

Environmental Services - Water Quality
Onsite Wastewater Scan Data Entry Form

PERMIT #: C 0 1 3 4 8 8

PIN #: 1 7 6 7 1 3 2 6 3 2

OP DATE: 0 8 / 2 8 / 1 1 9 9 2

SYSTEM USE:

- ☒ House
☐ Mobile Home
☐ Business
☐ Other

SEWAGE TYPE:

- ☒ Domestic
☐ Industrial

PUMP/SIPHON?:

- ☒ Yes
☐ No

PRESSURE MANIFOLD:

- ☐ Yes
☒ No

SYSTEM TYPE:

- ☐ I
☐ II
☐ III
☒ IV
☐ V
☐ VI
☐ Other

SUB TYPE:

- ☒ A
☐ B
☐ C
☐ D
☐ E
☐ F
☐ G

NBR BEDROOMS:

- ☐ 1
☐ 2
☒ 3
☐ 4
☐ 5
☐ 6
☐ Other

MAINT. SCHEDULE:

- ☒ Yes *Bk 1987*
☐ No *Pg 136 S*

CERT. OPERATOR

- ☒ Yes
☐ No

GT	ST	PT	SIZE
☐	☐		750
☐	☐	☐	900
☐	☒	☒	1,000
☐	☐	☐	1,200
☐	☐	☐	1,500
☐	☐	☐	1,800
☐	☐	☐	2,100
☐	☐	☐	2,500
☐	☐	☐	3,000
☐	☐	☐	4,000
☐	☐	☐	5,000
☐	☐	☐	8,000
☐	☐	☐	10,000
☐	☐	☐	Other
☒		☐	None/NA GT or PT

DRAINFIELD SIZE(SQ. FT.)

0 2 4 0 0

DRAIN TYPE:

- ☒ Stone
☐ EZ Flow
☐ Infiltrator
☐ Biodiffuser
☐ Cultec
☐ Drip
☐ Hancor
☐ Large Dia. Pipe
☐ Multi-Pipe
☐ Other

MAX DEPTH (IN.):

- ☐ 12 in. or less
☒ 18 in. or less
☐ 24 in. or less
☐ 26 in. or less
☐ 28 in. or less
☐ 30 in. or less
☐ 32 in. or less
☐ 36 in. or less
☐ Other

STONE DEPTH (IN.):

- ☒ 8 in. or less
☐ 12 in. or less
☐ 18 in. or less
☐ 24 in. or less
☐ Other

TRENCHES:

- ☒ Individual
☐ Bed

TRENCH WIDTH (IN.):

- ☒ 12 in. or less
☐ 18 in.
☐ 24 in.
☐ 36 in.
☐ 6 ft. or less
☐ 9 ft. or less
☐ Other

WAKE COUNTY HEALTH DEPARTMENT WELL AND SEWAGE SITE, LOCATION PERMIT

ALL PERMITS VOID 60 MONTHS FROM DATE OF ISSUANCE

PIN: 1767.03 13 26 32

Tax Map No. 359

Parcel No. 143

LPP permit
922598

Improvement Permit

Well Permit No. **C** 13488

Zoning Wake Township Wake Forest

Operation Permit []

