



APPLICATION

FOR PERCOLATION TESTING AND SITE EVALUATION

TEST DATE(S) 4/10/06 TEST TIME _____

AP 524112

AGENCY REVIEW: _____

DATE 2/22/06

04-330110

DO NOT WRITE ABOVE THIS LINE

I HEREBY APPLY FOR THE NECESSARY TESTING/EVALUATION PRIOR TO ISSUANCE OF SEWAGE DISPOSAL SYSTEM PERMIT(S) TO:

CHECK AS NEEDED:

- CONSTRUCT NEW SEPTIC SYSTEM(S)
- REPAIR/ADD TO AN EXISTING SEPTIC SYSTEM
- REPLACE AN EXISTING SEPTIC SYSTEM

CHECK AS NEEDED:

- NEW STRUCTURE(S)
- ADDITION TO AN EXISTING STRUCTURE
- REPLACE AN EXISTING STRUCTURE

CHECK ONE:

- CREATE NEW LOT(S)
- BUILD ON AN EXISTING LOT IN A SUBDIVISION
- BUILD ON AN EXISTING PARCEL OF RECORD

IS THE PROPERTY WITHIN 2500' OF ANY RESERVOIR?

- YES
- NO

THE TYPE OF STRUCTURE IS:

- RESIDENTIAL WITH 4 PROPOSED BEDROOMS IN THE COMPLETED STRUCTURE (NOTE **UNKNOWN** IF APPROPRIATE)
- COMMERCIAL (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/ CUSTOMERS ON ACCOMPANYING PLAN)
- INSTITUTIONAL/GOVERNMENT (PROVIDE DETAIL OF NUMBERS AND TYPES OF EMPLOYEES/USERS ON ACCOMPANYING PLAN)

PROPERTY OWNER(S) James Selfridge

DAYTIME PHONE 410-531-8930 CELL _____ FAX 410-531-8939

MAILING ADDRESS 14045 Gared Drive Glenwood MD 21738
STREET CITY/TOWN STATE ZIP

APPLICANT Tim Rayen

DAYTIME PHONE 410 531 8930 CELL 410-365-2278 FAX 410 531 8939

MAILING ADDRESS 14045 Gared Drive Glenwood MD 21738
STREET CITY/TOWN STATE ZIP

APPLICANT'S ROLE: DEVELOPER **BUILDER** BUYER RELATIVE/FRIEND REALTOR CONSULTANT

PROPERTY LOCATION
SUBDIVISION/PROPERTY NAME 14356 Dorsey Mill Rd Parcel 116
LOT NO.

PROPERTY ADDRESS 14356 Dorsey Mill Rd Glenwood
STREET TOWN/POST OFFICE

TAX MAP PAGE(S) 21 GRID 17 PARCEL(S) 116 PROPOSED LOT SIZE 1.12 Ac

AS APPLICANT, I UNDERSTAND THE FOLLOWING: THE SYSTEM INSTALLED SUBSEQUENT TO THIS APPLICATION IS ACCEPTABLE ONLY UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS APPLICATION IS COMPLETE WHEN ALL APPLICABLE FEES AND A SUITABLE SITE PLAN HAVE BEEN RECEIVED. I ACCEPT THE RESPONSIBILITY FOR COMPLIANCE WITH ALL M.O.S.H.A. AND "MISS UTILITY" REQUIREMENTS. APPROVAL IS BASED UPON SATISFACTORY REVIEW OF A PERC CERTIFICATION PLAN.

