

Permit No. 22075

HOPEWELL TOWNSHIP HEALTH DEPARTMENT

201 Washington Crossing - Pennington Road

Titusville, New Jersey 08560

TEL. (609) 737-0120 FAX (609) 737-2770

PERMIT

Applicant C/o Charles Faherty Block 17 Lot 2

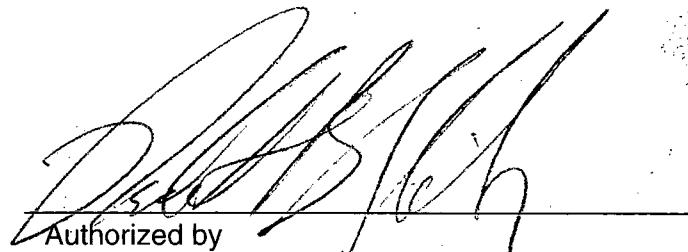
To Alteration/Deepen/Replacement of Existing Water Supply:

Location Hopewell Princeton Road

Fee 100.00

24 Hour Inspection Notification Required

This Permit is NOT Transferable



Authorized by

Hopewell Township Health Department

This permit is not transferable, Well to be submitted within 30 days

ABANDONED WELLS MUST BE SEALED

Permit No.

22075

05-22-2002

HOPEWELL TOWNSHIP HEALTH DEPARTMENT

201 Washington Crossing - Pennington Road

Titusville, New Jersey 08560

TEL. (609) 737-0120

FAX (609) 737-2770

PERMIT

Applicant C/o Charles Faherty Block 17 Lot 2
To Alteration/Repair to an existing Sewage Disposal System: y
Location Hopewell Princeton Road
Fee \$ 100.00

24 Hour Inspection Notification Required
This Permit is NOT Transferable


Authorized by
Hopewell Township Health Department

Permit is not transferable

Valid for 2 years from issue date

C. R. English

PNC BANK, NATIONAL ASSOCIATION
3232 NEWMARK DRIVE
MIAMISBURG, OH 45342-5421

ANNETTE C BIELAWSKI
MUNICIPAL CLERK
201 Washington Crossing-Pennington Rd
TITUSVILLE NJ, 08560-1410

OCT 27 2014

October 22, 2014

You are receiving this notice as you are listed in 2010 database provided by the New Jersey League of Municipalities (NJ LOM) as the New Jersey public officer / municipal clerk for the municipality in which this property is located. As a requirement of a recently enacted New Jersey Bill S2777, this correspondence is intended to notify you that a Summons or Complaint has been served on the property listed below.

Complaint was filed on 10/14/2014

Property Address:

155 Hopewell Princeton Road
Hopewell, NJ, 08525
Lot: 2.01 Block: 17

This property may be an affordable unit pursuant to the "Fair Housing Act",

In the event that there are any code violations, or other concerns, as to this property, please contact:

Zucker, Goldberg and Ackerman, LLC
Michael Ackerman
200 Sheffield Street, Suite 101
Mountainside, NJ 07092
Email: propertypreservation@zuckergoldberg.com

We are also informing you that the following entity is authorized to accept any service on our behalf:

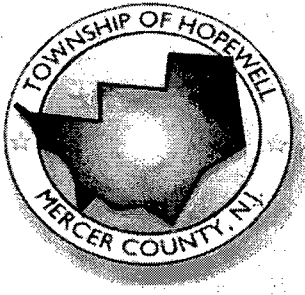
Zucker, Goldberg and Ackerman, LLC
Michael Ackerman
200 Sheffield Street, Suite 101
Mountainside, NJ 07092
Email: propertypreservation@zuckergoldberg.com

If you are not the public officer / municipal clerk for the municipality in which the property is located, we ask that you please notify the New Jersey League of Municipalities (NJ LOM) at New Jersey State League of Municipalities, 222 West State Street, Trenton, NJ 08608: (609) 695-3481 and also notify us by calling the following phone number: 908-233-8500.

Charles 466-0592 17/2.01
Faherty

901-Route 601 Skillman NJ 08558

~~Beth FORTER 6201/70~~



T O W N S H I P o f H O P E W E L L

DEPARTMENT of HEALTH

Serving Hopewell Borough and Pennington Borough

201 WASHINGTON CROSSING - PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

Telephone 609-737-0120 / Fax 609-737-2770

January 27, 2005

Charles A. Faherty
901 route 60
Skillman, NJ 08558

RE: Block 17, Lot 2.01 (155 Hopewell Princeton road)

Dear Mr. Faherty

This office has received and reviewed the well test reports for the sale of the above referenced property. The results are as follows:

1. The water from the potable well meets federal, state and local safe drinking water regulations.

We are still waiting for either or both, a complete application and report with regards to the septic inspection.

Although this system is just over 2 years old, it still needs to have both tanks pumped and inspected and the inspection ports checked for a release of the letter of review..

There is also some concern that when the new well was drilled in 2002, the unknown existing well may not have been sealed. Please advise and if necessary have old well properly sealed.

Based on the information provided to this office, well letter of review for this property is released and a copy is hereby provided.

However, the letter of review for the septic system inspection is still outstanding at this time.

Your attention to this matter is appreciated. You may contact this office at (609) 737-0120 with any questions you may have regarding this matter. Our office hours are Monday through Friday, 8:30 - 4:30

Sincerely,

Gary A. Guarino
Health Officer

Cc: Al Kettell

Hopewell Township Health Department

201 Washington Crossing Pennington Road

Titusville, NJ 08560

609-737-0120

FEB 14 2005

APPLICATION FOR LETTER OF REVIEW

Onsite Sewage Disposal System

Block 17 Lot 2⁰¹ Location 155 Hopewell-Princeton Road 2-14-05

Transfer/Tenancy/Change in Use (Circle one) Date _____ Fee \$25.00 received #392 \$25.00 Kuf

Property Owner Charles A. Fahey Phone 609-466-2592

Owner's Address 901 Rt. 601

City Skillman State NJ Zip 08558 FAX 609-466-0768

Legal Agent for owner Alfred Kettell, Jr. Phone 609-737-9898

Fax 609-737-7405 E-mail ALKETTEL@901.com

Purchaser/Tenant

Name Slade Wagner Phone 609-468-1716

Purchaser/Tenant

Address 95 Crusher Road

City Hopewell State NJ Zip 08525 FAX _____

Legal Agent for Applicant Nicholas Hegedus Phone 609-514-5193

Fax 609-514-5194 E-mail N2HEGEDUS@yahoo.com

Ordinance BH 2003-1 There shall be no transfer of real property, change in the use or change in tenancy of a property which utilizes an onsite sewage disposal system until the Administrative Authority or its authorized representative shall have issued a Letter of Review stating that the sewage disposal system complies or does not comply with the requirements of this ordinance and are in addition to and not in lieu of any applicable federal and state laws and regulations. In the event that any present or future federal or state law or regulation imposes standards more stringent than the requirements of this ordinance, the more stringent standards shall govern. The requirements of this ordinance shall pertain to all onsite subsurface sewage disposal systems in Hopewell Township, whether the property served is used for residential, commercial, agricultural or industrial purposes. Effective October 1, 2003

This application must be completed and submitted **10** business days prior to transfer of properties, change in use or change in tenancy. Be sure to include the name and address of all persons owning, purchasing or leasing the property upon which the onsite sewage disposal system is located.

Make check for \$25 payable to Hopewell Township

Transfer of real property:

A report by an independent inspection company indicating that the septic system inspection was conducted meeting minimum standards for the inspection of subsurface sewage disposal systems as prescribed by the Administrative Authority and or the NJ DEP shall be submitted.

For the purposes of this ordinance, Appendix A "Minimum Requirements for the Inspection of Septic Systems, Needed for the Sale, Transfer or Lease of Properties in Hopewell Township" shall serve as a minimum guidance document for conducting septic inspections until such time as new rules or regulations are issued by NJDEP. This document is adopted by reference. Revisions to Appendix A maybe enacted by the Health Department as required.

The report must describe in sufficient detail the basis for the decision that the septic system is in satisfactory condition, is not operating at its design capacity, is not satisfactory and or appears to be malfunctioning or is in need of repairs or alterations so as to be brought into conformance with the standards of N.J.A.C. 7:9A-3.4.

Additionally, the report must indicate or certify that the system as designed and or installed, complies with the provisions of N.J.A.C. 7:9A-3.3 "Existing Systems," with regards to use, expansion, or change in use.

If the application cites evidence of a malfunction, a plan to correct shall be provided to the Health Department.

Changes in Use or Tenancy:

Inspections shall be conducted and submitted each time a property is leased. Changes in use or of occupants must be noted in the report. Determination of wastewater generation for the proposed tenant must be provided and verified that it is within the design volume for the system. Inspection reports conducted within 6 months of the lease or sale may be used if more than one unit is included in the building and if all other design and occupancy conditions remain constant. Occupancy of units will not be allowed if malfunction system noted.

_____ To be completed by **Health Department** _____

Upon review of the information submitted to the Administrative Authority or its authorized representative, one of the following documents will be issued within five (5) business days of receipt of the completed application.

☒ Letter of review will be issued,

Septic system inspector certifies the satisfactory operation of the system per the ordinance.

_____ Notice issued that Additional information or data must be supplied

_____ Notice issued that the report, or its methods or conclusions, are rejected.

_____ Notice issued that the Letter of review will not be issued because, the System is not in compliance and that the system is in need of repair or replacement.

Application incomplete and returned _____ **By** _____

Temporary approval granted on _____ **By** _____
pending submittal of the following:

_____ A copy of the sales agreement to be provided. Specifically it should specify who is responsible for this work and when it is to be completed. Funding issues should be noted. Remediation does not need to occur before closing, as long as provided for in contract.

_____ Engineering certification for the alteration/repair provide

_____ Other _____

This must be completed within 30 days of temporary approval

Letter of Review issued on 2-15-05 **To** owner

By [Signature] **Title** [Signature]

Violation: Any person or persons, firm or corporation violating any of the provisions of this ordinance upon conviction thereof, pay penalty of not less than \$200.00 for each offense and an additional penalty of \$25.00 for each day of continuance of the violation of the notice of the violation shall have been given to such person or persons, firm OR corporation by the Administrative Authority, to be collected and enforced by summary proceedings for the collection of penalties pursuant to the New Jersey Penalty Enforcement Law. Such notice shall be given by (1) serving a copy thereof on the property owner as shown on the current tax map or his agent in charge of the property, a (2) mailing a copy thereof by certified mail to the property owner at his address as shown on the said tax map.

van note - harvey

associates, pc

777 Alexander Road
Princeton, New Jersey 08540
609-987-2323 Fax: 609-987-0005
www.vannoteharvey.com



Since 1894

February 9, 2005

Mr. Slade Wagner

**RE: Septic System Evaluation
155 Hopewell Pennington Road
Lot 2, Block 17
Faherty Property
Hopewell Township, Mercer County, New Jersey
VNHA # 34576-380-22**

Dear Mr. Wagner:

Van Note-Harvey Associates, P.C. (VNHA) issued a Certification of Compliance on October 10, 2002 for the septic system installed on the above referenced property by R.W. Wagner Excavating. Since that time only one person has occupied the property with minimal water usage accrued. Per your request, VNHA conducted an evaluation of the existing system on February 3, 2005.

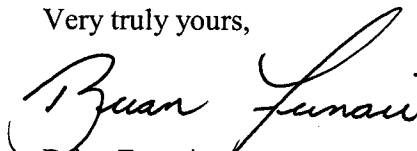
The first step of the evaluation was a dye test that consisted of introducing dye into the system and discharging approximately 350 gallons of water into the system. On the second dose from the dosing tank, a visual inspection of the inspection ports and the surrounding area were made. At no time during the visual inspection were there any indications of dye surfacing or a septic malfunction. The deep inspection port indicated proper water levels in the septic field.

The second step of the evaluation was to evaluate the septic tank and dosing tank. Prior to evaluating the tanks, Tommy Roman of Valentino Roman & Sons pumped and cleaned the 1,500-gallon septic tank. Once the tank was pumped, a visual inspection of the tank and baffles were made and found to be in good condition. The dosing tank, pumps, and alarms were also inspected and found to be in proper working condition.

Based on the above, we have concluded that the septic system at the above referenced location is not malfunctioning as of the date of our evaluation. This determination is consistent with N.J.A.C. 7:9A-3 Malfunction Systems.

If you have any questions regarding this evaluation, please feel free to give me a call.

Very truly yours,



Brian Funari

BJF/sec

Y:\VNHADATA\PROJECTS\34576\ARCARO.DOC

ENGINEERS • ENVIRONMENTAL CONSULTANTS • SURVEYORS
OFFICES IN: NEW JERSEY • PENNSYLVANIA • NEW YORK

Gary Guarino

From: Charles & Paulette Faherty [pfaherty@patmedia.net]
Sent: Thursday, January 27, 2005 5:39 PM
To: ALKETTELL@aol.com
Subject: Re: Block 17 Lot 2.01 - 155 Hopewell Princeton road

There was no well before this one was done just over 2 years ago. Charles Hixson had 3 or 4 springs for water when he built the house over 50 years ago and a cess (?) pool for waste. That is why we decided to put in a new septic system. The remaining spring had dried up during the drought in 2002 and that is why we had the new well put in. P & C

----- Original Message -----

From: ALKETTELL@aol.com
To: PFAHERTY@Patmedia.net
Sent: Thursday, January 27, 2005 3:20 PM
Subject: Fwd: Block 17 Lot 2.01 - 155 Hopewell Princeton road

Attached is letter from Hopewell Twp. Health Dept. Please note questions regarding the "old" well.

AL

1/31/05

No existing well prior to New Drilled Well
House was serviced by a spring

1/28/2005

Hopewell Township Health Department
201 Washington Crossing Pennington Road
Titusville, NJ 08560
609-737-0120

JAN 27 2005

APPLICATION FOR LETTER OF REVIEW
Onsite Well Water System

Block 017 Lot 002.01 Location 155 Hopewell-Princeton Road

Transfer/Tenancy/Change in Use (Circle one) Date _____ Fee \$25.00 received 25.00/1/27/05

Property Owner Charles A. Faherty # 379

Owner's Address 901 Rt. 601

City Skillman State NJ Zip 08558 Phone 609-466-0592

Legal Agent for owner Alfred Kettell Jr. Phone _____

Fax 609-737-7405 E-mail ALKETTEL@aol.com

Purchaser/Tenant
Name Slade Wagner

Purchaser/Tenant
Address 95 Crusher Road Hopewell, NJ 08525

City Hopewell State NJ Zip 08525 Phone 609-468-1716

Legal Agent for Applicant Nicholas Hegedus Phone 609-514-5193

Fax 609-514-5194 E-mail www.HegedusLawOffice
NZHEGEDUS@yahoo.com

Ordinance BH 2003-1 There shall be no transfer of real property, change in the use or change in tenancy of a property which utilizes an onsite public or private well water system for its potable water supply until the Administrative Authority or its authorized representative shall have issued a Letter of Review stating that the water system complies or does not comply with water quality standards specified by the NJ Safe Drinking Water Act N.J.S.A. 58:12A-1 et seq. and implementing rules N.J.A.C. 7:10 and the Private Well Testing Act Regulations N.J.A.C.7: 9E and any other parameters as specified by the Health Officer based on known contamination in this area. Effective October 1, 2003

This application must be completed and submitted **10 business days** prior to transfer of properties, occupancy or changes in use or change in tenancy and include the name and address of all persons owning, purchasing or leasing the property upon which the well is located.

Make check for \$25 payable to Hopewell Township.

Transfer of real property:

An original Laboratory Report provided by a NJDEP certified laboratory, plus a chain of custody must accompany this application. The laboratory must indicate if the water exceeds any maximum

contaminate level (MCL) or Action Levels for any parameters for which standards have been established by the Private Well Testing Act Regulations N.J.A.C.7:9E and the Safe Drinking water Act

Regulations or by the Administration Authority.

Changes in Tenancy:

An original laboratory report provided by a NJDEP certified Laboratory, plus a chain of custody must accompany this application. The laboratory must indicate if the water exceeds any maximum contaminate level (MCL) or Action Levels for: Total Coliform (annual), Nitrates, Volatile Organics, EPA 524.2 or latest version, Lead, first flush, Arsenic, Gross Alpha, Cadmium (Tri-annual) and any other parameters as specified by the Health Officer based on known contamination.

_____ To be completed by Health Department _____

☒ All parameters meet established MCL or Action Levels

_____ Application incomplete and returned _____

_____ Well water system is not in compliance. Approval pending submittal of one or more of the following:

_____ Provide Point of entry Treatment system or Install new well. (Permits are required)

Provide manufacture specifications for all treatment systems.