Owner/Contractor: Jerry Malinski

Date: 2-11-92

Location/Address: (5801) Phillips Landing Dr. 401 N, Rpt 1003 in Raleigh,

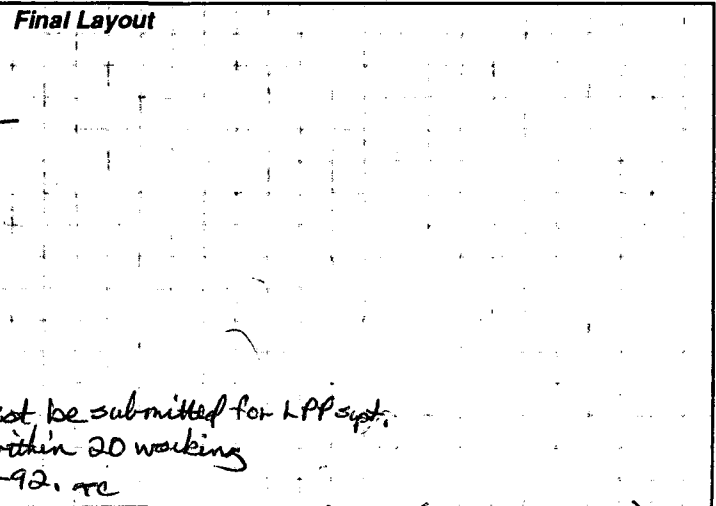
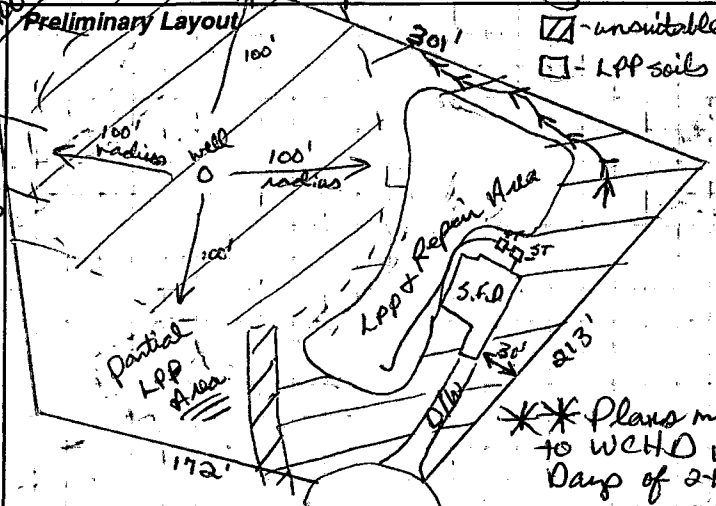
(R) into S/D lot at end of cul de sac.

S.R. # 1003

Subdivision Name: Phillips Landing

Lot No. 19

Section or Block No. _____



Sewage System Specifications

Repair [] Original Permit No. _____

Garbage Disposal Unit Yes [] No [X]

House [X] Mobile Home [] Business []

No. of Bedrooms 3 Lot Area 1.06

Size of Tank 1000 ST + 1000 PT gal.

Comments: .15 appl. rate, Use Area I for syst. + repair. Plans must be submitted to WCHD within 20 days of permit issuance date. NEMA 4X SIMPLEX BOX

Date: 8/28/92 Installed By: Frank Pierce

Nitrification Line 2400 ft² (.15 appl. rate) sq. ft.

Depth of Stone: 16" Max Depth of Trenches: 14" in.

Riser and Baffle Required [X] Pump Required [X]

Permit void if not in compliance with zoning regulations

Permits may be voided if site is altered or intended use changed

Layout by: Jerry D. Chappell R.S.

Well System
Individual [] Semi-Public [] Public [X]
New [] Replacement [] Repair []
Fee Paid: Yes [] No []
Construction Compliance
Site Approved [] []
Well Head Approved [] []
Grouting Approved [] []

Bacteriological Results
Date Inspected _____ Sanitarian _____
Initial Sample: _____ Date: _____
* Re-Sample #1 _____ Date: _____
* Re-Sample #2 _____ Date: _____
* Re-chlorination as required [] Yes [] No
* Fees for all resamples
All checks payable to: **Wake County Health Department**

Final Inspection

	Yes	No
Required Slab	[]	[]
Chlorinated	[]	[]
Required Certificate	[]	[]
Variance (Explain)	[]	[]
WCHD I.D. Affixed	[]	[]
Sample Collected	[]	[]

Comments: _____
Well Installed By: _____
Date System Finalized: 8/28/92 Sanitarian: Steve Barker R.S.

This report is based in part on information provided by the homeowner or his/her representative in the application submitted for this permit. The sanitarian is not responsible for false or misleading information contained in the application. The sanitarian is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him in the application. Neither Wake County nor the sanitarian warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

COPY TO HEALTH DEPARTMENT



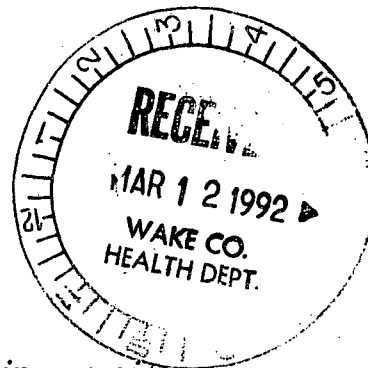
FEBRUARY ASSOCIATES, INC.