TEST RESULTS WILL BE MAILED TO APPLICANT. Tim Rayen
SIGNATURE OF APPLICANT

HOWARD COUNTY HEALTH DEPARTMENT, BUREAU OF ENVIRONMENTAL HEALTH, WELL AND SEPTIC PROGRAM
3525-H ELLICOTT MILLS DRIVE, ELLICOTT CITY, MARYLAND 21043-4544 (410) 313-1771 FAX (410) 313-2648
TDD (410) 313-2323 TOLL FREE 1-877-4MD-DHMH

April 10, 2006

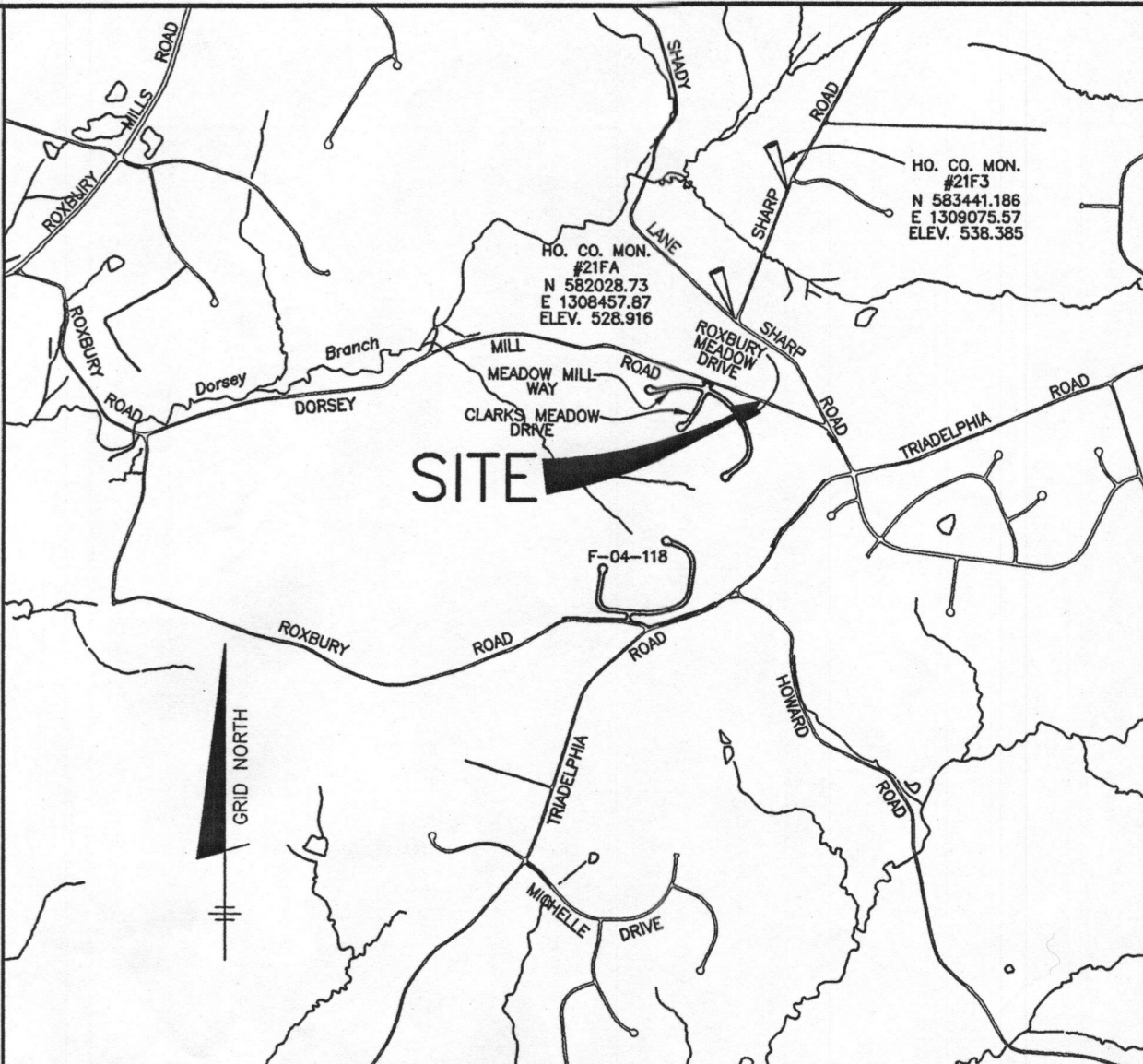
RE: Site Inspection
14356 Dorsey Mill Road

Per my site inspection, topography is very gentle, especially on the west side of the property. The eastern side is a couple of feet higher but on a gentle slope. Locations of the surrounding wells do not appear to be compromised due to the slope.

