Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

A

Permit Number #S001638

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☐ Septic System ☐ Lagoon ☒ Other (Refer to Form C)

PLEASE PRINT OR TYPE

A. Onsite System Location

Address* 6700 Rebel Drive City Lincoln, NE Zip 68516
(no rural route)

Legal Description _____ Yankee Hill Ridge 2nd Addtion Block 1 Lot 1
1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID _____ *Approx. Address (If to be determined) _____

B. Owner

Name Richard Wurtz Signature _____
Address 6700 Rebel Drive City/State/Zip Lincoln, NE 68516
Home Phone 402-405-2812 Work Phone _____

C. Certified Installer

Name: Jaime Kubik Signature Jaime Kubik
Address 105 Locust Street P.O. Box 191 City/State/Zip Hickman, NE 68372
Work Phone 402-475-2462

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number: _____

Designer Name _____ Firm _____ Work Phone _____

E. This system will serve a

☐ Residential Dwelling Number of Bedrooms 4 Whirlpool Bathtub? ☐ Yes ☒ No Total Acres 3.06
Garbage Grinder? ☒ Yes ☐ No

☐ Commercial Establishment/Other Facility Specify _____ Design flow in gallons per day Type of Wastewater ☐ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

1. Health Department
Site visits _____ Date rec'd _____ **ACTION** ☐ Approved ☐ Disapproved
Date frwd _____ Signature _____
Comments _____

2. Supt. Bldg. Insp. or Village Clerk
Comments _____ Date rec'd _____ **ACTION** ☐ Approved ☐ Disapproved
Date frwd _____ Signature _____

3. City or County Engineer
Comments _____ Date rec'd _____ **ACTION** ☐ Approved ☐ Disapproved
Date frwd _____ Signature _____

Installation Final Written Approval
By _____
Date _____

Business Office Use Only
Date Received 4-19-18 Amount Paid $405.00
Received By KA Cash/Check No. 3325

White - Health Department Yellow - Engineer Pink - Building & Safety

Lincoln-Lancaster County Health Department
Environmental Public Health Division (402) 441-8027
3131 O Street Lincoln, Nebraska 68510-1514

ON-SITE WASTE WATER SYSTEM
CONSTRUCTION - INSTALLATION PERMIT
No. HS001638

System Type: Non-Standard

Situs: 6700 REBEL DR, LINCOLN, NE 68516

Issued: 6/19/2018

Expires: 6/19/2019

Description: YANKEE RIDGE 2ND ADDITION, BLOCK 1, Lot 1

Owner: WURTZ, RICHARD P & SARAH R
6700 REBEL DR
LINCOLN, NE 68516

Shavonna M. Lausterer, MPH, CPH, Health Director

Dear Applicant:

The above document is your permit to construct a new On-site Waste Water System at the location listed. Please contact this office once the sytem is complete in order to schedule a final inspection before use.

Shavonna M. Lausterer, MPH, CPH
Health Director

JAIME KUBIK
108 LOCUST ST PO BOX 191
HICKMAN, NE 68372

H S001638

REC'D SEP 20 2019

NEBRASKA

Good Life. Great Resources.

DEPT. OF ENVIRONMENT AND ENERGY

Operating Permit No. 18OWT011

is hereby issued to

Richard D Wurtz

for the

700 Gallon/Day Onsite Wastewater Treatment System Alternative Design system

Description:

Average flow is 500 GPD. Peak flow is 700 GPD. System incudes a 1,000 gallon capacity septic tank, followed by a 1,000 gallon tank with a Bio-Microbics MicroFast 0.75 aerobic treatment system followed by a Salcor UV disinfection. The treatment system discharges to a surface polishing pond that requires a minimum 6,800 square feet. A maintenance agreement with a certified and manufacturer authorized installer is required for the life of the system.

located at

6700 Rebel Drive, Lincoln
40.72158 Lat / -96.62914 Long, Lancaster County

Pursuant to a Delegation Memorandum dated July 1, 2019, and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed 9/16/19

Shelley Schneider

Shelley Schneider, Water Permits Division Administrator

Suite 400, The Atrium, 1200 "N" Street, P. O. Box 98922, Lincoln, Nebraska, 68509-8922
Phone (402) 471-2186, Fax (402) 471-2909, e-mail ndee.morvinfo@nebraska.gov

NEBRASKA

Good Life. Great Resources.

SEP 16 2019

DEPT. OF ENVIRONMENT AND ENERGY

Richard D. Wurtz
6700 Rebel Drive
Hickman, NE 68372

RE: Alternative Onsite Wastewater Treatment System
6700 Rebel Drive
40.72158, -96.62914, Lancaster County
NDEQ ID: **94352**
Program ID: **18OWT011**

Dear Mr. Wurtz:

The Department has received a notification of construction completion form from Jason Kubik (C2040) and a system registration form from Jaime Kubik (C2500) for the above referenced system. Pursuant to Neb. Rev. Stat. Sec. §81-1506(2)(Reissue 1987), an operating permit for the system (enclosed) is hereby granted.

This Operating Permit is issued under the condition that the operation of the system will be in compliance with NDEE's Title 124 - Rules and Regulations for the Design, Operation and Maintenance of On-site Wastewater Treatment Systems.

Should ownership of the referenced On-site Wastewater Treatment system change, NDEE Title 124, Chapter 3, Section 007 provides that the transfer of ownership of a permitted system shall automatically authorize the new owner to operate under the existing permit. Subsequent permit holders are under the same obligations and conditions as the original permittee. The Department shall be notified of the transfer of ownership and given the name and address of the new owner.

If you have any questions please contact me at (402) 471-4285.

Sincerely,

Tom Buell
Supervisor, Onsite Section
Water Permits Division

Cc: Jaime Kubik, Southwick Liquid Waste Inc., 105 Locust Street, P.O. Box 191, Hickman, NE 68372
Nate Hartman, Lincoln-Lancaster County Health Department, 3140 N Street, Lincoln, NE 68510

Department of Environment and Energy
P.O. Box 98922
Lincoln, Nebraska 68509-8922

Jim Macy, Director
OFFICE 402-471-2186 FAX 402-471-2909
ndeq.moreinfo@nebraska.gov

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

SCANNED

A

Permit Number
#S001638

Onsite Wastewater Treatment System Permit Application

Include Form B and C. Submit correct fee with this Application

☐ Septic System ☐ Lagoon ☒ Other (Refer to Form C)

PLEASE PRINT OR TYPE

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Address* 6700 Rebel Drive (no rural route) City Lincoln, NE Zip 68516

Legal Description ____ Yankee Hill Ridge 2nd Addtion Block 1 Lot 1

1/4 1/4 Section Township Range Subdivison Addition Block Lot

PID ____ *Approx. Address (If to be determined) ____

B. Owner

Name Richard Wurtz Signature ____

Address 6700 Rebel Drive City/State/Zip Lincoln, NE 68516

Home Phone 402-405-2812 Work Phone ____

C. Certified Installer

Name: Jaime Kubik Signature ____

Address 105 Locust Street P.O. Box 191 City/State/Zip Hickman, NE 68372

Work Phone 402-475-2462

D. Engineer

☐ **Check and complete if engineer designed system** P.E. License Number: ____

Designer Name ____ Firm ____ Work Phone ____

E. This system will serve a

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☐ Commercial Establishment/Other Facility Specify ____ Design flow in gallons per day Type of Wastewater ☐ Domestic ☐ Non-Domestic

DO NOT WRITE BELOW THIS LINE

Approval Process

1. Health Department
Site visits ____
Comments ____
Date rec'd 6/19/18
Date frwd 6/19/18
ACTION ☒ Approved ☐ Disapproved
Signature ____

2. Supt. Bldg. Insp. or Village Clerk
Comments ____
Date rec'd ____
Date frwd ____
ACTION ☐ Approved ☐ Disapproved
Signature ____

3. City or County Engineer
Comments ____
Date rec'd ____
Date frwd ____
ACTION ☐ Approved ☐ Disapproved
Signature ____

Installation Final Written Approval
By ____
Date ____

Business Office Use Only
Date Received 4-19-18 Amount Paid $405.00
Received By ____ Cash/Check No. 3025

