

7335 HOWELL RIDGE RD

01546144

1/8/2008

duponbj

Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

FEE: _____
DATE: _____

AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION

ACS

PERMIT NUMBER: 5453B
PARCEL NUMBER: 01546138 44

JOB LOCATION ADDRESS: 7335 Howell Ridge Road
PROPERTY OWNER: Terrence Atkinson
BUILDING CONTRACTOR: Terrence Atkinson
SUBDIVISION NAME: Lynn Estates
AUTHORIZATION ISSUED BY: Jeremy Michelone, R.S. DATE: 10/19/05

Jeremy Michelone, R.S.
DEHR/DEH AUTHORIZED AGENT

AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 5453B, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN *INSTALLATION, CONSTRUCTION, ALTERATION AND/OR REPAIR APPROVAL* MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH THE MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS CONSTRUCTION AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. THIS CONSTRUCTION AUTHORIZATION AS PROVIDED IN G.S. 130A-335(f) AND G.S. 130A-336(b) SHALL BE VALID FOR A PERIOD EQUAL TO THE VALIDITY OF THE IMPROVEMENT PERMIT, NOT TO EXCEED 60 MONTHS.

5. OTHER CONDITIONS:
   Agreement forms on file before CA release.

CONDITIONS OF IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATON

Permit Number: 5453B

Tax Number: 01546139 44

- The 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.

Basement: ☐ Yes ☐ No ☐ Partial Basement

Primary Wastewater System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

☒ Conventional
☐ Prefabricated, permeable block panel system
☐ Shallow Placed Conventional
☐ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ Other
☐ Innovative or Experimental:

0.4 Long-term acceptance rate (GPD/ft^2)	480 Max gallons/day wastewater flow	1200 Absorption Area (ft^2)	9 Trench spacing (min. on centers) (ft)
Serviced by private well: ☐ Yes ☒ No	1500 Gallon septic tank	400 Total trench length (ft)	66 Maximum trench depth (in) (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions.)
4 Bedrooms in residence	1500 Gallon pump tank	36 Depth of stone (in)	

Any surface water present: **NO** Type: Minimum separation distance (ft):

Additional conditions: **Site reclassified as Provisionably Suitable under 15A NCAC 18A .1948(d).**
Agreement forms on file before CA release.
Install system in accordance with designed plans on file.

Repair Area System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

☒ Conventional
☐ Prefabricated, permeable block panel system
☐ *Shallow Placed Conventional*
☐ Low Pressure Pipe
☐ Large Diameter Pipe
☐ Fill
☐ *Other*
☐ Innovative or Experimental:

2400 Absorption Area (ft^2) 800 Total trench length (ft)	36 Depth of stone (in)	9 Trench spacing (min. on *centers*) (ft)	66 Maximum trench depth (in)

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the Request for the Job Location contained in this document. The approval is granted in accordance with the provisions of Laws and Rules For Sewage Treatment, and Disposal Systems in effect at the time of issuance of the permit and is subject to the following provisions:

*** *No work shall be conducted on the septic tank system until an* Installation, Construction, Alteration and/or Repair Approval is granted by this Department.

*** This Improvement permit is transferable.

Tommy Mabb R.S. 10/19/05

DENR Authorized Agent Date

Owner/Agent Signature Date

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
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

015-461-44

S&EC

Soil & Environmental Consultants, PA

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

Attached is a proposed design for a Pressure Manifold Septic System for a 4 bedroom single family residence on Lot 6 Lynn Estates in Mecklenburg County, North Carolina.

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March 4, 2005
S & EC Project No. 5-1385s1
Design By: W. Overby

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

Hickory Area Office:
622 Coon Mountain Lane
Taylorsville, NC 28681
Phone: (828) 635-5820
Fax: (828) 635-5820

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 is specified with gravel trenches and p.manifold distribution.
- System will require 3' of gravel from 30" to 66" & Type II or III fill from 0 to 30"
- Repair will require Bord Na Mona peat pretreatment for sandy clay loam saprolite
- Repair trenches will follow specs (gravel and fill) of system.
- French Drain installed above repair field required by Meck Co Health Dept.

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner:	Terrence Atkinson
Address:	9504 Beatties Ford Road Huntersville,NC 28078
Phone:	704 398-8587
County:	Mecklenburg
Location:	Lynn Estates Lot 6
Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Daily Wastewater Production:	480 gpd
System Flow:	35.55

Design Specifications

Drainfield Size:	400
Loading Rate:	0.4gpd/ft2
Depth of Gravel in Trench:	36 in.
Gravel Size:	3, 4, 5, 57, or 6 ASTM
Trench Depth:	66 in.
Trench Width:	36 in.
Septic Tank Size:	1500
Pump Tank Size:	1500
Estimated Supply Line Length:	120
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	20.88
Dosing Volume:	182.84
Supply Manifold:	4 in. SCH 80 PVC
Supply Manifold Length:	4 ft. (minimum)
Supply Manifold Volume:	N/A
Recommended Float Controls:	SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel:	SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.
Pressure Head:	2 ft.
Friction Head:	2.93
Elevation Head:	15.00
Total Dynamic Head:	22.92
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 at Pressure Manifold
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Recommended Pump:	Myers Model ME50 or County Approved Effluent Rated Pump Capable of Delivering ~23 ft.of Head at ~36 gpm Total Flow
Additional Comments:	Soil suitability was performed by S&EC & Mecklenburg County Health Department.

LYNN ESTATES LOT 6
PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	480
SOIL APPLICATION RATE:	0.4 gpd/ft.^{2}
TOTAL AREA TRENCH BOTTOM:	1200
TOTAL LATERAL LENGTH:	400
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	400
SUPPLY LINE LENGTH:	120
TOTAL DYNAMIC HEAD:	22.92
MANIFOLD SIZE:	4 in.SCH 80 PVC
DOSING VOLUME:	182.84
PUMP TANK DRAW DOWN*:	8.7
SEPTIC TANK SIZE:	1500
PUMP TANK SIZE:	1500
RECOMMENDED PUMP:	Myers Model ME50 or County Approved Effluent Rated Pump Capable of Delivering ~23 ft.of Head at ~36 gpm Total Flow

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

Lynn Estates Lot 6

Project No. 5-1385

LAYOUT FOR 4 BEDROOM HOME

February 28, 2005

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM					100.00		
INSTR. 1			100.00				
1	RED			1.30	98.70	80	80
2	YELOW			2.00	98.00	80	80
3	BLUE			2.90	97.10	80	80
4	PINK			4.00	96.00	80	80
5	RED			4.70	95.30	80	80
6	YELOW			5.50	94.50	80	80
7	*ORANGE*	*6.2*		*3.00*	*97.00*	*80*	*80*
8	*BLUE*			*3.80*	*96.20*	*80*	*80*
9	*PINK*			*4.40*	*95.60*	*80*	*80*
10	*RED*			*5.60*	*94.40*	*80*	*80*
11	*ORANGE*			*6.70*	*93.30*	*80*	*80*
12	YELOW	3.8		8.00	92.00	110	80
13	BLUE			4.80	91.00	110	80
14	PINK			6.00	89.80	110	80
15	RED			7.20	88.60	100	80
					Total	**1310**	**1200**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH DEPTH	DISTRIBUTION
** System*	*400*	*0.40*	*Gravel*	*0.40*	*66"*	PRESSURE MANIFOLD
Repair	800	0.20	*Gravel*	0.20	66"	PRESSURE MANIFOLD

Notes:

**System and repair to be installed in saprolite

**Repair will utilize pretreatment due to scl saprolite

**TBM is assumed to be 100'

**All measures in feet

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

**BS, HI, and FS indicate rod readings

Lynn Estates Lot 6

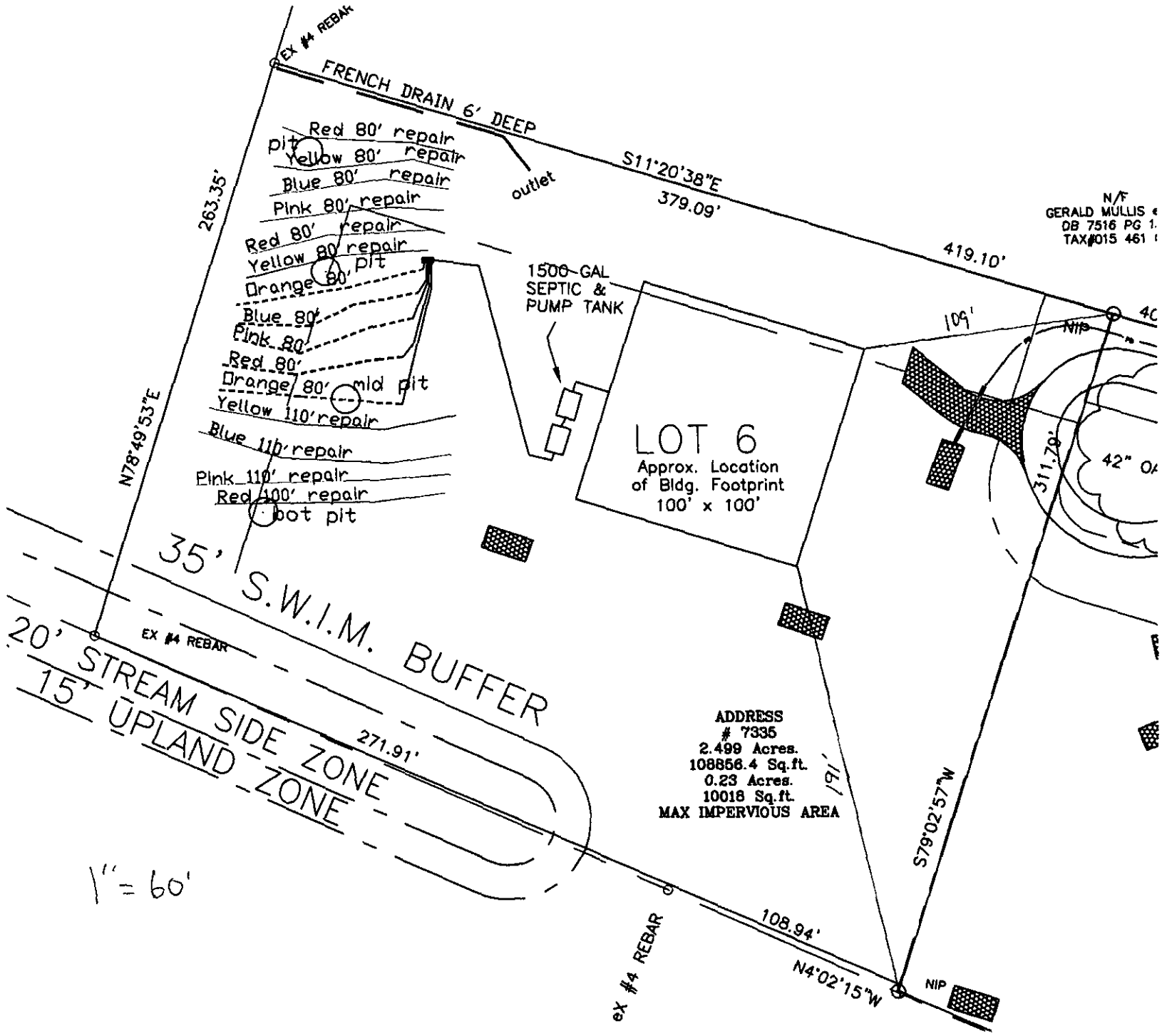
SYSTEM

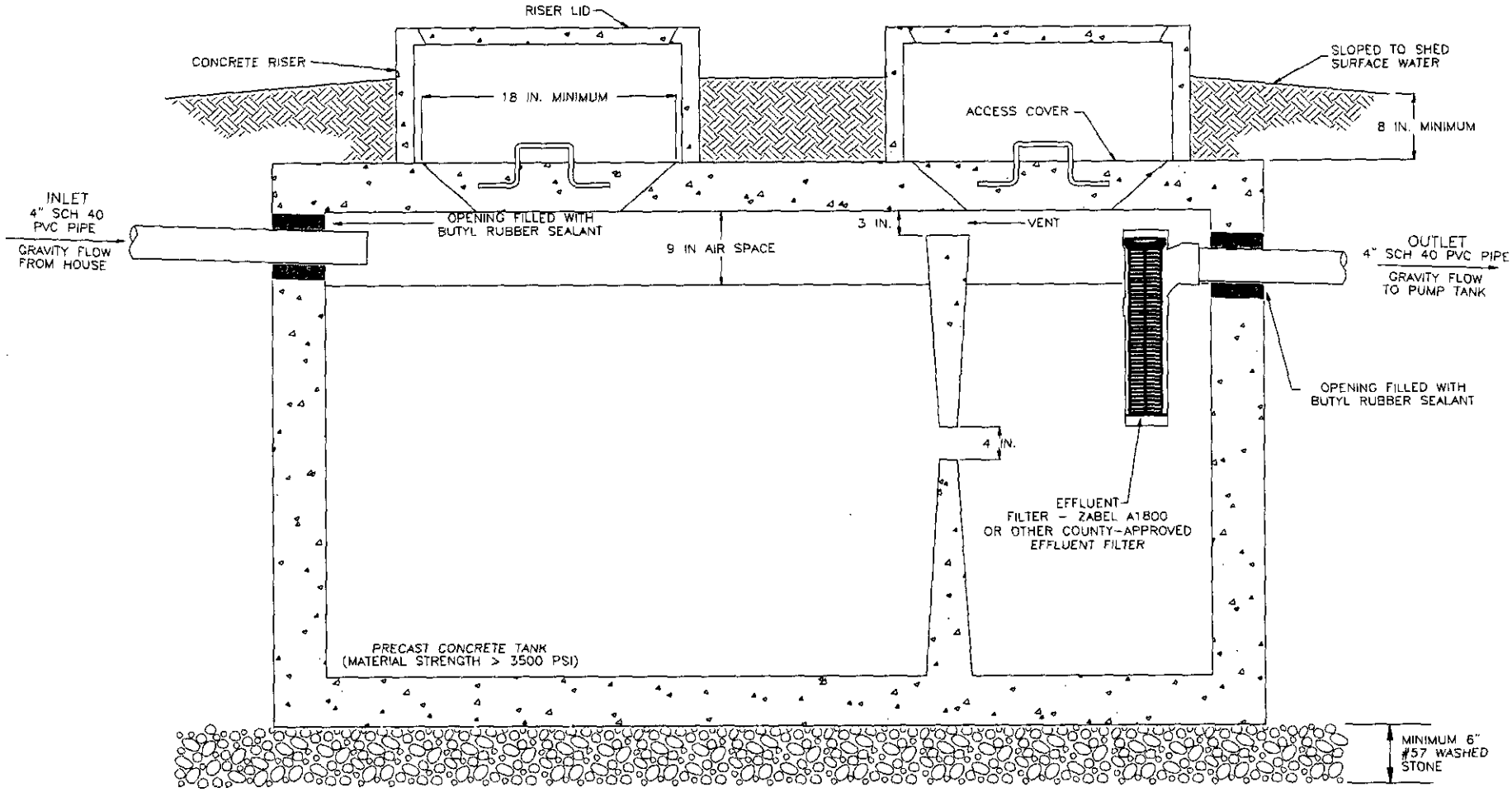
Line #	Color	Elevation	Length	Hole Size	Flow/Tap	gpd	Trench Area	Trench Ltar
7	ORNG	97	**80**	SCH 40 1/2	**7.11**	96.00	240	**0.40**
8	BLUE	96.2	**80**	SCH 40 1/2	**7.11**	96.00	240	**0.40**
9	PINK	95.6	**80**	SCH 40 1/2	**7.11**	96.00	240	**0.40**
10	RED	94.4	**80**	SCH 40 1/2	**7.11**	96.00	240	**0.40**
11	ORNG	93.3	**80**	SCH 40 1/2	**7.11**	96.00	240	***0.40***
	total	**feet =**	***400***	***gal/min =***	**35.55**			
			Des. Flow	**480**				
			Pump Run=	**13.50**				
			soil LTAR	**0.4**				

