

9200 WANEDEN LN

19909154

6/1/2007

duponbj

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

S&EC

Soil & Environmental Consultants, Inc.

25 North College Ave. ■ Newton, North Carolina 28658 ■ (828) 466-7404 ■ Fax (828) 466-7406

August 12, 1999
Project #: 2-1282

Dave Fuller & Associates
Attn: T. Aldred
1700 Abbey Place
Charlotte, NC 28209
Fax: (704) 523-0026

Dear Mr. Aldred:

Soil & Environmental Consultants, Inc. (S&EC) performed a preliminary soil/site suitability evaluation on Lot 17 Lake Wylie Recreation Lots. This lot is located off Wanenden Lane in Mecklenburg County, NC. The site evaluation was performed at your request as part of the preliminary planning process in order to determine areas of soil, which have potential for subsurface wastewater disposal.

S&EC traversed the property and observed landforms (slope, drainage patterns, past use, etc.) as well as soil conditions (depth, texture, structure, seasonal wetness, restrictive horizons, etc.) through the use of hand auger borings. From these observations, a preliminary evaluation of the site, relative to subsurface disposal of wastewater, was developed. The areas considered potentially useable are those which meet the vertical soil criteria for conventional, or Low Pressure Pipe (LPP) septic systems. The criteria used is contained in Article 11 of GS 130A, "Laws and Rules for Sewage Treatment and Disposal Systems", Sections .1940 through .1944.

Once potentially useable areas are located, the next consideration is the horizontal extent of those areas. The size and configuration of the useable soil area dictate the utility of that area. The size of a subsurface disposal field is determined by: 1) design flow from the source (in residences this is determined by the number of bedrooms, e.g. 120 gallons per day per bedroom) and 2) the long-term acceptance rate (LTAR) of the soil (based on the hydraulic conductivity of the soil, a function of the soil's texture, mineralogy, structure, porosity, etc.). The configuration must be such that an efficient layout of disposal lines (on contour) is possible. An additional consideration is the required setbacks for the system from various elements such as wells (100'), streams and ponds (50'), property lines (10'), top of embankment (15'), etc.

The site plan for a lot must ensure that adequate soil area for system and repair is unaffected by site elements (building placement, parking lots, roads, etc.). The area designated on the site plan for the septic system and repair must remain undisturbed (no mechanical clearing, excavation, heavy traffic or other significant site disturbing activities)

until authorized by the appropriate permitting agency. A lot with adequate useable soil area may be rendered unusable as a result of improper site planning and/or disturbance.

This is a preliminary report, which discusses the potentially useable soils for on-site subsurface wastewater disposal, and, of course, does not constitute or imply any approval or permit as needed by the client from the local heath department. An individual septic system permit will be required for this lot prior to obtaining a building permit. This will involve a detailed evaluation by the local health department to determine, among other things, system size and layout, loading rate, well, drive and house location. Only after developing this information can a final determination be made concerning specifics of system design and site suitability.

Within the evaluated tracts, the unsuitable areas are due to depths to restrictive horizons (unsuitable saprolite, etc.), complex topography, or drainageways. The potentially usable soils on this tract typically consist of clay-textured subsoil. Such soils may be permitted for conventional septic systems by the county with a loading rate of 0.1 to 0.4 gpd/ft^2 on a trench bottom area basis, or for a Low-Pressure Pipe or drip system with a loading rate of 0.05 to 0.2 gpd/ft^2 on an area basis. These loading rates are taken from 15 NCAC 18A.1900 (Laws and Rules for Sanitary Sewage Collection, Treatment and Disposal) and are based on the most hydraulically limiting layer within three feet for Conventional systems and within two feet for LPP (i.e. the Bt or BC Horizon in this case).

The site is located in the Piedmont region of North Carolina. Most of the lot was gullied and unsuitable for subsurface septic systems. However, one area found on the property may be usable for a fill low pressure or subsurface drip system. The soils in this area consist of red clay subsoil that extends to a depth of 33" in the middle of the proposed field and to 19" at the southern edge of the proposed field. However, due to the slope a subsurface drip system would be the only system that could work in this area. The installation depth for the lines for this type of system would be 6" below land surface. The usable soils were flagged in the field with S&EC logo flagging. A surveyor has located the flags and the surveyed area is shown on the attached map. The total area surveyed is approximately 7,280 ft^2. Approximately 20 feet on the southern side of the proposed area will not be used, due to setback from the lake and to allow additional building area for the proposed house. The 20' wide area lost (shaded area) will account for approximately 1,800 ft^2, which will leave approximately 5,480 ft^2 (hatched area) of soil potentially usable for a septic system.