Review of the percolation test notes for this and surrounding properties show percolation test rates and soils homogenous. Brian Baker's soil description of rock 25-30% summarize 10 feet of depth. Past percolation test notes indicate deep tests around 10' at 9-11 minutes. According to Bob Sheesley, prior to the review of the percolation test notes, the subdivision across the street had no rock issues and profiles contained sandy loam. It appears the subdivision across the street has similar soils to the above mentioned address and surrounding lots.

I would recommend approval of the site plan as is with a septic design specifying septic invert at 2' and bottom at 8-9'. This would allow for optimal oxygen infusion/diffusion from the air into the trench stone. Also, the deeper trench design would support the most efficiency maintaining setbacks to any surrounding well radii on the backyard lots (Sharp Road). *Pre-App.*

KN



21FA - CONCRETE MONUMENT SET 3.5' FROM NORTHERN EDGE OF PAVING OF SHADY LANE 48.5' FROM CL OF SHARP ROAD AND 88.0' FROM C&P POLE #7.
 21F3 - 5.5' FROM EASTERN EDGE OF PAVING OF SHARP ROAD APPROX. 0.3 MILES NORTH OF SHADY LANE, 3.2' FROM C&P POLE #14 (G&E POLE #48987).

VICINITY MAP
 SCALE: 1" = 2000'

GENERAL NOTES

- 1.) THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- 2.) THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWER SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE REQUIRED.
- 3.) EXACT LENGTH OF SEPTIC TRENCHES IS TO BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF TRENCH LAYOUT AND INSPECTION.
- 4.) TOPOGRAPHY SHOWN IS BASED ON A FIELD RUN TOPOGRAPHIC SURVEY BY BENCHMARK ENGINEERING, INC., DATED FEBRUARY, 2006.
- 5.) WELL TO BE DRILLED PRIOR TO ISSUANCE OF A BUILDING PERMIT. IT IS THE DEVELOPER'S RESPONSIBILITY TO DRILL THE WELL. IT WILL NOT BE CONSIDERED TO BE GOVERNMENTAL DELAY IF THE WELL IS NOT COMPLETED PRIOR TO THE SUBMISSION'S MILESTONE DATE.
- 6.) THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROPERTY'S BOUNDARIES EXCEPT AS NOTED, BASED ON INFORMATION RECEIVED FROM THE HOWARD COUNTY HEALTH DEPARTMENT.
- 7.) THE PERCOLATION TESTS AND WELL LOCATIONS SHOWN ON THIS PLAN ARE FIELD SURVEYED AND SUPPLEMENTED WITH INFORMATION RECEIVED FROM THE HOWARD COUNTY HEALTH DEPARTMENT. THE LOCATIONS OF TESTS A AND B ARE APPROXIMATE.
- 8.) THE EXISTING WELL IS TO BE ABANDONED BY A LICENSED WELL DRILLER PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. THE HEALTH DEPARTMENT IS TO BE NOTIFIED PRIOR TO ABANDONMENT OF THE EXISTING WELL.

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SEPTIC RESERVE AREA

I CERTIFY THAT THE INFORMATION SHOWN HEREON INFORMATION RECEIVED FROM THE HOWARD COUNTY HEALTH DEPARTMENT, AND IS ACCURATELY SHOWN, TO THE BEST OF KNOWLEDGE AND BELIEF.