_____ Provide Post treatment system or retested laboratory results.

_____ Filed copy of Deed with amendment provided.

_____ Provide a Copy of an agreement for remediation as negotiated by owner/purchaser to be completed or installed prior to occupancy of this property.

_____ Temporary approval granted on _____ and must be completed within 30 days.

_____ Deed amendment for installed water treatment system.

_____ Acceptable duplicated Post treatment laboratory test results water results.

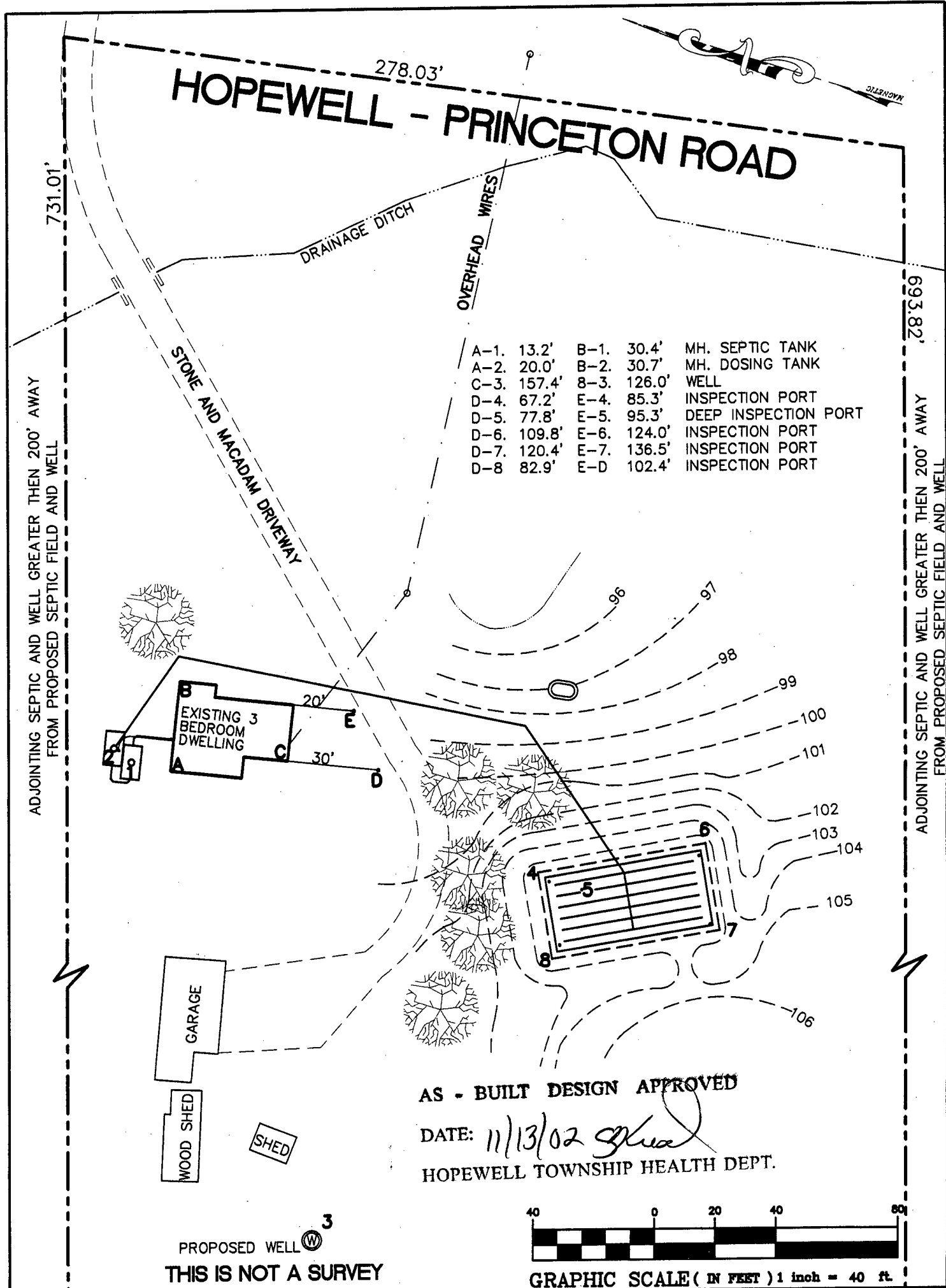
_____ Other _____

Letter of Review issued on 1-27-05 To owner

By [Signature] Title Health Officer

Violation: Any person or persons, firm or corporation violating any of the provisions of this ordinance upon conviction thereof, pay a penalty of not less than \$200.00 for each offense and an additional penalty of \$25.00 for each day of continuance of the violation after notice of the violation shall have been given to such person or persons, firm or corporation by the Administrative Authority, to be collected and enforced by summary proceedings for the collection of penalties pursuant to the New Jersey Penalty Enforcement Law. Such notice shall be given by (1) serving a copy thereof on the property owner as shown on the current tax map or his agent in charge of the property, or (2) mailing a copy thereof by certified mail to the property owner at his address as shown on the said tax map.

Planes



van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors

vh

777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

SEPTIC SYSTEM AS-BUILT PLAN
OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

D. Bruce Harrison

D. BRUCE HARRISON
NEW JERSEY PROFESSIONAL ENGINEER
No. 23524

10/15/02
DATE
OF SIGN

HOPEWELL TWP.,
SCALE: 1" = 40'

MERCER CO., N.J.
SEPTEMBER 2002

DRAWN BY:	FIELD BK	ORDER No.	FILE No.	SHEET No.
BJF	PAGE	02.22 34576 -33	TWP. BLK.	1 OF 1

STANDARD FORMS FOR
CERTIFICATE OF COMPLIANCE

County/Municipality of HOPEWELL TOWNSHIP

INSTRUCTIONS: Part A is to be completely filled in for all Certifications. Only Part B or Part C will be completed. Part B will be completed if the administrative authority relies upon the certification signed and sealed by a New Jersey licensed professional engineer that the system has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair and Individual Subsurface Sewage Disposal System which was approved by the administrative authority. Part C will be completed if the administrative authority performs the certification.

Part A – General Information

1. Permitted Activities (Check applicable categories):

Permit Number _____

☒ 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 Lot 2 Block 17

Street Address 155 HOPEWELL PRINCETON ROAD

3. Name and Present Address of Applicant: CHARLES FAHERTY

Applicant's Phone Number 609 466 0592 901 ROUTE 601 SKILLMAN NJ 08558

Part B – Professional Engineers Certification

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 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 the possibility of fine and imprisonment.

[Signature]
(Signature)

10/15/02
(Date)

D. BRUCE HARRISON 23514
Name (Type or Print), License #

SEAL

Part C – Certification by Administrative Authority

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 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 the possibility of fine and imprisonment.

Authorized Signature

Type of License Held

Name (Typed or Printed)

License Number

Date: _____

For Agency Use Only

Date Received: 10-22-02

Form Determined To Be: ☒ Complete ☐ Incomplete

Date Returned _____

Date Received _____

Date Certification Approved: 11-13-02

Authorized Signature: [Signature]

PERC TEST REPORT



van note-harvey associates
consulting engineers, planners & land surveyors

SUBJECT: Faherty FILE NO: 34576-33 DATE: 8-23-02
PROPOSED LOT: 2 BY: BJF TOWNSHIP: Hopewell
SOIL LOG: - WITNESS: - WEATHER: SUNNY HOT
BACKHOE: -

PERC HOLES

NO. <u>1</u>	NO. <u>2</u>	NO. <u>2.22</u>	NO. <u>2.22</u>	NO. <u>2.22</u>
DEPTH <u>14"</u>	DEPTH <u>14"</u>	DEPTH <u>14"</u>	DEPTH <u>14"</u>	DEPTH <u>14"</u>

4 HOUR PRE SOAKS

TIME:	DIST:	TIME:	DIST:	TIME:	DIST:	TIME:	DIST:	TIME:	DIST:

24 HOUR PRE SOAKS

PRE SOAKS

00:00	12"	00:00	12"						
00:37	0	00:36	0						
00:00	12"	00:00	12"						
00:38	0	00:37	0						

STABILIZATIONS

5 MIN	1 3/4	5 MIN	1 5/8						
↓	1 5/8	↓	1 1/2						
↓	1 3/4	↓	1 5/8						

FINAL TESTS

00:00	6"	00:00	6"						
00:18	0	00:18	0						
RATE	3.0	RATE	3.0	RATE		RATE		RATE	
	MIN/IN		MIN/IN						

COMMENTS: _____

SOIL PERMEABILITY CLASS RATING DATA

Client Faherty Site Hopewell-Princeton RO Township Hopewell
 Lot 2 Block 17 Job # 2-22-34576-33
 Test No. 1 Sample Depth * Date Collected 8-19-02 Tested 8-20-02
 Proposed Lot — Proposed Block —
 Coarse Fragment Content
 Total Weight of Sample, W.T., grams 167.4 198.7 133.9
 Weight of Material Retained on 2mm sieve, W.C.F., grams 14.2 11.7 8.7
 Wt. % Coarse Fragments (W.C.F./W.T.) x 100: 8.48 5.88 6.50

* GRAB SAMPLE SELECT FILL

	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, R _c	<u>7</u>	<u>7</u>	<u>7</u>
Hydrometer Reading - 40 seconds, grams, R ₁	<u>9</u>	<u>9</u>	<u>9</u>
Temperature of Suspension, °F	<u>75°</u>	<u>75°</u>	<u>75°</u>
Corrected Hydrometer Reading, grams R ₁ '	<u>3.4</u>	<u>3.4</u>	<u>3.4</u>
Hydrometer Reading - 2 hours, grams R ₂	<u>8</u>	<u>8</u>	<u>8</u>
Temperature of Suspension, °F	<u>74°</u>	<u>74°</u>	<u>74°</u>
Corrected Hydrometer Reading, grams, R ₂ '	<u>2.2</u>	<u>2.2</u>	<u>2.2</u>

Sieve Analysis:

a. Oven Dry Weight (2 hrs., 105°C) Total Sand Fraction (Soil retained in 0.047 mm sieve, grams)	<u>38.7</u>	<u>39.4</u>	<u>39.1</u>
b. Weight of Fine Plus Very Fine Sand Fraction (Sand passing 0.25 mm sieve), grams	<u>8.8</u>	<u>9.3</u>	<u>8.7</u>
c. % Fine Plus Very Fine Sand	<u>22.7</u>	<u>23.60</u>	<u>22.25</u>

Sample

% sand = (Wt. - R₁')/Wt. X 100 = (40 - 3.4)/40 X 100 = 91.5
 % clay = R₂'/Wt. X 100 = 2.2/40 X 100 = 5.5

Replicate A

% sand = (Wt. - R₁')/Wt. X 100 = (40 - 3.4)/40 X 100 = 91.5
 % clay = R₂'/Wt. X 100 = 2.2/40 X 100 = 5.5

Replicate B

% sand = (Wt. - R₁')/Wt. X 100 = (40 - 3.4)/40 X 100 = 91.5
 % clay = R₂'/Wt. X 100 = 2.2/40 X 100 = 5.5

Soil Morphology (Natural soil samples only):

Structure of Soil Horizon Tested N/A
 Consistence of Soil Horizon Tested: Dry N/A Moist 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. 7:14-3.

Signature of Site Evaluator Brian Lunari Date 8-20-02

Signature of Prof. Engineer [Signature] License # 23524 Date: 10/22/02

Hopewell Township Health Department
201 Washington Crossing Pennington Road
Titusville, NJ 08560
609-737-0120

JAN 27 2005

APPLICATION FOR LETTER OF REVIEW
Onsite Well Water System

Block 017 Lot 002.01 Location 155 Hopewell-Princeton Road

Transfer/Tenancy/Change in Use (Circle one) Date _____ Fee \$25.00 received 25.00/1/27/05

Property Owner Charles A. Faherty #379

Owner's Address 901 Rt. 601

City Skillman State NJ Zip 0858 Phone 609-466-0592

Legal Agent for owner Alfred Kettel Jr. Phone _____

Fax 609-737-7405 E-mail ALKETTEL@aol.com

Purchaser/Tenant Name Slade Wagner

Purchaser/Tenant Address 95 Crusher Road Hopewell, NJ 08525

City Hopewell State NJ Zip 08525 Phone 609-468-1716

Legal Agent for Applicant Nicholas Hegedus Phone 609-514-5193

Fax 609-514-5194 E-mail www.Hegeduslawoffice
NZ HEGEDUS@yahoo.com

Ordinance BH 2003-1 There shall be no transfer of real property, change in the use or change in tenancy of a property which utilizes an onsite public or private well water system for its potable water supply until the Administrative Authority or its authorized representative shall have issued a Letter of Review stating that the water system complies or does not comply with water quality standards specified by the NJ Safe Drinking Water Act N.J.S.A. 58:12A-1 et seq. and implementing rules N.J.A.C. 7:10 and the Private Well Testing Act Regulations N.J.A.C.7: 9E and any other parameters as specified by the Health Officer based on known contamination in this area. Effective October 1, 2003

This application must be completed and submitted **10 business days** prior to transfer of properties, occupancy or changes in use or change in tenancy and include the name and address of all persons owning, purchasing or leasing the property upon which the well is located.

Make check for **\$25** payable to Hopewell Township.

Transfer of real property:

An original Laboratory Report provided by a NJDEP certified laboratory, plus a chain of custody must accompany this application. The laboratory must indicate if the water exceeds any maximum

contaminate level (MCL) or Action Levels for any parameters for which standards have been established by the **Private Well Testing Act Regulations N.J.A.C.7:9E** and the **Safe Drinking water Act**

Regulations or by the Administration Authority.

Changes in Tenancy:

An original laboratory report provided by a NJDEP certified Laboratory, plus a chain of custody must accompany this application. The laboratory must indicate if the water exceeds any maximum contaminate level (MCL) or Action Levels for: Total Coliform (annual), Nitrates, Volatile Organics, EPA 524.2 or latest version, Lead, first flush, Arsenic, Gross Alpha, Cadmium (Tri-annual) and any other parameters as specified by the Health Officer based on known contamination.

_____ **To be completed by Health Department** _____

☒ All parameters meet established MCL or Action Levels

_____ Application incomplete and returned _____

_____ Well water system is not in compliance. Approval pending submittal of one or more of the following:

_____ Provide Point of entry Treatment system or Install new well. (Permits are required)

Provide manufacture specifications for all treatment systems.

_____ Provide Post treatment system or retested laboratory results.

_____ Filed copy of Deed with amendment provided.

_____ Provide a Copy of an agreement for remediation as negotiated by owner/purchaser to be completed or installed prior to occupancy of this property.

_____ Temporary approval granted on _____ and must be completed within **30 days**.

_____ Deed amendment for installed water treatment system.

_____ Acceptable duplicated Post treatment laboratory test results water results.

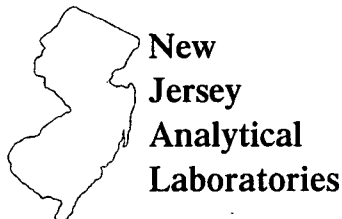
_____ Other _____

Letter of Review issued on 1-27-05 To owner

By [Signature] Title Health Officer

Violation: Any person or persons, firm or corporation violating any of the provisions of this ordinance upon conviction thereof, pay a penalty of not less than \$200.00 for each offense and an additional penalty of \$25.00 for each day of continuance of the violation after notice of the violation shall have been given to such person or persons, firm or corporation by the Administrative Authority, to be collected and enforced by summary proceedings for the collection of penalties pursuant to the New Jersey Penalty Enforcement Law. Such notice shall be given by (1) serving a copy thereof on the property owner as shown on the current tax map or his agent in charge of the property, or (2) mailing a copy thereof by certified mail to the property owner at his address as shown on the said tax map.

New Jersey Private Well Water Test Reporting Form

1590 Reed Road
Pennington, NJ 08534Tel: (609) 737-3477
Fax: (609) 737-3052
www.njal.com

The New Jersey Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act.

- ☒ Analytical results meet primary and secondary contaminant standards for drinking water.
- ☐ One or more of the analytical results do not meet primary⁺ contaminant standards for drinking water.
- ☐ One or more of the analytical results do not meet secondary⁺⁺ contaminant standards for drinking water.

