

4308 PIONEER CT

13717308

7/18/08

marliwr

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

2008 DEQ
UTS
LD

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 15331 WASPS App #:

Primary ES assigned to project: SS

Secondary ES assigned to project:

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

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: ___ Were sufficient auger borings made?	Yes ☐	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR	Yes ☐	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☐	No ☐	N/A ☐
.1945(b)	Proposed System Type stated-Repair	Yes ☐	No ☐	N/A ☐
130A-336 (a)(3)	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 & WW characteristics?	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 ☐

H. 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: _____

OP issued date: _____

Review performed by: IR Date performed: 7-31-08

LD

Groundwater & Wastewater Services
Septic Project File & Data Review Worksheet

GWS File #: 15531 WASPS App #: 2147

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			
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& .1945(b)	Number of auger borings made: 7+ Were sufficient auger borings made?	Yes ☐	No ☐	N/A ☐
.1939(d), .1955, .1956, .1957	LTAR .3 consultant	Yes ☐	No ☐	N/A ☐
	Improvement Permit/Construction Authorization			
.1937(g) 130A-336(a)	Proposed System Type stated-Initial	Yes ☑	No ☐	N/A ☐
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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: 4/29/08 MW

OP issued date: 5/9/08 MW

Review performed by: _____ Date performed: 6-12-07

3752 D.C

FEE: 100.00
DATE: 7-28-08
CRT I Charged-B37730

APPLICATION FOR APPROVAL TO USE AN EXISTING ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM
MECKLENBURG COUNTY - GROUNDWATER & WASTEWATER SERVICES
700 N. Tryon St., Suite 211 Charlotte, NC 28202
Phone: (704) 336-5103 Fax: (704) 336-6894

GWS – UES.APP 06/07

FILE #: 15331

TYPE APPLCATION:

- ☐ ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A / M)
- ☒ ADDITION - RENOVATION OR GARAGE WITH NO MAJOR CHANGES (X)
- ☐ EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
- ☐ COMMERCIAL OR INDUSTRIAL (N)

PERSON FILING APPLICATION:

NAME: Dave Osborne
ADDRESS: PO BOX 23464
CITY: CHARLOTTE
STATE: NC ZIP: 28227
PHONE: 704-201-5430
ALTERNATE PHONE:

PROPERTY OWNER:

NAME: SAME
ADDRESS:
CITY:
STATE: ZIP:
PHONE:
ALTERNATE PHONE:

JOB LOCATION INFORMATION

TAX/PARCEL #: 13717307
STREET ADDRESS: 4314 Pioneer CT
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME:
LOT #: 8

TOWNSHIP:

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

WATER SUPPLY:

- ☒ MUNICIPAL (M)
- ☐ COMMUNITY (C)
- ☐ PRIVATE WELL (P)
- ☐ SHARED WELL (S)
- ☐ OTHER 'SPRINGS' (O)

RESIDENTIAL PROPERTY TYPE:

- ☒ HOUSE (H)
- ☐ MODULAR HOME (M)
- ☐ MULTIPLE FAMILY (U)
- ☐ SINGLE MOBILE HOME (S)
- ☐ DOUBLE WIDE (D)
- ☐ OTHER (O)

OCCUPANCY (both fields are required):

NUMBER OF BEDROOMS: 3
NUMBER OF OCCUPANTS: 3

COMMERCIAL / INDUSTRIAL PROPERTY TYPE:

TYPE OF BUSINESS:
EMPLOYEES PER SHIFT:
OF SHIFTS:

INDUSTRIAL WASTES? ☐ YES ☐ NO
UNDERGROUND STORAGE TANKS? ☐ YES ☒ NO

ADDITION TYPE ATTACHED TO EXISTING STRUCTURE:

- ☐ BEDROOM
- ☐ BATHROOM
- ☐ KITCHEN
- ☐ DINING ROOM
- ☐ LIVING ROOM
- ☐ DEN
- ☐ GARAGE
- ☐ SUNROOM
- ☐ PORCH
- ☒ DECK
- ☐ OTHER

ADDITION TYPE DETACHED FROM EXISTING STRUCTURE:

- ☐ DETACHED GARAGE
- ☐ DETACHED GARAGE WITH PLUMBING
- ☐ POOL HOUSE
- ☐ SHOP
- ☐ BARN
- ☐ STORAGE SHED
- ☐ DETACHED PORCH / DECK
- ☐ OTHER

*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 the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Dave Osborne — Owner's/Agent's Signature
7-28-08 — Date

*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. This approval is granted in accordance with the provisions of Laws and Rules for Sanitary Sewage Collection, Treatment and Disposal 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 y this Department.
- This permit is not transferable.

☐ ADDITION / RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE
☐ MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE

Use existing for deck approval

EHS Signature — 7/31/08 — Date

PLOT PLAN FOR PERMIT APPLICATION
ONE/TWO FAMILY, MODULAR, MOBILE HOME OR ZONING USE

LOCATION

STREET # (N,S,E,W) | STREET NAME | (AV,RD,ST, etc)

4314 | Dinwiddie Ct

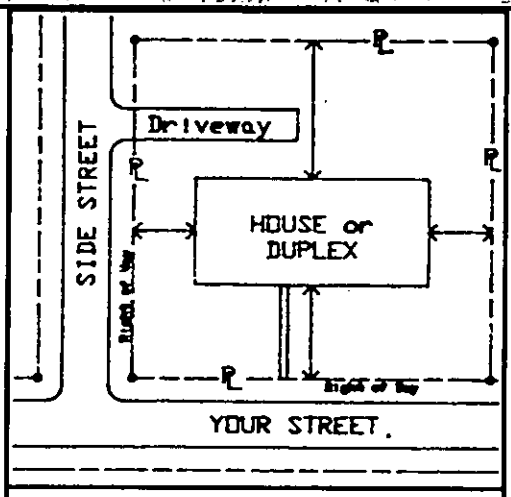
SUITE/UNIT(S):

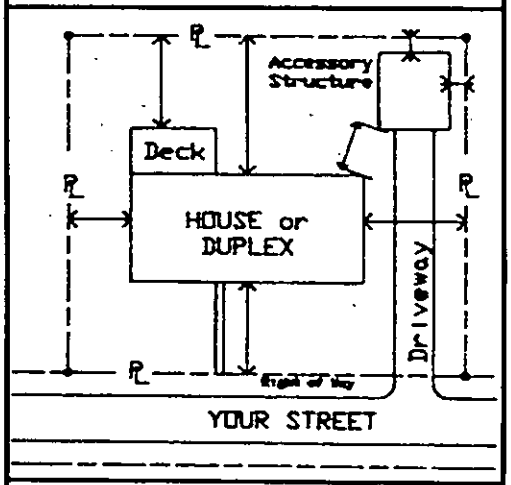
PERMIT #

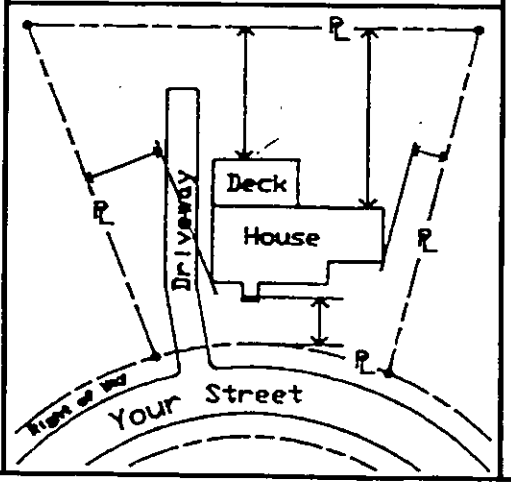
TAX JURISDICTION: *(Check One)*
☐ 0-Mecklenburg ☐ 1-Charlotte ☐ 2-Davidson ☐ 3-Cornelius
☐ 4-Pineville ☐ 5-Matthews ☐ 6-Huntersville ☑ 7-Mint Hill

TAX PARCEL # 139-113-01 | JOB # 281558

EXAMPLES/PLOT PLAN





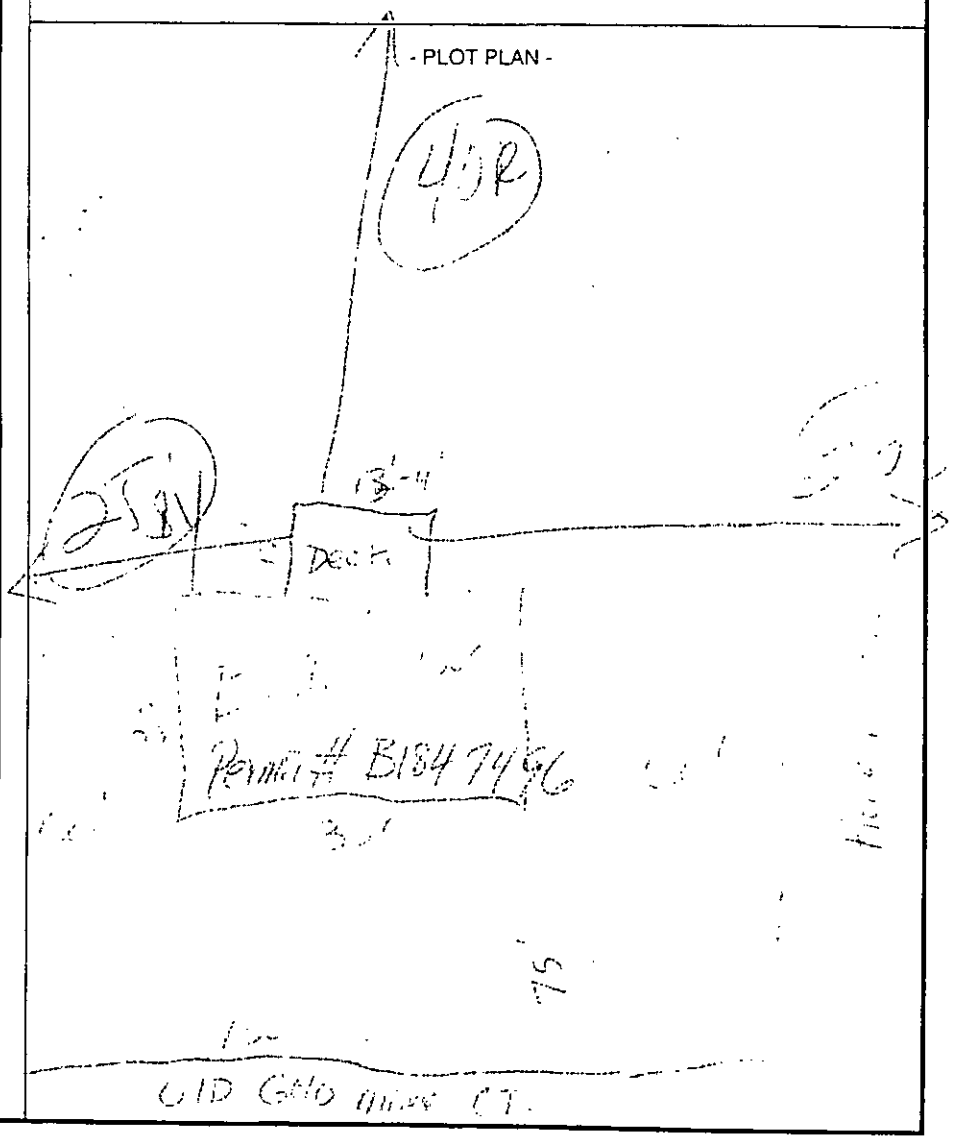


- INSTRUCTIONS -

In the space provided below, draw plot plan as neatly and accurately as possible, from survey if available.

1. Draw street(s) and right-of-way(s).
2. Draw property lines with dimensions.
3. Draw proposed and existing buildings showing any attached porch(es), deck(s), chimney(s), carport(s), or garage(s), etc...
4. Show distances of buildings from property lines or other structures.
5. Separate application and plot plan required for each building.

- PLOT PLAN -



ALL EXISTING AND PROPOSED BUILDING(S) ON LOT ARE SHOWN WITH MEASUREMENTS INDICATED

I. [signature] 7-23-06 Dawn Claiborne

APPLICANT'S SIGNATURE | DATE | PRINT APPLICANT'S NAME

APPROVED BY

MECKLENBURG COUNTY LAND USE AND ENVIRONMENTAL SERVICES AGENCY
P.O. BOX 31097 • CHARLOTTE, NC 28231-1097 • 704/336-2831

FILE NUMBER: 15331

SEPTIC FEE: 200.00
DATE: 4/5/07
JHA B31730

Revised On: January 3, 2007

APPLICATION NUMBER: 2147

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: 137 17 307
STREET ADDRESS: 4314 Pioneer CT.
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION NAME: Bain Bridge
LOT #: LOT SIZE (acres): 3/4
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: 2100
NUMBER OF BEDROOMS: 3
NUMBER OF OCCUPANTS: UNKNOWN 4
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)*:
☐ ANY TYPE ☑ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____
8A. RANK: 1

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: Ranson Lee
ADDRESS: Black Rd.
CITY: Mint Hill
STATE: NC ZIP: 28227
HOME PHONE: WORK PHONE: 704-361-9984
MOBILE PHONE: FAX:

11. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:
NAME: Dave Osborne
ADDRESS: PO Box 23464
CITY: Charlotte
STATE: NC ZIP: 28227
HOME PHONE: 704-545-6709 WORK PHONE:
MOBILE PHONE: 704-201-5430 FAX: 704-573-9458

12. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____
13 WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? _____

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.

