



NOCKAMIXON TOWNSHIP
589 LAKE WARREN ROAD
UPPER BLACK EDDY, PA 18972
PHONE: 610-847-5058
FAX: 610-847-5812

Sewage Pumping Service Receipt

Property Address 8479 Easton Rd

Owner of Record Todd Seiss

Address of Owner (if different from property address) _____

TMP # _____

Date of Pumping 7-28-22

System Pumped by Brad S Nicholas

Waste Hauler Signature [Signature]

Please submit this form to Nockamixon Township. Submittals may be mailed to the address above, faxed or emailed to

nockamixon@ptd.net



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UPPER BLACK EDDY, PA 18972
PHONE: 610-847-5058
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Sewage Pumping Service Receipt

Property Address 8479 Easton Rd

Owner of Record Todd Weiss

Address of Owner (if different from property address) _____

TMP # _____

Date of Pumping 6-22-16

System Pumped by Brad S. Nicholas

Waste Hauler Signature [Signature]

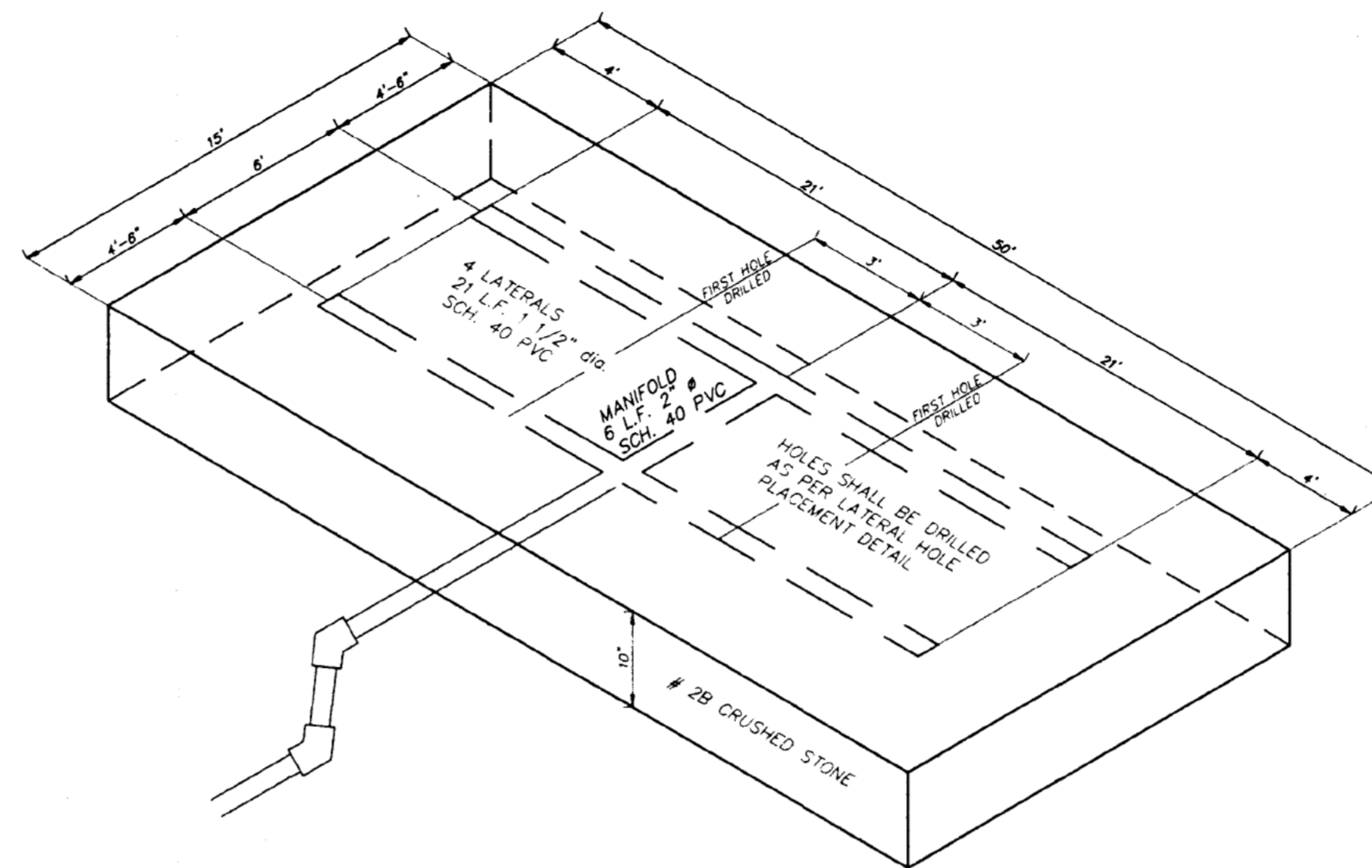
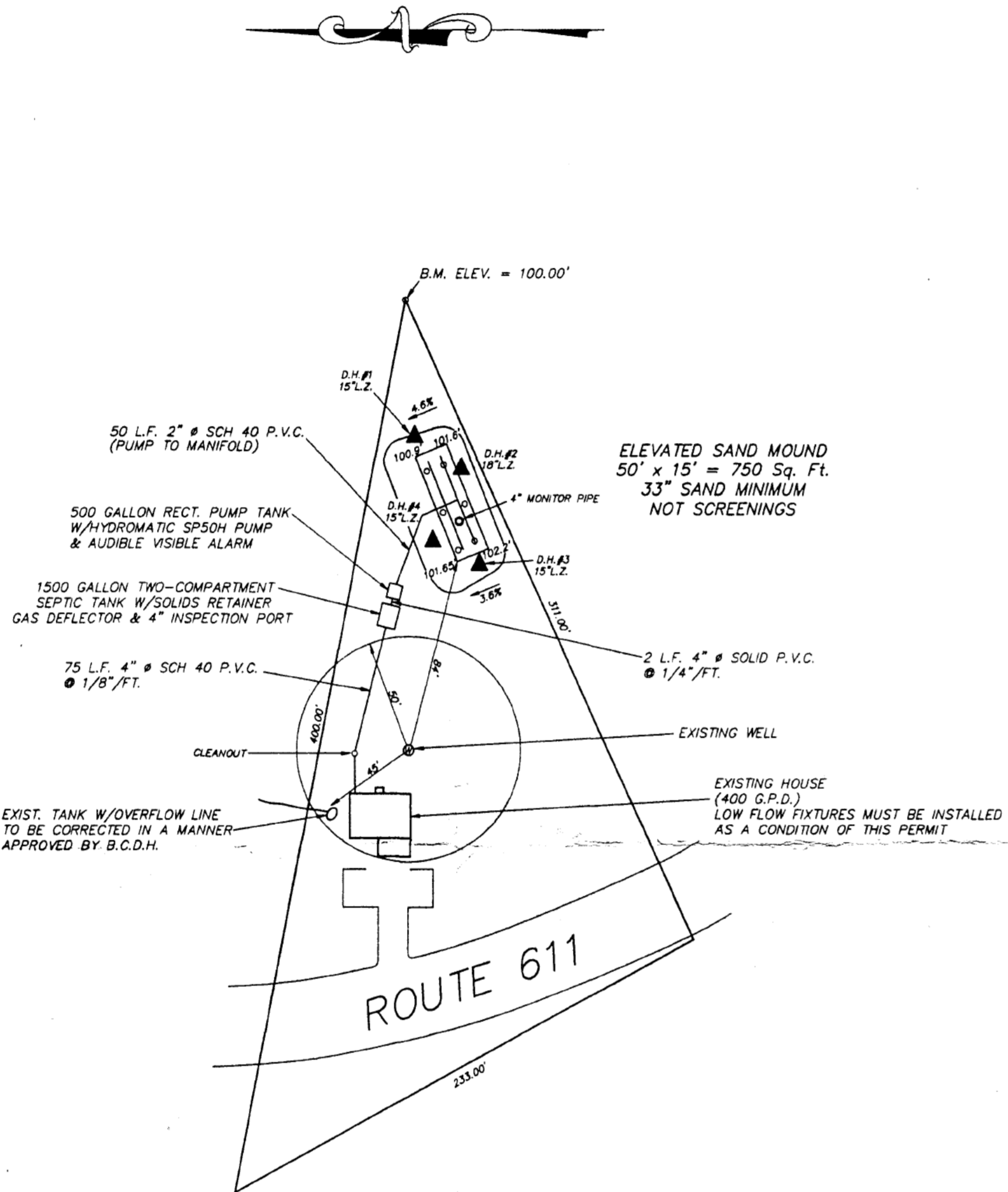
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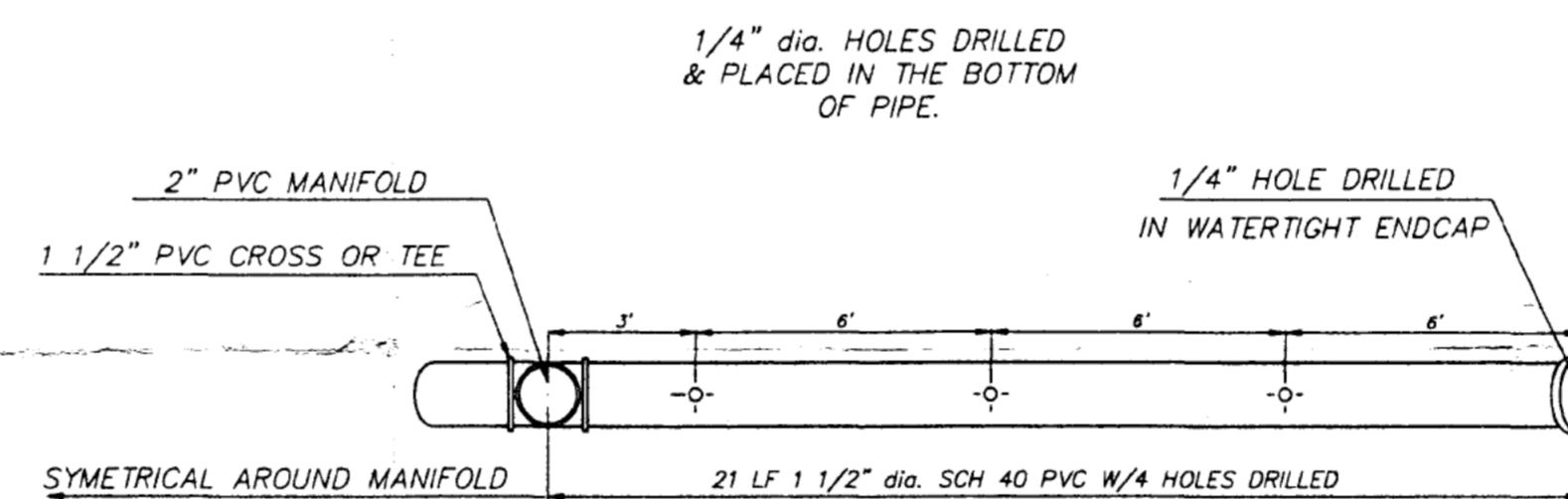
SITE PLAN
 T.M.P. 30-11-84
 AREA: 0.82 ACRES±
 Δ INDICATES B.C.H.D. APPROVED DEEP HOLE
 ○ INDICATES B.C.H.D. APPROVED PERC HOLE
 — INDICATES EXISTING CONTOURS
 THERE ARE NO WELLS PROPOSED OR EXISTING
 WITHIN 100' OF PROPOSED SYSTEM AND VICE VERSA.
 SLOPE AT SYSTEM AREA: 3.6% - 4.6%