Client InformationName: Mr. Charles Faherty
Mailing Address: 901 Route 601
Skillman, NJ 08558

Date Test Requested: 1/10/05

Property InformationProperty Address: 155 Hopewell Princeton Road Municipality: Hopewell Township
Muni Code (4 digit): 1106 County: Mercer Lot: 002.01 Block: 017
GPS Location-State Plane coordinates (feet): X: 422375 Y: 562598
GPS Coordinate Location (circle one): Well Head Front Door Sample Collection Point / Other
NJ Well Permit or Well Record Number (if known)**Laboratory Information**Reporting Laboratory Name & ID #: New Jersey Analytical Laboratories, LLC #11005
Reporting Laboratory Address & Phone #: 1590 Reed Road Pennington, NJ 08534
Tel: 609-737-3477**Sample Information:**Sample Collector Name: Allen Thomas
Authorized Representative/Certified Laboratory Employee Lab Certification ID #: 11005**NOTE: Only raw or untreated water samples meet the requirements of the PWTa regulations N.J.A.C. 7:9E.**

- a.) Indicate Specific Location of Sample collected: Kitchen Tap Raw
- b.) Type of Treatment Device(s) Installed (if known):

(+) In accordance with N.J.A.C. 7:10, Primary Drinking Water contaminants are those contaminants that have Maximum contaminant Levels or Action Levels established to protect health. The Primary Drinking Water contaminants are coliform bacteria, nitrate (total), lead, the volatile organic compounds, arsenic, mercury and gross alpha. The standards for primary contaminants are the maximum permissible levels allowed in drinking water based on ingesting the drinking water over the course of a lifetime.

(++) In accordance with N.J.A.C. 7:10, Secondary Drinking Water contaminants are those contaminants that have Recommended Upper Limits or Optimum Ranges established to protect against those properties that adversely effect the taste, odor, or appearance of drinking water. The Secondary Drinking Water contaminants are iron, manganese and pH.

Precision testing for a cleaner environment.

New Jersey Private Well Water Test Reporting Form

New Jersey Analytical Laboratories

The New Jersey Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act.

SUMMARY OF WELL WATER TEST RESULTS:						
Required Test Parameters	Result	Units	Applicable Standard (Maximum Contaminant Level, Action Level or Recommended Limit)	Applicable Standard Exceeded (Y/N)	Analytical Laboratory Certification ID #	Analytical Method
Total Coliform	<1	Pres/Abs	0 (not present)	N	11005	SM9222B
*E. coli	<1	Pres/Abs	0 (not present)	N	11005	SM9222B
Arsenic #	3.7	ug/l	50 ug/l	N	11005	EPA 200.9
Mercury ^	NA	ug/l	2 ug/l	NA	NA	NA
Lead	<1.0	ug/l	10 ug/l **	N	11005	EPA 200.9
Iron	<0.05	mg/l	0.3 mg/l	N	11005	SM 3111B
Manganese	<0.01	mg/l	0.05 mg/l	N	11005	SM 3111B
pH	7.08	su	6.5-8.5 (optimum range)	N	11005	EPA 150.1
Nitrate (total)	1500	ug/l	10,000 ug/l	N	11005	EPA 300
Benzene	<0.1	ug/l	1 ug/l	N	11005	EPA 524.2
Carbon Tetrachloride	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
meta-Dichlorobenzene	<0.2	ug/l	600 ug/l	N	11005	EPA 524.2
ortho-Dichlorobenzene	<0.1	ug/l	600 ug/l	N	11005	EPA 524.2
para-Dichlorobenzene	<0.1	ug/l	75 ug/l	N	11005	EPA 524.2
1,1-Dichloroethane	<0.1	ug/l	50 ug/l	N	11005	EPA 524.2
1,2-Dichloroethane	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
1,1-Dichloroethylene	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
cis-1,2-Dichloroethylene	<0.1	ug/l	70 ug/l	N	11005	EPA 524.2
trans-1,2-Dichloroethylene	<0.1	ug/l	100 ug/l	N	11005	EPA 524.2
1,2-Dichloropropane	<0.1	ug/l	5 ug/l	N	11005	EPA 524.2
Ethylbenzene	<0.1	ug/l	700 ug/l	N	11005	EPA 524.2
Methyl tertiary-butyl ether	<0.3	ug/l	70 ug/l	N	11005	EPA 524.2
Methylene Chloride	<0.2	ug/l	3 ug/l	N	11005	EPA 524.2
Monochlorobenzene	<0.1	ug/l	50 ug/l	N	11005	EPA 524.2
Naphthalene	<0.4	ug/l	300 ug/l	N	11005	EPA 524.2
Styrene	<0.1	ug/l	100 ug/l	N	11005	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.3	ug/l	1 ug/l	N	11005	EPA 524.2
Tetrachloroethylene	<0.1	ug/l	1 ug/l	N	11005	EPA 524.2
Toluene	<0.5	ug/l	1,000 ug/l	N	11005	EPA 524.2
1,2,4-Trichlorobenzene	<0.3	ug/l	9 ug/l	N	11005	EPA 524.2
1,1,1-Trichloroethane	<0.1	ug/l	30 ug/l	N	11005	EPA 524.2
1,1,2-Trichloroethane	<0.5	ug/l	3 ug/l	N	11005	EPA 524.2
Trichloroethylene	<0.2	ug/l	1 ug/l	N	11005	EPA 524.2
Vinyl Chloride	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
Xylenes (total)	<0.1	ug/l	1,000 ug/l	N	11005	EPA 524.2
Gross Alpha (initial) ~	6.84	pCi/L	5 pCi/L	Y	NY009	NJAC7:18-6
Gross Alpha (final) ~	4.27	pCi/L	15 pCi/L	N	NY009	NJAC7:18-6

UNITS: Pres/Abs=presence or absence; ug/l= micrograms per liter (also known as parts per billion); mg/l=milligrams per liter (also known as parts per million); pCi/L=picocuries per liter; su=standard units.

* If total coliform bacteria are detected then additional analyses are required to determine the specific type (fecal or E. coli) present. Fecal coliform or E. coli analysis are not required if total coliform sample results indicate the absence of total coliform bacteria.

** The results of a "flushed" raw (untreated) water sample, which is required by the Private Well Testing Act regulations, should be compared to the Ground Water Quality Standard of 10 ug/l found at N.J.A.C.7: 9-6 et seq. The Lead Action Level of 15 ug/l applies to a one liter first-draw tap sample collected from a cold water kitchen or bathroom tap/sink in which the water has remained motionless in the plumbing system for at least six hours [40 CFR 141.86(b)(2)]. This type of standing-water sample is NOT required by the Private Well Testing Act regulations.

Arsenic analysis is required only in Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Morris, Passaic, and Somerset Counties. The current USEPA MCL for arsenic is 50ug/L(ppb). A new MCL of 10 ug/L (ppb) has been adopted by the USEPA and will take effect nationally in January 2006.

^ Mercury analysis is required only in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, and Salem Counties.

~ Gross alpha testing will be phased in starting six months after the effective date of the Private Well Testing Act regulations (September 16, 2002).

Precision testing for a cleaner environment.

New Jersey Analytical Laboratories

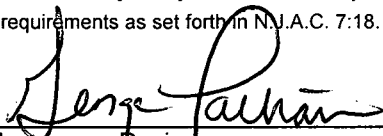
The New Jersey Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act.

ADDITIONAL SAMPLE INFORMATION:		
Coliform Analyses:		
Date/Time Sample Collected: 1/10/05,0910	Date/Time Sample Analyzed: 1/10/05,1630	Sample ID Number: 13125
Date/Time Sample Collected	Date/Time Sample Analyzed:	Sample ID Number:
Volatile Organics:		
Date/Time Sample Collected: 1/10/05,0910	Date/Time Sample Analyzed: 1/10/05,2301	Sample ID Number: 13125
Inorganics:		
Date/Time Sample Collected: 1/10/05,0910	Date/Time Sample Analyzed: 1/11/05,1546	Sample ID Number: 13125
Date/Time Sample Collected	Date/Time Sample Analyzed:	Sample ID Number:
pH Analysis:		
Date/Time Sample Collected: 1/10/05,0900	Date/Time Sample Analyzed: 1/10/05,0900	Sample ID Number: 13125
Gross Alpha Analyses:		
Date/Time Sample Collected: 1/10/05,0910	Date/Time Sample Analyzed: 1/12/05,2240	Sample ID Number: 13125
Date(s) All Analyses Received by Reporting Lab from Subcontracted Lab (if applicable):		

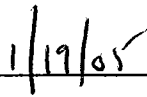
CERTIFICATION OF RESULTS:

I certify in writing that all sampling, analyses, and reporting performed herein, comply with all requirements set forth in N.J.A.C. 7:9E and N.J.A.C. 7:18, and hereby certify that this laboratory is in compliance with all laboratory certification and quality control procedures and requirements as set forth in N.J.A.C. 7:18.



Laboratory Manager or Designee

Date


ADDITIONAL INFORMATION:

Additional information concerning remediation funding alternatives and health effects of the parameters listed may be obtained by logging on to the New Jersey Department of Environmental Protection's website at: www.state.nj.us/dep/pwta or by calling the Private Well Testing Act Hotline at: 1-866-4PW-TEST.

I. Remediation/Treatment Funding Sources

A.) The Spill Fund Program administered by Environmental Claims Administration within the New Jersey Department of Environmental Protection offers help to innocent parties suffering from direct or indirect damages resulting from the discharge of a hazardous substance. A property owner may file a claim for reimbursement for most of the expenses incurred to install a treatment device for a potable well or to connect to a public water supply because of a hazardous substance in the well water. A claimant has 1 year from the date he/she learns that the well is contaminated above standards to file a claim. There are specific requirements and guidelines for filing claims with the Spill Fund. For more information, please contact the NJDEP-Environmental Claims Administration at: 609-633-0719 or visit their website at: www.state.nj.us/dep/srp or you may write to the ECA: NJDEP-ECA/Spill Fund, P.O. Box 028, 401 E. State Street, Trenton, N.J. 08625-0028.

B.) The New Jersey Housing and Mortgage Finance Agency (NJHMFA) has a Potable Water Loan Program that is available to owners of single family residences whose source of potable water exceeds the State of New Jersey's Primary Drinking Water Standards, including lead and mercury. In addition, the loan program covers iron and manganese although these contaminants do not have Primary Drinking Water Standards. For further information, please contact the NJHMFA Hotline at 1-800-NJHOUSE (1-800-654-6873) or they may be reached at: P.O. Box 18550, 637 South Clinton Avenue, Trenton, N.J. 08650-2085 or on the web at: www.state.nj.us/dca/hmfa

Precision testing for a cleaner environment.

HOPEWELL TOWNSHIP HEALTH DEPARTMENT
201 WASHINGTON CROSSING PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560

609-737-0120 FAX 609-737-1022

Permit Number 22065
Date Issued 5/22/02
Application Fee Received \$ 108.00

APPLICATION FOR PERMIT TO LOCATE AND CONSTRUCT AN INDIVIDUAL WATER SUPPLY & SYSTEM

SECTION A

Applicant Estate of Charles Hixson Phone (Home) ⁶⁰⁹ 466-0592 (Work) _____
Mailing Address % Charles Faherty, 901 Rte. 601, Skillman NJ
City _____ State _____ ZIP _____
Location where well is to be constructed or altered Block 17 Lot 2
Street Hopewell-Princeton Rd. City _____ ZIP _____
Well Driller Samuel Stothoff Co Inc Phone (908) 782-2116
Mailing Address PO Box 306
City Flemington State NJ ZIP 08822
Signature of Applicant or Agent Richard Stothoff Date 5-2-02

SECTION B

State Well Permit Number 28-50302
State Permit Issue Date 4-30-02
Expiration of State Well Permit 4-29-04

SECTION C

Inspection of grouting and installation of casing Date 9/5/02
Length of casing installed 60 Feet
Method of grouting of annular space Pressure
Inspector [Signature] License No. 831518

Instructions for completing application:

Application must be submitted with:

1. An engineers's site plan locating all existing and proposed wells and onsite sewage disposal systems within 200 feet.
2. A floor plan of the proposed structure showing all potential bedrooms, bathrooms and or other potential water uses (examples, underground lawn sprinklers, fire suppression systems, water fountains etc.).
3. A copy of the state well permit must be attached.
4. A check for the fee made payable to Hopewell Township.

Upon completion of the well construction a yield test must be conducted and the completed report submitted to the health department on an approved form.

Upon completion of the water supply system the completed state well and pump records must be submitted to the health department by the licensed well driller/pump installer.

Water potability tests per "The Safe Drinking Water Standards" must be collected by a certified testing laboratory and submitted to the health department prior to receiving final approval.

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
TRENTON, NJ

MAIL TO:

NJDEP
BUREAU OF WATER ALLOCATION
PO BOX 426
TRENTON, NJ 08625-0426

PERMIT TO DRILL WELL

VALID ONLY AFTER APPROVAL BY THE D.E.P.

Permit No. 28 50302

COORD #: 28.61.7 46

Property Owner Estate of Charles P. Hixson
Address % Charles Faherty
901 Rte. 601, Skillman, NJ 08558
Name of Facility Residence
Address Hopewell - Princeton Road

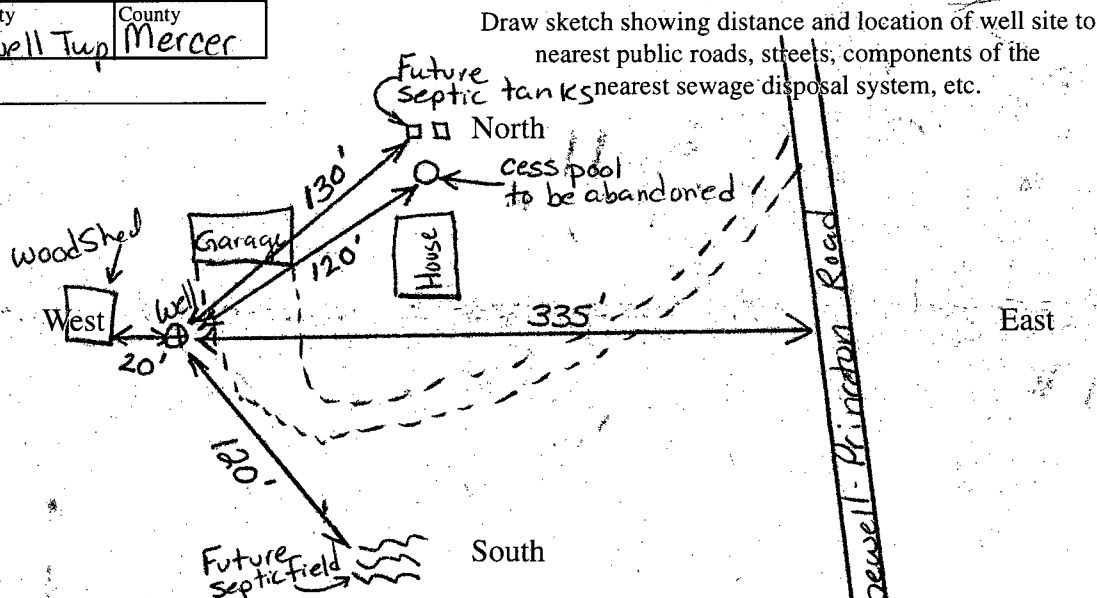
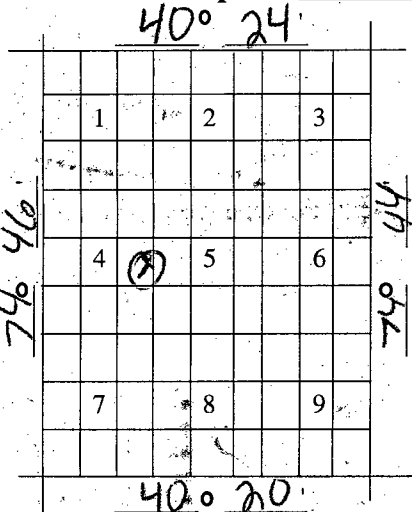
Driller Samuel Stothoff Co Inc
Address PO Box 306
Flemington NJ 08822

Diameter of Well	<u>6</u> Inches	Proposed Depth of Well	<u>400</u> Feet
Proposed Capacity of Pump	<u>5-8</u> GPM	Method of Drilling (Cable-tool, Rotary, etc.)	<u>Rotary</u>
Use of Well (See Reverse)	<u>Domestic</u>		
Drinking Water Supply?	<u>yes (see #7 on reverse)</u>		

LOCATION OF WELL

Lot # 2 Block # 17 Municipality Hopewell Twp County Mercer

State Atlas Map No. 40° 24'



PROVIDED WELL LOCATION (NAD 83 HORIZONTAL DATUM)
NJ STATE PLANE COORDINATE IN US SURVEY FEET

NORTHING: _____ OR EASTING: _____
LATITUDE: _____ 0 _____ " LONGITUDE: _____ 0 _____ "

SEE REVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT. APPROVAL OF THIS PERMIT IS MADE SUBJECT TO ACCEPTANCE OF AND COMPLIANCE WITH THE FOLLOWING ADDITIONAL CONDITIONS.