Lynn Estates Lot 6

REPAIR

Line #	Color	Elev	Length	Hole Size	Flow/Tap	gpd	Trench Area	Line Ltar
1	RED	96.7	80	SCH 80 1/2	5.48	48.00	240	0.20
2	YELLOW	98	80	SCH 80 1/2	5.48	48.00	240	0.20
3	BLUE	97.1	80	SCH 80 1/2	5.48	48.00	240	0.20
4	PINK	96.0	80	SCH 80 1/2	5.48	48.00	240	0.20
5	RED	95.3	80	SCH 80 1/2	5.48	48.00	240	0.20
6	YELLOW	94.5	80	SCH 80 1/2	5.48	48.00	240	0.20
12	YELLOW	92.0	80	SCH 80 1/2	5.48	48.00	240	0.20
13	BLUE	91.0	80	SCH 80 1/2	5.48	48.00	240	0.20
14	PINK	89.8	80	SCH 80 1/2	5.48	48.00	240	0.20
15	RED	88.6	80	SCH 80 1/2	5.48	48.00	240	0.20
	total	feet =	800	gal/min =	54.8			
			Des. Flow	480				
			Pump Run=	8.76				
			LTAR	0.2				


EX #4 REBAR
FRENCH DRAIN 6' DEEP
outlet
S11°20'38"E
379.09'
419.10'
N/F
GERALD MULLIS
DB 7516 PG 1
TAX#015 461
263.35'
N78°49'53"E
Red 80' repair pit
Yellow 80' repair
Blue 80' repair
Pink 80' repair
Red 80' repair
Yellow 80' repair pit
Orange 80'
Blue 80'
Pink 80'
Red 80'
Orange 80' mid pit
Yellow 110' repair
Blue 110' repair
Pink 110' repair
Red 100' repair pit
1500-GAL SEPTIC & PUMP TANK
LOT 6
Approx. Location of Bldg. Footprint 100' x 100'
109'
NIP
311.79'
42" O
35' S.W.I.M. BUFFER
20' STREAM SIDE ZONE
15' UPLAND ZONE
EX #4 REBAR
271.91'
ADDRESS
7335
2.499 Acres.
108856.4 Sq.ft.
0.23 Acres.
10018 Sq.ft.
MAX IMPERVIOUS AREA
191'
S79°02'57"W
108.94'
N4°02'15"W
NIP
eX #4 REBAR
1" = 60'

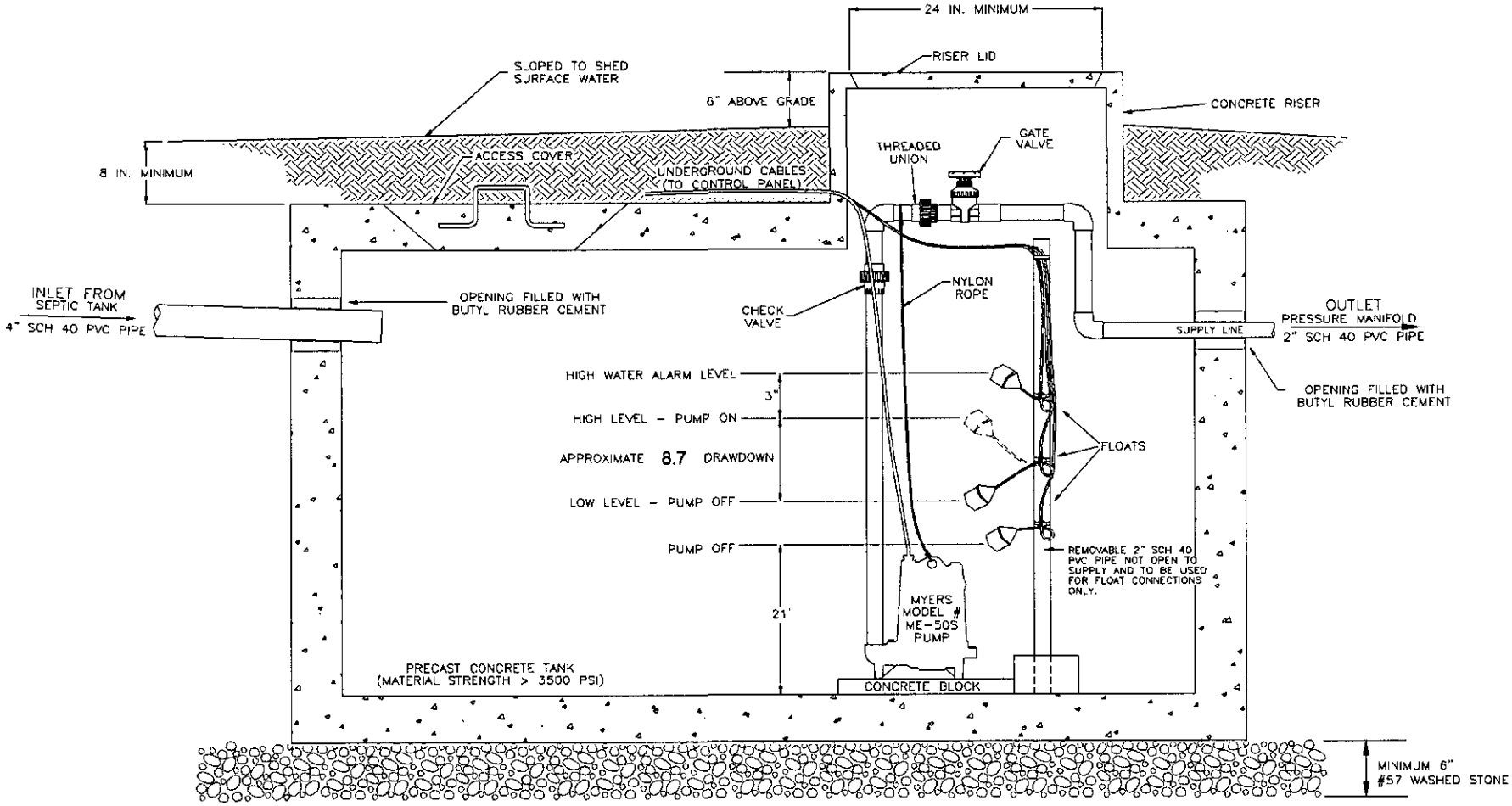


NOTES

1. TANK DIMENSIONS VARY BY MANUFACTURER.

1500 GALLON SEPTIC TANK

PROJECT NO: 4591	PROJECT NAME: **Lynn Estates Lot 6**	S&EC	**Soil & Environmental Consultants, Inc.**
PROJECT MGR.			11010 Raven Ridge Road Raleigh, North Carolina 27614 Phone: (919) 846-5900 Fax: (919) 846-9467 Web Page: www.SandEC.com
SCALE: NTS	SHEET TITLE: SEPTIC TANK DIAGRAM		



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

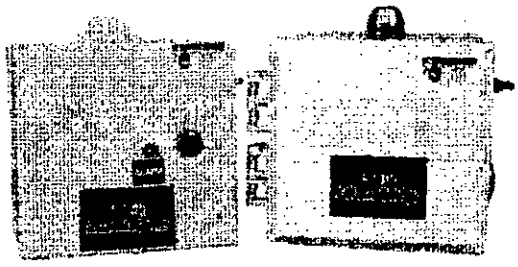
PROJECT NO: 5-1385	PROJECT NAME:	Lynn Estates Lot 6
PROJECT MGR:		
SCALE: NTS	SHEET TITLE:	PUMP TANK DIAGRAM

