

1/9/2008

duponbj

Groundwater and Wastewater Services File Imaging Project

May 2007

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S&ME

Date: July 7, 2005

To: Mr. David Cornelius, R.S. ✓
Mecklenburg County Env. Health Dept.

From: Paul G. Penninger, LSS
Toney C. Jacobs, LSS

RE: Request for an Improvement Permit for Lot 152 at The Sanctuary:
MCHD File #5862B

The Sanctuary at Lake Wylie is requesting an Improvement Permit for the above referenced lot. Mr. Bill Marlin has evaluated the soils (see attached MCHD soil sheets) and S&ME, Inc. has flagged the system and repair on the lot. The septic lines have been located by the surveyor and are shown on the attached maps provided by LandDesign Engineering. The attached sketch and specifications are not an Improvement Permit and are intended only to assist the MCHD in permitting the referenced lot at The Sanctuary.

We understand that a building permit cannot be issued until your office issues an Authorization to Construct (ATC). The buyer will apply for the ATC. If the buyer's house pad does not fit in the "building envelope" shown on the Improvement Permit, we understand that the proposed system may have to be modified prior to your office issuing the ATC. **No grading shall take place on the lot prior to obtaining the ATC from the MCHD.**

Tri-County Wastewater (TCWW) is under contract to supply maintenance services for each septic system installed at The Sanctuary. TCWW will have a list of preferred septic contractors for the subdivision and will also have requirements for septic system installation that are greater than the MCHD and State requirements. It will be the responsibility of TCWW to enforce any requirements above State requirements or the MCHD conditions on the Improvement Permit.

Please review the attached system sketch and design specifications for the Improvement Permit. Any additions or revisions you feel are necessary can be made on the Improvement Permit. Please call in you have and questions or comments.

S&ME, Inc.
105-D Denver Business Park Dr.
Mooresville, North Carolina 28115-7926

(704) 662-8625
(704) 662-8735 fax
www.smeinc.com

Design Specifications for Lot 152 at The Sanctuary
MCHD File # 5862B

Daily Design Flow:	600 gpd
Number Bedrooms:	5 bedroom
Basement or Crawl Space:	Basement
Septic Tank Size:	1500 gal
Pump Tank Size:	1500 gal
Primary System Loading Rate:	**0.3 gpd/ft^2**
Primary System:	**25% reduction**
Number and length of laterals:	4 @ 125 ft.
Total ft. of primary system:	500 ft.
Flow Rate through system:	22 gpm – use ½ in. SCH 80 taps with 2 ft. head pressure on pressure manifold (5.5 gpm per tap)
Pump Requirements:	to be calculated by installer when specific house and pump tank locations are available
Dosing Volume:	approx. 270 gal. – 2.2 doses/day at design flow
Depth of effluent pumped per dose:	calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Check Valve:	yes
Siphon break hole:	no
Repair System Loading Rate:	**0.3 gpd/ft^2**
Repair System:	**25% Reduction**
Total ft. of repair	540 ft.

Notes:

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

Sheet: 1 of 2
Property ID: PO 199-350-32
Lot #: 152
File #: 5862B
Code: 1

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Sanctuary at Lake Wylie
Address: PO Box 1003, Charlotte, N. C. 28210
Proposed Facility: Residence Design Flow (.1949): 600gpd
Location of Site: Roe Buck Meadow Lane
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

Applicant: Toney Jacobs & Assoc.
Date Evaluated: 3/15/2005
Property Size: Approx. .5 a inv.
Property Recorded:

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, 5	0-5	GR/SL	FR/SEXP/NS/NP	>48" TO SOIL WETNESS	48	N/A	NONE	PS, IV .3GPD/FT^2
		5-8	GR/SCL	FR/SEXP/SS/SP					
		8-48	SBK/C	FI/SEXP/S/P					
2	"	0-3	GR/CL	FR/SEXP/SS/SP	"	"	"	"	"
		3-48	SBK/C	FI/SEXP/S/P					
3	LS, 15	0-3	GR/CL	FR/SEXP/SS/SP	>49" TO SOIL WETNESS	49	"	"	"
		3-29	SBK/C	FI/SEXP/S/P					
		29-49	SBK/SCL	FR/SEXP/SS/SP					
4	NS, 15	0-4	GR/CL	"	"	"	"	"	"
		4-35	SBK/C	FI/SEXP/S/P					
		35-49	SBK/SCL	FR/SEXP/SS/SP					
5	LS, 20	0-5	GR/CL	"	"	"	"	"	PS, IV .325GPD/FT^2
		5-28	SBK/C	FI/SEXP/S/P					
		28-42	SBK/SCL	FR/SEXP/SS/SP					
		42-49	GR/SL	FR/SEXP/NS/NP					

Description	Initial System	Repair System
Available Space (.1945)	PS	PS
System Type(s)		
Site LTAR	.3GPD/FT^2	.3GPD/FT^2

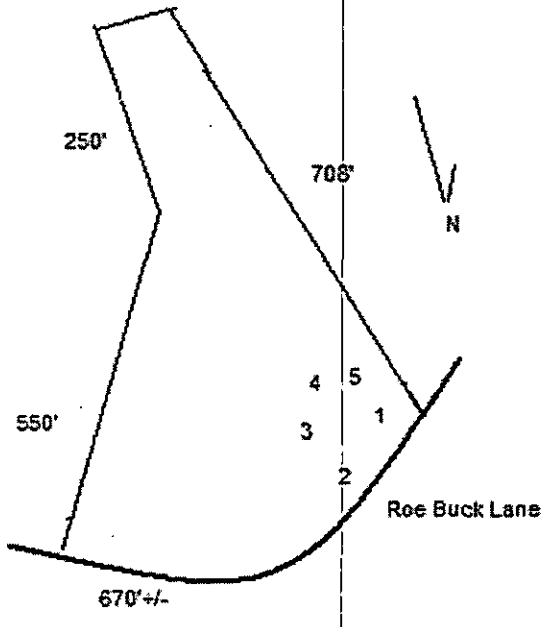
Other Factors (.1946):
Site Classification (.1948): PROVISIONALLY SUITABLE
Evaluated By: W. R. Marlin, LSS, 3/16/2005 W. R. Marlin
Others Present:

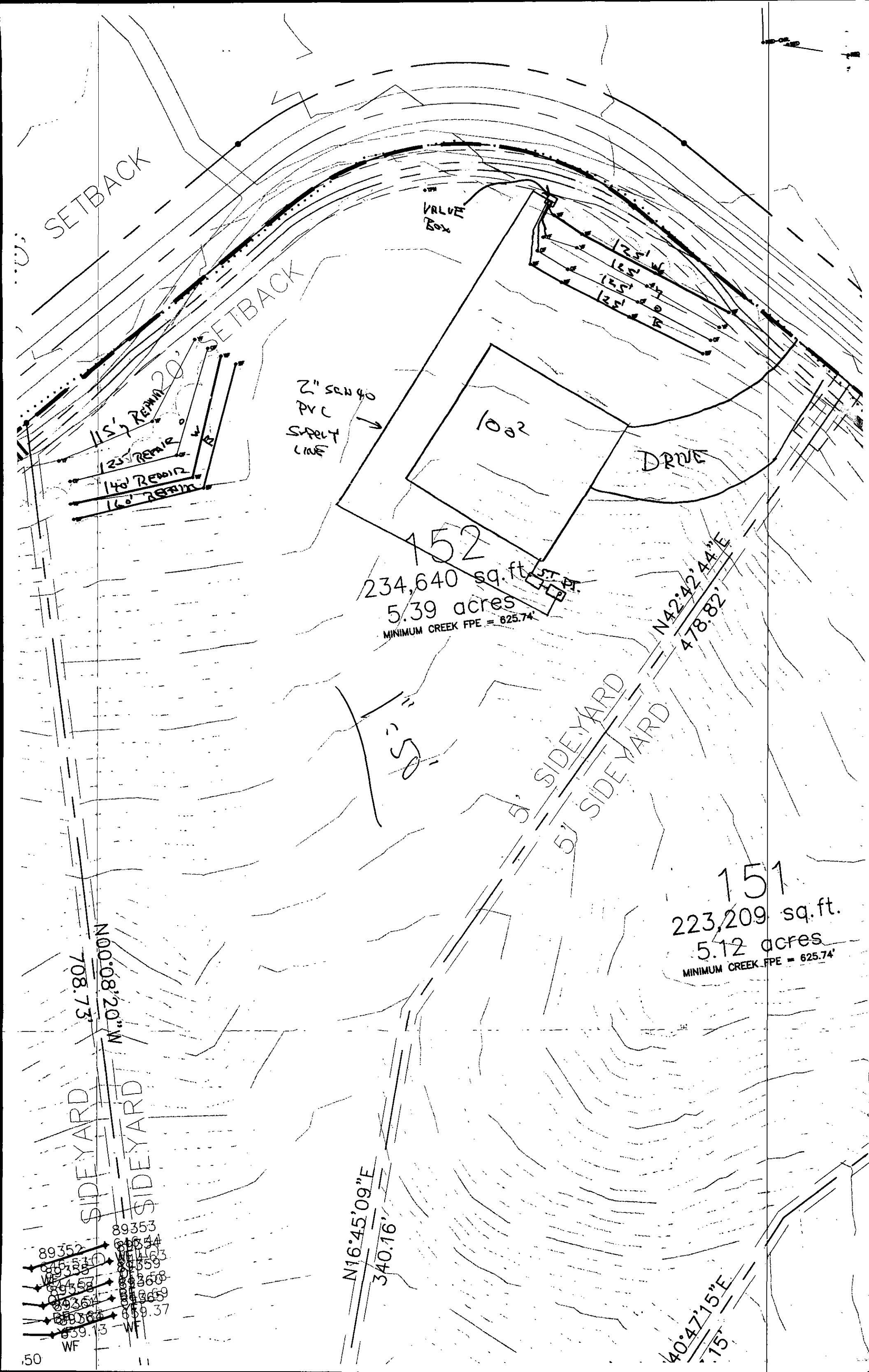
COMMENTS:
100% repair, would need pump

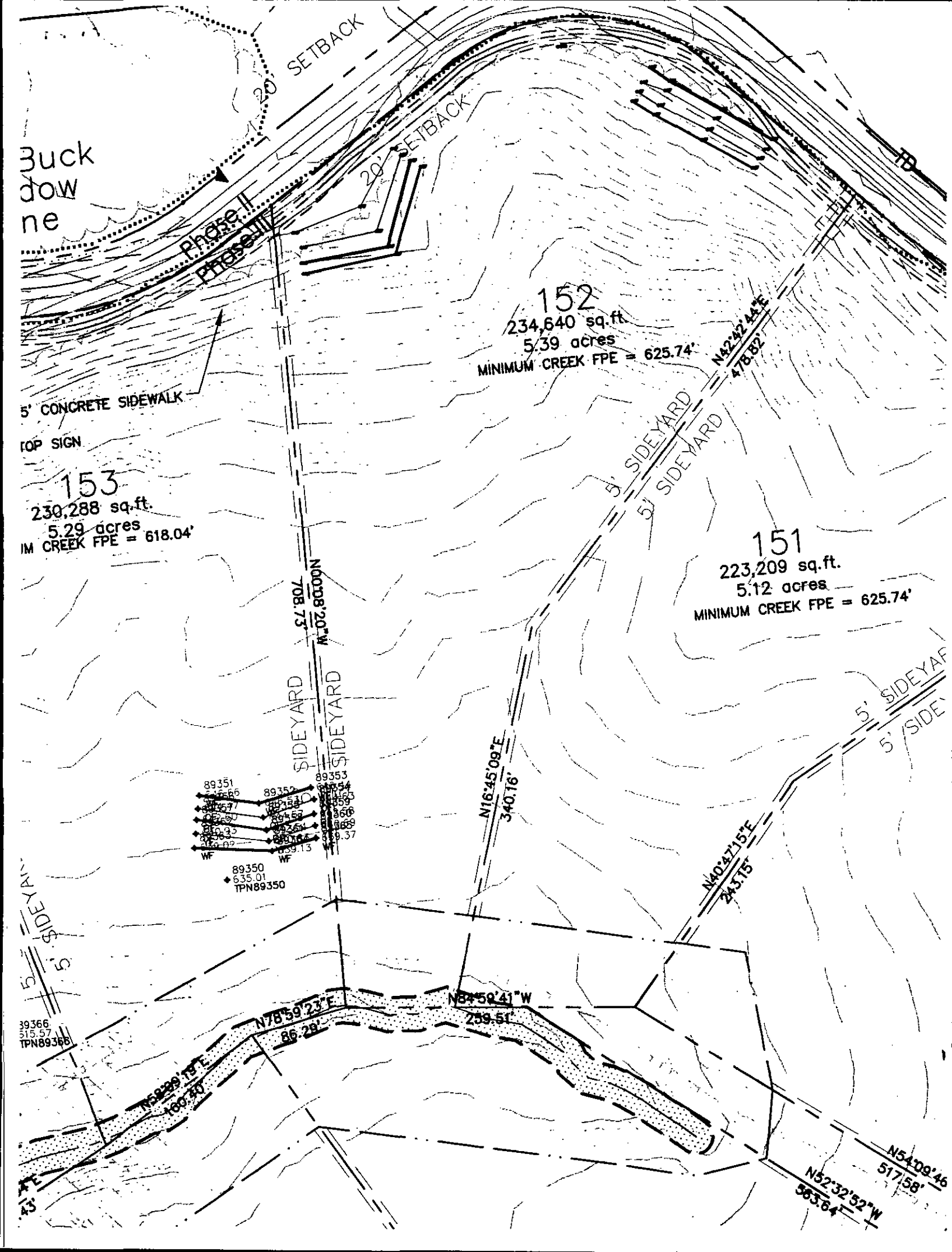
Landscape Position	Group	Texture	.1955 LTAR	Structure
R-Ridge	I	S-Sand	1.2 - 0.8	SG-Single Grain
SS-Shoulder Slope		LS-Loamy Sand		M-Massive
LS-Linear Slope				CR-Crumb
FS-Foot Slope	II	SL-Sandy Loam	0.8 - 0.6	GR-Granular
NS-Nose Slope		L-Loam		SBK-Subangular Blocky
HS-Head Slope				ABK-Angular Blocky
CC-Concave Slope	III	SI-Silt	0.6 - 0.3	PL-Platy
CV-Convex Slope		SICL-Silty Clay Loam		PR-Prismatic
T-Terrace		CL-Clay Loam		
FP-Flood Plain		SCL-Sandy Clay Loam		
	IV	SC-Sandy Clay	0.4 - 0.1	
		SIC-Silty Clay		
		C-Clay		

Consistence Moist	Consistence Wet	Mineralogy
VFR-Very Friable	NS-Non-Sticky	SEXP-Slightly Expansive
FR-Friable	SS-Slightly Sticky	EXP-Expansive
FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations




SETBACK
20' SETBACK
VALVE BOX
2" SCH 40 PVC SUPPLY LINE
115' REMAIN
125' REMAIN
140' REMAIN
160' REMAIN
125'
125'
125'
125'
10 d2
DRIVE
152
234,640 sq.ft.
5.39 acres
MINIMUM CREEK FPE = 625.74'
S.T. PT.
N42°42'44"E
478.82'
5' SIDEYARD
5' SIDEYARD
151
223,209 sq.ft.
5.12 acres
MINIMUM CREEK FPE = 625.74'
N00°08'20"W
708.73'
SIDEYARD
SIDEYARD
N16°45'09"E
340.16'
89353
89352
89354
89355
89359
89358
89360
89357
89356
89361
89362
89363
89364
89365
859.37
859.13
WF
50


20' SETBACK
20' SETBACK
Buck
dow
ne
Phase II
Phase III
RD
5' CONCRETE SIDEWALK
TOP SIGN
152
234,640 sq.ft
5.39 acres
MINIMUM CREEK FPE = 625.74'
N42°42'44"E
478.82'
5' SIDEYARD
5' SIDEYARD
153
230,288 sq.ft.
5.29 acres
IM CREEK FPE = 618.04'
151
223,209 sq.ft.
5.12 acres
MINIMUM CREEK FPE = 625.74'
N00°08'20"W
708.73'
SIDEYARD
SIDEYARD
N16°45'09"E
340.16'
5' SIDEYARD
5' SIDEYARD
N40°47'15"E
243.15'
89351
89352
89353
89350
635.01
TPN89350
N84°59'41"W
259.51'
N78°59'23"E
86.29'
N58°59'19"E
160.40'
89366
515.57
TPN89366
N54°09'46"
517.58'
N32°32'52"W
563.64'

FEE: _____
DATE: _____

AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION

PERMIT NUMBER: 5862B
PARCEL NUMBER: 199-350-32

JOB LOCATION ADDRESS: Roe Buck Meadoe Lane Lot #152
PROPERTY OWNER: The Sanctuary @ Lake Wylie
BUILDING CONTRACTOR: ____
SUBDIVISION NAME: The Sanctuary @ Lake Wylie
AUTHORIZATION ISSUED BY: David Cornelius, RS DATE: 07/19/05

DENR/DEH AUTHORIZED AGENT 7/19/05

AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NUMBER 5862B, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

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

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

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

5. OTHER CONDITIONS:
   Install according to plans on file submitted by S&ME, 7/7/05.
   Lot #152, phase III

CONDITIONS OF IMPROVEMENT PERMIT / CONSTRUCTION AUTHORIZATON

Permit Number: **5862B** Tax Number: **199-350-32**

- The IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be **NO** grading, filling, or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is **NOT** transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

Basement: ☒ Yes ☐ No ☐ Partial Basement

Primary Wastewater System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

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

0.3 Long-term acceptance rate (GPD/ft^2)	**600** Max gallons/day wastewater flow	**1500** Absorption Area (ft^2)	**9** Trench spacing (min. on centers) (ft)
Serviced by private well: ☐ Yes ☒ No	**1500** Gallon septic tank	**500** Total trench length (ft)	**24** Maximum trench depth (in) (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions.)
5 Bedrooms in residence	**1500** Gallon pump tank	**na** Depth of stone (in)	

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

Additional conditions: **Install according to plans on file submitted by S&ME, 7/7/05. Lot #152, phase III**

Repair Area System

Type: ☐ I ☐ II ☒ III ☐ IV ☐ V ☐ VI

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

1500 Absorption Area (ft^2) **500** Total trench length (ft)	**na** Depth of stone (in)	**9** Trench spacing (min. on centers) (ft)	**24** Maximum trench depth (in)

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

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

*** This improvement permit is transferable.

DENR Authorized Agent — Date 7/19/05

Owner/Agent Signature — Date 8-2-05

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE: (704) 336-5103
FAX: (704) 336-6894