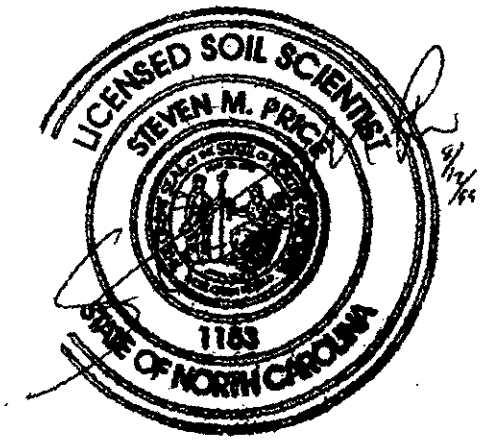
You informed me that this lot predates the requirements for 100% repair area. Since this is the case, only enough area for the initial system is required. The utility of a potential useable soil area for subsurface systems is most accurately determined by an on-ground layout of the proposed system. The total area needed for system will depend upon the system type, the LTAR, the layout of that system and the total design flow (factors mentioned above). During our site meeting with Bill Marlin and Larry Thompson of the Mecklenburg County Environmental Health Department, we discussed using a LTAR of 0.1 gpd/ft^2. Assuming this loading rate, a minimum area needed for a three-bedroom

residence (without repair) is 3,600 ft^2. Typically additional area is needed due to topographic irregularities. With the approximately 5,480 ft^2 located on the site map, there should be enough area to account for any irregularities. The attached map does not include the proposed house design but does show the existing house. This is the only map provided to me that showed the proposed drainfield area. The architect should be able to transfer the soils information on this map onto his maps and see if any revisions to the house layout are needed.

All surface runoff should be diverted around the proposed system area. There is one gully that appears to run from the road to approximately flag #8. This gully and the runoff that it may carry should be diverted to go around the proposed system area. This gully could possibly be made to tie into the gully located to the east of flags 6 and 7.

Soil and Environmental Consultants, Inc. is pleased to be of service in this matter and we look forward to assisting in the successful completion of the project. Please feel free to call with any questions or comments.

Sincerely,



Steven M. Price,
NC Licensed Soil Scientist #1153

cc: Larry Thompson

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

#2

Sheet: _____
Property ID: 199-091-10
Lot #: 17
File #: 5554A

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Bill & Christen
APPLICANT: T. Aldred
ADDRESS: c/o Aldred, Dave, Fuller, & Assoc; 1708 Aldridge Pl. Raleigh
DATE EVALUATED: 6-26-99
PROPOSED FACILITY: residence PROPOSED DESIGN FLOW (.1949) 480 gpd PROPERTY SIZE: 1.5±
LOCATION OF SITE: 9200 Wakefield Farm PROPERTY RECORDED:
WATER SUPPLY: ☐Private ☐Public ☒Well ☐Spring ☐Other
EVALUATION METHOD: ~~☐Augur Boring~~ ☒Pit ☐Cut
TYPE OF WASTEWATER: ~~☐~~Sewage ☐Industrial Process ☐Mixed

PROFILE #	8-20% .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	OTHER PROFILE FACTORS .1943 SOIL DEPTH	OTHER PROFILE FACTORS .1956 SAPRO CLASS	OTHER PROFILE FACTORS .1944 RESTR HORIZ	PROFILE CLASS &LTAR
1	LS	0-4"	grl cl	Fr/SExPl SS/SP	750" TO soil wetness	25"	PS	None	PS IV .351 Fm
		4-17"	sBK/c	VFr/Mixed/VS/VP					
		17-25"	M/sCl	Fr/SExPl SS/SP					
		25-50"	M/SL	Fr/SExPl NS/NP					
2	LS	0-2"	grl cl	Fr/SExPl SS/SP	760" TO soil wetness	13"	US	None	US
		2-13"	sBK/c	VFr/Mixed/VS/VP					
		13-40"	M/sCl	Fr/SExPl SS/SP					
		40-60"	M/SL	VFr/SExPl NS/NP					
3	LS	0-3"	grl cl	Fr/SExPl SS/SP	732" TO soil wetness	32"	US	None	US IV .259 Fm
		3-32"	sBK/c	Fr/SExPl S/P					
4	LS	0-3"	grl cl	Fr/SExPl SS/SP	743" TO soil wetness	21"	N/A	None	US
		3-21"	sBK/c	Fr/SExPl S/P					
		21-43"	M/sCl	Fr/SExPl SS/SP					
5	LS	0-8"	grl sCl	Fr/SExPl SS/SP	739" TO soil wetness	21"	N/A	None	US
		8-21"	sBK/c	VFr/Mixed/VS/VP					
		21-39"	M/sCl	Fr/SExPl SS/SP					