BEFORE YOU DIG CONTACT
 PA. ONE-CALL
 1-800-242-1776



MANIFOLD & LATERAL SECTION

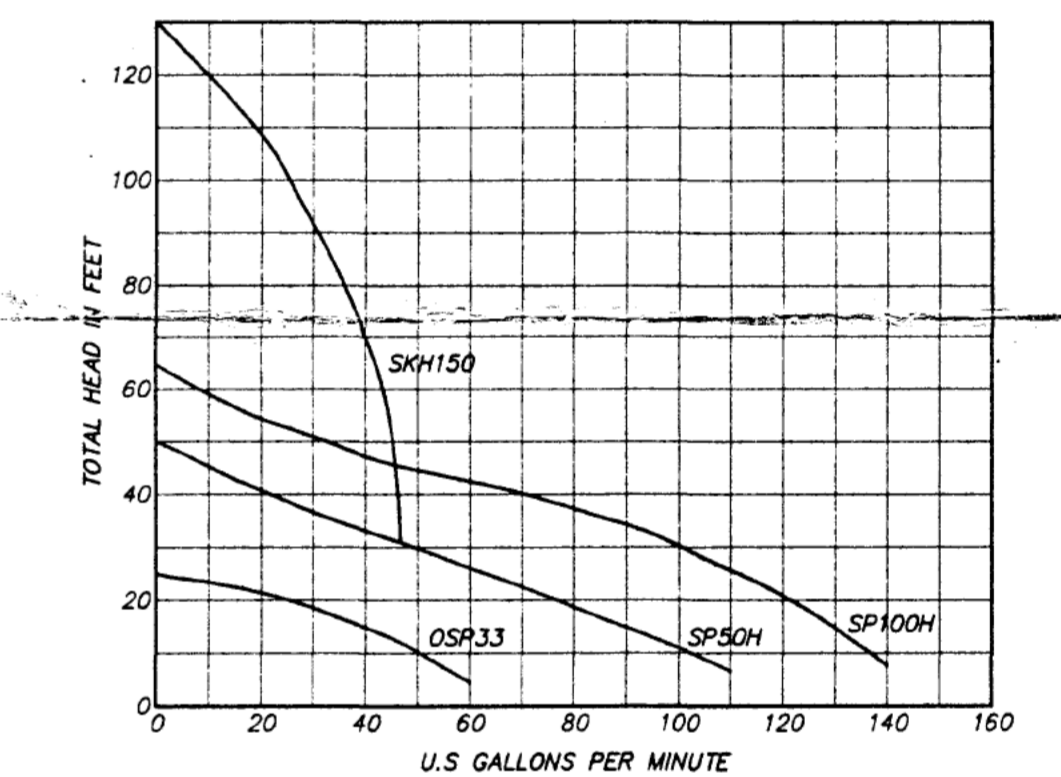


LATERAL HOLE PLACEMENT DETAIL

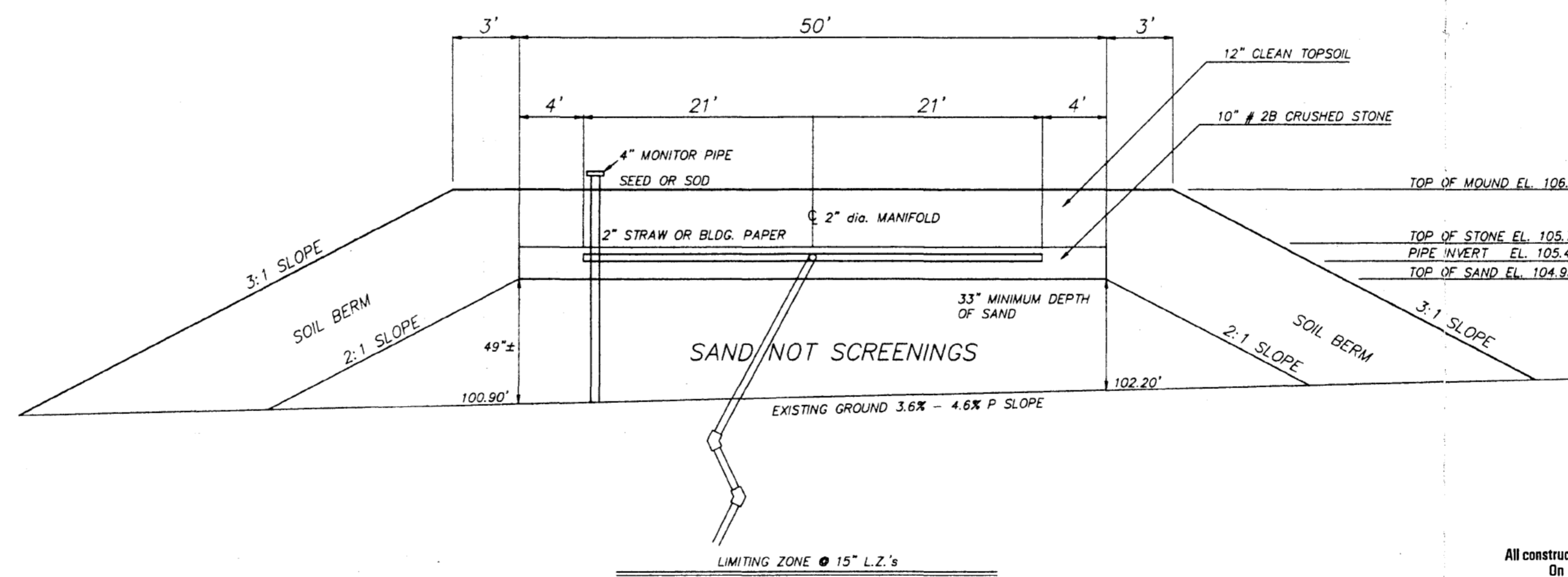
DESIGN CALCULATIONS

SEWAGE FLOW - 3 BEDROOMS - 400 GALLONS PER DAY PERK RATE 33.6 MIN./IN
 SIZE OF ABSORPTION BED USED - 4 HOLES/LATERAL X 4 LAT = 16
 MINIMUM PUMP CAPACITY REQUIRED - 16 HOLES X 1.3 GPM/HOLE = 20.8 GPM
 TOTAL ELEVATION CHANGE & HEAD LOSS DUE TO INCREASE IN ELEVATION = 9.90 FT.
 FRICTION LOSS: 2" DIA. PIPE FROM PUMP TO MANIFOLD EQUIVALENT FEET OF PIPE
 FITTINGS USED 90 DEGREE ELBOW 1 @ 5.55 5.55
 QUICK DISCONNECT & COUPLINGS 2 @ 1.35 2.70
 TEE 11.10
 45' 3 @ 2.58 7.74
 TOTAL 28.44 FEET
 LENGTH OF PIPE FROM PUMP TO MANIFOLD END = 56 FEET
 TOTAL = 84.44 FEET
 FRICTION LOSS PER 100 FT OF 2" PIPE CARRYING 20.8 GPM IS 0.92 FT.
 TOTAL FRICTION LOSS IN LINE IS 84.44 X 0.92 = 0.77 FEET
 TOTAL HEAD REQUIRED:
 A. ELEVATION CHANGE = 9.90 FEET
 B. FRICTION LOSSES = 0.77 FEET
 C. HEAD TO BE MAINTAINED IN LATERAL = 3.00 FEET
 13.67 FEET
 PUMP SELECTION - SEE PUMP CURVE FOR HYDROMATIC PUMP
 MINIMUM DOSE REQUIREMENTS - INTERNAL CAPACITY OF SYSTEM
 50 + 6 DELIVERY LINE & MANIFOLD = 56 FT. X .16 GALS/FT. = 8.96 GALS.
 4 LATERALS X 21' EACH = 84 FEET X .09 GALS/FT. = 7.56 GALS.
 MINIMUM DOSE X 5 TIMES TOTAL INTERNAL VOLUME = 5 X 16.52 = 82.6 GALS.
 PROPOSED DOSE = 179 GALS OR 12" ON/OFF

**Dimensions and performance data models:
 OSP33, SP50H, SP100H, SKH150**

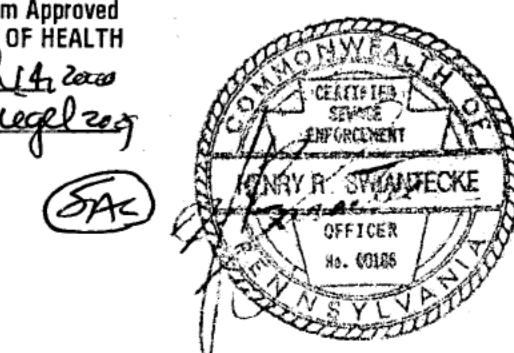


- MUST MEET D.E.P. APPROVED SAND SPECS.
- BERM SPECS. MINERAL SOIL WITH LESS THAN 20% COARSE FRAGMENTS, LIGHTLY COMPACTED AND LESS PERMEABLE THAN THE SAND.
- ORIGINAL GROUND SHALL BE CHISEL PLOWED 6" DEEP WITH LIGHT WEIGHT EQUIPMENT. STUMPS SHALL BE CUT FLUSH AND REMAIN IN PLACE. ALL VEGETATION RAKED AND REMOVED. TREATMENT SHALL BE APPLIED TO ABSORPTION AREA AND BERM AREA. TRAFFIC PROHIBITED ON PLOWED SURFACE UNTIL SAND IS IN PLACE.
- SAND SHALL BE PLACED FROM THE UPSLOPE SIDE OF BED WITH LIGHT WEIGHT EQUIPMENT.



ELEVATED SAND MOUND SYSTEM DESIGN
 PREPARED FOR
DAN RUFÉ & FRED ROBERTS
 SITUATE: RT. 611
 NOCKAMIXON TOWNSHIP
 BUCKS COUNTY
 PENNSYLVANIA
 SCALE: 1" = 50'
 DATE: NOVEMBER 8, 1999

All construction must meet Chapter 73 requirements
 On LOT Sewage System Approved
 BUCKS COUNTY DEPT. OF HEALTH
 DATE March 14, 2000
 BY Robert Drapela



CONSTRUCTION NOTES