P.O. Box 5427
Cary, N.C. 27512

Ph: 919/467-5427
Fax: 919/467-5463

Date: March 12, 1992

Steve Bristow, R.S.
Wake County Dept. of Health



Attached please find our proposal for a low-pressure-pipe on-site sewage disposal system for:

Lot 19 Phillips Landing

TM 359 P143

C-13488

The proposal includes:

Plans & specs, including flow chart & calculations

Plot plan

Septic tank & pump tank specs

Pump, controls, & accessory specs

Other installation & maintenance info

Sample Maintenance Agreement

Please note that specific manufacturers mentioned in the proposal are for example: other products that meet or exceed the specifications may be substituted.

When review of plans has been completed, please forward one copy of the plans (and permit, if applicable) to:

Jack Bostic

Phone: 571-0800

Call - will pick up

If you have questions or require additional information, please call.

Katherine H. Tew, R.S., P.G.
President



FEBRUARY ASSOCIATES, INC.

P.O. Box 5427 Cary, N.C. 27511 919/467-5427

C-13488

LPP

LPP system design & specifications
date: 3-12-92

Owner ALLAN & LISA WILSON

Address CONTACT: JACK BOSTIC / JERRY MALINSKI

Phone 571-8400

Type of structure (check one)

☒ Single family dwelling with 3 bedrooms. Garbage disposal? NO

☐ Business (describe) _____ No. of employees _____

☐ Other (describe) _____

county WAKE
site location LOT 19 PHILLIPS LANDING

Tax Map 359 Parcel 143 Twp WF

Soils eval. by TERRY CHAPPELL, RS

Application rate .15 gal/ft²/day

Design flow 360 gal/day

DESIGN SUMMARY

Drainfield: 2400 sq. ft.

Laterals: 480 linear ft., 1 1/4" diameter 160 psi PVC or better

Configuration: 10 @ 48' IN TWO SUBFIELDS

Supply line: 20 feet, 2" diameter Sch. 40 PVC

Manifold: (SPLIT) 70 feet, 3" diameter Sch. 40 PVC

Manifold placement: SIDE tee: UP

Septic tank: 1000 gallons

Pump tank: 1000 gallons, 20.8 GALLONS PER INCH OF DEPTH

Total dosing rate 49.9 gpm

Dosing volume 395 gallons

Drawdown in pump tank 19 inches

Total dynamic head 10.9 feet

Trench depth 12"-14"

Trench width 10" MINIMUM

Depth of gravel in laterals 8"

Size of gravel 3/8" - 1"

Pump ZOELLER N137

Controls TAC IIIA SSC12LWX

WITH EXTERNALLY-WEIGHTED FLOATS

OR FLOAT TREE

Check valve ONE IN PUMP TANK

Gate valve(s) TWO AT FIELD

Anti-siphon hole NO

Curtain drain NO

(Other equipment which meets or exceeds specifications may be substituted)

Comments _____

with Sch. 40
turnups, in
valve boxes or
sleeved in 6"
diam. pipe

Bostic
revised

TERAL	ELEVATION (FT)	ELEV. DIFF. (FT)	HEAD (FT)	HOLE SIZE (IN)	FLOW PER HOLE (GPM)	LENGTH (FT)	SPAC- ING (FT)	NO. HOLES	FLOW PER LATERAL (GPM)	1ST AND LAST HOLE (FT)	INST FLOW RATE (GPM /FT)
1	101.30	0.00	2.0	5/32	0.407	48	3.0	15	6.11	3.0	0.127
2	101.10	0.20	2.2	5/32	0.427	48	3.0	14	5.98	4.5	0.125
3	101.00	0.30	2.3	5/32	0.437	48	3.5	13	5.68	3.0	0.118
4	100.80	0.50	2.5	5/32	0.455	48	3.5	12	5.46	4.8	0.114
5	100.70	0.60	2.6	5/32	0.464	48	4.0	11	5.10	4.0	0.106
1	100.50	0.00	2.0	5/32	0.407	48	3.5	12	4.88	4.8	0.102
2	100.40	0.10	2.1	5/32	0.417	48	4.0	11	4.59	4.0	0.096
3	100.30	0.20	2.2	5/32	0.427	48	4.0	10	4.27	6.0	0.089
4	100.10	0.40	2.4	5/32	0.446	48	5.0	9	4.01	4.0	0.084
5	99.70	0.80	2.8	5/32	0.482	48	6.0	8	3.86	3.0	0.080

