REDESIGNED LOW PRESSURE MANIFOLD DOSING
FOR A
25% REDUCTION SEPTIC SYSTEM
FOR
SUBSURFACE WASTEWATER DISPOSAL
LOT 79 AT CHESAPEAKE POINT
274 COVE CREEK DRIVE
MOORESVILLE NC 28117

Prepared for
Jonathan Helms
Orleans Homebuilders
700 Forest Point Circle – Suite 102
Charlotte, North Carolina 28273
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jhelms@orleanshomes.com

Prepared by:
Toney C. Jacobs, LSS
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March 26, 2014
Revised April 17, 2014
Revised April 24, 2014

Copy: Brady Freeman, Supervisor, REHS
Iredell County Health Dept.
Mooresville NC 28117
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704 902-4491

DESIGN SPECIFICATIONS

Lot 79 at Chesapeake Point

Daily design flow	480 gpd.
Septic tank size	1000 gal. *(per phone call to Brady Freeman)*
Pumping tank size	1000 gal. (*per phone call to Brady Freeman*)
Initial system	400' of 25% reduction, 5 @ 80'
Effluent loading rate, Initial system	0.3 gpd/ft^2
Total length and diameter of supply pipe	approx. 100 ft. 2" SCH 40 PVC
Number and length of laterals	5 @ 80' end-fed
Flow rate through the system	27.5 gpm from 5 each ½" sch 80 taps from a 4" manifold
Elevation head	Approx. 14' (to be verified by installer)
Pressure head	2.0'
Friction head	3.2'
20% contingency	3.8'
Total head	23.0'
Pump requirements	27.5 gpm at 23.0' of head; use Goulds WE05H pump, pump and compatible panel or equivalent
Dosing volume	240 gal. – 2.0 doses/day at design flow
Depth of water pumped per dose	calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump run per dose	Approx. 8.7 min.
Check valve	yes
Siphon break hole	no
Effluent loading rate, Repair system	0.3 gpd/ft^2
Repair system	pressure distribution 50% reduction PPBPS varying lengths to 270'. Designated on site plan

Request to change system type to 25% reduction

This lot was fast tracked by S&ME; however, the house footprint has decreased from 70' to 66' and was finally built at a 42' depth. This along with a more conservative site preparation has left enough space for a 25% reduction rather than the 50% preliminarily shown on the AC. This plan is requesting the 25% reduction. All lines are staked in the field. Everything is in the area previously evaluated and contours remain the same.

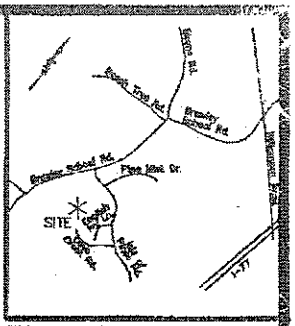
Toney C. Jacobs, LSS

DRAWING IS A PRELIMINARY PLAT FOR VERIFICATION OF ZONING COMPLIANCE FOR HOME LOCATION AND SHALL NOT BE USED FOR THE SALE, CONVEYANCE OR CONSTRUCTION OF THE DEPICTED LOT.

PLOT PLAN DEPICTS THE CONCEPTUAL LOCATION OF THE PROPOSED HOME AND ALL INFORMATION SHOWN TAKEN FROM PRELIMINARY PLATS ON FILE WITH IREDELL COUNTY AND SHOWN IMPROVEMENTS HAVE NOT BEEN AS-BUILT BY R. JOE HARRIS & ASSOCIATES, PLLC.

LOT IS SUBJECT TO ANY DEED RESTRICTIONS, EASEMENT CONVEYANCES, RIGHTS-OF-WAY, UTILITIES AND RESTRICTIVE COVENANTS ON FILE WITH THE IREDELL COUNTY, NCDOT, HOMEOWNERS ASSOCIATION AND/OR OTHER GOVERNMENTAL AGENCIES.