- CONTRACTOR MUST NOTIFY THE APPROPRIATE SEWAGE ENFORCEMENT OFFICER (S.E.O.) ONE WEEK PRIOR TO THE CONSTRUCTION, SO SCHEDULED CAN BE DEVELOPED. THE CONTRACTOR IS NOT PERMITTED TO PROCEED FROM ONE STAGE OF CONSTRUCTION TO ANOTHER WITHOUT APPROVAL OF S.E.O.
- ALL CONSTRUCTION TO CONFORM TO CHAPTER 73.
- ANY DEVIATION FROM THIS PLAN SHALL REQUIRE APPROVAL FROM LOCAL AGENCY PRIOR TO CONSTRUCTION.
- THE CONTRACTOR ASSUMES RESPONSIBILITY TO MEET THE GRADES OF THIS DESIGN.
- A BENCHMARK IS TO BE ESTABLISHED AND PROTECTED WHILE HOUSE AND/OR SYSTEM ARE UNDER CONSTRUCTION.
- THE COVER SOIL IS TO BE PROPERLY PREPARED SO THAT SEED GROWTH CAN BE DEVELOPED OVER THE CONSTRUCTION AREA.

- CHAIN TO BE ATTACHED TO PUMP AND DOSING TANK TO ALLOW EASY REMOVAL OF PUMP IF REQUIRED
- FLOAT TYPE- MERCURY LEVEL ALARM- HYDRO-ALARM OR EQUAL

SECTION THROUGH BUILDING SEWER AND SEPTIC TANK

ENVIRO-TECHNOLOGY & DESIGN INC.
 P.O. BOX 358
 REVERE, PA. 18953
 (610) 982-5335

TMP# 30-011-084
Sciss, Todd
PO Box 352
Revere, PA 18953



COUNTY OF BUCKS

DEPARTMENT OF HEALTH

Neshaminy Manor Center, Health Building, 1282 Almshouse Road
Doylestown, PA 18901 - 215 - 345 - 3318

Bucks County Government Services Center, 7321 New Falls Road, Levittown, PA 19055 -215- 949 - 5805
Bucks County Government Services Center, 261 California Rd, Quakertown, PA 18951 -215 529-7000

County Commissioners
CHARLES H. MARTIN, -Chairman
JAMES F. CAWLEY, ESQ., Vice Chairman
DIANE M. ELLIS-MARSEGLIA, LCSW

Director
DAVID C. DAMSKER, MD, MPH

January 20, 2009

Todd Sciss
Po Box# 352
Revere, PA. 18953-0352

Re: Open Well Permit #0221
Tm# 30-011-084
Wonsidler Well Drilling, Inc.

Final Notice

Dear: Sir,

This Permit did not receive an "Approved to Use" for the following reasons:

Missing: Part 2 Pump test, Water Quality Report & \$100.00 Fee

This well should not be in use as per County Rules and Regulation # 9.1c.

No Individual Residential Water Supply well constructed after promulgation of these Rules and Regulations shall be used unless the Individual Water Supply system receives a Certificate to operate from the Bucks County Department of Health.

The necessary forms or test results must be submitted within 30 days of receipt of this letter. Failure to comply with this order will result in legal action by this Department.

Any questions or concerns I can be reached at (215) 529-7029 Monday thru Friday 7:30 am till 4:00 pm

Thank you in advance for your cooperation.