NC DENR
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

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

Sheet: 1 of 2
Property ID: PO 199-350-32
Lot #: 152
File #: 5862B
Code: 1

ACS

SOIL/SITE EVALUATION for ON-SITE WASTEWATER SYSTEM

Owner: Sanctuary at Lake Wylie
Applicant: Toney Jacobs & Assoc.
Address: PO Box 1003, Charlotte, N. C. 28210
Date Evaluated: 3/15/2005
Proposed Facility: Residence
Design Flow (.1949): 600gpd
Property Size: Approx. .5 a inv.
Location of Site: Roe Buck Meadow Lane
Property Recorded:
Water Supply: [x] Public [ ] Individual [ ] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

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Available Space (.1945)	PS	PS
System Type(s)		
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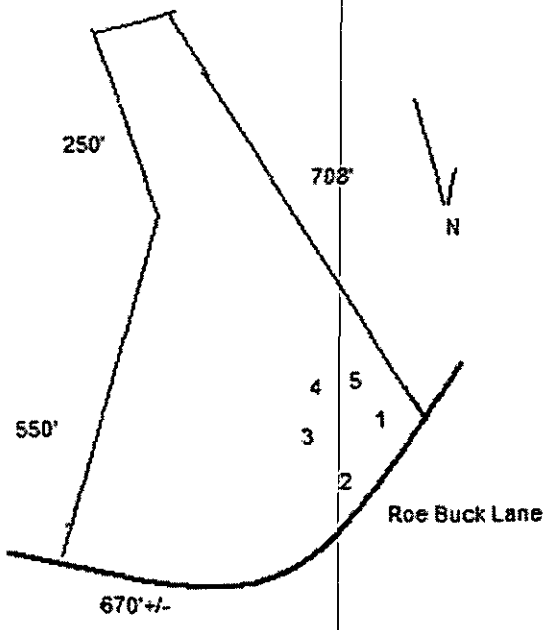
Other Factors (.1946):
Site Classification (.1948): PROVISIONALLY SUITABLE
Evaluated By: W. R. Marlin, LSS, 3/16/2005, W. R. Marlin
Others Present:

COMMENTS:
100% repair, would need pump

Landscape Position	Group	Texture	.1955 LTAR	Structure
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		SIC-Silty Clay		
		C-Clay		

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FI-Firm	S-Sticky	
VFI-Very Firm	VS-Very Sticky	
EFI-Extremely Firm	NP-Non-Plastic	
	SP-Slightly Plastic	
	P-Plastic	
	VP-Very Plastic	

Sketch of Soil Evaluation Locations



GWS – RES. APP 12/04

200.00 check 1891

SEPTIC FEE
DATE
CRT [illegible]

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

2/21/05

MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES

WELL FEE
DATE
CRT [illegible]

FILE # 5862B

SEPTIC / TYPE APPLICATION: ☐ NONE ☒ NEW SYSTEM EXISTING SYSTEM: ☐ EXPANSION/ALTERATION ☐ REPAIR

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

JOB LOCATION INFORMATION:

TAX/PARCEL #: 199 350 32
STREET ADDRESS: Roe Buck MEADOW
CITY: Charlotte
STATE: NC ZIP: 28278
SUBDIVISION OR MOBILE HOME PARK NAME: SANCTUARY
LOT #: 152
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: 5
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)

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

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

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

PROPERTY OWNER:

NAME: SANCTUARY AT LAKE WYLIE, LLC
ADDRESS: P.O. Box 1003
CITY: CHARLOTTE, NC
STATE: NC ZIP: 28201
HOME PHONE: WORK PHONE: 295-0950
MOBILE PHONE: FAX:

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: TONEY JACOBS, ESQ. INC
ADDRESS: 168 Granville Dr.
CITY: Mooresville
STATE: NC ZIP: 28117
HOME PHONE: — WORK PHONE: 663-6905
MOBILE PHONE: — FAX: 662-9845

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? Lots Not Recorded
WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?

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

2-21-05
Owner's/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's/Agent's Signature Date

MECKLENBURG COUNTY HEALTH DEPARTMENT
GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST., SUITE 211
CHARLOTTE, NC 28202
704-336-5103 / FAX: 704-336-6894