DATE: 2/21/06
 PLAN PREPARED BY: *John Carter*
 DATE: *2/21/06*
 APPROVED: FOR PRIVATE WATER AND SEWER SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

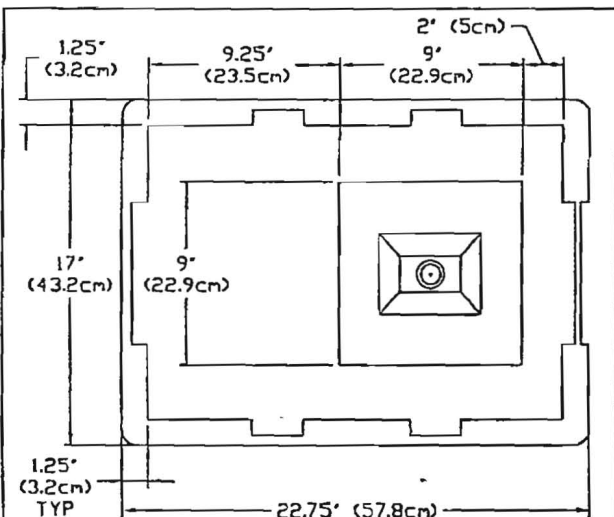
COUNTY HEALTH OFFICER: _____ DATE: _____

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 418
 ELLICOTT CITY, MARYLAND 21043
 phone: 410-465-6105 & fax: 410-465-6644
 email: Benchmark@coia.com

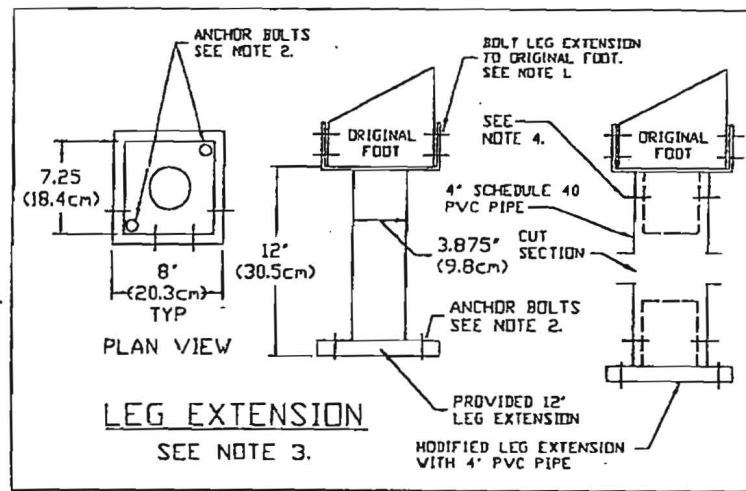
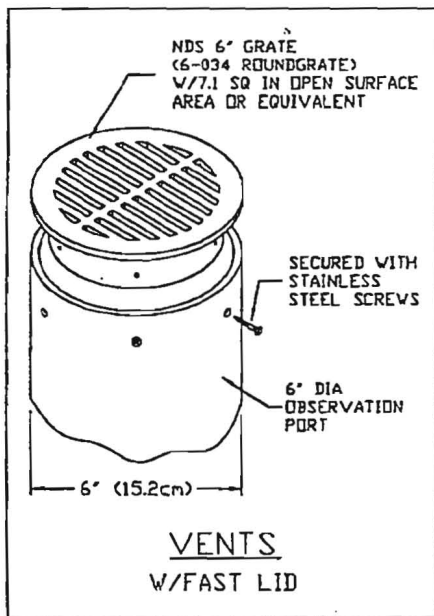
OWNER/DEVELOPER: JAMES AND CHRISTINA SELFRIDGE 14045 GARED DRIVE GLENWOOD, MD 21738 410-531-8930	PROJECT: 14356 DORSEY MILL ROAD
	LOCATION: TAX MAP: 21, GRID: 17 FORTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
	TITLE: PERCOLATION TESTING PLAN
DATE: FEBRUARY, 2006	PROJECT NO. 1893
DES: JC	DRAFT: JC
CHECK: DAM	SCALE: 1" = 50'
	SHEET 1 OF 1

PLAN
 SCALE: 1" = 50'