S&EC
Soil & Environmental Consultants, Inc.
11010 Raven Ridge Road Raleigh, North Carolina 27614 Phone: (919) 846-3900 Fax: (919) 846-9467
Web Page: www.SandEC.com

MODEL 112 Control Panel

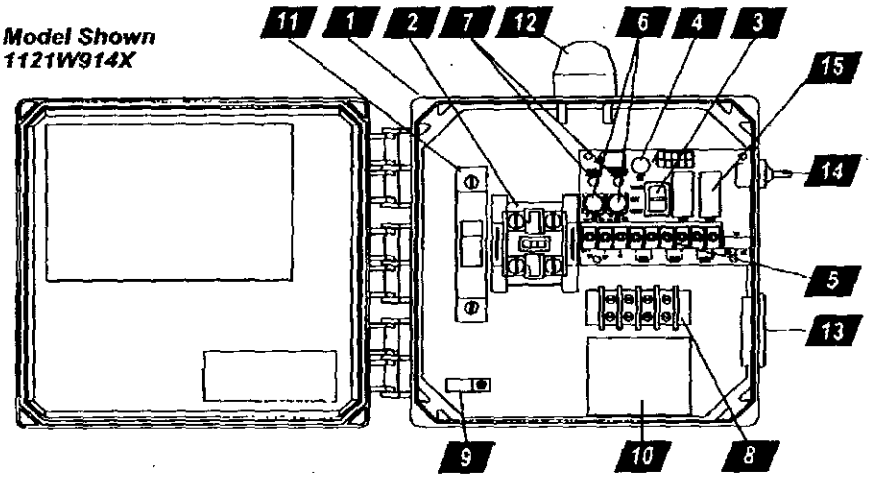
Single phase, simplex motor contactor control.

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)

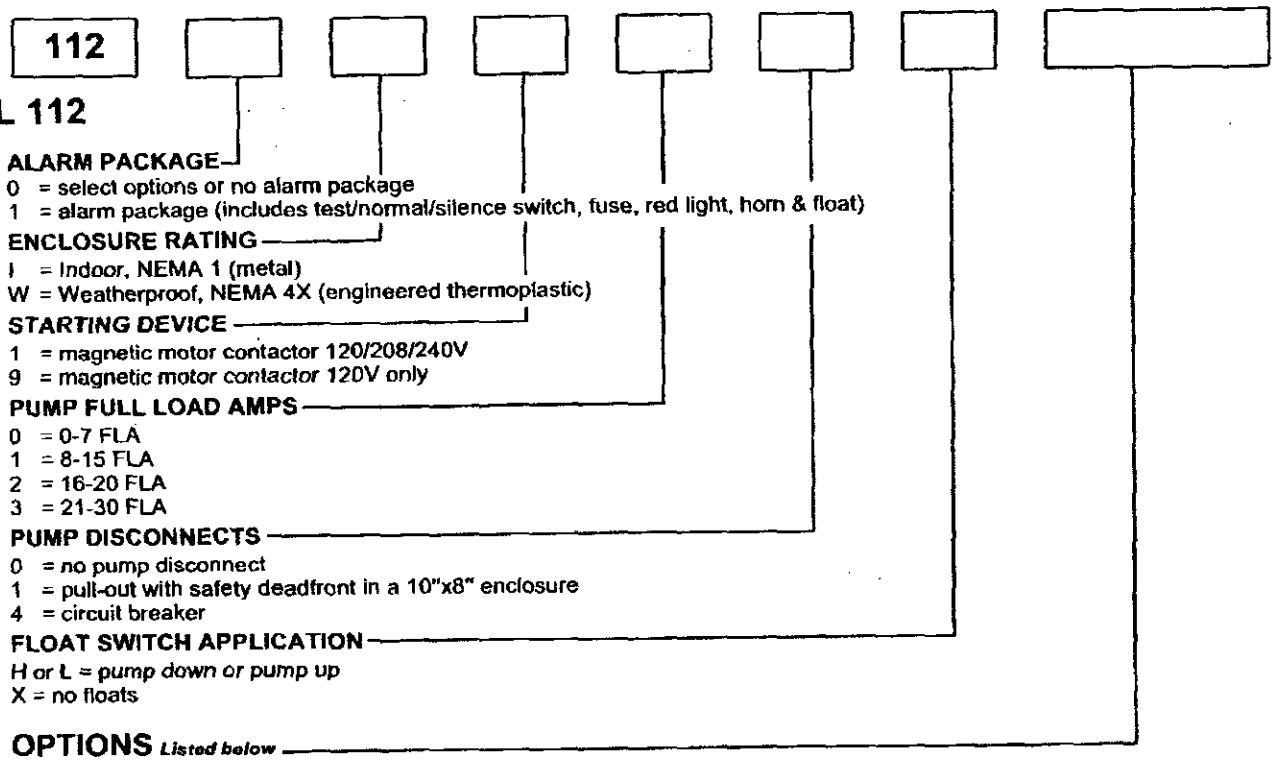
12. **Red Alarm Beacon** provides 360° visual check of alarm condition. **Note:** NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
13. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating). **Note:** NEMA 1 style utilizes an internally mounted buzzer (83 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



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

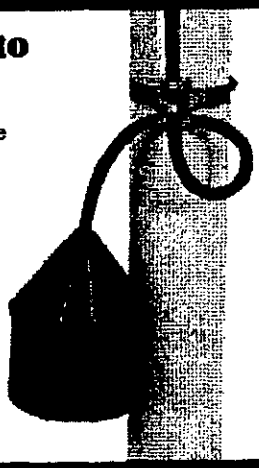
MODEL 112 1 W 9 1 4 H 3A 8A

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

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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

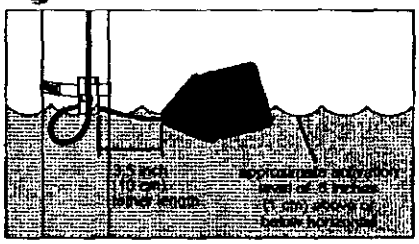
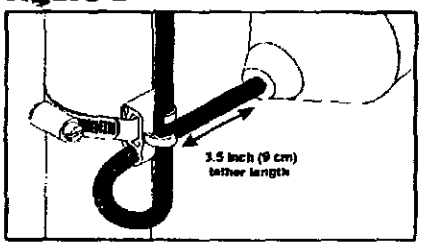


Figure B



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

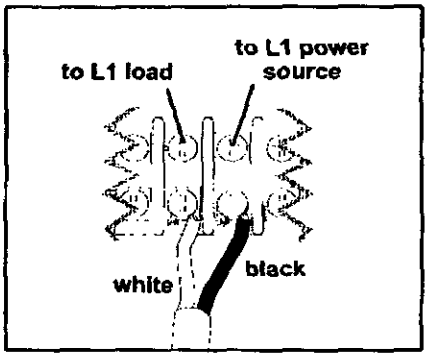
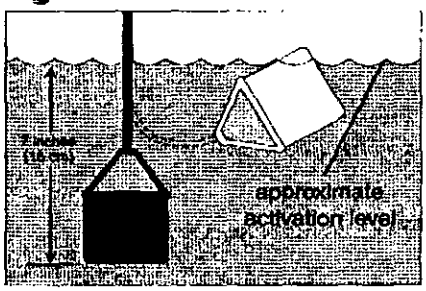


