u>9:08</u>
Time at 6"	<u>9:07</u>	<u>9:11</u>
Time (9"-6")		
Rate Min./Inch	<u>less</u> <u>- 2</u>	<u>less 2</u>

Site Suitability Assessment: Site Passed ☒ Site Failed ☐

Additional Testing Needed: _____

Performed By: [Signature]

Certification Number: _____

Witnessed By: [Signature]

Comments: _____

FORM 12 - PERCOLATION TEST

Location Address or Lot No. 451 MONTAGUE ROAD

COMMONWEALTH OF MASSACHUSETTS

, Massachusetts

Percolation Test*		
Date:	<u>4/23/94</u>	Time: <u>8:50</u>
Observation Hole #	<u>TP1-2</u>	<u>TP1-1</u>
Depth of Perc	<u>54"</u>	<u>56"</u>
Start Pre-soak	<u>8:50</u>	<u>8:50</u>
End Pre-soak	<u>9:05</u>	<u>9:05</u>
Time at 12"	<u>9:05</u>	<u>9:0</u>
Time at 9"	<u>9:06</u>	<u>9:08</u>
Time at 6"	<u>9:07</u>	
Time (9"-6")	<u>1/3 = .33</u>	<u>3/3 = 1.0</u>
Rate Min./Inch	<u>2.0</u>	<u>2.0</u>



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

Site Passed ☒ Site Failed ☐

Performed By: W. J. SIERUTA PE

Witnessed By: D. ZAROWSKI BOH

Comments:

TOWN WATER

125% Repair

60" separation

33" DOWN TO OUTLET IN V. TOP TILE



DEP APPROVED FORM - 12/07/95

REMOVAL OF DISPOSAL CHUCK TEES & BARRIERS AT

Percolation Test

Test No. perc 1 24765
 Reading _____ Time 850-905
 Saturation (15 min) 905
12 _____
11 _____
10 _____
9 _____
8 _____
7 _____
6 _____
 $\frac{1}{3} = .33$
 600" separation required
 5.0 Min/Inch
 Perc Rate _____
 Ground Elev. _____
 Depth of Hole 54"

Test No. perc 2
 Reading _____ Time _____
 Saturation (15 min) 850-905
12 _____
11 _____
10 _____
9 _____
8 _____
7 _____
6 _____
 $\frac{3}{3} = 1.0$
 5.0 Min/Inch
 Perc. Rate _____
 Ground Elev. _____
 Depth of Hole 56"

Test Pit TP1-1
 Depth Soil Description
0-8 OTS LOAM
8-18 SANDY SUB SOIL
18-68 SAND
68-89 SILTY SAND
89-103 SAND
 Groundwater Depth _____ Elev. _____
 Bedrock Depth 103 Elev. ROCK
 Ground Elev. EHWT 103

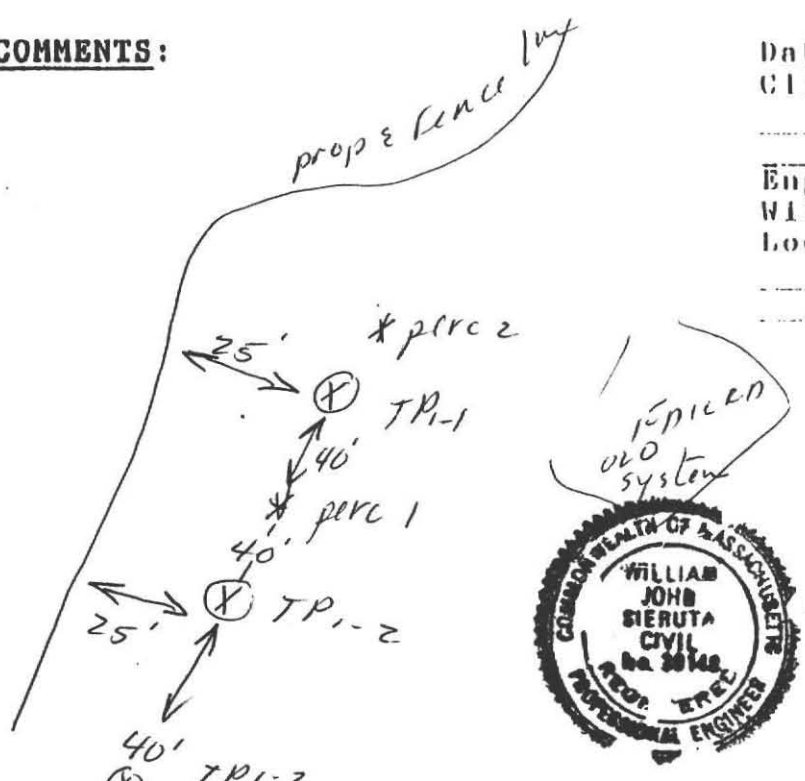
Test Pit TP1-2
 Depth Soil Description
0-7 OTS LOAM
7-13 SANDY SUB SOIL
13-48 SAND
48-66 FINE SAND/SILTY SAND
66-90 SAND
 Groundwater Depth 62 Elev. _____
 Bedrock Depth 90 Elev. Bedrock
 Ground Elev. EHWT 90

