

BARCO SYSTEMS, INC.

10 ILENE COURT UNIT 11-14

HILLSBOROUGH BUSINESS CENTER

BELLE MEAD, NEW JERSEY 08502

(908) 359-7131

INVOICE NO.

WORK ORDER

6633

CUSTOMER NO.

W03704

BILL TO:

WARNER, NANCY
6 UNIVERSITY AVENUE
MERCERVILLE, NJ 08619

SHIP TO:

GERACI, LUCIA
1165 BEAR TAVERN ROAD
HOPEWELL TOWNSHIP, NJ

DATE 09/28/94		SHIP VIA MERCER		F.O.B. TRUCK# 2		TERMS 1/3 DEPOSIT BAL COD			
PURCHASE ORDER NUMBER GERACI/PTC		ORDER DATE 10/17/94		SALES PERSON DK		OUR ORDER NUMBER DISP			
QUANTITY		ITEM NUMBER		DESCRIPTION		UNIT PRICE		EXTENDED PRICE	
1		JPTC03		CLEAN 550 TANK-PETRO FILL					
IN COMPLIANCE WITH N.J.A.C. 7:26-7.7 CONCERNING CERTAIN LIQUID HAZARDOUS WASTES, YOU ARE ADVISED THAT APPROXIMATELY 65 GALLONS WAS REMOVED FROM THE ADDRESSED SITE AND WILL BE PROCESSED IN ACCORDANCE WITH SAID REGULATIONS. ** I CERTIFY THAT THE WASTE OFFERED DOES NOT CONTAIN P.C.B. OR ANY HAZARDOUS CONSTITUENTS OTHER THAN WASTE PETROLEUM AND THAT NO EPA IDENTIFICATION NUMBER HAS BEEN ISSUED FOR THE ADDRESSED SITE									
QTY. REQ		SHIPPED		B.O.		CUSTOMER/REPRESENTATIVE'S SIGNATURE		TECHNICIAN'S SIGNATURE	
						X721		X724	
						X722		X726	
						NJ HAZWASTE NUMBER:			
						NonTaxable Subtotal		.00	
						Taxable Subtotal		.00	
						Tax		.00	
						Total Order		.00	

BARCO SYSTEMS, INC.



CERTIFICATE
OF
ABANDONMENT

PRESENTED TO:

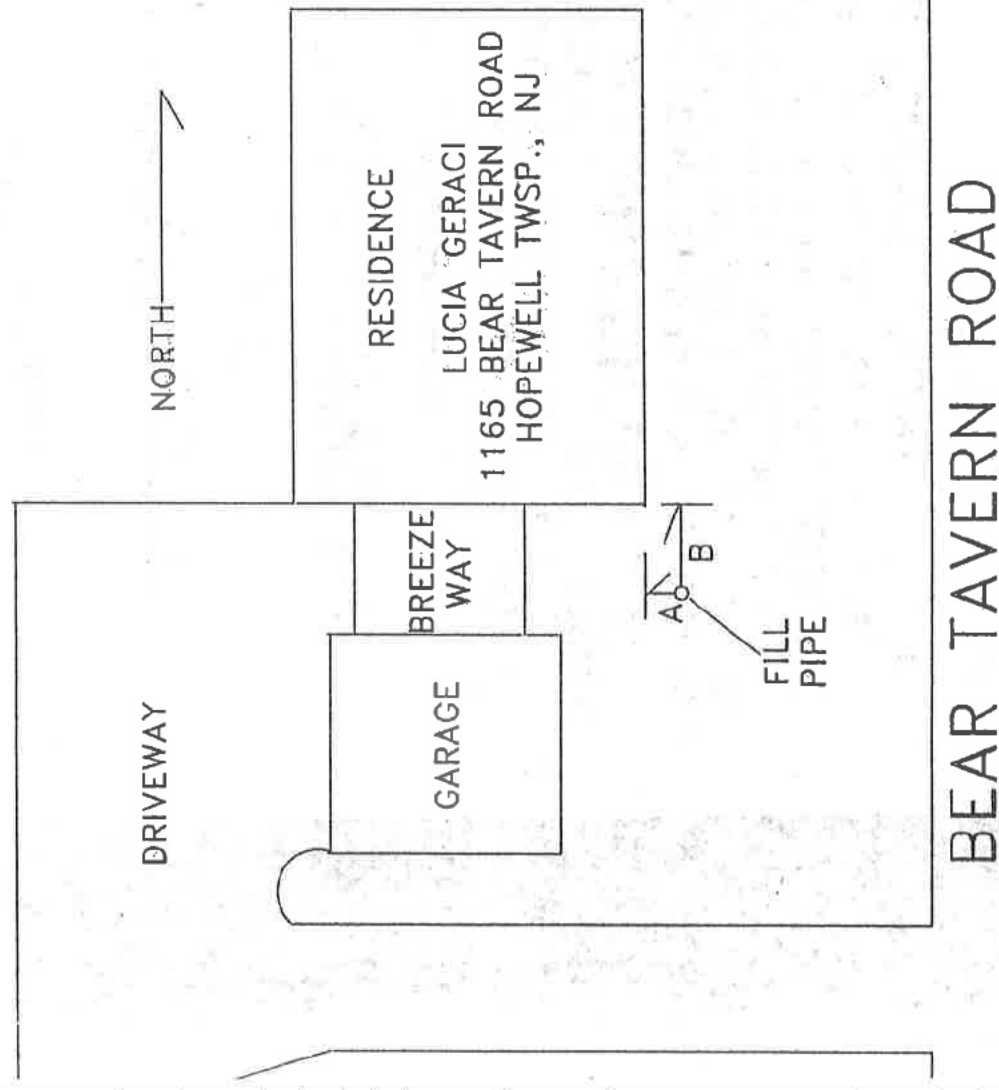
LUCIA GERACI
THIS CERTIFIES THAT THE 550
GALLON CAPACITY FUEL OIL UNDERGROUND
STORAGE TANK SYSTEM LOCATED AT
1165 BEAR TAVERN ROAD, HOPEWELL TWP., NJ
HAS BEEN PERMANENTLY CLOSED IN PLACE
IN ACCORDANCE WITH REQUIREMENTS
OF THE USEPA, NJDEPE/BUST, NJDCA, API,
NEPA, AND BOCA. ISSUED ON THIS

EIGHTEENTH DAY OF OCTOBER IN THE
YEAR 1994.

X Thomas Barry
CERTIFIED PETROFILL TECHNICIAN

LOCATION DIAGRAM ON REVERSE SIDE

BARCO SYSTEMS, INC.
10 ILENE CT., UNIT # 11
BELLE MEAD, NEW JERSEY 08502
(908) 359-7131



ORIGINAL POSITION
FUEL OIL FILL PIPE
A = 1' 9"
B = 5' 2"

DATE: 10-18-94
CREW: 9 BM-RD
DRAWN: JLM
APPR: TPB
SCALE: NONE

STANDARD FORMS FOR
SUBMISSION OF SOILS/ENGINEERING DATA

COUNTY/MUNICIPALITY HOPEWELL TWP

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 1 - General Information

1. Type of Permit Needed (Check applicable categories):

- ☐ New Construction ☒ Alteration/No Expansion or Change of Use
☐ Alteration/Expansion or Change in Use
☐ Alteration/Malfunctioning System
☐ Deviation from Standards ☐ Repairs to Existing System

2. Location of Project:

Municipality HOPEWELL Block No. 98 Lot No. 98

Street Address 1165 Bear Tavern Road Zip

3. Name of Applicant (print): JACKIE FASSBENDER

4. Applicant's Present Address: [REDACTED]

5. Applicant's Phone Number: [REDACTED]

6. Type of Facility:

- ☒ Residential
☐ Commercial/Institutional

Specify Type of Establishment:

7. Type of Wastes to be Discharged:

- ☒ Sanitary Sewage
☐ Industrial Wastes
☐ Other - Specify Type

8. Other Approvals/Certification/Waivers/Exemptions (Attach to Application):

_____ Pinelands Commission

_____ U.S. Army Corps of Engineers

_____ NJDEPE - Bureau of Floodplain Management

_____ Other - Specify: _____

9. I hereby certify that the information furnished on Form 1 of this application is true. I am aware that false swearing is a crime in this State and subject to prosecution.