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

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): Unsuitable
EVALUATED BY: W.R. Marlin, LSS 6-29-99
OTHER(S) PRESENT: T. Aldred, P. Walker, J. Blackmon

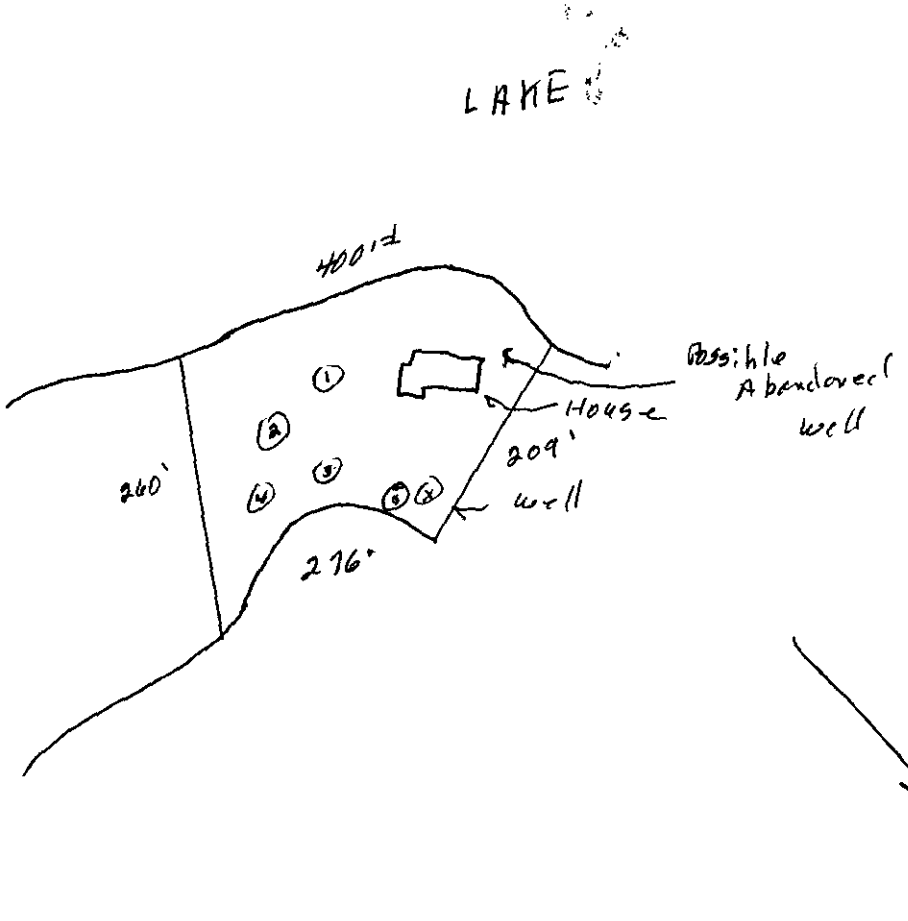
FILE # 5554A

COMMENTS

LANDSCAPE POSITION	GROUP	TEXTURE	.1955 LTAR
R-RIDGE	I	S-SAND	1.2-0.8
S-SHOULDER SLOPE		LS-LOAMY SAND	
L-LINEAR SLOPE			
FS-FOOT SLOPE	II	SL-SANDY LOAM	0.8-0.6
N-NOSE SLOPE		L-LOAM	
H-HEAD SLOPE			
CC-CONCLAVE SLOPE	III	SI-SILT	0.6-0.3
CV-CONVEX SLOPE		SICL-SILTY CLAY LOAM	
T-TERRACE		CL-CLAY LOAM	
FP-FLOOD PLAIN		SCL-SANDY CLAY LOAM	
	IV	SC-SANDY CLAY	0.4-0.1
		SIC-SILTY CLAY	
		O-ORGANIC	

CONSISTENCE	
MOIST	WET
VFR-VERY FRIABLE	NS-NON-STICKY
FR-FRIABLE	SS-SLIGHTLYSTICKY
FI-FIRM	S-STICKY
VFI-VERY FIRM	VS-VERY STICKY
EFI-EXTREMELY FIRM	NP-NON-PLASTIC
	SP-SLIGHTLYSTICKY
	P-PLASTIC
	VP-VERY PLASTIC

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

June 30, 1999

Bill Childers
C/O Dave Fuller & Associates
1700 Abbey Place
Charlotte, NC 28209

Re: 9200 Wanenden Lane
File: 5554A
Parcel: 199-091-10

Dear Property Owner:

Receipt of your Application for Improvement Permit for the above referenced property is acknowledged. A soil and site evaluation have been conducted. The results of the evaluation indicated that the site is **UNSUITABLE** under Rules .1940 **TOPOGRAPHY AND LANDSCAPE POSITION**, .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 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.