S.C.S. Soil Description SAND Seasonal High Water Table? 103" / 90"

Bench Mark: Elev. OUTLET Description IN

COMMENTS:

Date: APRIL 23 1996
 Client: STAN INGERSTON
451 MONTAGUE ROAD
AMHERST MASS
 Engineer: WJ. SIERUTA P.E.
 Witness: D. ZAROZINSKI BOH
 Location of Perc: D. ZAROZINSKI BOH



451 MONTAGUE RD
Amherst. MA

200.00
TBM TOP OF
TILL ON SEPTIC
OUTLET
33" DOWN

Location Address or Lot No. _____

Determination for Seasonal High Water TableMethod Used:

- ☒ Depth observed standing in observation hole None inches
☒ Depth weeping from side of observation hole None inches
☐ Depth to soil mottles None inches
☐ Ground water adjustment _____ feet

Index Well Number _____ Reading Date _____ Index well level _____

Adjustment factor _____ Adjusted ground water level _____

TP-1
 EHW 103

TP-2
 90"

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 5/1/96 (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 [Signature] Date 4/23/96

Date 4/23/96

Commonwealth of Massachusetts

Amherst, MASS, Massachusetts

Site Suitability Assessment for On-site Sewage Disposal

Performed By: William SIERUTA

Certification Number: _____

Witnessed By: D. ZARAZINSKI BOH

Location Address or Lot No. <u>STAN INGERSTON</u> <u>451 MONTAGUE ROAD</u> <u>RTE 63</u> <u>Amherst MASS</u>	Owner's Name, Address and Tel. # <u>STAN INGERSTON</u> <u>451 MONTAGUE RD</u> <u>RTE 63</u> <u>Amherst MASS</u>
--	---

New Construction ☐

Repair ☒

Office Review

Published Soil Survey Available: No ☐ Yes ☒

Year Published _____ Publication Scale _____

Drainage Class _____ Soil Limitations _____

Soil Map Unit _____

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) _____

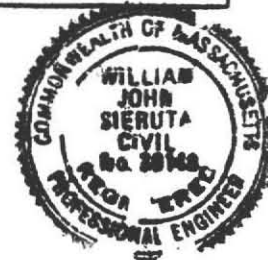
Wetlands Conservancy Program Map (map unit) _____

wetlands 210 FT
AWAY VEGET
Stream.

Current Water Resource Conditions (USGS): _____ Month _____

Range : Above Normal ☒ Normal ☐ Below Normal ☐

Other References Reviewed: _____



On-site Review

Deep Hole Number *TP1-1* Date: *4/23/96* Time: *8:00* Weather *SUNNY*
 Location (Identify on site plan) *see attached*
 Land Use *LAWN* Slope (%) *1%* Surface Stones *noled out crops*
 Vegetation *residential*
 Landform *LAWN*
 Landform *Feet are cut WASH*
 Position on landscape (sketch on the back) *see sketch*
 Distances from:
 Open Water Body *210'* feet Drainageway *210'* feet
 Possible Wet Area *210'* feet Property Line *25'* feet
 Drinking Water Well feet Other