Signature of Applicant _____ Date: _____

FOR AGENCY USE ONLY

_____ Application Denied - Reason for Denial/Citation of Rules Violated: _____

☒ Application Approved

_____ Application Approved Subject to Approval by NJDEPE

Date of Action 8/30/94 Signature of Authorized Agent [Signature]

Name and Title George Kiesel - Senior Sanitarian

COUNTY/MUNICIPALITY HOPEWELL TWP

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2a - General Site Evaluation Data Lot 98 Block 98

1. Name of Site Evaluator (print): BRIAN FUNARI

2. Business Address of Site Evaluator: VAN NOTE HARVEY ASSOC.

777 ALEXANDER RD PRINCETON NJ.

3. Business Phone Number of Site Evaluator: (609) 987-2323

4. Special Site Limitations Identified (Check Appropriate Categories):

 Floodplains Bedrock Outcrops Wetlands
 Excessively Stony Disturbed Ground Sink Holes
 Sand Dunes Steep Slopes
 Other - Specify

5. Soil Logs - Enter on Form 2b - Use one sheet for each soil log.

6. Considerations Relating to Disturbed Ground:

a. Type of Disturbance (Check Appropriate Categories):

 Filled Area Excavated Area Re-graded Area
 Subsurface Drains Other-Specify

b. Pre-existing Natural Ground Surface

Elevation Relative to Existing Ground Surface

Method of Identification

c. Suitability of Disturbed Ground

 Unsuitable: Objects Subject to Disintegration or Change in Volume

 Excessively Coarse

 Proctor Test Performed - % Standard Proctor Density =

7. Hydraulic Head Test:

- a. Hydraulically Restrictive Horizon: Depth Top to Bottom _____
- b. Piezometer A: Depth to Bottom _____ Depth of Water Level (24 hrs) _____
- c. Piezometer A: Depth to Bottom _____ Depth of Water Level (24 hrs) _____
- d. Witnessed by _____ Signature _____ Date _____

8. Attachments (Check Items Included):

☒ Site Plan

_____ Key Map Showing Location of Site on U.S.G.S. Quadrangle or Other Accurate Map

_____ Key Map Showing Location of Site on U.S.D.A. Soil Survey Map

_____ Other - Specify _____

9. I hereby certify that the information furnished on Form 2a of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Evaluator Bryan Lucas Date: 8-5-94

Signature of Professional Engineer Robert A. Hougl License # 33444

COUNTY/MUNICIPALITY Hopewell Twp

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 2b - Soil Log and Interpretation Lot 98 Block 98

1. Log Number 1 Method (Check One): ☒ Profile Pit Boring

2. Soil Log

Depth Munsel Color Name and Symbol; Estimated Textural Class;
(inches) Estimated Volume % Coarse Fragment, If Present: Structure;
Top-Bottom Moist or Dry Consistence; Mottling - Abundance, Size and Contrast, If
Present

SEE ATTACHED

3. Ground Water Observations:

☒ Seepage - Indicate Depth 47"

Pit/Boring Flooded - Depth after _____ Hours _____

4. Soil Limiting Zones (Check Appropriate Categories):

☒ Fractured Rock Substratum - Depth to Top 47"

_____ Massive Rock Substratum - Depth to Top _____

_____ Excessively Coarse Horizon - Depth Top to Bottom _____

_____ Excessively Coarse Substratum - Depth to Top _____

☒ Hydraulically Restrictive Horizon - Depth Top to Bottom 4" - 28"

_____ Hydraulically Restrictive Substratum - Depth to Top _____

_____ Perched Zone of Saturation - Depth Top to Bottom _____

_____ Regional Zone of Saturation - Depth to Top _____

5. Soil Suitability Classification:

6. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Evaluator

Brian J. Jarama Date: 8-5-94

Signature of Professional Engineer

Robert A. Hough License # 33444

FASSBENDER
HOPEWELL TOWNSHIP BLOCK 98, LOT 98
SOIL LOG
JULY 29, 1994

VNHA #2-22-31828-30

0 - 4"	Topsoil
4" - 28"	DARK REDDISH BROWN (5 yr 3/3) silt loam 5% gravel, no mottles, subangular blocky structure, moderate moist, friable, few roots, gradual smooth boundary.
28" - 47"	DARK REDDISH BROWN (5 yr 3/3) silt loam 5% gravel, few fine faint yellowish brown mottles 28" - 36", subangular blocky structure, moderate, moist, no roots, gradual smooth boundary.
47" - 106"	DARK REDDISH BROWN (5 yr 3/3) silt loam 70% RED angular shale, no mottles, subangular blocky structure, moderate, moist to saturated, friable, no roots, boundary not observed.

Machine refusal @ 106"
Seepage @ 47"

COUNTY/MUNICIPALITY Hope we 11 Twp

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 3a - Soil Permeability Data Lot 98 Block 98

Assign a number for each test and a letter for each test replicate. Show test data and calculations on Form 3b, 3c 3d, 3e, 3f, or 3g. Use one sheet for each separate test or test replicate.

1. Summary of Data - Enter data for each test replicate on a separate line.

Type of Test	Test (Number)	Replicate (Letter)	Depth (Inches)	Result*
Pit Ba.1	1	-	101"	K-Z

*Test tube permeameter, pit-bailing, and piezometer test report results in inches per hour. For Soil permeability class rating give soil permeability class number. For percolation test report result in minutes per inch. For basin flooding test report result as positive, if basin drains completely within 24 hours after second filling, negative otherwise.

2. Design Permeability/Percolation Rate: Specify Test Number _____

_____ Average of Test Replicates _____ Single Replicate

_____ Slowest of Replicates

3. Type of Limiting Zone Identified _____ Test Number _____

4. Attachments (Check Items Included):

Form 3b - Tube Permeameter Test Data - Number of Sheets _____
Form 3c - Soil Permeability Class Rating Test Data - Number of Sheets _____
Form 3d - Percolation Test Data - Number of Sheets _____
Form 3e - Piezometer Test Data - Number of Sheets _____
✓ Form 3f - Pit-Bailing Test Data - Number of Sheets 4
Form 3g - Basin Flooding Test Data - Number of Sheets _____

5. I hereby certify that the information furnished on Form 3a of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Evaluator Bryan Lumsden Date: 8-5-94

Signature of Professional Engineer Robert A. Hough License # 33444

COUNTY/MUNICIPALITY Howeell TWP

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 3f - Pit-Bailing Test Data

1. Test Number 1 Reference Soil Log 1 Date Tested 7-29-94

2. Using the reference level established, measure and record the following:

- Depth to Bottom of Pit, ft, D_{pit} SEE ATTACHED
- Depth to Water Level after 2 hr. Stabilization Period, ft, D_{water} _____
- Depth to Impermeable Stratum, ft, D_{stratum} _____
(If depth is unknown assume it to be 1.5 times the depth of the pit.)
- Height of Water Level Above Impermeable Stratum, ft, H _____
($H = D_{\text{stratum}} - D_{\text{water}}$)
- Length of Time Interval, T, in minutes _____

3. At the interval chosen, record the following data in the table below:

- Time of Measurement, t_m , minutes
- Depth of Water Level Below Reference Level, d_w , inches
- Water Surface Dimensions, ft: 1,w

4. Calculate the following values and enter in the table below:

- Water Surface Area, ft^2 , A_w
- Water Level Rise h_{rise} (Subtract current value of d_w from previous value)
- Ave. Water Surface Area, ft^2 , A_{av} (Take average of A_w and previous A_w)
- Ave. Height of Water Level Above Impermeable Stratum, ft, h (Take ave. of d_w and previous value of d_w convert to ft., and subtract from D_{stratum})
- Permeability, in/hr, Ka (Calculate using formula):
 $K_a = [h_{\text{rise}}/T] \times [A_{\text{av}}/2.27 (H^2 - h^2)] \times 60 \text{ min/hr}$

t_m	d_w (in.)	1, w (ft.)	A_{av} (ft ²)	h_{rise} (in.)	A_{av} (ft ²)	h (ft)	K_a
t_0				XXXX	XXXX	XXXX	XXXX
t_1							
t_2							
t_3							
t_4							
t_0				XXXX	XXXX	XXXX	XXXX
t_1							
t_2							
t_3							
t_4							
t_0				XXXX	XXXX	XXXX	XXXX
t_1							
t_2							
t_3							
t_4							