White - Health Department Yellow - Engineer Pink - Building & Safety

Form A Updated: 4/15

Contacted Kubik on 6/5

Picked up 6/21

#S95 for replacement

Lincoln-Lancaster County Health Department
Environmental Public Health Division
3140 N Street • Lincoln NE 68510-1514
Phone: 402-441-8643

D

Permit Number:

Onsite Wastewater Treatment System
As-Built Description and Drawing

Type of Onsite Wastewater System: ☐ Lagoon (Skip to Back Page) ☐ Subsurface Septic ☐ Mound

Onsite Wastewater System Location

Address or Legal Description or Parcel Identification Number (PID) 16-28-201-001-000

Owner: RICHARD WURTZ Address 6700 REBEL DRIVE LINCOLN, NE 68516

A. Wastewater Piping

1. Material: SCH 40 Diameter: 4 in.
2. Distance between dwelling and septic tank: 109 ft.

B. Septic Tank

1. Material PM 1060 INFILTRATOR (2)
2. Capacity: 1000 + 1000 FOR BIO MICROBICS
3. Depth to top of tank, below unfinished grade: 12 in.
4. Distance to:
   Well +100 ft.
   Pressure line +60 ft
   Property Line +50 ft.
   Foundation 109 ft.

C Distribution Box or Drop Box

Distance **and** Direction from septic tank: ____ ft. ____

D. Drainfield/Absorption Field

☐ Trench ☐ Bed

1. Type: ☐ Perforated Pipe ☐ Chamberless ☒ Other
   Material brand and inside width of Chamberless: ____
2. Number of Laterals: ____
3. Length of each lateral (linear): ft. ____ ft. ____
   ft. ____ ft. ____
4. Drainfield size: ____ sq. ft. ENGINEERED POLISHING PAD
5. Distance to:
   Well +100 ft.
   Pressure line +50 ft.
   Property line +60 ft.
   Depth of Groundwater +12

Partial PH + PS

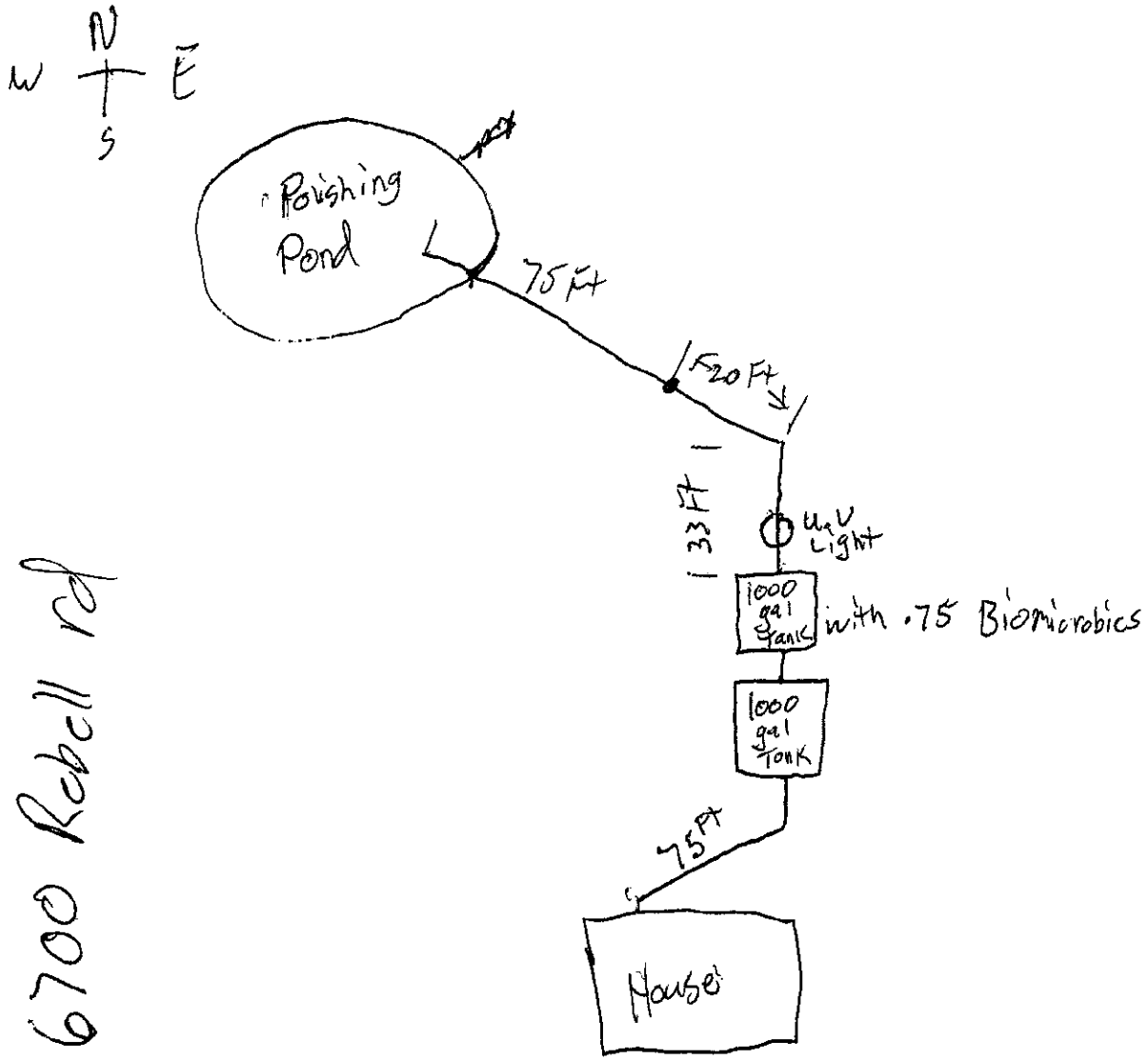
Was the Onsite Wastewater System covered prior to LLCHD inspection? ☒ Yes ☐ No

If Yes, the Certified Professional must sign below for final approval:

I swear and affirm that the system complies with Lincoln Municipal Code (LMC) 24.38 and/or County Resolution R-13-0062 requirements and that the information and documentation submitted are true and accurate.

Certified Professional Signature: [signature] Date: 8/2/2019

Complete As-Built drawing on the back of this form.



6700 Rabell rd

NEBRASKA

Good Life. Great Resources.

DEPT. OF ENVIRONMENT AND ENERGY

Operating Permit No. 18OWT011

is hereby issued to

Richard D Wurtz

for the

700 Gallon/Day Onsite Wastewater Treatment System Alternative Design system

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located at

6700 Rebel Drive, Lincoln
40.72158 Lat / -96.62914 Long, Lancaster County

Pursuant to a Delegation Memorandum dated July 1, 2019, and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed 9/16/19

Shelley Schneider

Shelley Schneider, Water Permits Division Administrator

Suite 400, The Atrium, 1200 "N" Street, P. O. Box 98922, Lincoln, Nebraska, 68509-8922
Phone (402) 471-2186, Fax (402) 471-2909, e-mail ndee.moreinfo@nebraska.gov

Nebraska DEQ

Onsite Wastewater Treatment System Application for Construction/Operating Permit

For NDEQ Use Only NDEQ ID: Program ID:

Print or Type

RICHARD P WIERTZ
Owner/Authorized Representative First Name | Initial | Last Name

Business or Legal Entity Name (if applicable)

6700 REBEL DRIVE LINCOLN NE 68516
Owner Address | City | State | Zip

Phone Number 402-525-2037 Email

☐ Check here if authorized representative and include a description of the representative's authority to sign on behalf of the owner.