END

FIELD NUMBER = 2

TOTAL LENGTH = 480 FT

TOTAL FLOW = 49.94 GPM

MAXIMUM REDUCTION OF FLOW BETWEEN LATERALS = 37.01%
 ss any key to continue...

OK DUE TO STACKING SPACE

5/32 #	SPACE	1st/Last
1	15	3
2	14	3
3	13	3.5
4	12	3.5
5	11	4.0
6	10	4.0
7	9	5.0
8	8	6.0
9	7	6.5
10		

As built
shots

27	2.0	.41	15	6.11	28 1/4
27	2.0	.41	14	5.74	28 1/2
28	2.1	.42	13	5.46	210
29	2.2	.43	12	5.16	211 1/4
30	2.4	.45	11	4.95	31 1/4
33	2.0	.41	12	4.92	33 1/2
36	2.0	.44	10	4.40	37
36	2.0	.44	9	3.96	37
36	2.0	.44	8	3.52	37
36	2.0	.44	7	3.08	37

47.3 use 12 1/4 in dose

CALCULATIONS

Total dosing rate: 49.9 gallons per minute

Reduction of flow: 37 %

Slope: 2.6 %

Manifold cross-sectional area: 7.4 in²

Lateral cross-sectional area: 1.8 in² each

5 laterals/manifold, area: 9.0 in²

Ratio: 7.4 / 9.0 = 18.3

Top lateral elevation: 101.3

Pump-off elevation: 94.0

Elevation head: 7.3'

Design head: 2.0'

Friction loss: 1.3'

Fittings loss: .3'
(20% friction loss)

TOTAL DYNAMIC HEAD: 10.9'

supply line: 20 ' of 2 " x 1/100' = .9
manifolds: 70 ' of 3 " x 1/100' = .4

Draining manifold & supply line: length 70 ' x 38.4 gal/100' = 27 gallons
length - ' x - gal/100' = - gallons = 27

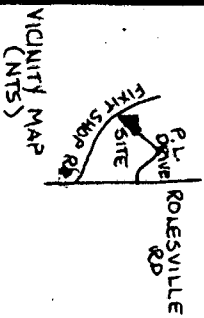
Lateral volume : length 480 ' x 9 gal/100' = 43.2 gallons

Dosing volume : min: (5 lat vol + drain) 243 gallons
max: (10 lat vol + drain) 45.9 gallons USE: 395 gallons

Pump run time: 7.9 minutes Volume to pressurize: 70.2 gallons
17.8 % dosing volume delivered under gravity

Drawdown: (dosing volume/pump tank volume) x liquid depth

(gal / gal) x " = 19 "

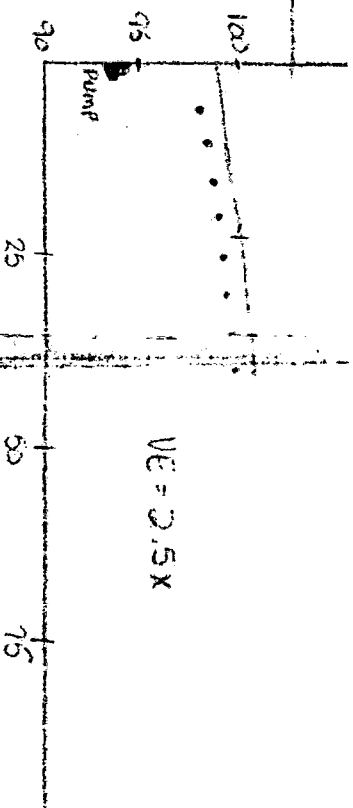


DESIGN SUMMARY

1000-GALLON SEPTIC TANK, 1000-GALLON PUMP TANK
PUMP 496 GPM @ 10.9' TDH
DESIGN HEAD: 2.0'
TRENCHES: 10" WIDTH, 12"-14" DEPTH, 8' GRAVEL DEPTH
AT FIELD: 2 GATE VALVES, 2 CLEANOUTS
IN PUMP TANK: CHECK VALVE, 19" DRAWDOWN TO DISE 395 GALLONS
SUPPLY LINE: 2" SCH. 40
MAINFOLD: 3" SCH. 40
LATERALS: 1 1/4" 160 PSI, 4" SCH. 40 TURNUPS IN SLEEVES OR BOXES