5. Record the Following Data:

- Final Depth of Pit, D_{pit} , ft _____
- Depth to Impermeable Stratum, ft, $D_{stratum}$ _____
(If no impermeable stratum is encountered assume $D_{stratum} = D_{pit}$)
- Height of Standpipe Above Reference Level, ft, h_{pipe} _____
- Depth to Water Level after 24 hr. Stabilization Period, ft, D_{water} _____
(Take measurement from top of standpipe. Subtract h_{pipe})
- Height of Static Water Level Above Impermeable Stratum, ft, H _____
($H = D_{stratum} - D_{water}$)
- Average Height of Water Level Above Impermeable Stratum, ft, h _____
(Take average of d_w from beginning and end of last time interval recorded in Section 4, convert this to ft., subtract from $D_{stratum}$)

6. Re-calculation of K using data from Section 5 above and from final time interval of Section 4:

$$K = \frac{[h_{rise}/t]}{[A_{av}/2.27(H^2 - h^2)] \times 60 \text{ min/hr}} \times 60 \text{ min/hr} =$$

7. I hereby certify that the information furnished on Form 3f of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Evaluator Brian Lunn Date: 8-5-94
Signature of Professional Engineer Robert A. Hough License # 33444

PIT BAILING TEST												
PROJECT: FASSBENDER												
TEST NO: PIT BAIL #1												
DATE: 7/29/94												
D1= (AVERAGE DISTANCE FROM GROUND SURFACE TO WATER IN PIT IN.)												
D2=	101	(ASSUMED OR MEASURED DISTANCE FROM GROUND SURFACE TO IMPERVIOUS STRATA IN.)										
D3=	64	(OBSERVED DISTANCE FROM STABILIZED WATER SURFACE TO GROUND SURFACE IN.)										
H=	3.08	(D2-D3 FT.)										
H0=												
TIME OF		DISTANCE FROM GROUND SURFACE										
OBSERVATION,		TO WATER IN PIT										
HR:MIN		IN.	D1(AVE),IN.	DELTA H,IN.	LENGTH, IN.	WIDTH, IN.	AREA, SF.	AVE. AREA, SF.	H0,FT.	K,IN/HR		
DELTA T,MIN.												
9:40 AM		96			26	25	4.51					
10:00 AM	20	94	95	2	32	25	5.56	5.03	0.50	1.44		
10:20 AM	20	92.5	93.25	1.5	34	25	5.90	5.73	0.65	1.25		
10:40 AM	20	91.25	91.875	1.25	42	25	7.29	6.60	0.76	1.22		
11:00 AM	20	90.5	90.875	0.75	44	25	7.64	7.47	0.84	0.84		
11:20 AM	20	89.25	89.875	1.25	44	25	7.64	7.64	0.93	1.46		
11:40 AM	20	88.5	88.875	0.75	44	25	7.64	7.64	1.01	0.89		
12:00 PM	20	87.75	88.125	0.75	44	25	7.64	7.64	1.07	0.91		
12:20 PM	20	87.25	87.5	0.5	46	25	7.99	7.81	1.13	0.63		
12:40 PM	20	86.75	87	0.5	46	25	7.99	7.99	1.17	0.65		
1:00 AM	20	86	86.375	0.75	46	25	7.99	7.99	1.22	0.99		
1:20 AM	20	85.25	85.625	0.75	46	25	7.99	7.99	1.28	1.01		
1:40 AM	20	84.5	84.875	0.75	46	25	7.99	7.99	1.34	1.03		
2:00 AM	20	83.75	84.125	0.75	46	25	7.99	7.99	1.41	1.05		

COUNTY/MUNICIPALITY Hopewell Twp

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 4 - General Design Data

1. Volume of Sanitary Sewage, Gal 650 GPD

V Residential: No. of Dwelling Units 1 Total No. of Bedrooms 4

 Commercial/Institutional - Indicate type of establishment and show method of calculation. If estimate is based on water meter data, indicate source of data, frequency of readings, average daily flow, and maximum recorded daily reading.

2. Alterations or Repairs:

a. Reason for Alteration or Repair (Check Appropriate Categories):

 Expansion or Change in Use ✓ Upgrade Existing Facilities

 Correct Malfunctioning System Other - Specify

b. Described Nature of Alteration or Repairs:

3. System Components:

a. Grease Trap Capacity, Gals

Show Calculation Used:

b. Septic Tank Capacities, Gals: 1000 First (Single) Compartment

 Second Compartment Third Compartment

c. Effluent Distribution

Method: Gravity Flow Gravity Dosing ✓ Pressure Dosing

Dosing Device: ✓ Pump Siphon

d. Dosing Tank Capacities, Gals: Total Capacity 1300 Dose Volume 162.5 Gals.

Reserve Capacity 889.65 Gallons

e. Laterals: Number 14 Total Length 19 Pipe Size 1" Spacing 36"

- f. Connecting Pipe: Size 3" Length 40'
- g. Manifold: Size 3" Length 18'
- h. Disposal Field: Type of Installation FILL ENCLOSED SOIL REPLACEMENT
Design Permeability (Percolation Rate) 6-20 in/hr
Trenches: Width _____ Total Length _____ Bed: Area 950.95
- i. Seepage Pits: Design Percolation Rate _____
Number of Pits _____ Total Percolating Area Provided _____

4. Attachments (Check Items Included):

- ☒ General Plan of System Showing Location of All System Components
- ☒ X-Sections of Each System Component Including Grease Trap, Septic Tank, Dosing Tank, Disposal Field, Seepage Pits, and Interceptor Drains
- ☒ Pump Performance Curve
- _____ Other - Specify _____

5. I hereby certify that the information furnished on Form 4 of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Professional Engineer Robert A. Hough Date: 8/5/94

COUNTY/MUNICIPALITY _____

APPLICATION FOR PERMIT TO CONSTRUCT/ALTER/REPAIR
AN INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM

Form 5 - Design of Pressure Dosing System

1. Configuration of Distribution Network:

Type of Manifold: _____ End _____ ☒ Central _____
Distribution Laterals: Number 14 Length, ft 19 Spacing, ft 3
Hole Diameter, ins 1/4 Hole Spacing, ins 36
Diameter of Laterals, ins 1

2. Lateral Discharge Rate:

Design Pressure Head at Supply End of Laterals, H_p , ft 3.5
Hole Discharge Rate, Q , gpm 1.4
Number of Holes per Lateral, n 6
Lateral Discharge Rate, $(Q \times n)$ gpm 8.4
3. Manifold Length, ft 18 Manifold Diameter, ins 3
4. System Discharge Rate, gpm 118

5a. Pump Selection:

Diameter of Delivery Pipe 3 Length of Delivery Pipe 40
Friction Loss in Delivery Pipe, H_f , ft 1.39
Elevation of Dosing Tank Low Water Level 92.50
Elevation of Lateral Invert 101.67
Elevation Head, H_e , ft 9
Total Operating Head, H_t ($H_p + H_f + H_e$), ft 13.89
Pump Model SPD 100 H Rated Horsepower 1/2
Pump Discharge Rate at Total Operating Head, gpm 118

5b. Siphon Elevation:

Diameter of Delivery Pipe _____ Length of Delivery Pipe _____
Friction Loss in Delivery Pipe, H_f , ft _____
Velocity Head, H_v , ft _____
Total Operating Head, H_t ($H_p + H_f + H_v$), ft _____
Elevation of Lateral Invert _____
Elevation of Siphon Invert _____

6. Dose Volume:

Design Volume of Sewage, gal/day _____ 650
Design Permeability, in/hr _____ 6-20 or Percolation Rate, min/in _____ 3-15
Internal Volume of Distribution Network _____ 33.5
Dose Volume _____ 162.5

7. I hereby certify that the information furnished on Form 5 of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Professional Engineer Robert A. Hough Date: 8/5/94

NOTE:

N 14° 21' E 152.97'

EXISTING HOUSE PIPING GOING TO EXISTING SEPTIC FIELD AND THE NEW SEPTIC FIELD ARE SUBJECT TO CHANGE AT TIME OF CONSTRUCTION. WHEN ALL PIPE INVERTS ARE VERIFIED, ALL CHANGES WILL BE PICKED UP ON AS-BUILT.