You may also wish to obtain the services of a private consultant to collect the site-specific data and submit such a system design to the Health Department for technical review. A site may be reclassified to Provisionally Suitable provided written documentation, including engineering, hydrogeologic, geological, or soil studies indicates to the local Health Department that a proposed septic tank system or a proposed alternative system can reasonably be expected to function satisfactorily.

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 336-5570.

Sincerely,

Philo S. Walker RS

Philo S. Walker, R.S.
Individual Water and Wastewater Systems

Cc: T. W. Aldred

FEE: 200.00 CHK # 3351

DATE: 6/10/99 JC

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

[ ] CRT

TYPE APPLICATION: ___ NEW SYSTEM X 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 #: 5554A

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 199-091-10

STREET ADDRESS: 9200 WANEDEN LN.

SUBDIVISION OR MOBILE HOME PARK NAME: N/A

LOT NUMBER: LOT # 17

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: 4000 ±

NUMBER OF BEDROOMS: 4 OR 5 NUMBER OF OCCUPANTS: 2

CLOSING DATE 7/15/99

FOUNDATION FOR RESIDENCE:

___ WITHOUT BASEMENT
___ ON SLAB
___ CRAWL SPACE
___ WITH BASEMENT /PLUMBING
___ WITH BASEMENT /NO PLUMBING

2 STORY

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:
A NEW SINGLE FAMILY RESIDENCE IS TO BE BUILT. THE EXISTING HOUSE COULD REMAIN.

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	WELL, SPRINGS OR WATERLINES	✓ YES ___ NO
EXISTING WASTEWATER SYSTEMS	✓ YES ___ NO	DESIGNATED WETLANDS	___ YES ✓ NO
EASTMENTS OR RIGHT-OF-WAYS	___ YES ✓ NO		

PROPERTY OWNER: UNDER CONTRACT TO BILL CHILDERS

NAME: CHILDERS (LAST) BILL (FIRST) S. (MI)

ADDRESS: C/O T.W. ALDRED-DAVE FULLER & ASSO. 1700 ABBEY PLACE

CITY: CHARLOTTE STATE: NC ZIP: 28209

DAYTIME PHONE: (704) 523 - 0008

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: ALDRED (LAST) T.W. (FIRST) (MI)

DAYTIME PHONE: (704) 523-0008

C/O DAVE FULLER & ASSO

1700 ABBEY PLACE - CHARLOTTE 28209

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? 1950 + SOLD IN 1989

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: T.W. Aldred Jr. - C/O Bill Childers DATE: 6/10/99

