New Owner

MECKLENBURG COUNTY
GROUNDWATER & WASTEWATER SERVICES

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. SEPTIC / TYPE APPLICATION: ☐ N/A ☒ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ☐ N/A ☒ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 139-222-12
STREET ADDRESS: 8819 Blaydon Dr.
CITY:
STATE: NC ZIP: 28227
SUBDIVISION NAME: Mint Hill Estates
LOT #: 30 LOT SIZE (acres):
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☐ 1-CHARLOTTE ☐ 4-PINEVILLE ☐ 7-MINT HILL
☐ 2-DAVIDSON ☐ 5-MATTHEWS

4. BUILDING INFORMATION:
BUILDING TYPE:
☐ SINGLE MOBILE HOME ☐ MODULAR HOME
☐ DOUBLE WIDE ☐ MULTIPLE FAMILY
☒ HOUSE ☐ OTHER _____
HEATED SQUARE FOOTAGE:
NUMBER OF BEDROOMS: 3
NUMBER OF OCCUPANTS: 4
FOUNDATION TYPE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☒ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☐ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ☐ MUNICIPAL ☒ PRIVATE WELL ☐ PUBLIC WELL ☐ SHARED WELL ☐ OTHER _____

7. PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☒ POTABLE (DRINKING WATER) ☐ OTHER _____

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST DESIRED 5-LEAST DESIRED).*

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. RANK: ____ ____ ____ ____ ____

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES ☒ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES ☒ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	☐ YES ☒ NO	JURISDICTIONAL WETLANDS	☐ YES ☒ NO
WELLS, SPRINGS, OR WATER LINES	☐ YES ☒ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	☐ YES ☒ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES ☒ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES ☒ NO
CHEMICAL/PETROLEUM STORAGE TANKS	☐ YES ☒ NO	KNOWN UNDERGROUND CONTAMINATION	☐ YES ☒ NO
WASTE STORAGE	☐ YES ☒ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	☐ YES ☒ NO

10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____ ☐ UNKNOWN

11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? _____ ☐ N/A

12. PROPERTY OWNER:
NAME: Leonid Korniuskyy
ADDRESS: 8508 Lochinvar dr.
CITY: Charlotte
STATE: NC ZIP: 28227-9778
HOME PHONE: (704) 631-3433
WORK PHONE:
MOBILE PHONE: (704)-569-0902
FAX: (803)-802-1981

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME: Viking Custom build. Inc
ADDRESS: Oleg Bomar
CITY: P.O. Box 10025 Charlotte
STATE: NC ZIP: 28212
HOME PHONE: (704) 569-0902
WORK PHONE:
MOBILE PHONE: (704)-201-8874
FAX: (803)-802-1981

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894

Revised on: 7/1/08

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30002554** GWS File #: **7251B** Tax Parcel #: - -

- This IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is **NOT** transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

I. This Improvement Permit Shall: Expire in Five (5) Years **Expiration Date (If Applicable):** 12/19/2013

Type of Installation: Residential - New System Lot Number: 30

Structure Type: HOUSE Size (ft^2): 2200 # Bedrooms: 3 # Occupants: 5

Building Foundation: Concrete Slab Water Supply: Private Well

II. Initial System Type: Pump to Innovative **System Classification:** IIIb

Initial System Specifications:

Design Flow (gpd):	360	LTAR (gpd/ft^2):	0.24	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1000
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1125	Total Trench Length (ft):	375
Maximum Trench Depth (in):	12*	Depth of Media (in):	N/A	Distribution Device:	Drop Boxes		

III. Repair System Type: N/A **System Classification:** N/A

Repair System Specifications:

Design Flow (gpd):	0	LTAR (gpd/ft^2):	0.24	Septic Tank Size (gal):	0	Pump Tank Size (gal):	0
Trench Width (ft):	0	Trench Spacing (ft):	0	Absorption Area (ft^2):	0	Total Trench Length (ft):	0
Maximum Trench Depth (in):	0	Depth of Media (in):	0	Distribution Device:	N/A		

IV. Permit Conditions/Comments:

(Please See the Following Page for Permit Conditions.)

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment, and Disposal Systems* and is subject to the following provisions:

- No work shall be conducted on the septic system until an INSTALLATION APPROVAL is granted by the Department.
- The septic system installer shall be a registered septic contractor with Mecklenburg County Health Department.
- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: David Cornelius Owner/Legal Agent: Leonid Kornivskyy
Print Name

Signature: Signature:

Date Issued: 12/19/2008

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St, Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

IMPROVEMENT PERMIT for a RESIDENTIAL ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

Permit #: **30002554** GWS File #: **7251B**

IV. Permit Conditions/Comments:

- This type of septic system requires an inspection once every 5 years by our office. The system owner is responsible for any fees, as determined by the Mecklenburg County Board of Commissioners, associated with this inspection.
- Additional soil cover, as specified on the plot plan, required over the drain field must be inspected and approved prior to issuance of an Operation Permit.
- 100% repair area is not required for this property. However, the maximum feasible area shall be allocated for a repair area.
- This Improvement Permit is being issued based on a supplemental soil investigation performed by staff from our office.
- The septic system shall be installed in accordance with the plans submitted by the wastewater system *design consultant*.
- All components of the septic system must be installed in accordance with the required setbacks listed on the corresponding plot plan.
- All components of the septic system must be located at least 100 ft. (50 ft. minimum) from all private wells.
- All waterlines must be located a minimum of 10 ft. from any part of the septic system.
- Install According to plans on file submitted by S&EC. A full set of house plans must be on file before issuance of construction authorization, DC

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department is issuing an IMPROVEMENT PERMIT for the above referenced property. This permit is being issued in accordance with the *Laws and Rules For Sewage Treatment and Disposal Systems* and is subject to the following provisions:

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- The permitted system shall be installed in accordance with the included PLOT PLAN.
- This IMPROVEMENT PERMIT is transferable.

DENR Authorized Agent: David Cornelius

Signature: _____

Date Issued: 12/19/2008

Owner/Legal Agent: Leonid Kornivskyy
Print Name

Signature: _____

7251B

Soil & Environmental Consultants, PA

248 LePhillip Court • Concord, North Carolina 28025 • Phone: (704) 720-9405 • Fax: (704) 720-9406
www.SandEC.com

8819 BLAYDON DR.

139-222-12

Attached is a proposed design for a 3 bedroom single family residence Innovative system at Blaydon Drive in Mecklenburg County, North Carolina.

Contents: **Page**

Information for the Installer---------- 1

Design Information
Layout Specifications---------- 2

Site Plan/System Plan---------- 3

Washer Box Specifications---------- 4

Septic Tank Diagram---------- 5

Pump Tank Diagram---------- 6

Control Panel & Float Specifications---------- 7-10

Pump Specifications---------- 11-12

Electric Box Installation---------- 13

Maintenance of Septic Systems---------- 14-16

Calculations---------- 17

Dec-08
S & EC Project No. 5-2161
Design By: E. Bailey

GWS Septic System Design Review

GWS File #: 7251B **Approved** **Disapproved**

Design Review: TCT 12/10/08 ☒ ☐

DT 12/16/08 ☒ ☐

...dered "APPROVED" until both sections above ...e an APPROVED status.

Greensboro Office:
3817-E Lawndale Drive
Greensboro, NC 27455
Phone: (336) 540-8234
Fax: (336) 540-8235

Raleigh Office:
11010 Raven Ridge Road
Raleigh, NC 27614
Phone: (919) 846-5900
Fax: (919) 846-9467

INFORMATION FOR THE INSTALLER:

- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by DEHNR, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Where required by the county health department, post installation inspections by the designer must be scheduled 5 week days in advance.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System will be an innovative installation pumped to a washer box with drop box distribution
- Trench walls should be raked and limed. Trenches 36" wide
  Trench depth is specified as 12" on system
  System requires 12" soil cap to extend 5' past the end of the laterals

Blaydon Drive

Project No. 5-2161

LAYOUT FOR 3 BEDROOM HOME — Dec-08

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH
TBM		1.0			100.0	
INSTR. 1			101.0			
			System			
1	Yellow			4.20	96.8	47
2	Red			4.30	96.7	47
3	Orange			4.60	96.4	47
4	Pink			4.70	96.3	47
5	Blue			5.10	95.9	47
6	Yellow			5.30	95.7	47
7	Orange			5.80	95.2	47
8	Red			6.30	94.7	47
					Total	376

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	DISTRIBUTION	Tranch Depth
SYSTEM	376	0.24	Innovative At-grade	Drop Box	12"

Notes:

** TBM of system located top of stump marked in field

**TBM is assumed to be 100'

**All measures in feet

**Nitrification lines are demonstrated on contour via colored pin flags

**BS and FS indicate rod readings

**SUITABLE FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE. SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND TOPOGRAPHIC IRREGULARITIES.
THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS. SOME OTHER CONSIDERATIONS THAT AFFECT SITE SUITABILITY THAT SHOULD BE CONSIDERED IN DEVELOPMENT DESIGN ARE:

1) 10' SETBACK FROM PROPERTY LINE
2) 100' SETBACK FROM ANY WELL
3) 50' SETBACK FROM STREAMS, PONDS OR LAKES.

See accompanying S&EC report.

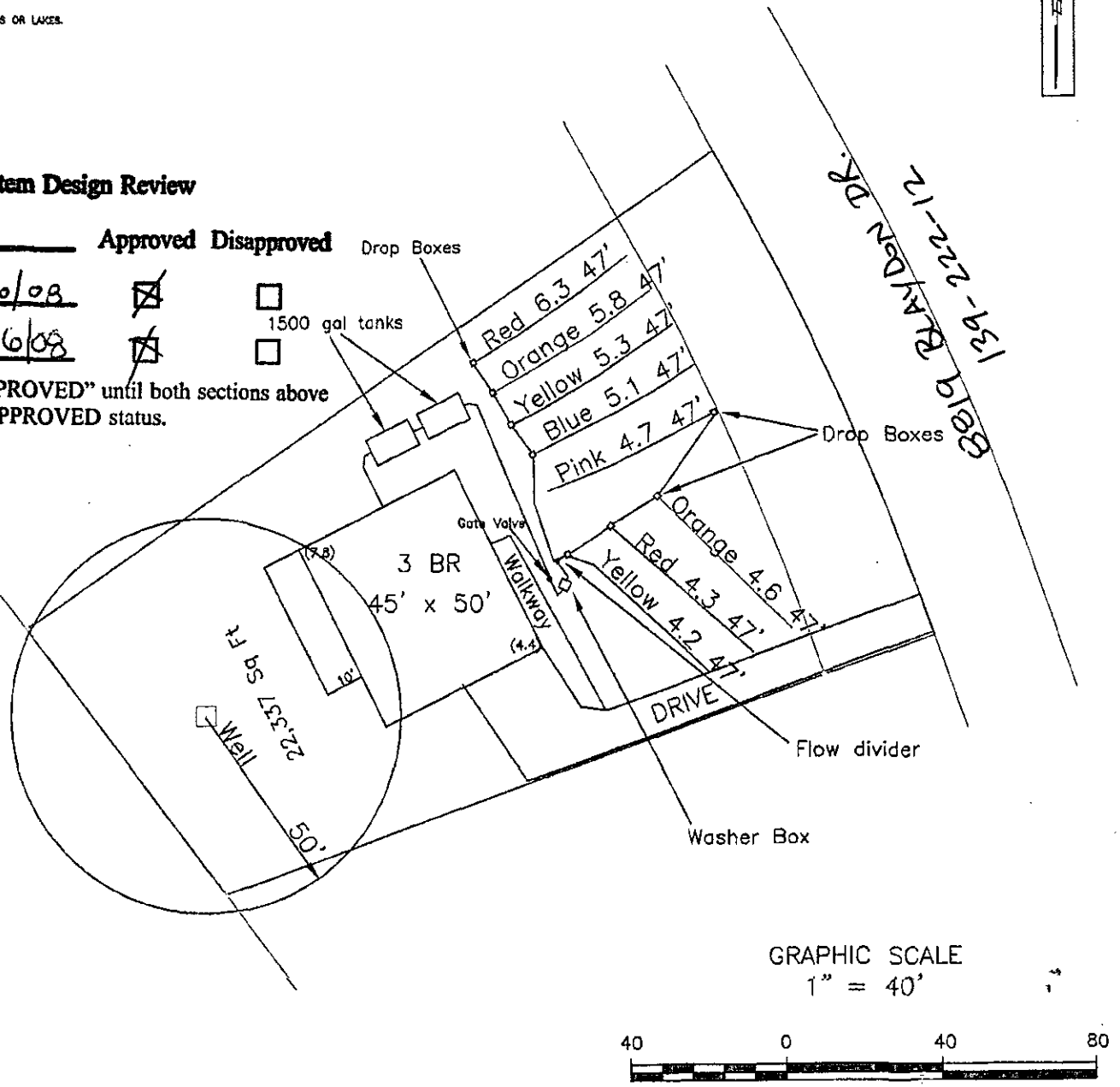
GWS Septic System Design Review

GWS File #: 7251B **Approved** ☒ **Disapproved** ☐

Design Review: TCT 12/10/08 ☒ ☐

Field Review: DCreaks 12/16/08 ☒ ☐

*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.