10' WIDE DRAINAGE EASEMENT

EXISTING ELEV. OF THE FOUR CORNERS OF BED ±99

PROPOSED ELEV. OF THE FOUR CORNERS OF BED 102.67.
CENTER OF BED 102.92

DESIGN 8/30/94 APPROVED

DATE Alteration

HOPEWELL TOWNSHIP HEALTH DEP.

4 BEDROOM DWELLING

STEP
B.M. ELEV. =
100.00
(ASSUMED)

BULL VALVE

4" PVC SCH. 40
PER ASTM D-2665

EXISTING SEPTIC
TANKS.

EXISTING SEPTIC
FIELD

EX. SEPTIC FIELD TO BE
ABANDONED

7' STRIP DEDICATED TO THE

COUNTY OF MERCER ROAD WIDENING

S 14° 21' W 110.00' R = 5,696.6' 101 83.09'

BEAR TAVERN ROAD

A - 10 LF. 4" PVC SCH. 40 PER ASTM D-2665
MIN. SLOPE ON PIPE 1/4" PER LINEAR FOOT

B - 1000 GALLON SEPTIC TANK

(ONLY IF TANK HAS TO BE REPLACED)

C - 4" PVC SCH. 40 PER ASTM D-2665

D - 1300 GALLON DOSING TANK

E - 40 LF. 3" PVC SCH 40 PER ASTM D-2665
DELIVERY PIPE

F - SEPTIC BED SEE SHEET 2 of 6

G - INSPECTION PORTS (TYP.) TO BE PROVIDE
IN THE FOUR CORNERS OF THE BED

LEGEND :

SOIL LOG

PIT BAIL TEST

WELL

EXISTING CONTOUR

PROPOSED CONTOUR

REFERENCE PLAN OF LOT 98, BLOCK 98
PROVIDED BY JACKIE FASSBENDER.

van note-harvey associates
consulting engineers, planners & land surveyors
777 Alexander Road
223 North Main Street
Princeton, N.J. 08540
Cape May Court House, N.J. 08210

vh

Robert A. Hough 8/5/94
DATE OF
SIGNATURE

ROBERT A. HOUGH
N.J. P.E. No. 33444

1 REV. FIELD + PIPING 8/30/94

SEPTIC SYSTEM DESIGN

FOR

LOT 98

BLOCK 98

HOPEWELL TOWNSHIP

MERCER CO., N.J.

SCALE 1" = 30'

AUGUST 1994.

DRAWN BY B.J.F.

FIELD BK

ORDER No.

FILE No.

SHEET No.

CHECKED BY

PAGE

2.22.

FLAT FILE

1 of 6

FILL ENCLOSED, SOIL REPLACEMENT

LATERALS AND END CAPS
TO HAVE 1/4" DIA. HOLES
DRILLED IN ACCORDANCE
WITH N.J.A.C. 7:9A-9.6



ROBERT A. HOUGH
N.J. P.E. No. 33444

LOT 98

BLOCK 98

HOPEWELL TOWNSHIP
SCALE AS SHOWN

MERCER CO., N.J.
AUGUST 1994.

DRAWN BY
D I C

**ORDER No.
2.22.**

FILE No.

FILE No.	SHEET No.
FLAT FILE	2 of 6



TOWNSHIP of HOPEWELL

DEPARTMENT of HEALTH

201 WASHINGTON CROSSING PENNINGTON RD. TITUSVILLE, N.J. 08560 MERCER COUNTY
TELEPHONE 609 737-0120/737-0132 / TELEFAX NO. 737-1022

Serving Hopewell Borough
and Pennington Borough

September 2, 1994

Jackie Fassbender
427 Azure Lane
Glassboro, NJ 08628

Re: Block 98 Lot 98

To whom it may concern:

ALTERATION

Your application for an alteration to an onsite subsurface sewage disposal system has been approved with the following conditions:

SEWAGE DISPOSAL PERMITS ARE VALID FOR TWO YEARS FROM DATE OF ISSUE.

1. A copy of this letter must be forwarded to your construction contractor and sewage disposal installer prior to installation of said system.
2. The house location must be staked by a licensed surveyor or professional engineer to assure proper location and elevation as represented on the attached plan.
3. The sewage disposal system must be located and staked prior to installation by a licensed surveyor or professional engineer to guarantee the proper alignment of the system in the area of the soil tests, and to insure it will conform to all site restrictions as represented on the attached design.
4. The required elevation of the sewage disposal system should be verified by the licensed professional engineer or surveyor, the builder and the plumbing contractor as it relates to the foundation height, the point where the sewer line exits the dwelling and the height of the septic tank. If this is a gravity system and the minimum height of the sewer line is not maintained, an ejector system will be required after the septic tank.
5. An onsite conference is required with your installer and a representative from this office prior to installation of any part of this system. This should avoid any problem during the installation which can be costly to all parties concerned.

6. The design engineer must be notified at the beginning of the installation. Field measures must be made for the required as-built design, and grading plan certifications. The as-built must show soil test location, distances to the tank and D-box as measured from two fixed points, also, any changes caused by site conditions, construction changes and installation problems. If this is a raised system, the as-built grading plan must be certified by the engineer that it is as designed, showing all inverts and contour lines. The as-built will provide a detailed location of the installed system so it can be located once it is covered.

7. No excavating machinery shall be permitted in the excavation during construction. A Track hoe must be used to dig the excavation. Sand must be available at the start of construction to cover the bottom and to protect open fractures etc.

8. All trees within 10 feet of a conventional disposal system or within the area of the extended clay fill and sloped area of a raised disposal/mound system must be removed.

9. All phases of construction of the disposal system must be inspected by the Health Department. It is your responsibility (or your contractors) to notify the Health Department by no later than 9:00 a.m. on every day that construction is underway so inspections can be scheduled. Systems will be dug up if not inspected by this office!

10. A certificate of occupancy will not be issued if the system is not completed and the grades certified. Raised systems must be stabilized. All systems must be seeded or sodded and have established vegetative growth.

11. All septic tanks must comply with new tank requirements and also be provided with locking manhole access lids to final grade as required by NJDEP 7:9A.

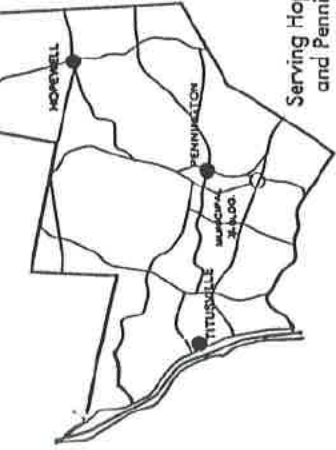
12. All sand and clay fill must be stock piled on site and certified by a licensed laboratory or by the design engineer once in place using a perc test.

Effective January 1, 1990 the New Jersey Department of Environmental Protection enacted a law requiring the certification and licensing of sewage disposal systems.

Very truly yours,



George K. Kiesel
Senior Sanitarian



TOWNSHIP of HOPEWELL

DEPARTMENT of HEALTH

201 WASHINGTON CROSSING PENNINGTON RD. TITUSVILLE, N.J. 08560 MERCER COUNTY
TELEPHONE 609 737-0120/737-0132 / TELEFAX NO. 737-1022

Serving Hopewell Borough
and Pennington Borough

STANDARD FORM FOR CERTIFICATE OF COMPLIANCE INSTALL I08.NJ General Information

1. PERMITTED ACTIVITIES (Check applicable categories):

Permit Number _____

_____ New Construction

☒ Alteration/No Expansion or Change in Use

_____ Alteration/Expansion or Change in Use

_____ Deviation from Standards

☒ Repairs to Existing System

2. LOCATION OF PROJECT;

Municipality Hopewell Twp Block 98 Lot 98
Street Address 1165 Broad Tavern Rd
Titusville NJ 08560

3. NAME AND PRESENT ADDRESS OF APPLICANT:

Applicant's Name: Jackie Fassbender

Applicant's Address: 427 Azure Lane
Glassboro NJ 08628

Applicant Phone Number _____

I hereby certify, under penalty of law, that the subsurface sewage disposal system identified in part 1 has been located, constructed, installed or altered in compliance with the requirements of NJAC 7:9A-1 and the Application to Construct/Alter/Repair/An Individual subsurface Sewage Disposal System which was approved by the administrative authority. I am aware that there are significant penalties for submitting false information, including a possibility of fine and/or imprisonment.