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

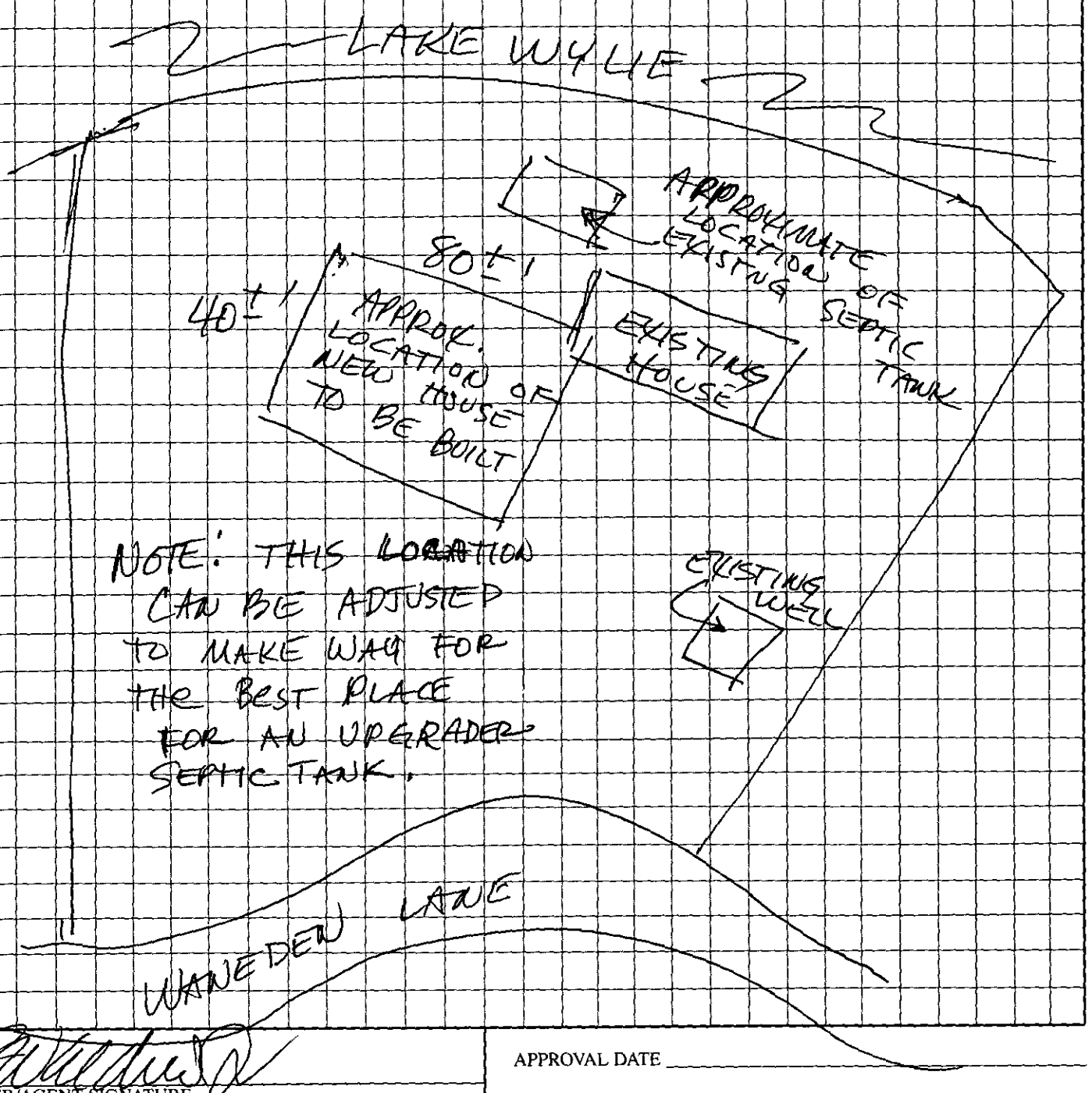
PROPOSED PLOT PLAN

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

FILE: 5554A

TC: 199-091-10

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 6/10/99

APPROVAL DATE _____

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

APPLICATION FOR AN IMPROVEMENT PERMIT

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

Mecklenburg County services are available without regard to ethnic origin, sex, or disability.

(OFFICE USE ONLY)
FILE: 5554A
TC: _____
SERIAL: No 18017
☒ L ☒ CRT

① ADDRESS: 9200 WANEDEN LANE (STREET NO. / STREET) ② FILE: _____
③ JURISDICTION: _____ ④ TAX PARCEL NO.: 199-091-10
⑤ SUBDIVISION: _____ ⑥ LOT: _____ ⑦ BLOCK: _____

OWNER

⑧ NAME: JERRY (FIRST) (MIDDLE) BLACKMON (LAST)
⑨ MAILING ADDRESS: 2019 EAST QUEENS Rd
⑩ CITY: CHARLOTTE ⑪ STATE: NC ⑫ ZIP: 28207
⑬ PHONE: (WORK) 332-6164 ⑭ (HOME) 332-1048

REQUEST

This request is for a(n):

⑮ ☐ New permit
⑯ ☐ Repair or alteration permit
⑰ ☐ Authorization for mobile home exchange
⑱ ☒ Other (specify) DECK

DESIGN CRITERIA

System will serve:

⑲ ☒ Residence ⑳ ☐ Mobile home ㉑ ☐ Business or place of public assembly
㉒ Number of bedrooms? THREE ㉕ Type? _____
㉓ Maximum occupancy? THREE ㉖ Maximum number of employees? _____
㉔ Basement? ☐ yes ☒ no ㉗ Maximum number of seats? _____

WATER SUPPLY

㉘ Water supply from (present or proposed):

A ☒ Individual well
B ☐ Municipal system
C ☐ Community well
D ☐ Community system

IMPROVEMENT PERMIT

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 permit is issued by this Department.