P:\1893\1893.DWG: 2/21/06 10:53 AM
 June, Oca TDS600 HDI.pcl



**BLOWER HOUSING BASE
DIMENSIONS (SECTION A-A)**



NOTES

1. SECURE ORIGINAL 7" X 7" FOOT TO LEG EXTENSION BY PLACING TWO (2) SCREWS IN EACH SIDE OF THE LEG EXTENSION. EIGHT (8) SCREWS PER FOOT ARE INCLUDED AND SHOULD BE USED ON EACH OF THE FOUR (4) CORNER LEG EXTENSIONS.
2. ANCHOR THE LEG EXTENSIONS (4 CORNER LEGS ONLY) TO THE BASE OF THE TANK. PLACE BOLTS AT OPPOSITE CORNERS OF THE LEG EXTENSION BASE.
3. TO ELONGATE FOOT PAST THE PROVIDED 12", CUT THE 3.9" LEG EXTENSION IN THE CENTER INTO TWO SEPARATE PIECES. THEN CUT A SCH 40 PVC PIPE TO THE DESIRED LENGTH AND SLIP THE PIPE OVER THE TOP AND BOTTOM CUT SECTIONS OF THE LEG EXTENSIONS.
4. ATTACH PIPES WITH STAINLESS STEEL SCREWS.
5. VENT TO BE LOCATED ABOVE FINISH GRADE OR HIGHER TO AVOID INFILTRATION. CAP WITH 6" VENT GRATE W/AT LEAST 7.1 SQ. IN. OF OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS (SEE MCF 0.5 L DWG).

OR:
RUN VENT TO DESIRED LOCATION AND COVER OPENING WITH 3" VENT GRATE W/AT LEAST 7.1 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS. VENT MUST NOT ALLOW EXCESS MOISTURE BUILDUP OR BACK PRESSURE.

IN THE INTEREST OF TECHNOLOGICAL PROGRESS, ALL PRODUCTS ARE SUBJECT TO DESIGN AND/OR MATERIAL CHANGE WITHOUT NOTICE.

Date 01-03-05

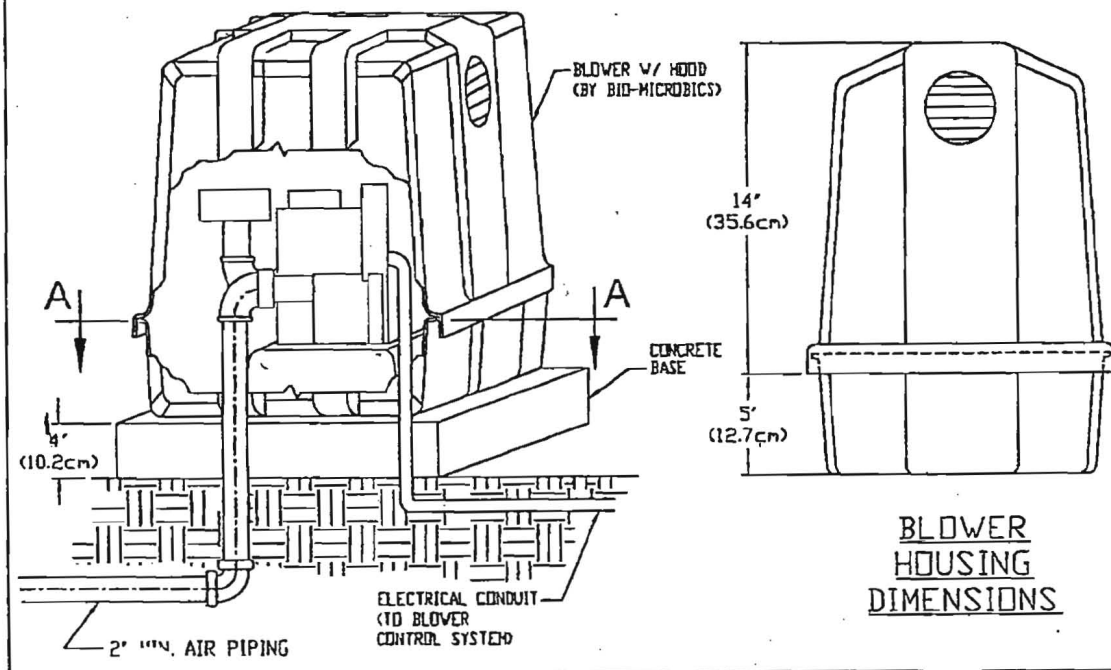
BIO-MICROBICS
INCORPORATED
1-800-753-FAST(3278)

