VDH VIRGINIA DEPARTMENT OF HEALTH

Protecting You and Your Environment

Lancaster County Health Department
P.O. Box 158
Lancaster, Virginia 22503
(804) 462-9919 Voice
(804) 462-6211 Fax

Sewage Disposal System Operation Permit

Property Owner
Don Bornkamp

Health Dept. ID: **151-03-444**
Tax Map: **23E(1)19**

Locality: Lancaster

Phone:

Property Location
Property Address: Lot 19 Riverwood Subdivision
Lancaster, Virginia 22503
Subdivision: Riverwood , Section 23E, Block 1, Lot 19
Directions: Rt 3 to 614 to L on 637 to Riverwood Dr.

==========

Don Bornkamp is hereby granted permission to operate a Type II Sewage System at the above referenced location, having a design capacity of **600** gallons per day, or **four (4)** bedrooms maximum.

This permit is issued in accordance with the provisions of Title 32.1, Chapter 6 of the Code of Virginia as Amended, and Section 12VAC 5-610-340 of the Sewage Handling and Disposal Regulations of the Virginia Department of Health. The issuance of an operation permit does not denote or imply any guarantee by the department that the sewage disposal system will function for any specified period of time. It shall be the responsibility of the owner or any subsequent owner to maintain, repair, or replace any sewage disposal system that ceases to operate in accordance with the regulations.

January 6, 2006
Effective Date

Robert Salg
EHS

Robert Salg
Signed January 6, 2006

COMMONWEALTH of VIRGINIA

THREE RIVERS HEALTH DISTRICT

SERVING THE COUNTIES OF: ESSEX, GLOUCESTER, KING & QUEEN, KING WILLIAM, LANCASTER, MATHEWS, MIDDLESEX, NORTHUMBERLAND, RICHMOND, WESTMORELAND

Lancaster County Health Department
P. O. Box 158
Lancaster, VA 22503
(804) 462-5197, Environmental 462-9919
FAX: (804) 462-6211

REUBEN K. VARGHESE, MD, MPH
DIRECTOR
P. O. BOX 415
SALUDA, VA 23149
TELEPHONE 804-758-2381
FAX (804) 758-4828

11.25.2003

Don Bornkamp
407 4th Avenue
East Northport, NY 11731

RE: Sewage Disposal System Construction & Water Supply Permit, HDID # 151-03-444, TM # 23E(1)19.
Directions to property: East onVSH 3, R/T 614 (Devils Bottom Road), L/T 637 (Riverwood Drive) to Lot 19 (remote drainfield across Riverwood Drive behind Lot 39 on Lot 47.

Dear Mr. Bornkamp:

This letter, in conjunction with the approved plans (Pages 1-7) dated 11.04.2003, which are attached, constitutes your permit to install a sewage disposal system and water supply system. The application for a permit was submitted pursuant to Sec.32.1-163.5 of the *Code of Virginia* which requires the Health Department to accept private soil evaluations and designs from an Authorized Onsite Soil Evaluator (AOSE) or a Professional Engineer working in consultation with an AOSE for residential development. The permitted site was certified as being in compliance with the Board of Health's regulations (and local ordinances if the locality has authorized the local health department to accept private evaluations for compliance with local ordinances) by (William J. Meagher, (804-725-7348), AOSE, certification or license # 031). This letter is issued in reliance upon that certification.

The Board of Health hereby recognizes that the soil and site conditions acknowledged by this correspondence, and documented by additional soil records on file at the local health department, are suitable for the installation of onsite sewage disposal systems. The attached plat (or plats) shows the approved areas for the sewage disposal systems. This letter is void if there is any substantial physical change in the soil or site conditions where a sewage disposal system is to be located.

If modifications or revisions are necessary between now and when you construct your dwelling, please contact the Authorized Onsite Soil Evaluator (AOSE) or Professional Engineer (PE) who performed the evaluation and design on which this permit is based. The name, address and phone number of the AOSE/PE appears on the certification form attached to this permit. Should revisions be necessary during construction, your contractor should consult with the AOSE/PE that submitted the site evaluation or site evaluation and design. The AOSE or PE is authorized to make minor adjustments in the location or design of the system at the time of construction provided adequate documentation is provided to the Lancaster County Health Department.