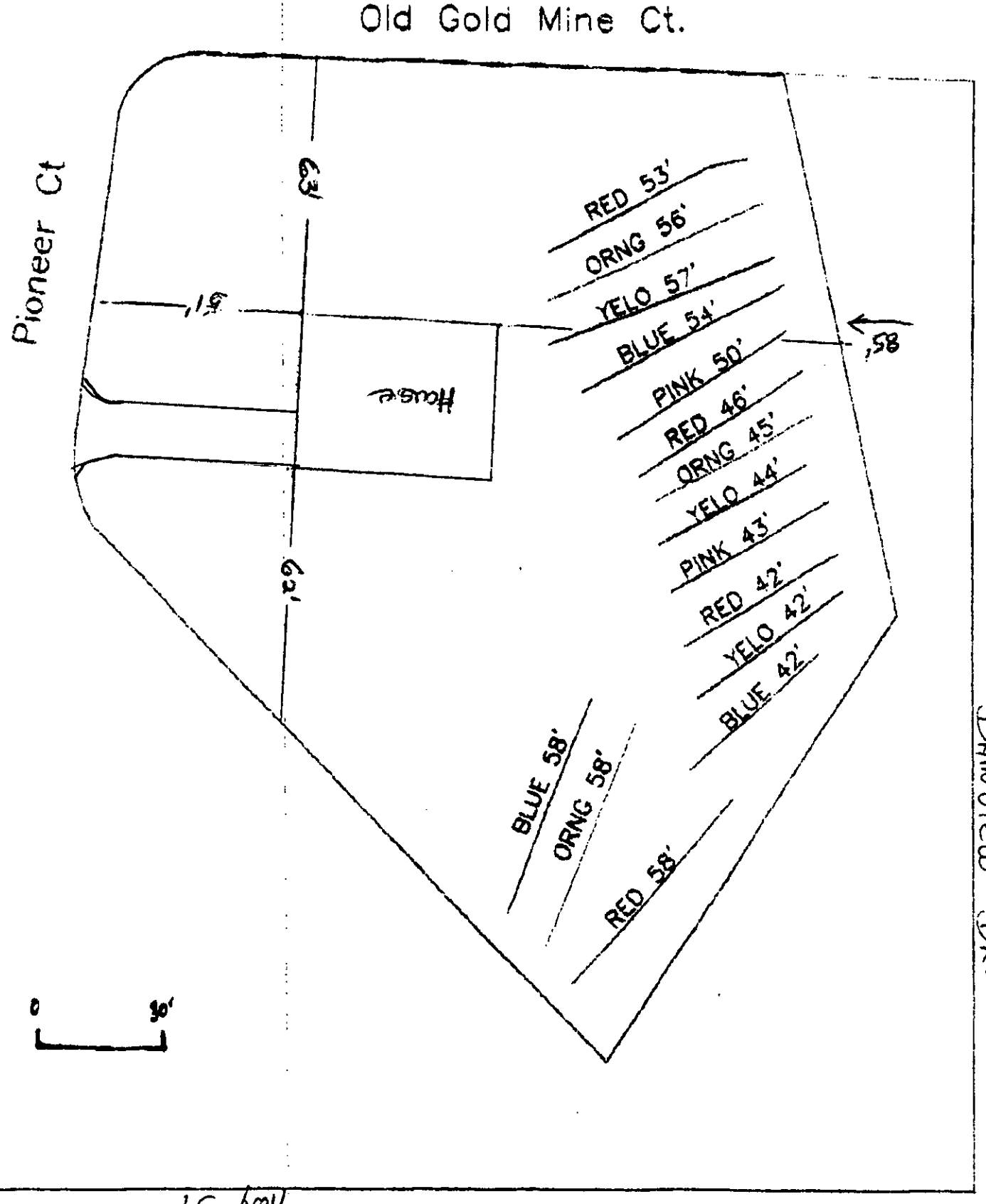
Dave Osborne 4-5-07
Property Owner's or Owner's Legal Representative Signature Date

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-GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211, CHARLOTTE, NC 28202 PHONE: (704) 336-5103 FAX: (704) 336-6894


Old Gold Mine Ct.
Pioneer Ct
63'
62'
19'
58'
House
RED 53'
ORNG 56'
YELO 57'
BLUE 54'
PINK 50'
RED 46'
ORNG 45'
YELO 44'
PINK 43'
RED 42'
YELO 42'
BLUE 42'
BLUE 58'
ORNG 58'
RED 58'
0
30'
Bayview Dr.
Hwy 51
Mint Hill

SEPTIC SYSTEM DESIGN REVIEW WORKSHEET

File: 15331

Address: 4314 Pioneer Ct.

PID #: 137-173-07

Subdivision: Bainbridge

Lot #:

Comments:

1. Based on Bill's soil report from 3/29/04 the primary & repair drain fields are located in fill, massive structure, and expansive clay. This lot was evaluated with pits.
2. Multiple denial letters have been issued for this site dating back to 1996.
3. Additional fee for supplemental soil evaluation will be required if the applicant wants to proceed further. Back hoe pits will be required.

Reviewed By: Trevor Thomason

Date: April 20, 2007

Status: Approved **X Disapproved** Pending

* APPROVED ON 6-4-07 TCT

GWS Septic System Design Review

GWS File #: 15331	Approved	Disapproved
Design Review: TCT 6-4-07	☒	☐
Field Review: 6/12/07	☒	☐

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

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

Sheet: 1
Property ID: 137-173-07
Lot #:
File #: 15331
Code: 3

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: James R. Lee
Applicant:
Address: 9500 Blair Road, Charlotte, N. C. 28227
Date Evaluated: 3/25/04
Proposed Facility: Residence
Design Flow (.1949): 360gpd
Property Size: .7a
Location of Site: 4314 Pioneer Ct.
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 6	0-37	MIXED FILL		2.5Y5/2@34"	N/A	N/A	NONE	US
		37-50	M/C	VFI/EXP/VS/VP					
2	"	0-33	MIXED FILL		"	"	"	"	"
		33-52	M/C	VFI/EXP/VS/VP					
3	LS, 8	0-21	MIXED FILL		"	"	"	"	"
		21-53	M/C	VFI/EXP/VS/VP					
4	LS, 10	0-11	ABK/C	FI/SEXP/S/P	>55" TO SOIL WETNESS	11	"	"	"
		11-55	M/CL	FR/SEXP/SS/SP					
5	"	0-52	M/CL/SCL	"	>52" TO SOIL WETNESS	CUT	US	"	"
6	"	0-2	GR/CL	"	>54" TO SOIL WETNESS	29	"	"	US, IV .12GPD/FT^2 LPP
		2-19	ABK/C	FI/SEXP/S/P					
		19-29	SBK/CL	FR/SEXP/SS/SP					
		29-54	M/CL	"					
7	"	0-12	ABK/C	FI/SEXP/S/P	>49" TO SOIL WETNESS	12	"	"	US
		12-49	M/CL	FR/SEXP/SS/SP					

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)	IIIbg	II
Site LTAR	0.3	0.275

Other Factors (.1946): _____
Site Classification (.1948): Provisionally Suitable
Evaluated By: W. R. Marlin, LSS, 3/29/2004
Others Present: D. Walker, R. Lee

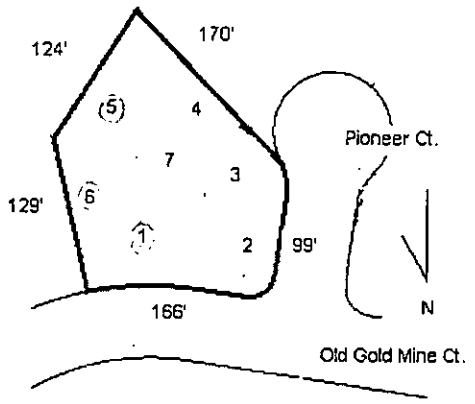
Site Evaluation - David Cornelius, RS

FILE #15331

COMMENTS: Appears to be 100% repair, pits 1, 2, 3 in old pond site

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	



Soil & Environmental Consultants, PA

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

FILE #15331

Attached is a proposed design for a Pressure Manifold Septic System for a 3 bedroom single family residence on Pioneer Ct for Dave Osborne Construction in Mecklenburg County, North Carolina.

4314 PIONEER CT.
137-173-07

Contents: **Page**

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

Design Information
- Design Specifications---------- 2
- Layout Specifications---------- 4
- System Tapsheet---------- 5

Site Plan/System Plan---------- 6

Septic Tank Diagram---------- 7

Pump Tank Diagram---------- 8

Pressure Manifold Diagram---------- 9

Control Panel Specifications---------- 10, 13

Pump Specifications---------- 14, 15

Electric Box Specifications----------

Calculations----------

(1) GWS Septic System Design Review
GWS File #: 15331
Approved ☒ Disapproved ☐
Design Review: TCT 4-20-07
Field Review:
*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.

(2) GWS Septic System Design Review
GWS File #: 15331
Approved ☒ Disapproved ☐
Design Review: ACT 6-4-07
Field Review: 6/12/07
*Projects are not considered "APPROVED" until both sections above are completed and indicate an APPROVED status.

APPROVED BASED ON PIT EVALS. SUBMITTED BY CONSULTANT ON 5-29-07. TCT.

April 13, 2007
S & EC Project No. 5-1847s2
Design By: W. Overby

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 is specified as an innovative installation (36" trench bottom)
- Repair is specified as pump to washer box gravel installation.
- **MARK ELECTRICAL LINES (UNDERGROUND) BEFORE INSTALLATION**

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner:	Dave Osborne Construction
Address:	PO Box 23464 Charlotte, NC 28227
Phone:	704.545.6709
County:	Mecklenburg
Location:	Mint Hill
Source of Wastewater Flow:	3 Bedroom Residance
Estimated Daily Wastewater Production:	360
System Flow:	12.59

Design Specifications

Drainfield Size:	300
Loading Rate:	0.30
Depth of Gravel in Trench:	N/A
Gravel Size:	N/A
Trench Depth:	36 in.
Trench Width:	36 in.
Septic Tank Size:	1500
Pump Tank Size:	1500
Estimated Supply Line Length:	160
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	27.84
Dosing Volume:	137.13
Supply Manifold:	*4* in. SCH 80 PVC
Supply Manifold Length:	2.5 ft. (minimum)

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:	1.60
Elevation Head:	10.00
Total Dynamic Head:	15.64
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 ~16 ft.of Head at ~13 gpm Total Flow
Additional Comments:	Soil suitability was performed by the Mecklenburg County Health Department.

Pioneer Ct.

PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	360
SOIL APPLICATION RATE:	0.3
TOTAL AREA TRENCH BOTTOM:	900
TOTAL LATERAL LENGTH:	300
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	300
SUPPLY LINE LENGTH:	160
TOTAL DYNAMIC HEAD:	15.64
MANIFOLD SIZE:	*4* in.SCH 80 PVC
DOSING VOLUME:	137.13
PUMP TANK DRAW DOWN*:	4.7
SEPTIC TANK SIZE:	1500
PUMP TANK SIZE:	1500
RECOMMENDED PUMP:	Myers Model ME50 or County Approved Effluent Rated Pump Capable of Delivering ~16 ft.of Head at ~13 gpm Total Flow

**Pump tank draw down based on a volume basis of 29 gallons per inch. Draw down may vary among pump tank manufacturers.*

Dave Osborne Construction-Pioneer Ct

Project No. 5-1847

Layout for a 3 bedroom home

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH
TBM		1.6			100.0	
INSTR. 1			101.6			
			SYSTEM			
1	Red			2.20	99.4	58
2	Blue			2.70	98.9	42
3	Yellow			3.20	98.4	42
4	Red			4.00	97.6	42
5	Orange			4.50	97.1	58
6	Blue			5.60	96.0	58
					Total	300
			REPAIR			
7	Pink			5.10	96.5	43
8	Yellow			5.80	95.8	44
9	Orange			6.60	95.0	45
10	Red			7.20	94.4	46
11	Pink			8.20	93.4	50
12	Blue			9.20	92.4	54
13	Yellow			9.60	92.0	57
14	Orange			10.20	91.4	56
15	Red			10.30	91.3	53
					Total	448

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	INNOVATIVE TYPE	TRENCH DEPTH	DISTRIBUTIC
System	300	0.300	INNOV	EZFLO	36"	P.Manifold & drop box
Repair	448	0.275	GRAVEL	N/A	36"	Washer box & drop box

