



Orange County Health Department

Environmental Health Division
P.O. Box 8181, 306-C Revere Road
Hillsborough, NC 27278
Phone 245-2360 Fax 644-3006

www.co.orange.nc.us

WELL PERMIT

Pin: 9768996360
Application Date: 07/07/2008

TMBL: 7.114..1H
Permit number: W08-00188

APPLICANT: KONOVE PAUL
ADDRESS: 1459 REDBUD RD
PITTSBORO NC
27312
PHONE: 919-542-5361 /

OWNER: WINFIELD ANNE B
ADDRESS: 6712 PAULINE DR
CHAPEL HILL NC ,
27514
PHONE: /

Property Desc: #3 REC 3-5 MORGAN GLEN P58/56 Lot Size: 10.09
Property Address: 197 SWANSEA LN CAPL
Well Type: PRIVATE WELL WW System: On-Site System
NEW WELL

Comments/Conditions:

ISSUED: 08/19/2008


ENVIRONMENTAL HEALTH SPECIALIST

EXPIRES: 08/19/2013

PERMIT CONDITIONS:

- * REFER TO THE ATTACHED SITE PLAN SHOWING THE WELL AND FACILITY LOCATIONS AND OTHER SPECIFICATIONS
- * THIS PERMIT MAY BECOME INVALID AND MAY BE REVOKED IF:
 - * The information submitted on the application is incorrect, falsified or changes,
 - * The site is altered, or
 - * The well is not completed before the expiration date.
- * THE WELL SHALL BE CONSTRUCTED OR REPAIRED IN ACCORDANCE WITH:
 - Orange County Groundwater Protection Rules as adopted by the Orange County Board of Health.
 - NC Well Construction Standards, as applicable and
 - Orange County Environmental Health Division Policies
- * THE WELL SITING IS BASED ON SETBACK DISTANCES FROM KNOWN FEATURES AND DOES NOT INDICATE NOR GUARANTEE THAT ANY QUANTITY OR QUALITY OF WATER WILL BE PROVIDED BY A WELL CONSTRUCTED IN THAT AREA.
- * The well must be located in well-drained areas that are not subject to flooding. Some of the setback distances include:
 - 40 feet from any property line,
 - 50 feet from any building foundation; sewer line; swimming pool, pump room, or storage area; or storage building,
 - 100 feet from A septic system or repair area or other potential source of contamination.
 If it is not possible to achieve these distances, a reduced setback may be granted provided specific conditions are met.
- * Ground surface should be maintained to direct surface water away from the well.
- * Setbacks for Public Water Supplies may be increased.
- * All new or repaired wells must be thoroughly disinfected after construction. All traces of chlorine must be flushed out of the system at least 48 hours prior to sampling.
- * Water samples may be taken upon request by submitting a proper application and appropriate fees. The Orange County Health Department does not provide water sampling for use as a condition of purchase, loan approval, or a property transaction. These services are provided by the private sector.
- * Any changes to the proposed plans must be approved by the OCHD
- * Wells must be constructed, repaired, and abandoned by a person who holds a valid certification from the State and who is also registered in Orange County for well construction.
- * A list of registered well drillers is available upon request.
- * The well construction must be inspected by OCHD at certain stages during the installation.
- * The permittee is responsible for obtaining the appropriate permits for the wiring of pump installations from the Orange County Building Inspections Office.
- * It is the responsibility of the well contractor to call the OCHD to schedule the installation inspections.
- * After the installation is completed, some settling of the grout material may take place. If it has settled substantially, please call the well contractor to complete the grouting -otherwise, the void can be filled with cement grout when a slab is poured.
- * The owner is responsible for marking all property lines and corners. The Contractor is responsible for ensuring that the well or septic system is installed in the proper location and that all setbacks are met.

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WELL PERMIT REQUEST / FIELD LOG

Pin: 9768996360
Application Date: 07/07/2008

TMBL: 7.114..1H
Permit number: W08-00188

APPLICANT: KONOVE PAUL
ADDRESS: 1459 REDBUD RD
PITTSBORO NC, 27312

OWNER: WINFIELD ANNE B
ADDRESS: 6712 PAULINE DR
CHAPEL HILL NC, 27514

PHONE: 919-542-5361 /

PHONE: /

Property Desc: #3 REC 3-5 MORGAN GLEN P58/56
Property Address: 197 SWANSEA LN CAPL
Well Type: PRIVATE WELL
NEW WELL

Lot Size: 10.09
WW System: On-Site System

Comments:

Date	EHS	Notes
8/7/08	AW	w/PAUL. APPROVED WS NE OF PROPERTIES NEAR SOLAR LINE.