Sergey Khud Senior Sanitarian
Signature Title

10/31/94
Date

REFERENCE PLAN OF LOT
98, BLOCK 98 PROVIDED
BY JACKIE FASSBENDER,

- | | | |
|-------------|------------|-----------------|
| A-1. 14.5' | B-1. 23.5' | EX. SEPTIC TANK |
| A-2. 37.0' | B-2. 6.0' | EX. SEPTIC TANK |
| A-3. 53.0' | B-3. 17.0' | NEW DOSING TANK |
| A-4. 56.0' | B-4. 24.0' | CORNER OF FIELD |
| A-5. 96.0' | B-5. 60.0' | CORNER OF FIELD |
| A-6. 104.0' | B-6. 71.0' | CORNER OF FIELD |
| A-7. 69.0' | B-7. 47.0' | CORNER OF FIELD |

PIT BAIL▲
SOIL LOG■

N 14° 21' 00" E 152.97'

AS BUILT DESIGN

DATE:

10/31/94

Robert A. Hough

HOPEWELL TOWNSHIP HEALTH DEPT.

10' WIDE DRAINAGE
EASEMENT

WELL

S 86° 02' 00" E

220.00'

4 BEDROOM
HOUSE

222.39'

BULL VALVE
EX. PIPE TO
EXISTING FIELD
(APPROX.
LOCATION)

INSPECTION
PORTS (TYP.)

S 14° 21' 00" W 110.00'

R = 5,696.6' L = 83.09'

BEAR TAVERN ROAD

van note-harvey associates
consulting engineers, planners & land surveyors
777 Alexander Road
223 North Main Street
Princeton, N.J. 08540
Cape May Court House, N.J. 08210

vh

Robert A. Hough

9/28/94
DATE OF
SIGNATURE

ROBERT A. HOUGH

N.J. P.E. No. 33444

SEPTIC AS-BUILT PLAN
FOR

LOT 98 - BLOCK 98

HOPEVELL TWP.
SCALE = 1" = 30'

MERCER CO., N.J.
SEPTEMBER 1994.

DRAWN BY BJF	FIELD BK PAGE	ORDER No. 2.22. 31828-31	FILE No.	SHEET No. 1 OF 1
-----------------	------------------	--------------------------------	----------	---------------------

TUBE PERMEAMETER TEST DATA

Client Fassbender Site Township Hopewell Job # 2-22-31828-31
 Test Number 1 Replicate (letter) B Date Collected 9-2-94 / Tested 9-5-94

Material Tested: Fill Test in Native Soil - Depth Fill
 Type of Sample: Undisturbed ☒ Disturbed ☒ SELECT

Sample Dimensions: Inside Radius of Sample Tube, R, in cm 3.05
 Length of Sample, L, in inches 5.4

Bulk Density Determination (disturbed samples only):
 Sample Weight (wt. tube containing sample - wt. of empty tube), grams 508.9
 Sample Volume [$L \times 2.54 \text{ cm./inch} \times 3.14(R \times R)$], cc 400.31
 Bulk Density (Sample Wt./Sample Volume), grams/cc 1.27

Standpipe Used: No ☒ Yes - If Yes, Internal Radius, cm 0.733

Height of Water Above Rim of Test Basin, in inches:
 At the Beginning of Each Test Interval, H1 30
 At the End of Each Test Interval, H2 22

Rate of Water Level Drop:
 TIME, Start of Test Interval, T1 00:00 Length of Test Interval, T, min. 57
00:00 57
00:00 57
00:00 0

Calculation of Permeability:
 $K, (\text{in/hr}) = 60 \text{ min/hr} \times [t \times r] / [R \times R] \times L(\text{in}) / T(\text{min}) \times \ln (H1/H2)$
K-4 10.17 = 60 min/hr x .733² / 3.05² x 5.4 / .57 x ln (30/22)

Defects in the Sample:
☐ None ☐ Cracks ☐ Worm Channels ☐ Root Channels ☐ Large Roots
☐ Soil/Tube Contact ☐ Large Gravel ☐ Dry Soil ☐ Smearing
☐ Compaction ☐ Other-Specify _____

I hereby certify that the information furnished on this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator Bruce Lucas Date 9-5-94
 Signature of Prof. Engineer Robert A. Kough License # 33444 Date 9/20/94

TUBE PERMEAMETER TEST DATA

Client Fassbender Site Township Hopeville Job # 2-22-31828-31
 Test Number 1 Replicate (letter) A Date Collected 9-2-94 / Tested 9-5-94

Material Tested: Fill Test in Native Soil - Depth 11
 Type of Sample: Undisturbed ☒ Disturbed ☒ SELECT F111

Sample Dimensions: Inside Radius of Sample Tube, R, in cm 3.05
 Length of Sample, L, in inches 5.5

Bulk Density Determination (disturbed samples only):
 Sample Weight (wt. tube containing sample - wt. of empty tube), grams 506.1
 Sample Volume [$L \times 2.54 \text{ cm} / \text{inch} \times 3.14 (R \times R)$], cc 409.08
 Bulk Density (Sample Wt./Sample Volume), grams/cc 1.24

Standpipe Used: No ☒ Yes - If Yes, Internal Radius, cm 0.733

Height of Water Above Rim of Test Basin, in inches:
 At the Beginning of Each Test Interval, H1 30"
 At the End of Each Test Interval, H2 22"

Rate of Water Level Drop:
 TIME, Start of Test Interval, T1 00:00 Length of Test Interval, T, min. .55
00:00 .53
00:00 .53
00:00 0

Calculation of Permeability:
 $K, (\text{in/hr}) = 60 \text{ min/hr} \times [r \times r] / [R \times R] \times L(\text{in}) / T(\text{min}) \times \ln (H1/H2)$
K-4 11.15 = $60 \text{ min/hr} \times .733^2 / 3.05^2 \times 5.5 / .53 \times \ln (30 / 22)$

Defects in the Sample:
☐ None ☐ Cracks ☐ Worm Channels ☐ Root Channels ☐ Large Roots
☐ Soil/Tube Contact ☐ Large Gravel ☐ Dry Soil ☐ Smearing
☐ Compaction ☐ Other-Specify _____

I hereby certify that the information furnished on this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator Robert A. Hough Date 9-5-94
 Signature of Prof. Engineer Robert A. Hough License # 33444 Date 9/28/94

TUBE PERMEAMETER TEST DATA

Client Fassbender Site Township Hopewell Job # 2-22-31828-31

Test Number 1 Replicate (letter) C Date Collected 9-2-94 / Tested 9-5-94

Material Tested: Fill Test in Native Soil - Depth SELECT Fill
Type of Sample: Undisturbed ☒ Disturbed ☒ SELECT Fill

Sample Dimensions: Inside Radius of Sample Tube, R, in cm 3.05
Length of Sample, L, in inches 5.4

Bulk Density Determination (disturbed samples only):
Sample Weight (wt. tube containing sample - wt. of empty tube), grams 506.5
Sample Volume $[L \times 2.54 \text{ cm./inch} \times 3.14(R \times R)]$, cc 406.31
Bulk Density (Sample Wt./Sample Volume), grams/cc 1.27

Standpipe Used: No ☒ Yes - If Yes, Internal Radius, cm 0.7332

Height of Water Above Rim of Test Basin, in inches:
At the Beginning of Each Test Interval, H1
At the End of Each Test Interval, H2

Rate of Water Level Drop:
TIME, Start of Test Interval, T1 00:00 TIME, End of Test Interval, T2 33 Length of Test Interval, T, min. 55
00:00 34 57
00:00 34 57

Calculation of Permeability:
 $K, (\text{in/hr}) = 60 \text{ min/hr} \times [t \times r] / [R \times R] \times L(\text{in}) / T(\text{min}) \times \ln(H1/H2)$
K-4 10.17 = 60 min/hr x 733² / 3.05² x 5.4 / 57 x ln (30/22)

Defects in the Sample:
None Cracks Worm Channels Root Channels Large Roots
Soil/Tube Contact Large Gravel Dry Soil Smearing
Compaction Other-Specify

I hereby certify that the information furnished on this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator Bruce Luman Date 9-5-94
Signature of Prof. Engineer Robert A. Hough License # 33444 Date 9/26/94



van note-harvey associates, p.c.