- ☐ PUBLIC COMMUNITY Water Supply Wells shall obtain construction and operation permits from the Bureau of Safe Drinking Water in accordance with N.J.A.C. 7:10-11.1 et seq.
- ☐ INDUSTRIAL SUPPLY - A physical connection control permit shall be obtained pursuant to the provisions of N.J.A.C. 7:10-10.1 et seq.
- ☐ IRRIGATION SUPPLY - A physical connection control permit may be required pursuant to the provisions of N.J.A.C. 7:10-10.1 et seq.
- ☐ REPLACEMENT WELL - Existing well must be sealed by a New Jersey licensed well driller of the proper class upon abandonment.
- ☐ PINELANDS - Well must be drilled and cased to a minimum depth of 100' unless the provisions of N.J.A.C. 7:50-6.84 (a)4.v. are met.
- ☐ MINIMUM distance requirements as per N.J.A.C. 7:9D-2.7 have not been met - see attached condition(s).
- ☐ The well shall be equipped with a totalizing flow meter per N.J.A.C. 7:19-2 et seq.

This Space for Approval Stamp

WELL PERMIT APPROVED
NJ D.E.P.

APR 30 2002

BUREAU OF WATER ALLOCATION

In compliance with N.J.S.A.58:4A-14, application is made for a permit to drill a well as described above.

Date 4-26-02 Signature of Driller Richard Stothoff Registration No. 1085m
Signature of Property Owner Charles P. Faherty

COPIES: Water Allocation - White Health Dept. - Yellow Owner - Blue Driller - White

USE OF WELL:

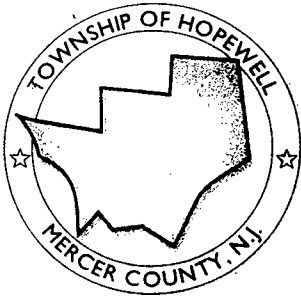
Agricultural/Horticultural
Domestic
Fire Protection
Geothermal Closed Loop
Geothermal Open Loop
Industrial
Irrigation

Livestock
Non-Public
Public Community Water Supply
Public Non-Community Water System
Replacement Type of Well (Specify)
Test

Make Checks Payable to: **"TREASURER - STATE OF NEW JERSEY"**

In accepting this permit the Owner and Driller agree to abide by the following terms and conditions:

1. All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq.
2. This permit conveys no rights, either expressed or implied, to divert water.
3. Well permits, submitted incomplete and/or illegible will be returned without approval for modification.
4. **If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Allocation.**
5. In the event this well is abandoned, the Owner or Well Driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the Department in accordance with the provisions of N.J.A.C. 7:9D-1 et seq.
6. Well permits are valid for one (1) year from date of approval except for permits issued for domestic use which are valid for a period of two years. Department must be notified in writing of permit cancellation.
7. Drinking Water Supplies must be classified as either:
 - a. **Domestic** (private household)
 - b. **Non-Public Water Supply** (Other Than Domestic Supply)
 - c. **Public Community Water Supply** - at least 15 service connections or serves at least 25 individuals daily (municipal supply, community well, mobile home parks, etc.)
 - d. **Public Non-Community Water Supply** (campgrounds, restaurants, hospitals, etc.)
8. A well record must be submitted by the well driller to the Bureau of Water Allocation within ninety (90) days after the well is completed.
9. This permit is **NONTRANSFERABLE**.
10. All wells to be used as a drinking water supply should be tested in accordance with the requirements of the appropriate county/municipality Health Department.
11. If the use of the well is to be changed, a well permit for the proposed use of the well may be required for review and approval. The existing well permit number must be referenced on the application form.



TOWNSHIP of HOPEWELL

DEPARTMENT of HEALTH

Serving Hopewell Borough and Pennington Borough

201 WASHINGTON CROSSING PENNINGTON ROAD, TITUSVILLE, N.J. 08560

TELEPHONE 609-737-0120 / FAX 609-737-2770

May 22, 2002

Estate Of Charles Hixon C/o Charles Faherty
901 Route 601
Skillman, NJ 08558

Re: Block 17 Lot 2

To Whom It May Concern:

Enclosed is your permit to construct a well at the above referenced property.

Please have the well location staked by your engineer.

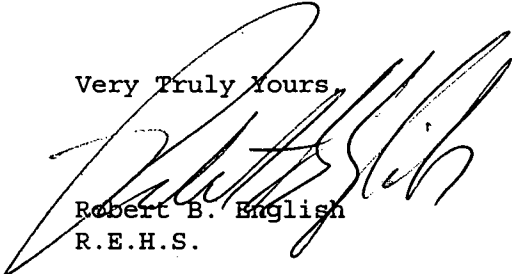
Please notify your well driller that the permit(s) has been approved. The driller will schedule the appropriate inspection.

Upon completion of the well, your well driller will conduct the required water availability test per township ordinance.

Prior to certificate of occupancy, a state certified laboratory must collect and test the water for NO Chlorine residual, coliform bacteria, nitrates, iron, manganese, pH and Volatile organic compounds EPA method 524.2, effective 8/1/00 Gross Alpha Particles and Arsenic are now required.

Corrective action must be completed if any of the above are found not to be in compliance with the Safe Drinking Water Standards.

Very Truly Yours,


Robert B. English
R.E.H.S.

WELL RECORD**RECEIVED**

SEP 19 2002

Well Permit Number
28 50302Atlas Sheet Coordinates
28 01 746OWNER HIXSON, CHARLES PAddress 901 RT 601 Hopewell Township Health Dept.City SKILLMANState NJ

Zip Code _____

WELL LOCATION ADDRESS HOPEWELL - PRINCETON RD
MERCER HOPEWELL TWPOwner's Well No. 1County _____ Municipality _____ Lot No. 2 Block No. 17WELL USE DOMESTICDATE WELL STARTED 9 / 4 / 02
DATE WELL COMPLETED 9 / 5 / 02**WELL CONSTRUCTION**Total Depth Drilled 180 ft.Finished Well Depth 180 ft.Borehole Diameter: 10 in.
Top _____ in.
Bottom 6 in.Well Casing Begins:
2 ft. above grade or
_____ ft. below grade

Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Single/Inner Casing	<u>42</u>	<u>58</u>	<u>6</u>	<u>Steel</u>	<u>Sch 40</u>
Middle Casing (for triple cased wells only)					
Outer Casing (largest diameter)					
Open Hole or Screen (No. Used _____)	<u>58</u>	<u>180</u>	<u>6</u>		
Blank Casings (No. Used _____)					
Tail Piece					
Gravel Pack					
Grout	<u>0</u>	<u>58</u>	<u>10x6</u>	<u>Neat Cement Bentonite</u>	<u>1692</u> lbs. _____ lbs.

RECORD OF TESTTest Date 9 / 5 / 02Static Water Level 40 ft. below land surfaceWater Level Measured Using m-scope

Pumping Water Level _____ ft. below land surface

Well Was Pumped Using air liftWell Yield 35 gpm

If Pump Tested: Discharge Rate _____ gpm

Duration of Test _____ hours

PERMANENT PUMPING EQUIPMENTInstalled by S. Stothoff Co. Reg. No. 0009Pump Type submersibleDepth of Pump below land surface 120' ft.Capacity 2-10 gpm Horsepower 3/4

I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.

SAMUEL STOTHOFF CO., INC.

Drilling Company _____

Well Driller (Print) Jim Kintzel

Driller's Signature _____

Registration No. 10773 Date 9 / 12 / 02COPIES: White - DEP Canary - Driller Pink - Owner
Goldenrod - Health Dept.Grouting Method Pressure grout w/tremie line
Drilling Method air rotary**GEOLOGIC LOG**

Note depths where water was encountered in consolidated formations.

0' - 8' Clay
8' - 180' Argillite**Water bearing zones:**115'170'**AS-BUILT WELL LOCATION**

(NAD 83 HORIZONTAL DATUM)

NJ STATE PLANE COORDINATE IN US SURVEY FEET

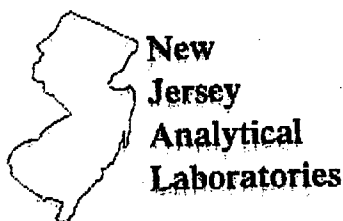
NORTHING: _____ EASTING: _____

OR

LATITUDE: _____° _____' _____" LONGITUDE: _____° _____' _____"

NJAL Lab ID# 13125

New Jersey Private Well Water Test Reporting Form



17/2.01

1590 Reed Road
Pennington, NJ 08534Tel: (609) 737-3477
Fax: (609) 737-3052
www.njal.com

The New Jersey Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act.

- ☒ Analytical results meet primary and secondary contaminant standards for drinking water.
- ☐ One or more of the analytical results do not meet primary* contaminant standards for drinking water.
- ☐ One or more of the analytical results do not meet secondary** contaminant standards for drinking water.

Client Information

Name: Mr. Charles Faherty
Mailing Address: 901 Route 601
Skillman, NJ 08558

Date Test Requested: 1/10/05

Property Information

Property Address: 155 Hopewell Princeton Road Municipality: Hopewell Township
Muni Code (4 digit): 1106 County: Mercer Lot: 002.01 Block: 017
GPS Location-State Plane coordinates (feet): X: 422375 Y: 562598
GPS Coordinate Location (circle one): Well Head (Front Door) Sample Collection Point / Other
NJ Well Permit or Well Record Number (if known):

Laboratory Information

Reporting Laboratory Name & ID #: New Jersey Analytical Laboratories, LLC #11005
Reporting Laboratory Address & Phone #: 1590 Reed Road Pennington, NJ 08534
Tel: 609-737-3477

Sample Information:

Sample Collector Name: Allen Thomas
Authorized Representative/Certified Laboratory Employee Lab Certification ID #: 11005
NOTE: Only raw or untreated water samples meet the requirements of the PWTa regulations N.J.A.C. 7:9E.
a.) Indicate Specific Location of Sample collected: Kitchen Tap Raw
b.) Type of Treatment Device(s) Installed (if known):

(*) In accordance with N.J.A.C. 7:10, Primary Drinking Water contaminants are those contaminants that have Maximum contaminant Levels or Action Levels established to protect health. The Primary Drinking Water contaminants are coliform bacteria, nitrate (total), lead, the volatile organic compounds, arsenic, mercury and gross alpha. The standards for primary contaminants are the maximum permissible levels allowed in drinking water based on ingesting the drinking water over the course of a lifetime.

(**) In accordance with N.J.A.C. 7:10, Secondary Drinking Water contaminants are those contaminants that have Recommended Upper Limits or Optimum Ranges established to protect against those properties that adversely effect the taste, odor, or appearance of drinking water. The Secondary Drinking Water contaminants are iron, manganese and pH.

Precision testing for a cleaner environment.

NJAL Lab ID# 13125

New Jersey Private Well Water Test Reporting Form

New Jersey Analytical Laboratories

The New Jersey Well Test Reporting Form is a standardized form to be used exclusively by laboratories reporting well test results to their client in accordance with the Private Well Testing Act Regulations N.J.A.C. 7:9E.

These laboratory analyses were completed for the purposes of complying with the Private Well Testing Act.

SUMMARY OF WELL WATER TEST RESULTS:						
Required Test Parameters	Result	Units	Applicable Standard (Maximum Contaminant Level, Action Level or Recommended Limit)	Applicable Standard Exceeded (Y/N)	Analytical Laboratory Certification ID #	Analytical Method
Total Coliform	<1	Pres/Abs	0 (not present)	N	11005	SM9222B
E. coli	<1	Pres/Abs	0 (not present)	N	11005	SM9222B
Arsenic *	3.7	ug/l	50 ug/l	N	11005	EPA 200.9
Mercury	NA	ug/l	2 ug/l	NA	NA	NA
Lead	<1.0	ug/l	10 ug/l **	N	11005	EPA 200.9
Iron	<0.05	mg/l	0.3 mg/l	N	11005	SM 3111B
Manganese	<0.01	mg/l	0.05 mg/l	N	11005	SM 3111B
pH	7.08	su	6.5-8.5 (optimum range)	N	11005	EPA 150.1
Nitrate (total)	1500	ug/l	10,000 ug/l	N	11005	EPA 300
Benzene	<0.1	ug/l	1 ug/l	N	11005	EPA 524.2
Carbon Tetrachloride	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
meta-Dichlorobenzene	<0.2	ug/l	600 ug/l	N	11005	EPA 524.2
ortho-Dichlorobenzene	<0.1	ug/l	600 ug/l	N	11005	EPA 524.2
para-Dichlorobenzene	<0.1	ug/l	75 ug/l	N	11005	EPA 524.2
1,1-Dichloroethane	<0.1	ug/l	50 ug/l	N	11005	EPA 524.2
1,2-Dichloroethane	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
1,1-Dichloroethylene	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
cis-1,2-Dichloroethylene	<0.1	ug/l	70 ug/l	N	11005	EPA 524.2
trans-1,2-Dichloroethylene	<0.1	ug/l	100 ug/l	N	11005	EPA 524.2
1,2-Dichloropropane	<0.1	ug/l	5 ug/l	N	11005	EPA 524.2
Ethylbenzene	<0.1	ug/l	700 ug/l	N	11005	EPA 524.2
Methyl tertiary-butyl ether	<0.3	ug/l	70 ug/l	N	11005	EPA 524.2
Methylene Chloride	<0.2	ug/l	3 ug/l	N	11005	EPA 524.2
Monochlorobenzene	<0.1	ug/l	50 ug/l	N	11005	EPA 524.2
Naphthalene	<0.4	ug/l	300 ug/l	N	11005	EPA 524.2
Styrene	<0.1	ug/l	100 ug/l	N	11005	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.3	ug/l	1 ug/l	N	11005	EPA 524.2
Tetrachloroethylene	<0.1	ug/l	1 ug/l	N	11005	EPA 524.2
Toluene	<0.5	ug/l	1,000 ug/l	N	11005	EPA 524.2
1,2,4-Trichlorobenzene	<0.3	ug/l	9 ug/l	N	11005	EPA 524.2
1,1,1-Trichloroethane	<0.1	ug/l	30 ug/l	N	11005	EPA 524.2
1,1,2-Trichloroethane	<0.5	ug/l	3 ug/l	N	11005	EPA 524.2
Trichloroethylene	<0.2	ug/l	1 ug/l	N	11005	EPA 524.2
Vinyl Chloride	<0.1	ug/l	2 ug/l	N	11005	EPA 524.2
Xylenes (total)	<0.1	ug/l	1,000 ug/l	N	11005	EPA 524.2
Gross Alpha (initial) **	6.84	pCi/L	5 pCi/L	Y	NY009	NJAC7:16-6
Gross Alpha (final) **	4.27	pCi/L	15 pCi/L	N	NY009	NJAC7:16-6

UNITS: Pres/Abs=presence or absence; ug/l= micrograms per liter (also known as parts per billion); mg/l=milligrams per liter (also known as parts per million); pCi/L=picocuries per liter; su=standard units.

* If total coliform bacteria are detected then additional analyses are required to determine the specific type (fecal or E. coli) present. Fecal coliform or E. coli analysis are not required if total coliform sample results indicate the absence of total coliform bacteria.

** The results of a "flushed" raw (untreated) water sample, which is required by the Private Well Testing Act regulations, should be compared to the Ground Water Quality Standard of 10 ug/l found at N.J.A.C.7: 9-6 et seq. The Lead Action Level of 15 ug/l applies to a one liter first-draw tap sample collected from a cold water kitchen or bathroom tap/sink in which the water has remained motionless in the plumbing system for at least six hours (40 CFR 141.86(b)(2)). This type of standing-water sample is NOT required by the Private Well Testing Act regulations.

Arsenic analysis is required only in Bergen, Essex, Hudson, Hunterdon, Mercer, Middlesex, Morris, Passaic, and Somerset Counties. The current USEPA MCL for arsenic is 50ug/L(ppb). A new MCL of 10 ug/L (ppb) has been adopted by the USEPA and will take effect nationally in January 2006.

^ Mercury analysis is required only in Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, and Salem Counties.

- Gross alpha testing will be phased in starting six months after the effective date of the Private Well Testing Act regulations (September 16, 2002).

Precision testing for a cleaner environment.