Figure D



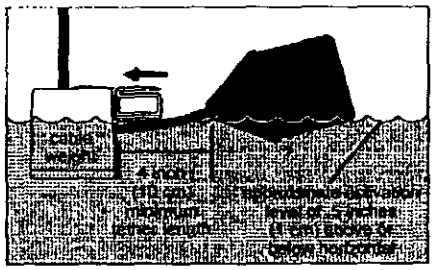
CABLE WEIGHT

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



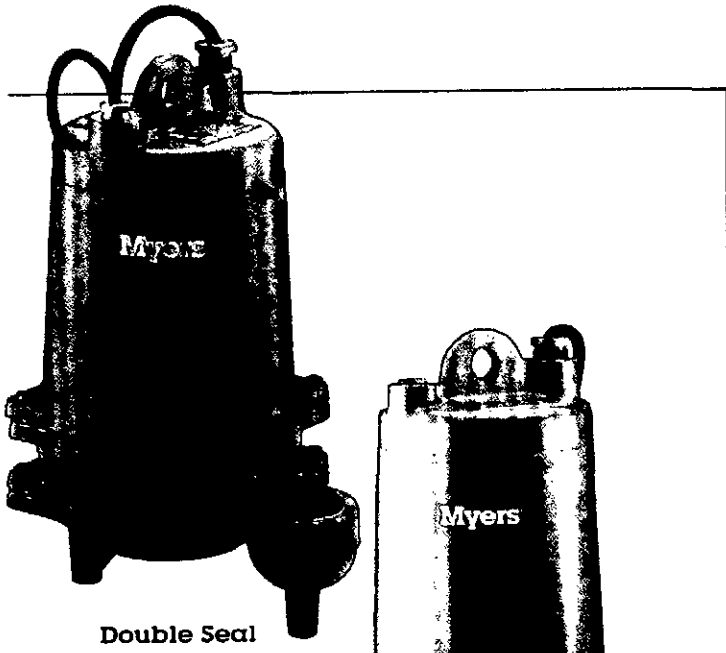
CONTROLS
SJE Rhombus®
SJ ELECTRO SYSTEMS, INC.
22650 County Highway 6 ■ P.O. Box 1708 ■ Detroit Lakes, Minnesota 56502 USA
1-888-DIAL-SJE (1-888-342-5753) ■ Phone: 218-847-1317 ■ Fax: 218-847-4617
E-mail: sje@sjerhombus.com

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

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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

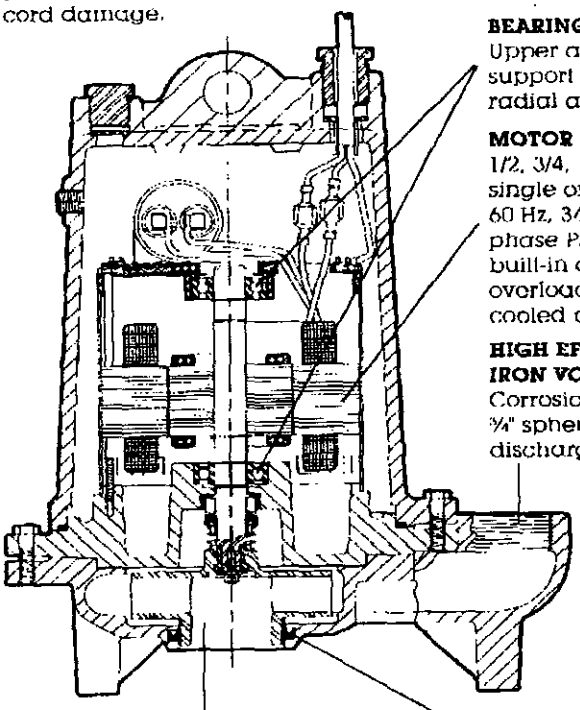
POWER CORD
Jacket sealed with compression fittings. Individual wires potted with epoxy to prevent wicking in case of cord damage.

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

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

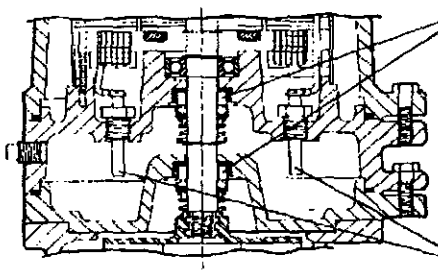
MOTOR
1/2, 3/4, 1 and 1-1/2 HP single or three phase. 60 Hz, 3450 RPM. Single phase PSC motors have built-in on winding overload protection, oil-cooled and lubricated.

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.

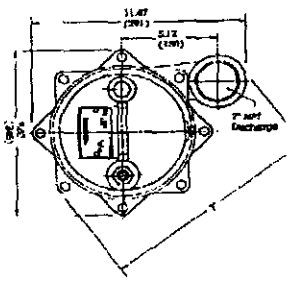
VOLUTE/IMPELLER SEAL RING
Maintains high efficiency and reduces recirculation. Replaceable.

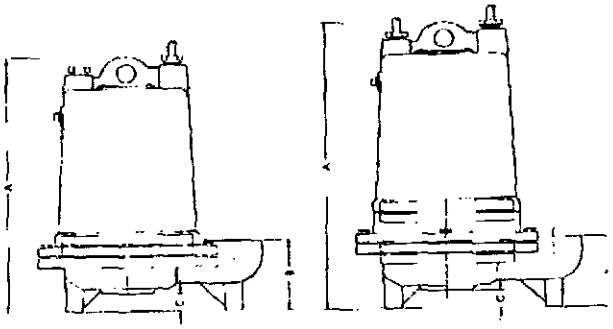


SHAFT SEAL(S)
Carbon and ceramic faces. Optional dual tandem seals. Extends motor life.