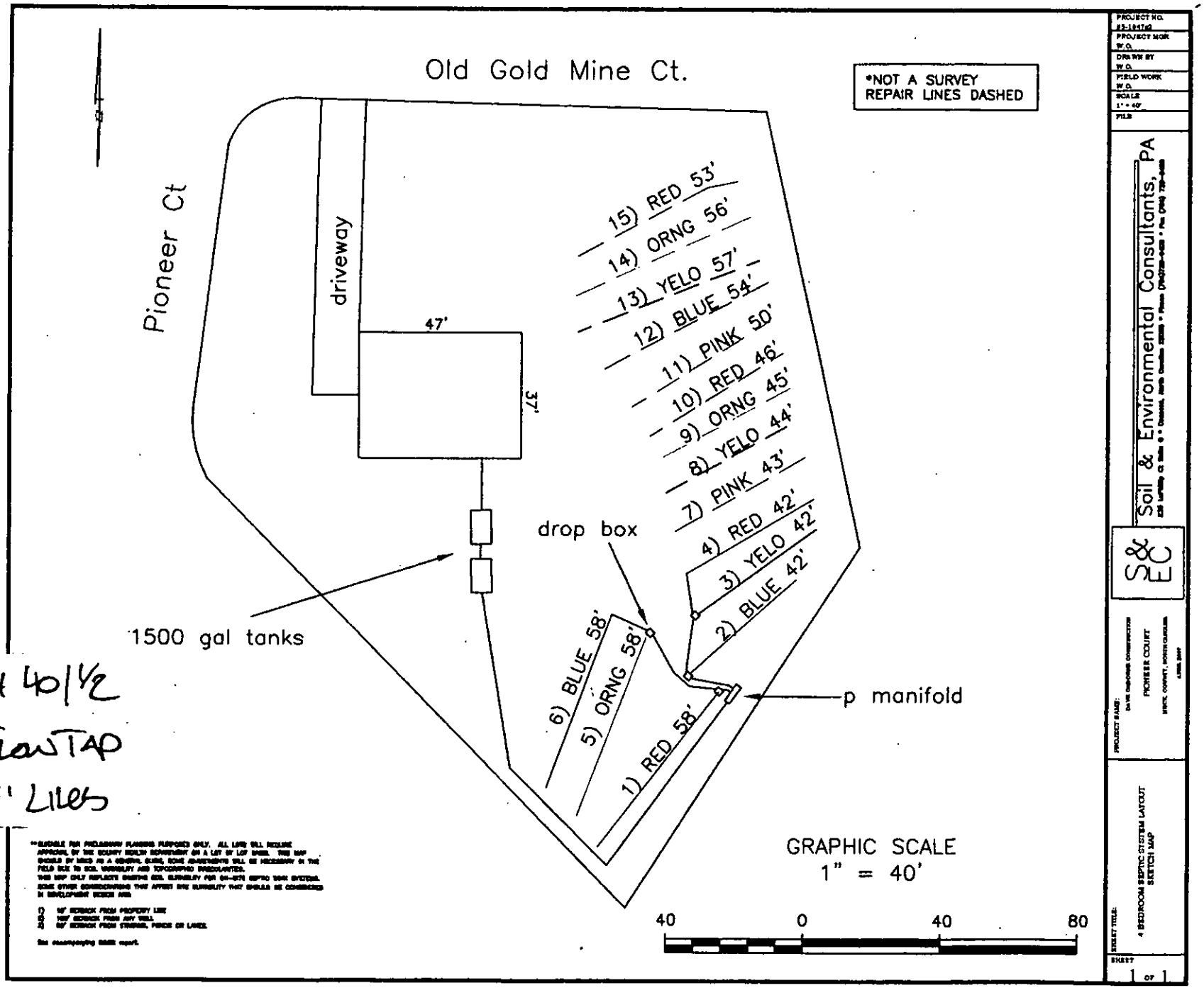
Notes:

** TBM located top of EIP
**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

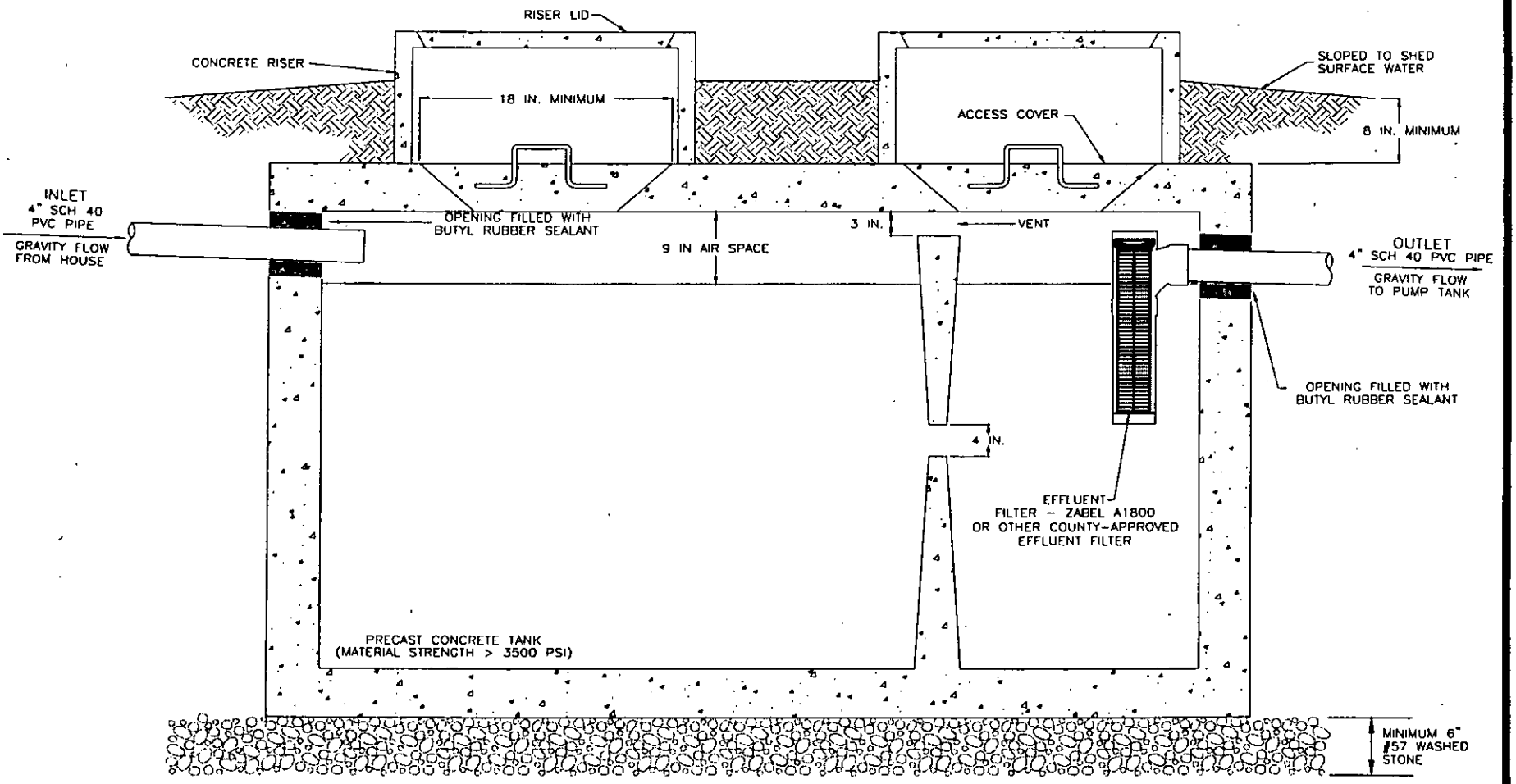
Dave Osborne Construction-Pioneer Ct

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	gpd	Trench Area	Line LTAR
1	Red	99.4	175	SCH 40 1/2	7.11	203.30	525	0.39
2	Orange	98.9	125	SCH 80 1/2	5.48	156.70	375	0.42
	total	feet =	300	gal/min =	12.59			
			Des. Flow	360				
			Pump Run=	28.59				
			soil LTAR	0.3				
			EZFLO LTAR	0.40				
			EZFLO LTAR+5%	0.42				



Check CCH 40 1/2
7.11 FlowTAP
For 58" Lines

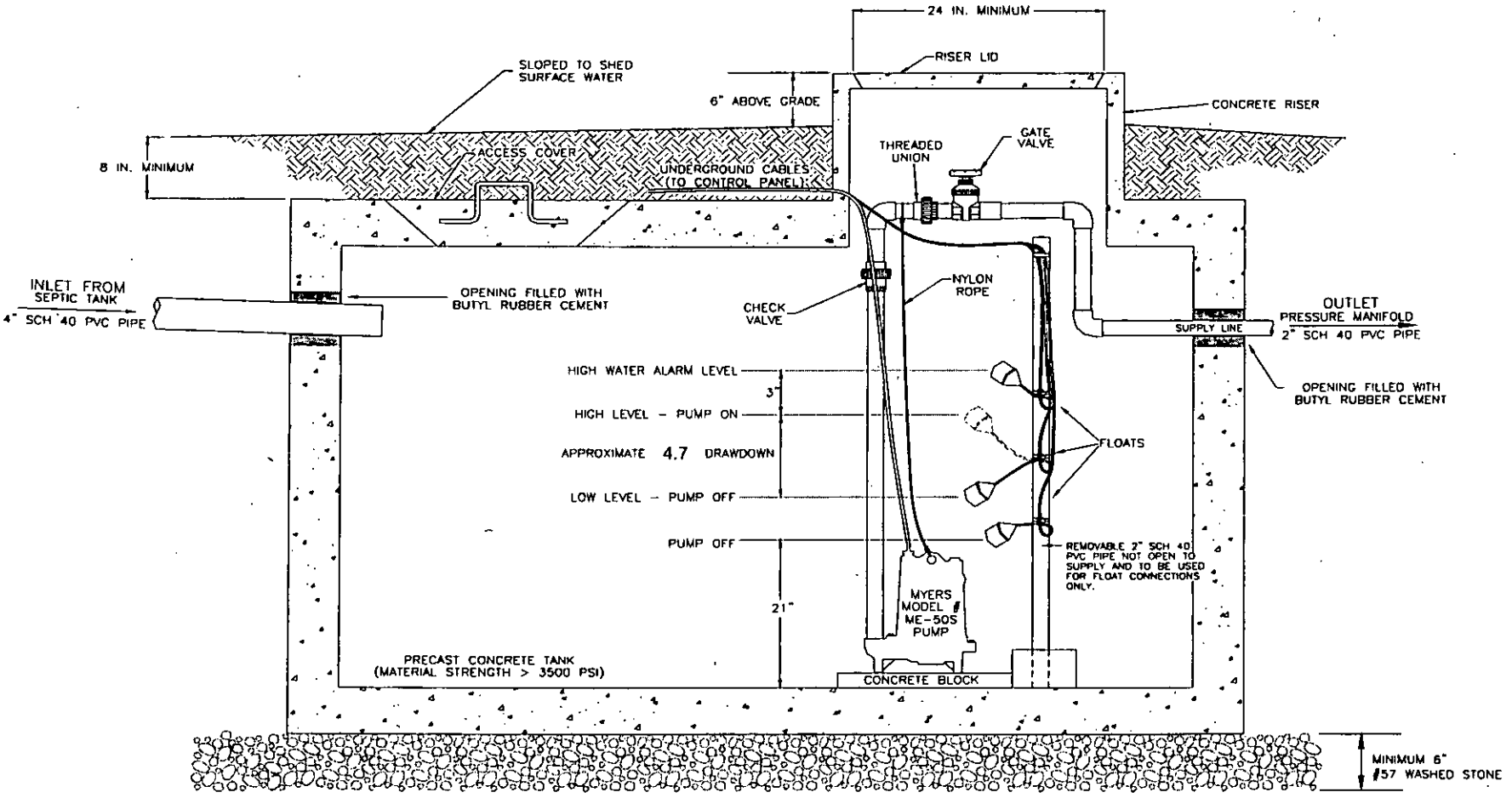


NOTES

1. TANK DIMENSIONS VARY BY MANUFACTURER.

1500 GALLON SEPTIC TANK

PROJECT NO. 4591	PROJECT NAME: **Dave Osborne Construction-**	S&EC Soil & Environmental Consultants, Inc.
PROJECT MGR.	SHEET TITLE: SEPTIC TANK DIAGRAM	
SCALE NTS		