Sincerely,

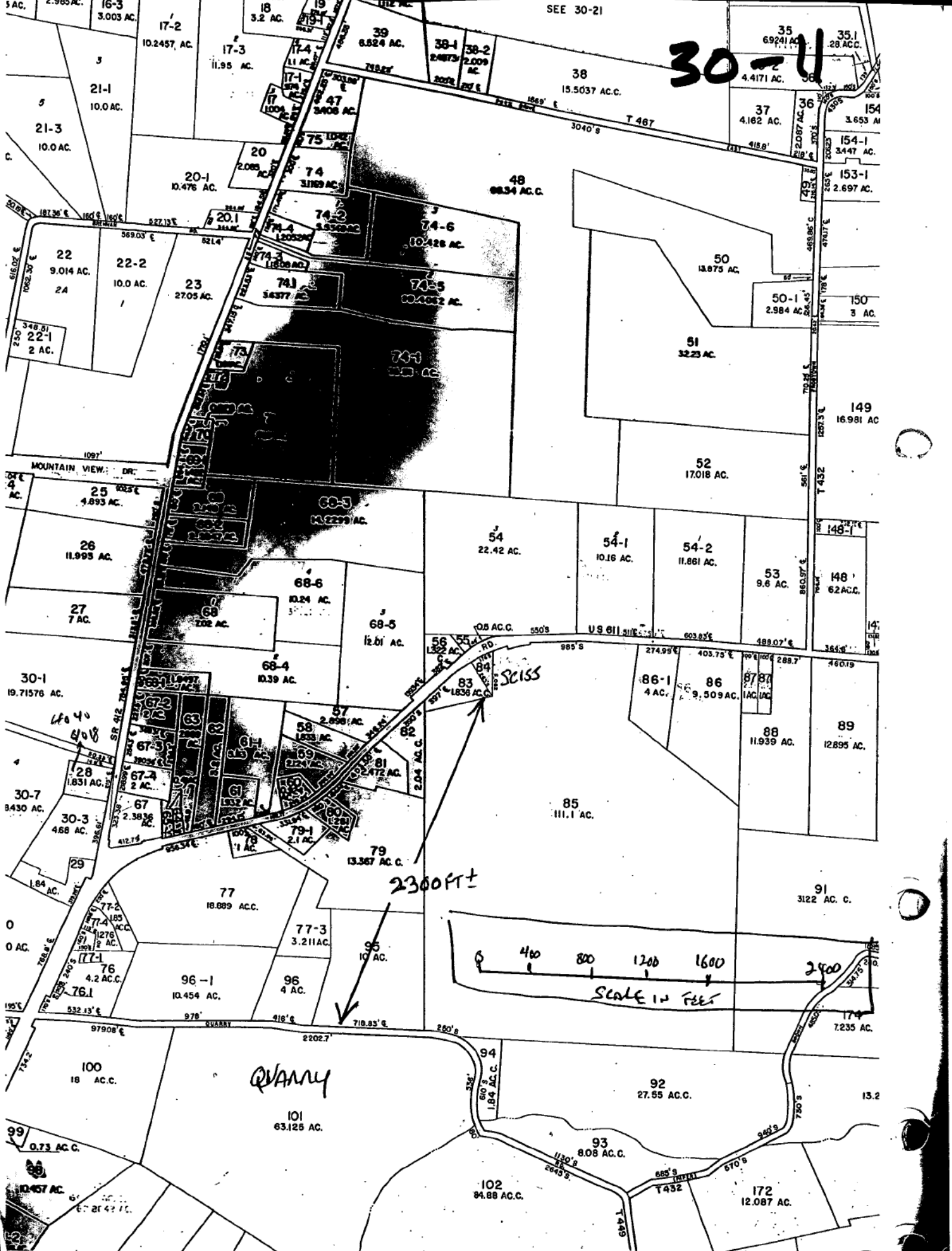

David Phy

Environmental Health Technician

cc: district
central
township ✓

SEE 30-21

30-4



NOCKAMIXON TOWNSHIP
Bucks County, PA

APPLICATION FOR INDIVIDUAL WATER WELL PERMIT

Owner's Name Todd Sciss
Mailing Address Po Box 352 Revue Pa 18953
Phone Number [REDACTED]
Address of Property 8479 Easton Rd. Ottsville Pa.
T.M.P. Number 30-11-84 Lot Size 3/4 Acre
Zoning District ND- /SUB/DIV Lot # _____
Type of Well-New Well () Replacement, existing well ()
Sewage System: Type Sand mound Sewage Permit # _____
Year Installed 2000 Date Issued _____ Date Comp. _____
Residential Use Commercial Use _____
Estimated Start Date ASAP
Well Drillers Name ?
Address _____
Phone _____

All wells will be constructed in accordance with the rules and regulations governing individual water supply systems as approved by Bucks County Commissioners November 3, 2004 and with Nockamixon Township Code Chapter 228 (attached) and the Bucks County Dept. of Health procedures for well construction/modification (attached). A Township application fee of \$25.00 is required. This fee will be returned to the applicant when a copy of the reports from the state certified water laboratory and a copy of the water well completion report submitted to the Bucks County Dept. of Health are received by the Township Zoning Office.

Owner's Signature* Todd Sciss Date 9-6-05
Water well Drillers Signature _____ Date _____
Date Received (TWP) 9-6-05 (cash)
Twp. Application Fee \$ 25. Date Paid 9-6-05

*(copy of Sales Agreement required if equitable owner)

Todd will call with name
of well driller

TMP # 30-11-84

I - District - All uses except ^{B-1 (no use)} B-12
mobile
Home
land
MIN Lot Area 3 Acres
MIN Lot width at setback Line 250'

FRONT 100 -

SIDE 50 -

REAR 100 -

Sciss - C10 393-1970
cell

30-11-84

8479 EAST Rd.

will failed.

Nockamixon Twp

*SEE REVERSE SIDE FOR IMPORTANT INFORMATION

PERMIT

for

INSTALLATION OF SEWAGE DISPOSAL SYSTEM

RECEIVED
3-15-00

Pursuant to Application for Sewage Disposal System number T.M.#30-11-84 Serial#00-064
a permit is hereby issued to:

NAME OF APPLICANT
Dan Rufe (610)847-5850

ADDRESS OF APPLICANT TELEPHONE NUMBER
P. O. Box 57, Ottsville, Pa. 18942

PROPERTY ADDRESS OF SITE FOR SEWAGE DISPOSAL SYSTEM
Route 611, Nockamixon Township, Bucks County, Pa.

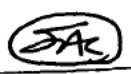
This Permit issued under the provisions of the "Pennsylvania Sewage Facilities Act", the Act of January 24, 1966 (P.L. 1535), as amended is subject to the following conditions:

1. Except as otherwise provided by the Act or regulations of the Pennsylvania Department of Environmental Resources, no part of the installation shall be covered until inspected by the approving body and approval to cover is granted in writing below.
2. This Permit may be revoked for the reasons set forth in Section 7(b)(6) of the Act.
3. If construction or installation of an individual sewage system or community sewage system and of any building or structure for which such system is to be installed has not commenced within three years after the issuance of a permit for such system, the said permit shall expire, and a new permit shall be obtained prior to the commencement of said construction or installation.

ADDITIONAL CONDITIONS:

4. This repair permit is issued under the authority of Chapter 73, Section 73.3(b) in an attempt to correct a malfunctioning on-lot sewage system. This repair shall not be construed as a suitable system having met all the regulations of for additional sewage flows or change in present system usage. Furthermore, this repair permit in no way certifies or validates the existing on-site sewage system.

KEEP THIS PERMIT FOR FUTURE REFERENCE



Approval to Cover

BUCKS COUNTY DEPT OF HEALTH
COUNTY NORTH ANNEX
515 S. WEST END BLVD
QUAKERTOWN, PA 18951

March 14, 2000

Signature of Enforcement Officer

Approving Body

Robert Siegel 2000
Signature of Enforcement Officer

Date

The basis for the issuance of this Permit is the information supplied in the Application for Sewage Disposal System and other pertinent data concerning soil absorption tests, topography, lot size, and sub-soil groundwater table elevations. The permit only indicates that the issuing authority is satisfied that the installation of the Sewage Disposal System is in accordance with the Rules, Regulations and Standards adopted by the Pennsylvania Department of Environmental Resources under the provisions of the Pennsylvania Sewage Facilities Act, the Act of January 24, 1966 (P.L. 1535), as amended. The issuance of a Permit shall not preclude the enforcement of other health laws, ordinances or regulations in the case of malfunctioning of the system.

TO BE POSTED AT THE BUILDING SITE

FACTS EVERY SEPTIC SYSTEM OWNER SHOULD KNOW

BEFORE INSTALLING YOUR SYSTEM

- Rope off the area of your system and protect it from vehicles.
- Caution your builder to avoid system area during home construction.
- Do not allow stripping of top soil or grading in the area of the system.
- Make sure your well is upslope from system and *at least* 100 feet away.
- Do not allow system installation in wet or frozen soil conditions. Soil must be *loose, dry, unsmearred, and uncompacted*.
- Keep downspout and footer drains out of your septic system.
- Seed your system area as soon as weather permits.
- Divert all surface water from system area.