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

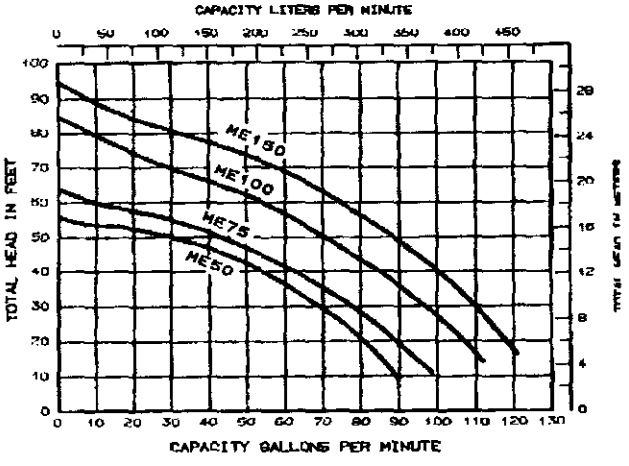
DIMENSIONS





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



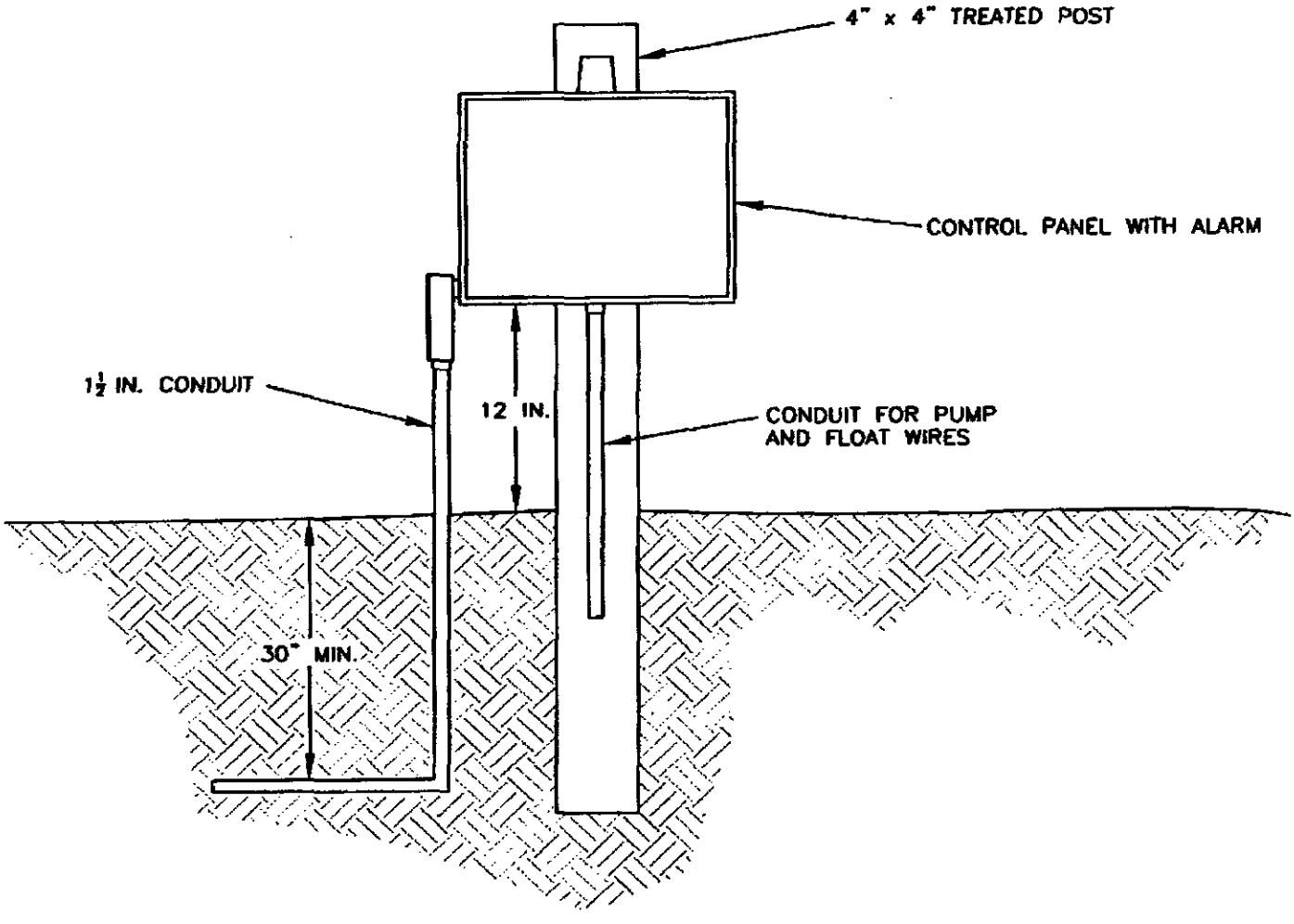
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PENTAIR PUMP GROUP

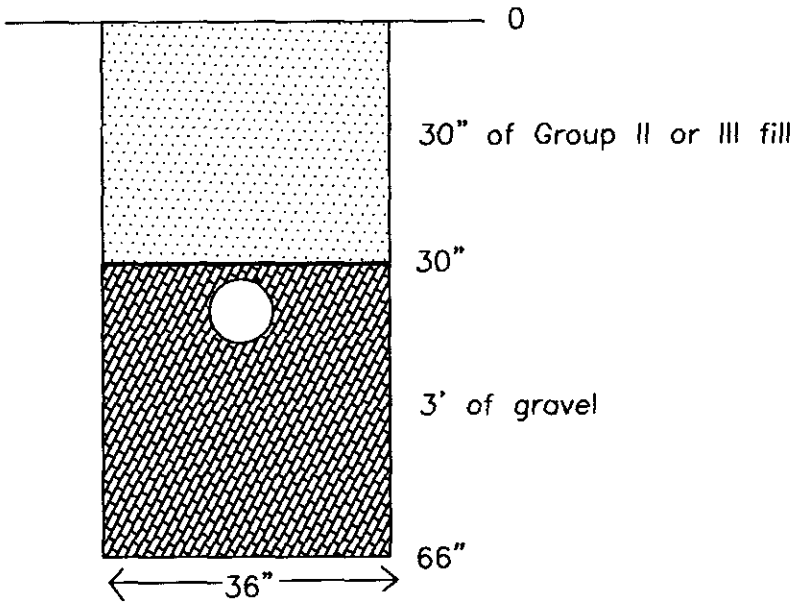
F. E. Myers, 1101 Myers Parkway, Ashland, Ohio 44805-1969
419/289-1144, FAX: 419/289-6658, www.femyers.com
Myers (Canada), 269 Trillium Drive, Kitchener, Ontario N2G 4W5
519/748-5470, FAX: 519/748-2553

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.

TYPICAL TRENCH DETAIL



1" = 2'

CALCULATIONS

Location Lynn Estates Lot 6

Project Number 5-1385

Lot No: lot 6

No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.4	$^{gal}/_{ft^2\ day}$
EZ-Lay? (YES OR NO)	no	
Supply Line Length	120	ft.
Supply Line Volume	20.88	gal.
Required Feet of Line	400	ft.
Amount of Line from Layout	400	ft.
Gallons per Minute	35.55	$^{gal}/_{min}$
Required Septic Tank Capacity	1500	gal.
Minimum Standard Tank Size	1500	
Lateral Line Volume	261.2	gal.
Dosing Volume	182.84	gal.

Note: Dosing Volume based on 70% of the lateral line volume.

Tank Draw Down	8.7	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	5.14	*minutes*
Estimated Elevation Head	15	ft.
Pressure Head	2	ft.
Friction Factor	2.44	ft./100 ft. *(From the interpolater.)*
Friction Head	2.93	ft.
Total Dynamic Head (+15%)	22.92	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
35.55	2.44
40	3.03
40.67	3.13
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Profile Description
Mecklenburg County
Terrance Atkinson–Lynn Estates Lot 6

Pit 1
Upper Left Corner (repair)

Horizon	Depth	Color	Mottles	Texture	Structure
A	0-4″	10YR 3/4		Sandy loam	Weak Granular
Bt1	4-14″	7.5YR 4/6		Clay loam	Weak Med. Subangular Blocky
Bt2	14-38″	10YR 5/8		Clay	Strong Massive
BC	38-54″	10YR 5/6 7.5YR 6/8		Fine Sandy Clay Loam	Weak Medium Subangular blocky
BC	54-72″	Multicolor 10YR 7/8		Sandy Loam	Structure less

Pit 2
Lower Pit (system)

Horizon	Depth	Color	Mottles	Texture	Structure
A	0-9″	10YR 4/4		Sandy loam	Granular
Bt1	9-24″	10YR 4/6		Sandy clay loam	Subangular blocky
Bt2	24-52″	7.5YR 5/6		Clay	Angular blocky
C	52-77″	multicolor		Loam	Saprolite

Pit 3
Upper Middle Lot (repair)

Horizon	Depth	Color	Mottles	Texture	Structure
A	0-1″	10YR 3/3		Sandy loam	Granular
Bt	1-36″	7.5YR 4/6		Clay	Subangular blocky
BC	36-52″	multicolor	10YR 4/6	Clay loam	Subangular blocky