Professional Engineer, Master Installer or Registered Environmental Health Specialist

Print or Type

JASON JARED KUBIK C 2040
First Name | Initial | Last Name | Certification/License Number

SOUTHWICK LIQUID WASTE
Company Name

105 LOCUST STREET BOX 191 HICKMAN NE 68372
Mailing Address | City | State | Zip

Phone Number 402-475-2462 Email SOUTHWICKSEWER@YAHOO.COM

Location

Legal description OR *Geographical coordinates to 4 decimal points*

___ ___ ___ ___ ___ LANCASTER / 40.72158 96.62914
¼ ¼ Section Township Range County | Latitude | Longitude

Physical address if different than owner's mailing address

System Information

☒ Dwelling-Peak single day flow 700 gals **OR** ☐ Non-dwelling-Peak single day flow ___ gals

☐ Domestic Wastewater ☐ Non-Domestic Wastewater -Description of non-domestic wastewater sources (i.e. restaurant, laundry, butcher shop, camper dump station or other)

☐ New System ☒ Modification, reconstruction or alteration of existing system

☐ Septic System ☐ Mound ☐ Holding tank ☐ Lagoon ☐ Other (if other, describe here)

BIO MICROBICS .75 WITH POLISHING POND

Depth to seasonal high groundwater for planned location of the soil absorption system ___ ft.

Percolation rate 59 min/inch Maximum ground slope 8 %

I swear or affirm that the application information and documentation submitted are true, complete and accurate.

Owner/Authorized Representative Signature

4/12/18
Date

NOTICE: Failure to complete the form or include the appropriate fee(s) will delay the application. NDEQ issued construction permit is required prior to any construction.

Version 5-2012

Individual or Sole Proprietor
United States Citizenship Attestation Form

For the purpose of complying with Neb. Rev. Stat. §4-108 through 4-114, I attest as follows:

☑ I am a citizen of the United States.

-OR-

☐ I am a qualified alien under the federal Immigration and Nationality Act. My immigration status and alien number are as follows:

_____.

I agree to provide a copy of my USCIS documentation upon request.

I hereby attest that my response and the information provided on this form and any related application for public benefits are true, complete, and accurate, and I understand that this information may be used to verify my lawful presence in the United States.

PRINT NAME Richard Peter Wurtz
(first, middle, last)

SIGNATURE [signature]

DATE 04/03/2018

Revised 08/18/2014

Southwick
Liquid Waste

April 12, 2017

Mark Bauer, P.E.
NE-DEQ Onsite Wastewater Unit
P.O. Box 98922
Lincoln, NE 68509-8922

RE: WURTZ RESIDENCE – 6700 Rebel Drive, Lincoln, NE
Onsite Wastewater Plan – Permit Packet

Dear Mr. Bauer,

Enclosed is the submittal information for a Construction/Operating permit for a 4 bedroom home. The proposed design is an advanced treatment unit with a Bio Microbics FAST 0.75 system and a polishing pond as the final treatment. This proposed plan is due to the homeowner's desire to not have a lagoon and encroach upon Title 124 prescribed property line setbacks. Polishing pond will vary in shape, but will ultimately have a minimum of 6,800 square feet in size and a 5 foot depth. Conventional lagoon requirements will also not be met, but pond will be graded to prevent surface flow. It will also not have fencing.

Sincerely,

Jason Kubik

Enclosed: (3) Sets Submittals and Plans, (1) Copy of Bio-Microbics FAST system specs, (1) Construction Permit Application w/Fee, & (1) Citizen Attestation Form

Southwick
Liquid Waste

ADVANCED TREATMENT DESIGN w/Polishing Pond and Bio-Microbics MicroFAST 0.75

Richard and Sarah Wurtz Residence

6700 Rebel Drive
Lincoln, NE 68515

Lancaster County
Yankee Ridge 2nd Addition
Block 1, Lot 1
3.06 Acres

Southwick Liquid Waste
105 Locust Street P.O. Box 191
Hickman, NE 68372

402-475-2462

Email: southwicksewer@yahoo.com

April 12, 2018

WURTZ RESIDENCE ATU w/polishing pond DESIGN

April 12, 2018

Peak Daily Design Load – 4 bedroom – 700 GPD

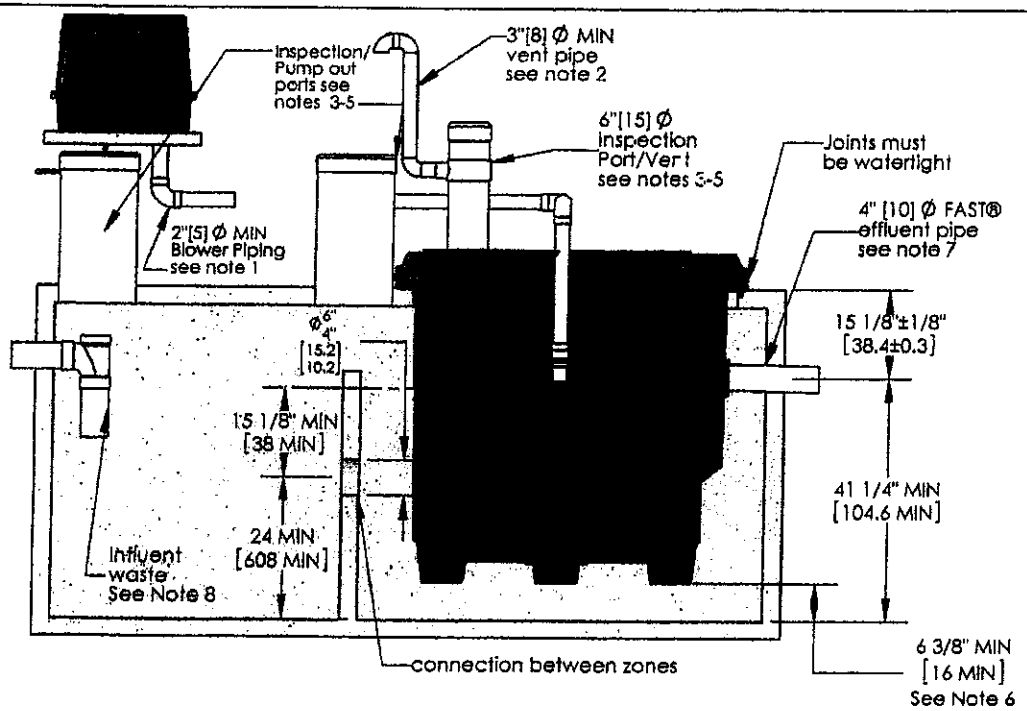
Polishing Pond Sizing

Proposed site consists of Askarben Silty Clay Loam
Current subsurface system failing
Required polishing pond sizing as per Title 124
Minimum 6,800 square feet
Depth of 5 feet

Treatment – Use Bio-Microbics MicroFAST 0.75 treatment system
Contractor to provide first 2 years of service
Homeowner to maintain service contract to insure proper function of system over time

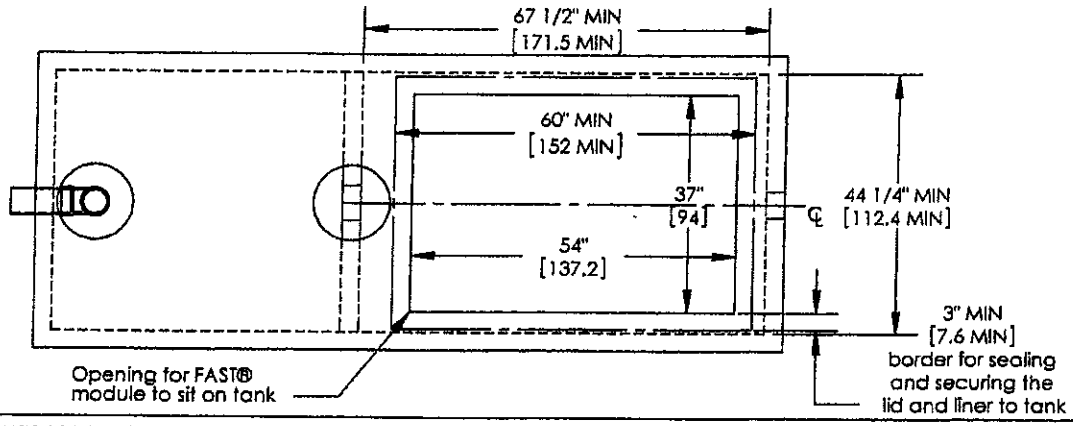
Septic Tank Sizing

(1) 1,000 gallon existing cement tank as primary treatment tank
(1) 1,000 gallon Infiltrator tank containing Bio-Microbics MicroFAST 0.75



Settling Zone
375 Gallon MIN [1700L MIN]