NOTES

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

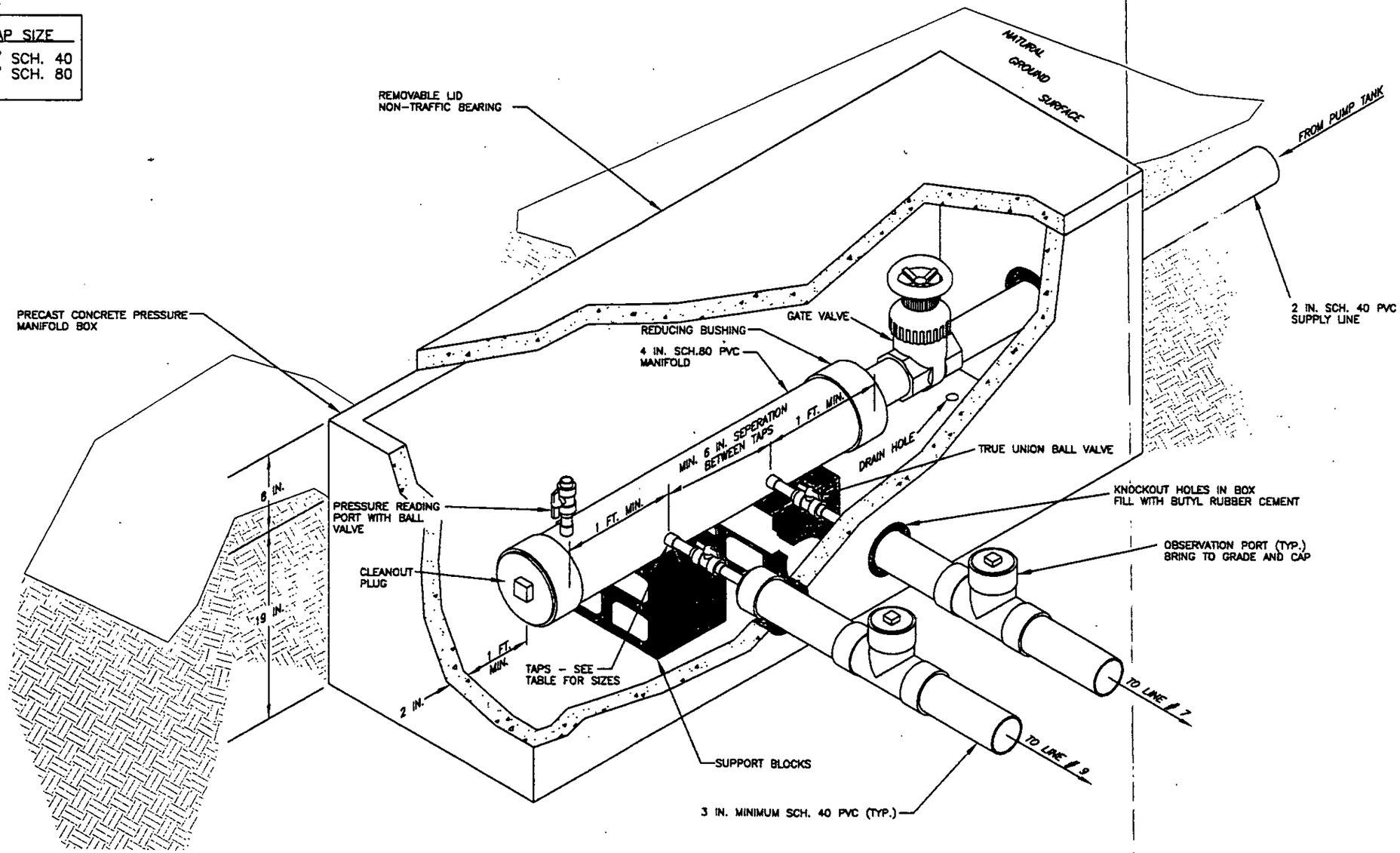
1500 GALLON PUMP TANK

PROJECT NO. 5-	PROJECT NAME: **Dave Osborne Construction-Pioneer Ct**	S&EC Soil & Environmental Consultants, Inc.
PROJECT MGR.		
SCALE NTS	SHEET TITLE: PUMP TANK DIAGRAM	

PRESSURE MANIFOLD DETAILS
FOR
PIONEER CT

TAP SIZES

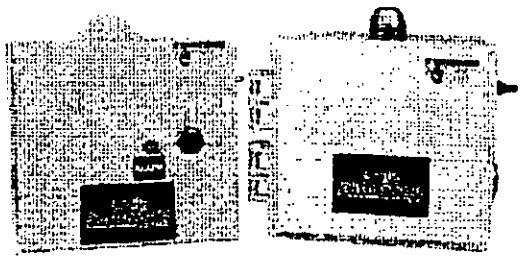
LINE No.	TAP SIZE
1	1/2" SCH. 40
2	1/2" SCH. 80



MODEL 112 Control Panel

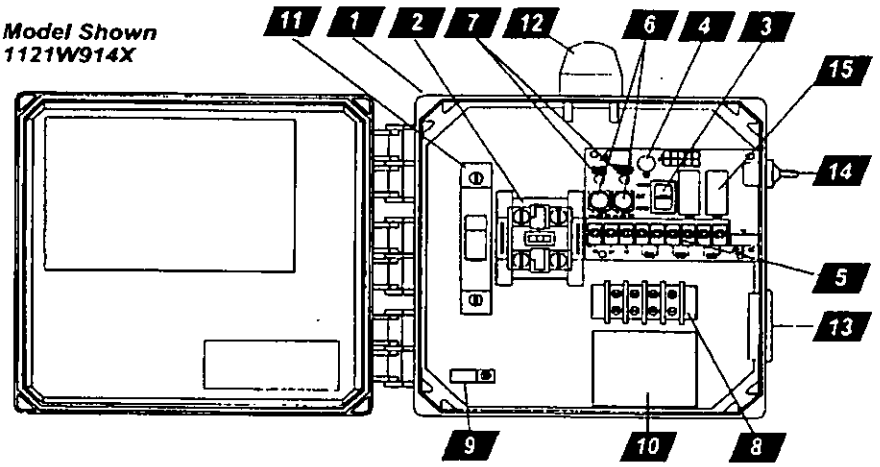
Single phase, simplex motor contactor control.

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

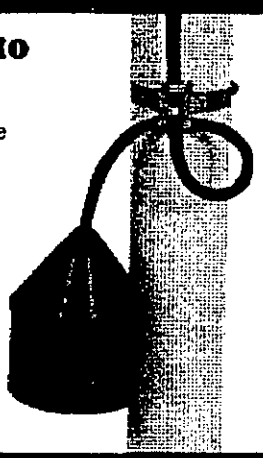
MODEL 112 1 W 9 1 4 H 3A 8A

- **Alarm Package** — 1
- **Enclosure Rating** — W
- **Starting Device** — 9
- **Pump Full Load Amps** — 1
- **Pump Disconnect** — 4
- **Float Switch Application** — H
- **Options: Alarm Flasher, Elapsed Time Meter** — 3A 8A

© 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

SJE Rhombus CONTROLS
SJ ELECTRO SYSTEMS, INC.
PO Box 1708, Detroit Lakes, MN 56502
1-888-DIAL-SJE [1]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

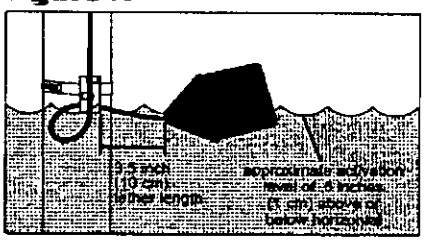
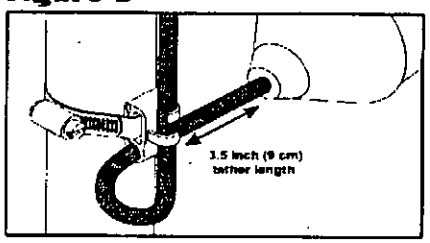


Figure B



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

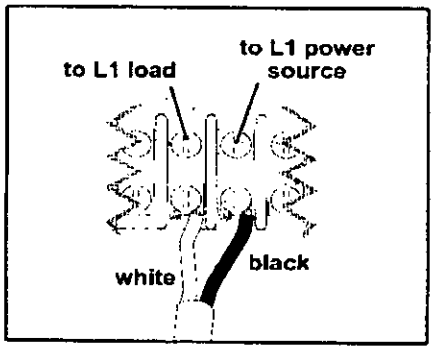
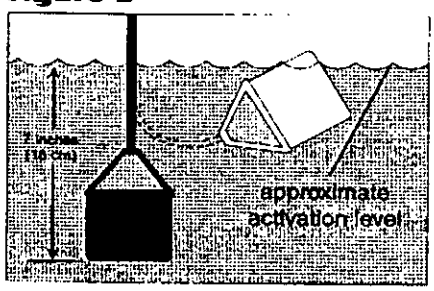


Figure D



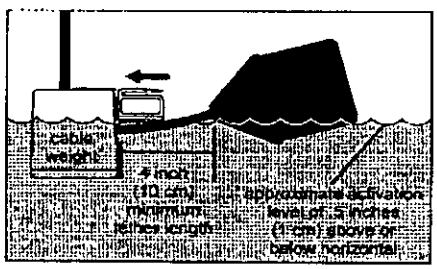
CABLE WEIGHT

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

©SJE-Rhombus

Printed in USA 03/00

ME SERIES

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

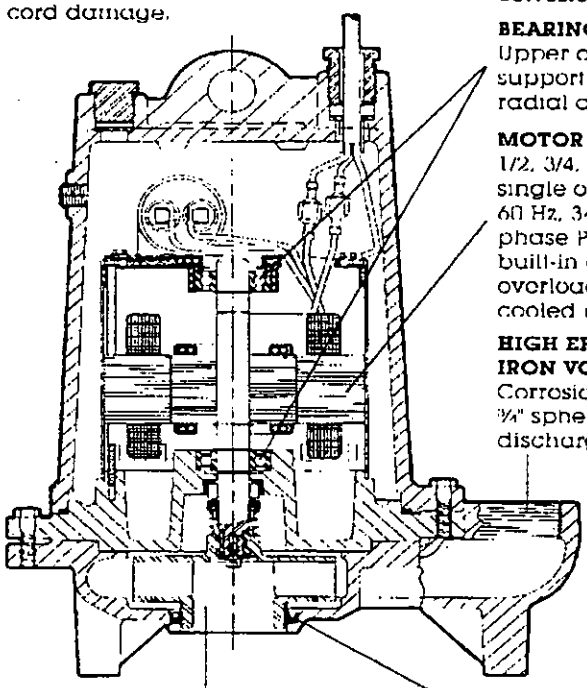
POWER CORD
Jacket sealed with compression fittings. Individual wires potted with epoxy to prevent wicking in case of cord damage.

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

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

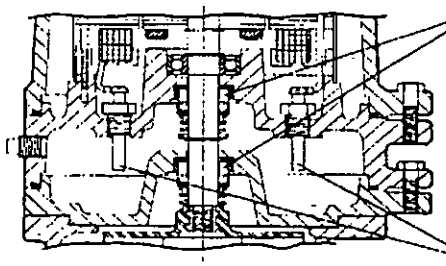
MOTOR
1/2, 3/4, 1 and 1-1/2 HP single or three phase. 60 Hz, 3450 RPM. Single phase PSC motors have built-in on winding overload protection, oil-cooled and lubricated.

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.

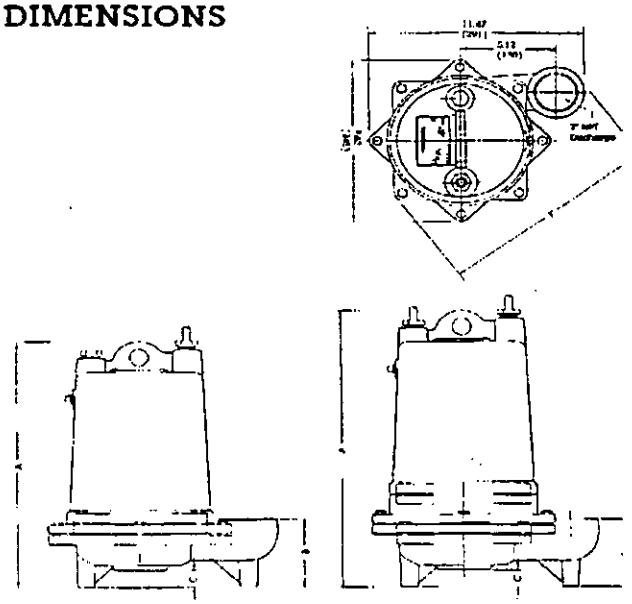
VOLUTE/IMPELLER SEAL RING
Maintains high efficiency and reduces recirculation. Replaceable.



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

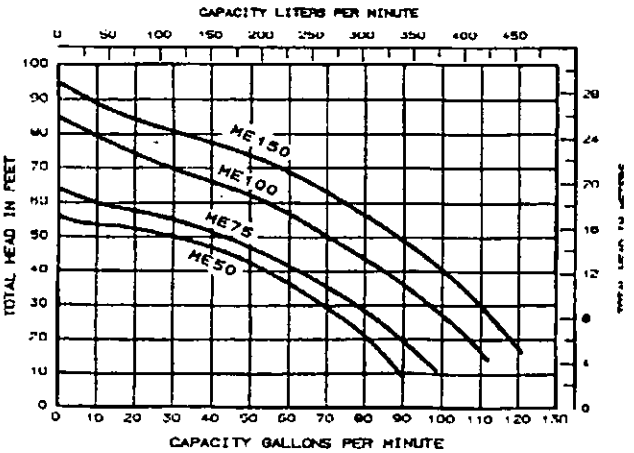
SEAL LEAK PROBES
Optional probes (dual seal only) detect water leakage in seal housing. Activates warning light.

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.