CONSERVE WATER

- Water conservation prolongs your system life, saves you money, and need *not* be a personal inconvenience.
- Install low flow showerheads, faucet aerators, and install toilet bottle kits or tank displacement devices (if new construction, purchase low flow commodes). These devices can save a family of four over 100 gallons per day. Cost for these devices is only about \$20-\$70 and will save \$100-\$300 each year.
- See your local plumbing supplier and most major department stores.
- Purchase a front loading washer, they use $\frac{1}{2}$ less water than top loaders.
- Take showers, they use less water than baths.
- Promptly repair leaky faucets.
- Use the clothes washer and dishwasher only when you have full loads.
- Contact your local DER office for more information.

PUMP YOUR SEPTIC TANK

- Septic tanks *must* be pumped regularly (at least every 2-3 years).
- Tank pumping helps prevent more expensive system problems. Waiting for evidence of system problems (spongy lawn or sluggish toilet) may be too late for pumping to help.
- Pump your tank through the large central manhole, not the small baffle opening.
- Be sure tank pumper agitates tank contents before pumping. Solids and floating scum must be mixed before removal.
- Carefully mark the location of your septic tank.
- Sewage grinders and garbage disposals increase solids build-up in your tank. More frequent pumping should occur.
- **NEVER ENTER A SEPTIC TANK.**
- Information on septic system maintenance can be obtained from the local DER office.

HELPFUL HINTS

- Place a copy of your sewage permit and yellow application in a safe place. This information will be important for future use.
- No septic tank additives have been proven beneficial for septic tank operation. Some may even be harmful. Regular tank pumping is the best advice to prolong your system's life.
- Before repairing or replacing your system (even a new septic tank), a new sewage permit from the municipal sewage enforcement officer will be needed.

FOR HELP OR INFORMATION CALL
YOUR MUNICIPAL SEWAGE ENFORCEMENT OFFICER OR THE LOCAL DER OFFICE.

APPLICATION FOR AN ON-LOT SEWAGE DISPOSAL SYSTEM PERMIT

ER-BWQ-290

PART I APPLICANT AND SITE INFORMATION

1. Applicant Name <u>DAN RUBE</u>	2. Site Address <u>RT 611</u>
Address <u>P.O. BOX 57</u>	Street, RR, Box, No. <u>OTTSVILLE</u>
<u>OTTSVILLE, PA 18942</u>	State <u>PA</u> Zip <u>18942</u>
Telephone No. Day <u>610 247-5850</u>	Post Office <u>N/A</u>
Evenings () _____	Subdivision Name <u>NOCKAMIXON</u> Lot No. _____
	Municipality <u>BUCKS</u> County _____

Directions to the Site: _____

3. Lot Size <u>0.82 ±</u> acres	4. TYPE OF FACILITY TO BE SERVED BY THIS SYSTEM
Type of System	Single Family Residential <input checked="" type="checkbox"/> Multifamily <input type="checkbox"/>
<input type="checkbox"/> New	No. of Bedrooms <u>3</u> Commercial <input type="checkbox"/>
<input checked="" type="checkbox"/> Repair	gal./day _____
5. Facility Water Supply: Public <input type="checkbox"/> Well <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Cistern <input type="checkbox"/> Surface <input type="checkbox"/>	
6. Distance to the nearest existing or proposed Private Water Supply (on or off the property) <u>> 84</u> ft.	

PART II LOCAL AGENCY USE ONLY

SEWAGE PLANNING	SITE SUITABILITY ANALYSIS	APPLICATION STATUS
<input type="checkbox"/> Approved Planning Mod. DEP Code No. _____	Soil Series <u>uc</u>	ACTION <u>RECEIVED</u> DATE <u>3/8/00</u> <input checked="" type="checkbox"/> Complete Application <input checked="" type="checkbox"/> Received <input checked="" type="checkbox"/> Permit Issued <u>3/14/00</u> <input type="checkbox"/> Permit Denied <input type="checkbox"/> Interim Inspection <input type="checkbox"/> Interim Inspection <input type="checkbox"/> Final Inspection <input type="checkbox"/> Approved <input type="checkbox"/> Disapproved SEO Initials <input type="checkbox"/> Revoked Permit
<input type="checkbox"/> Area Not Planned (lot created before May 15, 1972)	Slope <u>4.6</u> %	
<input type="checkbox"/> Limitations in Effect	Type of Limiting Zone <u>soil wetting</u>	
Application \$ <u>100.00</u>	Depth of Limiting Zone <u>15</u> inches	
Testing _____	Type of Cover _____	Attach Form ER-BWQ-290 Appendix A or B
Inspection(s) _____	Ag, Grass, Forest	
Other _____		
Total \$ _____		

PART III PLOT PLAN AND SYSTEM DESIGN

1. TANKAGE	2. SOIL ABSORPTION SYSTEM	3. ATTACH THE FOLLOWING DOCUMENTATION
Total Tank Capacity <u>1500</u> gal.	Total Absorption Area <u>750</u> Sq. Ft.	a. A copy of the Form ER-BWQ-290 Appendix A (and B when required) (See Part II)
<input checked="" type="checkbox"/> Septic Tank(s) <u>1</u>	<input type="checkbox"/> Standard Trench <input type="checkbox"/> Elev. Sand Trench	b. A detailed plot plan and sewage system design (including plan reviews and cross sections). See the instructions on the reverse side for required details. Indicate the number of attached sheets <u>1</u> .
<input type="checkbox"/> Aerobic Tank(s)	<input type="checkbox"/> Seepage Bed <input checked="" type="checkbox"/> Elev. Sand Bed	4. Type of Sand Filter
<input type="checkbox"/> Chemical Toilet	<input checked="" type="checkbox"/> Pressure Dose <input type="checkbox"/> Subsurf. Sand	<input type="checkbox"/> Buried <input type="checkbox"/> Free Access
<input type="checkbox"/> Composting Toilet	<input type="checkbox"/> Alternate _____	5. Type of Disinfection
<input type="checkbox"/> Incinerating Toilet	<input type="checkbox"/> Experimental _____	<input type="checkbox"/> Erosion <input type="checkbox"/> Hypo
<input type="checkbox"/> Recycling Toilet	<input type="checkbox"/> IRISIS	Comments: _____
<input type="checkbox"/> Holding Tank		
<input type="checkbox"/> Vault Privy		

PART IV SIGNATURES

I am the owner of record (or the authorized agent of the owner) of the lot described in Part I of this application. I intend to install an on-lot sewage system on this property. The information provided as part of this application is true and correct to the best of my knowledge. I understand that providing false information on this application is subject to the penalties of 18 PA C.S.A. §4904, relating to unsworn falsification to authorities. Submission of this form grants authorized representatives from the local agency and/or this Department access to the lot to inspect and conduct tests of 1) the site; 2) the system and structures under construction; 3) the completed sewage system; and, 4) the operational status of the system.

Property Owner's Signature [Signature] Date 2/25/00

The information in this application is true and correct to the best of my knowledge.

Enforcement Officer Signature Robert Deegel Date March 14, 2000 Certification No. 2029

SITE INVESTIGATION AND PERCOLATION TEST REPORT FOR ON-LOT DISPOSAL OF SEWAGE

30-11-84

Application No. _____ Municipality Nockamixon County Bucks
 Site Location Rt. 611 Subdivision Name _____
 SUITABLE Soil Type yc Slope 4.6 % Depth to Limiting Zone 15 Ave. Perc. Rate 33.6
 UNSUITABLE Mottling Seeps or Pooled Water Bedrock Fractures Coarse Fragments Perc. Rate
 Slope Unstabilized Fill Floodplain Other _____

INSTRUCTIONS FOR COMPLETION OF THIS FORM ARE LOCATED ON THE REVERSE

SOILS DESCRIPTION: ENVIRO-TECHNOLOGY + DESIGN INC.

Soils Description Complete by: Reverse, 18953 Date: Sept 2, '99

Inches	Pit #4	Description of Horizon				
0 TO 7		DK BRN	SIL	v Fri	gran	
7 TO 15		St BRN	ch SIL	Fri	lsbk	
15 TO 27		BRN	vch SIL	Fri-Firm	lsbk	mottles 15" c/d
TO						Depth to Limiting Zone: <u>15</u> inches
TO		<u>#1-15"M, #2-18"M, #3-15"M</u>				

PERCOLATION TEST: ENVIRO-TECHNOLOGY + DESIGN INC.