PROJECT NO. #S-2161
PROJECT MGR. WO
DRAWN BY WO, CB
FIELD WORK WO
SCALE 1" = 40'
FILE

Soil & Environmental Consultants, PA
238 LaValley Ct. STE C • Concord, North Carolina 28025 • Phone (704)786-8468 • Fax (704) 786-8469

S&EC

PROJECT NAME: VIKING BUILDERS - ELEVATION DRIVE - MECKLENBURG...JOSEPH CAPUSCIA

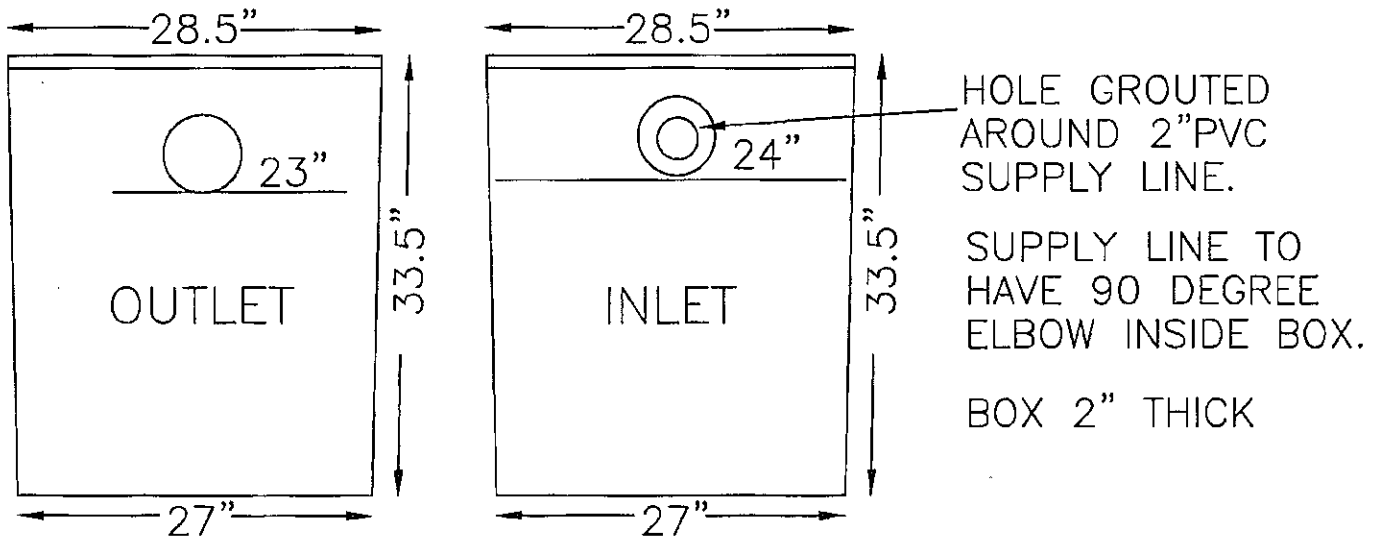
SHEET TITLE: 3-BR SEPTIC SYSTEM LAYOUT SKETCH MAP

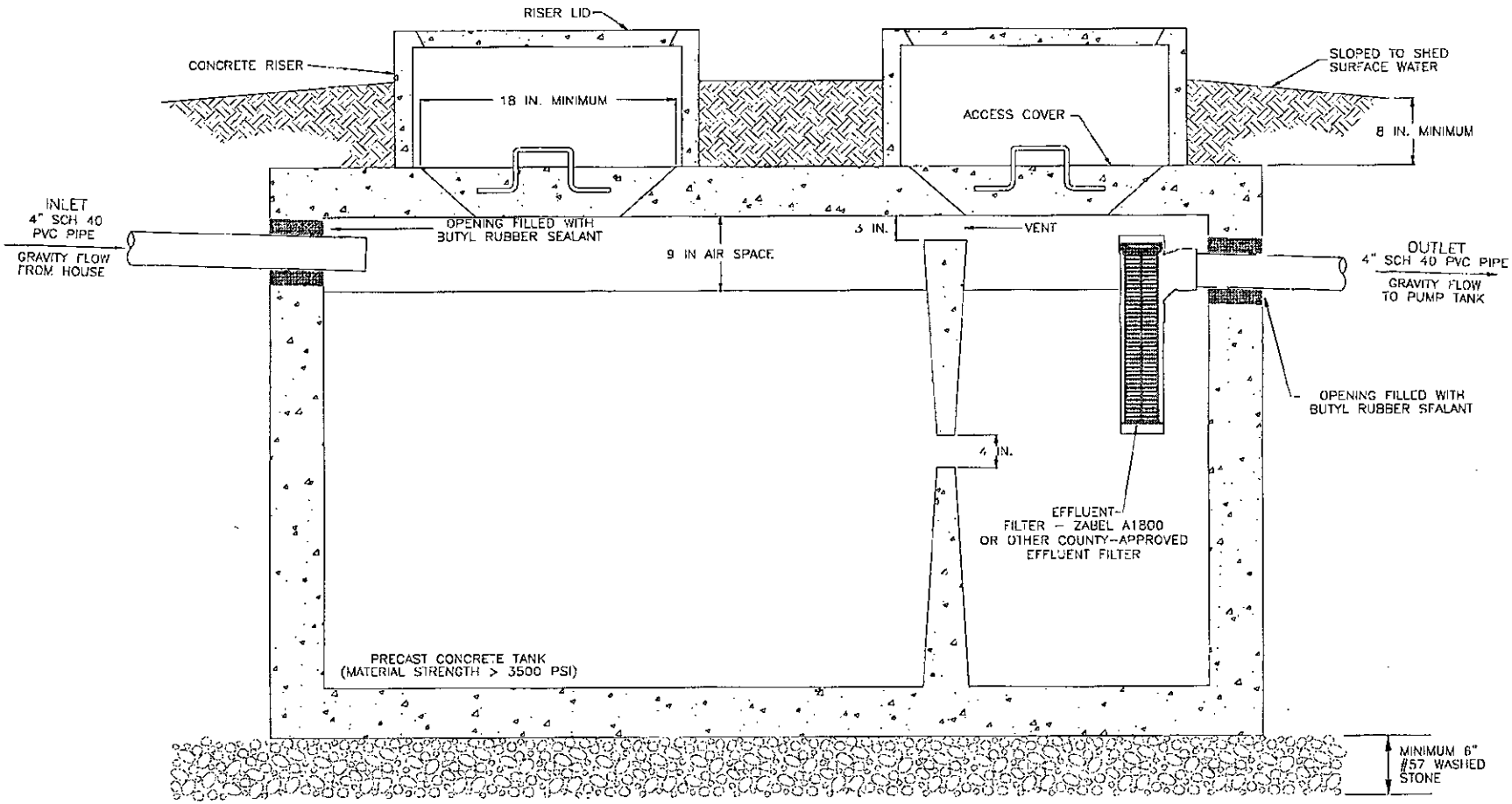
SHEET 1 OF 1

PROPOSED WASHER BOX

SPECIFICATIONS FROM DELLINGER PRECAST

(approx 70 gallons in size)



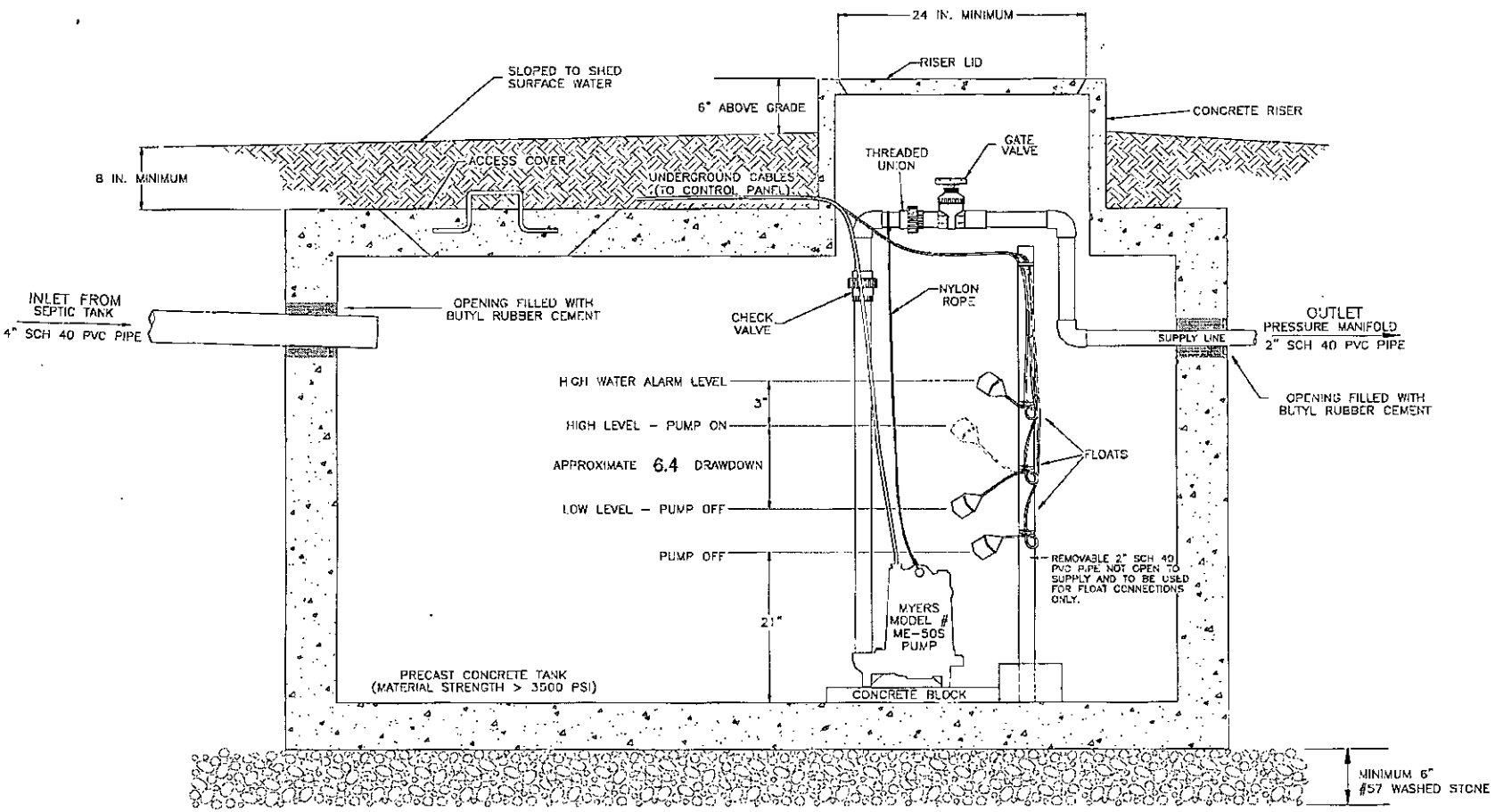


NOTES

1. TANK DIMENSIONS VARY BY MANUFACTURER.

1500 GALLON SEPTIC TANK

PROJECT NO: 4591	PROJECT NAME: **Blaydon Drive**	S&EC Soil & Environmental Consultants, Inc.
PROJECT MGR:	SHEET TITLE: SEPTIC TANK DIAGRAM	11010 Raven Ridge Road Raleigh, North Carolina 27614 Phone: (919) 846-8900 Fax: (919) 846-9487 Web Page: www.SandEC.com
SCALE: NTS		



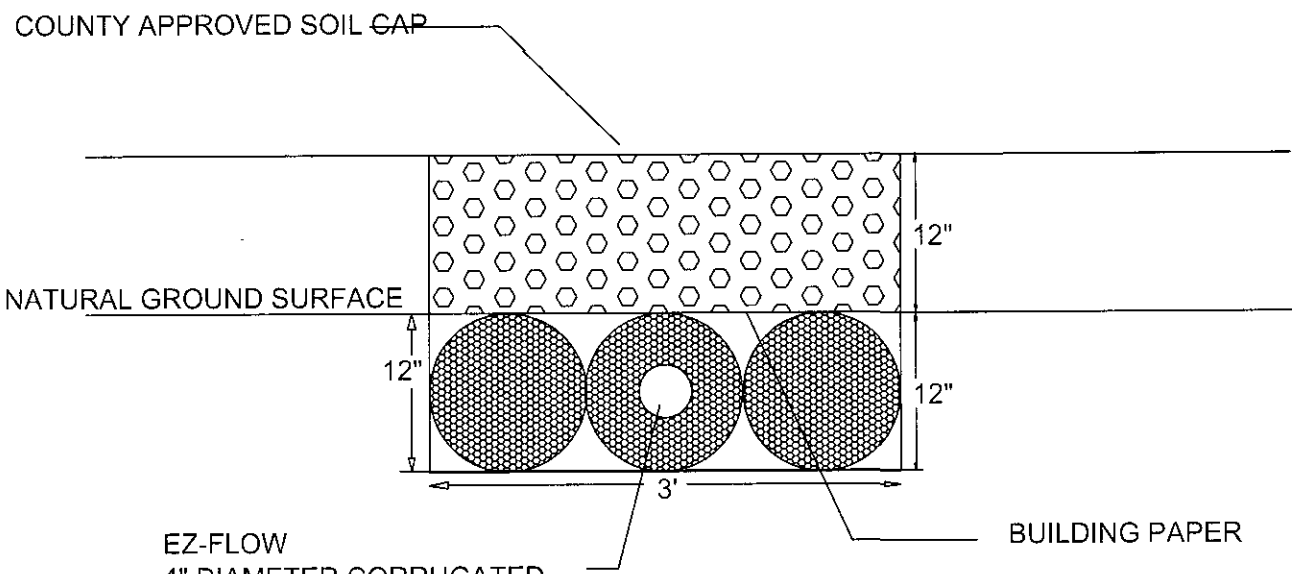
NOTES

1. TANK DIMENSIONS VARY BY MANUFACTURER.
2. DRAWDOWN WILL VARY WITH TANK DIMENSIONS. DRAWDOWN SHOWN BASED ON 21 GALLONS PER INCH.

1500 GALLON PUMP TANK

PROJECT NO. 5-2161	PROJECT NAME: Blaydon Drive	S&EC Soil & Environmental Consultants, Inc.
PROJECT MGR.		11010 Raven Ridge Road Raleigh, North Carolina 27614 Phone: (919) 846-5900 Fax: (919) 846-9467
SCALE NTS	SHEET TITLE: PUMP TANK DIAGRAM	Web Page: www.Sand2C.com

NITRIFICATION TRENCH DETAIL FOR EZ-FLOW 12" TRENCH



NOTE :

1. PERFORATED CORRUGATED PLASTIC PIPE SHALL MEET REQUIREMNTS OF ASTM D 2729.
2. PIPE SHALL BE LEVEL.
3. END CAP SHALL BE PROVIDED AT END OF ALL CORRUGATED PLASTIC PIPE LINES.
4. TRENCH BOTTOM SHALL BE LEVEL.