(609) 987-2323
fax: 987-0005
777 ALEXANDER ROAD
PRINCETON, NJ 08543-3227

SOIL PERMEABILITY CLASS RATING DATA

Client Fassbender Site 98 Block 98 Township Hopewell
Lot 98 Job # 8-3-94 Date Collected 8-5-94 Tested 8-5-94
Test No. 1 Sample Depth — Proposed Block —
Coarse Fragment Content GRA0 SAMPLE
Total Weight of Sample, W.T., grams SELECT FILL
Weight of Material Retained on 2mm sieve, W.C.F., grams 103.9
Wt. % Coarse Fragments (W.C.F./W.T.) x 100: 1.3 122.8 178.6
1.3 4.4 7.5
8.1 4.2

	Sample	Replicate A	Replicate B
Oven Dry Weight (24 hrs, 105°C) of 40 Gram Air Dry Sample, grams, Wt	<u>40</u>	<u>40</u>	<u>40</u>
Hydrometer Calibration, Rc	<u>5</u>	<u>5</u>	<u>5</u>
Hydrometer Reading - 40 seconds, grams, R1	<u>9</u>	<u>8</u>	<u>8</u>
Temperature of Suspension, °F	<u>74°</u>	<u>74°</u>	<u>74°</u>
Corrected Hydrometer Reading, grams R1'	<u>5.2</u>	<u>4.2</u>	<u>4.2</u>
Hydrometer Reading - 2 hours, grams R2	<u>7</u>	<u>6</u>	<u>7</u>
Temperature of Suspension, °F	<u>72°</u>	<u>72°</u>	<u>72°</u>
Corrected Hydrometer Reading, grams, R2'	<u>2.8</u>	<u>1.8</u>	<u>2.8</u>

Sieve Analysis:

- a. Oven Dry Weight (2 hrs., 105°C) Total Sand Fraction
(Soil retained in 0.047 mm sieve, grams)
40 40 40
- b. Weight of Fine Plus Very Fine Sand Fraction
(Sand passing 0.25 mm sieve), grams
3.3 5.1 2.9
8.3 12.8 7.3
- c. % Fine Plus Very Fine Sand

Sample
% sand = $(Wt. - R1')/Wt. \times 100 = (40 - 5.2)/40 \times 100 = 87.0$
% clay = $R2'/Wt. \times 100 = 2.8/40 \times 100 = 7.0$

Replicate A
% sand = $(Wt. - R1')/Wt. \times 100 = (40 - 4.2)/40 \times 100 = 89.5$
% clay = $R2'/Wt. \times 100 = 1.8/40 \times 100 = 4.5$

Replicate B
% sand = $(Wt. - R1')/Wt. \times 100 = (40 - 4.2)/40 \times 100 = 89.5$
% clay = $R2'/Wt. \times 100 = 2.8/40 \times 100 = 7.0$

Soil Morphology (Natural soil samples only):
Structure of Soil Horizon Tested n/a Moist n/a
Consistence of Soil Horizon Tested: Dry n/a

Soil Permeability Class Rating (Based upon average textural analysis of this replicate and other replicate samples)
Sample K-5 Replicate A K-5 Replicate B K-5

I hereby certify that the information furnished on this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator Brian Furman Date 8-5-94
Signature of Prof. Engineer Robert A. Hough License # 33444 Date: 9/28/94

Application for Construction of Driveway and On Site Inspection for Drainage

Driveway Must Be Staked Before Inspection

Applications approved as per Site Plan subject to the following requirements:

1. 7 inch depth of 2½" or 1½" blend 10 ft. in from curb
2. Remove curb and replace with new concrete entrance curb. No capping of curb permitted.
3. Finish driveway entrance 1⅝" above street level. 3700 lbs. test concrete. Concrete slip must be delivered to Engineer. [Delete where inapplicable.]

Additional Requirements: _____

County Road

Approval Granted, Township Engineer _____

Date _____

Certificate of Compliance, Driveway and Surface Drainage approved by
(name) _____ on (date) _____

☐ Check Here If Driveway Permit Is Desired

(authorized signature) _____

Date _____

SEWAGE APPLICATION

Maximum Number of Users. _____

Gallons per person. _____

Additional bedroom area available. _____

Type of facilities other than bath: washer sink

Septic Tank — Liquid Capacity and Type 1 (1000 gallon) 4" (750 gallon) precast concrete

Width _____

Length _____

liquid depth _____

distance liquid level to underside of top. _____

Liquid Disposal — number of trenches or bed size 2 (30'x42') beds. = 2520 SF

Width _____

depth _____

linear feet of pipe. 504 LF

Distance between lines _____

Description see attached details Type of pipe 4" orangeburg

PERCOLATION TEST RESULTS

Hole No. 1

Time in Min. per In. 48

Depth 44

Type of Soil Encountered top soil

Depth of each type 0" - 10"

clay loam and

10" - 27"

The above fully complies with applicable State and Municipal Regulations.
Certified by Philip J. Veere PE # 25, No 9884 Date Dec 16, 1971

Engineer

License No.

Date

Date _____

WATER SUPPLY APPLICATION

Describe type of well and existing or proposed water supply system.

Estimated depth of well. _____

Depth and gauge of casing. 50'

Method of sealing. cement

Capacity & type of storage facilities. _____

Treatment facilities. _____

Pumping equipment. _____

The undersigned agree to (alter) (construct) the aforesaid water supply in accordance with applicable State and Municipal regulations.

Contractor Howard Lunn signature _____

Owner _____

signature James R. Potts

Application approved and fee received for:

(X) Sewage Disposal System, authorized signature _____

Board of Health, Township of Hopewell

date 1-6-72

(X) Water Supply System, authorized signature _____

Board of Health, Township of Hopewell

date 1-6-72

Certificate of Compliance: SS Reservation Supervisor 7/1/72 SMJ

(X) Sewage Disposal System approved after inspection by (name) _____

on (date) Sept 27 1972

and found acceptable.

date May 12, 1972

(X) Potability of water tested by (name) Quality Control Lab

on (date) Sept 27 1972

Authorized Signature _____

Board of Health, Township of Hopewell

Date Received _____
 Application No. _____

APPLICATION

Hopewell Township — Mercer County, N. J.

Application is hereby made for the issuance of permits checked (✓), pursuant to the Zoning Ordinance of Hopewell Township.

Owner James R Potts Address Pleasant Valley Harborton Rd Phone 737 2624

Contractor

Address

Phone

(X) Bldg. James R Potts Same 737 2624

() Water _____

(X) Sewage _____

() Driveway _____

() Occupancy _____

Plans submitted (building, sewer, etc.) Plot plan & septic system design

Site Plan prepared by (~~Architect~~/Engineer) Philip J Vecere PE #45, No 9884

Address Box 457 Thuisville NJ Phone 737 0809 Date Dec 16 1971

Title Plot Plan for James R Potts Drawing No. _____

Purpose and use of proposed construction Individual dwelling (one family)

Lot location (street & no.) Bear Tavern Road Zone R-150

Block No. 98 Lot No. 98 Development Township Page 24

Lot size: Front 190' ± Depth 230' ± Area 38,037 SF

Building Size, Max. width 72'-4" Max. depth 32'-0" Height 24' ±

Distance from — right property line 60' ± Left property line 35' ±

Rear Yard depth 93' ±

Living Area — First Floor 1184 SF Second Floor 1040 SF Other _____

Total 2224 SF Building Area _____ Percentage of Lot coverage 5% ±

No. of bedrooms 4 No. of Baths 3

Estimated Cost \$111,000.00

(owner's signature)