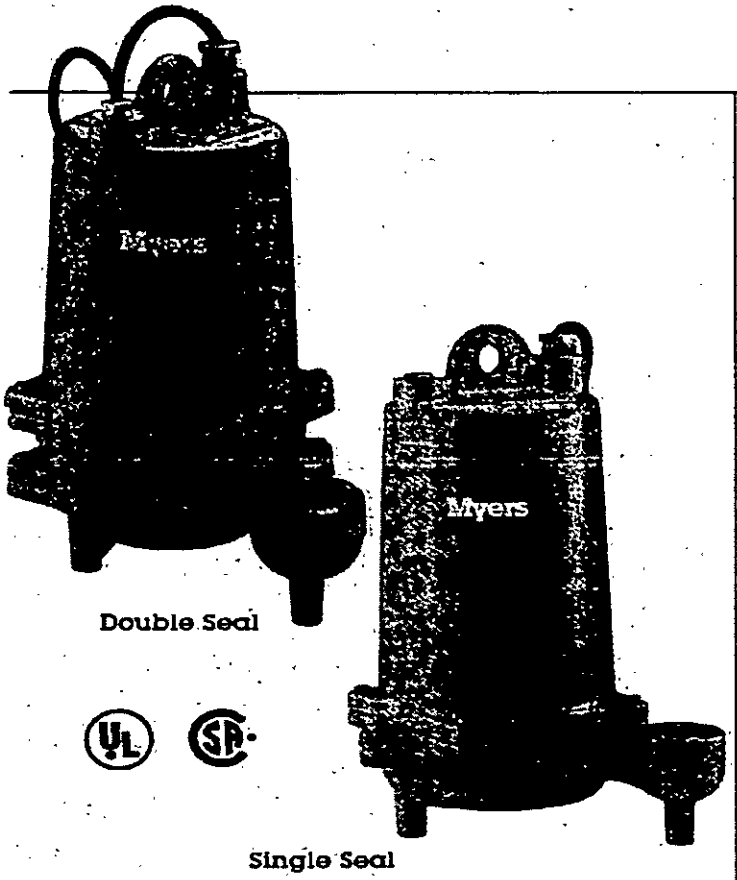
Myers
PENTAIR PUMP GROUP

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

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 ⅜ 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

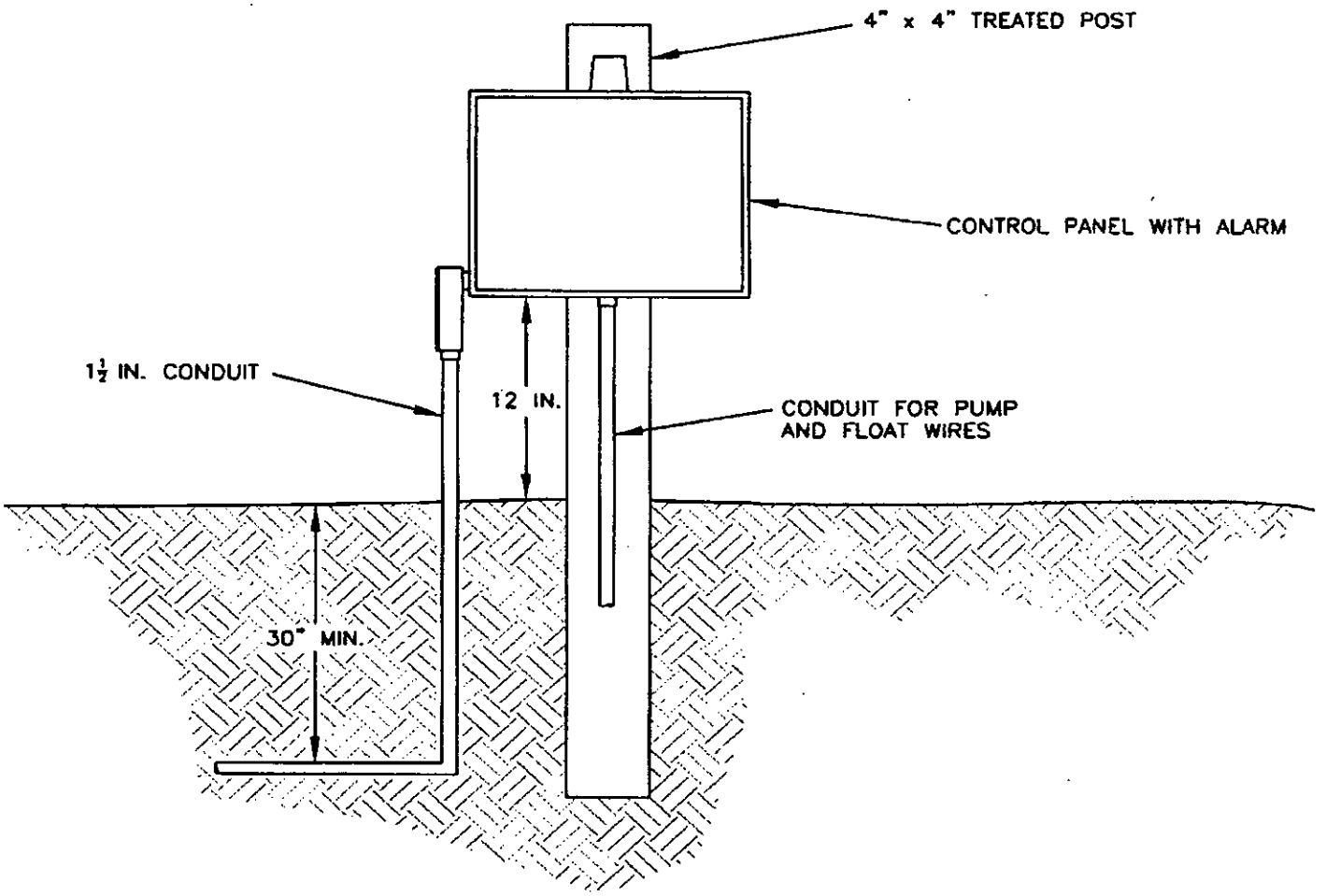
Construction Materials	
Motor Housing, Volute	cast iron, Class 30, ASTM A48-76
Enclosed Two Vane Impeller Standard	engineered thermoplastic
Optional	bronze
Impeller Wear Ring	304 SST
Volute Sealing Ring	Buna-N
Shaft	416 SST
Power Cord	
1/2 HP 1 Ph	20 ft. 16/3 SJOW/SJOW-A
3/4 - 1-1/2 HP 1 Ph	20 ft. 14/3 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

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.

CALCULATIONS

Location Pioneer Ct/Mint Hill

Project Number 5-1847s2

Lot No: n/a

No. of Bedrooms	3	
Design Flow	360	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\,day}$
EZ-Lay? (YES OR NO)	yes	
Supply Line Length	160	ft.
Supply Line Volume	27.84	gal.
Required Feet of Line	300	ft.
Amount of Line from Layout	300	ft.
Gallons per Minute	12.59	$^{gal}/_{min}$
Required Septic Tank Capacity	1500	gal.
Minimum Standard Tank Size	1500	
Lateral Line Volume	195.9	gal.
Dosing Volume	137.13	gal.

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

Tank Draw Down	4.7	*Generic Draw Down of 29 gal.per in.*
Pump Run Time	10.89	minutes
Estimated Elevation Head	10	ft.
Pressure Head	2	ft.
Friction Factor	1	ft./100 ft. *(From the interpolater.)*
Friction Head	1.60	ft.
Total Dynamic Head (+15%)	15.64	ft.

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
21.33	0.95
25	1.27
	1.28
30	1.78
	1.76
35	2.37
	2.25
40	3.03
40.67	3.13
45	3.77
48.14	4.28
50	4.58
57.11	5.89
58.47	6.14
60	6.42

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

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: ___

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: DAVE OSBORNE CONSTRUCTION CO. APPLICATION DATE ___
ADDRESS: PO BOX 23464 CHARLOTTE, NC 28227 DATE EVALUATED: 9/26/06
PROPOSED FACILITY: 3 BEDROOM PROPOSED DESIGN FLOW (.1949): 360 PROPERTY SIZE: ___
LOCATION OF SITE: PIONEER COURT MINT HILL 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) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	FS	0-13	FILL MASSIVE	MASSIVE	53"	>48"	N/A	PS	.25
		13-26	WF SBK C	FR S P					
		26-49	MM AB C	F S P					
		49+	MASS C	VFI VS VP					
2	FS	0-13	FILL MASSIVE	MASSIVE	53"	PS	N/A	PS	.25
		13-26	WF SBK C	FR S P					
		26-49	MM AB C	FI SP					
		49+	MASS C	VFI VS VP					
3	L	0-7	FILL		PS	PS	N/A	PS	.275
		7-23	WF SBK CL	FR SS SP					
		23-48	MM SBK C	FI S P					
4	L	0-10	FILL		PS	PS	N/A	PS	.275
		10-20	WF SBK CL	FR SS SP					
		20-36	MM SBK C	FI S P					
		36-48	WF SBK CL	FR S P					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	300	448
System Type(s)	INNOV	GRAVEL
Site LTAR	.3	.275

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: W OVERCASH
OTHER(S) PRESENT: BILL WARREN

COMMENTS:

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

Sheet ___ of ___
PROPERTY ID #: ___
COUNTY: ___

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: DAVE OSBORNE CONSTRUCTION — APPLICATION DATE: ___
ADDRESS: PO BOX 23469 CHARLOTTE NC 28227 — DATE EVALUATED: 9/20/06
PROPOSED FACILITY: 3 BR — PROPOSED DESIGN FLOW (.1949): 360 — PROPERTY SIZE: ___
LOCATION OF SITE: PIONEER CT MINT HILL — 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) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
5A	L	0-9	FILL		PS	36"	PS	PS	.3
		9-36	WFSBKL C	FR S P					
		36-68	SLOSS/ MASSIVE COMM SAP	VFR NS NP					
6A	L	0-12	FILL		PS	26"	PS	PS	.3
		12-26	WM SBK C	FR S P					
		26-52	SLOSS/ MASSIVE LOAM SAP	VFR NS NP					
7A	L	0-12	FILL		PS	>48"	N/A	PS	.275
		12-24	MFSBKL C	FR S P					
		24-52	WF SBKL CL	FR SS SP					
8A	L	0-6	WFSBKL SCL	FR S SP	PS	≥48"	N/A	PS	.3
		6-48	MOD SBK C	FR S P					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): ___
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: W. OVERMAN
OTHER(S) PRESENT: BILL MORGAN

COMMENTS:

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

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

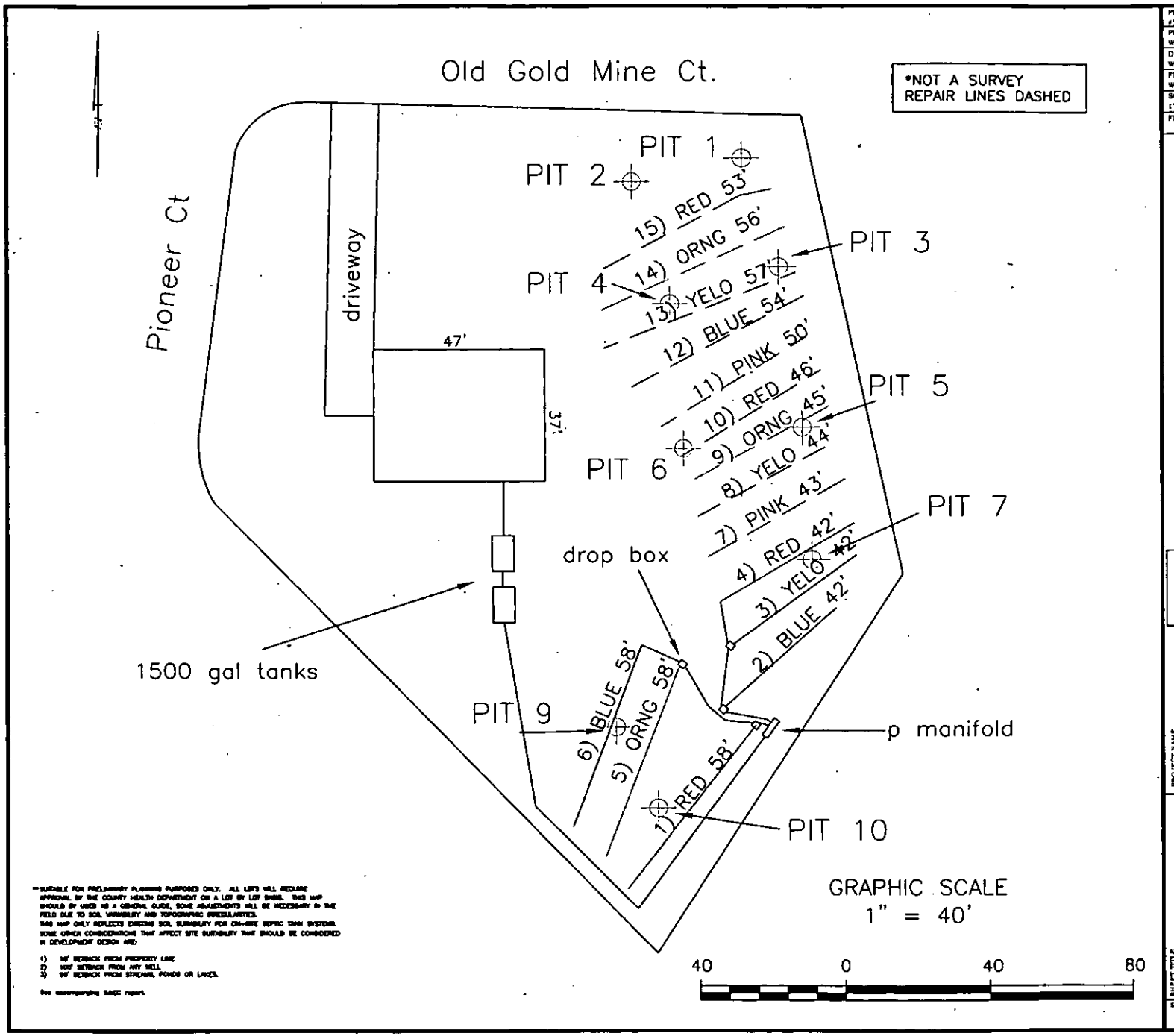
OWNER: DAVE OSBORNE CONSTRUCTION _____ APPLICATION DATE _____
ADDRESS: PO BOX 23764 CHARLOTTE NC 28227 DATE EVALUATED: 9/20/06
PROPOSED FACILITY: 3 BEDROOM PROPOSED DESIGN FLOW (.1949): 360 PROPERTY SIZE: _____
LOCATION OF SITE: PIONEER CT MINT HILL PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☑ 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) .1941 STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) .1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	L	0-6	WFSBK C	FR S P	PS	>48"	N/A	PS	.4
		6-53	WFSBK SCL	VFR SS SP					
2	S	0-10	WFSBK SCL	VFR SS SP	PS	>48"	N/A	PS	.3
		10-48	WMSBK C	FR SS P					
3									
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)		
System Type(s)		
Site LTAR		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: W OVERCAST
OTHER(S) PRESENT: BILL MANLOW