Treatment Zone
625 Gallon MIN [2400L MIN]



NOTES

1. Airline piping to FAST® may not exceed 100 FT [30m] total length and have a maximum of 4 elbows in the piping system. For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base 26" X 20" X 2" [65 X 50 X 5cm] min.
2. Vent to desired location and cover opening with a vent grate with at least 7 sq in.[45 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow condensate build up or create back pressure. Vent must be above finished grade or higher (see sheet 4 of 4).
3. All appurtenances to FAST® (e.g. tanks, access ports, electrical, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Pump out access shall be adequate to thoroughly clean out both zones.
4. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
5. Tank, piping, conduit, etc. are provided by others. Blower control system by Bio-Microbics, Inc. See Installation Manual.
6. If less than the specified minimums are considered necessary, consult factory for guidance.
7. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
8. The tank(s) shall be designed to prevent air passage between the settling zone/tank and the treatment zone and preventing an air lock. Examples include a baffle wall sealed to the lid or treatment zone inlet line with a pipe cap. Consult factory for guidance.
9. Installations using a FAST® system lid are capable of withstanding AASHTO H-10 equivalent loads. Any installation in which a FAST lid is buried deeper than 3 feet, or where additional loading conditions may occur, a professional engineer should be consulted. FAST® with feet option should be considered. Refer to Installation Manual for more details.
10. Specialized treatment levels may require specific features to be incorporated into the design. Consult factory for guidance.

DO NOT SCALE

UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS]
TOLERANCES
± 0.02 IN/IN
[± 0.05 CM/CM]

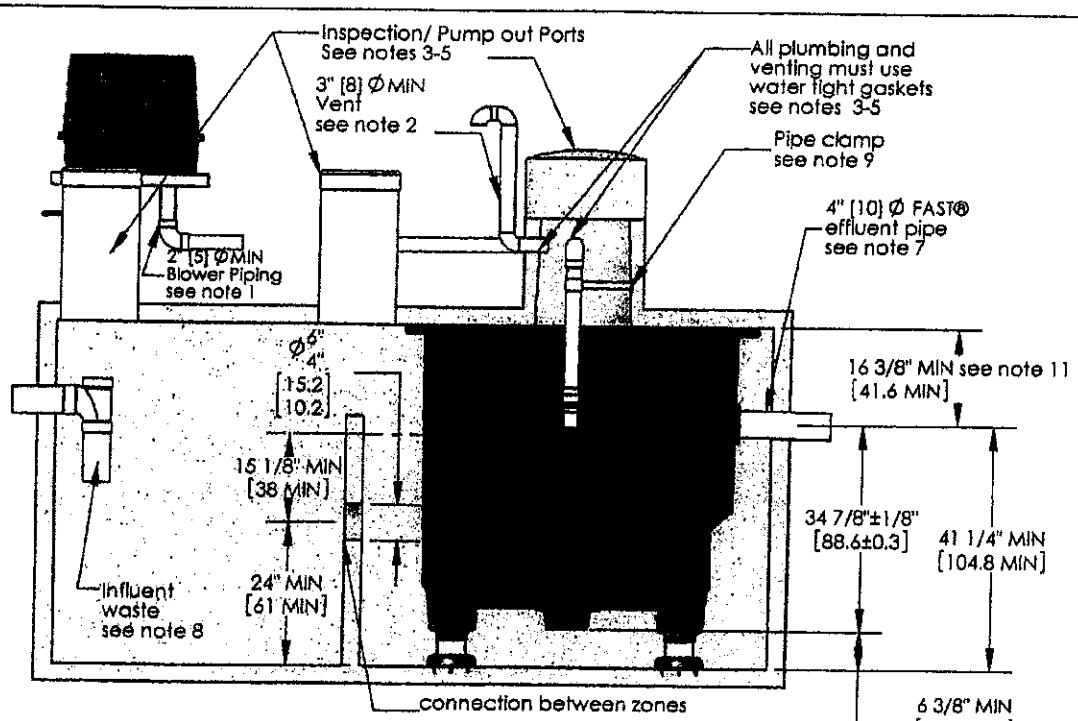
BIO MICROBICS
BETTER WATER, BETTER WORLD®

MicroFAST 0.75 FAST Unit

WEIGHT	lb	SIZE	DRAWING NUMBER		
NAME	DATE	A	MicroFAST® 0.75 with lid		SHEET 1 OF 4
DRAWN CTC	12/18/2006				
CHECKED PF	9/18/2013		REVISED 9/18/2013	REV. INI-07-D	

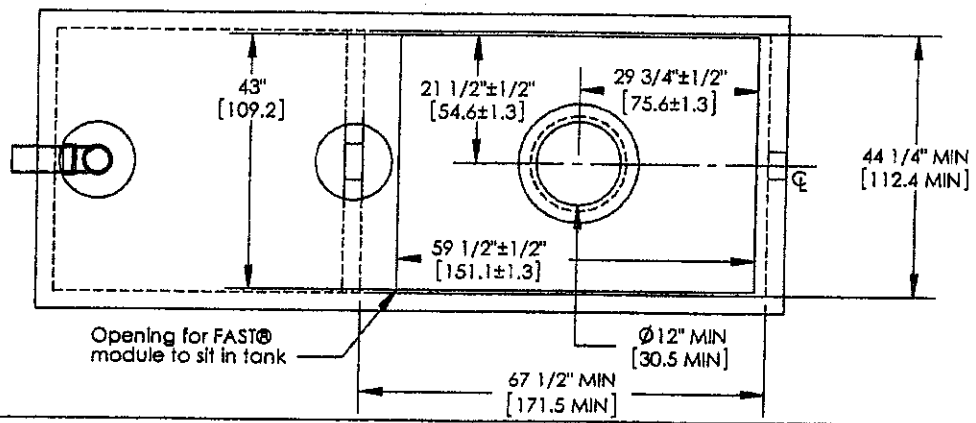
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BIO-MICROBICS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BIO-MICROBICS INC. IS PROHIBITED. DESIGN AND INVENTION RIGHTS ARE RESERVED. IN THE INTEREST OF TECHNOLOGICAL ADVANCEMENT, ALL PRODUCTS ARE SUBJECT TO DESIGN AND OR MATERIAL CHANGE WITHOUT NOTICE.

BIO-MICROBICS © 2013



Settling Zone
375 Gallon MIN [1700L MIN]

Treatment Zone
625 Gallon MIN [2400L MIN]



NOTES

1. Airline piping to FAST® may not exceed 100 FT [30m] total length and have a maximum of 4 elbows in the piping system. For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base 26" X 20" X 2" [65 X 50 X 5cm] min.
2. Vent to desired location and cover opening with a vent grate with at least 7 sq in.[45 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow condensate build up or create back-pressure. Vent must be above finished grade or higher (see sheet 4 of 4).
3. All appurtenances to FAST® (e.g. tanks, access ports, electrical, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Pump out access shall be adequate to thoroughly clean out both zones.
4. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
5. Tank, piping, conduit, etc. are provided by others. Blower,control system by Bio-Microbics, Inc. See Installation Manual.
6. If less than the specified minimums are considered necessary, consult factory for guidance.
7. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
8. The tank(s) shall be designed to prevent air passage between the settling zone/tank and the treatment zone and preventing an air lock. Examples include a baffle wall sealed to the lid or treatment zone inlet line with a pipe cap. Consult factory for guidance.
9. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' min [60 cm]. See alternate air supply option on sheet 4 of 4.
10. Specialized treatment levels may require specific features to be incorporated into the design. Consult factory for guidance.
11. Min. height may be reduced, consult factor and reference "Low Profile Module Procedure.pdf"
12. Refer to sheet 4 of 4 for leg extensions requirements.

DO NOT SCALE

UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]

BIO MICROBICS
BETTER WATER. BETTER WORLD.

MicroFAST 0.75 FAST Unit

	WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
	NAME	DATE	A	MicroFAST® 0.75 with feet	2 OF 4
DRAWN	CTC	12/18/2006			
CHECKED	PF	9/18/2013	REVISED 9/16/2013	REV. INI-07-D	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BIO-MICROBICS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BIO-MICROBICS INC. IS PROHIBITED. DESIGN AND INVENTION RIGHTS ARE RESERVED. IN THE INTEREST OF TECHNOLOGICAL ADVANCEMENT, ALL PRODUCTS ARE SUBJECT TO DESIGN AND OR MATERIAL CHANGE WITHOUT NOTICE.