This authorization is null and void if conditions are changed from those shown on the application or conditions are changed from those shown on the attached construction drawings, plans, and specifications. No part of any installation shall be covered or used until inspected, corrections made if necessary, and approved by the Lancaster County Health Department or unless expressly authorized by the Lancaster County Health Department. Any part of any installation, which has been covered prior to approval shall be uncovered if necessary, upon direction of the Department.

This authorization to construct a sewage disposal system and water supply expires: 05.25.2005

Sincerely,

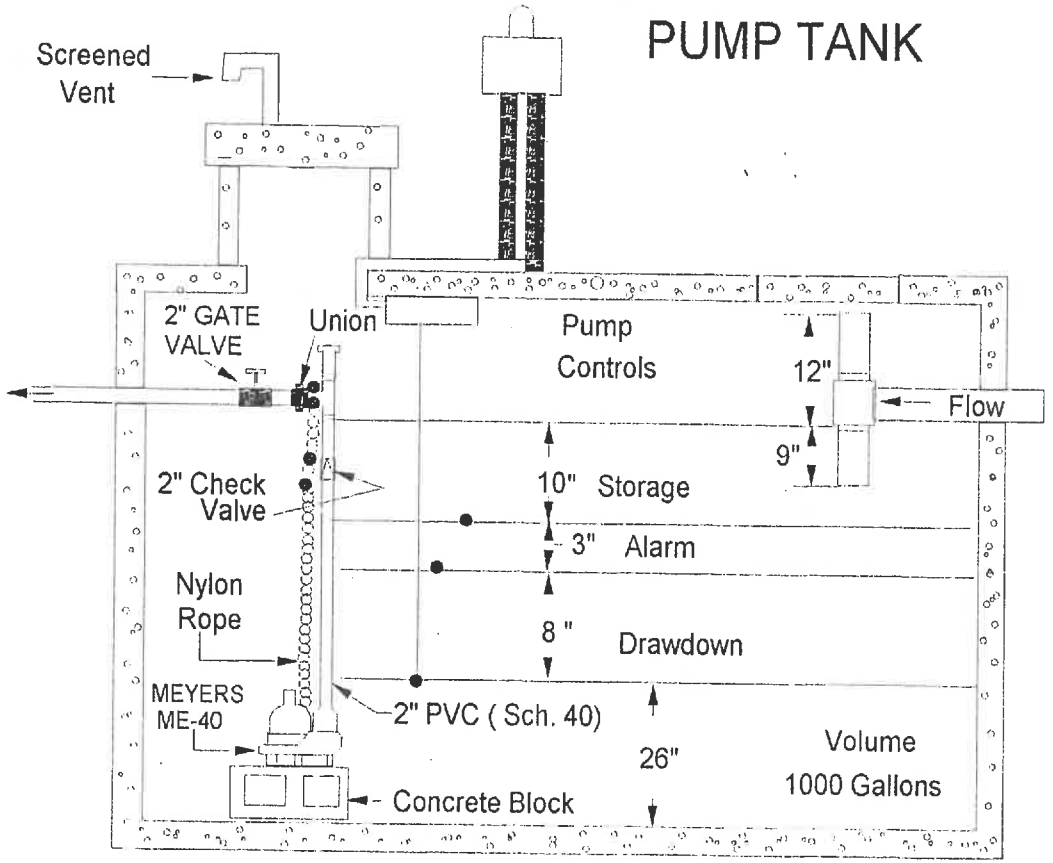
Robert Bennett

Robert Bennett, P.E.
Environmental Health Specialist Senior
Lancaster County Health Department

Cc: William J. Meagher, AOSE
P.O. Box 950
Mathews, VA 23109

Applicant- Bornkamp
Tax Map- #- 25C-1-19
Distance to Drainfield- 536'
Brand of Pump- Myers
Pump Model Number- ME-40