COMMENTS:


Old Gold Mine Ct.
*NOT A SURVEY
REPAIR LINES DASHED
Pioneer Ct
driveway
47'
37'
PIT 1
PIT 2
PIT 3
PIT 4
PIT 5
PIT 6
PIT 7
PIT 9
PIT 10
15) RED 53'
14) ORNG 56'
13) YELO 57'
12) BLUE 54'
11) PINK 50'
10) RED 46'
9) ORNG 45'
8) YELO 44'
7) PINK 43'
4) RED 42'
3) YELO 42'
2) BLUE 42'
drop box
1500 gal tanks
6) BLUE 58'
5) ORNG 58'
1) RED 58'
p manifold
GRAPHIC SCALE
1" = 40'
40 0 40 80
PROJECT NO
PROJECT MGR.
W O
DRAWN BY
FIELD WORK
SCALE
1" = 40'
FILE
Soil & Environmental Consultants, PA
PROJECT NAME
PIONEER COURT
SHEET TITLE
4 BEDROOM SEPTIC SYSTEM LAYOUT
SKETCH MAP
SHEET
1 OF 1

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 #: 30002147 GWS File #: 15331 Tax Parcel #: 137-173-07

- 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):** 6/12/2012

Type of Installation: Residential - New System Lot Number: 0

Structure Type: HOUSE Size (ft^2): 2100 # Bedrooms: 3 # Occupants: 6

Building Foundation: Concrete Slab Water Supply: Community

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

Initial System Specifications:

Design Flow (gpd):	360	LTAR (gpd/ft^2):	0.3	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	900	Total Trench Length (ft):	300
Maximum Trench Depth (in):	30	Depth of Media (in):	N/A	Distribution Device:	Pressure Manifold		

III. Repair System Type: Conventional **System Classification:** IIa

Repair System Specifications:

Design Flow (gpd):	360	LTAR (gpd/ft^2):	0275	Septic Tank Size (gal):	1500	Pump Tank Size (gal):	1500
Trench Width (ft):	3	Trench Spacing (ft):	9	Absorption Area (ft^2):	1	Total Trench Length (ft):	0
Maximum Trench Depth (in):	30	Depth of Media (in):	N/A	Distribution Device:	Distribution Box		

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

Signature: [signature]

Date Issued: 6/12/2007

Owner/Legal Agent: [signature]
Print Name

Signature: DAVE OSBORNE

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 #: **30002147** GWS File #: **15331**

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.
- 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 located at least 100 ft. (50 ft. minimum) from all private wells.
- The system must be water tested during the final inspection to verify proper operation and set system pressure.
- Install according to plans on file submitted by S&EC.

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

Signature:

Date Issued: 6/12/2007

Owner/Legal Agent: Dave Osborne
Print Name

Signature: DAVE OSBORNE

FEE: 300.00

DATE: 1/9/2008

CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

MECKLENBURG COUNTY

GROUNDWATER & WASTEWATER SERVICES

FILE NUMBER: 15331

PERMIT NUMBER: 30002147

PARCEL NUMBER: 13717307

JOB LOCATION INFORMATION

ADDRESS: 4314 PIONEER CT

CITY: CHARLOTTE **STATE: NC** **ZIP:** 28227

ISSUED TO: RANSON LEE

CONSTRUCTION AUTHORIZATION ISSUANCE DATE: 1/9/2008

CONSTRUCTION AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 30002147, 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 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.
   *CONSTRUCTION AUTHORIZATION EXPIRATION DATE: 6/12/2012

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

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

File #: 15381 Permit #: _____ Tax Parcel #: 137-173-07

Property Owner: DAVE OSBORNE

Job Location Address: 4314 PIONEER CT

City: MINT HILL State: NC Zip Code: 28227

Installation Approval Issuance Date: 4/29/08

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 5/29/08, 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: 0.3 GPD/ft² (For new installations only.)

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Drainfield Design ☐ N/A INNOVATIVE 25% REDUCTION

Trench Depth: 36 inches

Trench Width: 3 feet

Line Spacing: 9 feet (O.C.)

Total line length: 300 feet

# of Lines: 6 @ VAR feet

Depth of Media: N/A inches (Type) IIIb0g

Distribution Device: PRESSURE MANIFOLD

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: 7100 feet

SKETCH OF SYSTEM LAYOUT
(Proposed Layout)

INSTALL ACCORDING TO PLANS ON FILE SUBMITTED BY S&EC, 4/13/07

Comments: System Classification & Type: IIIb,g, INNOVATIVE, 25% REDUCTION. INSTALL ACCORDING TO PLANS ON FILE. INSTALL 6 LINES (3X42' & 3X58')

DENR Authorized Agent: DAVID CORNELIUS, RS Signature: David Cornelius, RS

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 #: 15331 Permit #: _____ Tax Parcel #: 137-173-07

Property Owner: DAVE OSBORNE

Job Location Address: 4314 PIONEER CT

City: MINT HILL State: NC Zip Code: 28227

Operation Permit Issuance Date: 5/9/08 Contractor Name: RCS

Permitted Design Flow: 360 GPD

Liquid Capacity of Septic Tank: 1500 gallons

Liquid Capacity of Dosing Tank: 1000 gallons

Effluent Pump Model: MEYERS 1/4 HP

Drainfield Installation ☐ N/A INNOVATIVE 25% REDUCTION

Trench Depth: 30 inches E-Z FLOW

Trench Width: 3 feet 3X42'

Line Spacing: 9 feet (O.C.) 3X58'

Total line length: 300 feet

# of Lines: 6 @ VAR feet

Depth of Media: N/A inches (Type) 1110g

Depth of Cover: 12 inches

Distribution Device: PRESSURE MANIFOLD

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: 7100 feet

Inspection Dates

Tank(s) Inspected: 5/9/08

Excavation Inspected: 5/9/08

Pump & Controls Inspected: 5/9/08

SKETCH OF SYSTEM INSTALLATION
(As-Built Drawing)

INSTALLED ACCORDING TO PLANS ON FILE.

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 g, INNOVATIVE, 25% REDUCTION, E-Z FLOW

6 LINES INSTALLED (3X42' & 3X58') EZ 2034 (P, NA, NA)

DENR Authorized Agent: DAVID CORNELIUS Signature: _____

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 #: 15331 Permit #: _____ Tax Parcel #: 137-173-07

Property Owner: DAVE OSBORNE

Job Location Address: 4314 PIONEER CT

City: MINT HILL 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: IIIbog

*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: DAVID CORNELIUS, RS Date: 5/14/08

Signature: _____, RS

Drew

Check # 4057 JKA
200.00 Rec'd 11/1/05

GWS – REG. APP 07/05

[redacted]

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

[redacted]

FILE # ~~15531~~ 15331

SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFY PLOT PLAN

WELL / TYPE APPLICATION: ☐ NONE ☐ NEW WELL ☐ MAJOR REPAIR ☐ ABANDONMENT

JOB LOCATION INFORMATION:

TAX/PARCEL #: 13717207
STREET ADDRESS: 4314 Pioneer Ct.
CITY: Mint Hill
STATE: NC ZIP: 28227
SUBDIVISION OR MOBILE HOME PARK NAME: Bainbridge
LOT #:
TOWNSHIP:
☐ 0-MECKLENBURG ☐ 4-PINEVILLE
☐ 1-CHARLOTTE ☐ 5-MATTHEWS
☐ 2-DAVIDSON ☐ 6-HUNTERSVILLE
☐ 3-CORNELIUS ☐ 7-MINT HILL

BUILDING INFORMATION:

TYPE OF BUILDING:
☐ SINGLE MOBILE HOME (S) ☐ MODULAR HOME (M)
☐ DOUBLE WIDE (D) ☐ MULTIPLE FAMILY (U)
☐ HOUSE (H) ☐ OTHER
HEATED SQUARE FOOTAGE:
NUMBER OF BEDROOMS:
NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:
☐ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☐ CRAWLSPACE ☐ BASEMENT WITH NO PLUMBING

IF PLANNING TO EXPAND/ALTER THE EXISTING SYSTEM INDICATE THE FOLLOWING CHANGES:
NUMBER OF BEDROOMS TO BE ADDED: NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE:
WILL THERE BE A HOME BUSINESS IN THE RESIDENCE? ☐ YES ☐ NO TYPE:

WATER SUPPLY:

☐ MUNICIPAL (M) ☒ PUBLIC (C) ☐ PRIVATE WELL (P) ☐ SHARED WELL (S) ☐ OTHER SPRINGS (O)
☐ OTHER

PROPOSED USE OF WELL: ☐ N/A ☐ IRRIGATION ☐ POTABLE ☐ GEOTHERMAL

ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.

BURIED CABLES, LANDFILLS, STUMPHOLES ☐ YES ☐ NO
EXISTING WASTEWATER SYSTEMS ☐ YES ☐ NO
EASEMENTS OR RIGHT-OF-WAYS ☐ YES ☐ NO
WELLS, SPRINGS, OR WATER LINES ☐ YES ☐ NO
DESIGNATED WETLANDS ☐ YES ☐ NO
GRADING/SOIL REMOVAL PERFORMED ☐ YES ☐ NO

PROPERTY OWNER:

NAME: Ranson J. Lee Martha W. Lee
ADDRESS: 9500 Blair Rd
CITY: Charlotte
STATE: NC ZIP: 28227
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME:
ADDRESS:
CITY:
STATE: ZIP:
HOME PHONE: WORK PHONE:
MOBILE PHONE: FAX:

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 10/26/05
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?

"An Improvement Permit is subject to suspension or revocation if the plans or the intended use change or if information submitted in the 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 the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

J Ranson Lee
Owner/Agent's Signature Date

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

"A Well 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 the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

Owner/Agent's Signature Date

MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202 704-336-5100 / FAX: 704-336-5994

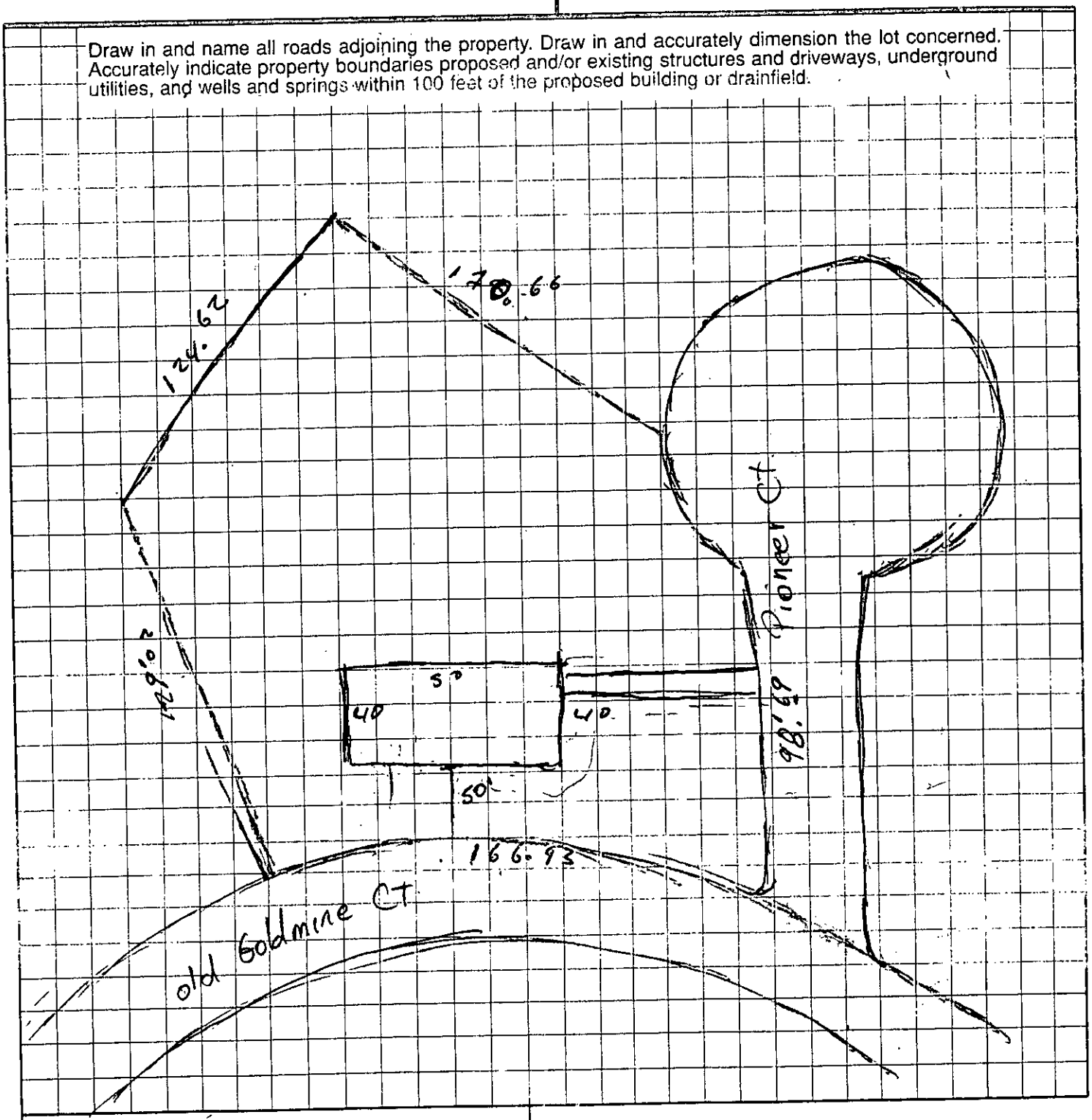
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5103