James R Potts

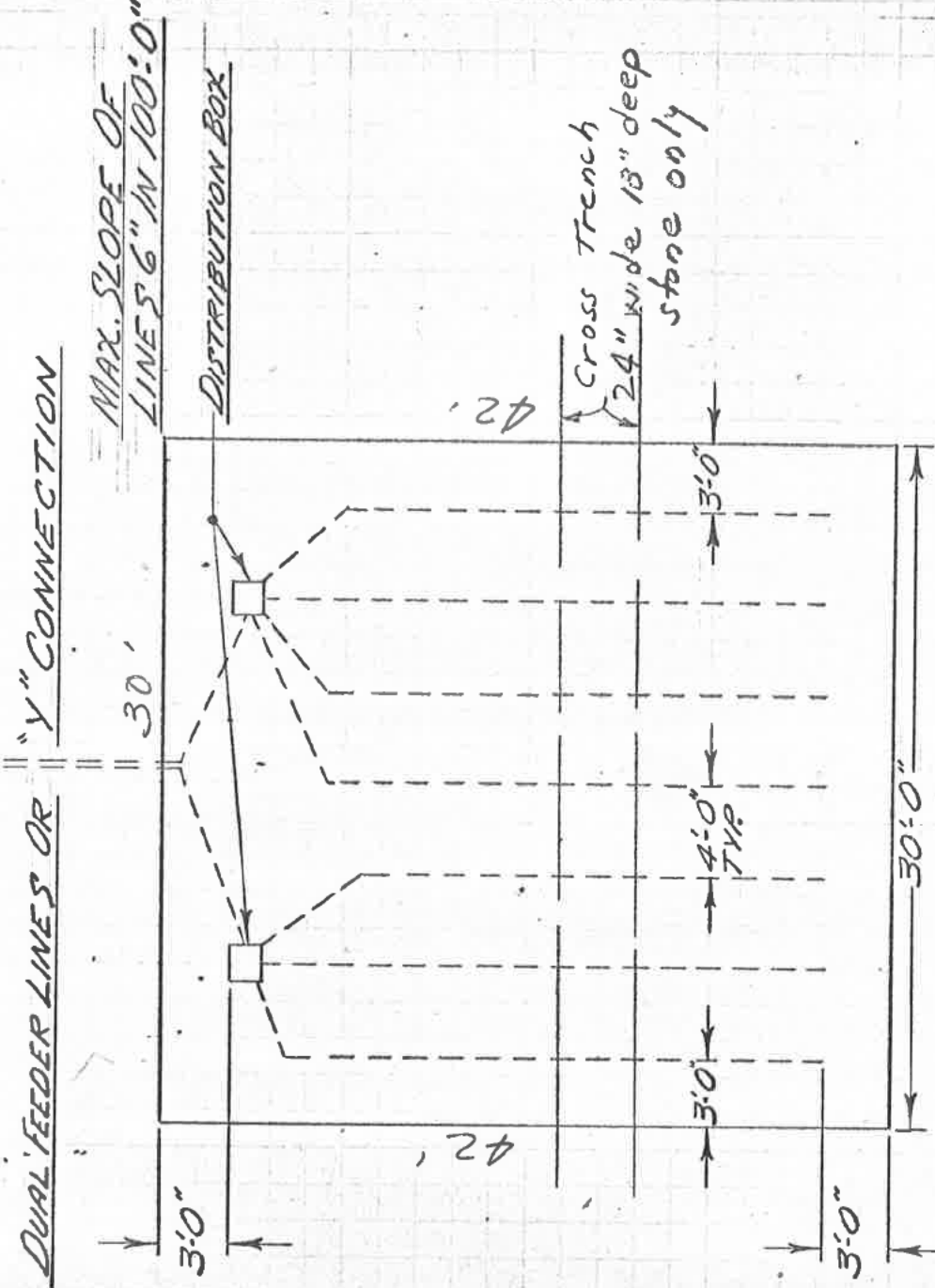
Approval (Granted) (Denied)

Reason for denial _____

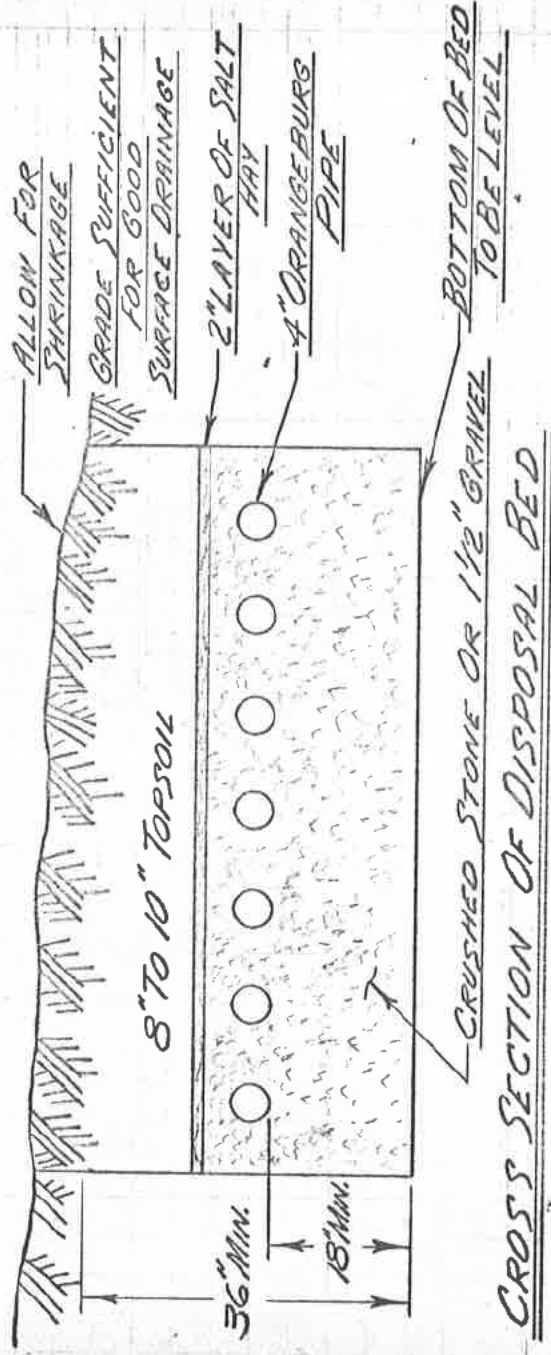
Fee 2000.00 Date Dec 16 1971

Zoning Inspector

DISTRIBUTION BOX
OR
SEPTIC TANK



SCALE: ~



CROSS SECTION OF DISPOSAL BED

NOTE:
BOTTOM OF BE TO LEVEL & CLEAR OF ALL DEBRIS & DRY
IF EXCAVATION BECOMES SATURATED BEFORE BACK FILLING
IT MUST BE CLEANED AND RESHAPED TO VIRGIN SOIL BEFORE
PLACING STONE.