* OTHER: _____

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WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION

Parcel Pin: 9768996360
Application Date: 07/07/2008

TMBL: 7.114..1H
Permit #: CA08-00207

Applicant: KONOVE PAUL
Address: 1459 REDBUD RD
PITTSBORO NC
27312
Phone: 919-542-5361 /

Owner: WINFIELD ANNE B
Address: 6712 PAULINE DR
CHAPEL HILL NC
27514
Phone: /

Property Desc.: #3 REC 3-5 MORGAN GLEN P58/56
Prop Address: 197 SWANSEA LN197 SWANSEA LANE
Permit Type: RESIDENTIAL NEW SYSTEM
Facility Type: RES SFD

Lot Size: 10.09

IP Number: IP05-00468
Water Supply: Private Well
Expires: 10/07/2010

SYSTEM SPECIFICATIONS

Wasteflow :	360 GPD	Primary System Type:	Pump (Ultra-Shallow)	System Class:	IIIbu
No.of Bedrooms:	3	Nitrification:	480 Ft. X 3Ft. Wide		
Septic Tank:	1000 GAL	Maximum Trench Depth:	12 In.		
Min. Pump Tank:	1000 GAL	Horiz. Trench Separation:	9 Ft.		
Other:		Innovative System Type:			
		Repair System Type:	Pump (Ultra-Shallow)	System Class:	IIIbu

COMMENTS:

1: PRECONSTRUCTION CONFERENCE REQUIRED.

SEPTIC CONTRACTOR MUST FLAG INITIAL DRAINFIELD ON CONTOUR PRIOR TO MEETING.

2: IMPORTED COVER MATERIAL AND SEEDING REQUIRED (see additional requirements below).

3: PRESSURE MANIFOLD REQUIRED (see attached design).

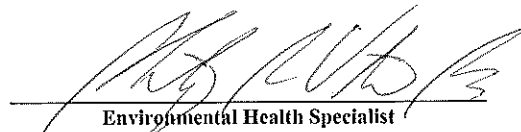
4: THIS SYSTEM NOT DESIGNED FOR GARBAGE DISPOSAL!

1: [NOT-Met] An imported soil cap is required over the drainfield area. For non-conventional trench products the imported soil must be placed on the site before constructing the trenches. The soil imported must be approved by OCHD prior to placement. The soil shall be maintained at a minimum thickness of 6" after settling and must extend at least 5 feet beyond the drainfield in all directions. The soil cap must be seeded prior to the system approval.

PERMIT CONDITIONS

- * REFER TO THE ATTACHED SITE PLAN SHOWING THE SYSTEM AND FACILITY LOCATIONS AND OTHER SYSTEM SPECIFICATIONS
- * THIS AUTHORIZATION SHALL BECOME INVALID AND MAY BE REVOKED IF:
 - * THE INFORMATION SUBMITTED ON THE APPLICATION IS INCORRECT, FALSIFIED, OR CHANGES.
 - * THE SITE IS ALTERED, OR
 - * THE SYSTEM INSTALLATION IS NOT COMPLETED BEFORE THE EXPIRATION DATE.
- * THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH:
 - * ORANGE COUNTY RULES FOR WASTEWATER TREATMENT AND DISPOSAL SYSTEMS AS ADOPTED BY THE ORANGE COUNTY BOARD OF HEALTH
 - * ORANGE COUNTY WASTEWATER SYSTEM SPECIFICATIONS, AND OCHD POLICIES.
- * SYSTEMS WITH A CLASSIFICATION OF III OR HIGHER WILL REQUIRE PERIODIC INSPECTIONS BY THE O.C. HEALTH DEPARTMENT

ISSUED: 08/19/2008


Environmental Health Specialist

EXPIRES: 10/07/2010

Typical Setbacks Required By State and Local Rules Unless Otherwise Specified In Writing:

(1)	Any private water supply source, including any well or spring	100 feet
(2)	Any public water supply source	100 feet
(3)	Streams classified as WS-I	100 feet
(4)	Any other stream, canal, marsh, or other surface water	50 feet
(5)	Any Class I or Class II reservoir	100 feet from normal pool elevation
(6)	Any permanent storm water retention pond	50 feet from flood pool elevation
(7)	Any other lake or pond	50 feet from normal pool elevation
(8)	Any building foundation or building footing	15 feet
(9)	Any basement	15 feet
(10)	Any property line	10 feet
(11)	Top of slope of embankments or cuts of 2 feet or more vertical height	15 feet
(12)	Any water line	10 feet
(13)	Drainage systems:	
	(A) Interceptor drains, foundation drains, and storm water diversions	
	(I) upslope from system	10 feet
	(II) sideslope from system	15 feet
	(III) downslope from system	25 feet
	(B) groundwater lowering ditches and devices	25 feet
(14)	Any swimming pool	25 feet
(15)	Any other nitrification field (except repair area)	20 feet
(16)	Drip line (Outermost edge of a structure)	5 feet

Any changes to the proposed plans must be approved by the OCHD

*

Please do not allow any traffic, construction, excavation, utilities, material storage, or any other disturbance to take place on the designated septic area or repair area. These activities may void your permit.

*

The owner is responsible for marking any property lines and corners. The Contractor is responsible for ensuring that the well or septic system is installed in the proper location and that all setbacks are met.

*

The system must be installed/repaired by an Orange County Registered Septic System Contractor.

*

A list of Orange County Registered Septic System Contractors is available upon request.

*

The system installation must be inspected by OCHD at certain stages during the installation.

*

For systems with pumps, the Registered Septic System Contractor is responsible for insuring the proper installation of the electrical components. An electrical permit must be obtained and a person with a valid North Carolina SP-PH Electrical license must provide electrical service to the pump controller and alarm.

*

It is the responsibility of the Registered Septic System Contractor to call the OCHD to schedule the installation inspections.

*

The OCHD must issue an Operation Permit (indicating system approval) before the facility can be occupied, before the Certificate of Occupancy can be issued by the Planning jurisdiction, and before permanent electrical can be released.

*

The Registered Septic System Contractor is responsible for backfilling the system components so that no areas are subject to the retention or ponding of surface water.

*

After the installation is completed, some settling of the backfill material may take place. The system owner is responsible for eliminating settled or sunken area, stabilization, and final landscaping of the ground surface.

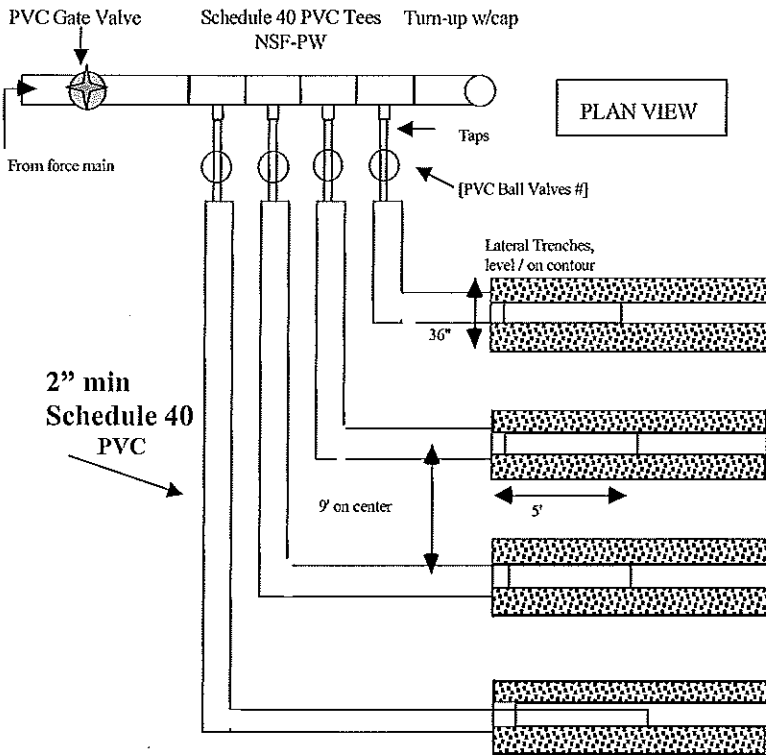
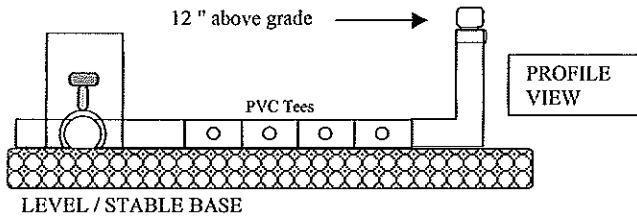
*

When the Construction Authorization is issued for a Conventional System or an Accepted System, the Owner may choose to substitute any Accepted System for the permitted system, provided there are no changes necessary in the specific line locations, depths, or distribution system.