DEEP OBSERVATION HOLE LOG

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Moisture	Other (Structure, Stones, Boulders, Consistency, etc.)
<i>0-8</i>	<i>AP</i>	<i>SANDY LOAM</i>	<i>10YR 3-3</i>		
<i>8-12</i>	<i>BW</i>	<i>SANDY LOAM</i>	<i>10YR 5-6</i>		
<i>18-60</i>	<i>C1</i>	<i>LOAMY SAND</i>	<i>10YR 5-3</i>		
<i>68-89</i>	<i>C2</i>	<i>SANDY LOAM</i>	<i>10YR 6-2</i>		
<i>89-103</i>	<i>C3</i>	<i>LOAMY SAND</i>	<i>10YR 5-4</i>		
<i>103</i>	<i>R1</i>	<i>Rock</i>	<i>10YR 6-1</i>		



STRUCTURE LESS
MASSIVE 10% BLOCKY STONE
STRUCTURE LESS
ROCK

Parent Material (geologic)

OUTWASH TERRACE Depth to Bedrock: *103*

Depth to Groundwater:

Standing Water in the Hole: *NONE* Weeping from Pit Face: *NONE**DNA*

Estimated Seasonal High Ground Water:

FEHWT 103"

On-site Review

Deep Hole Number TP-2 Date: 4/23/96 Time: 800 AM Weather SUNNY WARM
 Location (Identify on site plan) -
 Land Use residential Slope (%) 1% Surface Stones outcrops noted
 Vegetation LAWN
 Landform Terrace OUTWASH
 Position on landscape (sketch on the back) see sketch
 Distances from:
 Open Water Body 210⁺ feet Drainageway 210⁺ feet
 Possible Wet Area 210⁺ feet Property Line 25 feet
 Drinking Water Well _____ feet Other _____

**DEEP OBSERVATION HOLE LOG**

Depth from Surface (Inches)	Soil Horizon	Soil Texture (USDA)	Soil Color (Munsell)	Soil Moisture	Other (Structure, Stones, Boulders, Consistency, % Gravel)
0-7	AP	SANDY LOAM	10YR3-3		
7-13	BW	LOAMY SAND	10YR5-6		
13-40	C1	LOAMY SAND	10YR 5-3		STRUCTURELESS MASSIVE
40-66	C2	SANDY LOAM	10YR 6-2		MASSIVE BLOCKY
66-90	C3	LOAMY SAND	10YR 5-4	NONE NOTED	STRUCTURELESS
90	R1	ROCK	10YR 6-1		MASSIVE

Parent Material (geologic)

OUTWASH SAND

Depth to Bedrock: 90

Depth to Groundwater:

Standing Water in the Hole: NONE Weeping from Pit Face: NONE

DNA

Estimated Seasonal High Ground Water:

EHW 90"

PERCOLATION TEST INFORMATION

TEST PIT TPI-1

TEST PIT TPI-2

8	OTS LOAM	AP SANDY LOAM 104R 3-3	0-8	7	OTS LOAM	AP SANDY LOAM 104R 3-3	0-7
10	SANDY SUB SOIL	BW SANDY LOAM 104R 5-10	8-18	6	SAND SUB SOIL	BW SANDY LOAM 104R 5-10	7-13
50	MED SAND	C LOAMY SAND TO SAND MED 104R 5-3	18-68	35	MED SAND	C LOAMY SAND 104R 5-3	13-48
21	FINE SAND & SILT	C2 SANDY LOAM 104R 6-2	68-89	18	FINE SAND	C SANDY LOAM 104R 5-4	48-66
14	SAND MED LAYERED	C3 LOAMY SAND 104R 5-4	89-103	24	MED SAND LAYERED	C3 LOAMY SAND 104R 5-4	66-90
0	ROCK	R	103	0	ROCK	R	0

NO H2O
NO MOTTLING

NO H2O
NO MOTTLING

DATE: APRIL 23 1990

ENGR: WJ SIERUTA PEREVAL

WITNESS: D ZARDZINSKI BOH

PERMEABILITY TEST

PERC TEST 1

DEPTH 54"

ACTUAL RATE .33 MIN/INCH

DESIGN RATE 5.0 MIN/INCH

60" SEPARATION REQUIRED

PER 310 CMR 15.212

PERC TEST 2

DEPTH 56"