BIO-MICROBICS © 2013

Specifications for MicroFAST 0.75 Wastewater Treatment System

1. GENERAL

The contractor shall furnish and install (1) MicroFAST®0.75 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, leg extensions, or lid, blower assembly, blower controls and alarms. All other items will be provided by others. The MicroFAST 0.75 unit shall be situated within a 625 Gallon[2400L] minimum compartment as shown on the drawings. Suggested maximum settling zone is (1X) the daily flow. Tank must provide adequate pump out access and conform to local, state, and all other applicable codes. The contractor shall coordinate the proper fabrication of the tank between the tank and FAST system suppliers as well as the installation of the FAST unit, and delivery to the job site.

2. OPERATING CONDITIONS

The MicroFAST 0.75 treatment system shall be capable of treating the wastewater produced by typical family activities (bath, laundry, kitchen, etc.) ranging from (1) one to (11) eleven persons and not to exceed 750 US Gallons per day (2800LPD) provided the waste contains nothing that will interfere with biological treatment. The FAST system is a biological treatment system not meant for non-biodegradable or industrial wastewater.

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 descend through the media to the bottom of the septic tank.

4. BLOWER

The MicroFAST 0.75 unit shall come equipped with a regenerative type blower capable of delivering 17-25 CFM [31-46m3/hr]. The blower assembly shall include an inlet filter with metal filter element. The blower shall be mounted outside the tank on a contractor supplied concrete base. Blower piping to the tank shall use non-corrosive material (PVC, Galvanized, or Stainless Steel). Do not run galvanized pipe inside the treatment tank. Refer to Installation Manual for further details.

5. REMOTE MOUNTED BLOWER

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. The discharge air line from the blower to the MicroFAST System, shall be provided and installed by the contractor.

6. ELECTRICAL

The electrical source should be within 150 feet [45 meters] of the blower, consult local codes for longer wiring distances. All wiring must conform to all applicable codes(IEC, NEC, etc.). Wiring distances must prevent significant voltage loss. Input power on 60Hz electrical systems 110/220VAC, 1Ø, 3.5/1.7 FLA, on 50 Hz electrical systems 220VAC, 1Ø, 1.9 FLA. Other voltages and phase are also available. Actual power consumption varies with site conditions. All conduit and wiring shall be supplied by contractor.

7. CONTROLS

The control panel provides power to the blower with an alarm system consisting of a visual and audible alarm capable of signaling blower circuit failure and high water conditions. The control panel is equipped with SFR® (Sequencing Fixed Reactor) timed control feature. A manual silence button is included.

8. INSTALLATION AND OPERATING INSTRUCTIONS

All work must be done in accordance with local codes and regulations. Installation of the FAST 0.75 shall be done in accordance with the written instructions provided by the manufacturer. Manuals shall be furnished, which will include a description of system installation, operation, and maintenance procedures.

9. FLOW AND DOSING

FAST systems have been successfully designed, tested and certified receiving gravity, demand-based influent flow. When influent flow is controlled by pump or other means to help with highly variable flow conditions, then multiple dosing events should be used to maximize performance. The flow rate shall not exceed 5 gpm (19 Lpm) with a maximum hourly flow not to exceed 10% of the design daily flow (75 gph (280 LPH)).

10.WARRANTY

Bio-Microbics, Inc. warrants all new residential FAST® models (MicroFAST® 0.50, 0.625, 0.75, 0.90, and 1.5) against defects in materials and workmanship for a period of two years after installation or three years from date of shipment which ever occurs first. All other FAST® system models are warranted for a period of one year after installation or eighteen months from date of shipment, whichever occurs first. All are subject to the following terms and conditions below: During the warranty period, if any part is defective or fails to perform as specified when operating at design conditions, and if the equipment has been installed and is being operated and maintained in accordance with the written instructions provided by Bio-Microbics, Inc., Bio-Microbics, Inc. will repair or replace at its discretion such defective parts free of charge. Defective parts must be returned by owner to Bio-Microbics, Inc.'s factory postage paid, if so requested. The cost of labor and all other expenses resulting from replacement of the defective parts and from installation of parts furnished under this warranty and regular maintenance items such as filters or bulbs shall be borne by the owner. This warranty does not cover general system misuse, aerator components which have been damaged by flooding or any components that have been disassembled by unauthorized persons, improperly installed or damaged due to altered or improper wiring or overload protection. This warranty applies only to the treatment plant and does not include any of the structure wiring, plumbing, drainage, septic tank or disposal system. Bio-Microbics, Inc. reserves the right to revise, change or modify the construction and/or design of the FAST system, or any component part or parts thereof, without incurring any obligation to make such changes or modifications in present equipment. Bio-Microbics, Inc. is not responsible for consequential or incidental damages of any nature resulting from such things as, but not limited to, defect in design, material, or workmanship, or delays in delivery, replacements or repairs.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED. BIO-MICROBICS SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

NO REPRESENTATIVE OR PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY OR TO ASSUME FOR BIO-MICROBICS, INC., ANY OTHER LIABILITY IN CONNECTION WITH THE SALE OF ITS PRODUCTS. Contact your local distributor for parts and service.

DO NOT SCALE

UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]

BIO MICROBICS

BETTER WATER. BETTER WORLD.®

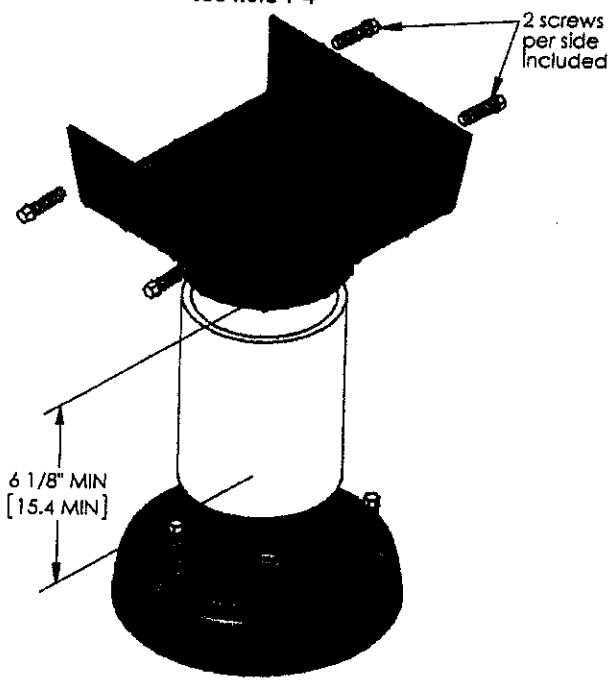
MicroFAST 0.75 FAST Unit

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
NAME	DATE	A	MicroFAST® 0.75 Specifications	3 OF 4
DRAWN CTC	12/18/2006			
CHECKED PF	9/18/2013	REVISED 9/18/2013	REV. INI-07-D	

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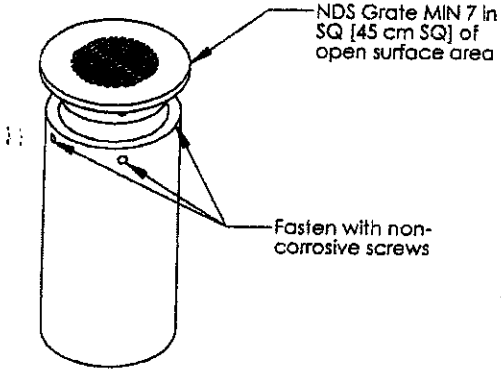
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Minimum leg extension assembly see note 1-4