When a substitution is made, verification that the Owner made the system choice will be required prior to issuance of the Operation Permit.

**ORANGE COUNTY ENVIRONMENTAL HEALTH
MANIFOLD DESIGN SHEET FOR CA08-00207**

Applicant: Paul Konove Owner: Ann B. Winfield
 Location: 197 Swansea Ln/#3R Morgan Glen
 TMBL: 7.114..1H Designed by: P. Vilaro R.S. 8/18/2008



Manifold Design						
Line #	Tap Top to Bottom	Tap Dia. In.	Tap Sch.	Tap Flow gpm	Line Length Ft.	Flow/ Linear Ft.
1		1/2"	80	6.7	120	.056
2		1/2"	80	6.7	120	.056
3		1/2"	80	6.7	120	.056
4		1/2"	80	6.7	120	.056
5						
6						
7						
8						
9						
10						
Totals				26.8	480'	

Manifold design may require modification based on actual drainfield layout on site.

Manifold Size 2" Force Main Size 2" PVC

Dosing Volume = $\frac{480}{\text{Length of Drainfield}}$ ' X .46 = 221 Gallons / Gallons per Inch = *TBD " Drawdown

Total Dynamic Head = $\frac{*}{\text{Elevation Head}} + \frac{*}{\text{Friction Loss}} + \frac{3'}{\text{Design Pressure Head}}$ = *TDH *To be determined at installation

Pump Requirement 30 GPM @ * Head

General Design Information

Pressure Head:	Flow per Tap					
	Flow Per Orifice					
	2"		3"		4"	
Tap Size/Material	SCH 80	SCH 40 **	SCH 80	SCH 40 **	SCH 80	SCH 40 **
1/2"	5.5	7.1	6.7	8.7	7.7	10.1
3/4"	10.1	12.5	12.4	15.3	14.3	17.7

** When Schedule 40 taps are used, the ball valve must be increased by one size (1/2" Sch 40 tap → 3/4" valve
 3/4" Sch 40 tap → 1" valve).

Manifold Size	Manifold Size / # Taps		
	Max No. Taps off one side (Reduce by 1/2 for tapping both sides)		
	1/2" taps	3/4" taps	1" taps
2" Manitec	4	2	
3" Manitec	9	5	3
4" Manifold	16	9	5
6" Manifold	40+	21	12

An approved* vault (open bottom) and lid extending 6" above grade is required for:

- any system not serving a single family dwelling,
- any drilled & tapped manifold, (taps exposed)
- any system between 600 GPD and 3000 GPD
- any manifold with more than 6 taps
- any off-site system

* Vaults and associated lids for manifolds and Manitecs must be pre-approved by OCHD for use. Concrete lids must be sectioned to allow for

reasonable access without equipment or special tools. (75# - 150#)
 Lightweight lids must be non-corrosive, secured or have a latching mechanism, and must support 150 lb live load. Pre-approval is required! A manifold consists of a Schedule 80 PVC barrel that is drilled and tapped to accept threaded nipples or adapters.
 Other systems under 3000 GPD may use a manitec that is buried on a level bed of gravel with stabilized valve access boxes provided to finished grade. Valve boxes must allow full operational access to valves and cleanouts.

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CONSTRUCTION AUTHORIZATION APPLICATION FIELD NOTES THIS IS NOT A PERMIT

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TMBL: 7.114..1H

Permit #: CA08-00207

Applicant: KONOVE PAUL
Phone: 919-542-5361 /

Owner: WINFIELD ANNE B
Phone: /

Property Desc.: #3 REC 3-5 MORGAN GLEN P58/56
Prop Address: 197 SWANSEA LN
Permit Type: RESIDENTIAL NEW SYSTEM
Facility Type: 1029 RES SFD
GPD Requested: 360

Lot Size: 10.09

Improv. #: IP05-00468 Expires

Water Supply: Private Well

ACTIVITY LOG AND NOTES

Wasteflow : _____ GPD	Primary System Type: _____	Sys Class _____
No. of Bedrooms: _____	Nitrification: _____ Ft. X _____ Ft. Wide	
STB Tank: _____ gal	Max. Trench Depth: _____ In.	
Pump Tank: _____ gal	Horz. Trench Sep: _____ Ft.	
	Repair System Type: _____	Sys Class: _____

Comments:

Date	RHS	Notes
8/7/08	PMW	✓/PAUL K REC'D NEW SITE PLAN. ALL LOOKS OK