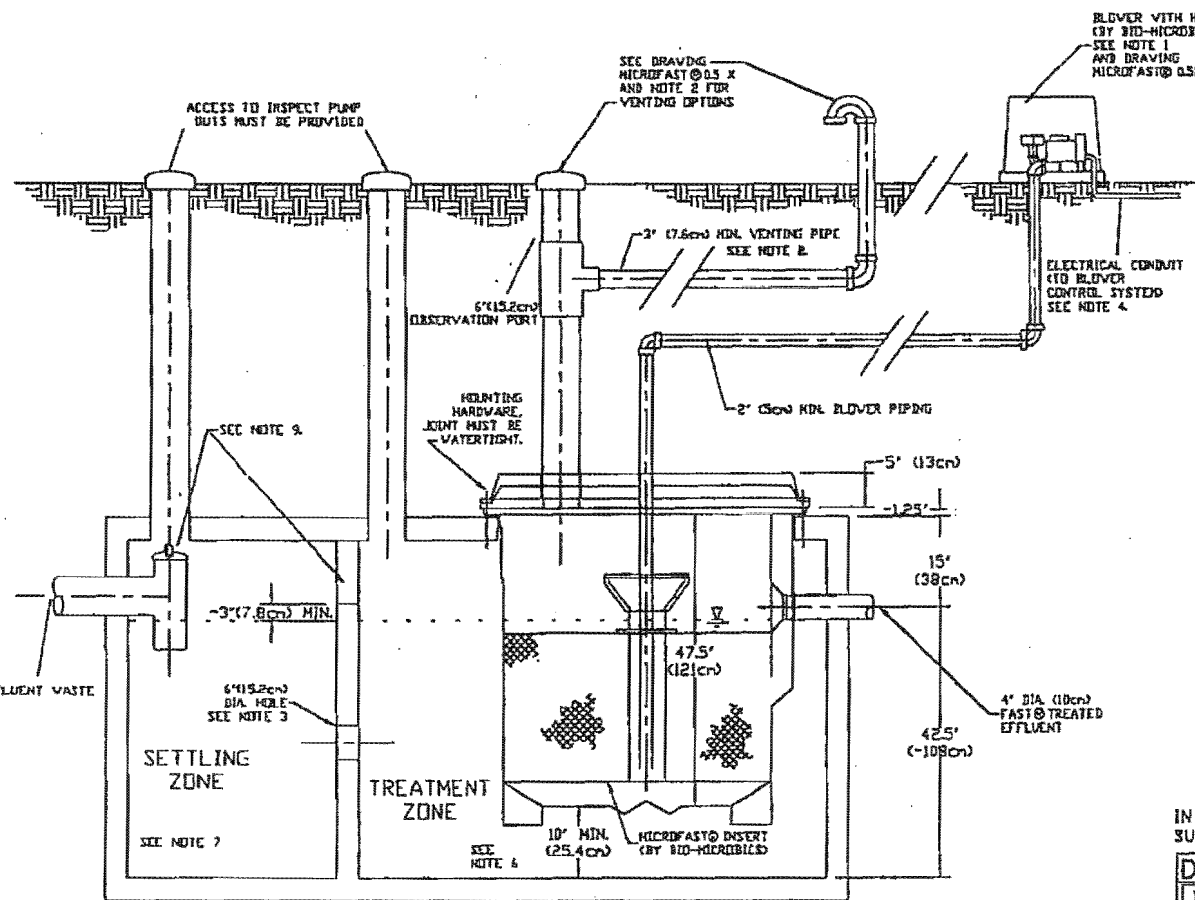
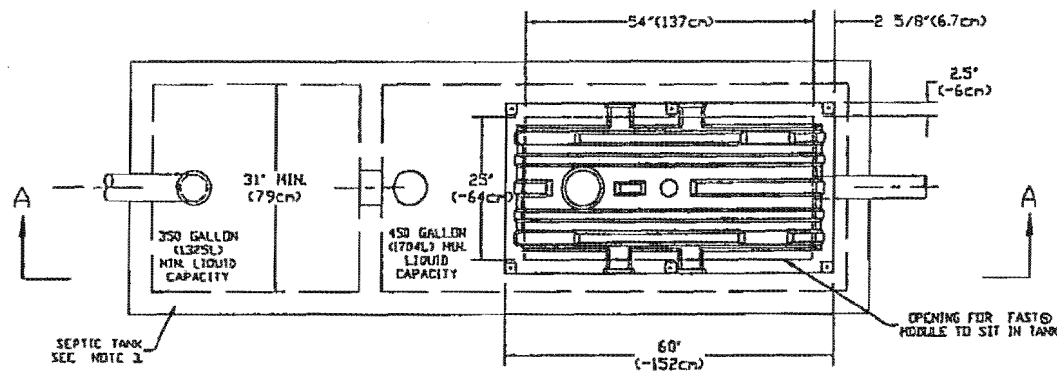
MicroFAST® 0.5 X