JOB NO 5-2161	PROJECT NAME: BLAYDON DRIVE
PROJECT MGR WO	
SCALE NTS	SHEET TITLE: TRENCH DETAIL

S&EC
Soil & Environmental Consultants, PA
11010 Raven Ridge Road • Raleigh, North Carolina 27614 • Phone: (919) 846-5900 • Fax: (919) 846-9467
www.SandEC.com

Type VI	a. Any > 3,000 GPD system with mechanical, biological, or chemical pretreatment system plant b. Wastewater reuse/recycle	Improvement Permit, Construction Authorization, and Operation Permit	6 mos.

TABLE V(b)

MANAGEMENT ENTITY RESPONSIBILITIES

System Classification	Management Entity	Minimum System Inspection/Maintenance Frequency	Reporting Frequency
Type I	Owner	N/A	N/A
Type II	Owner	N/A	N/A
Type III	Owner	N/A	N/A
Type IV	Public Management Entity with a Certified Operator or a private Certified Operator	2/yr.	12 mos.
Type V	Public Management Entity With a Certified Operator or a private Certified Operator	a. 2/yr (0-1500 GPD) 4/yr (1500-3000 GPD) 12/yr (3000-10000 GPD) 1/wk (> 10000 GPD) b. 12/yr (3000-10000 GPD) 1/wk (> 10000 GPD) c. 4/yr. d. 12/yr.	6 mos.
Type VI	Public Management Entity With a Certified Operator	a. 1/wk(3000-10000 GPD) 2/wk(10000-25000 GPD) 3/wk(25000-50000 GPD) 5/wk(> 75000 GPD) b. 12/yr.	3 mos.

(l) A sewage collection, treatment, and disposal system that creates or has created a public health hazard or nuisance by surfacing of effluent or discharge directly into groundwater or surface waters, or that is partially or totally destroyed shall be repaired within 30 days of notification by the state or local health department unless the notification otherwise specifies a repair period in writing. If a system described in the preceding sentence has for any reason been disconnected, the system shall be repaired prior to reuse. The state or local health department shall use its best professional judgement in requiring repairs that will reasonably enable the system to function properly. If, for any reason, a sewage collection, treatment, and disposal system is found to be nonrepairable, or is no longer required, the system shall not be used, and may be required to have any contents removed, collapse any components and backfill, or otherwise secured as directed by the authorized agent to protect the public health and safety.

(m) When necessary to protect the public health, the state or local health department may require the owner or controller of a malfunctioning system to pump and haul sewage to an approved wastewater system during the time needed to repair the system.

Zoeller Pump Co., Inc.
3649 Cane Run Road
Louisville,
Kentucky 40211-1961
U.S.A.
1-502-778-2731
1-502-774-3624 - FAX
1-800-928-PUMP (7867)

Tru Flow Splitter System

Check up to five results to perform an action.

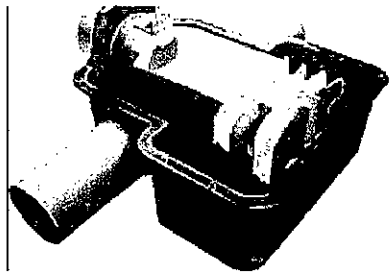
This Innovative Splitter System will Evenly Split Effluent Into Two To Five Lines. It is Made of Two Major parts:
(1) The Diverter Basin & Cover and the Diverter.
(2)The Patented Bubble Level Design Allows for Post Construction Adjustability and Maintenance, thereby Solving the problems associated with distribution box settlement.
The Tru-flow® Unit May Settle as much as 15° Front-to Back (30° Total) and/or 12° side-to-side (24° total) and, when adjusted, will evenly Split Effluent. The Splitter System Works with Low Flows as well as high flows. This Unique Design has no parts to wear out and Utilizes Corrosion Resistant Materials.

- Tested from 1/10 GPM To 30 GPM flows.
- Bubble level built on for easy adjustments and maintenance.
- Tru-flow® System is maintainable and adjustable from surface after installation.
- 4" Riser easily attached to visually inspect and adjust the diverter.
- Can be used as a recirculating valve.

For Additional Information



larger image



larger image

Results 1 - 4 of 4 1

Item #	Item Name	Pipe Seals	Diameter	Height
173-0001	Tru Flow Splitter System	4" Schedule 35	N/A	N/A
173-0005	Tru Flow Splitter System	3"	N/A	N/A
173-0006	Tru Flow Splitter System	4" Schedule 40	N/A	N/A
173-0007	Tru Flow Splitter System	N/A	6 inches	36 inches

Results 1 - 4 of 4 1

Print Back

CALCULATIONS

Location Blaydon Drive

Project Number 5-2161

Lot No:

No. of Bedrooms	3	
Design Flow	360.00	$^{gal}/_{day}$
LTAR	0.24	$^{gal}/_{ft^2\,day}$
EZ-Lay? (YES OR NO)	Yes	
Supply Line Length	56	ft.
Supply Line Volume	9.744	gal.
Required Feet of Line	375	ft.
Amount of Line from Layout	376	ft.
Gallons per Minute	26.30	$^{gal}/_{min}$
Required Septic Tank Capacity	1500	gal.
Minimum Standard Tank Size	1500	
Lateral Line Volume	245.528	gal.
Dosing Volume	184.15	gal.

Note: Dosing Volume based on 75% of the lateral line volume.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
21.06	0.93
25	1.27
26.3	1.40
30	1.78
33.96	2.25
35	2.37
38.53	2.84
40	3.03
[illegible]	-2.89
45	3.77
[illegible]	-3.52
50	4.58
[illegible]	-4.62
60	6.42

Tank Draw Down	6.4	*Generic Draw Down of 29 gal.per in.*
Pump Run Time	7.00	minutes
Elevation Head	6.6	ft.
Pressure Head	2	ft.
Friction Factor	1.4	ft./100 ft. *(From the interpolater.)*
Friction Head	0.78	ft.
Total Dynamic Head (+15%)	10.79	ft.

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet ____ *of* ____
PROPERTY ID #: _____
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: ___Viking Builders_____ APPLICATION DATE_____
ADDRESS:____Blaydon Drive ___ DATE EVALUATED: _____
PROPOSED FACILITY: _3 BR HOME ___ PROPOSED DESIGN FLOW (.1949): 360gpd___ PROPERTY SIZE: _____
LOCATION OF SITE: ___Blaydon Dr. Mecklenburg County_____ PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☐ Public ☒ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☒ Auger Boring ☒ Pit ☐ Cut TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
1	Ridge 2%	0-4	WFGR / SiL	NS NP VFR / NEXP	>27	27	NA	PS	PS .25
		4-12	WFGR / SiL	NS NP VFR / NEXP					
		12-20	WFSBK / SiCL	SS NP FR / SEXP					
		20-27	WFSBK / SiC	SS SP FR / SEXP					
		27+	Cr						
2	Linear 4%	0-4	WFGR / SiCL	NS NP FR / NEXP	>32	32	NA	PS	PS .25
		4-18	WMSBK / SiC	S SP FR / SEXP					
		18-32	WFSBK / C	S P FR / SEXP					
		32+	Cr						
3	Linear 4%	0-12	WFGR / SiL	NS NP VFR / NEXP	>36	36	NA	PS	PS .275
		12-22	MMSBK / SiC	SS SP FI / SEXP					
		22-36	MMABK / C	S P FI / SEXP					
		36+	Cr						
4	Ridge 2%	0-12	WFGR / SiL	NS NP VFR / NEXP	>29	29	NA	PS	PS .275
		12-29	WFSBK / SiCL	SS SP FR / SEXP					
		29+	Cr						

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	376	n/a
System Type(s)	At-grade Innov	n/a
Site LTAR	0.24 (MCGWS)	n/a

OTHER FACTORS (.1946): _____ PS
SITE CLASSIFICATION (.1948): _____ PS
EVALUATED BY: WO
OTHER(S) PRESENT: _____

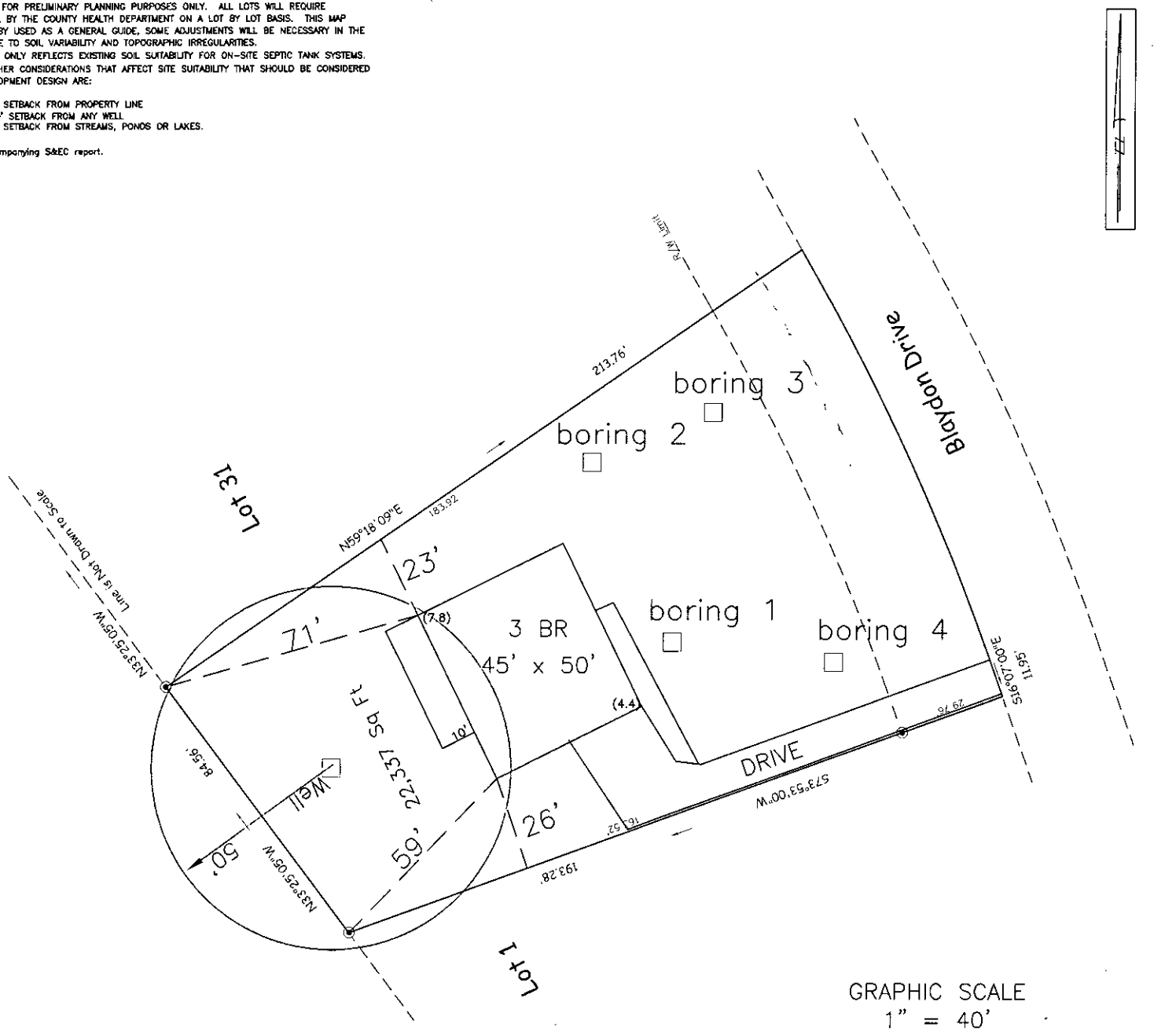
LICENSED SOIL SCIENTIST
JAMES WENDELL OVERBY
1218
STATE OF NORTH CAROLINA

COMMENTS: Lot is repair exempt.

**SUITABLE FOR PRELIMINARY PLANNING PURPOSES ONLY. ALL LOTS WILL REQUIRE APPROVAL BY THE COUNTY HEALTH DEPARTMENT ON A LOT BY LOT BASIS. THIS MAP SHOULD BY USED AS A GENERAL GUIDE, SOME ADJUSTMENTS WILL BE NECESSARY IN THE FIELD DUE TO SOIL VARIABILITY AND TOPOGRAPHIC IRREGULARITIES.
THIS MAP ONLY REFLECTS EXISTING SOIL SUITABILITY FOR ON-SITE SEPTIC TANK SYSTEMS. SOME OTHER CONSIDERATIONS THAT AFFECT SITE SUITABILITY THAT SHOULD BE CONSIDERED IN DEVELOPMENT DESIGN ARE:

1) 10' SETBACK FROM PROPERTY LINE
2) 100' SETBACK FROM ANY WELL
3) 50' SETBACK FROM STREAMS, PONDS OR LAKES.

See accompanying S&EC report.



*Survey base provided by Ben M. Flowe & Son.