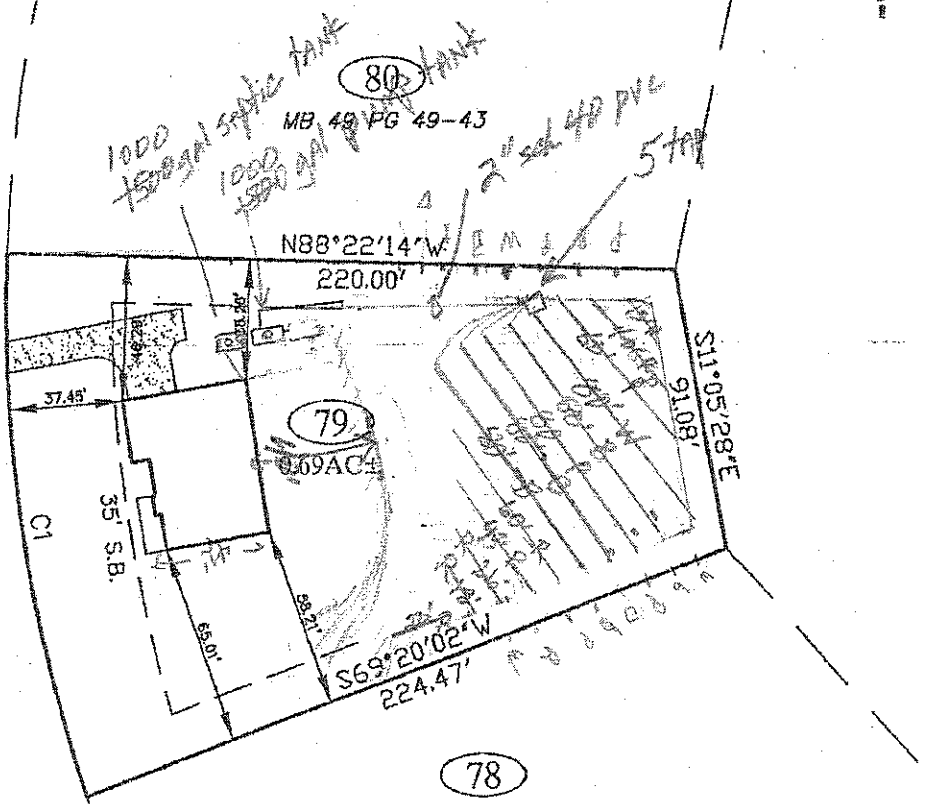
DRIVEWAY LOCATION APPROXIMATE ONLY. SUBJECT TO FIELD VERIFICATION AND LOCAL ORDINACES.



VICINITY MAP NOT TO SCALE

CHESAPEAKE POINTE LOT 79
PEARSON
FARMHOUSE

CURVE TABLE				
CURVE	LENGTH	RADIUS	CHORD	BEARING
C1	178.00	482.26	176.99	N08°54'30"W



REV. 1 NOTE:
CHANGED HOUSE TO PEASON FARMHOUSE

PLAT REF: MB 51, PG 77
IREDELL COUNTY, NC

LOT IS NOT LOCATED WITHIN THE 100 YEAR FLOOD PER FEMA FLOOD INSURANCE RATE MAP (FIRM) #3710463600J DATED MARCH 18, 2008.

-60 0 30 60
SCALE: 1" = 60'

Preliminary Plot Plan - Lot 79

for

Orleans Homebuilders @ Chesapeake Pointe

Iredell County, North Carolina

Drawn By: R.O.B.	Date: 4-22-13	Rev: 10-10-13
Surveyor: K.M.G.	Scale: 1" = 60'	MB 49 PG 49-43

R. Joe Harris & Associates, P.L.L.C.

Engineering • Land Surveying • Planning Management

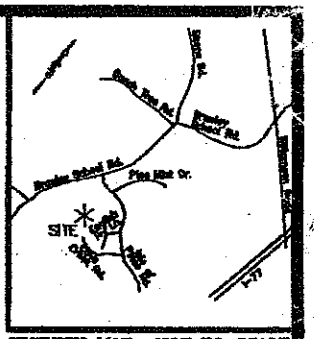
1698 W. Hwy 160, Suite 130, Fort Mill, S.C. 29708 P: (803) 802-1799

