

PUB. SEWER STATUS VERIFIED BY mlb

ISSUE DATE: 1/3/2005

PERMIT

P 521635

APPROVAL DATE: _____

A REPAIR - 33230

ON-SITE SEWAGE DISPOSAL SYSTEM HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

Jenkins Brothers IS PERMITTED TO INSTALL ALTER

ADDRESS: 7670 Smith's Private Road, Sykesville PHONE NUMBER: 410-461-0292

SUBDIVISION: _____ LOT NUMBER: 4-A

ADDRESS: 7299 Browns Bridge Road PROPERTY OWNER: Francis Baker

SEPTIC TANK CAPACITY (GALLONS): _____

PUMP CHAMBER CAPACITY (GALLONS): _____

NUMBER OF BEDROOMS: _____

SQUARE FEET PER BEDROOM: _____

LINEAR FEET OF TRENCH REQUIRED: _____

TRENCHES:	Trench to be _____ feet wide. Inlet _____ feet below original grade. Bottom maximum depth _____ feet below original grade. Effective area begins at _____ feet below original grade. _____ feet of stone below distribution pipe.
LOCATION:	
PURPOSE:	Existing septic system has failed. Call for inspection when ground is opened so sanitarian can recommend repair.

PLANS APPROVED: _____ DATE: _____

- NOTE: PERMIT VOID AFTER 2 YEARS
- NOTE: CONTRACTOR RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS

NEITHER THE HOWARD COUNTY COUNCIL OR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-2640 FOR INSPECTION OF SEPTIC SYSTEM



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor

Kendl P. Philbrick
Secretary

Jonas A. Jacobson
Deputy Secretary

March 31, 2005

Mr. Robert Weber, Director
Bureau of Environmental Health
Howard County Health Department
7178 Columbia Gateway Drive
Columbia, Maryland 21046

RE: Francis Baker Property
7299 Browns Bridge Road

Dear Mr. Weber:

I have reviewed the referenced property's site evaluation data from your files and visited the property with your staff. The results of our site evaluation at the property indicate the rear yard of the site is marginally suitable for the installation of an innovative alternating deep trench sewage disposal system with a curtain drain. Advanced pretreatment could be added as an option to enhancing the performance of the system or promoting the renovation of the existing system. The rear yard of the site is marginally suitable for the installation of this system due to relatively deep clayey soils with firm consistence. This causes the soil to retain water and to maintain saturated conditions for long periods. Although a deeper water table was not observed, the saturated surficial soil conditions will negatively impact a trench constructed through them because the clay textured soils will release water into any excavation and compete for dispersal with the sewage flows. Therefore a curtain drain is recommended to convey surface water away from the system. The curtain drain should maintain a ten-foot minimum distance from the sewage disposal trench and be constructed so that the bottom of the curtain drain trench is above the inlet of the disposal trench. A valve or distribution box with surface access provided can be installed to direct flows between the new deep trench and the existing system.

The property owner may wish to contact private consultants if they feel that other options for this property can be proposed. Some of these might include sand mounds or other pretreatment units that discharge to at-grade mounds, sand mounds, or drip dispersal systems. A composting toilet could be employed to eliminate blackwater flows. Since there is increased risk associated with this site, the property owner may want to consider approval of this site for a holding tank if they can comply with the conditions set forth in Policy Directive R.S. 7. An approval for an innovative system or holding tank for this property is for the sewage flow from the existing home only, and is

Letter to: Mr. Robert Weber, Director
Re: Francis Baker Property
Page: 2

not suitable for any expansion of the dwelling that could increase sewage flows. The following sections summarize requirements necessary for proceeding with the project.