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. 17 Lot No. 2

Street Address 155 HOPEWELL PRINCETON RD Zip

3. Name of Applicant (print): CHARLES FAHERTY

4. Applicant's
Present Address: 901 Route 601
SKILLMAN, N.J. 08558

5. Applicant's Phone Number: 609 466 0592

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

REV. APPLICATION 5.31.02

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

Brian Lunari
AGENT

Date:

5-9-02

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

6/6/02

Signature of Authorized Agent

[Signature]

Name and Title _____

COUNTY/MUNICIPALITY Hopewell

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

Form 2a - General Site Evaluation Data Lot 2 Block 17

1. Name of Site Evaluator (print): VAN NATE HARVEY ASSOCIATES

2. Business Address of Site Evaluator: 777 ALEXANDER RD
PRINCETON NJ 08540

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 L. Lunn Date: 5-9-02

Signature of Professional Engineer Robert A. Hough 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 2 Block 17

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

2. Soil Log

Depth (inches)	Munsell Color Name and Symbol; Estimated Textural Class; 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 _____

Pit/Boring Flooded - Depth after _____ Hours _____

4. Soil Limiting Zones (Check Appropriate Categories):

Fractured Rock Substratum - Depth to Top _____

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 _____

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 L. Linn Date: 5-9-02

Signature of Professional Engineer Robert A. Hough License # 33444

van note - harvey
associates, pc

777 Alexander Road
Princeton, New Jersey 08540
609-987-2323 Fax: 609-987-0005
www.vannoteharvey.com



Since 1894

**FAHERTY
LOT 2, BLOCK 17
HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY
VNHA #02.22.34576-31**

**Soil Log #1/Pit Bail #1
May 1, 2002**

- 0 – 7" Topsoil
- 7" – 40" Silt loam, 10% angular shale, common medium distinct light gray mottles from 18"-40", angular blocky structure, moderate, dry, friable, few roots, clear smooth boundary.
- 40" – 108" Silt loam, 95% angular shale, common medium distinct light gray mottles, throughout, angular blocky structure, moderate, moist, firm, no roots, boundary not observed.

- * Machine refusal @108" with backhoe
- * Seepage @40" E.S.H.W.T.

Y:\VNHDATA\PROJECTS\34576\FAHERTY SOIL LOGS.DOC

COUNTY/MUNICIPALITY HOPEWELL TWP

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

Form 2b - Soil Log and Interpretation

Lot 2 Block 17

1. Log Number 2 Method (Check One): ☒ Profile Pit ☐ Boring

2. Soil Log

Depth (inches)	Munsell Color Name and Symbol; Estimated Textural Class; 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 _____

Pit/Boring Flooded - Depth after _____ Hours _____

4. Soil Limiting Zones (Check Appropriate Categories):

Fractured Rock Substratum - Depth to Top_____

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_____

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 Lunari Date: 5-9-02

Signature of Professional Engineer Robert A. Hough License # 33444

van note - harvey
Associates, PC

777 Alexander Road
Princeton, New Jersey 08540
609-987-2323 Fax: 609-987-0005
www.vannoteharvey.com



Since 1894

**FAHERTY
LOT 2, BLOCK 17
HOPEWELL TOWNSHIP, MERCER COUNTY, NEW JERSEY
VNHA #02.22.34576-31**

**Soil Log #2
May 1, 2002**

0 – 7"	Topsoil
7" – 35"	Silt loam, 10% angular shale, common medium distinct light gray mottles from 18"-40", angular blocky structure, moderate, dry, friable, few roots, clear smooth boundary.
35" – 98"	Silt loam, 95% angular shale, common medium distinct light gray mottles, throughout, angular blocky structure, moderate, moist, firm, no roots, boundary not observed.

- * Machine refusal @ 98" with backhoe
- * Seepage @46" E.S.H.W.T.

Y:\VNHDATA\PROJECTS\34576\FAHERTY SOIL LOGS.DOC

COUNTY/MUNICIPALITY HOPEWELL TWP

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

Form 3a - Soil Permeability Data

Lot 2 Block 17

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 bail	1	-	125	0.97

*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 6-20

_____ 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 Brian Lunn Date: 5-9-02

Signature of Professional Engineer Robert A. Hays License # 33444

COUNTY/MUNICIPALITY HOPEWELL 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 4-19-02

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} 2
- 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 _____
($H = D_{stratum} - D_{water}$)
- 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: l, 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, K_a (Calculate using formula):
$$K_a = [h_{rise}/T] \times [A_{av}/2.27 (H^2 - h^2)] \times 60 \text{ min/hr}$$

t_m	$d_w(\text{in.})$	$l, w (\text{ft.})$	$A_{av}(\text{ft}^2)$	$h_{rise}(\text{in.})$	$A_{av}(\text{ft}^2)$	$h(\text{ft})$	K_s
t_0				XXXXXX	XXXXXX	XXXXXX	XXXXXX
t_1							
t_2							
t_3							
t_4							
t_0				XXXXXX	XXXXXX	XXXXXX	XXXXXX
t_1							
t_2							
t_3							
t_4							
t_0				XXXXXX	XXXXXX	XXXXXX	XXXXXX
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:

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

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 L. Lanza

Date:

5-9-02

Signature of Professional Engineer

Robert A. Hough

License #

33444

PIT BAILING TEST

PROJECT: FAHERTY

TEST NO: PITBAIL #1

DATE: 4.19.02

D1= (AVERAGE DISTANCE FROM GROUND SURFACE TO WATER IN PIT,IN.)

D2= 125 (ASSUMED OR MEASURED DISTANCE FROM GROUND SURFACE TO IMPERVIOUS STRATA,IN.)

D3= 102 (OBSERVED DISTANCE FROM STABILIZED WATER SURFACE TO GROUND SURFACE,IN.)

H= 1.92 (D2-D3,FT.)

H0=

TIME OF OBSERVATION, HR:MIN	DELTA T,MIN.	DISTANCE FROM GROUND SURFACE TO WATER IN PIT			AREA				H0,FT.	K,IN/HR
		IN.	D1(AVE),IN.	DELTA H,IN.	LENGTH, IN.	WIDTH, IN.	AREA, SF.	AVE. AREA, SF.		
9:30 AM	0	121.5			37	33	8.48			
10:30 AM	60	118.5	120	3	37	33	8.48	8.48	0.42	3.20
11:30 AM	60	116	117.25	2.5	47	33	10.77	9.63	0.65	3.26
2:30 PM	180	113.25	114.625	2.75	47	33	10.77	10.77	0.86	1.49
6:00 PM	210	110.25	111.75	3	50	33	11.46	11.11	1.10	1.71
7:30 PM	90	109	109.625	1.25	51	33	11.69	11.57	1.28	2.09
9:00 PM	90	108.5	108.75	0.5	55	33	12.60	12.15	1.35	0.97

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~~ 1000

☒ Residential: No. of Dwelling Units 1 Total No. of Bedrooms 6

 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: 1500 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 2000 Dose Volume ~~343.16~~ 367.67

Reserve Capacity 1004.95

e. Laterals: Number 12 Total Length ~~23~~ 24 Pipe Size 1 Spacing 3.75
eA

f. Connecting Pipe: Size 3 Length 220'

g. Manifold: Size 3 Length 18.75'

h. Disposal Field: Type of Installation MSR

Design Permeability (Percolation Rate) 6-20 in/Hr

Trenches: Width _____ Total Length _____ Bed: Area 1336.5
~~1282.0~~ sq Ft

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: 5/10/02

COUNTY/MUNICIPALITY Hopewell TWP

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 12 Length, ft 24'
23' Spacing, ft 3.75

Hole Diameter, ins 1/4 Hole Spacing, ins 48"

Diameter of Laterals, ins 1

2. Lateral Discharge Rate:

Design Pressure Head at Supply End of Laterals, H_p , ft 3

Hole Discharge Rate, Q , gpm 1.28

Number of Holes per Lateral, n 5

Lateral Discharge Rate, $(Q \times n)$ gpm 6.4

3. Manifold Length, ft 18.25 Manifold Diameter, ins 3"

4. System Discharge Rate, gpm 77

5a. Pump Selection:

Diameter of Delivery Pipe 3" Length of Delivery Pipe 220

Friction Loss in Delivery Pipe, H_f , ft 3.47

Elevation of Dosing Tank Low Water Level 89.7

Elevation of Lateral Invert 104.47

Elevation Head, H_e , ft 14.77

Total Operating Head, H_t ($H_p + H_f + H_e$), ft 21.24

Pump Model SPD100H Rated Horsepower 1 HP

Pump Discharge Rate at Total Operating Head, gpm 77 GPM @ 21.43 TDH

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 950 1000

Design Permeability, in/hr 6-20 or Percolation Rate, min/in _____

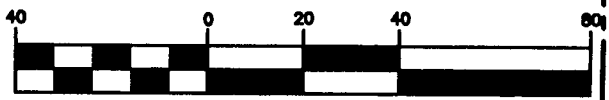
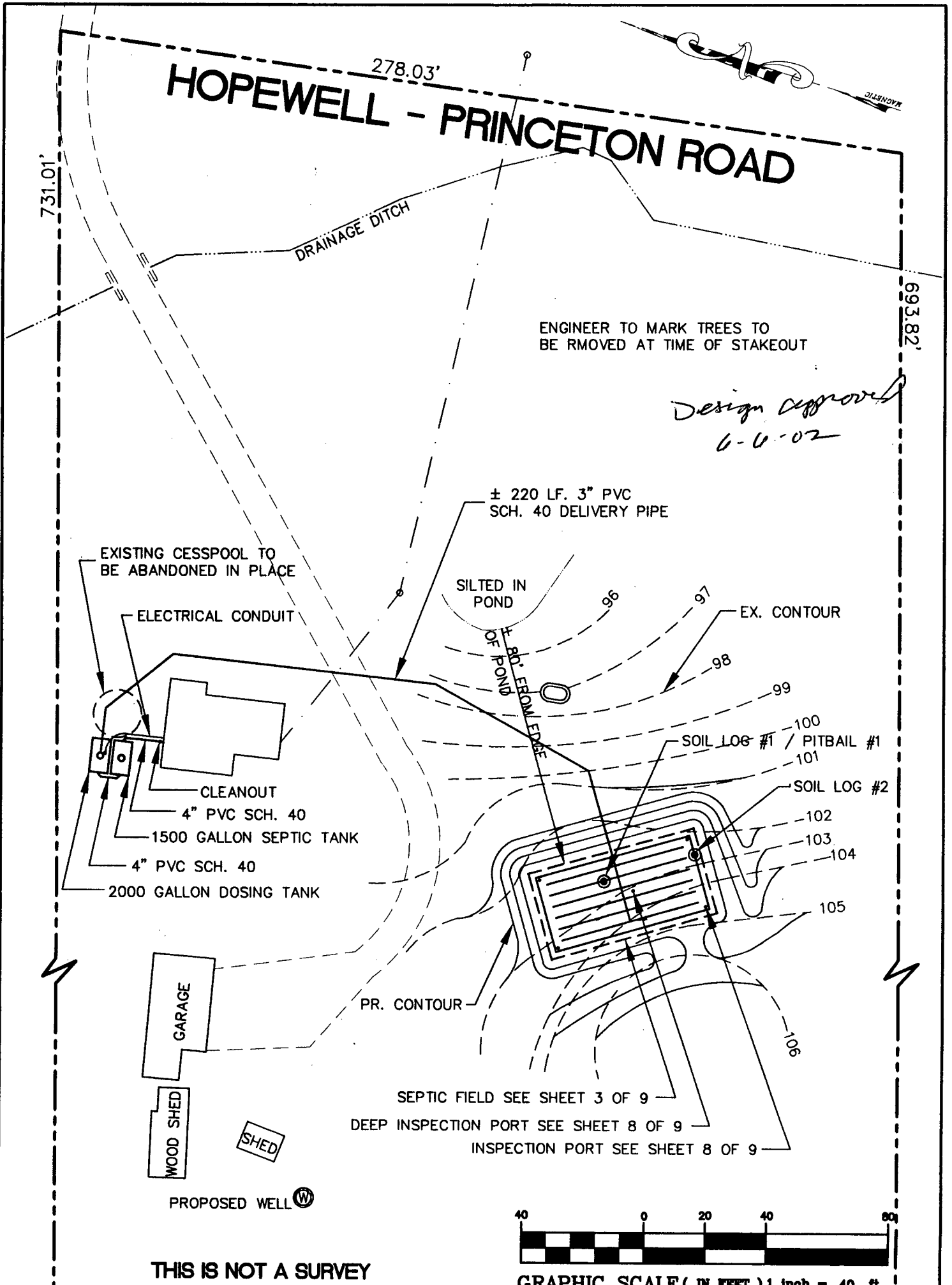
Internal Volume of Distribution Network 100.4

Dose Volume 343.16 367.67

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: 5/10/02



GRAPHIC SCALE (IN FEET) 1 inch = 40 ft.

van note-harvey associates, p.c
consulting engineers,
planners & land
surveyors

vh

777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

SEPTIC SYSTEM REPAIR DESIGN
OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

Robert A. Hough

ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444

5/31/02
DATE
OF SIGN

HOPEWELL TWP., SCALE: 1" = 40'		MERCER CO., N.J. MAY 2002		
DRAWN BY: BJF	FIELD BK	ORDER No. 02.22.34576-32	FILE No.	SHEET No.
CHECKED BY: RAH	PAGE		TWP. BLK.	2 OF 9

SEPTIC FIELD CROSS - SECTION

MOUNDED SOIL REPLACEMENT

NOT TO SCALE

REQUIRED DISPOSAL AREA

DESIGNED FOR A 4 BEDROOM DWELLING
WITH THE OPTION OF 2 ADDITIONAL
BEDROOMS OR CARETAKERS APARTMENT
(DESIGNED FOR A TOTAL OF 6 BEDROOMS)

DAILY FLOW RATE = 1000 GPD.

DESIGNED PERM. = 6 - 20 IN/HR.

REQUIRED BOTTOM BED AREA - (MIN.)
1000 GPM X 1.33 SF/DAY = 1330.0 SF.

DESIGNED BOTTOM BED AREA -

54' LONG X 24.75' WIDE = 1336.5 SQ. FT.

EXCAVATION LIMITS -

58' LONG X 28.75' WIDE = 1667.5 SQ. FT.

PRESURE DISTRIBUTION SYSTEM

12 DISTRIBUTION LATERALS 24' LONG.

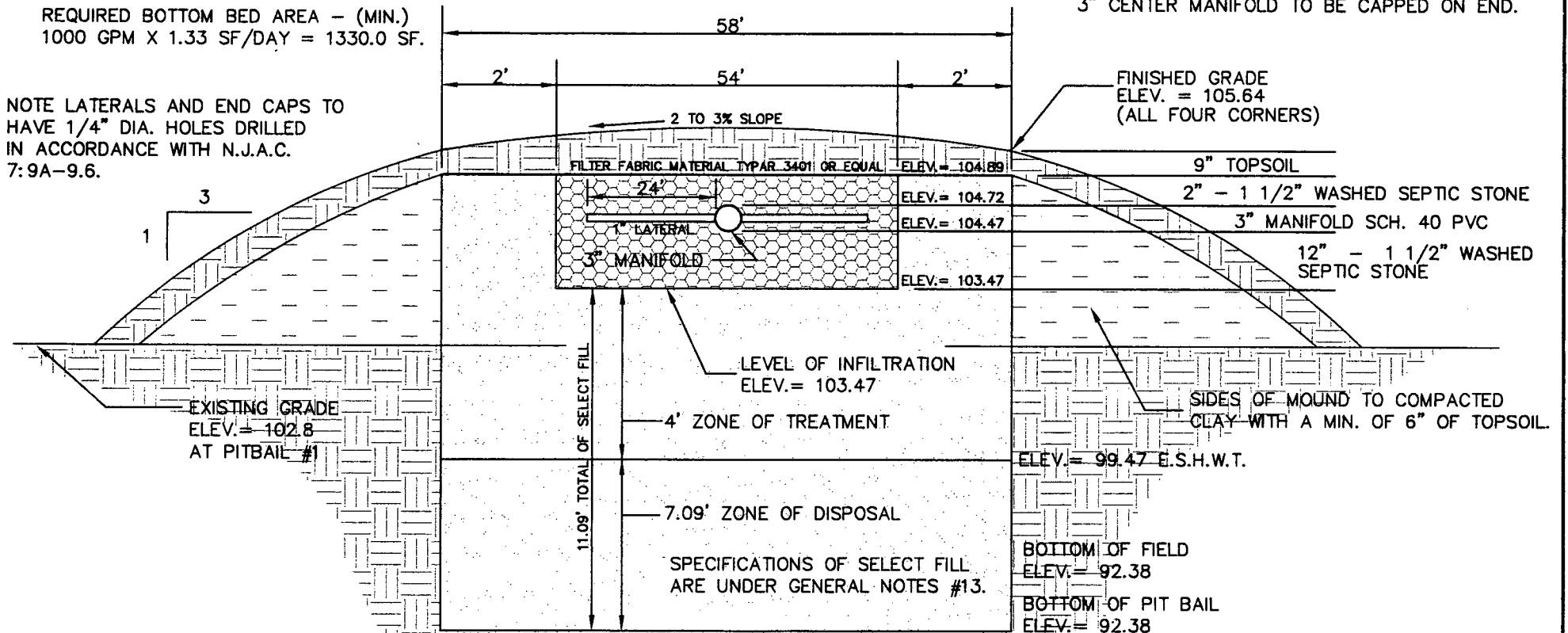
LATERALS SPACED 3.75' OFF CENTER.