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4MT





VIEW A-A

NOTES

1. BLOWER PIPING TO FAST MAY NOT EXCEED 100FT (30.5M) TOTAL LENGTH AND USE A MAXIMUM OF 4 ELBOWS IN THE PIPING SYSTEM (@100FT). FOR DISTANCES GREATER THAN 100 FEET--CONSULT FACTORY. BLOWER BASE MUST BE LOCATED ABOVE FLOOD LEVELS.
2. VENT TO BE LOCATED ABOVE FINISH GRADE OR HIGHER TO AVOID INFILTRATION. CAP WITH 6" VENT GRATE W/AT LEAST 7.1 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS (SEE MCF 0.5 X DRAWING).
OR:
RUN VENT TO DESIRED LOCATION AND COVER OPENING WITH 3" VENT GRATE W/AT LEAST 7.1 SQ. IN. OPEN SURFACE AREA. SECURE WITH STAINLESS STEEL SCREWS. VENT MUST NOT ALLOW EXCESS MOISTURE BUILDUP OR BACK PRESSURE.
3. ALL APPURTENANCES TO THE FASTO UNIT (e.g. SEPTIC TANK, PUMPOUTS, ETC.) MUST CONFORM TO ALL COUNTRY, STATE, PROVINCE, AND LOCAL CODES.
4. BLOWER CONTROL SYSTEM BY BIO-MICROBICS, INC.
5. COPYRIGHT (C) 2005, BIO-MICROBICS, INC.
6. MUST INCREASE TANK SIZE BY 20% IF MINIMUM OF 10 INCHES IS USED BETWEEN THE UNIT AND THE BASE OF THE TANK. CONSULT FACTORY FOR APPROVAL.
7. THE PRIMARY COMPARTMENT MAY BE A SEPARATE TANK.
8. NO MORE THAN 4 FT OF FILL MAY BE PLACED OVER FAST LID. UNIT MAY STAND INSIDE TANK. SEE MCF 0.5 X & F DWGS AND REFER TO INSTALLATION MANUAL FOR MORE DETAILS.
9. EITHER PLACE A PIPE CAP ON THE TOP OF THE INFLUENT PIPE TEE, OR EXTEND THE BAFFLE SEPARATING THE TWO ZONES ALL THE WAY TO THE TOP OF THE CONCRETE TANK. IF USING THE PIPE CAP, THE BAFFLE MUST EXTEND PAST THE WATER LEVEL 3" MIN. AS SHOWN ON THE DRAWING.

IN THE INTEREST OF TECHNOLOGICAL PROGRESS, ALL PRODUCTS ARE SUBJECT TO DESIGN AND/OR MATERIAL CHANGE WITHOUT NOTICE.

Date	01-03-05
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MicroFAST® 0.5 L

Specifications For MicroFAST 0.5 Wastewater Treatment System

1. GENERAL

The contractor shall furnish and install (1) MicroFAST 0.5 treatment system as manufactured by Bio-Microbics, Inc. The treatment system shall be complete with all needed equipment as shown on the drawings and specified herein.