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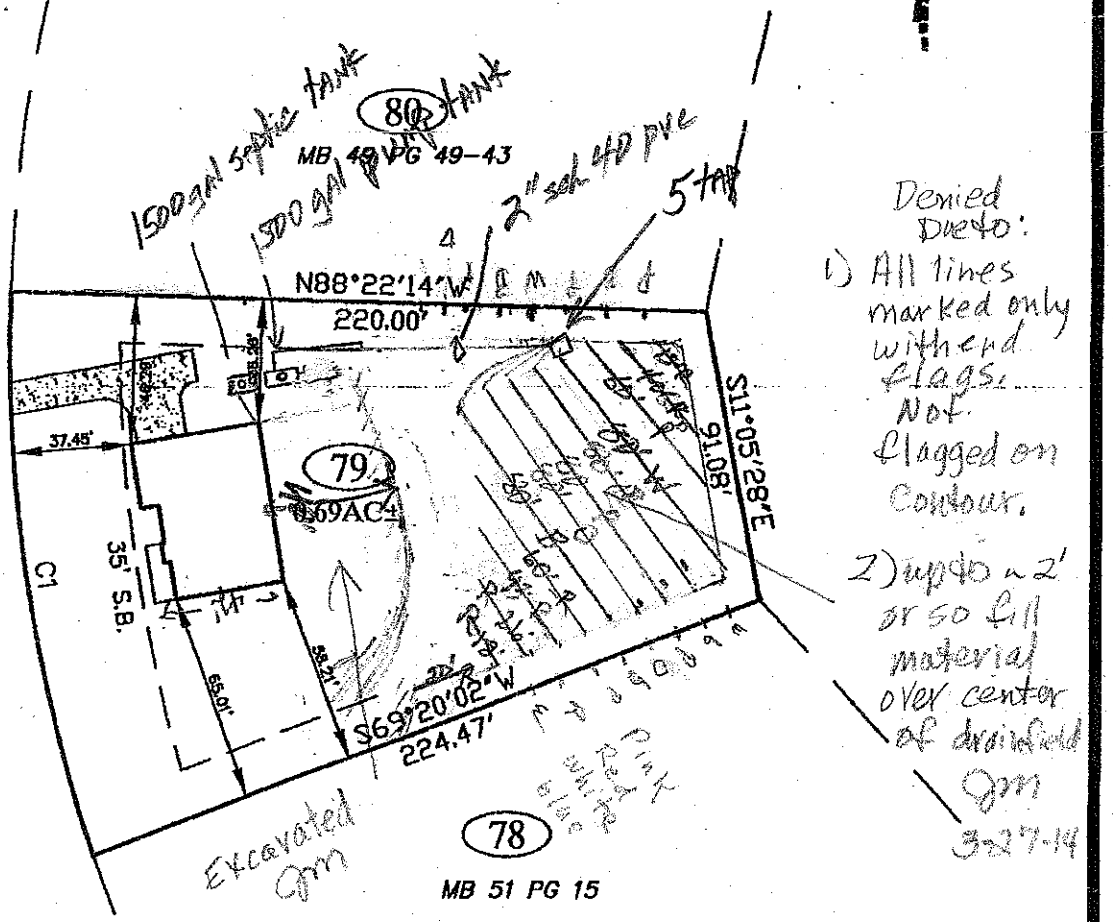
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Denied Due to:
1) All lines marked only with red flags. Not flagged on Contour.
2) up to ~2' or so fill material over center of drainfield
Opn
3-27-14

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Paid $75.00 BW
Ltd Relayout
Paid $120
Int.