BACK-UP
COMMUNITY
WELL

LATERAL	TOTAL DEEP	HOLE SIZE	# HOLES	SPACING	1ST LAST FLAG	
TOP	0	5/32"	16	3'6"	3'9"	ORANGE
2	.2'	"	15	3'6"	3'6"	WHITE
3	.3'	"	14	4'	4'	O
4	.5'	"	13	4'	6'	W
5	.6'	"	14	4'	4'	PINK
6	.7'	"	13	4'	6'	W
7	.9'	"	12	4'6"	5'3"	P
8	1.3'	"	10	5'	7'6"	W
TOP	0	5/32"	15	3'	3'	
2	.2'	"	14	3'	4'6"	
3	.3'	"	13	3'6"	3'	
4	.5'	"	12	3'6"	4'9"	
5	.6'	"	11	4'	4'	
6	.8'	"	12	3'6"	4'9"	
7	.9'	"	11	4'	4'	
8	1.0'	"	10	4'	6'	
9	1.2'	"	9	5'	4'	
10	1.6'	"	8	6'	3'	



VE = 2.5X

0 25 50
FEET
1" = 50'

North

FEBRUARY ASSOCIATES, INC.

P.O. Box 5427
Cary, N.C. 27511
919/467-5427

LPP DESIGN

Lot 19 PHILLIPS LANDING
TM 359 P 143

C-13488

OWNER: ALLAN & LISA
WILSON

CONTACT: JACK BOSTIC
571-0800

BUILDER: JERRY MALINSKI

NOTES

1. SURFACE TOPO IS IRREGULAR.
SHOOT TRENCH BOTTOMS

- () APPROVED
() APPROVED AS NOTED
() DISAPPROVED

Review of this document has been made only for conformance with the design concept of the project and approval or approval as noted shall not relieve the contractor from responsibility for any errors therein or for furnishing the materials, and equipment of proper dimension, size, quantity, quality and all performance characteristics to meet the requirements and intent of the contract documents.

WAKE COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

Date 3-20-92 By *[Signature]*

PHI 3-12-92 REV. 3-17-92

LPP INSTALLATION INSPECTION FORM

Tax Map 359Parcel 143Permit C13488

LPP Construction Inspection Checklist

Site Preparation

Date 8-25-92

1. Is the site in the right location?
2. Roped off and protected from traffic?
3. Small trees and brush cleared?
4. Provisions for site drainage?
5. Distribution field shaped to shed water?
6. Lines staked out properly?

OK

7. Comments System now up hill

Construction Check

Date 8-26-92

1. Tanks: Mills STB 858 1000
Mills PT 72 1000
Proper size, type and construction?
Installed properly?
2. Manifold and laterals:
Depth of gravel suitable?
Placement of dams?
Holes drilled properly and placed downward?
Manifold and laterals connected properly?
3. Width of trenches

OK

OK

OK

OK

OK

OK

OK

4. Comments

SP 40 used

Operation Check

Date 8-27-92

1. Pump and switches operating?
2. High water alarm operating?
3. Electric receptacle outside pump tank?
4. Pressure head adjusted?

OK

OK

OK

OK

5. Comments Design 47.3 gpm - Actual Asbuilt 50.75 gpm

Final Landscaping

Date 8-28-92

1. Site shaped to shed rainwater
2. Any low areas?
3. Diversion drains?
4. Downspout drains directed away from system?
5. Seeded and mulched?

OK

OK

N/A

N/A

FAS

Comments

AS BUILT ELEVATIONS

END FED

SHOW VALVES

SHOW ^(X) CHECKS

☒

LENGTH

31/14
31/12
37
37
37
37
37

CENTERFEED

LENGTH

LENGTH

OTHER DRAW DIA.

3.1 10 3.1n