... This permit is not transferable, and shall become null and void 36 months from the date of issuance. Mayflea existing system

Environmentalist — Date 4/3/89

Director or Authorized Section Head — Date 4/3/89

*This permit must be signed by the Director of Mecklenburg County Health Department or an authorized section head in order to be valid.

㉙ The undersigned, 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 on the property for the purpose of processing this request.

Signed: Reid H. Davis FOR SONRISE INC.
Date: 3-27-89

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION

CHARGE SLIP

Date 3/27/89

Name/Company Sonics Inc

Sanitation
Vector Control ✓
O.P.W.D.

Service: Ltr. Permit addition
55549

MECKLENBURG COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
PAID
MAR 27 1989
CK # 1507
$20.00

Fee: $ 20.00

K Faulkner
Completed by

Collected by

PROPOSED PLOT PLAN

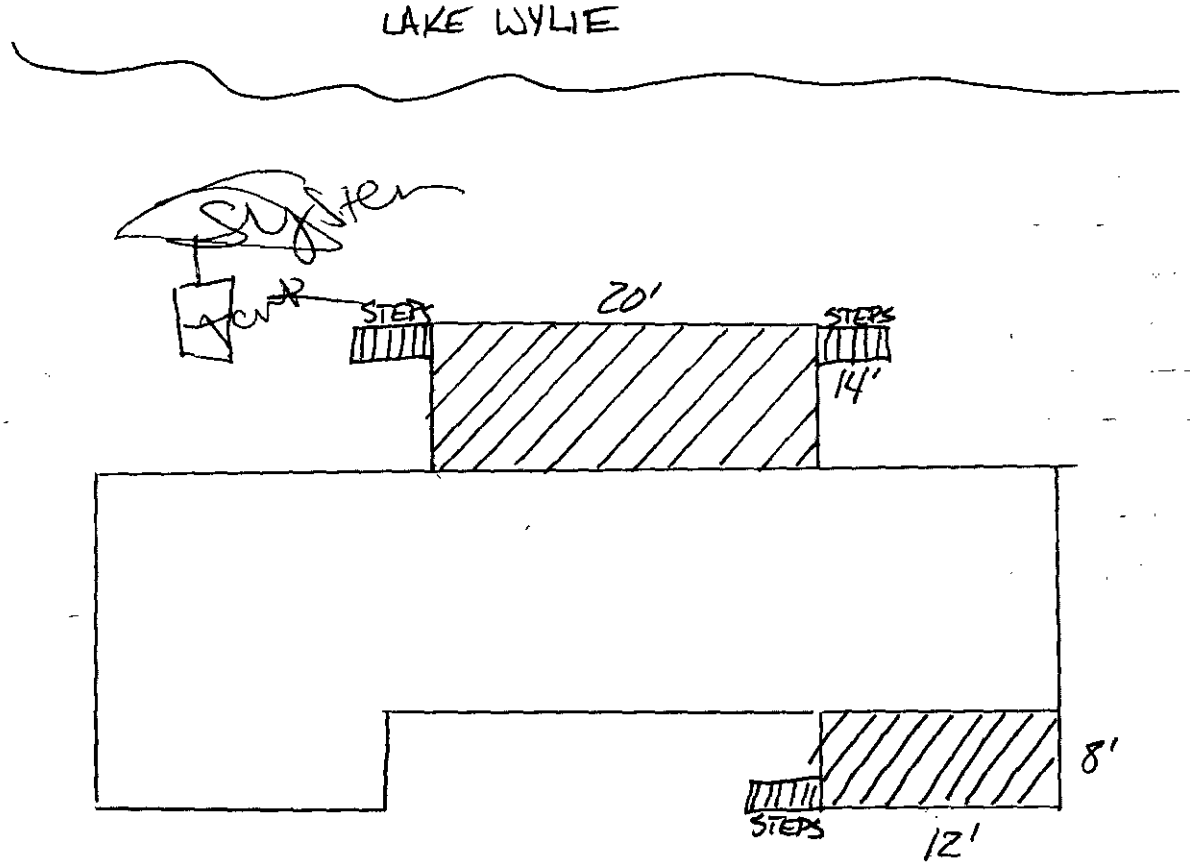
MECKLENBURG COUNTY · ENVIRONMENTAL HEALTH ·

1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: SSS4A

TC: 199-091-10

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.



Note:
Advised Property Owner of location of tank & drainfield

Signed: Reid & Davis for Sunrise Inc.

Date: 3-27-89