GRAPHIC SCALE
1" = 40'

40 0 40 80

PROJECT NO	45-21b1
PROJECT MGR.	WO
DRAWN BY	WO, CB
FIELD WORK	WO
SCALE	1" = 40'
FILE	

Soil & Environmental Consultants, PA
245 Lafayette Ct. * Concord, North Carolina 28027 * Phone (704)722-8403 * Fax (704) 720-8406

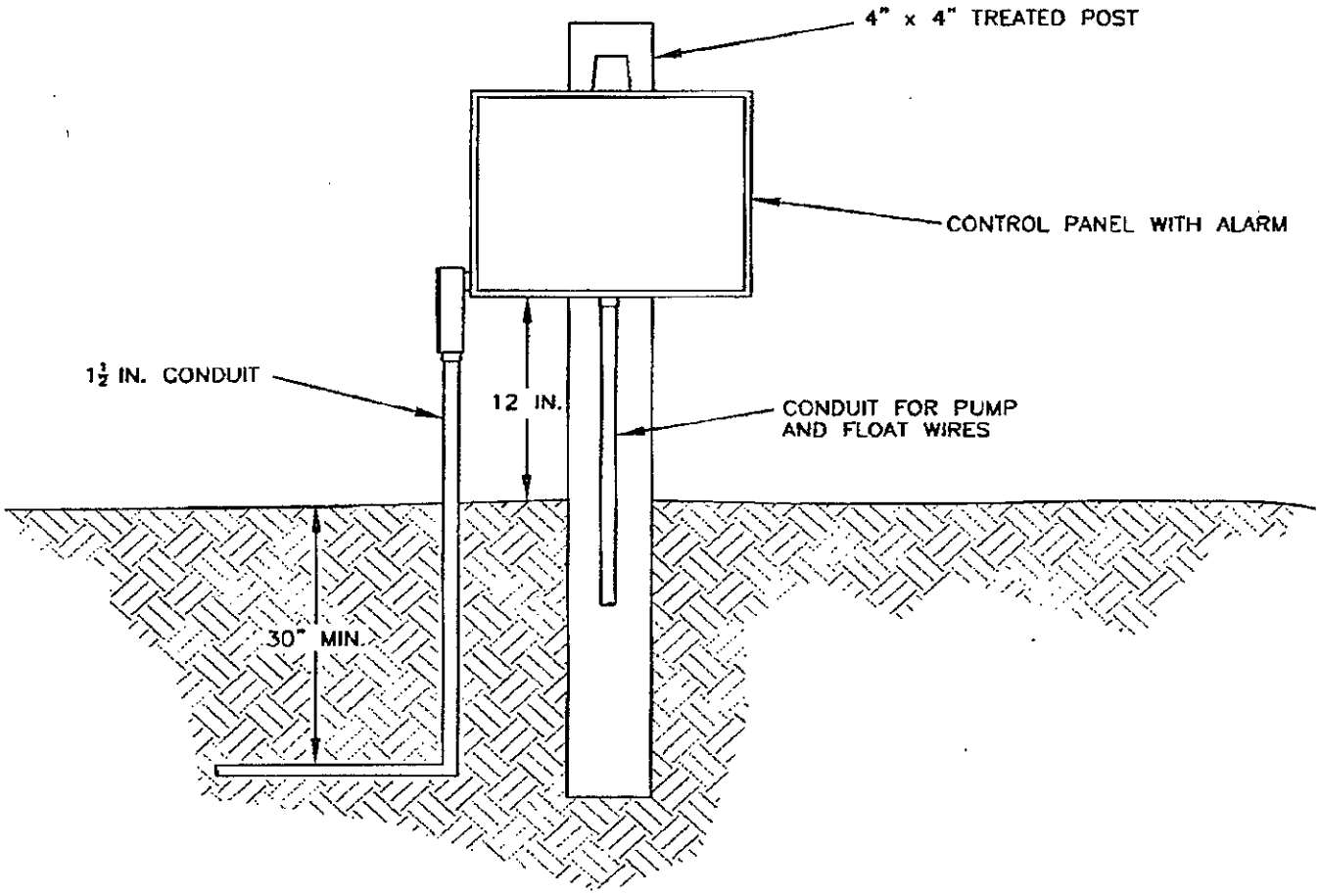
S&EC

PROJECT NAME
VIKING HUNTERS
-BLAYDON DRIVE-
IREDELL COUNTY, NORTH CAROLINA
AUGUST 2008

SHEET TITLE
3-BR SEPTIC SYSTEM LAYOUT
SKETCH MAP

SHEET
1 OF 1

ELECTRIC BOX



NOTES: ELECTRICAL SYSTEM COMPONENTS SHALL BE INSTALLED TO MEET OR EXCEED MINIMUM REQUIREMENTS SPECIFIED IN THE ELECTRICAL COME. ALL WIRING SHALL BE #12 MINIMUM, AND RATED FOR DIRECT BURY. PROVIDE GROUNDING AS REQUIRED, AND PROVIDE 30" MINIMUM BURY ON CABLES. PROVIDE ONE 20 AMP, DOUBLE POLE, 230 VOLT CIRCUIT BREAKER (FOR PUMP), AND ONE 20 AMP, SINGLE POLE, 115 VOLT CIRCUIT BREAKER (FOR ALARM) IN MAIN PANEL.

(5) Ashes, garbage, and trash shall be kept out of the pit.

History Note: *Authority G.S. 130A-335(e) and (f);*
Eff. July 1, 1982;
Amended Eff. January 1, 1990.

15A NCAC 18A .1961 MAINTENANCE OF SEWAGE SYSTEMS

(a) Any person owning or controlling the property upon which a ground absorption sewage treatment and disposal system is installed shall be responsible for the following items regarding the maintenance of the system:

(1) Ground absorption sewage treatment and disposal systems shall be operated and maintained to prevent the following conditions:

(A) a discharge of sewage or effluent to the surface of the ground, the surface waters, or directly into groundwater at any time; or

(B) a back-up of sewage or effluent into the facility, building drains, collection system, or freeboard volume of the tanks; or

(C) a free liquid surface within three inches of finished grade over the nitrification trench for two or more observations made not less than 24 hours apart. Observations shall be made greater than 24 hours after a rainfall event.

The system shall be considered to be malfunctioning when it fails to meet one or more of these requirements, either continuously or intermittently, or if it is necessary to remove the contents of the tank(s) at a frequency greater than once per month in order to satisfy the conditions of Parts (A), (B), or (C) of this Paragraph. Legal remedies may be pursued after an authorized agent has observed and documented one or more of the malfunctioning conditions and has issued a notice of violation.

(2) Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

(b) System management in accordance with Tables V(a) and V(b) of this Rule shall be required for all systems installed or repaired after July 1, 1992. After July 1, 1992, system management in accordance with Tables V(a) and V(b) shall be required for all existing Type V and Type VI systems.

(c) No Improvement Permit or Construction Authorization shall be issued for Type IV, Type V, or Type VI systems, unless a management entity of the type specified in Table V(b) is specifically authorized, funded, and operational to carry out this management program in the service area where the proposed system is to be located.

(d) A local health department may be the public management entity only for systems classified Type IV, V(a) and V(b) and only when specifically authorized by resolution of the local board of health.

(e) A contract shall be executed between the system owner and a management entity prior to the issuance of an Operation Permit for a system required to be maintained by a public or private management entity, unless the system owner and certified operator are the same. The contract shall include the specific requirements for maintenance and operation, responsibilities of the owner and system operator, provisions that the contract shall be in effect for as long as the system is in use, and other requirements for the continued proper performance of the system. It shall also be a condition of the Operation Permit that subsequent owners of the system execute such a contract.

(f) Inspections of the system shall be performed by a management entity at the frequency specified in Table V(b). The management entity shall report the results of their inspections to the local health department at the specified reporting frequency. However, where inspections indicate the need for system repairs, the management entity shall notify the local health department within 48 hours in order to obtain a Construction Authorization for the repairs.

(g) The management entity shall be responsible for assuring routine maintenance procedures and monitoring requirements in accordance with the conditions of the Operation Permit and the contract.

(h) Sewage systems with multiple components shall be classified by their highest or most complex system type in accordance with Table V to determine local health department and management entity responsibilities.

(i) Sewage systems not identified in this Rule shall be classified by the Division of Environmental Health after consultation with the appropriate commission governing operators of pollution control facilities.

(j) The local health department shall routinely review the performance and operation reports submitted in accordance with Table V(b) of this Rule and shall perform an on-site inspection of the systems as required in Table V(a).

(k) The certified operator shall hold a valid and current certificate from the appropriate commission, and nothing in this Section shall preclude any requirements for system operators, in accordance with Article 3 of G.S. 90A.

TABLE V(a)

LOCAL HEALTH DEPARTMENT RESPONSIBILITIES

System Classification	System Description	Permits Required	Minimum System Review Frequency
Type I	a. Privy b. Chemical toilet c. Incinerating toilet d. Other toilet system e. Grease trap	Improvement Permit, Construction Authorization, and Operation Permit	N/A
Type II	a. Conventional septic system (single-family or 480 GPD or less) b. Conventional septic system with 750 linear feet of nitrification line or less c. Conventional system with shallow placement	Improvement Permit, Construction Authorization, and Operation Permit	N/A
Type III	a. Conventional septic system > 480 GPD (excluding single-family residence) b. Septic system with single effluent pump or siphon c. Gravity fill system d. Dual gravity field system e. PPBPS system, gravity dosed f. Large diameter pipe system g. Other non-conventional trench systems	Improvement Permit, Construction Authorization, and Operation Permit	5 yrs. (IIIb only)
Type IV	a. Any system with LPP distribution b. System with more than 1 pump or siphon	Improvement Permit, Construction Authorization, and Operation Permit	3 yrs.
Type V	a. Sand filter pretreatment system b. Any > 3,000-GPD septic tank system with a nitrification field designed for > 1500 GPD c. Aerobic Treatment Unit (ATU) d. Other mechanical, biological, or chemical pretreatment plant (< 3000 GPD)	Improvement Permit, Construction Authorization, and Operation Permit	12 mos.

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

File # 7251B

INSTALLATION APPROVAL *for an*
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 139-222-12 Permit #: _____ Tax Parcel #: 139-222-12

Property Owner: Leonid Korniuskyy

Job Location Address: 8819 Blaydon Dr.

City: Charlotte State: NC Zip Code: 28227

Installation Approval Issuance Date: 12-07-2009

Permission is hereby given to ☒ install ☐ alter ☐ repair an on-site wastewater treatment & and disposal system, with subsurface soil absorption and effluent discharge, as specified herein at the described location. This approval is granted based upon the application information submitted to our office. All work shall be completed on or before _____, after which date this approval shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of granting this approval. An **Operation Permit** must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now of hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.

***NOTICE: This system shall not be installed while soils are in a wet condition.**

Permitted Design Flow: 360 GPD

Site LTAR: 0.24 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Drainfield Design ☐ N/A

Trench Depth: 12 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 376 feet

# of Lines: 8 @ 47 feet

Depth of Media: 12 inches (Type) 25% Reduction

Distribution Device: Drop Boxes

Bed Design *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Distribution Device: _____

Water Supply Source

☐ Municipal ☒ Private Well ☐ Community Well

☐ Other _____

Minimum System Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 50 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

Install according to S+EC Design and specifications.

Closet was removed to make house a 3 BR.

House inspected on 12-07-2009.

Comments: System Classification & Type: IIIbg

DENR Authorized Agent: Jeremy Michael Signature: Jeremy Michael

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 7251B Permit #: _____ Tax Parcel #: 139-222-12

Property Owner: Leonid Kornivskyy

Job Location Address: 8819 Blaydon Dr.

City: Charlotte State: NC Zip Code: 28227

Operation Permit Issuance Date: 12-11-2009 Contractor Name: Larry Tucker

Permitted Design Flow: 480 GPD

Liquid Capacity of Septic Tank: 1560 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Effluent Pump Model: Zoeller 4/8

Drainfield Installation ☐ N/A

Trench Depth: 12 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 376 feet

# of Lines: 8 @ 47 feet

Depth of Media: 12 inches (Type) Quick4 Chambers

Depth of Cover: 12 inches Fill

Distribution Device: Drop Chambers

Inspection Dates

Tank(s) Inspected: 12-08-09

Excavation Inspected: 12-08-09

Pump & Controls Inspected: 04-21-2010

Bed Installation *(For Repair Installations ONLY.)* ☒ N/A

Bed Depth: _____ inches

Bed Width: _____ feet

Total line length: _____ feet

# of Lines: _____ @ _____ feet

Depth of Media: _____ inches (Type) _____

Depth of Cover: _____ inches

Distribution Device: _____

Water Supply Source

☐ Municipal ☒ Private Well ☐ Community Well

☐ Other _____

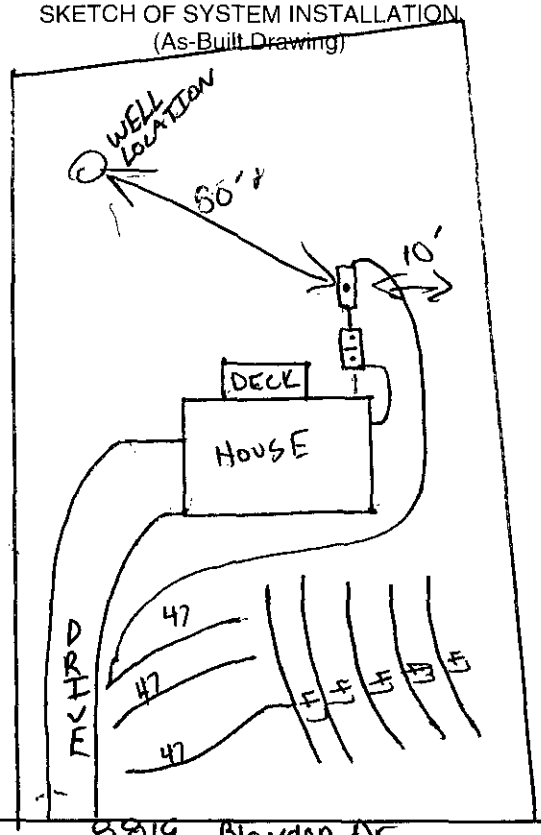
System Installation Setbacks

Distance from Building Foundation: 5 feet

Distance from Property Line: 10 feet

Distance from Water Supply Source: 50'+ feet

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)



The undersigned has inspected the Septic Tank System described above, and certifies it has been ☒ installed ☐ altered ☐ repaired ☒ as detailed in the plot above ☐ in accordance with the permit issued and meets the provisions of 15A NCAC 18A. 1900, "Laws and Rules for Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. The issuance of this Operation Permit does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of 15A NCAC 18A. 1900 in addition to those listed below under "Comments." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the Suspension or Revocation of this permit.