ACTUAL RATE 1.0 MIN/INCH

DESIGN RATE 5.0 MIN/INCH

60" SEPARATION REQUIRED

PER 310 CMR 15.212

DESIGN INFORMATION

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

FINISH GRADING TO BE AS SHOWN ON PLAN VIEW
ALL DISTURBED AREAS TO BE COMBED AND SEED

DESIGN CRITERIA

USE: EXISTING 4 BEDROOM SINGLE FAMILY RESIDENTIAL STRUCTURE
DISPOSAL TO BE REMOVED
FULL BATH SEPTIC WALK OUT

DESIGN FLOW: 310 CMR 15.203

110 GALS X 4 BEDROOMS X 125% = 550 GALS

DISPOSAL UNIT TO BE REMOVED

SEPTIC TANK: REQD

550 GALS X 200% = 1100 GALS

MINIMUM TANK SIZE PERMITTED

1500 GALS

EXISTING TANK 1500 GAL TANK

10'0" X 5'0"

* TANK TO BE INSPECTED TO ASSURE

INLET & OUTLET TEES ARE IN PLACE

LANDING SYSTEM

DUE TO SOIL CONDITIONS A LEACH

FIELD DESIGN IS TO BE USED PER 310 CMR 15.252

EFFECTIVE WIDTH 24"

EFFECTIVE LENGTH 31'

EFFECTIVE DEPTH 6"