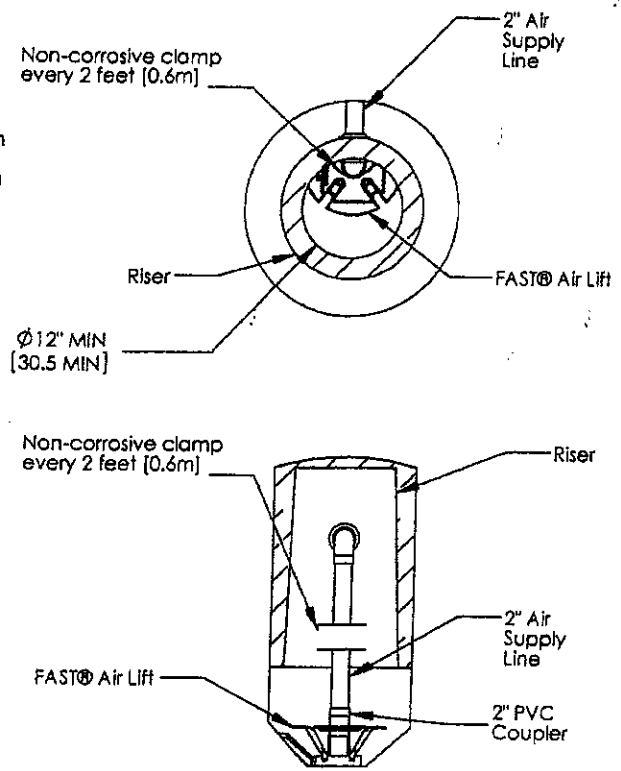
DETAIL
SCALE 1 : 5

FAST® Vent Option



DETAIL
SCALE 1 : 4

Alternate Air Supply Option



Notes
1. Secure leg extension to the FAST® unit by placing two screws on each side of the leg extension (4 screws per foot are included).
2. Cut 4" schd. 40 PVC pipe (not included) to obtain the desired height. Minimum pipe length of 6 1/8" [15.56cm] will provide minimum clearance of 6 3/8 inches [16.2 cm]. For heights greater than 18" [45.7cm] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36"[90cm].
3. Anchor the leg extensions to the tank with non-corrosive hardware (not included) at the provided mounting points.
4. If less than the specified minimums are considered necessary, consult factory for guidance.
5. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2ft [0.6m] minimum.
6. Tank, anchors, piping conduit, blower, housing pad and vents are provided by others.

DO NOT SCALE

UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN (± 0.05 CM/CM)

BIO MICROBICS
BETTER WATER, BETTER WORLD®

MicroFAST 0.75 FAST Unit

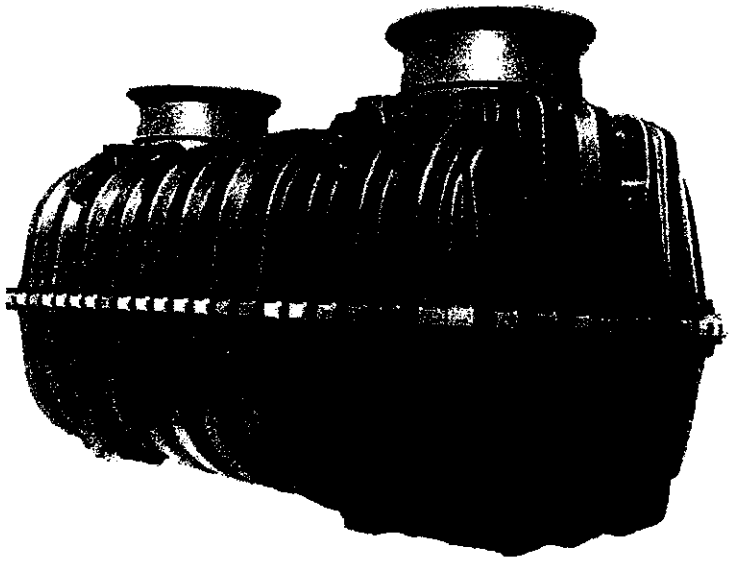
WEIGHT	lb	SIZE	DRAWING NUMBER		
	NAME	DATE			
DRAWN	CIC	12/18/2006	A	MicroFAST® 0.75 Details	SHEET 4 OF 4
CHECKED	PF	9/18/2013	REVISED 9/18/2013	REV. INI-09-X	

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INFILTRATOR®

IM-1060

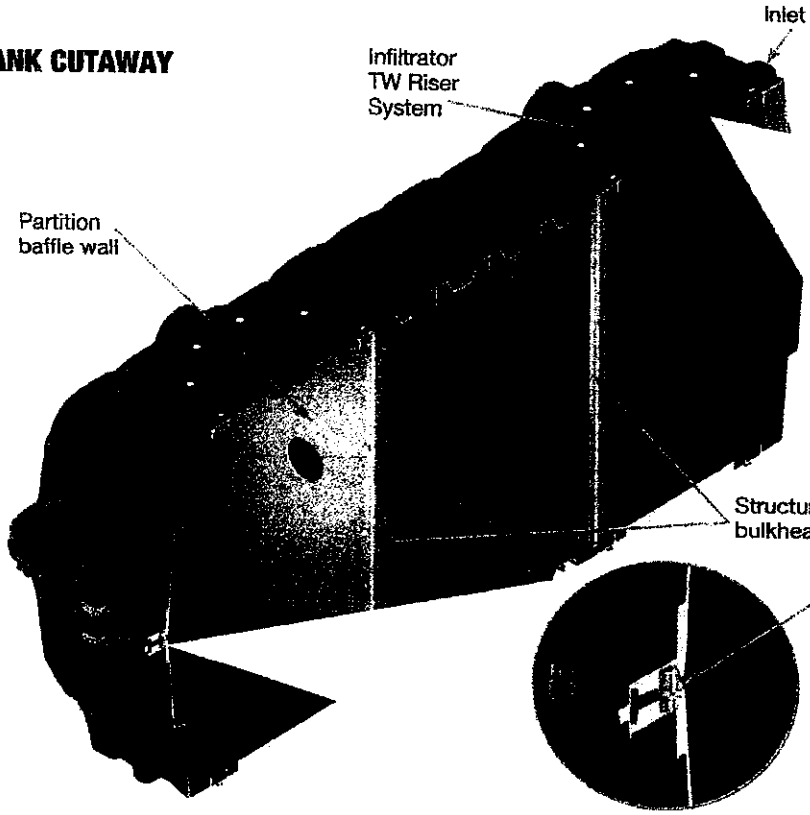


The Infiltrator IM-1060 is a lightweight strong and durable septic tank. This watertight tank design is offered with Infiltrator's line of custom-fit risers and heavy-duty lids. Infiltrator injection molded tanks provide a revolutionary improvement in plastic septic tank design, offering long-term exceptional strength and watertightness.

Features & Benefits

- Strong injection molded polypropylene construction
- Lightweight plastic construction and inboard lifting lugs allow for easy delivery and handling
- Integral heavy-duty green lids that interconnect with TW™ risers and pipe riser solutions
- Structurally reinforced access ports eliminate distortion during installation and pump-outs
- Reinforced structural ribbing and fiberglass bulkheads offer additional strength
- Can be installed with 6" to 48" of cover
- Can be pumped dry during pump-outs
- Suitable for use as a septic tank, pump tank, or rainwater (non-potable) tank
- No special water filling requirements are necessary
- The tank may be backfilled with suitable native soil. See installation instructions for guidance.

TANK CUTAWAY





HEAVY DUTY LID CUTAWAY
Reinforced 24" structural access port

MID-SEAM CUTAWAY
Reinforced water tight mid-seam gasketed connection

Protecting the Environment with **Innovative Wastewater Treatment Solutions**

INFILTRATOR®
water technologies

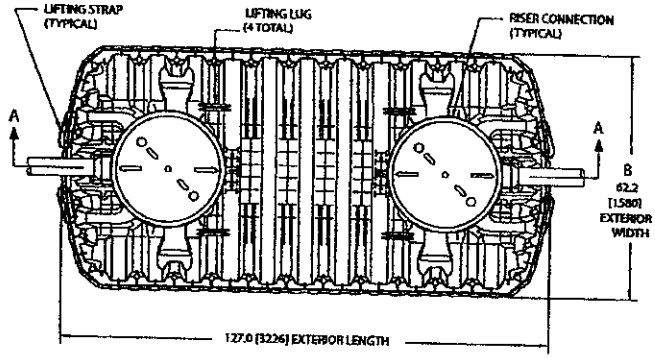
IM-1060 General Specifications and Illustrations

The IM-1060 is an injection molded two piece mid-seam plastic tank. The IM-1060 injection molded plastic design allows for a mid-seam joint that has precise dimensions for accepting an engineered EPDM gasket. Infiltrator's gasket design utilizes technology from the water industry to deliver proven means of maintaining a watertight seal. The two-piece design is permanently fastened using a series of non-corrosive plastic alignment dowels and locking seam clips. The IM-1060 is assembled and sold through a network of certified Infiltrator distributors.