Comments: System Classification & Type: III-b IQ4W,G, N/A, N/A

DENR Authorized Agent: Jeremy Michael Signature: Jeremy Michael

Mecklenburg County Groundwater & Wastewater Services
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

NC DENR
Division of Environmental Health
On-Site Wastewater Section

OPERATION PERMIT for an
ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

File #: 7251B Permit #: _____ Tax Parcel #: 139-222-12

Property Owner: Leonid Kornivskyy

Job Location Address: 8819 Blaydon Dr.

City: Charlotte State: NC Zip Code: 28227

OPERATION PERMIT CONDITIONS:

I. Performance: System shall perform in accordance with 15A NCAC 18A .1961.

II. Monitoring: System shall be monitored as required by 15A NCAC 18A .1961.

III. Maintenance: Ground absorption sewage treatment and disposal systems shall be checked, and the contents of the septic tank removed, periodically from all compartments, to ensure proper operation of the system. The contents shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.

IV. Operation: System shall be operated in accordance with 15A NCAC 18A .1961.

System Classification: IIIbg Shallow placed w/cover

*Operation Permits for Type V and VI systems expire five (5) years from the date of issuance (in accordance with Table V(a)). The system owner must contact GWS six (6) *months prior to expiration for permit renewal.*

Subsurface system operator required: Yes ☐ No ☒

☐ This type of system requires the system owner to maintain a contract with a certified operator to perform system inspection, maintenance, and reporting as required in 15A NCAC 18A .1961. and Table V(a). The system owner is responsible for all fees associated with these services.

☐ System does not require inspection by GWS on a routine frequency.

☒ System requires inspection by GWS once every five (5) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every three (3) years. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every twelve (12) months. The system owner is responsible for all fees associated with the inspection.

☐ System requires inspection by GWS once every six (6) months. The system owner is responsible for all fees associated with the inspection.

V. Other:

_____

_____

_____

_____

DENR Authorized Agent: Jeremy Michael Date: 12-11-2009

Signature: Jeremy Michael

FILE NUMBER: 22510 | Revised On: January 3, 2007 | APPLICATION NUMBER: 2554

SEPTIC FEE: 209 DATE: 2/30/07 SC

MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES
APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

WELL FEE: _____ DATE: _____

1. **SEPTIC / TYPE APPLICATION:** ☐ NONE ☒ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFIED PLOT PLAN

2. **WELL / TYPE APPLICATION:** ☐ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

3. **JOB LOCATION INFORMATION:**

TAX PARCEL NUMBER: 139-222-12
STREET ADDRESS: 8819 Blaydon Drive
CITY: Charlotte
STATE: NC ZIP: 28227
SUBDIVISION NAME: Mint Hill Estates
LOT #: 30 LOT SIZE (acres): .392
TOWNSHIP:

☒ 0-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☐ 1-CHARLOTTE ☐ 4-PINEVILLE ☒ 7-MINT HILL
☐ 2-DAVIDSON ☐ 5-MATTHEWS

4. **BUILDING INFORMATION:**

BUILDING TYPE:
☐ SINGLE MOBILE HOME ☐ MODULAR HOME
☐ DOUBLE WIDE ☐ MULTIPLE FAMILY
☒ HOUSE ☐ OTHER _____
HEATED SQUARE FOOTAGE: 2,200
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 5
FOUNDATION TYPE:
☒ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☐ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

5. **IF PLANNING TO EXPAND OR ALTER THE EXISTING SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☒ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. **WATER SUPPLY:** ☐ MUNICIPAL ☐ PUBLIC WELL ☑ PRIVATE WELL ☐ SHARED WELL ☐ SPRING

7. **PROPOSED USE OF WELL:** ☐ N/A ☐ IRRIGATION ☑ POTABLE ☐ GEOTHERMAL ☐ OTHER

8. **PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED)*:

8A. **RANK:** ☐ ANY TYPE ☒ CONVENTIONAL (1) ☐ ACCEPTED (4) ☐ INNOVATIVE (3) ☐ ALTERNATIVE (2) ☐ OTHER _____ (5)

9. **DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

BURIED CABLES, LANDFILLS, STUMPHOLES	☐ YES ☒ NO	GRADING/SOIL REMOVAL PERFORMED	☐ YES ☒ NO
EXISTING WASTEWATER SYSTEMS	☐ YES ☒ NO	JURISDICTIONAL WETLANDS	☐ YES ☒ NO
WELLS, SPRINGS, OR WATER LINES	☐ YES ☒ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	☐ YES ☒ NO
EASEMENTS OR RIGHT-OF-WAYS	☐ YES ☒ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	☐ YES ☒ NO

10. **PROPERTY OWNER:**

NAME: Crysco Berl
ADDRESS: 8044 Westcape Dr.
CITY: Denver
STATE: NC ZIP: 28037
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX:

11. **OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: Fran Harris / Ella Pomerlyan
ADDRESS: 11237 Lawyers Rd
CITY:
STATE: ZIP: 28227
HOME PHONE: WORK PHONE: 704-277-4487
MOBILE PHONE: 704-905-0205 FAX:

12. **WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** 5-26-1998
13 **WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** August 20, 2007

14. **SEPTIC SYSTEM PERMIT APPLICATION SIGNATURE SECTION:**
If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either 60 months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

Fran Harris - Agent
Property Owner's or Owner's Legal Representative Signature Date

15. **WELL PERMIT APPLICATION SIGNATURE SECTION:**
If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of 12 months from the date of issuance.

Property Owner's or Owner's Legal Representative Signature Date

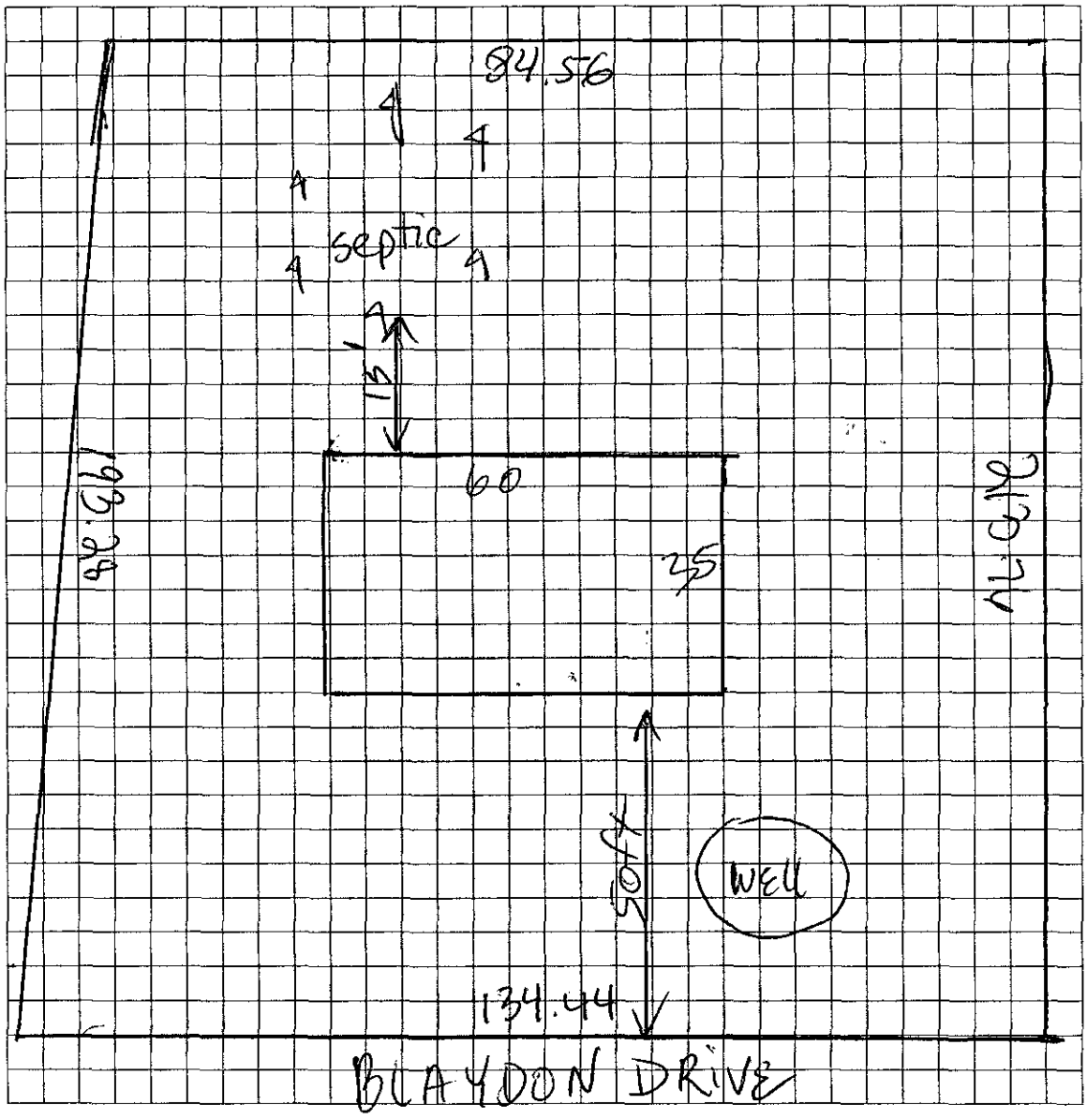
☐ SURVEY PLAT TO SCALE SUBMITTED ☐ SCALED SITE PLAN SUBMITTED ☐ UN-SCALED SITE PLAN SUBMITTED

Mecklenburg County
Land Use & Environmental Service Agency
Groundwater & Wastewater Services
700 N. Tryon St., Suite 211
Charlotte, NC 28202
Phone: (704) 336-5103
Fax: (704) 336-6894

File # 7251B
Date_____

PROPOSED PLOT PLAN LOT # 30

A map showing existing and proposed property lines and easements with dimensions, the location of the single family residence, non-single family residence, or other facility, and appurtenances, the site for the proposed well, and the location of existing or proposed sewer lines and/or sewage disposal systems, surface water bodies, aboveground or underground storage tanks. Name all roads adjoining the property. If this a repair indicate the type of repair.



Owner/Agent Signature Ellen Powell

Date 7/30/07

LBC 12/15/04

Department of Environment, Health, and Natural Resources
Division of Environmental Health
On-site Wastewater Section

Sheet: 1 of 2
Property ID: 139-222-12
Lot #: 30
File #: 7251B
AppID: 2554

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Crysco Berl
Applicant: Fran Harris/Ella Pomerlyan
Address: 8044 Westscape Dr., Denver, N. C. 28037
Date Evaluated: 8/16/2007
Proposed Facility: Residence
Design Flow (.1949): 360gpd
Property Size: .49a
Location of Site: 8819 Blaydon Drive
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [ ] Auger Boring [x] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

PROFILE #	.1940 Landscape Position/ Slope%	Horizon Depth (IN.)	SOIL MORPHOLOGY .1941 .1941 Structure/ Texture	.1941 Consistence Mineralogy	b PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr. Horiz	Profile Class & LTAR
1	LS, 5	0-13	GR/SIL	VFR/SEXP/NS/SP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV .275GPD/FT^2
		13-32	SBK/ABK/SIC	FISEXPS/P					
		32-48	SBK/SICL	FR/SEXPSS/SP					
2	"	0-10	GR/SIL	VFR/SEXP/NS/SP	>41" TO SOIL WETNESS	29	"	"	US, IV .25GPD/FT^2
		10-20	SBK/SIC	FR/SEXPSS/SP					
		20-29	SBK/ABK/SIC	FI/SEXP/S/P					
		29-41	M/SICL	FR/SEXPSS/SP					
3	"	0-10	GR/SICL	VFR/SEXP/NS/SP	>30" TO SOIL WETNESS	30	"	"	US, IV .2GPD/FT^2
		10-22	SBK/ABK/SIC	FI/SEXP/S/P					
		22-30	SBK/SICL	FR/SEXPSS/SP					
4	LS, 6	0-11	GR/SIL	VFR/SEXP/NS/SP	>45" TO SOIL WETNESS	45	"	"	US, III .15GPD/FT^{2}LPP
		11-24	SBK/SICL	FR/SEXP/SS/SP					
		24-45	M/SICL	"					
5	"	0-9	GR/SIL	VFR/SEXP/NS/SP	>34" TO SOIL WETNESS	34	"	"	US, IV .24GPD/FT^2
		9-21	SBK/SICL	FR/SEXP/SS/SP					
		21-34	SBK/SIC	FI/SEXP/S/P					
					SITE LTAR .24GPD/FT^2				

Description	Initial System	Repair System
Available Space (.1945)	PS	NA
System Type(s)	IIIbg	NA
Site LTAR	0.24	0.24

Other Factors (.1946):

Soil Evaluation By: W. R. Marlin, LSS, 8/17/2007
Others Present:
Site Classification (.1948): Provisionally Suitable
Site Evaluation By: David Cornelius, RS
Others Present:

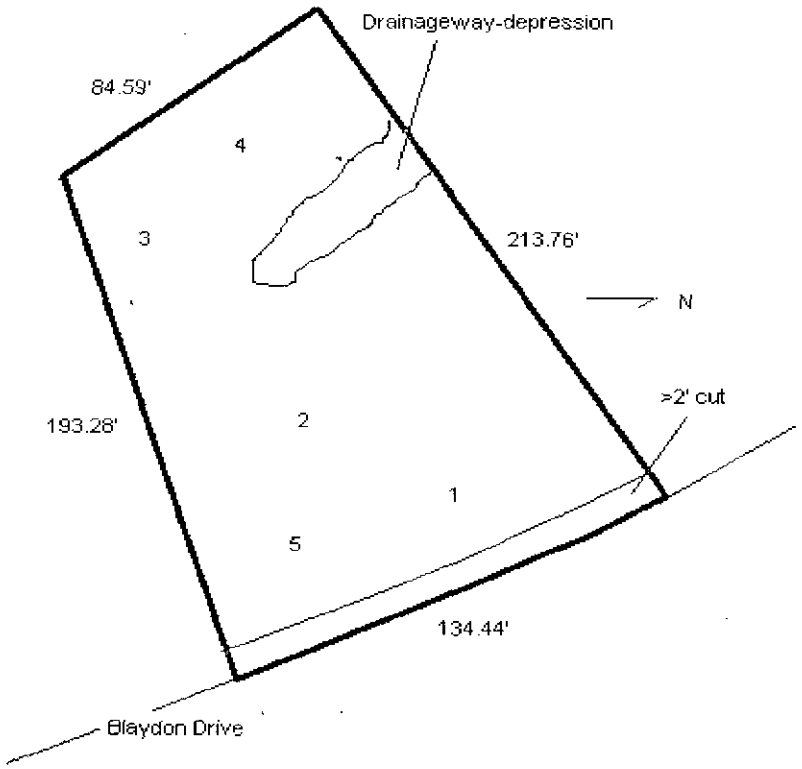
COMMENTS:

Does not require 100% repair, make sure side property lines are correctly marked before attempting to design system layout

Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace				
FP-Flood Plain		CL-Clay Loam		
		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



MECKLENBURG COUNTY
Health Department

June 6, 2008

Crysco Berl
8044 Westcape Dr.
Denver, NC 28037

Re: Application for improvement permit for:
Property Site: 8819 Blaydon Dr
Health Department file number: **7251B**

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on August 17, 2007 evaluated the above-referenced property at the site designated on the plat that accompanied your improvement permit application. According to your application the site is to serve a 4 bedroom house, with a daily design flow of 480 gallons per day. The evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 and related statutes and Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule .1900 and related rules.