BY C.Y. DATE 9/70

CHKD. BY DATE

SUBJECT TYPICAL DISPOSAL BED

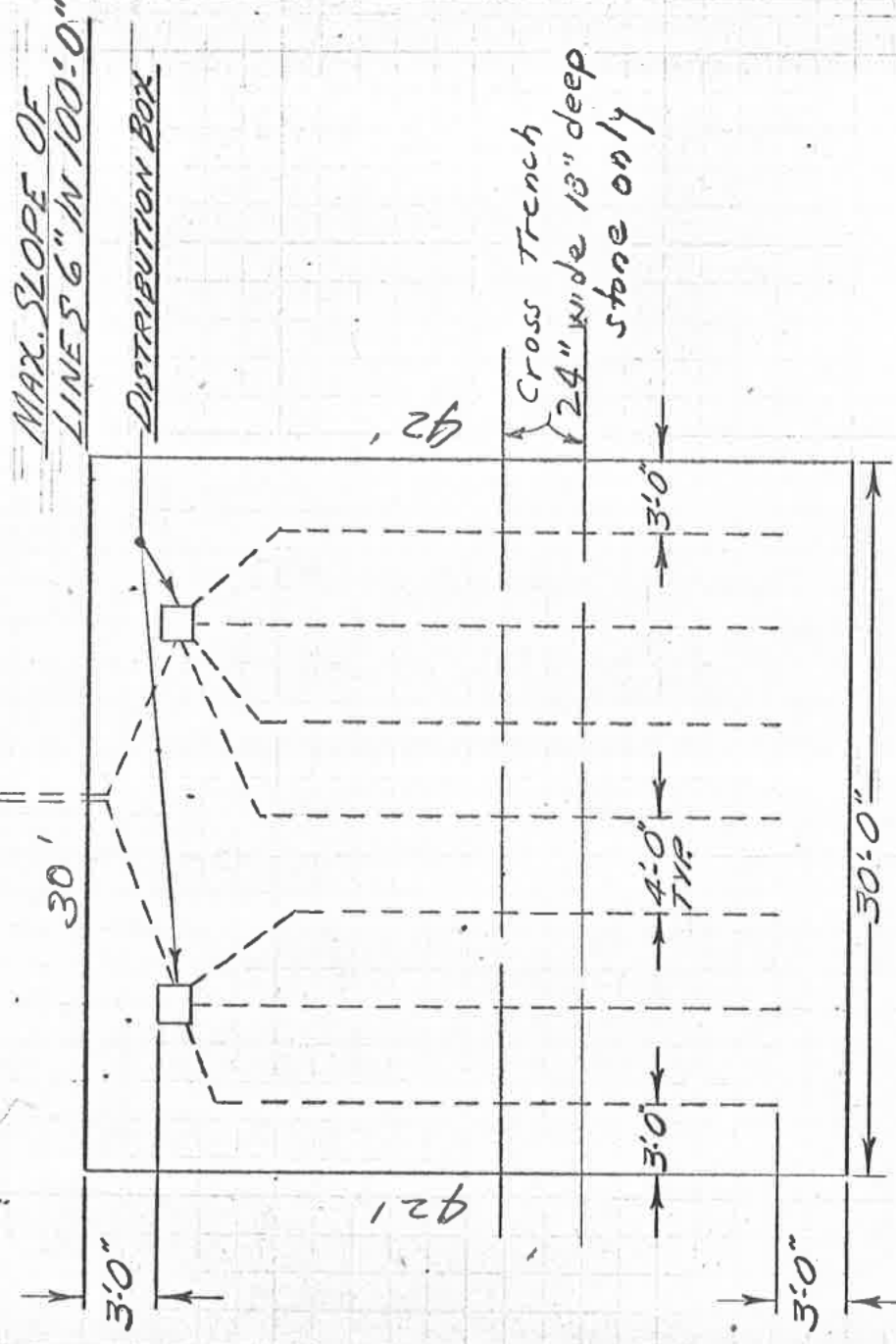
SHEET NO. 1 OF 1

JOB NO. 1000000000

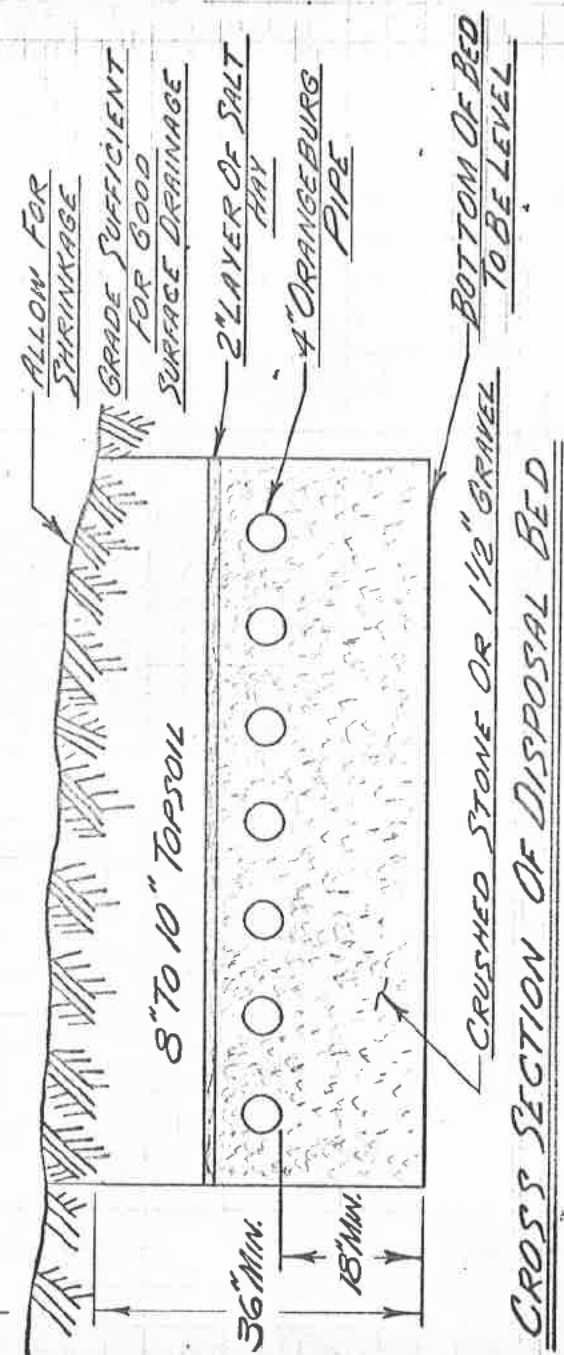
James R. Potts Bear Tavern Road Hopewell Twp

DISTRIBUTION BOX
OR
SEPTIC TANK

DUAL FEEDER LINES OR "Y" CONNECTION



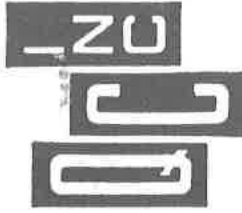
SCALE: ~



NOTE:

BOTTOM OF BE TO BE TO LEVEL & CLEAR OF ALL DEBRIS & DRY IF EXCAVATION BECOMES SATURATED BEFORE BACK FILLING IT MUST BE CLEANED AND RESHAPED TO VIRGIN SOIL BEFORE PLACING STONE.

ATTACHED & BOUND TO BE NON-REPRODUCIBLE



QUALITY CONTROL LABORATORY DIVISION

Industrial Highway, Southampton, Pa., 18966

673-4900
355-3900
(AREA CODE 215)

E. W. COOK, V.M.D.
R. W. COOK, V.M.D.
A. F. ZIMMERMANN

- Hopewell Twp. Board of Health
R.R. 1
Box 169-A
Titusville, New Jersey 08560

Bacteriological Water Analysis Report

date sampled September 26, 1972
date tested September 27, 1972
date reported September 29, 1972
sampled by RG
frequency
copies to

SAMPLE	Standard Plate Count per ml 24 hr. 35°C	Coliform Count per 100 ml MPN confirmed	Residual Chlorine mg/l	Hardness	pH	Results *
James Potts Sec. 98, Lot #98	12	0	0	178mg/l 10.5gpg	7.85	S

* S = safe for use, meets U.S. Public Health Service bacteriological standards

NS = not safe for use:

- evidence of contamination
- swimming pool chlorine residual low, should be 0.4 - 1.0
- swimming pool pH low, should be over 7.2

REMARKS

A neutralizer should be installed followed by a medium capacity softener; the neutralizer to prevent corrosion, and the softener to remove hardness added by the neutralizing.

Q C Inc.
Carl W. Cook V.M.D.

All analyses conform to the current edition of "Standard Methods for the Examination of Water and Wastewater"
Approved for the bacteriological examination of water by the Pennsylvania Department of Health, Certificate I-38B

Well sealing 5-23-72 9:30 A.M.

WELL INSPECTION REPORT

Owner James R. Potts
 Address Bear Tavern Rd.
 Lot 98 Block 98 Map page 24

WELL DATA AS COMPLETED

N. J. State well drilling permit # _____ dated _____

Length of casing 52 ft.
 Depth 182 ft.
 Water level below top of casing 35 ft.
 Depth of suction or jet below top of casing 130 ft.
 Estimated capacity of well 9 gpm 125'
 Length of pumping test 1 hr.

I certify that the above information is correct and the well has been drilled, sealed, and disinfected according to the latest Hopewell Township Ordinance.

5/24/72
 Dated

John J. Laraway Jr.
Howard W. Laraway
 Well driller

Inspection of construction was made on the following dates:

1-6-72 6 Bags of cement used
524/72

Final construction of well and distribution system is certified to be in accordance with Hopewell Township Ordinance.

John J. Laraway
 Inspector

WATER QUALITY

Sample No. Quality Control Tank Date Sept 27, 1972 Satisfactory

John J. Laraway
 Health Dept.