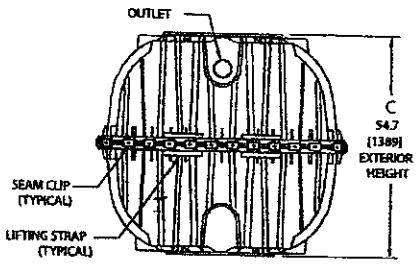
Must be backfilled and installed in accordance with Infiltrator Water Technologies, Infiltrator IM-Series Septic Tank General Installation Instructions and for shallow ground water conditions reference the Infiltrator IM-Series Tank Buoyancy Control Guidance.

Please visit www.infiltratorwater.com/images/pdf/ManualsGuides/TANK01.pdf for the latest information.

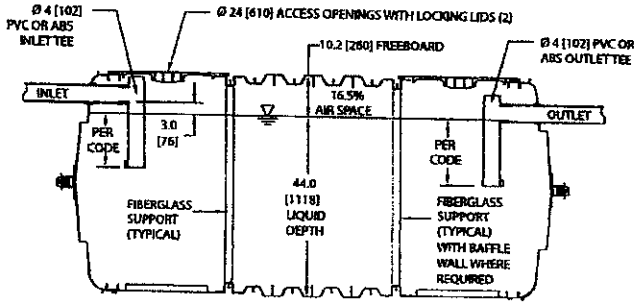
IM-1060	
Working Capacity	1094 gal (4141 L)
Total Capacity	1287 gal (4872 L)
Airspace	16.5%
Length	127" (3226 mm)
Width	62.2" (1580 mm)
Length-to-Width Ratio	2.3 to 1
Height	54.7" (1389 mm)
Liquid Level	44" (1118 mm)
Invert Drop	3" (76 mm)
Fiberglass Supports	2
Compartments	1 or 2
Maximum Burial Depth	48" (1219 mm)
Minimum Burial Depth	6" (152 mm)
Maximum Pipe Diameter	6" (152 mm)
Weight	320 lbs (145 kg)



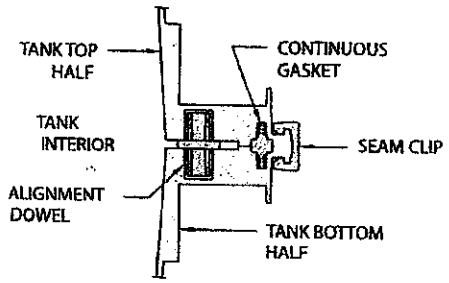
TOP VIEW



END VIEW



SIDE VIEW



MID-HEIGHT SEAM SECTION

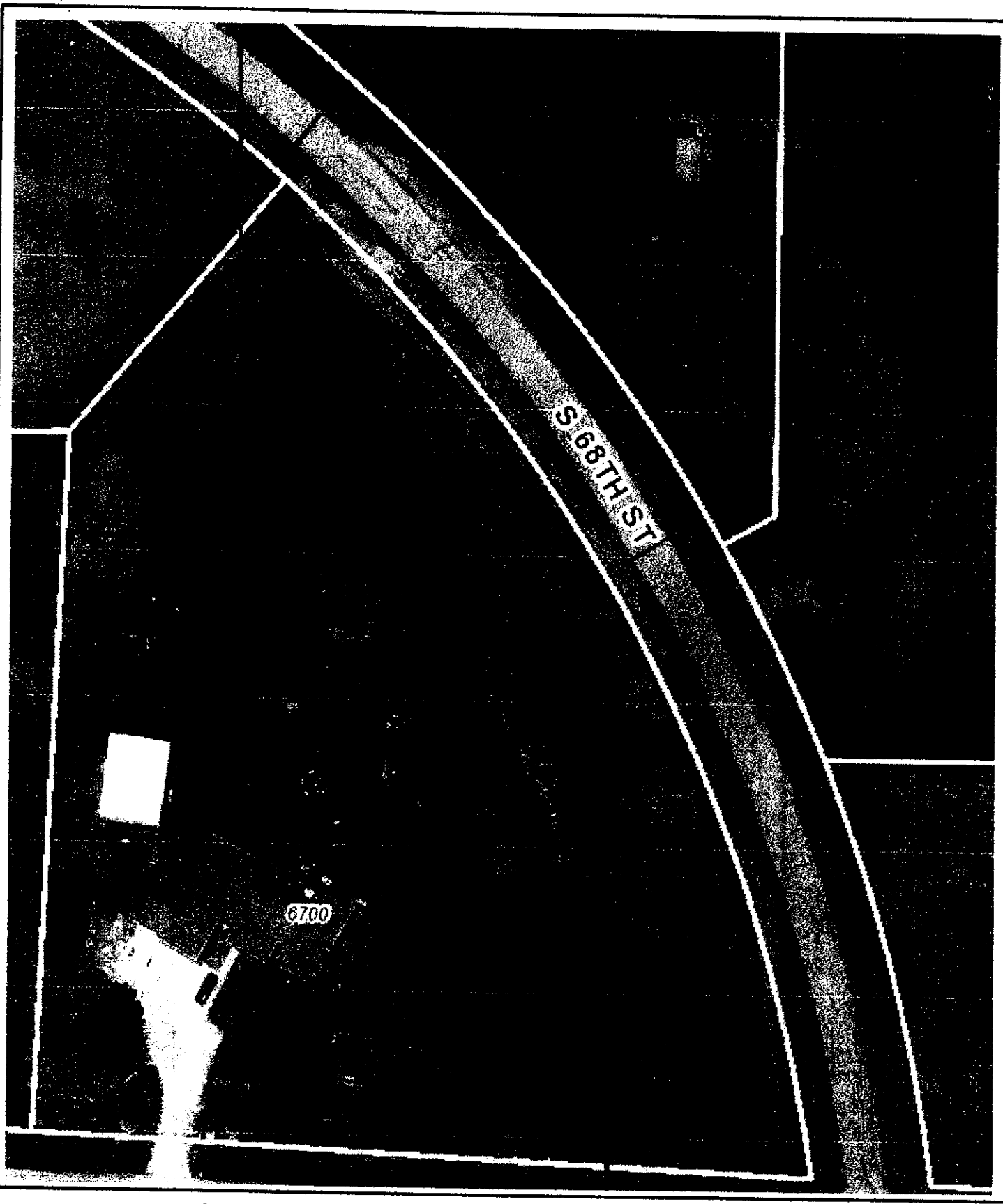
INFILTRATOR water technologies

4 Business Park Road
P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • Fax 860-577-7001
1-800-221-4436
www.infiltratorswater.com

U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,716,163; 5,588,778; 5,639,844 Canadian Patents: 1,329,959; 2,004,564 Other patents pending. Infiltrator, Equalizer, Quick4, and SideWinder are registered trademarks of Infiltrator Water Technologies. Infiltrator is a registered trademark in France. Infiltrator Water Technologies is a registered trademark in Mexico. Contour, MicroLeaching, PolyTuff, ChamberSpacer, MultiPort, PosiLock, QuickCut, QuickPlay, SnapLock and StraightLock are trademarks of Infiltrator Water Technologies. PolyLok is a trademark of PolyLok, Inc. TUF-TITE is a registered trademark of TUF-TITE, INC. Ultra-Rib is a trademark of IPEX Inc.