Based on the criteria set out in Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rules .1940 through .1948, the evaluation indicated that the site is **UNSUITABLE** for a ground absorption sewage system. Therefore, your request for an improvement permit is **DENIED.** A copy of the site evaluation is enclosed. The site is unsuitable based on the following:

- ☒ Unsuitable soil topography and/or landscape position (Rule .1940)
- ☐ Unsuitable soil characteristics (structure or clay mineralogy) (Rule .1941)
- ☐ Unsuitable soil wetness condition (Rule .1942)
- ☐ Unsuitable soil depth (Rule .1943)
- ☐ Presence of restrictive horizon (Rule .1944)
- ☒ Insufficient space for septic system and repair area (Rule .1945)
- ☒ Unsuitable for meeting required setbacks (Rule .1950)
- ☐ Other (Rule .1946)

These severe soil or site limitations could cause premature system failure, leading to the discharge of untreated sewage on the ground surface, into surface waters, directly to ground water or inside your structure.

The site evaluation included consideration of possible site modifications, and modified, innovative or alternative systems. However, the Health Department has determined that none of the above options will overcome the severe conditions on this site. A possible option might be a system designed to dispose of sewage to another area of suitable soil or off-site to additional property.

For the reasons set out above, the property is currently classified **UNSUITABLE,** and an improvement permit shall not be issued for this site in accordance with Rule .1948 (e).

However, the site classified as **UNSUITABLE** may be classified as **PROVISIONALLY SUITABLE** if written documentation is provided that meets the requirements of Rule .1948(d). A copy of this rule is enclosed. You may hire a consultant to assist you if you wish to try to develop a plan under which your site could be reclassified as **PROVISIONALLY SUITABLE.**

You have a right to an informal review of this decision. You may request an informal review by the soil scientist or environmental health supervisor at the local health department. You may also request an informal review by the N. C. Department of Environment and Natural Resources regional soil specialist. A request for informal review must be made in writing to the local health department.

You also have a right to a formal appeal of this decision. To pursue a formal appeal, you must file a petition for a contested case hearing with the Office of Administrative Hearings, 6714 Mail Center, Raleigh, NC 27699-6714. To get a copy of a petition form, you may write the Office of Administrative Hearings or call the office at (919) 733-0926 or from the OAH web site at www.oah.state.nc.us/form.htm. The petition for a contested case hearing must be filed in accordance with the provision of North Carolina General Statutes 130A-24 and 150B-23 and all other applicable provisions of Chapter 150B. N. C. General Statue 130A-335(g) provides that your hearing would be held in the county where your property is located.

Please note: If you wish to pursue a formal appeal, you must file the petition form with the Office of Administrative Hearings **WITHIN 30 DAYS OF THE DATE OF THIS LETTER.** The date of this letter is June 6, 2008. Meeting the 30-day deadline is critical to your right to a formal appeal. Beginning a formal appeal within 30 days will not interfere with any informal review that you might request. Do not wait for the outcome of any informal review if you wish to file a formal appeal.

If you file a petition for a contested case hearing with the Office of Administrative Hearings, you are required by law (N.C. General Statute 150B-23) to send a copy of your petition to the North Carolina Department of Environment and Natural Resources. Send the copy to: Office of General Counsel, N. C. Department of Environment and Natural Resources, 1601 Mail Service Center, Raleigh, NC. 27699-1601. Do **NOT** send the copy of the petition to your local health department. Sending a copy of your petition to the local health department will **NOT** satisfy the legal requirement in N.C. General Statute 150B-23 that you send a copy to the Office of General Counsel, NCDENR.

You may call or write the local health department if you need any additional information or assistance.

Sincerely,

David Cornelius, RS
Authorized Agent - DENR

Encl: (2)

LD Truck!

Possible 4/22/10

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 7251B WASPS App #: 2554

Primary ES assigned to project: DC

Secondary ES assigned to project: _____

Project Type: New System ☑ Alteration ☐ Repair ☐ Modified Plot Plan ☐

I. File Review:

Rule or Law				
	Permit Application			
.1937(d)	Is the Application complete	Yes ☑	No ☐	N/A ☐
.1937(d)	Is there a Site plan/Plat with application	Yes ☑	No ☐	N/A ☐
.1937(d)	Is the Facility shown?	Yes ☑	No ☐	N/A ☐
.1937(d)	Are appurtenances shown	Yes ☑	No ☐	N/A ☐
	Site Evaluation Information			
.1939 (a)(1)	Topography and Landscape Position Recorded?	Yes ☑	No ☐	N/A ☐
.1940 (a-g)	Slope % Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Texture Class Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Structure type Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Consistence Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(2)	Mineralogy Recorded?	Yes ☑	No ☐	N/A ☐
.1939 (a)(3)	Soil Wetness Condition Recorded?	Yes ☐	No ☐	N/A ☑
.1939 (a)(4)	Soil Depth to Rock or Parent Material Recorded When Encountered	Yes ☐	No ☐	N/A ☑
.1939 (a)(5)	Depth to Restrictive Horizons Recorded When Encountered?	Yes ☐	No ☐	N/A ☑
.1939 (a)(6)	Sufficient Available Space Recorded?	Yes ☑	No ☐	N/A ☐
.1937(m)	Are the Profile Locations Shown?			
.1939(a)	Are the S/PS Profiles in system & in repair area?	Yes ☑	No ☐	N/A ☐
& .1945(b)	Number of auger borings made: 5			
	Were sufficient auger borings made?	Yes ☑	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR .24	Yes ☑	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☑	No ☐	N/A ☐
.1945(b) 130A-336 (a)(3)	Proposed System Type stated-Repair System location identifiable by setbacks - Initial	Yes ☑	No ☐	N/A ☐
.1937(g) .1945(b)	System components shown – Initial	Yes ☑	No ☐	N/A ☐
.1945(b)	Repair area shown	Yes ☐	No ☐	N/A ☑
.1937 (f)(g)	Does System design match facility, flow & WWcharacteristics?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is System design consistent with soil/site conditions?	Yes ☑	No ☐	N/A ☐
.1937 (f)(g)	Is the System located in the approved area?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Is the Design flow (gpd) indicated?	Yes ☑	No ☐	N/A ☐

130A-336(a)	Number of Bedrooms, employees, seats, etc. indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench depth indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench width indicated?	Yes ☑	No ☐	N/A ☐
.1937(g)	Trench length indicated?	Yes ☑	No ☐	N/A ☐
130A-336(a)(1)	Proposed/existing well shown?	Yes ☑	No ☐	N/A ☐
130A-336(a)(1)	Property line lengths shown?	Yes ☑	No ☐	N/A ☐
130A-336(a)	Facility/appurtenance setbacks shown from fixed points?	Yes ☑	No ☐	N/A ☐
	Operation Permit			
.1937(i)	System type as described in table V(a) of rule .1961	Yes ☑	No ☐	N/A ☐
.1937(i)	Conditions for system performance, operation, maintenance, monitoring and reporting.	Yes ☑	No ☐	N/A ☐

II. WASPS Review:

Construction authorization issued	Yes ☐	No ☐	N/A ☐
Installation approval issued	Yes ☐	No ☐	N/A ☐
Operation permit issued	Yes ☐	No ☐	N/A ☐
Other related documentation	Yes ☐	No ☐	N/A ☐

Items requiring correction/modification: _____

Comments:

_____

_____

_____

_____

_____

IA issued date: 12 7 09

OP issued date: 12 11 09

Review performed by: _____ Date performed: 12/23/08

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	12/30/08	**Amount:**	200.00
Receipt #:	60099	**Tendered:**	200.00
Check / Auth #:	CASH	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #:	200000
Contractor:	KORNIVSKYY LEONID
Attn:	
Address:	8508 LOCHINVAR DRIVE
Address:	
City/State/Zip:	CHARLOTTE, NC 28227

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Auth for Waste Wtr Sys Constr 8819 BLAYDON DR/FILE 7251B		1	200.00	200.00

----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
		10.00			

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	04/15/09	**Amount:**	200.00
Receipt #:	62389	**Tendered:**	200.00
Check / Auth #:	CASH	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #:	200000
Contractor:	KORNIVSKYY LEONID
Attn:	
Address:	8508 LOCHINVAR DR
Address:	
City/State/Zip:	CHARLOTTE, NC 28227

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Installation/Final Approval 8819 BLAYDON DRIVE/FILE 7251B		1	200.00	200.00

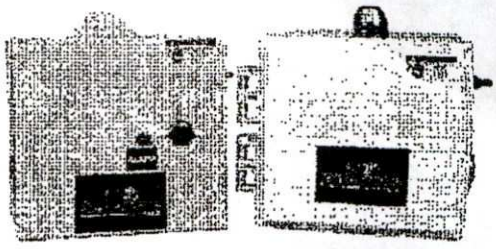
----------Outstanding Balances----------

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
	[redacted]				

MODEL 112 Control Panel

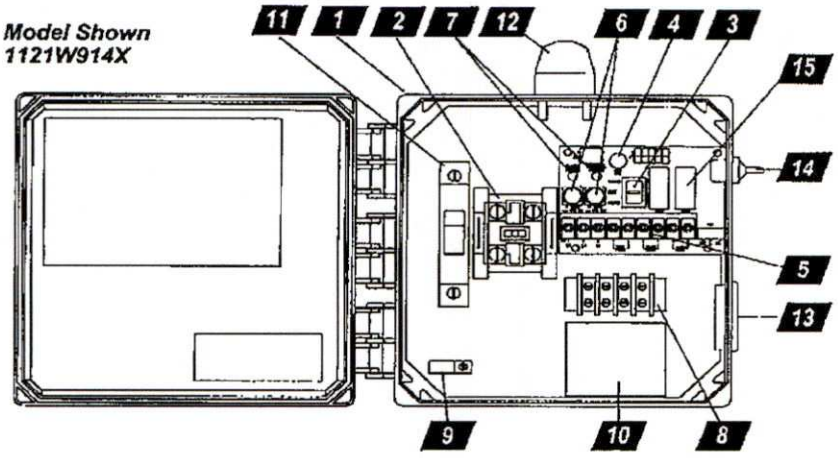
Single phase, simplex motor contactor control.

The Model 112 control panel provides a reliable means of controlling one 120, 208, or 240 VAC single-phase pump in pump chambers, sump pump basins, irrigation systems and lift stations. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system.



indoor *indoor/outdoor*

Model Shown
1121W914X



1. **Enclosure** measures 8 x 8 x 4 inches (20.32 X 20.32 X 10.16 cm). Choice of NEMA 1 (steel for indoor use), or NEMA 4X (ultraviolet stabilized thermoplastic with removable flanges for outdoor or indoor use).

   * Options selected may increase enclosure size and change component layout.
2. **Magnetic Motor Contactor** controls pump by switching hot electrical lines.
3. **HOA Switch** for manual pump control (mounted on circuit board).
4. **Green Pump Run Indicator Light** (mounted on circuit board).
5. **Float Switch Terminal Block** (mounted on circuit board).
6. **Alarm and Control Fuses** (mounted on circuit board).
7. **Alarm and Control Power Indicators** (mounted on circuit board).
8. **Pump Input Power and Pump Connection Terminal Block**
9. **Ground Lug**
10. **Terminal Block Installation Label**
11. **Circuit Breaker** (optional) provides pump disconnect and branch circuit protection.

STANDARD ALARM PACKAGE (other options available)

12. **Red Alarm Beacon** provides 360° visual check of alarm condition. **Note:** NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
13. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating). **Note:** NEMA 1 style utilizes an internally mounted buzzer (83 to 85 decibel) in lieu of horn.
14. **Exterior Horn Test/Normal/Silence Switch** allows alarm horn to be silenced and testing of horn and light to ensure proper operation of alarm system.
15. **Horn Silence Relay** automatically resets alarm after alarm condition has been resolved (mounted on circuit board).

FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes three 20' Sensor Float® control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty

c UL us
LISTED

SJE Rhombus CONTROLS
SJ ELECTRO SYSTEMS, INC.
PO Box 1708, Detroit Lakes, MN 56502
1-888-DIAL-SJE ..1-218-847-1317
1-218-847-4617 Fax
email: sje@sjerhombus.com
www.sjerhombus.com

8

112							

MODEL 112

ALARM PACKAGE
- 0 = select options or no alarm package
- 1 = alarm package (includes test/normal/silence switch, fuse, red light, horn & float)

ENCLOSURE RATING
- I = Indoor, NEMA 1 (metal)
- W = Weatherproof, NEMA 4X (engineered thermoplastic)

STARTING DEVICE
- 1 = magnetic motor contactor 120/208/240V
- 9 = magnetic motor contactor 120V only

PUMP FULL LOAD AMPS
- 0 = 0-7 FLA
- 1 = 8-15 FLA
- 2 = 16-20 FLA
- 3 = 21-30 FLA

PUMP DISCONNECTS
- 0 = no pump disconnect
- 1 = pull-out with safety deadfront in a 10"x8" enclosure
- 4 = circuit breaker

FLOAT SWITCH APPLICATION
- H or L = pump down or pump up
- X = no floats

OPTIONS *Listed below*

★ Options selected may increase enclosure size and change component layout.

If additional features are required, call the factory for a quote on either a Pro-Line or Engineered Custom control panel system.

CODE	DESCRIPTION
1A	Red beacon only / no audio *must select 1E if floats included*
1C	Horn only / no visual *must select 1E if floats included*
1E	Alarm float
3A	Alarm flasher
★ 4A	Low level cutout *select option 4D if floats included*
★ 4B	Red low-level indicator & alarm *must select 4A also*
4D	Low-level float
6A	Auxiliary alarm contact, form C type
★ 8A	Elapsed time meter
★ 8C	Event (cycle) counter
10E	Lockable latch - NEMA 4X
10E	Lockable latch - NEMA 1
★10F	Lightning arrester
★10K	Anti-condensation heater

CODE	DESCRIPTION
11C	NEMA 1 alarm panel *must select option 6A*
11D	NEMA 4X alarm panel *must select option 6A*
15A	Control / alarm circuit breaker *Does not include the circuit board as in standard.*
16A	10' cord in lieu of 20'
16B	15' cord in lieu of 20'
16C	30' cord in lieu of 20'
16D	40' cord in lieu of 20'
17A	SJE SignalMaster® / mounting strap ●
17B	SJE SignalMaster® / externally weighted ●
17C	Sensor Float® / internally weighted ▲
17D	Sensor Float® / externally weighted ▲
17E	Sensor Float® Mini / pipe clamp ▲
17F	Sensor Float® Mini / externally weighted ▲
19X	Door mounted pump run indicator
21A	Pumpmaster® in lieu of on/off switches ●
21B	PumpMaster® Plus in lieu of on/off switches ●
21C	Super Single® in lieu of on/off switches ▲
21D	Double Float™ in lieu of on/off switches ▲

● Mechanically-activated ▲ Mercury-activated

SAMPLE

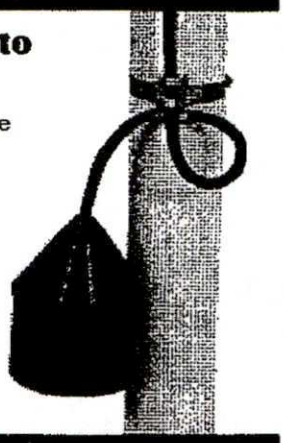
MODEL	112	1	W	9	1	4	H	3A 8A

Alarm Package
Enclosure Rating
Starting Device
Pump Full Load Amps
Pump Disconnect
Float Switch Application
Options: Alarm Flasher, Elapsed Time Meter

© SJE-Rhombus Printed in USA 01/00

SENSOR FLOAT® control switch

Mercury-activated, narrow-angle float switch designed to activate pump control panels and alarms.



This narrow-angle sensing device is used to accurately monitor liquid levels in sewage and non-potable water applications. The Sensor Float® control switch is not sensitive to rotation and is suitable for use with intrinsically safe circuits. Contact SJE-Rhombus regarding specific intrinsically safe applications.

Normally Open Model (high level)
The control switch turns on (closes) when the float tips slightly **above** horizontal signaling a high level, and turns off (opens) when the float drops slightly below horizontal.

Normally Closed Model (low level)
The control switch turns on (closes) when the float drops slightly **below** horizontal signaling a low level, and turns off (opens) when the float tips slightly above horizontal.

FEATURES

- Suitable for use with intrinsically safe circuits.
- Not sensitive to rotation.
- Control differential of .5 inches (1 cm) above or below horizontal.
- UL Listed for use in non-potable water and sewage.
- CSA Certified.
- Three-year limited warranty.

LR54245 LISTED 83N2

Hydraulic

OPTIONS

This switch is available:

- for normally open (high level) applications or normally closed (low level) applications.
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters.
- with three mounting options that allow for flexibility in installation:

Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device.

Internally Weighted: for applications where the switch can be suspended from above.

Externally Weighted: for applications where the switch can be suspended from above.

SPECIFICATIONS

CABLE: flexible 18 gauge, 2 conductor (UL,CSA) SJOW, water-resistant (CPE) jacket

FLOAT: 3.38 inch diameter x 4.55 inch long (8.58 cm x 11.56 cm), high-impact, corrosion resistant, PVC housing for use in sewage and non-potable water up to 140°F (60°C)

MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi

MERCURY TILT SWITCH: single pole, single throw, mercury-to-mercury contacts, hermetically sealed in a steel capsule and epoxy sealed in the float housing

ELECTRICAL: 5 amp, 120/230 VAC, 50/60 Hz

CONTROLS SJE Rhombus SJ ELECTRO SYSTEMS, INC.
PO Box 1708, Detroit Lakes, MN 56502
1-888-DIAL-SJE 1-218-847-1317
1-218-847-4617 Fax
email: sje@sjerhombus.com
www.sjerhombus.com

Sensor Float® control switch installation instructions

⚠WARNING **ELECTRICAL SHOCK HAZARD**
Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.

⚠WARNING **EXPLOSION OR FIRE HAZARD**
Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.

Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.

MOUNTING THE SWITCH

1. Place the cord into the clamp as shown in Figure B.
2. Locate clamp at desired activation level and secure the clamp to the discharge pipe as shown in Figures A and B. **Note:** Do not install cord under hose clamp.
3. Tighten the hose clamp using a screwdriver. Over tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
4. Bring cable leads back to control device and wire according to Figure C.
5. Check installation. Allow system to cycle to insure proper operation.

Note: All hose clamp components are made of 18-8 stainless steel material. See your SJE-Rhombus supplier for replacements.

Figure A

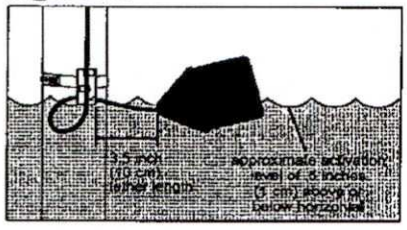
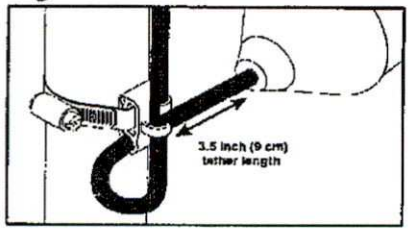


Figure B



INTERNAL WEIGHT

1. Determine desired activation level.
2. Suspend switch 7 inches (18 cm) below desired activation level as shown in Figure D. Switch remains partially submerged during the "on" tipping action. Switch can be totally submerged and still continue to operate properly.
3. Wire cable leads directly into control device as shown in Figure C.
4. Check installation. Allow system to cycle to insure proper operation.

Figure C - Wiring Diagram

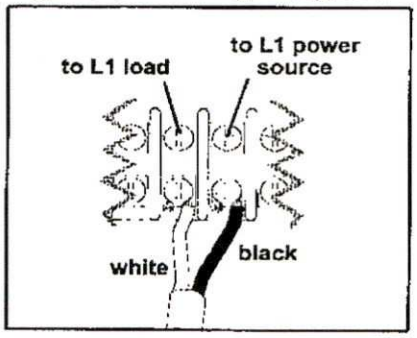
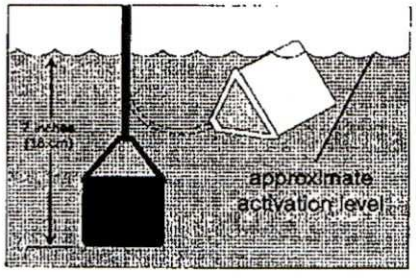


Figure D



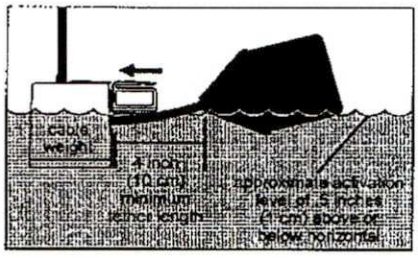
CABLE WEIGHT

1. Determine desired activation level.
2. Suspend switch and cable weight at desired activation level as shown in Figure E.
3. Wire cable leads directly into control device as shown in Figure C.
4. Check installation. Allow system to cycle to insure proper operation.

Cable weight is attached to switch cable at the factory. To adjust:

1. Release clip.
2. Adjust cable weight to desired position.
3. Lay switch cable in weight channel.
4. Align clip with weight channel and slide towards switch cable as shown in Figure E.
5. Snap clip snugly up to cable, moving clip to tightest possible position.

Figure E



CONTROLS SJE Rhombus®
SJ ELECTRO SYSTEMS, INC.
22650 County Highway 6 ■ P.O. Box 1708 ■ Detroit Lakes, Minnesota 56502 USA
1-888-DIAL-SJE (1-888-342-5753) ■ Phone: 218-847-1317 ■ Fax: 218-847-4617
E-mail: sjc@sjerhombus.com

Instl. Instr. PN 1009646A
Cat. Page PN 1009509A

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Printed in USA 03/00

ME SERIES

1/2 through 1-1/2 HP
Effluent Pumps



Double Seal



Single Seal

THE MYERS ME SERIES EFFLUENT PUMPS ARE DESIGNED SPECIFICALLY FOR TODAY'S EFFLUENT PRESSURE DISTRIBUTION MOUNDS, TRENCHES AND HIGH FLOW DRAINAGE APPLICATIONS. The ME Series effluent pumps with their efficient two vane, enclosed impellers, provide the ideal performance for optimum dosing. ME Series pumps are constructed of only corrosion resistant materials like cast iron, stainless steel and thermoplastics to assure that they will perform for years to come in the harsh effluent environment and drainage applications. For more information, call your Myers distributor today or the Myers Ashland, Ohio sales office at 419/289-1144.

ADVANTAGES BY DESIGN

IDEAL FOR USE IN MOUND AND TRENCH PRESSURE DISTRIBUTION SYSTEMS

- High efficiency, two vane, enclosed impeller provides ideal performance for most efficient dosing.
- Impeller passes full ¾ inch solids.
- Enclosed impeller design eliminates possibility of jamming or corrosion between impeller and volute.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- High torque, permanent split capacitor (PSC), single phase motors. No starting switches or relays to wear out.
- Optional seal leak probe warns of seal leak condition. (Dual seal motors only.) Helps prevent costly motor damage.
- Motors have on winding current and temperature sensitive overload. (Single phase only.)

THE ME SERIES EFFLUENT PUMPS ARE DESIGNED FOR YEARS OF MAINTENANCE FREE OPERATION

- Volute seal ring is replaceable. Restores pump to original performance if wear should occur.
- Motor is held in place by 4 screws. Easily removed if service is ever needed.

PRODUCT CAPAILITIES

Capacities To	120 GPM	454 LPM
Heads To	95 ft.	28.9 m
Max. Spherical Solids	¾ in.	19 mm
Liquids Handling	domestic effluent & drain water	
Intermittent Liquid Temp.	up to 140° F	up to 60° C
Motor Electrical Data	1/2 HP 115 volts, 1 ph 1/2 to 1-1/2 HP 230 volts, 1 ph 208, 230, 460, 575 volts, 3 ph oil-filled, permanent split capacitor type, 1 ph, 3450 rpm, 60 Hz	
Motor Insulation	Class B (130° C)	
Third Party Approvals	UL, CSA	
Acceptable pH Range	6-9	
Specific Gravity	.9-1.1	
Viscosity	28-35 SSU	
Discharge, NPT	2 in.	50.8 mm
Min. Sump Dia. Simplex	24 in.	61 cm
Duplex	36 in.	91.4 cm

Construction Materials	
Motor Housing, Volute	cast iron, Class 30, ASTM A48-76
Enclosed Two Vane Impeller Standard	engineered thermoplastic
Optional	bronze
Impeller Wear Ring	304 SST
Volute Sealing Ring	Buna-N
Shaft	416 SST
Power Cord	
1/2 HP 1 Ph	20 ft. 16/3 SJOW/SJOW-A
3/4 - 1-1/2 HP 1 Ph	20 ft. 14/3 SJOW/SJOW-A
All 3 Ph	20 ft. 14/4 SOW/SOW-A
Shaft Seals Standard	single carbon & ceramic
Optional	tandem carbon & ceramic
Opt. Lower	tungsten carbide
Fasteners	300 Series SST

WHERE INNOVATION MEETS TRADITION

ISO 9001 Certified Company

Myers
PENTAIR PUMP GROUP

ME SERIES

1/2 through 1-1/2 HP
Effluent Pumps

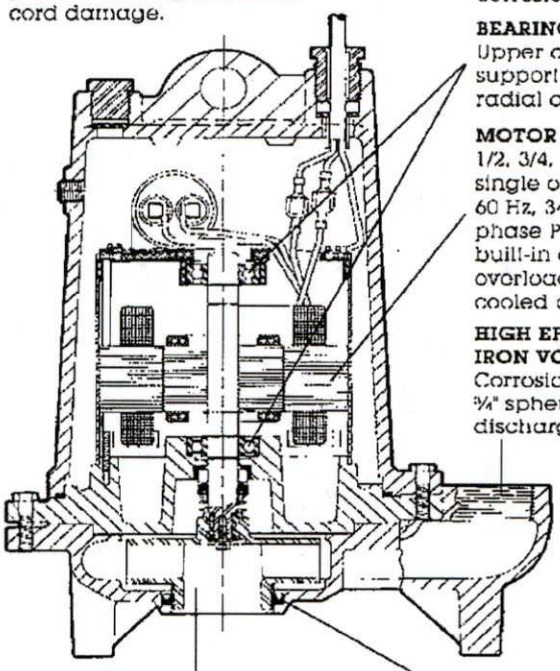
POWER CORD
Jacket sealed with compression fittings. Individual wires potted with epoxy to prevent wicking in case of cord damage.