Percolation Test Completed by: Reverse, 18953 Date 10/15/99

Weather Conditions: Below 40°F 40°F or above Dry Rain, Sleet, Snow (last 24 hours)

Soil Conditions: Wet Dry Frozen

Hole No.	Yes	No	Reading Interval	Reading No. 1: Inches of drop	Reading No. 2: Inches of drop	Reading No. 3: Inches of drop	Reading No. 4: Inches of drop	Reading No. 5: Inches of drop	Reading No. 6: Inches of drop	Reading No. 7: Inches of drop	Reading No. 8: Inches of drop
1	/		10/30	6/8	6/8	6/8	5/8				
2	/		10/30	6/8	6/8	6/8	5/8				
3	/		10/30	2 5/8	2 4/8	2 4/8	2 3/8				
4	/		10/30	1 6/8	1 5/8	1 5/8	1 5/8				
5	/		10/30	1 2/8	1 2/8	1 1/8	1 1/8				
6	/		10/30	6/8	6/8	5/8	5/8				

***Water remaining in the hole at the end of the final 30 minute presoak? Yes, use 30 minute interval; No, use 10 minute interval.

Calculation of Average Percolation Rate:

Hole No.	Drop during final period	Perc. Rate as Minutes/Inch
1	5/8 "	48
2	5/8 "	48
3	2 3/8 "	12.6
4	1 5/8 "	18
5	1 1/8 "	27
6	5/8 "	48

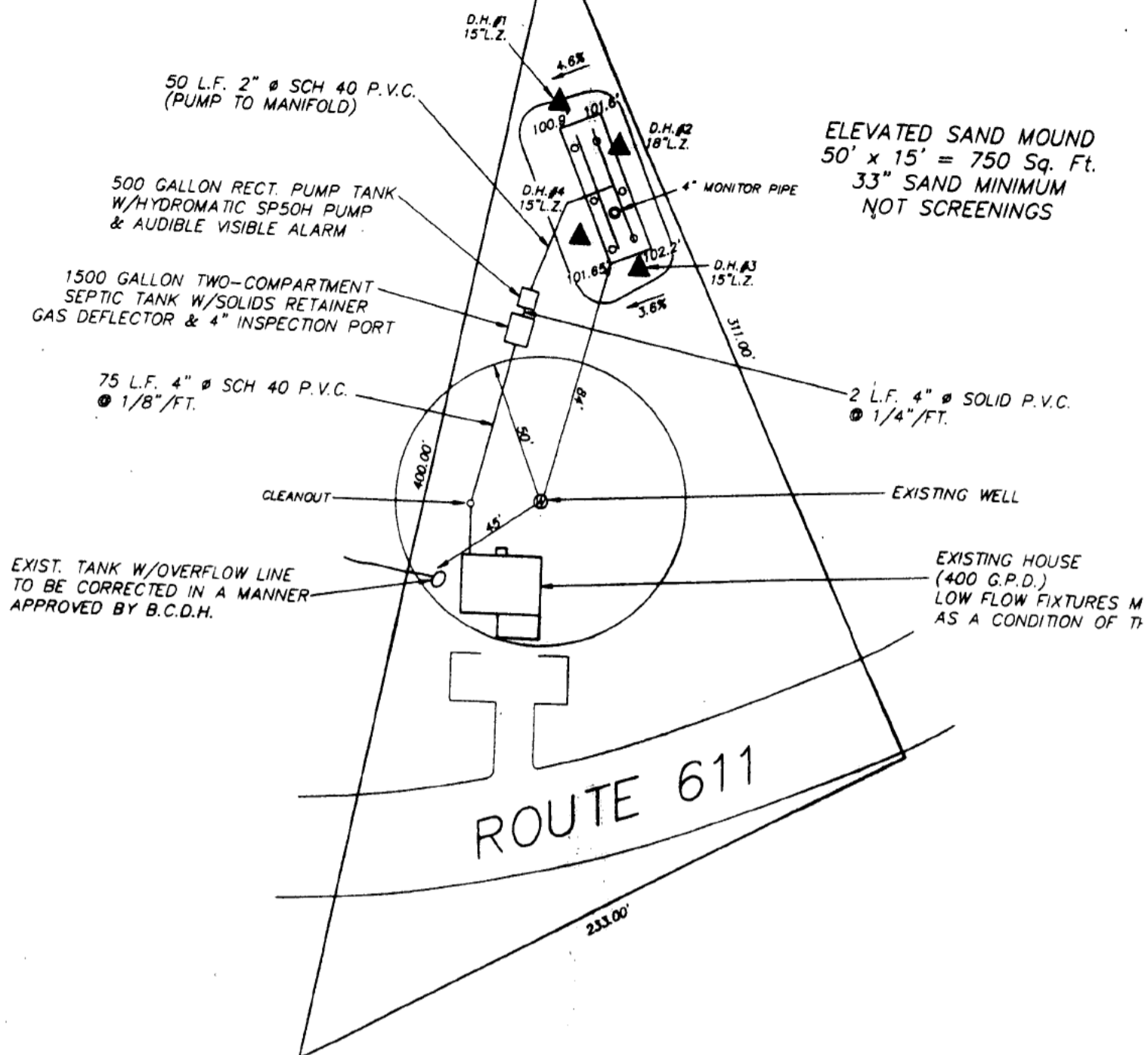
TOTAL OF MIN / IN → 201.6 = 33.6 Min
 TOTAL NO. OF HOLES → 6 Inch



The information provided is the true and correct results of tests conducted by me, performed under my personal supervision, or confirmed in a manner approved by the Department.

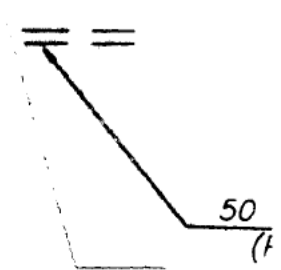
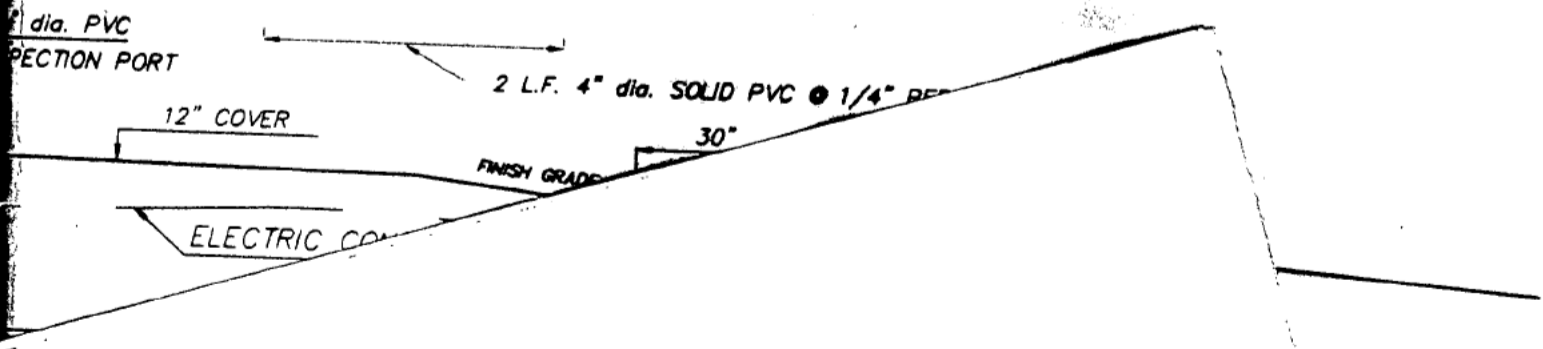
(S) Robert Siegel
Sewage Enforcement Officer

LOCAL AGENCY



ELEVATED SAND MOUND
 50' x 15' = 750 Sq. Ft.
 33" SAND MINIMUM
 NOT SCREENINGS

SCH 40 PVC @ 1/8" PER FOOT
 PUMP TANK MAY NOT EXCEED
 MAX.