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Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436

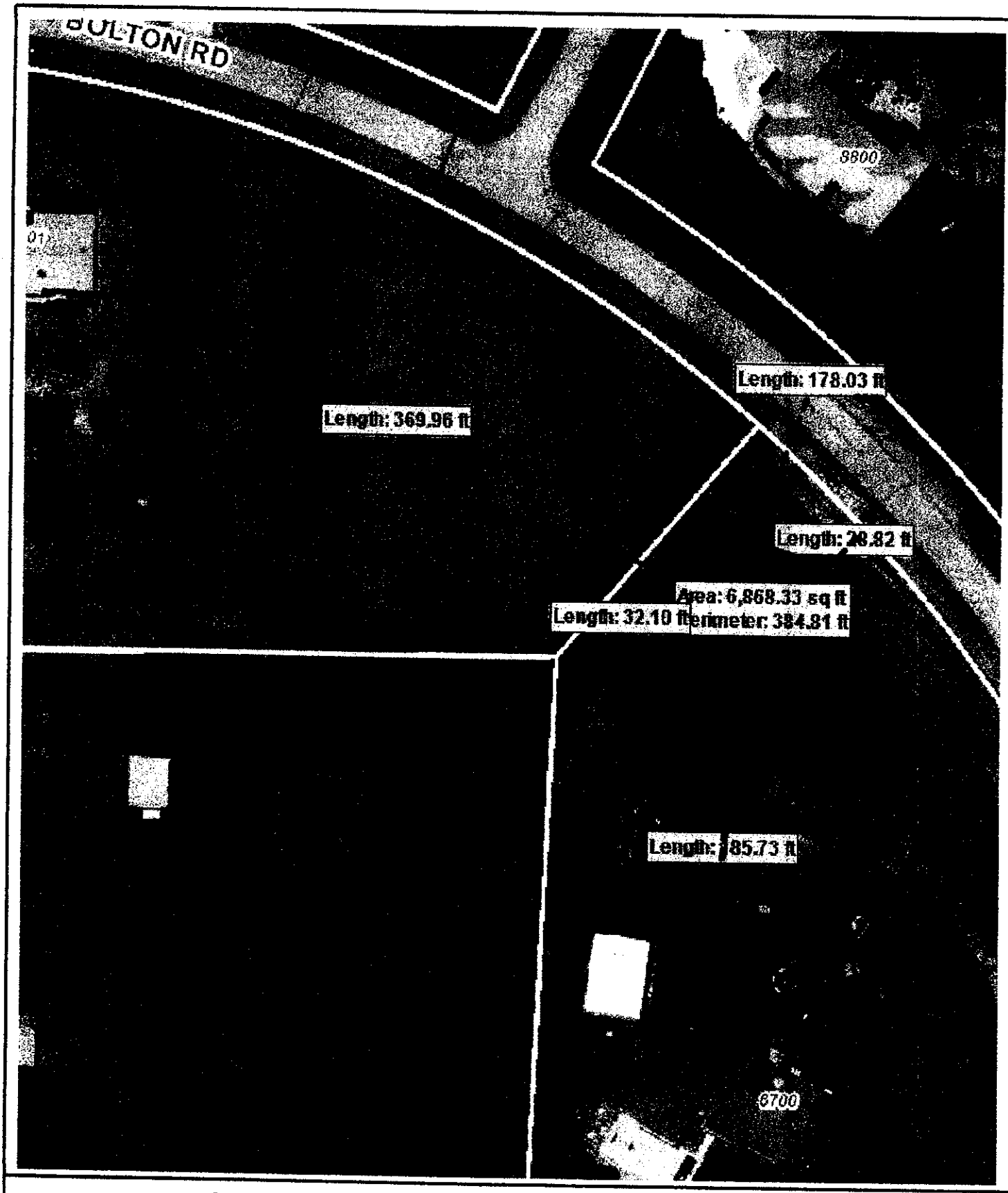


Lancaster County/City of Lincoln GIS Map

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Printed: Apr 03, 2018

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Lancaster County/City of Lincoln GIS Map

N
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Printed: Apr 11, 2018

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NEBRASKA

Good Life. Great Environment.

DEPT. OF ENVIRONMENTAL QUALITY

COPY

JUN 11 2018

Pete Ricketts, Governor

Richard D. Wurtz
6700 Rebel Drive
Hickman, NE 68372

RE: Alternative Onsite Wastewater Treatment System
6700 Rebel Drive
40.72158, -96.62914, Lancaster County
NDEQ ID: **94352**
Program ID: **18OWT011**

Dear Mr. Wurtz:

Construction shall be as described in the approved documents. It is your responsibility to make sure the facility is built as approved and all regulatory requirements met. We strongly recommend that you meet with your engineer and installer prior to construction to review the approved plans and specifications. If any modifications are necessary, Title 124 requires that you obtain written approval from the Department before changes are made to the system design.

An operating permit is required for use of this onsite system. After the system has been constructed, your Installer must properly register the system (submit completed form and fees) and your engineer must submit the construction completion card to the Department. A permit checklist, system registration form for a Title 124 permit system, and Engineer's notification of construction completion form have been enclosed to assist you with this process. Additionally, copies have been sent to your engineer. Once the system registration has been submitted by your Installer and the notification of construction completion submitted by your Engineer, the Department will evaluate for compliance and issue an operating permit if all regulatory requirements have been met.

Documents describing the above-referenced project have been approved and stamped accordingly. Pursuant to Neb. Rev. Stat. Sec. §81-1506(2)(Reissue 1987) and the requirements found in Nebraska Administrative Code Title 124, a permit for construction (enclosed) is hereby granted. This construction permit expires one year from the date of issuance. You may request renewal (subject to any changes in regulations and Department approval) prior to expiration.

Three sets of documents were submitted as part of the Title 124 permit application. One set of documents has been retained for the public record. The remaining documents are being returned to the submitting engineer for distribution.



The treatment system must be installed and serviced by an NDEQ certified onsite wastewater professional, who is also authorized by the manufacturer to install and service the treatment equipment. Once the manufacturer's warranty has expired on the treatment equipment, you are required to keep a Service/Maintenance contract with a certified professional for the life of the equipment.

Compliance with minimum sanitary engineering design criteria was the only consideration in the review of this project. Items such as quality of material, electrical and mechanical design features and structural soundness, were not considered unless specifically noted in the review comments. This approval does not release you, the owner, from your responsibility to provide an operable facility.

Local zoning, siting or building code requirements are separate from and in addition to the requirements found in the Nebraska Administrative Code administered by the Department. Please continue to work with local officials to ensure any local requirements are met.

If you have any questions please contact Cyril Martinmaas with the NDEQ Onsite Section at cyril.martinmaas@nebraska.gov or (402) 471-0513.

Sincerely,

Shelley Schneide

Shelley Schneider
Water Permits Division Administrator

Enclosures: Owner Checklist, Permit Registration, and Engineer Construction Completion

SS/mb
Cc: Jason Kubik, Southwick Liquid Waste Inc., 105 Locust Street, P.O. Box 191, Hickman, NE 68372
Nate Hartman, Lincoln-Lancaster County Health Department, 3140 N Street, Lincoln, NE 68510

COPY

Nebraska Department of Environmental Quality

Construction Permit No. 18OWT011

is hereby issued to

Richard D Wurtz

for the

700 Gallon/Day Onsite Wastewater Treatment System Alternative Design system

Description:

Average flow is 500 GPD. Peak flow is 700 GPD. System incudes a 1,000 gallon capacity septic tank, to be followed by a 1,000 gallon tank with a Bio-Microbics MicroFast 0.75 aerobic treatment system followed by a Salcor UV disinfection. The treatment system discharges to a surface polishing pond that requires a minimum 6,800 square feet. A maintenance agreement with a certified and manufacturer authorized installer is required for the life of the system.

located at

6700 Rebel Drive, Lincoln
40.72158 Lat / -96.62914 Long, Lancaster County

Pursuant to a Delegation Memorandum dated August 22, 2016, and signed by the Director, the undersigned hereby executes this document on behalf of the Director.

Signed 6/8/18

Shelley Schneider

Shelley Schneider, Water Permits Division Administrator

2018E0037404

Suite 400, The Atrium, 1200 "N" Street, P. O. Box 98922, Lincoln, Nebraska, 68509-8922
Phone (402) 471-2186, Fax (402) 471-2909, e-mail Pubinfo@mail.deq.state.ne.us