PUMP TANK



prepared by
William J Meagher C.P.S.S.
Post Office Box 950
Mathews, Virginia

WILLIAM J. MEAGHER
CERTIFIED PROFESSIONAL SOIL SCIENTIST
P O BOX 850
MATHEWS VIRGINIA 23109

Appendix 7

Certification Statement

County: LANCASTER Date: 11-4-03

Property Identification: 23 E (1) - 19

Submitted by: _____

This is to certify according to §32.1-163.5 of the *Code of Virginia* that work submitted for the referred property is in accordance to and complies with *the Sewage Handling and Disposal Regulations* of the Virginia Department of Health. I recommend a PERMIT [1] be Approved [2].

COMMONWEALTH OF VIRGINIA
WILLIAM J. MEAGHER #0034
AUTHORIZED ON-SITE EVALUATOR

AOSE _____ Date: _____

Soil Consultant 11-4-03 Date: _____

[1] This blank must be filled in with one of the following terms: 'permit', 'certification letter', or 'subdivision approval'.
[2] This blank must be filled in either the term 'approved' or 'denied'.

If the submission contains a certification by a professional engineer in consultation with an AOSE, the following statement shall be signed and sealed:

I hereby certify that the evaluations and designs contained herein (refer to subdivision, lot, etc.) were conducted in accordance with the *Sewage Handling and Disposal Regulations* (12 VAC 5-610-10 et seq., the "*Regulations*") and the policies of the Virginia Department of Health for implementation of those *Regulations*. Furthermore, I certify that the evaluations and designs comply with the minimum requirements of the *Regulations*.

I recommend a _____ [1] be _____ [2].

Licensed PE: _____ Date: _____

Seal

Note:

1). Contact the plan preparer @ 804 725-7348 72 hours in advance of the system installation to arrange for a joint inspection.

2). Hand clear the vegetation from the drainfield site and install the system during dry soil conditions. Improper clearing practices or improper installation of this system may void this permit or approval letter.

3). Changes to the design by owner or installer must be approved in advance by the plan preparer and the Health Department.

4). This permit or approval letter was issued using the current Health Department regulations, interpretations, and policies. Design changes, coordination with permitting agencies, and conflict resolution may require additional services. These services will be billed at the current [illegible] hourly rate. Limits of liability are limited to the cost of the initial services only.

IMMEDIATE PLANS TO BUILD: YES ✓ NO ____ PROPOSED START DATE: 11.03
SUBDIVIDING: YES ____ NO ✓ TAX MAP # 25E(1)19

Commonwealth of Virginia

Application for a Sewage Disposal and/or Water Supply Permit

DATE REC'D 11/21/03 Health Department ID 51-03-444
Recpt. # 218116 Date Pd. 11-21-03 Amt. $ 190.00 RPA:

To Be Completed By The Applicant

Type of Sewage system: ✓ New ____ Repair ____ Expanded ____ Conditional
FHA/VA yes ____ no ____ Case No ____

Owner Don Bornkamp Address 407-4th Ave East Northport, NY 11731 Phone 613-368-0736

Agent William Meagher Address PO Box 950 Marlboro VT Phone 725-7348

Directions of Property Rt 3 TO R ON 614 TO L ON 637 TO Riverwood Dr

Subdivision Riverwood Section 25 Block (1) Lot 19

Other Property Identification Drain field Easement on Lot 48 Across Riverwood Dr

Dimension/size of Lot/Property ____

Other Application Information

I. Building/facility ✓ New ____ Existing
Intermittent Use ____ Yes ✓ No If yes, describe ____

II. Residential Use ✓ Yes ____ No
Termite Treatment ✓ Yes ____ No
✓ Single Family ____ Multi-family
(Number of Bedrooms 4) (Number of Units ____)

Basement ____ Yes ✓ No
Fixtures in Basement ____ Yes ✓ No

III. Commercial Use ____ Yes ✓ No Describe: ____

Commercial/Wastewater ____ Yes ✓ No Number of Patrons ____
Number of Employees ____

If yes, give volumes and describe ____

IV. Water Supply: ____ Public ____ New ____ Existing
✓ Private ____ New ____ Existing
Describe: III A Well

V. Proposed Sewage Disposal Method:
Onsite Sewage Disposal System: ✓ Septic Tank Drainfield ____ LPD ____ Mound ____ Other

Public Sewerage System

Attach a site plan (rough sketch) showing dimensions of property, proposed and/or existing structures and driveways, underground utilities, adjacent soil absorption system, bodies of water, drainage ways, and wells and springs within 200 feet radius of the center of the proposed well or drainfield. Distances may be paced or estimated.