Tool Sciss

Approx 2400' North

Quarry Road Turn

30-V184

1) Circle of influence;

2) UTMAR is MAX
Quarry Design Allowed

3) UTMAR Name - Sold
Report To Top / Dep! -

Chapter 228

WELLS

ARTICLE I

Construction Standards

- | | |
|-------------------------------------|---|
| § 228-1. Purpose. | § 228-6. Water quality standards. |
| § 228-2. Definitions. | § 228-7. Well testing requirements. |
| § 228-3. Applicability. | § 228-8. Flow and storage requirements. |
| § 228-4. Submission requirements. | § 228-9. Observation wells. |
| § 228-5. Construction requirements. | § 228-10. Applicability to subdivision and land development applications. |
| | § 228-11. Waiver. |
| | § 228-12. Violations and penalties. |

[HISTORY: Adopted by the Board of Supervisors of the Township of Nockamixon as indicated in article histories. Amendments noted where applicable.]

GENERAL REFERENCES

Building construction — See Ch. 70.
Plumbing — See Ch. 156.
Sewers — See Ch. 168.

Subdivision and land development — See Ch. 196.
Water — See Ch. 222.
Zoning — See Ch. 234.

ARTICLE I

Construction Standards

[Adopted 12-27-1990 by Ord. No. 62]

§ 228-1. Purpose.

The purpose of this article is to ensure that new wells constructed in Nockamixon Township are able to provide a reliable, safe, and adequate water supply to support intended uses within the capacity of available groundwater resources and to ensure that new wells do not unduly infringe upon the performance of existing wells.

§ 228-2. Definitions.

As used in this article, the following terms shall have the meanings indicated:

BAILER TEST — Water is withdrawn from a well using a bailer of known volume over a measured time increment, such as one hour, four hours, or eight hours. The volume of water withdrawn over the period of the test is measured so that a general withdrawal rate can be calculated in gallons per minute. The water level in the well is measured before and immediately after the test to determine the total drawdown caused by the test. The withdrawal rate is divided by the drawdown to obtain the specific capacity of the well in gpm/ft.

HYDROLOGIC BUDGET — A hydrologic budget of a given area describes the relationship between groundwater recharge, groundwater discharge and the change in groundwater storage. In general, to ensure adequate water supply over the long term, groundwater discharge through streams and well pumping should not exceed groundwater recharge. Some temporary depletion of groundwater storage is acceptable during dry periods, provided that this loss can be replaced by the following recharge event.

PEAK DEMAND RATE — The average rate of discharge of water from a well, in gallons per minute, during peak demand periods. The peak demand rate equals the number of bathrooms in the residence multiplied by three gallons per minute.

§ 228-3. Applicability. [Amended 2-9-1999 by Ord. No. 95]

- A. A permit shall be required before any new well shall be drilled in the township or any existing well extended in depth.
- B. No building permit for a new residential or nonresidential structure or addition to a structure which is to be served by a new well shall be issued until a well permit has been obtained.
- C. All new wells and all extensions in depth of existing wells shall be drilled, tested and certified by the well driller to be in accordance with the provisions of this article.
- D. Preliminary plan approval of major subdivisions and land developments shall be contingent upon the satisfactory completion of the well testing of water resources study required herein.

§ 228-4. Submission requirements.

No building permit shall be issued for any new construction until the following requirements are met. Applications for a building permit shall be accompanied by the following:

- A. Location and technical specifications for the proposed well(s).
- B. Location of all existing and proposed sewage disposal areas and potential groundwater contamination sources within 200 feet of the proposed well(s).
- C. Results of the well tests for quantity and quality as required herein.

§ 228-5. Construction requirements.

The well construction shall be in accordance with the standards of the Pennsylvania Department of Environmental Protection Public Water Supply Manual, Part IV, dated September 1986, as amended, which are adapted for township use, as follows:

Chapter 2 – Sources

2.0 General Construction Requirements for Wells

- a. The actual on-site work of drilling, constructing, altering and repairing a well shall be under the supervision of a persons in possession of a valid well driller's license issued

by the Pennsylvania Department of Environmental Protection (PADEP), Bureau of Topographic and Geologic Survey.

- b. During construction the area surrounding the well shall be maintained in a clean condition, and surface drainage shall be diverted away from the well.
- c. All wells shall be cased to protect against contamination. Water bearing formations that are known to be contaminated or those identified as being in danger of contamination shall be sealed off with grout. Sealing shall be accomplished by a method approved by the PADEP.
- d. Prior to completion of the well, the casing should be capped and any open annular space covered until the well has been grouted and the pump installed. The cap should be either threaded onto the casing or be a friction-type device which locks onto the outside of the casing.
- e. After construction of the well it shall be properly developed so as to obtain the best practical yield and quality. Testing of the well should be conducted as outlined in the American Water Works Association (AWWA) Standard A-100-84.
- f. Unsuitable or nonproductive well shall be sealed by filling the entire well with concrete.

2.1 Well Head

- a. The well head shall be constructed as to assure the maximum protection of the well and to exclude entry of any contaminant.
- b. When the casing is brought above grade or is located in an offset basement pump room, the top of the well casing shall be located not less than 12 inches above grade or basement floor.
- c. Whenever possible the pump shall be so located and designed as to make the use of a pump pit unnecessary. Under extenuating circumstances, pump pits may be accepted on condition that adequate provision is made for their drainage by a sump pump or other arrangement. Direct connections to a sanitary sewer or storm sewer shall not be made.
- d. The well head shall be provided with either a pitless installation or a sanitary seal.
- e. The space between the pump column and the casing of each well shall be provided with a vent which shall be protected with a downfacing elbow or mushroom-type head located at least 18 inches above flood levels. All vents shall be screened against the entry of insects.
- f. Wells in which pumping equipment is not installed shall be properly capped to exclude the entry of contamination pending such installations.

2.2 Pitless Adaptors

Where used pitless adaptors shall conform with the standards set forth by PADEP.

2.3 Well Casing

All wells shall be provided with a watertight, 1/4-inch thick welded steel pipe casing. Pipe shall be in accordance with AWWA standard C200. The minimum length of casing shall be 40 feet or 10 feet into bedrock, whichever is greater. All joints between sections of the casing shall be made by continuous welding (AWWA Standards C206). All casing shall be extended at least 18 inches above final grade. The space between the earth and outside casing shall be filled with cement grout to a distance of at least six feet below the ground surface if the well is located in a flood plain or wetlands area. Grouting shall be in accordance with AWWA Standard A100.

2.4 Minimum Distances

New wells shall be located within the building envelope of the lot to be served by the well. Minimum distances from a well to possible sources of pollution shall be great enough to provide assurances that subsurface flow of contaminated water will not reach the well. Each proposed site should be field surveyed to evaluate the character and location of possible source of contamination, types of geological formations present, depth to the water bearing aquifer, direction of groundwater flow, and the effected on groundwater movement by well pumping.

The following minimum lateral distances shall apply for clay and loam soils with the stipulation that where more pervious soils such as sand and gravel are found, the distances are to be increased.

Source of Pollution	Separation Distance (feet)
Cesspools	100
Septic tanks	50
Drain field	100
Sewers (non-cast iron)	50
Sewers (cast iron pipe with leaded or mechanical joints)	10

2.5 Disinfection of Wells

All wells are to be properly disinfected with chlorination before being placed into service. The following procedure outlines a common method of well disinfection.

2.5.1 Recommended Procedure

- a. Pour two gallons of household bleach (sodium hypochlorite) into the well casing making sure the inner walls, cable and drop pipe are wetted.
- b. Circulate the water in the casing by pumping from the well back into the casing for a period of approximately one hour. Wash down the inside of the casing, drop pipe and electrical cable.
- c. Cap the well and allow it to stand overnight.
- d. Pump the chlorinated water from the well, then flush the system free of chlorinated water.

- e. Collect a sample of water from the well for bacterial analysis. This sample should not be taken less than 24 hours after the system has been flushed free of chlorine.
- f. If the bacterial sample taken from the well in step e is reported unsafe, repeat steps a, b, c, d and e a second time.

§ 228-6. Water quality standards. [Amended 8-12-1997 by Ord. No. 92]

- A. Each well shall be certified by a state-licensed water laboratory to meet or exceed state water drinking requirements based upon the maximum contaminant level (MCL) parameters adopted by the Pennsylvania Department of Environmental Protection and in effect at the time the certification is made (hereafter the "DEP Water Quality Standards").
- B. Each well shall meet the DEP Water Quality Standards for the following:
 - Coliform Bacteria
 - Ph
 - Iron
 - Nitrates
 - Total dissolved solids
 - Trichloroethylene (TCE)
 - Tetracloroethylene (PCE)
 - 1,1,1 Trichloroethane
 - Benzene
 - Methylene blue active substances (MBAS)
 - Toluene
 - Xylene
- C. Wells not meeting the above standards will be required to meet them through adequate treatment systems. [Amended 6-9-1992 by Ord. No. 72]
- D. The report from the laboratory shall contain the name and license number of the laboratory.
- E. When a well is proposed within $\frac{1}{4}$ mile of the Revere Superfund Site or the Bucks County Landfill, water quality testing shall be expanded for site specific contaminants as recommended by the township.
- F. No building permit shall be issued for any construction until the owner of the lot provides to the township a copy of the report from the state-certified water laboratory and a copy of the report submitted to the Commonwealth of Pennsylvania indicating compliance with the above regulations.