INDIVIDUAL LATERALS TO HAVE 5 HOLES
1/4" IN DIAMETER AT 48" APART.

END LATERALS TO BE SPACED 3" FROM
EDGE OF BED.

3" CENTER MANIFOLD TO BE CAPPED ON END.

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



SELECT FILL EMPLACEMENT

FILL MATERIAL TO BE SPREAD AND COMPACTED IN ONE FOOT LAYERS. COMPACTION IS TO BE DONE BY SHEEPSFOOT ROLLER OR THE USE OF A RUBBER TIRED OR TRACKED MACHINE DRIVEN OVER THE AREA IN A CONTROLLED PATTERN.

AFTER EMPLACEMENT OF THE SELECT FILL AND BEFORE PLACEMENT OF THE STONE. THE ENGINEER MUST PERFORM PERCOLATION TESTS IN THE EMPLACED SELECT FILL.

van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors
vh
777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

Robert A. Hough
ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444

DATE
5/21/02

SEPTIC SYSTEM REPAIR DESIGN

LOT 2, - BLOCK 17

PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

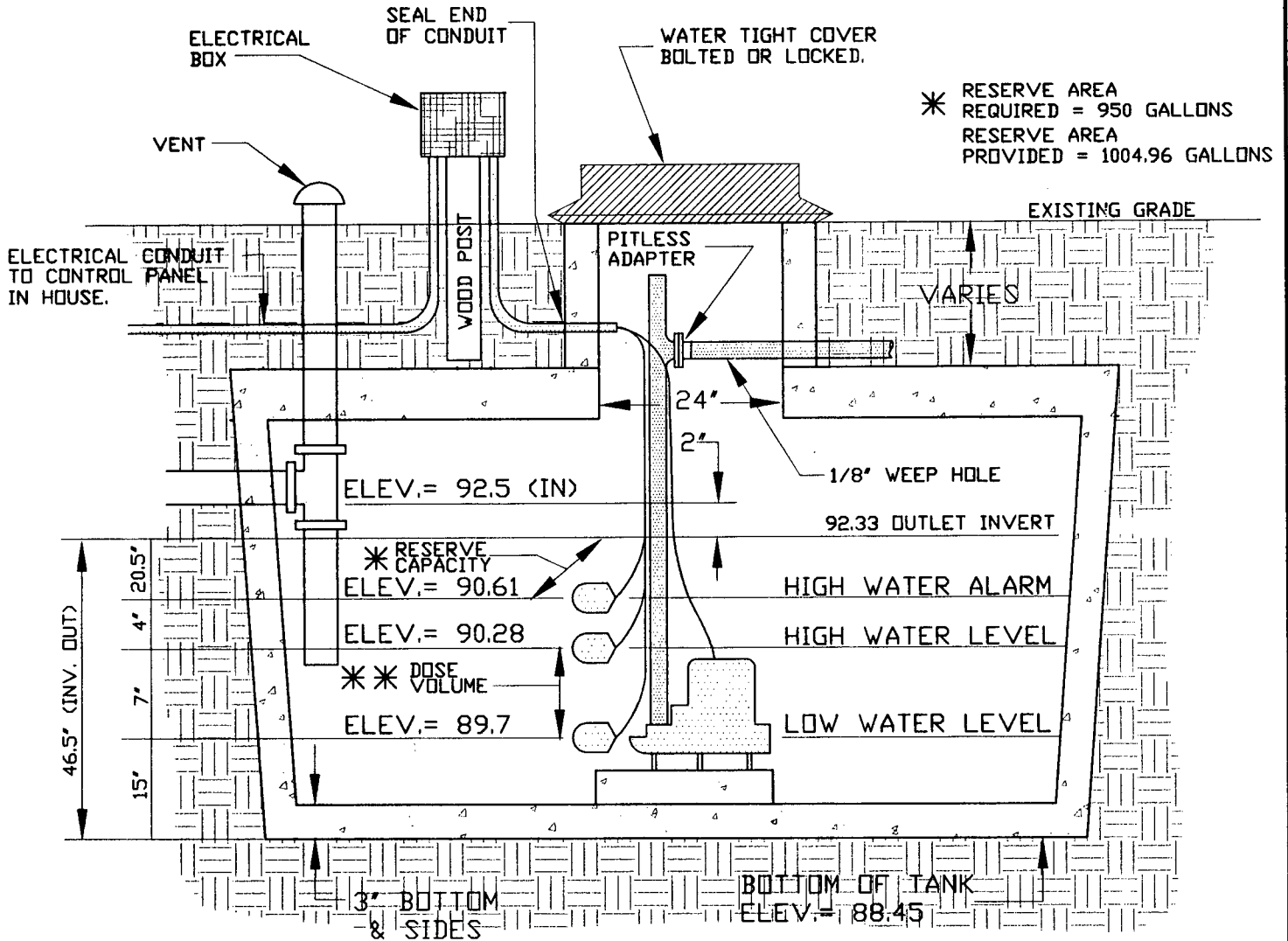
HOPWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

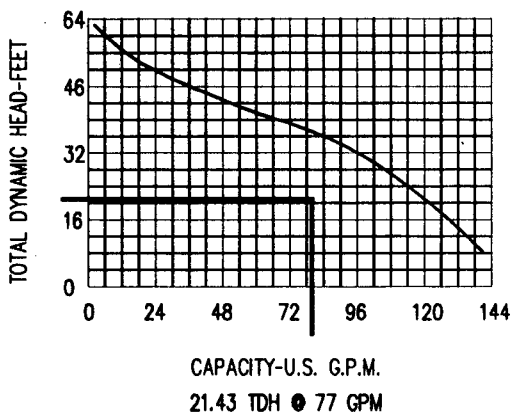
DRAWN BY:	B.J.F.	FIELD BK.	ORDER NO.	FILE NO.	SHEET NO.
CHECKED BY:	RAH	PAGE	02.22.34576-32	TWP. BLK.	3 OF 9

2000 GALLON DOSING TANK WITH PUMP

NOT TO SCALE



MIN. TANK INSIDE DIMENSIONS L=151" X W=75" X D=45.5".



**HYDROMATIC PUMP MODEL SPD100H
OR APPROVED EQUAL.**

**** DOSE 237.5 GALLONS PLUS TOTAL VOLUME
OF PIPING 100.4 GALLONS.
DOSE VOLUME REQUIRED = 337.9 GALLONS
DOSE VOLUME PROVIDED = 343.16 GALLONS**

QUICK-DISCONNECT COUPLINGS SHALL
BE USED TO FACILITATE REMOVAL OF
THE PUMP FOR SERVICING.

FLOATS TO BE USED HYDROMATIC 3900
MERCURY SWITCH LEVEL CONTROL OR EQUAL.

PUMP TO BE USED HYDROMATIC
SPD100H OR APPROVED EQUAL.

AUDIO AND VISUAL ALARMS TO BE
INSTALLED INSIDE OF DWELLING.

van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors

vh

777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

**SEPTIC SYSTEM REPAIR DESIGN
OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN**

Robert A. Hough

5/31/02
DATE
OF SIGN

**ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
LIC. No. 33444**

HOPEWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

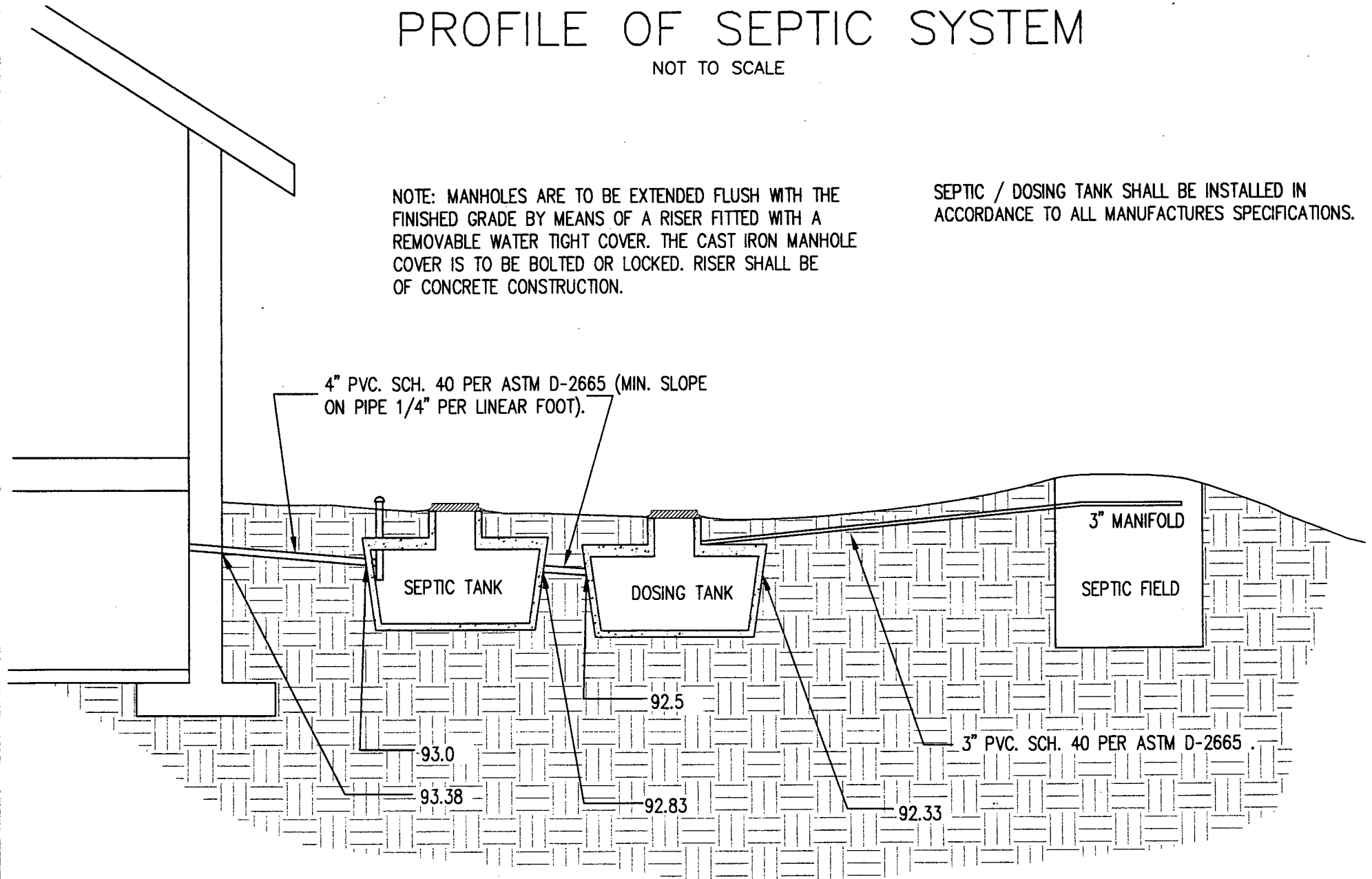
DRAWN BY: BJB	FIELD BK	ORDER No. 02.22. 34576 -32	FILE No.	SHEET No.
CHECKED BY: RAH	PAGE		TWP. BLK.	4 OF 9

PROFILE OF SEPTIC SYSTEM

NOT TO SCALE

NOTE: MANHOLES ARE TO BE EXTENDED FLUSH WITH THE FINISHED GRADE BY MEANS OF A RISER FITTED WITH A REMOVABLE WATER TIGHT COVER. THE CAST IRON MANHOLE COVER IS TO BE BOLTED OR LOCKED. RISER SHALL BE OF CONCRETE CONSTRUCTION.

SEPTIC / DOSING TANK SHALL BE INSTALLED IN ACCORDANCE TO ALL MANUFACTURES SPECIFICATIONS.



TANKS TO BE SET SIDE - BY - SIDE. FOR ELEVATION PURPOSES ONLY.

van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors
vh
777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

Robert A. Hough
ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444
DATE
5/21/02
OF SIGN

SEPTIC SYSTEM REPAIR DESIGN

OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

HOPEWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

DRAWN	BJF	FIELD BK	ORDER No.	FILE No.	SHEET No.
BY:			02.22.		
CHECKED	RAH	PAGE	34576	TWP. BLK.	5 OF 9
BY:			-32		

GENERAL NOTES

1. REMOVE TREES IN THE VICINITY OF DISPOSAL FIELD AS DIRECTED BY HEALTH OFFICER.
2. EXCAVATION CARRIED BELOW REQUIRED DEPTH TO BE FILLED WITH FILLER MATERIAL.
3. NO GRADING EQUIPMENT SHALL PASS OVER SEPTIC FIELD.
4. TWO PIECE PRECAST REINFORCED CONCRETE SEPTIC TANK SHALL BE WATER TESTED BY THE ADMINISTRATIVE AUTHORITY
5. LOT GRADING TO BE CONTROLLED TO DIRECT SURFACE WATER AWAY FROM AND TO AVOID PONDING WITHIN WASTE DISPOSAL AREA.
6. PROVIDE ACCESS COVER PERMANENT MARKER AT FINISHED GRADE FOR SEPTIC TANK, DOSING TANK AND DISTRIBUTION BOX.
7. THE PERFORMANCE OF SUBSURFACE DISPOSAL SYSTEMS DEPENDS UPON CONSTRUCTION IN STRICT ACCORDANCE WITH STATE AND LOCAL STANDARDS, PRESCRIBED USE AS DESIGNED, AND PERIODIC MAINTENANCE BY THE OWNER.
8. THERE ARE NO EXISTING WELLS, WATER COURSES OR SEPTIC SYSTEMS WITHIN 100 FEET OF THE PROPOSED SEPTIC SYSTEM OR WELL EXCEPT THOSE SPECIFIED ON THE PLAN.
9. CONTRACTOR TO VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL NOTIFY ENGINEER IF SUBSOIL CONDITIONS ARE FOUND TO DIFFER SUBSTANTIALLY FROM THOSE SHOWN ON DRAWINGS.
11. NO GARBAGE GRINDER UNITS TO BE ATTACHED TO SEPTIC SYSTEM.
12. CONTRACTOR TO NOTIFY ENGINEER OF PROGRESS SO THAT ENGINEER MAY MAKE PERIODIC INSPECTIONS FOR PREPARATION OF AS-BUILT PLAN AND CERTIFICATE. INSPECTIONS TO INCLUDE BUT NOT BE LIMITED TO: OPEN EXCAVATION, REPLACEMENT, D-BOX, BACKFILL AND FINAL GRADE. NO CERTIFICATION CAN BE PROVIDED IF NOT WITNESSED BY VNHA.
13. SELECT FILL SHALL MEET THE FOLLOWING CRITERIA:
 - A. CONTENT OF COARSE FRAGMENT (PARTICLES GREATER THAN 2MM IN SMALLEST DIMENSION) SHALL BE LESS THAN 15% BY VOLUME OR 25% BY WEIGHT.
 - B. TEXTURAL ANALYSIS (COMPOSITION, BY WEIGHT, OF SIZE PASSING THE 2MM SIEVE): 85-95% SAND, 5-15% SILT AND CLAY, MINIMUM 5% CLAY. SAND SILT AND CLAY ARE THE PARTICLE SIZE FRACTIONS OR "SOIL SEPARATES" AS DEFINED BY THE U.S.D.A. SYSTEM OF SOIL CLASSIFICATION.
 - C. PERMEABILITY: 2-6 IN./HR. OR PERCOLATION RATE 15-20 MIN./IN.
14. ALL ELECTRICAL INSTALLATIONS PER NATIONAL ELECTRICAL CODE.
15. SOIL TESTS AND SOIL LOGS: THE SOIL LOGS AND PERMEABILITY TESTS MAKE NO REPRESENTATIONS OR WARRANTIES EITHER AS TO THE PRESENCE OR ABSENCE OF OBSTRUCTIONS OR SOIL CONDITIONS OTHER THAN THOSE ACTUALLY PENETRATED OR AS TO THEIR NATURE OR EXTENT. SUBSURFACE CONDITIONS OTHER THAN THOSE ACTUALLY PENETRATED MAY VARY WITH REGARD TO ELEVATION, COMPOSITION, TEXTURE, STRUCTURE, SOUNDNESS, AND OTHER CHARACTERISTICS FROM THE DESCRIPTIONS GIVEN IN THE SOIL LOGS AND THE RESULTS FROM THE PERCOLATION TESTS. SUBSURFACE CONDITIONS DIFFERING FROM THOSE OBSERVED AT TEST LOCATIONS MAY REQUIRE REVISIONS TO THE DESIGN OR CONSTRUCTION OF THE ON-SITE SEWAGE DISPOSAL SYSTEM AT THE OWNER'S EXPENSE.
16. SEPTIC TANK TO BE CONSTRUCTED AND PLACED ACCORDING TO N.J.A.C. 7:9A-8.2.
17. SOIL TESTS ARE CARRIED OUT UNDER THE DIRECT SUPERVISION OF A LICENSED ENGINEER.
18. FILL MATERIAL COMPACTION TO BE INSPECTED BY THE ENGINEER.
19. DOSING TANK TO BE CONSTRUCTED AND PLACED ACCORDING TO N.J.A.C. 7:9A-8.2.
20. SEPTIC/DOSING TANK TO BE MANUFACTURED BY R&E MERSHON CONCRETE PRODUCTS, INC.