The principal items of equipment shall include FAST System Insert, insert lid (or leg extensions if that option is chosen), blower assembly, blower controls and alarms. The MicroFAST 0.5 unit shall be situated within a 450 gallon minimum compartment in a two compartment tank as shown on the plans, or in a 800 gallon one compartment tank. Tank(s) must conform to local, state, and all other applicable codes. The contractor shall provide coordination between the FAST system and tank supplier with regard to fabrication of the tank, installation of the FAST unit and delivery to the job site.

2. OPERATING CONDITIONS

The MicroFAST 0.5 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (8) eight persons and not to exceed 500 US Gallons per day (1893 LPD).

3. MEDIA

The FAST media shall be manufactured of rigid PVC, polyethylene or polypropylene and it shall be supported by the polyethylene insert. The media shall be fixed in position and contain no moving or wearing parts and shall not corrode. The media shall be designed and installed to ensure that sloughed solids immediately descend through the media to the bottom of the septic tank.

4. BLOWER

The MicroFAST 0.5 unit shall come equipped with a regenerative type blower capable of delivering 11-25 CFM. The blower assembly shall include an inlet filter with metal filter element.

5. REMOTE MOUNTED BLOWER

The blower may be mounted remote with no more than 100 ft (30.5 M) of piping and no more than four elbows, from the MicroFAST unit on a contractor supplied concrete base. The blower must not set in standing water and its elevation must be higher than the normal flood level. A two-piece, rectangular housing shall be provided with tamper-proof screws. The discharge air line from the blower to the MicroFAST shall be provided and installed by the contractor.

6. ELECTRICAL

The electrical source should be within 150 feet of the blower. Consult local code for longer wiring distances. All wiring must conform to code. The input power required for the blower is 115/230 Volts, Single Phase, 60/50 Hertz, 3.8/1.9 Full Load Amps, minimum wire size is 16 A.W.G. (Locked Rotor Amps are 18.6/9.3). All conduit and wiring between the electrical control panel (optional), the power supply, and the blower shall be furnished and installed by the contractor.

7. ALARMS

The alarm system shall consist of a visual and audible alarm to indicate loss of power to the blower and/or high water level. A manual silence switch is included.

B. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the MicroFAST 0.5 shall be done in accordance with the written instructions provided by the manufacturer. No more than four foot of fill may be placed over the FAST® lid. Operation manuals shall be furnished which will include a description of installation, operation, and system maintenance procedures. There shall be a separate manual for the installer, service provider, and owner, tailored to each.

9. WARRANTY

The manufacturer of the MicroFAST 0.5 treatment system shall warrant for three years from the date of shipment or two years from the date of start-up, whichever occurs first, that the equipment they provide will be free from defects in material and workmanship.


In the event a mechanical component fails to perform as specified or is proven defective in service during the warranty period, the manufacturer shall repair or replace such defective parts. (Cost of labor on repair/replacement is not covered under this warranty.) The replacement or repair of those items normally consumed in service such as air filter, etc., shall be considered as part of routine maintenance and upkeep.

It is not intended that the manufacturer assume responsibility for contingent liabilities or consequential damages of any nature resulting from defects in design, material or workmanship, or delays in delivery, replacement, or otherwise.

10. FLOW AND DOSING

Wastewater treatment systems work best when influent flow is delivered as consistently as possible. FAST systems have been successfully designed, tested and certified receiving gravity demand-based influent flow. However when influent flow is controlled (either by pump or other means) to the FAST system to help with highly variable flow conditions, then multiple feeding events should be used to help assure even flow, optimum performance, and reliability.

IN THE INTEREST OF TECHNOLOGICAL PROGRESS, ALL PRODUCTS ARE SUBJECT TO DESIGN AND/OR MATERIAL CHANGE WITHOUT NOTICE.

Date	01-03-05	MicroFAST® 0.5 S
		
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