FILE: 15331

TC: 137-173-07

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

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

Sheet: 1
Property ID: 137-173-07
Lot #:
File #: 15331
Code: 3

ACS

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: James R. Lee
Applicant:
Address: 9500 Blair Road, Charlotte, N. C. 28227
Date Evaluated: 03/25/2004
Proposed Facility: Residence
Design Flow (.1949): 360gpd
Property Size: .7a
Location of Site: 4314 Pioneer Ct.
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] 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	OTHER PROFILE FACTORS .1942 Soil Wetness/ Color	.1943 Soil Depth (IN.)	.1956 Sapro Class	.1944 Restr Horiz	Profile Class & LTAR
1	LS, 6	0-37	MIXED FILL		2.5Y5/2@34"	N/A	N/A	NONE	US
		37-50	M/C	VFI/EXP/VS/VP					
2	"	0-33	MIXED FILL		"	"	"	"	"
		33-52	M/C	VFI/EXP/VS/VP					
3	LS, 8	0-21	MIXED FILL		"	"	"	"	"
		21-53	M/C	VFI/EXP/VS/VP					
4	LS, 10	0-11	ABK/C	FI/SEXP/S/P	>55" TO SOIL WETNESS	11	"	"	"
		11-55	M/CL	FR/SEXP/SS/SP					
5	"	0-52	M/CL/SCL	"	>52" TO SOIL WETNESS	CUT	US	"	"
6	"	0-2	GR/CL	"	>54" TO SOIL WETNESS	29	"	"	US, IV .12GPD/FT^2 LPP
		2-19	ABK/C	FI/SEXP/S/P					
		19-29	SBK/CL	FR/SEXP/SS/SP					
		29-54	M/CL	"					
7	"	0-12	ABK/C	FI/SEXP/S/P	>49" TO SOIL WETNESS	12	"	"	US
		12-49	M/CL	FR/SEXP/SS/SP					

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

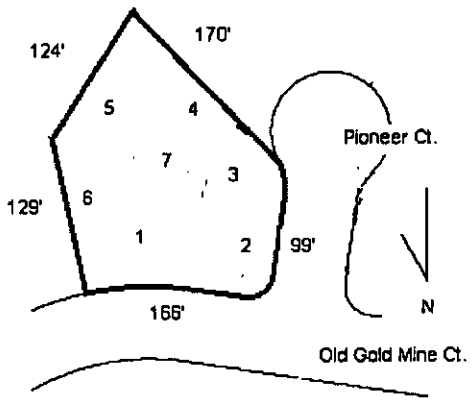
Other Factors (.1946): _____
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 3/29/2004, W. R. Marlin
Others Present: D. Walker, R. Lee

FILE #15331

COMMENTS: Appears to be 100% repair, pits 1, 2, 3 in old pond site

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	

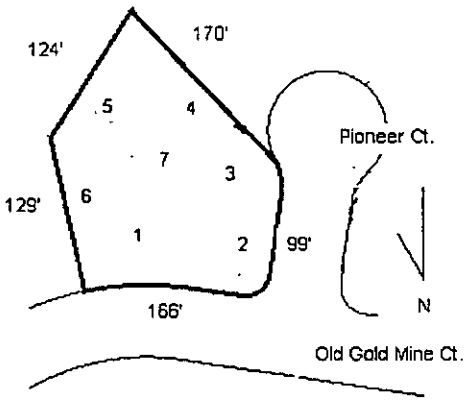


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STRUCTURE	MINERALOGY
SG-SINGLE GRAIN	SLIGHTLY EXPANSIVE
M-MASSIVE	
CR-CRUMB	EXPANSIVE
GR-GRANULAR	
SBK-SUBANGULAR BLOCKY	
ABK-ANGULAR BLOCKY	
PL-PLATY	
PR-PRISMATIC	



Mecklenburg County
Health Department

April 8, 2004

Corrected Copy

James R. Lee
9500 Blair Road
Charlotte, NC 28227

Re: Application for improvement permit for
Property site: 4314 Pioneer Court
Health Department file No. 15331

Dear Mr. Lee:

The Mecklenburg County Health Department, Environmental Health Division on March 25, 2004 evaluated the above-referenced property at the site designated on the plat/site plan that accompanied your improvement permit application. According to your application the site is to serve a 4-bedroom residence, with a design wastewater flow of 360 gallons per day. The evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 including 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 no improvement permit shall be issued for this site in accordance with Rule .1948(c).

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, N.C. 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 Statute 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 April 01, 2004. 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, N.C. 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,

J. Andrew Walker, R.S.

Encl: (2)

Philo A. Walker RS
for J Andrew Walker RS

700 N. Tryon Street • Suite 211 • Charlotte, NC 28202-2236 • (704) 336-5103

Mecklenburg County
Health Department

March 31, 2004

James R. Lee
9500 Blair Road
Charlotte, NC 28227

Re: Application for improvement permit for James R. Lee
Property site: 9500 Blair Road
Health Department file No. 15331

Dear Property Owner or Owner's Agent:

The Mecklenburg County Health Department, Environmental Health Division on March 25, 2004 evaluated the above-referenced property at the site designated on the plat/site plan that accompanied your improvement permit application. According to your application the site is to serve a 4-bedroom residence, with a design wastewater flow of 360 gallons per day. The evaluation was done in accordance with the laws and rules governing wastewater systems in North Carolina General Statute 130A-333 including related statutes and Title 15A, Subchapter 18A, of the North Carolina Administrative Code, Rule. 1900 and related rules.

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- ☐ 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.

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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, N.C. 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 Statute 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 January 31, 2004. 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, N.C. 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,

J. Andrew Walker, R.S. - DENR

FEE: 200.00 CK# 7035
DATE: 3/15/04

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

[ ] CRT

TYPE APPLICATION: X 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 #: 15331

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 13717307

STREET ADDRESS: 4314 Pioneer CT.

SUBDIVISION OR MOBILE HOME PARK NAME: Bainbridge

LOT NUMBER:

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
__ 6 HUNTERSVILLE
X 7 MINT HILL

HEATED SQUARE FOOTAGE: 1800

NUMBER OF BEDROOMS: 3 NUMBER OF OCCUPANTS: 4

CLOSING DATE _____

FOUNDATION FOR RESIDENCE:

__ WITHOUT BASEMENT
X ON SLAB
__ CRAWL SPACE
__ 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)
X MUNICIPAL (M)
__ PRIVATE WELL (P)
__ SHARED WELL (S)
__ OTHER 'SPRINGS' (O)

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

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

PROPERTY OWNER:

NAME: Lee James R + Martha W
(LAST) (FIRST) (MI)

ADDRESS: 9500 Blair Road

CITY: Charlotte STATE: NC ZIP: 28227

DAYTIME PHONE: ( ) 704-361-9884 o-545-4940

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME:
(LAST) (FIRST) (MI)

DAYTIME PHONE: ( ) –

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

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: J Ramon Lee DATE: 4-15-04

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

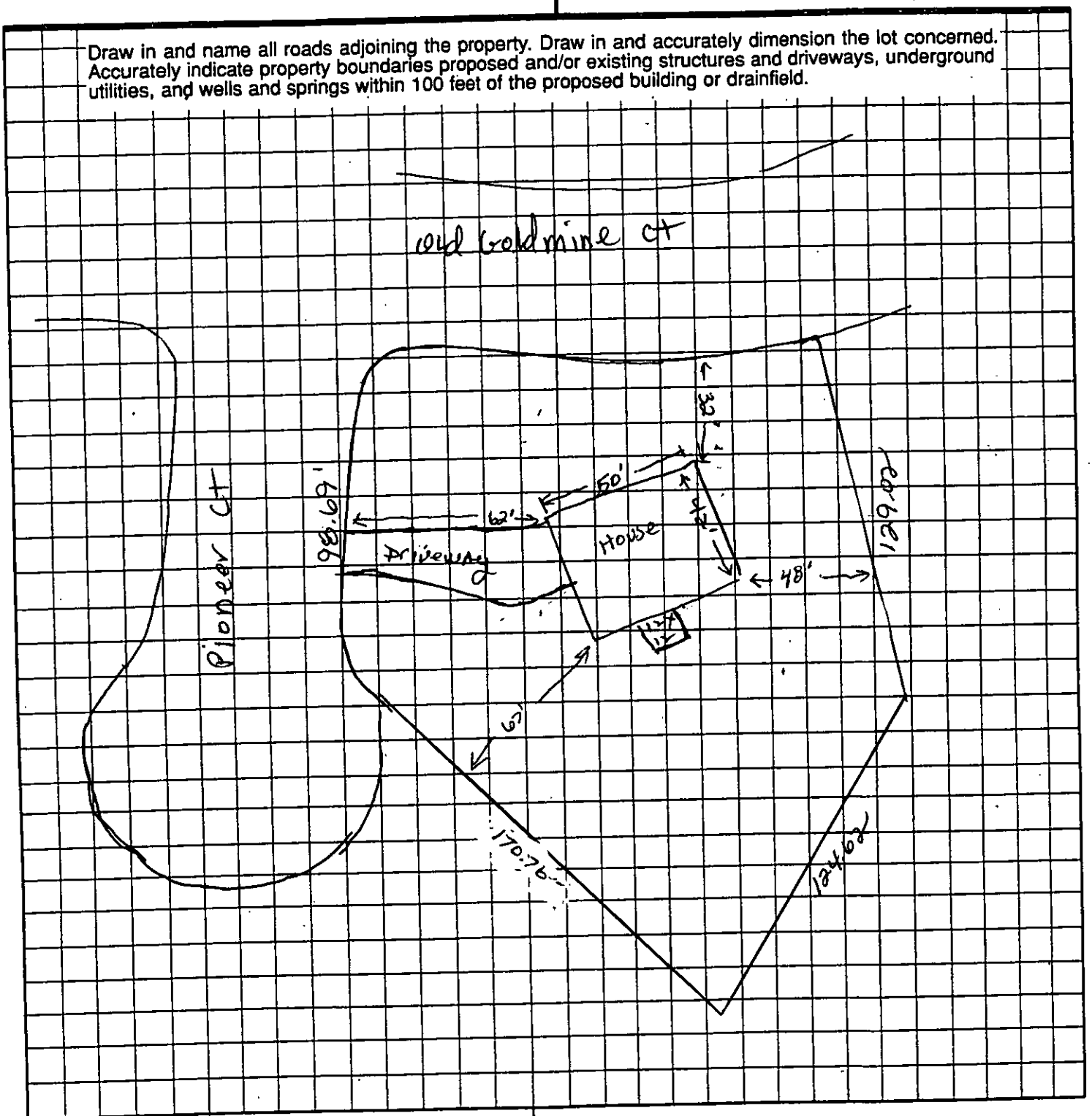
PROPOSED PLOT PLAN

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

FILE: 15331

TC: 137-173-07

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.