van note-harvey associates, p.c

consulting engineers,
planners & land
surveyors



777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

Robert A. Hough

5/31/02

DATE
OF SIGN

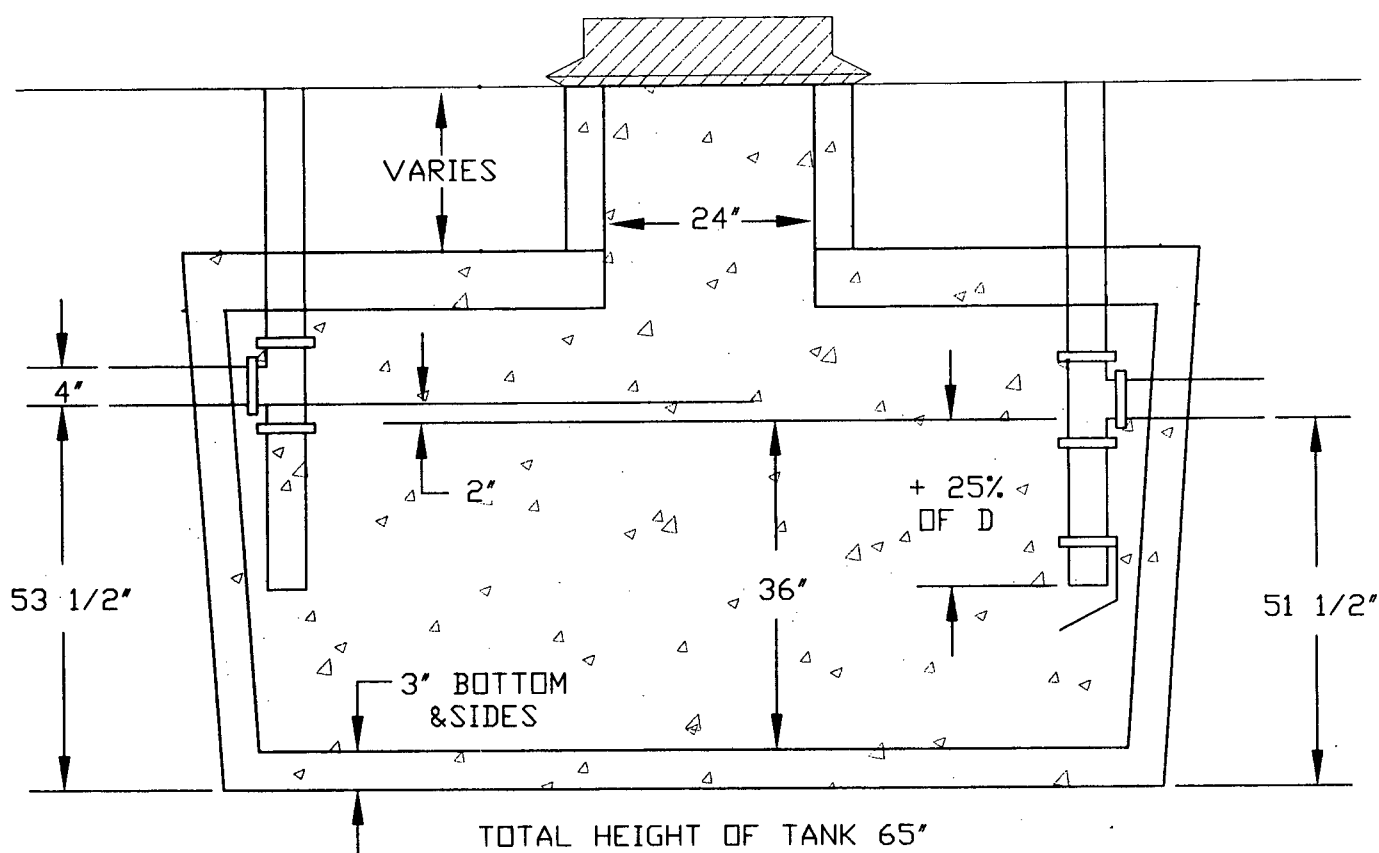
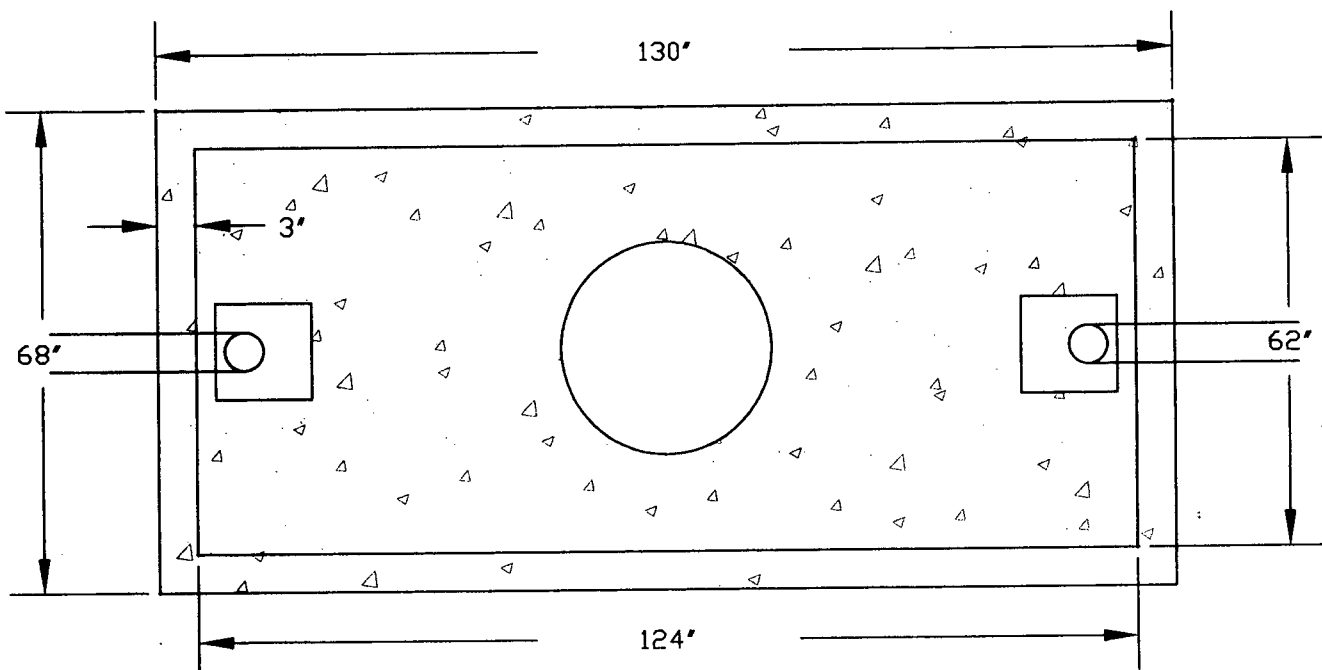
ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444

SEPTIC SYSTEM REPAIR DESIGN
OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

HOPEWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

DRAWN BY: BJB	FIELD BK	ORDER No. 02.22.34576-32	FILE No.	SHEET No.
CHECKED BY: RAH	PAGE		TWP. BLK.	6 OF 9



R & E MERSHON CONCRETE PRODUCTS INC. 1500 GALLON TANK – ONE PIECE

TANK IS 4000 PSI CONCRETE – STEEL REINFORCED
CONCRETE TO CONFORMS TO ACI 318-16-4.5.1
AND ACI 318-16-4.5.2

van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors



777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

SEPTIC SYSTEM REPAIR DESIGN
OF
LOT 2, – BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

Robert A. Hough

5/31/02

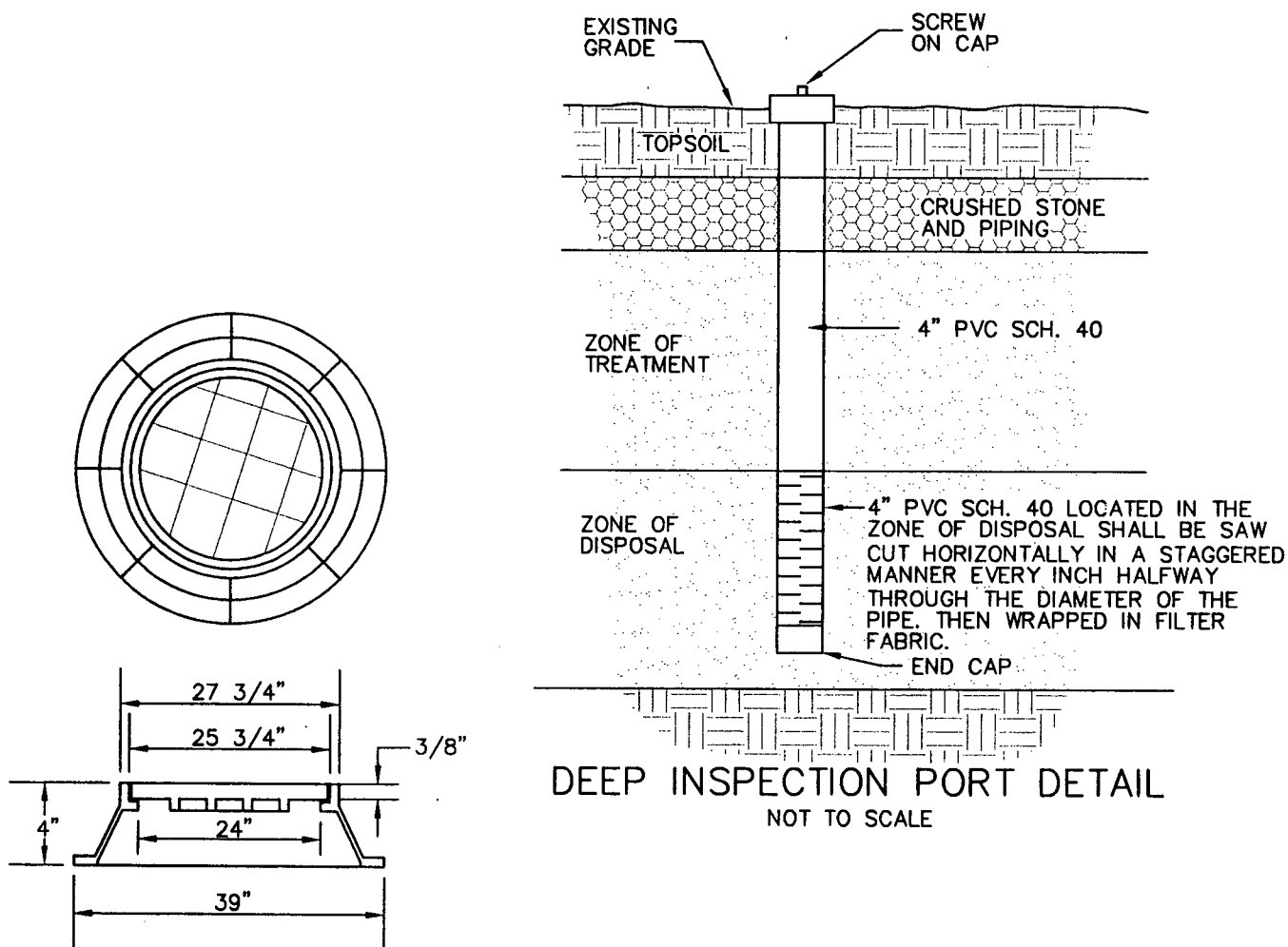
DATE
OF SIGN

ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444

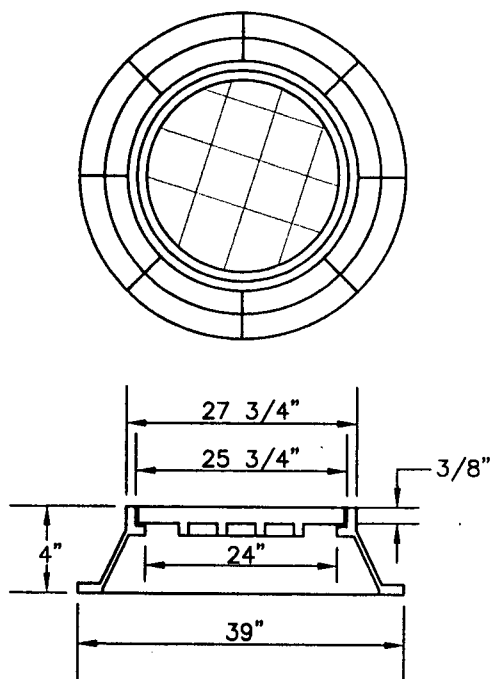
HOPEWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

DRAWN BY: BJF	FIELD BK	ORDER No. 02.22. 34576 -32	FILE No.	SHEET No.
CHECKED BY: RAH	PAGE		TWP. BLK.	7 OF 9

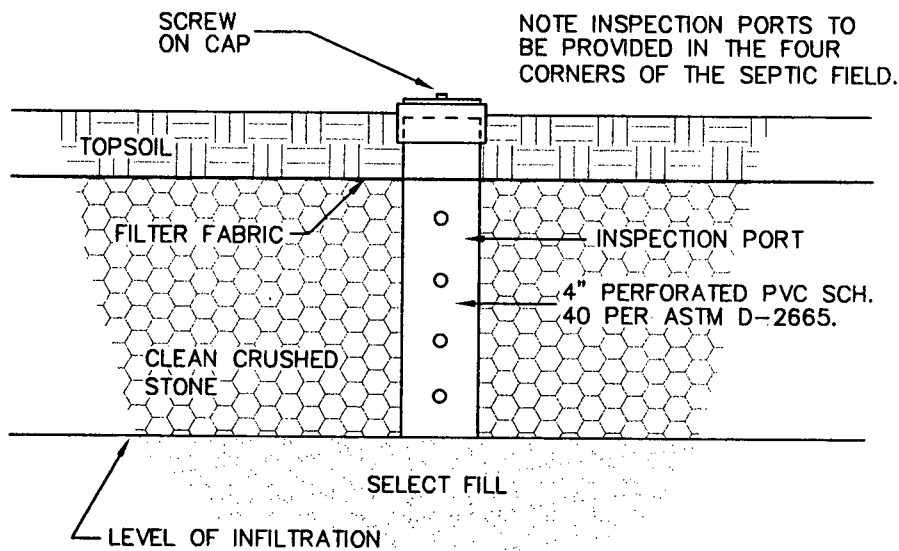


DEEP INSPECTION PORT DETAIL
NOT TO SCALE



MANHOLE FRAME AND COVER AS MANUFACTURED BY
CAMPBELL FOUNDRY, TYPE 1203B OR APPROVED EQUAL.