The property lines and building location are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application.

W Meagher
Signature of Owner/Agent

11.14.03
Date

NOV 2003
RECEIVED
LANCASTER
COUNTY HEALTH
DEPARTMENT

Soil Evaluation Report

William J. Meagher, AOSE, CPSS
Post Office Box 950, Mathews, VA 23109
804-725-7348

Tax Map Number: 25E (1) 19
County: Lancaster

General Information

Date: 11-04-03

Applicant: William J. Meagher Telephone Number: 725-7348

Address: P.O. Box 950 Mathews, VA 23109

Owner: Don Bornkamp

Address: C/O William Meagher P.O. Box 950 Mathews VA. 23109

Location: Rt 3 N to LHT on 614 to LHT on 673 to Riverwood Drive Lot on LHS , Drainfield on RHS

Subdivision: Riverwood Block/Section: 25 (1) Lot: 19

Soil Information Summary

1. Position in landscape satisfactory Yes x No ☐
   Describe: level wooded
2. Slope: 0-1 %
3. Depth to rock/impervious strata Max. ___ Min. ___ None x
4. Depth to seasonal water table (gray mottling or gray color) No x☐ Yes inches
5. Free water present No ☐ Yes ___ Range in inches
6. Soil percolation rate estimated No ☐ Yes x Texture group: ☐ I x II ☐ III ☐ IV
   Estimated rate: 40 min/inch
7. Percolation test performed No x Yes ☐ Number of percolation test holes ___
8. Depth of percolation test holes ___
9. Average percolation rate ___

Name and title of evaluator: William J. Meagher A.O.S.E.

Signature: _____

Approval/Rejection

X Site approved: Drainfield to be placed at 30" depth at site designated on permit. ☐ **REPAIR ONLY**

☐ Site disapproved:

Reasons for rejection:

1. ☐ Position in landscape subject to flooding or periodic saturation.
2. ☐ Insufficient depth of suitable soil over hard rock.
3. ☐ Insufficient depth of suitable soil to seasonal water table.
4. ☐ Rates of absorption too slow.
5. ☐ Insufficient area of acceptable soil for required drainfield, and/or Reserve Area.
6. ☐ Proposed system too close to well.
7. ☐ Other (Specify) ___

Soil Evaluation Report - Profile Description

Date of Evaluation: ___

Tax Map #: ___

Where the local health department conducts the soil evaluation the location of profile holes may be shown on the schematic drawing on the construction permit or the sketch submitted with the application. If soil evaluations are conducted by a private soil scientist, location of profile holes and sketch of the area investigated including all structural features i.e. sewage disposal systems, wells, etc. within 100 feet of site (See section 4) and reserve site shall be shown on the reverse side of this page or prepared on a separate page and attached to this form.

☐ See application sketch x See construction permit ☐ See sketch on reverse side or page attached to this form.

Hole #	Horizon	Depth (Inches)	Description of color, texture, etc.	Texture Group
1		0-2	10yr 4/2 SL	II
		2-16	10yr 6/4 SL	II
		16-18	10yr 6/4, 5/6 SL	II
		18-32	10yr 5/6 SCL	II
		32-48	10yr 5/6 SCL w FEW WHITE GRAVELS	
2		0-2	10yr 4/2 SL	II
		2-12	10yr 6/4, SL	II
		12-18	10yr 5/6 SL	II
		18-50	10yr 5/6, SCL Lt	II
		50-60	7.5yr 5/6 SL	II
3		0-2	10yr 4/2 SL	II
		2-14	10yr 6/4 SL, SL	II
		14-34	10 yr 6/6 SL , SCL Lt	II
		34-48	10yr 5/6,7.5yr 5/6 SCL	II
		48-60	7.5yr 5/6 SL	II
			DRAINFIELD EASEMENT IS LOCATED ON LOT 47	