§ 228-7. Well testing requirements.

The capability of a well to meet the peak demand and the total daily demand of a household shall be evaluated through a two-part pump test comprised of a peak demand test and a constant rate pump test. The proposed well shall be pumped continuously for four hours and tested for

yield, drawdown and recovery. Such tests shall be performed in accordance with the New Jersey Geological Survey Groundwater Report Series No. 1, Two-Part Pump Test for Evaluating the Water Supply Capabilities of Domestic Wells, as prepared by Jeffrey L. Hoffman and Robert Canace for the New Jersey Geological Survey, Department of Environmental Protection.

§ 228-8. Flow and storage requirements.

In order to be certified for use, a well must have a production of not less than three gallons per minute as established by a four-hour test and certified by the well driller. If less than three gallons per minute yield is established by bailer tests, such a well may still be certified for use if it provides sufficient storage for the length of time necessary to provide for expected peak demand. In no case will a well yielding less than one gallon per minute be certified for use. Sufficient storage is determined to be a combination of well yield and volume of storage and shall equal 90 gallons for 10 minutes. Thus, if a peak demand of 90 gallons is required and the well is capable of producing one gallon per minute, the required storage shall be 80 gallons.

§ 228-9. Observation wells.

Applicants for a building permit for a single lot need only undertake testing of observation wells if there is an existing well within 250 feet of the proposed well location. Observation of an existing well within 250 feet may be waived if the applicant for a well permit provides documentation indicating a reasonable effort to monitor the same was performed by the applicant and the applicant was denied access to the well.

§ 228-10. Applicability to subdivision and land development applications.

- A. **Water Resources Impact Study.** A Water Resources Impact Study is required for each major subdivision consisting of more than 10 lots and for each land development which will draw in excess of 1,000 gallons of water per day. The purpose of the study is to determine if there is an adequate water supply to serve the proposed use and to estimate the impact of the additional water use on existing nearby wells, underlying aquifers, and surface water bodies. Any proposed water system or on-lot water supply for a major subdivision or land development which does not provide an adequate water supply for use, or which adversely affects nearby wells or streams, shall not be approved by the township and shall be cause for denial of the subdivision or land development plans. An impact study may be waived by the township when the development is proposed to be served by an existing public water distribution system.
- B. **Supply requirements.** The adequacy of the water supply shall be determined based upon the following assumptions:
 - (1) An average of 3.5 persons per dwelling unit;
 - (2) Each person is assumed to use 75 gallons of water per day.

- (3) Report requirements. The water resources impact study shall be prepared by a qualified hydrogeologist and a professional engineer registered in the Commonwealth of Pennsylvania and shall include the following:
- (a) Calculations of the projected water needs using the criteria set forth in the following references:
 - [1] Public Water Supply Manual, Bureau of Water Quality Management, Pennsylvania Department of Environmental Protection, Harrisburg, PA;
 - [2] Guide for Determination of Required Fire Flow, by the Insurance Services Office (ISO), as modified;
 - [3] American Water Works Association, standards and manuals for the American Water Works Association, Denver, CO.
 - (b) A geological map of the area within a one-and-zero-tenths-mile radius of the site;
 - (c) The location of all faults, lineaments and fracture traces within $\frac{1}{4}$ mile of the site;
 - (d) The location of all existing and proposed wells within $\frac{1}{4}$ mile of the site and of all large withdrawal wells (10,000 gallons per day or more) within 1.0 mile of the site;
 - (e) The location of all existing and proposed on-lot septic systems within $\frac{1}{4}$ mile of the site;
 - (f) A discussion of the aquifer characteristics underlying the site and their long-term drought recharge capability based on site specific investigation or on accepted published data. "Long-term drought recharge capability" shall be defined as the average amount of water that can be withdrawn from an aquifer during extended periods of low rainfall and/or high temperatures without adversely affecting existing wells and stream flow in the surrounding area.
 - (g) Based on the drought recharge capability and the calculated daily groundwater withdrawals of the project, a hydrologic budget shall be estimated for the site property itself and for the area within $\frac{1}{4}$ mile radius of the site if withdrawing zero to 10,000 gallons per day; $\frac{1}{2}$ mile radius of the site if withdrawing 10,000 to 50,000 gallons per day; and one mile if withdrawing more than 50,000 gallons per day.
 - (h) A determination, aided by the results of the hydrologic budget, of whether the potential exists for adverse effects on the hydrologic environment by the proposed subdivision or land development.
 - (i) A statement of the qualifications of the person(s) preparing the study.
- (4) Test wells required.
- (a) All subdivisions and land developments shall be subject to the requirements for test wells and observation wells. The following shall be a guide to the number of test wells and observation wells required:

Total Number of Proposed Lots	Number of Test Wells	Number of Observation Wells
10 lots or less	0*	
11 to 25	1	2
26 to 49	2	2
50+	3	3

NOTES:

* Wells must meet requirements for water quality and quantity as stated herein.

- (b) These requirements shall be met if the proposed subdivision is to be served by individual wells or a community water system.
- (c) This testing of wells for subdivisions shall be conducted in accordance with AWWA A100 except minimum length of test shall be for 48 hours. In addition, the following information shall be provided to the township:
- [1] The name of the driller and personnel conducting the test;
 - [2] Complete description of the test well or wells to include horizontal and vertical dimensions, casing installed, and grouting details;
 - [3] Date drilled;
 - [4] List of rock formations identified during drilling;
 - [5] Static water level immediately prior to yield testing;
 - [6] Hydrograph of depth to water surface during test pumping and recovery period at the test well or wells showing corresponding pump and discharge rate in gallons per minute and the time readings were taken.
 - [7] Statement of water quality conditions and degree of compliance with the standards set forth in this article (Water Quality Standards).
- (5) Observation wells.
- (a) Observation wells and all existing wells within a five-hundred-foot radius of the test well shall be monitored. The minimum number of observation wells does not include existing wells except where existing wells are permitted to meet the requirements for observations wells as specified herein. Observation wells shall be located a minimum of 200 feet and a maximum of 500 feet from the test well. All wells may be installed in locations which may be utilized for future domestic water supplies. Observation of an existing well within 500 feet may be waived if the applicant for a well permit provides documentation indicating a reasonable effort to monitor the same was performed by the applicant and the applicant was denied access to the well.
 - (b) To qualify as an observation well, the pump of this well must be electrically disconnected at least two hours before the beginning of the test to permit stabilization of the static water level in order to establish the base level.

- (c) The water level in the observation wells shall be monitored throughout the two-part pump test for the test wells at an interval of every hour for the first five hours of pump test; and five measurements during remainder of test. If the results of the pumping test show potential for adverse effects on neighboring wells, then an agreement between the township and developer must be reached to mitigate future problems before the well is certified for use.
- (6) A report shall be prepared and submitted to the township and shall accompany the submission of the test well and observation well data. The report shall analyze and interpret all of the data as to the impact on the groundwater supply and existing wells. Conclusions shall be drawn from the analysis as to the appropriateness of the site for the proposed water supply system. The credentials of the individual(s) preparing the report shall be included.
- (7) The complete submission to the township shall include any and all applications, reports or supplemental information submitted to the Bucks County Health Department, Pennsylvania Department of Environmental Protection and/or the Delaware River Basin Commission, as required by those agencies.
- (8) All well testing requirements as set forth herein for a building permit shall be met by the applicant for subdivision or land development preliminary plan approval.

§ 228-11. Waiver.

In the event it is established that the application of any provision of this article would result in undue hardship, the Board of Supervisors may grant a waiver of that provision.

§ 228-12. Violations and penalties.

Any person who violates or permits a violation of this article shall, upon conviction in a summary proceeding brought before a District Justice under the Pennsylvania Rules of Criminal Procedure, be guilty of a summary offense and shall be punishable by a fine of not more than \$1,000, plus costs of prosecution. In default of payment thereof, the defendant may be sentenced to imprisonment for a term not exceeding 30 days. Each day or portion thereof that such violation continues or is permitted to continue shall constitute a separate offense, and each section of this article that is violated shall also constitute a separate offense.