Pit 4

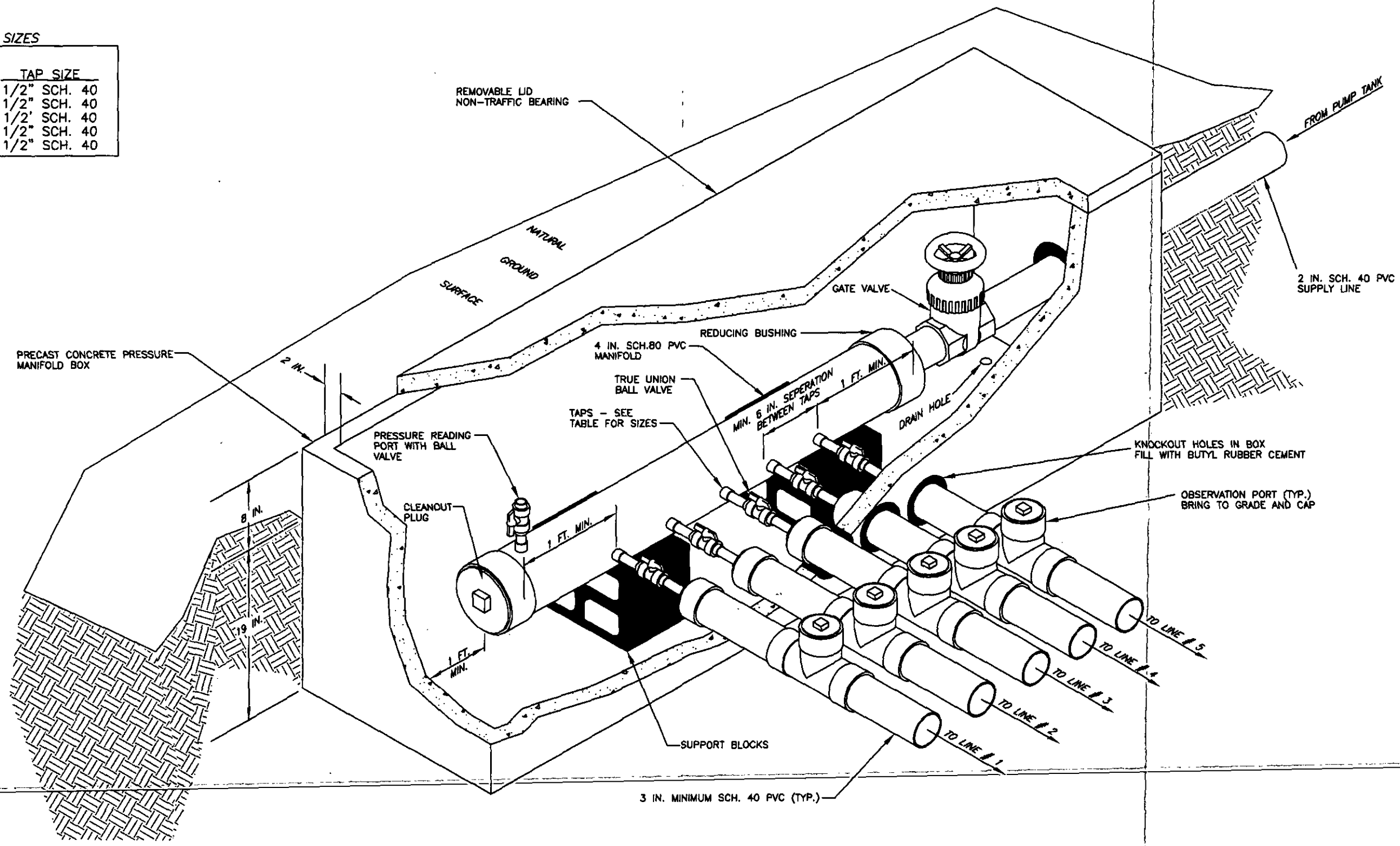
Middle of Lot (system)

Horizon	Depth	Color	Mottles	Texture	Structure
A	0-6″	10YR 4/4		Sandy loam	Weak Granular
B	6-32″	10YR 4/6		Clay	Massive
BC	32-53″	10YR 4/6 10YR 5/8	10YR 4/6	Sandy Clay loam	Subangular blocky
C	53-77″	Multicolor 10YR 6/8		Sandy Loam	Structrless Saprolite

PRESSURE MANIFOLD DETAILS
FOR
LOT 6 LYNN ESTATES

TAP SIZES

LINE No.	TAP SIZE
1	1/2" SCH. 40
2	1/2" SCH. 40
3	1/2' SCH. 40
4	1/2" SCH. 40
5	1/2" SCH. 40



FEE: 200.00
DATE: 12/3/03 JKA
VISA

APPLICATION FOR IMPROVEMENT PERMIT FOR RESIDENTIAL SITE INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM

I J CRT

TYPE APPLICATION: ___ NEW SYSTEM ___ EXPANSION/ ALTERATION OF EXISTING SYSTEM ___ REPAIR OF EXISTING SYSTEM

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

FILE #: 5453B

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION: 4

TAX/PARCEL NUMBER: 015-461-27

STREET ADDRESS: 7335 Howell Ridge Road

SUBDIVISION OR MOBILE HOME PARK NAME: LYNN ESTATES

LOT NUMBER: Six (6)

TYPE OF BUILDING (CHECK ONE):

___ SINGLE MOBILE HOME(S)
___ DOUBLE WIDE (D)
X HOUSE (H)
___ MODULAR HOME (M)
___ MULTIPLE FAMILY (U)
___ OTHER (O)

TOWNSHIP (CHECK ONE):

___ 0 MECKLENBURG
___ 1 CHARLOTTE
___ 2 DAVIDSON
___ 3 CORNELIUS
___ 4 PINEVILLE
___ 5 MATTHEWS
X 6 HUNTERSVILLE
___ 7 MINT HILL

HEATED SQUARE FOOTAGE: 3,000-5,000

NUMBER OF BEDROOMS: 4 NUMBER OF OCCUPANTS:

CLOSING DATE_____

FOUNDATION FOR RESIDENCE:

___ WITHOUT BASEMENT
___ ON SLAB
___ CRAWL SPACE
X WITH BASEMENT /PLUMBING
___ WITH BASEMENT /NO PLUMBING

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

WILL THERE BE A HOME BUSINESS IN THE RESIDENCE: ___ YES X NO TYPE: _____

WATER SUPPLY (CHECK ONE):

___ COMMUNITY (C)
___ SHARED WELL (S)
X MUNICIPAL (M)
___ OTHER 'SPRINGS' (O)
___ PRIVATE WELL (P)

IF ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY, PLEASE SHOW LOCATION ON PLAT:

BURIED CABLES, LANDFILLS, STUMPHOLES ___ YES X NO
EXISTING WASTEWATER SYSTEMS ___ YES X NO
EASTMENTS OR RIGHT-OF-WAYS X YES ___ NO
WELL, SPRINGS OR WATERLINES ___ YES X NO
DESIGNATED WETLANDS ___ YES X NO

PROPERTY OWNER:

NAME: ATKINSON (LAST) TERRENCE (FIRST) L. (MI)

ADDRESS: 9504 BEATTIES FORD RD

CITY: HUNTERSVILLE STATE: N.C. ZIP: 28078

DAYTIME PHONE: ( ) 704-507-4752

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: (LAST) (FIRST) (MI)

DAYTIME PHONE: ( ) –

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 11/11/03

An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

SIGNED: Terrence L. Atkinson DATE: 12/02/03

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR., SUITE 211, 700 N. TRYON ST., CHARLOTTE, N.C. 28202., (704) 336-5102

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

Sheet: 1
Property ID: 015-461-44
Lot #: 6
File #: 5453B
Code: 3

ACS

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Terrence Atkinson
Applicant:
Address: 9504 Beatties Ford Road, Huntersville, N. C. 28078
Date Evaluated: 02/05/2004
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: 2.5a
Location of Site: 7335 Howell Ridge Road
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 15	0-3	GR/CL	FR/SEXP/SS/SP	>20" TO SOIL WETNESS	20	N/A	NONE	US
		3-20	SBK/C	VFI/EXP/VS/VP					
2	LS, 10	0-5	GR/SCL	FR/SEXP/SS/SP	>27" TO SOIL WETNESS	27	"	"	"
		5-27	SBK/C	VFI/EXP/VS/VP					
3	LS, 8	0-4	GR/SCL	FR/SEXP/SS/SP	>26" TO SOIL WETNESS	26	"	"	"
		4-18	SBK/SCL	FR/SEXP/SS/SP					
		18-26	SBK/SC	VFI/EXP/VS/VP					
4	LS, 10	0-4	GR/SCL	FR/SEXP/SS/SP	"	"	"	"	"
		4-26	SBK/SC	VFI/EXP/VS/VP					
5	LS, 8	0-7	GR/SCL	FR/SEXP/SS/SP	"	"	"	"	"
		7-26	SBK/SC	VFI/EXP/VS/VP					