Pretreatment

Employing advanced pretreatment on septic tank effluent is beneficial from the standpoint of enhancing the soil absorption component of the system's performance and extending its life. There are a variety of devices and methods for providing advanced pretreatment, including constructed wetlands, aerobic wastewater treatment plants, single pass and recirculating sand filters, peat filters, composting toilets, and greywater re-use systems. Composting toilet options could be advantageous on this site because they substantially reduce the overall flow that the system must treat and dispose of. A good comparison of some of the available advanced pretreatment units can be found at the following web site:

<http://www.epa.gov/region1/assistance/ceitts/wastewater/techs.html>. The property owner's consultant may have preferences for a pretreatment unit to complement the soil absorption system selected. I am available to provide further guidance as to how pretreatment options could be incorporated into a system design if requested by you, the property owner, or their consultant.

Plans and Specifications

If an innovative system is selected by the property owner, upon notification of this, the On-Site Systems Division of the Wastewater Permits Program will develop preliminary design specifications for use in the design of the system. A private consultant should then be retained by the property owner to provide final plans and specifications for the system. Once plans are complete, two sets of plans must be submitted to the On-Site Systems Division of the Wastewater Permits Program and to the local Approving Authority for review before final approval to construct the system can be given.

Agreement and Easement

An Agreement and Easement must be signed by all parties, recorded in the land records and returned to the local Approving Authority before permits to construct can be issued. The Agreement and Easement establishes the regulatory conditions associated with the experimental project and provides monitoring access for State and County personnel.

Linked Deposit

Financial assistance may be available for this project through the Department of the Environment's Linked Deposit Program. Information concerning this loan program can be found by entering linked deposit in the search box on the MDE website at <www.mde.state.md.us>. Future financial

Letter to: Mr. Robert Weber, Director
Re: Francis Baker Property
Page: 3

assistance from the Chesapeake Bay Restoration Fund may be available for the installation of nitrogen reducing advanced pretreatment systems.

A copy of the site evaluation data is enclosed. Please forward a copy of this letter and the attachments to the property owner. If you have questions regarding this matter please call me at (410) 537-4156.

Sincerely,

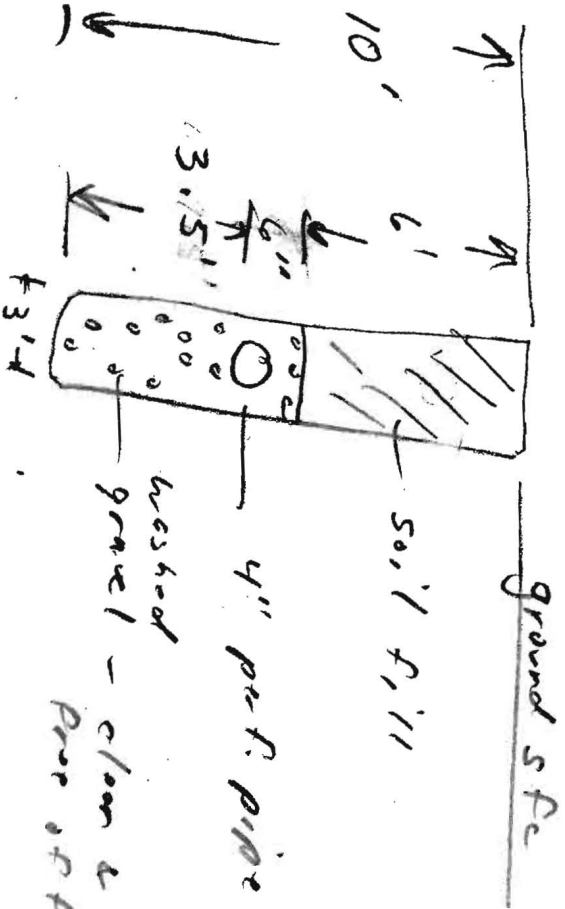
A handwritten signature in cursive script that reads "Barry Glotfelty" followed by a stylized monogram "BG".