REMARKS: (Sanitary Survey comments) NO WELLS WITH IN 100' OF SEPTIC SYSTEM

Key:

S = Sand
LS = Loamy Sand
SL = Sandy Loam
SCL = Sandy Clay Loam
L = Loam
SiL = Silty Loam
SiCL = Silty Clay Loam
CL = Clay Loam
SC = Sandy Clay
SiC = Silty Clay
C = Clay

WILLIAM J. MEAGHER
CERTIFIED PROFESSIONAL SOIL SCIENTIST
P.O. BOX 950
MATHEWS, VIRGINIA 23109

Appendix 6
Abbreviated Design Form

For use with gravity and pump drainfields, enhanced flow systems and low pressure distribution systems when applying for a certification letter or subdivision approval.

Design Basis

A. Estimated Percolation Rate: 40 MIN/IN

B. Trench bottom square feet required per bedroom (from Table 4.6 based on ☑ Gravity ☐ LPD): 314 ft²

C. Number of bedrooms: 4

Area calculations

D. Length of trench: 60' Length of available area: 60'

E. Width of trench: 3'

F. Number of trenches: 7

G. Center-to-center spacing: 9'

H. Width required G(F-1) + E: 57' Width of available area: 57ft'

I. Total square footage required (line B times line C): 1256 ft²

J. Square footage in design (D*E*F): 1260 ft²

K. Is a reserve area required? ☐ yes ☑ No

4 - 7

WILLIAM J. MEAGHER
CERTIFIED PROFESSIONAL SOIL SCIENTIST
P.O. BOX 950
MATHEWS, VIRGINIA 23109

Appendix 5
Sewage Disposal System Construction Specifications

General Information

New ✓ Repair ☐ Expanded ☐

Owner DON Bornkamp Telephone 613-368-0736

Address

For a Type 11 Sewage disposal system which is to be constructed on/at R 17B TO R ON 614 TO L ON 637 TO Riverwood Dr Lot ON LHS, DRAINFIELD ON RHS

Subdivision Section 25 Block (1) Lot 19

Actual or estimated water use 600 GPD

DESIGN	NOTES
Water supply, existing: (describe) _____ **To be installed:** class III A cased 20 grouted 100	
Building sewer: 4" I.D. PVC 40, or equivalent. Slope 1.25" per 10' (minimum). ☐ Other _____	OK, 4-28-05 RB stubbed @ 5'
Septic tank: Capacity 1200 gals. (minimum. ☐ Other	OK - 4-28-05 RB outlet filter
Inlet-outlet structure: PVC 40, 4" tees or equivalent. ☐ Other	OK 4-28-05 RB
Pump and pump station: No ☐ Yes ☑ describe and show design. If yes: See Pump Page No Power Come back to check alarm's switches	OK 4-28-05 RB Pump in place no Power
Gravity mains: 3" or larger I.D., minimum 6" fall per 100', 1500 lb. Crush strength or equivalent. ☑ Other SCH 40 2" PVC	OK 4-28-05 RB except under road.
Distribution box: Precast concrete with 8 ports. ☐ Other	OK 4-28-05 RB
Header lines: Material: 4" I.D. 1500 lb. Crush strength plastic or equivalent from distribution box to 2' into absorption trench. Slope 2" minimum. ☐ Other	OK 4-28-05 RB
Percolation lines: Gravity 4" plastic 1000 lb. Per foot bearing load or equivalent, slope 2" 4" (min. max.) per 100'. ☐ Other	Infiltrators 410 10 per ditch
Absorption trenches: Square ft. required 120 ; depth from ground surface to bottom of trench 30" ; trench width 3' Depth of aggregate 13" ; Trench length 60' ; Number of trenches 7	Infiltrators - 410 10 ditch = 70 units Contractor: Humps Backhoe Service Tom

Revised 6/99