MOTOR HOUSING
Cast iron for efficient heat transfer and corrosion resistance.

BEARINGS
Upper and lower ball support rotor. Take radial and thrust loads.

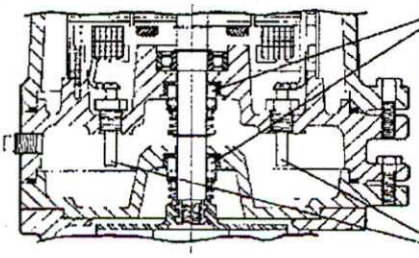
MOTOR
1/2, 3/4, 1 and 1-1/2 HP single or three phase. 60 Hz, 3450 RPM. Single phase PSC motors have built-in on winding overload protection, oil-cooled and lubricated.

HIGH EFFICIENCY CAST IRON VOLUTE
Corrosion resistant. Passes ¾" spherical solids. 2" NPT discharge.



ENCLOSED TWO VANE IMPELLER
high efficiency. Passes ¾" spherical solids with stainless steel wear ring. Optional bronze construction available.

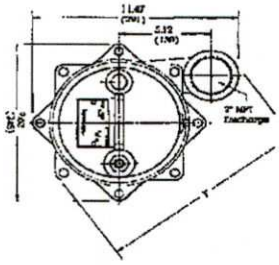
VOLUTE/IMPELLER SEAL RING
Maintains high efficiency and reduces recirculation. Replaceable.

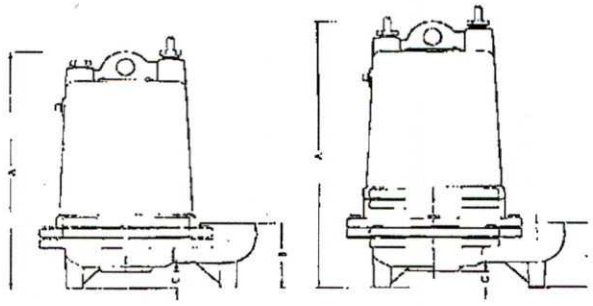


SHAFT SEAL(S)
Carbon and ceramic faces. Optional dual tandem seals. Extends motor life.

SEAL LEAK PROBES
Optional probes (dual seal only) detect water leakage in seal housing. Activates warning light.

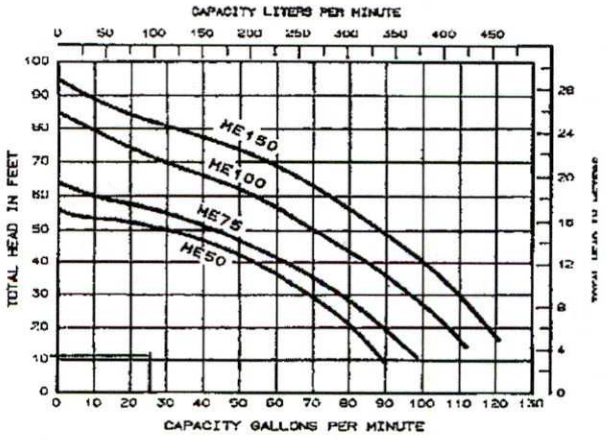
DIMENSIONS





Model Series	Inches (millimeters) A	B	C	F
ME50S	16.8 (427)	4.09 (104)	1.03 (26)	12.13 (308)
ME50D	18.6 (472)	4.09 (104)	1.03 (26)	12.13 (308)
ME75S, ME100S, ME150S	16.8 (427)	4.0 (102)	1.06 (27)	12.5 (318)
ME75D, ME100D, ME150D	18.6 (472)	4.0 (102)	1.06 (27)	12.5 (318)

PERFORMANCE CURVE



K3320 9/98
Printed in U.S.A.

PRINTED WITH SOY INK

Myers
PENTAIR PUMP GROUP

F. E. Myers, 1101 Myers Parkway, Ashland, Ohio 44805-1969
419/289-1144, FAX: 419/289-6658, www.femyers.com
Myers (Canada), 269 Trillium Drive, Kitchener, Ontario N2G 4W5
519/748-5470, FAX: 519/748-2553

Repair was not needed @ time. Filter was causing back 725lbs #10111

15 JAN '19 PM 1:49

MECKLENBURG COUNTY
HEALTH DEPARTMENT

APPLICATION FOR A RESIDENTIAL SITE IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL

1. SEPTIC / TYPE APPLICATION: ○ N/A ○ NEW SYSTEM ○ ALTERATION ◉ REPAIR ○ MODIFIED PLOT PLAN

2. WELL / TYPE APPLICATION: ◉ N/A ○ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

3. JOB LOCATION INFORMATION:
TAX PARCEL NUMBER: 13922212
STREET ADDRESS: 8819 Blaydon Drive
CITY: Charlotte
STATE: NC ZIP: 28227
SUBDIVISION NAME: N/A
LOT #: _____ LOT SIZE (acres): .6
TOWNSHIP:
◉ MECKLENBURG ○ CORNELIUS ○ HUNTERSVILLE
○ DAVIDSON ○ CHARLOTTE ○ PINEVILLE
○ MATTHEWS ○ MINT HILL

4. BUILDING INFORMATION:
BUILDING TYPE:
○ SINGLE MOBILE HOME ○ MODULAR HOME
○ DOUBLE WIDE ○ MULTIPLE FAMILY
◉ HOUSE ○ OTHER _____
HEATED SQUARE FOOTAGE: 2992
NUMBER OF BEDROOMS: 4
NUMBER OF OCCUPANTS: 3
FOUNDATION TYPE:
○ CONCRETE SLAB ○ BASEMENT WITH PLUMBING
◉ CRAWL SPACE ○ BASEMENT WITH NO PLUMBING

5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION: ☑ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

6. WATER SUPPLY: ○ MUNICIPAL ◉ PRIVATE WELL ○ PUBLIC WELL ○ SHARED WELL ○ OTHER _____

7. PROPOSED USE OF WELL: ◉ N/A ○ IRRIGATION ○ POTABLE (DRINKING WATER) ○ OTHER _____

8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST DESIRED 5-LEAST DESIRED)*:

☑ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

8A. RANK: ____ ____ ____ ____ ____

9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.

BURIED CABLES, LANDFILLS, STUMPHOLES	○ YES ○ NO	GRADING/SOIL REMOVAL PERFORMED	○ YES ○ NO
EXISTING WASTEWATER (SEPTIC) SYSTEMS	○ YES ○ NO	JURISDICTIONAL WETLANDS	○ YES ○ NO
WELLS, SPRINGS, OR WATER LINES	○ YES ○ NO	APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY	○ YES ○ NO
EASEMENTS OR RIGHT-OF-WAYS	○ YES ○ NO	WASTEWATER OTHER THAN DOMESTIC SEWAGE	○ YES ○ NO
CHEMICAL/PETROLEUM STORAGE TANKS	○ YES ○ NO	KNOWN UNDERGROUND CONTAMINATION	○ YES ○ NO
WASTE STORAGE	○ YES ○ NO	GROUNDWATER USE RESTRICTIONS/VARIANCES	○ YES ○ NO

10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____ ☑ UNKNOWN

11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? _____ ☑ N/A

12. PROPERTY OWNER:
NAME: Richard K Wiseman
ADDRESS: 8819 Blaydon Drive
CITY: Charlotte
STATE: NC ZIP: 28227
WORK PHONE: 7047760032
MOBILE PHONE: 7047760032
FAX: _____
E-MAIL: rkwisema@gmail.com

13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
WORK PHONE: _____
MOBILE PHONE: _____
FAX: _____
E-MAIL: _____

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17

14. SEPTIC SYSTEM PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

_____ (Initial here for septic system applications)

15. WELL PERMIT APPLICATION:

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

_____ (Initial here for well applications)

16. APPLICATION SIGNATURE SECTION:

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below. A PROPOSED PLOT PLAN is required to be submitted with each application.

Richard K Wiseman _____ 1.14.2019

Property Owner's or Owner's Legal Representative Signature — Date

---

OFFICE USE ONLY

○ SURVEY PLAT TO SCALE SUBMITTED ○ SCALED SITE PLAN SUBMITTED ○ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

WELL APPLICATION FEE RECEIVED: $ _____ DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: _____

GWS FILE NUMBER ASSIGNED: _____

APPLICATION ID NUMBER ASSIGNED: _____

COMMENTS:

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

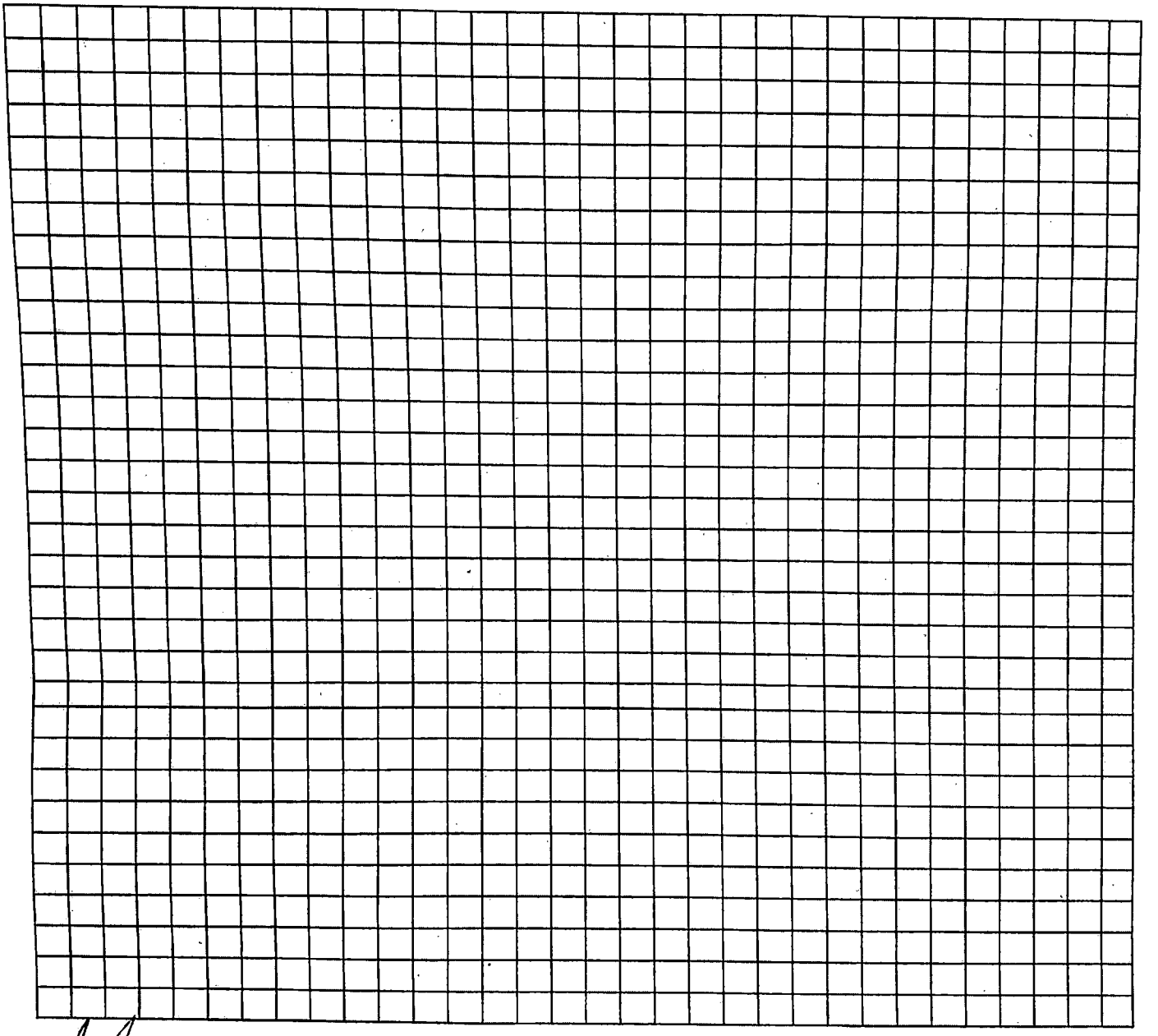
File #: _____

PROPOSED PLOT PLAN

A drawing showing the locations of the following items is required: existing and proposed property lines with dimensions, easements or right-of-ways, proposed building pad(s) or existing building footprint(s), all appurtenances (garage, driveway, deck, pool, etc.), location of existing or proposed well(s), location of existing or proposed sewer lines and sewage disposal systems, surface water bodies, and any aboveground or underground storage tanks. Provide names for all roads that adjoin the property.

Street Address: 8819 Blaydon Drive, Charlotte, NC 28227 Tax Parcel #: _____

Subdivision Name: N/A Lot #: _____



Property Owner's or Owner's Legal Representative Signature

1.14.19
Date

MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 980-314-1680, FAX: 704-336-6894
Email: Wellreg@MecklenburgCountyNC.gov

Revised on: 4/20/17