STANDARD MANHOLE FRAME
AND COVER DETAIL
NOT TO SCALE



INSPECTION PORT DETAIL
NOT TO SCALE

van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors



777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

Robert A. Hough

5/31/02

ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444

DATE
OF SIGN

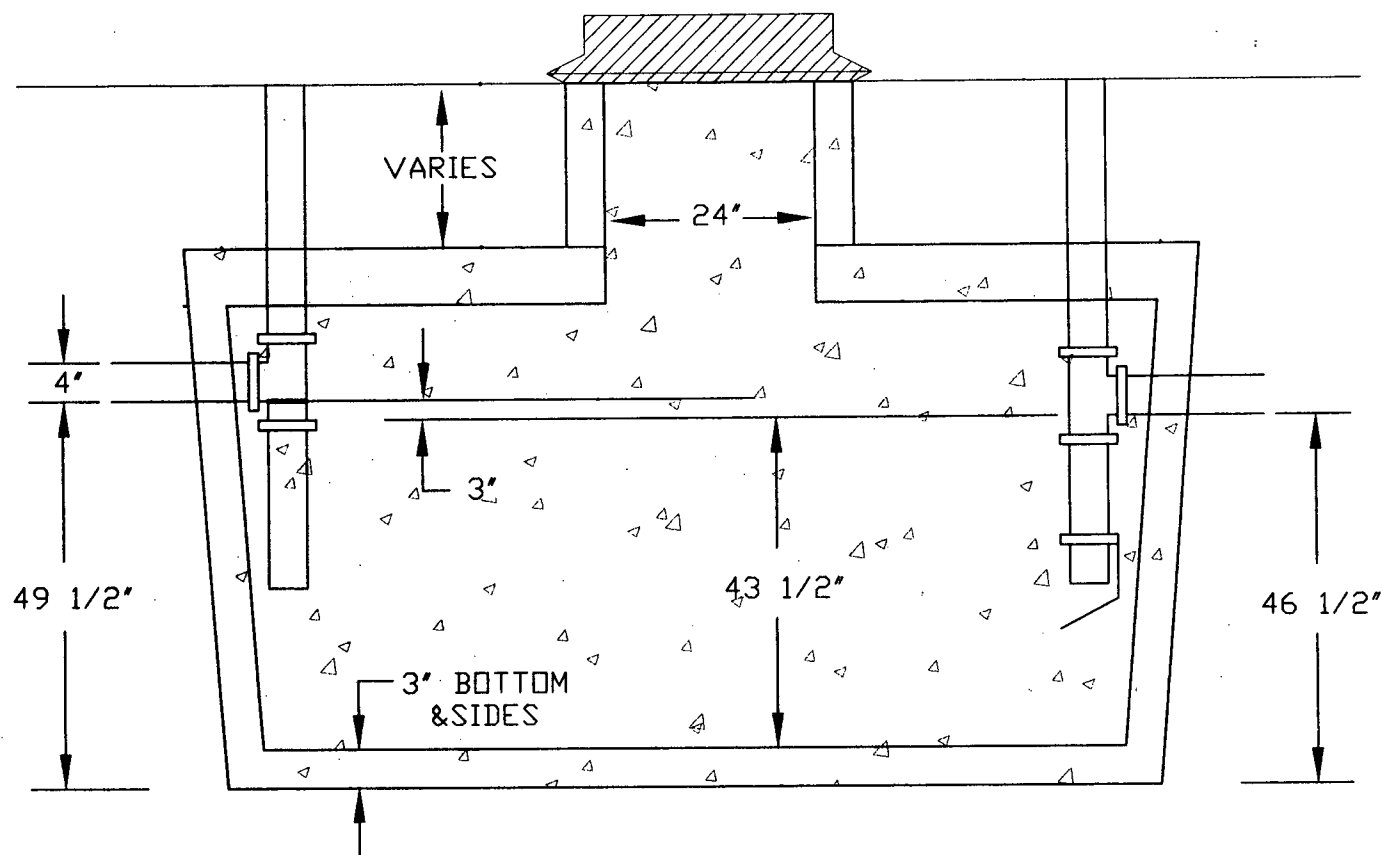
SEPTIC SYSTEM REPAIR DESIGN
OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

HOPEWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

DRAWN BY: BJB	FIELD BK	ORDER No. 02.22.34576-32	FILE No.	SHEET No.
CHECKED BY: RAH	PAGE		TWP. BLK.	8 FO 9

R & E MERSHON CONCRETE PRODUCTS INC.
2000 GALLON TANK – ONE PIECE



TANK TAPERS TOP TO BOTTOM AND
IS TRAPEZOIDAL IN CROSS SECTION

TANK IS 4000 PSI CONCRETE – STEEL
REINFORCED CONCRETE CONFORMS TO
ACI 318-16-4.5.1
AND
ACI 318-16-4.5.2

UNIT IS:
LENGTH 13'-1"
WIDTH 6'-9"
HEIGHT 61 1/2"
INLET 49 1/2"
OUTLET 46 1/2"

van note-harvey associates, p.c

consulting engineers,
planners & land
surveyors



777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

SEPTIC SYSTEM REPAIR DESIGN
OF

LOT 2, – BLOCK 17

PREPARED FOR

CHARLES P. FAHERTY

SITUATED IN

Robert A. Hough

5/31/02

DATE
OF SIGN

ROBERT A. HOUGH
NEW JERSEY PROFESSIONAL ENGINEER
No. 33444

HOPEWELL TWP.,
SCALE: AS SHOWN

MERCER CO., N.J.
MAY 2002

DRAWN BY: BJB
CHECKED BY: RAH

FIELD BK
PAGE

ORDER No.
02.22,
34576
-32

FILE No.
TWP. BLK.

SHEET No.
9 OF 9

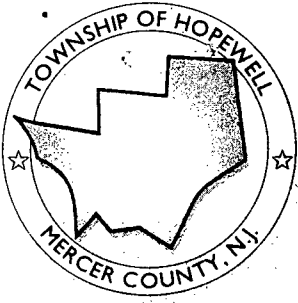
Bob Wagner & Sons

8-19-02 - Bed Started - depth OK - Hard w spots

8-22-02 - Sand w upto grade - OK to Store & Pipe
New Septic Tank Set

8-23-02 - Store & Pipe Set OK to Cover
New Pump Tank Set

8/26/02 - Pump Line Set / Sleaved under Driveway
OK to Cover



TOWNSHIP of HOPEWELL

DEPARTMENT of HEALTH

Serving Hopewell Borough and Pennington Borough

201 WASHINGTON CROSSING PENNINGTON ROAD, TITUSVILLE, N.J. 08560

TELEPHONE 609-737-0120 / FAX 609-737-2770

June 6, 2002

C/o Charles Faherty
901 Route 601
Skillman, NJ 08558

Re: Block 17 Lot 2

To whom it may concern:

Your application for 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 or back-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 and by the design engineer once in place using a perc test.

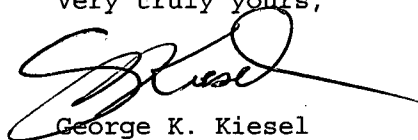
13. NJAC7:9A requires a two compartment septic tank wherever a sewer ejector is utilized.

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

CONDITION

*****New well to be drilled*****

Very truly yours,



George K. Kiesel
Environmental Health Coordinator

cc: Robert A. Hough

STANDARD FORMS FOR
CERTIFICATE OF COMPLIANCE

County/Municipality of HOPEWELL TOWNSHIP

INSTRUCTIONS: Part A is to be completely filled in for all Certifications. Only Part B or Part C will be completed. Part B will be completed if the administrative authority relies upon the certification signed and sealed by a New Jersey licensed professional engineer that the system has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 7:9A-1 and the Application to Construct/Alter/Repair and Individual Subsurface Sewage Disposal System which was approved by the administrative authority. Part C will be completed if the administrative authority performs the certification.

Part A – General Information

1. Permitted Activities (Check applicable categories):

Permit Number _____

☒ 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 Lot 2 Block 17

Street Address 155 HOPEWELL PRINCETON ROAD

3. Name and Present Address of Applicant: CHARLES FAHERTY

Applicant's Phone Number 609 466 0592 901 ROUTE 601 SKILLMAN NJ 08558

Part B – Professional Engineers Certification

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 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 the possibility of fine and imprisonment.

[Signature] (Signature) 10/15/02 (Date)

D. BRUCE HARRISON 23514
Name (Type or Print), License #

SEAL

Part C – Certification by Administrative Authority

I certify under penalty of law that the subsurface sewage disposal system identified in Part A has been located, constructed, installed or altered in compliance with the requirements of N.J.A.C. 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 the possibility of fine and imprisonment.

Authorized Signature

Name (Typed or Printed)

Type of License Held

License Number

Date: _____

For Agency Use Only

Date Received: 10-22-02

Form Determined To Be: ☒ Complete ☐ Incomplete

Date Returned _____

Date Received _____

Date Certification Approved: 11-13-02

Authorized Signature: [Signature]

PERC TEST REPORT



van note-harvey associates
consulting engineers, planners & land surveyors

SUBJECT: FaHerty FILE NO: 34576-33 DATE: 8-23-02
PROPOSED LOT: 2 BY: BJF TOWNSHIP: Hopewell
SOIL LOG: - WITNESS: - WEATHER: sunny Hot
BACKHOE: -

PERC HOLES

NO. <u>1</u>	NO. <u>2</u>	NO. <u> </u>	NO. <u> </u>	NO. <u> </u>
DEPTH <u>14"</u>	DEPTH <u>14"</u>	DEPTH <u> </u>	DEPTH <u> </u>	DEPTH <u> </u>

4 HOUR PRE SOAKS

TIME:	DIST:	TIME:	DIST:	TIME:	DIST:	TIME:	DIST:	TIME:	DIST:

24 HOUR PRE SOAKS

PRE SOAKS

00:00	12"	00:00	12"						
00:37	0	00:36	0						
00:00	12"	00:00	12"						
00:38	0	00:37	0						

STABILIZATIONS

5 min	1 3/4	5 min	1 5/8						
↓	1 5/8	↓	1 1/2						
↓	1 3/4	↓	1 5/8						

FINAL TESTS

00:00	6"	00:00	6"						
00:18	0	00:18	0						
RATE	3.0	RATE	3.0	RATE		RATE		RATE	
	min/in		min/in						

COMMENTS: _____

SOIL PERMEABILITY CLASS RATING DATA

Client FAHERTY Site Hopewell-Princeton RD Township Hopewell
 Lot 2 Block 17 Job # 2-22-34576-33
 Test No. 1 Sample Depth * Date Collected 8-19-02 Tested 8-20-02
 Proposed Lot - Proposed Block -
 Coarse Fragment Content
 Total Weight of Sample, W.T., grams 167.4 198.7 133.9
 Weight of Material Retained on 2mm sieve, W.C.F., grams 14.2 11.7 8.7
 Wt. % Coarse Fragments (W.C.F./W.T.) x 100: 8.48 5.88 6.50

* GRAB SAMPLE SELECT FILL

	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>7</u>	<u>7</u>	<u>7</u>
Hydrometer Reading - 40 seconds, grams, R1	<u>9</u>	<u>9</u>	<u>9</u>
Temperature of Suspension, °F	<u>75°</u>	<u>75°</u>	<u>75°</u>
Corrected Hydrometer Reading, grams R1'	<u>3.4</u>	<u>3.4</u>	<u>3.4</u>
Hydrometer Reading - 2 hours, grams R2	<u>8</u>	<u>8</u>	<u>8</u>
Temperature of Suspension, °F	<u>74°</u>	<u>74°</u>	<u>74°</u>
Corrected Hydrometer Reading, grams. R2'	<u>2.2</u>	<u>2.2</u>	<u>2.2</u>

Sieve Analysis:

a. Oven Dry Weight (2 hrs., 105°C) Total Sand Fraction (Soil retained in 0.047 mm sieve, grams)	<u>38.7</u>	<u>39.4</u>	<u>39.1</u>
b. Weight of Fine Plus Very Fine Sand Fraction (Sand passing 0.25 mm sieve), grams	<u>8.8</u>	<u>9.3</u>	<u>8.7</u>
c. % Fine Plus Very Fine Sand	<u>22.7</u>	<u>23.60</u>	<u>22.25</u>

Sample

% sand = (Wt. - R1')/Wt. X 100 = $(\frac{40 - 3.4}{40}) \times 100 = 91.5$
 % clay = R2'/Wt. X 100 = $\frac{2.2}{40} \times 100 = 5.5$

Replicate A

% sand = (Wt. - R1')/Wt. X 100 = $(\frac{40 - 3.4}{40}) \times 100 = 91.5$
 % clay = R2'/Wt. X 100 = $\frac{2.2}{40} \times 100 = 5.5$

Replicate B

% sand = (Wt. - R1')/Wt. X 100 = $(\frac{40 - 3.4}{40}) \times 100 = 91.5$
 % clay = R2'/Wt. X 100 = $\frac{2.2}{40} \times 100 = 5.5$

Soil Morphology (Natural soil samples only):

Structure of Soil Horizon Tested N/A
 Consistence of Soil Horizon Tested: Dry N/A Moist N/A

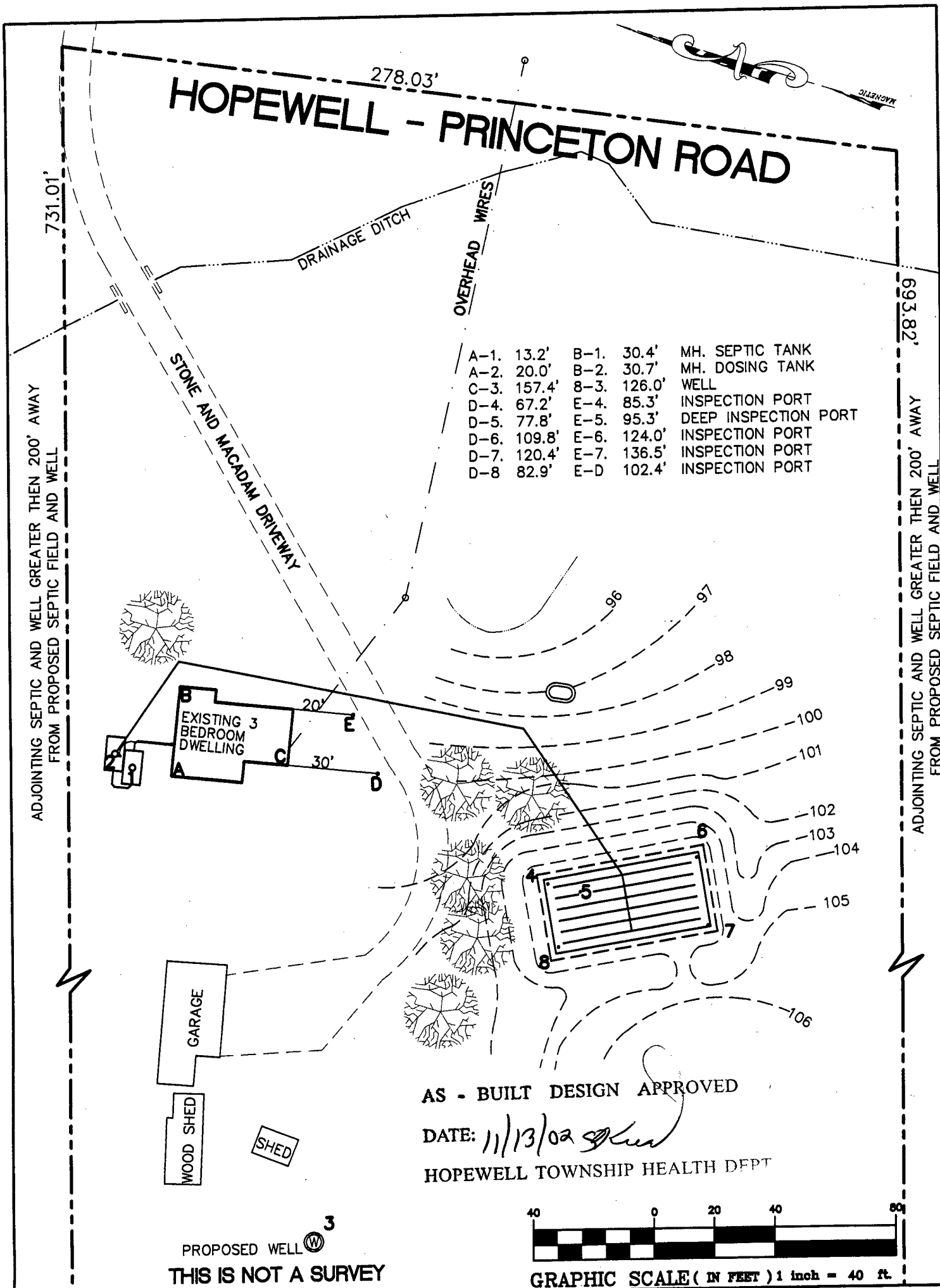
Soil Permeability Class Rating (Based upon average textural analysis of this replicate and other replicate samples)

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. 7:14-3.

Signature of Site Evaluator Bryan Lunari Date 8-20-02

Signature of Prof. Engineer [Signature] License # 23524 Date 10/22/02



van note-harvey associates, p.c.
consulting engineers,
planners & land
surveyors

vh

777 ALEXANDER ROAD
PRINCETON, NEW JERSEY
08540

SEPTIC SYSTEM AS-BUILT PLAN
OF
LOT 2, - BLOCK 17
PREPARED FOR
CHARLES P. FAHERTY
SITUATED IN

D. BRUCE HARRISON
NEW JERSEY PROFESSIONAL ENGINEER
No. 23524

10/15/02
DATE
OF SIGN

HOPEWELL TWP.,
SCALE: 1" = 40'

MERCER CO., N.J.
SEPTEMBER 2002

DRAWN BY: BJF	FIELD BK	ORDER No. 02.22.34576-33	FILE No.	SHEET No.
CHECKED BY:	PAGE		TWP. BLK.	1 OF 1