BOTTOM AREA

31' X 24' = 744 FT²

TOTAL PERMEABILITY

744 X .74 = 551

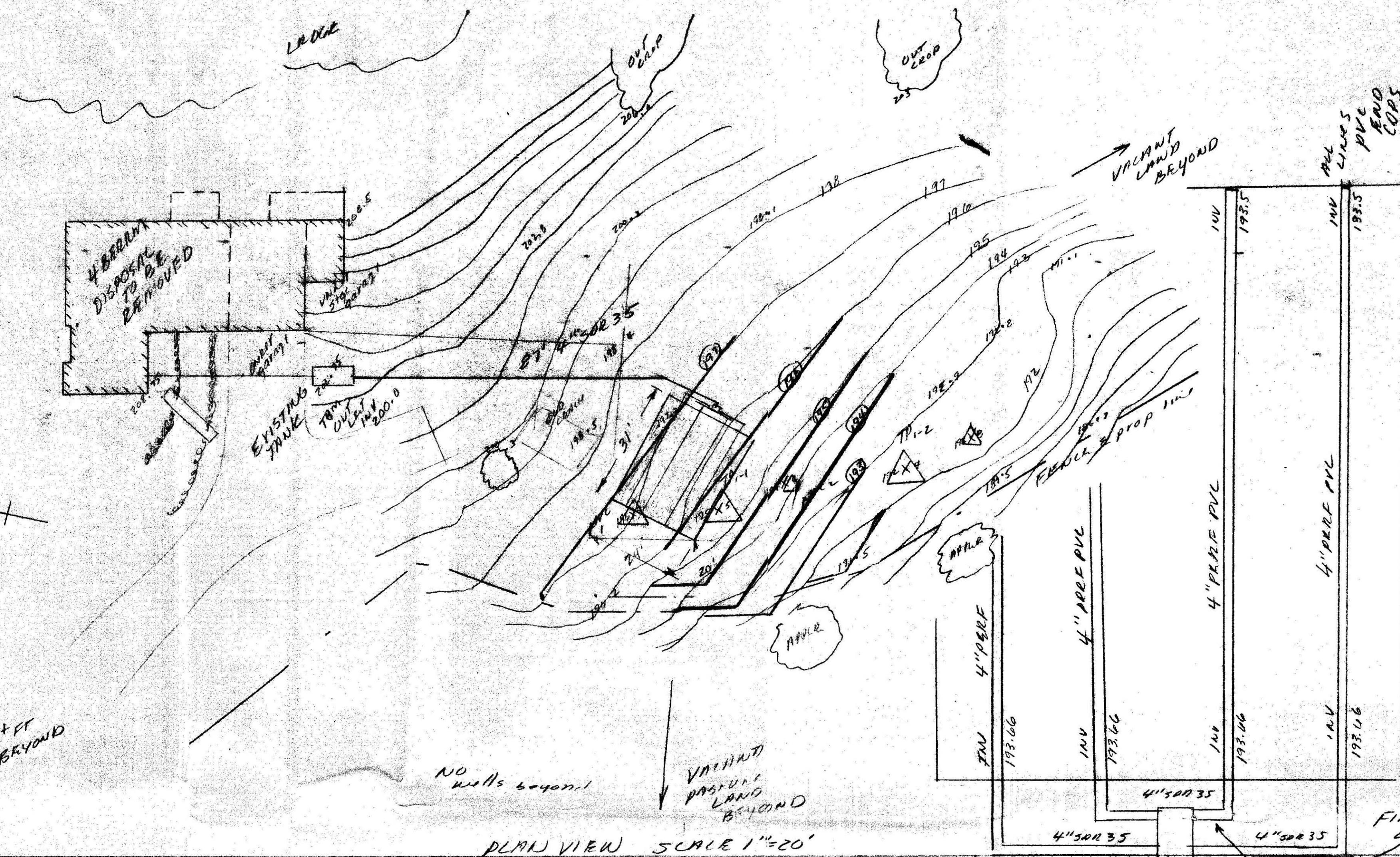
BOTTOM RESIDUAL

AREA 174 GAL/FT²

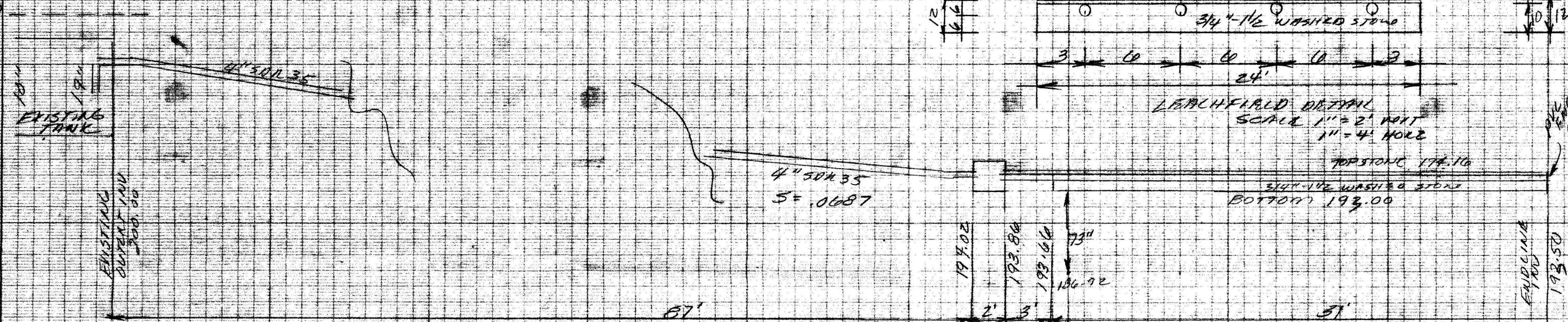
EXCEEDS 310 CMR 15.203

AND MEETS BOH

REGULATION



SEPTIC SYSTEM PROFILE SCALE 1" = 4'



INSTALLATION NOTES

1. EXISTING TANK TO BE PUMPED & CLEANED
2. EXISTING TANK TO HAVE INLET AND OUTLET TEES INSPECTED AND REPLACED IN ACCORDANCE WITH 310 CMR 15.227 SLOTS IF NEEDED
3. ALL JOINTS WITH TANK & DIST. BOX TO BE ASPHALT ROPE SEALED
4. FINISH GRADING TO BE AS SHOWN

SLOPE OFFSET

CALC
310 CMR 15.210
REQD FOR SLOPES OF
1/3 OR LESS
15 FT
AVAIL ABLE TO
BAGGOUT ELEV
174.16

SEPTIC SYSTEM PLAN
FOR
STAN INGERSTON
451 MONTAGUE ROAD
ATE 03
AMHERST, MASS

ENGR WJ SIERUTA PE
DATE 5-10-90