Description	Initial System	Repair System
Available Space (.1945)	US	US
System Type(s)		
Site LTAR		

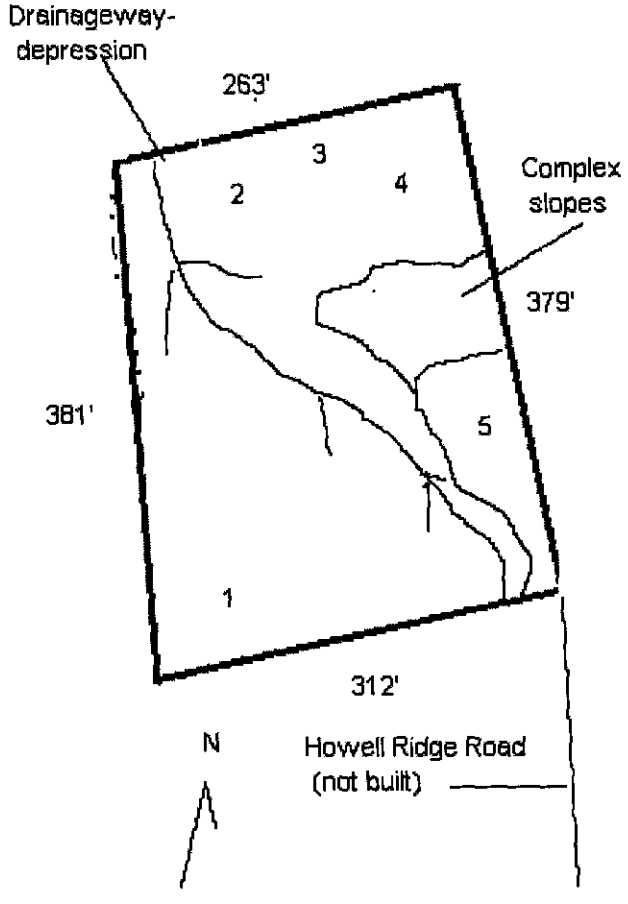
Other Factors (.1946): _____
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 2/11/2004, W. R. Marlin
Others Present:

FILE # 5453B

COMMENTS: 100% repair

LANDSCAPE POSITIONS	GROUP	TEXTURES	.1955 LTAR	CONSISTENCE MOIST	WET
R-RIDGE	I	S-SAND	1.2 - 0.8		
S-SHOULDER SLOPE		LS-LOAMY SAND		VFR-VERY FRIABLE	NS-NON-STICKY
L-LINEAR SLOPE				FR-FRIABLE	SS-SLIGHTLY STICKY
FS-FOOT SLOPE	II	SL-SANDY LOAM	0.8 – 0.6	FI-FIRM	S-STICKY
N-NOSE SLOPE		L-LOAM		VFI-VERY FIRM	VS-VERY STICKY
H-HEAD SLOPE				EFI-EXTREMELY FIRM	NP-NON-PLASTIC
CC-CONCLAVE SLOPE	III	SI-SILT-	0.6 – 0.3		SP-SLIGHTLY STICKY
CV-CONVEX SLOPE		SIL-SILT LOAM			P-PLASTIC
T-TERRACE		CL-CLAY LOAM			VP-VERY PLASTIC
FP-FLOOD PLAN		SCL-SANDY CLAY LOAM			
		SICL-SILTY CLAY LOAM			
	IV	SIC-SILTY CLAY	0.4 – 0.1		
		C-CLAY			
		SC-SANDY CLAY			

STRUCTURE	MINERALOGY
SG-SINGLE GRAIN	SLIGHTLY EXPANSIVE
M-MASSIVE	
CR-CRUMB	EXPANSIVE
GR-GRANULAR	
SBK-SUBANGULAR BLOCKY	
ABK-ANGULAR BLOCKY	
PL-PLATY	
PR-PRISMATIC	



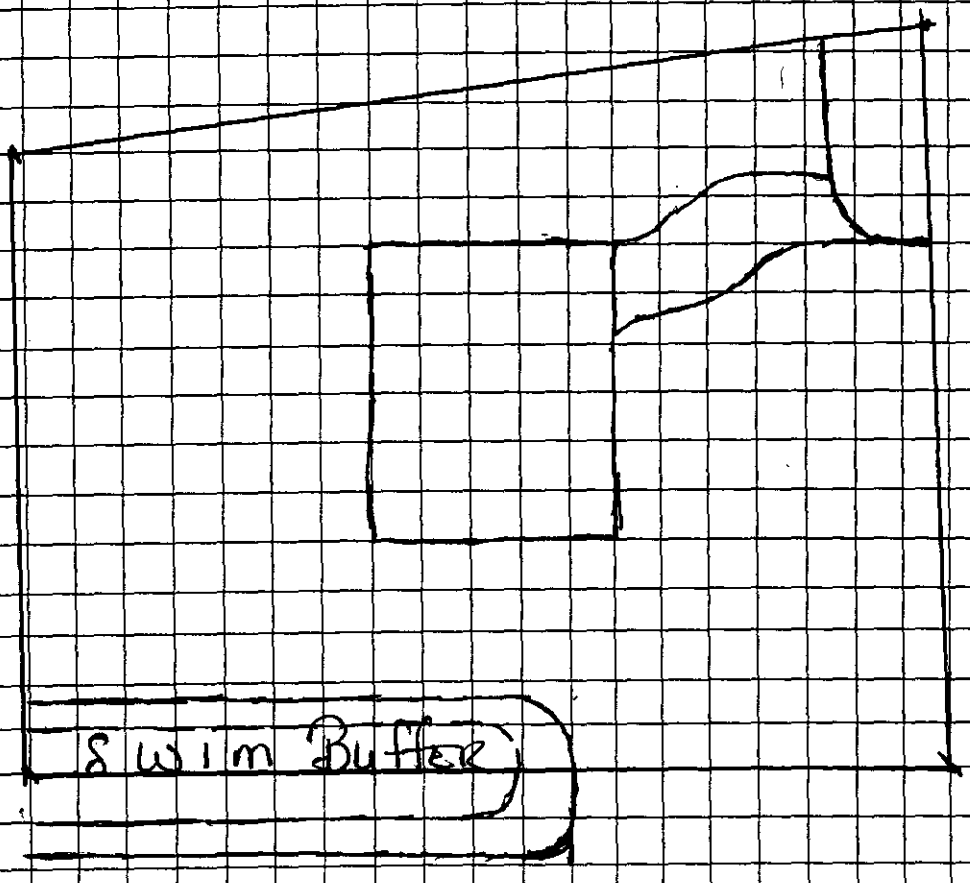
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON STREET
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 5453B

TC: 015-461-39

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.



APPROVAL DATE _____

OWNER/AGENT SIGNATURE

DATE

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date: 12/03/03
Receipt #: 19966
Check / Auth #: VISA 175532
Received By: AIDOOJK

Amount: 1,000.00
Tendered: 0.00
Returned: 0.00

Account Information

Account #: 200000
Contractor: AIKINSON TERRENCE L
Attn:
Address: 9504 BEATTIES FORD ROAD
Address:
City/State/Zip: HUNTERSVILLE, NC 28078

Item	Description	Permit#	Quantity	Unit Price	Total Price
0701	Improvment Permit App-Residen HOWELL RIDGE ROAD LOT 1,3-6		1	1,000.00	1,000.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
50.00					

Rob Wallace
304-635-0804
7335
Howell Ridge Rd
015-461-44
Lot 6 Hurricane
5453B
VM 1/14/10
10:45

PRESSURE MANIFOLD DETAILS
FOR
LOT 6 LYNN ESTATES

TAP SIZES

LINE No.	TAP SIZE
1	1/2" SCH. 40
2	1/2" SCH. 40
3	1/2" SCH. 40
4	1/2" SCH. 40
5	1/2" SCH. 40