Barry Glotfelty, R.S.
On-Site Systems Division
Wastewater Permits Program

Attachments

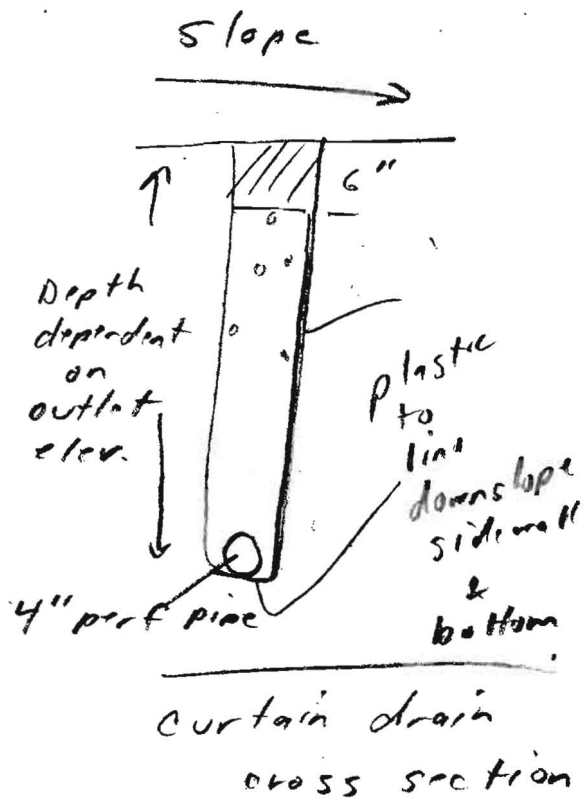
BG:je

cc: Mr. Jay Prager



Drop Trench Cross Sec.

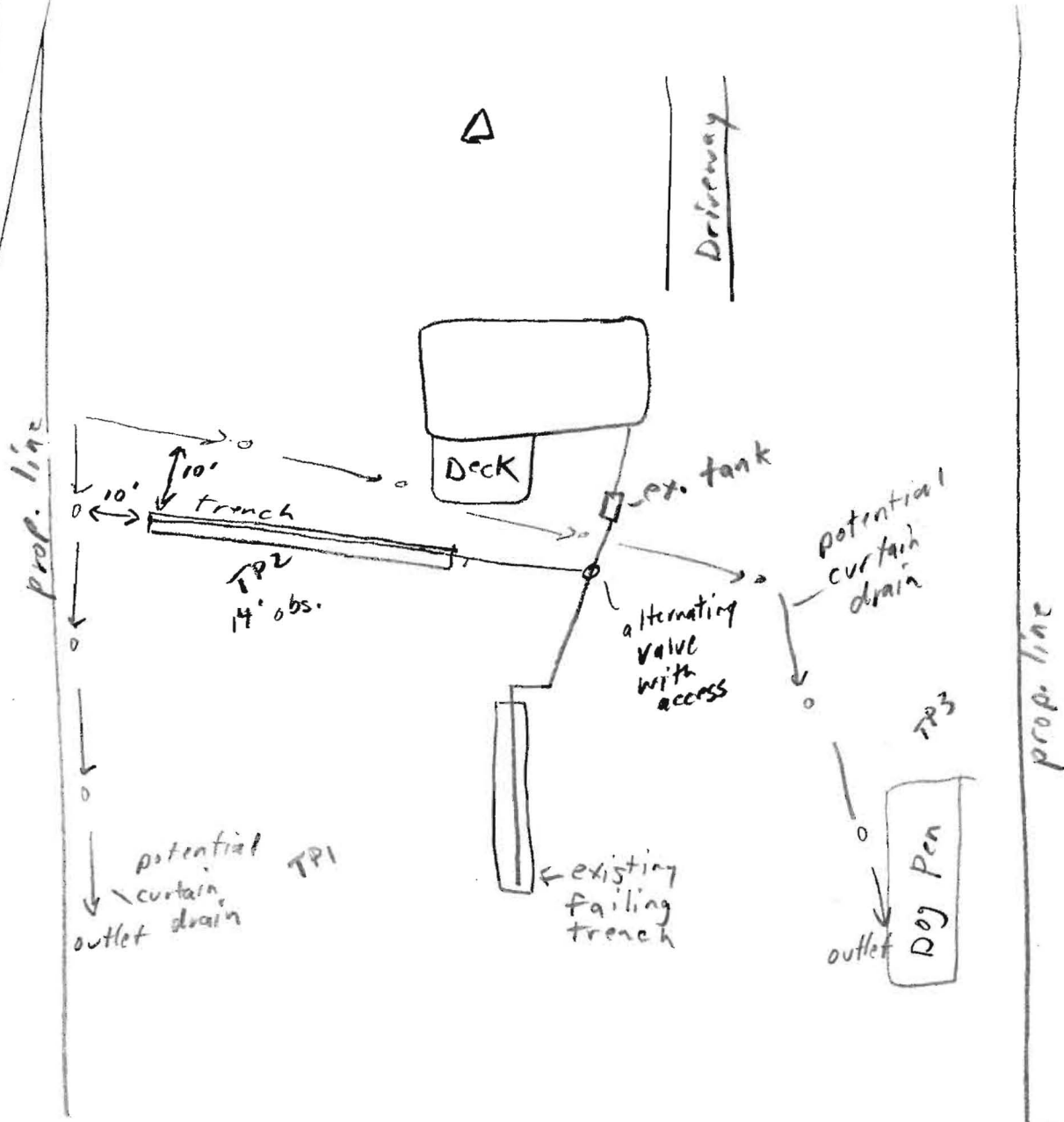
SCALE	APPROVED BY	DRAWN BY
DATE	Francis Baker PMP	REVISID
DEPARTMENT OF THE ENVIRONMENT BALTIMORE, MARYLAND 21201		
DRAWING NUMBER		