OWNER/AGENT SIGNATURE

DATE 3-15-04

APPROVAL DATE _____

White - Health Department's Copy

Canary - E.H.S. Copy

Pink - Owner's Copy

FEE: 100.00 Ref# 07829
DATE: 1-18-96

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

[ ] 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 #: 15331

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 137-173-07

STREET ADDRESS: 4314 PIONEER CT

SUBDIVISION OR MOBILE HOME PARK NAME: BAINBRIDGE

LOT NUMBER: # 7

TYPE OF BUILDING (CHECK ONE):

___ SINGLE MOBILE HOME(S)
___ DOUBLE WIDE (D)
✓ 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
___ 6 HUNTERSVILLE
✓ 7 MINT HILL

HEATED SQUARE FOOTAGE: 2319

NUMBER OF BEDROOMS: 4

NUMBER OF OCCUPANTS: UNK

FOUNDATION FOR RESIDENCE:

___ WITHOUT BASEMENT
___ ON SLAB
✓ CRAWL SPACE
___ 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 ✓ NO TYPE: _____

WATER SUPPLY (CHECK ONE):

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

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

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

PROPERTY OWNER:

NAME: REYNOLDS (LAST) ROBERT (FIRST) E (MI)

ADDRESS: 2010 RAMOLE RD

CITY: MIDLAND STATE: NC ZIP: 28107

DAYTIME PHONE: (704) 888 - 1047

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: (LAST) (FIRST) (MI)

DAYTIME PHONE: ( ) -

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

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: Robert E. Reynolds DATE: 1-16-96

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

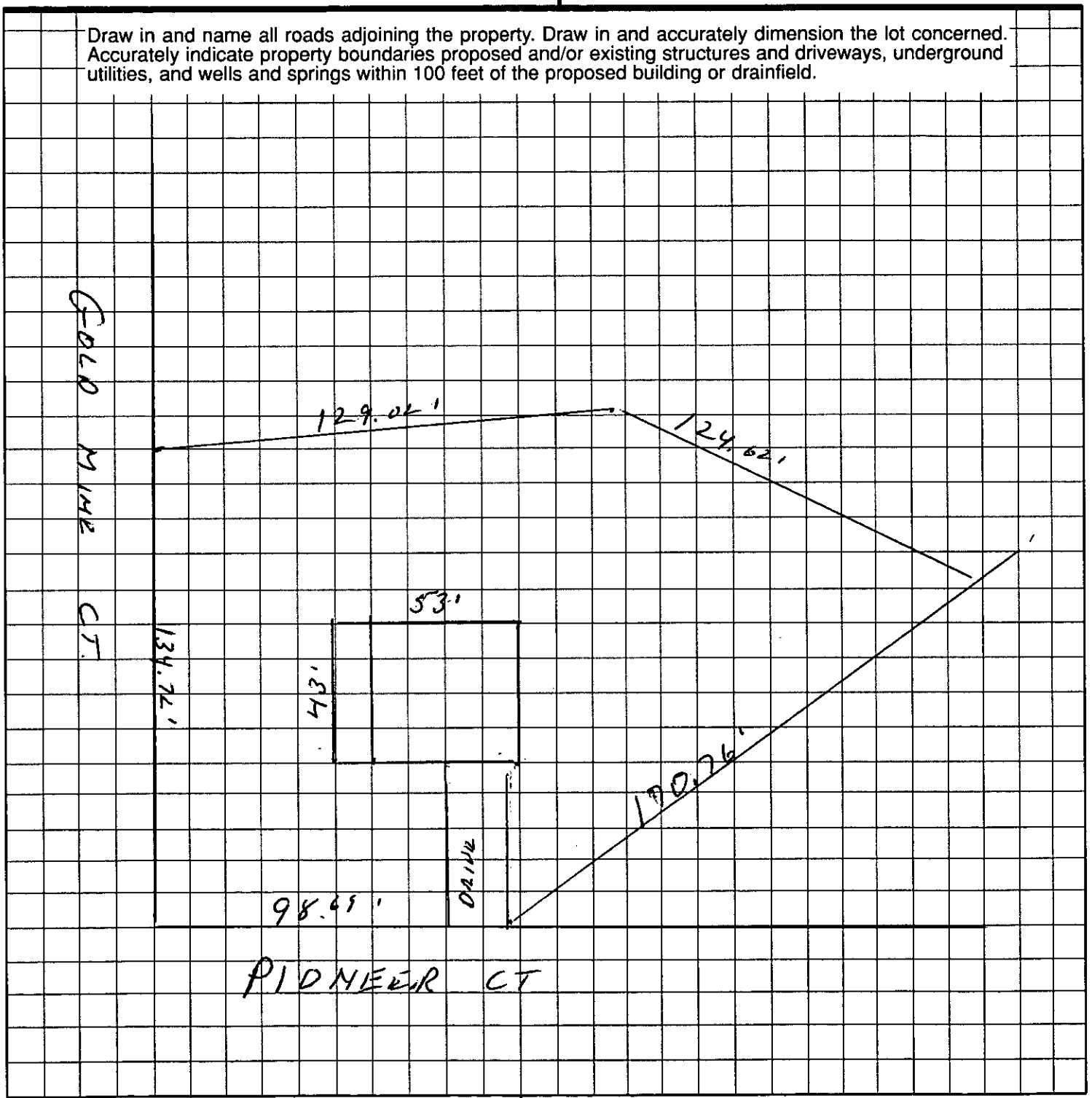
PROPOSED PLOT PLAN

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

FILE: 15331

TC: 137-173-07

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.



Robert E. Reynolds
OWNER/AGENT SIGNATURE

DATE 1-16-96

APPROVAL DATE _____

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

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

42400 #3 15331 137-173-07

Sheet ___ of ___
PROPERTY ID #: _____
COUNTY: _____

SOIL/SITE EVALUATION *for* ON-SITE WASTEWATER SYSTEM

OWNER: Lee & Martha L. Benson APPLICANT: _____
ADDRESS: Box 23033 Charlotte, NC APPLICATION DATE: _____ DATE EVALUATED: _____
PROPOSED FACILITY: residence PROPOSED DESIGN FLOW (.1949): 480gpd PROPERTY SIZE: .69
LOCATION OF SITE: 4314 Pioneer Ct. PROPERTY RECORDED: _____
WATER SUPPLY: ☐ Private ☑ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	1940 LAND-SCAPE POSITION/ SLOPE %	HORI-ZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) 1941 STRUCTURE/ TEXTURE	1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS 1942 SOIL WETNESS/ COLOR	1943 SOIL DEPTH	1956 SAPRO CLASS	1944 RESTR HORIZ	PROFILE CLASS & LTAR
1			Fill up to	24"					
2									
3									
4	LS 02	0-3"	gr/scl	Fr/SEXP/SSPD	> 20" TO Chroma 2 mottles	20"	NA	None	US IIE
		3-15"	sbk/c	Fr/SEXP/SSP					
		15-20"	sbk/cl	Fr/SEXP					
5 & 6			Saprolite is cut over 2-6" below below soil surface						
7									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	US	US
System Type(s)		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): Unsuitable
EVALUATED BY: William R. Neill 4-3-96
OTHER(S) PRESENT: _____

OMMENTS: new repair is all patched in

LEGEND

use the following standard abbreviations

ANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL 1955 LTAR	LPP 1957 LTAR	MINERALOGY/ CONSISTENCE	STRUCTURE
C (Concave Slope)	I	S (Sand)	1.2 - 0.8	0.6 - 0.4	NEXP (Non-expansive)	G (Single Grain)
V (Convex Slope)		LS (Loamy Sand)			SEXP (Slightly Expansive)	M (Massive)
(Drainage Way)					EXP (Expansive)	CR (Crumb)
S (Debris Slump)	II	SL (Sandy Loam)	0.8 - 0.6	0.4 - 0.3		GR (Granular)
P (Flood Plain)		L (Loam)				SBK (Subangular Blocky)
S (Foot Slope)						ABK (Angular Blocky)
(Head Slope)	III	SI (Silt)	0.6 - 0.3	0.3 - 0.15		PL (Platy)
(Linear Slope)		SICL (Silty Clay Loam)				PR (Prismatic)
(Nose Slope)		CL (Clay Loam)			MOIST	WET
(Ridge)		SCL (Sandy Clay Loam)				
(Shoulder Slope)		SLC (Silt Loam Clay)			VFR (Very Friable)	NS (Non-sticky)
(Terrace)	IV	SC (Sandy Clay)	0.4 - 0.1	0.2 - 0.05	FR (Friable)	SS (Slightly Sticky)
		SIC (Silty Clay)			FI (Firm)	S (Sticky)
					VFI (Very Firm v. Very Sticky)	VS (Very Sticky)
		O (Organic)	None		EFI (Extremely Firm)	NP (Non-plastic)
						SP (Slightly Plastic)
						P (Plastic)
						VP (Very Plastic)

OTES

ORIZON DEPTH In inches below natural soil surface

EPTH OF FILL In inches from land surface

ESTRUCTIVE HORIZON Thickness and depth from land surface

IPROLITE S(suitable) or U(unsuitable)

OIL WETNESS Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation

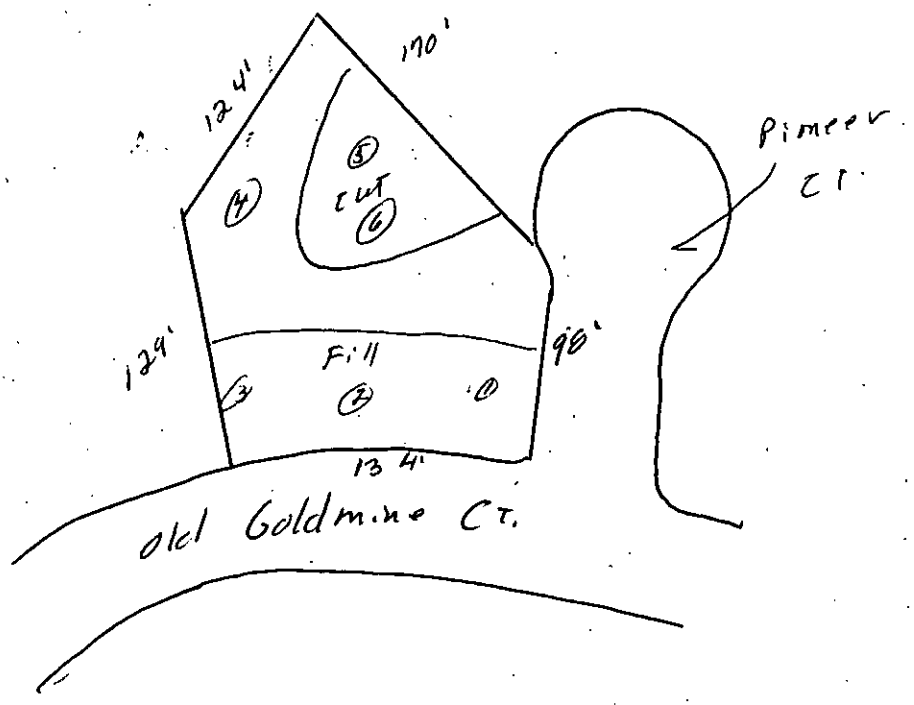
LASSIFICATION S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

valuation of saprolite shall be by pits.

ong-term Acceptance Rate (LTAR): gal/day/ft²

Show profile locations and other site features (dimensions, reference or benchmark, and North).

15331



Mecklenburg County
Health Department

April 9, 1996

Mr. Robert Reynolds
2010 Ramble Road
Midland, NC 28107

Re: 4314 Pioneer Court
File: 15331
Parcel: 137-173-07

Dear Mr. Reynolds:

Receipt of your Application for Improvement Permit for the above referenced property is acknowledged. A soil evaluation and a site visit have been conducted. The results of the evaluation indicated that the site is **UNSUITABLE** under Rules .1943 **SOIL DEPTH** and .1945 **AVAILABLE SPACE.** For these reasons your Application for Improvement Permit is denied. A possible way to develop the site exists under Rule .1948(d) which reads as follows:

> A site classified as **UNSUITABLE** may be used for a ground absorption sewage treatment and disposal system specifically identified in Rules .1955, .1956, or .1957 of this Section or a system approved under Rule .1969 if written documentation, including engineering, hydrogeologic, geologic or soil studies, indicates to the local health department that the proposed system can be expected to function satisfactorily. Such sites shall be reclassified as **PROVISIONALLY SUITABLE** if the local health department determines that the substantiating data indicate that:
> (1) a ground absorption system can be installed so that the effluent will be non-pathogenic, non-infectious, non-toxic, and non-hazardous;
> (2) the effluent will not contaminate ground or surface water; and
> (3) the effluent will not be exposed on the ground surface or be discharged to surface waters where it could come in contact with people, animals, or vectors.

The State shall review the substantiating data if requested by the local health department.

Please be advised that you have the right to an informal review by this department. You also have the right to appeal under G.S. 130A-24, and to have the appeal held in Mecklenburg County.

If you have any questions regarding this matter, please call me at 336-5575.

Sincerely,

Kelly Randall, R.S., Soil Scientist
Individual Water and Wastewater Systems

cc: Ranson & Martha Lee

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	07/28/08	**Amount:**	100.00
Receipt #:	58382	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	GLADNAG		

Account Information

Account #:	B37730
Contractor:	OSBORNE DAVID
Attn:	
Address:	P O BOX 23464
Address:	
City/State/Zip:	CHARLOTTE, NC 28227

Item	Description	Permit#	Quantity	Unit Price	Total Price
0705	MH Exc/Add/Repl w/o System Mod 4314 PIONEER CT		1	100.00	100.00

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
1,644.20	200.00				

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	01/09/08	**Amount:**	150.00
Receipt #:	54456	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #:	B37730
Contractor:	OSBORNE DAVID
Attn:	
Address:	P O BOX 23464
Address:	
City/State/Zip:	CHARLOTTE, NC 28227

Item	Description	Permit#	Quantity	Unit Price	Total Price
0734	Auth for Waste Wtr Sys Constr 4314 Pioneer Court/file 15331		1	150.00	150.00

Outstanding Balances

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
150.00					

MECKLENBURG COUNTY
LAND USE AND ENVIRONMENTAL SERVICES
Payment Receipt

Receipt Information

Date:	01/09/08	**Amount:**	150.00
Receipt #:	54457	**Tendered:**	0.00
Check / Auth #:	CHARGE	**Returned:**	0.00
Received By:	CRAIGGY		

Account Information

Account #: B37730
Contractor: OSBORNE DAVID
Attn:
Address: P O BOX 23464
Address:
City/State/Zip: CHARLOTTE, NC 28227

Item	Description	Permit#	Quantity	Unit Price	Total Price
0703	Installation/Final Approval 4314 Pioneer Court/file 15331		1	150.00	150.00

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

Month-To-Date	Prior Month	30 Days	60 Days	90 Days	Balance
300.00					