IREDELL COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

PAGE 1: *APPLICATION FORM*

Application For: ( ) New Well Permit ( ) Well Repair Permit ( ) Well Abandonment
( ) Septic Improvement Permit (✓) Authorization to Construct ( ) Existing System Inspection ( ) Septic System Repair

THE ABOVE PERMIT DOCUMENTS WILL BECOME INVALID IF INFORMATION PROVIDED ON THIS APPLICATION IS FALSIFIED OR CHANGED, OR IF THE SITE IS ALTERED. THE IMPROVEMENT PERMIT IS VALID FOR EITHER 60 MONTHS OR WITHOUT EXPIRATION DEPENDING UPON DOCUMENTATION SUBMITTED APPLICATION WITH SITE PLAN 60 MONTHS, APPLICATION WITH COMPLETE, SCALED PLAT WITHOUT EXPIRATION. SEE 15A NCAC 18A .1937(f) FOR DETAILS.

Page 2: *Site Plan Worksheet* form MUST accompany this application

The following optional attachments may also be submitted: ( ) Survey Plat, scaled no more than 1 inch = 60 feet
Place an (X) beside whichever is submitted if applicable ( ) Custom Site Plan, scaled no more than 1 inch = 60 feet

Applicant Information:

Applicant Name: Dolen's Homebuilders Address: 700 Egret Point Cir. ste 102 Charlotte 28273 Phone: 704-971-8838

Owner Name: " Address: " Phone: "

Property Information:

Street Address: Lot 79 274 Cove Creek Rd

Subdivision Name: Chesapeake Point Section/Phase: _____ Lot Number: 79

Driving Directions: SW Bramley School, TL Isle of Pine, TR Cove Creek Rd on left

Site Development Information: *(check or complete ALL that apply)*

(✓) New Single Family Residence
( ) New Multi-Family Residence
( ) Accessory Building
( ) Bedroom(s) Addition

Maximum Number of Bedrooms: 4
Maximum Number of Occupants: 8
( ) Swimming Pool
( ) Other Addition/Structure: _____

(✓) Crawl Space Foundation
( ) Concrete Slab Foundation
( ) Basement with Plumbing
( ) Basement without Plumbing

Non-Residential Site Development:

Type of Business: _____
Square Footage of Building: _____
Maximum Number of Employee: _____
Maximum Number of Seats/Beds/Other: _____

Water Supply:

( ) New Well ( ) Existing Well (✓) Community Well ( ) City Water ( ) Other Public Water

Desired Septic System Type: *(you may rank in order of preference)* Year existing system installed: _____
( ) No Preference ( ) Alternative ( ) Conventional ( ) Innovative ( ) Modified Conventional ( ) Other: 30% reduction

Please answer the following to the best of your ability:

( ) Yes (✓) No Does the site contain any jurisdictional wetlands?
( ) Yes (✓) No Is any non-domestic sewage (i.e. industrial) to be generated?
( ) Yes (✓) No Is the site subject to approval by any other public agency?

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.

Signature: _____ 3/24/14
Property owner or owner's legal representative signature (SIGNATURE REQUIRED) DATE

IREDELL COUNTY HEALTH DEPARTMENT

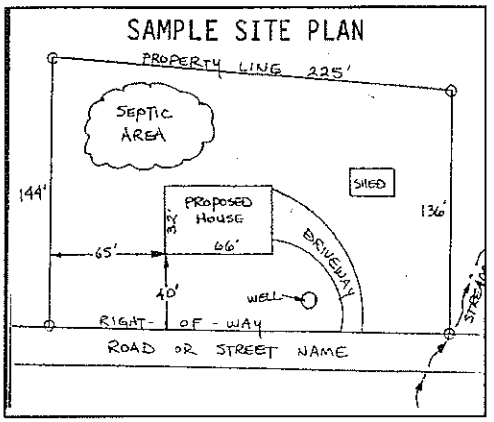
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PAGE 2: *SITE PLAN WORKSHEET*

SEE THE "SAMPLE SITE PLAN" BELOW. *INCOMPLETE SITE PLANS WILL BE RETURNED TO YOU FOR COMPLETION AND MAY RESULT IN A DELAY IN THE ISSUANCE OF YOUR SEPTIC SYSTEM PERMIT!!!*

Place an (X) beside each item as you complete the site plan:

( ) **Property Line measurements are clearly identified**
( ) **All proposed structures are indicated**
( ) **Front and side setbacks from property line**
( ) **Preferred driveway location and well location**
( ) **Area you prefer your septic system to be placed**
( ) **North arrow, or other sufficient indicator of direction**



Circle N/A on the following if appropriate:

Location of septic systems and wells within 100' of your property	**N/A**
Location of easements and rights of ways on your property	**N/A**
Location of any designated wetlands on the property	**N/A**

USE THIS SPACE TO DRAW YOUR SITE PLAN

Show: proposed house or business footprint, wells, water lines, patios, pools and decks, and any other item that will occupy space on the site

" See Attached "
LOS plan

Signature: _____ LSS

Property owner or owner's legal representative signature (SIGNATURE REQUIRED)

3/24/14

DATE

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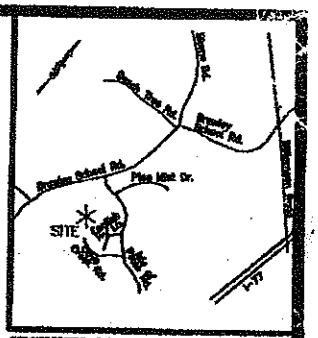
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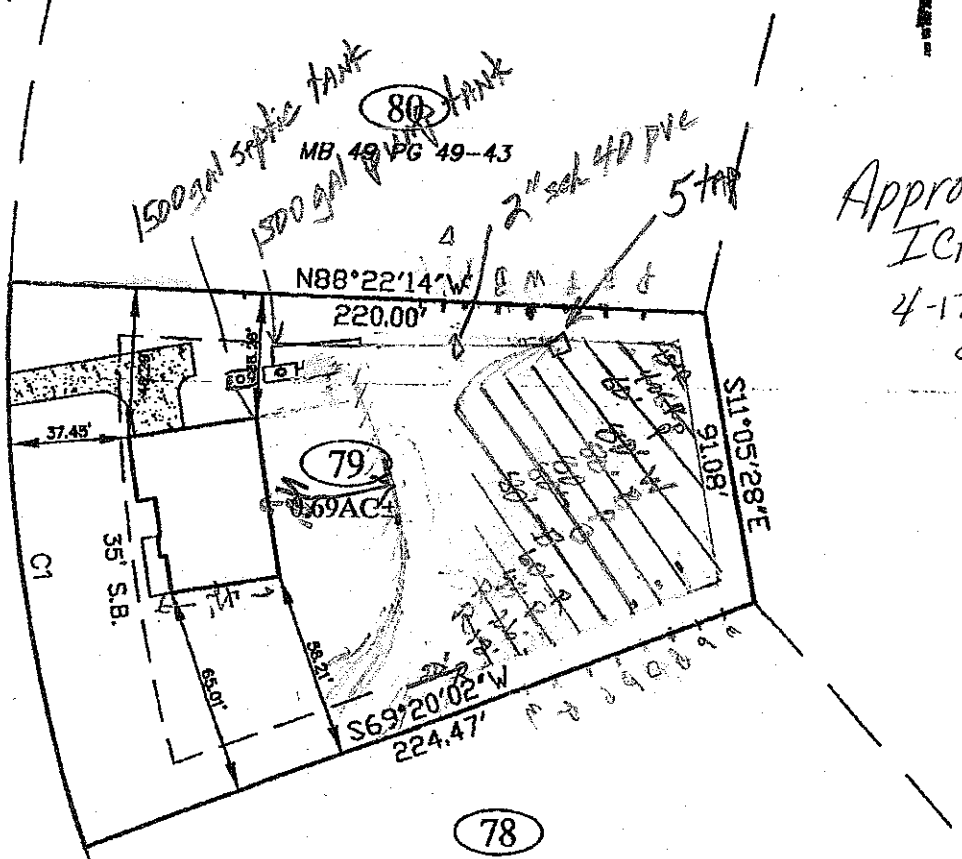


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Approved
ICHD
4-17-14
JM

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