Curtain drain

SCALE	APPROVED BY:	DRAWN BY
DATE	<i>Francis Baker Prof.</i>	REVISED
DEPARTMENT OF THE ENVIRONMENT • BALTIMORE, MARYLAND 21201		
		DRAWING NUMBER

Site Sketch



NAME: _____ COUNTY: Howard DATE: 2-15-05

7299 Browns Bridge Rd.
Note: Show the following items:

1. Property boundaries and dimensions.
2. Hand auger holes (AH), caspits (CP), boring (B) and tests (T).
3. Slope percent and direction.
4. Existing and proposed buildings, driveway, swimming pool, easements and right of ways on property.
5. Existing and proposed wells, septic systems, sewage disposal areas, ditches, water bodies and permanent stormwater control structures on property and within 150 feet of property lines.

MARYLAND DEPT. OF THE ENVIRONMENT
 ONSITE SEWAGE DISPOSAL SYSTEM
 SITE EVALUATION REPORT
 SOIL PROFILE DESCRIPTION

FILE NO. 7299 Browns Bridge Rd.
 MD. GRID: Francis Baker
 TAX MAP/B/P: TPT 1
 SUBDIVISION:
 DATE:
 BY: 2-15-05

DEPTH inches	TEXTURE	MATRIX COLOR	MOTTLES DESCRIPTION	STRUCTURE	CONSISTENCE	%ROCK BY VOL.	REMARKS (Caving, moisture, etc.)
HOLE TP1							
0-5	sil	dark brown	—	3mgran	mufc		
5-9	sil	lt brown	—	1msbk	mufc		
9-15	sicl-cl	orange yell. brown		1msbk	mfc		
15-29	cl	yellow orange			mfr-mfi		
29-48	c	variegated grey			mufi		appear to be redox features
48-78	cl	yellow			mfr-mfi		
78-144	sl		redox features				very moist
— TP 2 —							
0-9.5'	c-cl		redox features				clay textures appear to
10-14'	l		No WT observed				hold H ₂ O & release into trench
Slope%-		EL.(ft)-		Chroma 2-		Least Permeable Layers- 6-9.5	
Landscape Position-		Water BLS-		Limiting Zones-			
Additional Remarks-							
clay textured surface seems to hold water due to firm consistency & heavy texture. although redox present doesn't appear to be a water table.							

D-3