

1/7/2008

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Groundwater and Wastewater Services File Imaging Project

May 2007

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H.P.

PROPOSAL FOR OFF-SITE SEPTIC AREA FOR LOT 77A BANKHEAD ROAD, LAKE WYLIE

Background

The present owners of lot 77A and 77B at the end of Bankhead Road at Lake Wylie are in the process of purchasing Surplus lot 3237.02 from Crescent Resources, Inc. As a part of the agreement, CRI is to supply the owners with three potential off-site septic systems for Lots 77A, 77B, and surplus lot 3237.02. The septic areas are located at the intersection of Bankhead Road and Wilbanks Drive. Toney C. Jacobs and Associates has worked with CRI during the evaluation and permitting process of these septic areas. We conducted initial preliminary soil evaluations and have made applications with the Mecklenburg County Health Department. Mr. Bill Marlin, LSS of the MCHD, has evaluated the soils on the septic areas and generally agreed with our recommendations. Toney C. Jacobs and Associates has flagged the three systems in the field and has met the surveyor to assist in creating a record map showing the three potential building lots, the septic supply line easement between the lots and the off-lot septic areas. The septic supply line easement is on CRI land (it is our understanding that Wilbanks Drive is owned by CRI and is not a DOT maintained road).

There is an older existing home on Lot 77A, a new home on Lot 77B, and no home on the CRI surplus lot 3237.02. It is our understanding that after purchasing surplus lot 3237.02, the owners may work to reconfigure the existing lot lines to create the best three waterfront lots possible. This report recognizes that the older home may be replaced with a newer home in the near future. At this time, we are mainly interested in getting the three surveyed septic areas approved while the owners decide how to reconfigure the property or if at all. If the property is reconfigured, the supply easement may have to be modified at the building lots.

For Lot 77A, we are proposing a 4 bedroom, 25% reduction septic system. This could be an Infiltrator or EasyFlow system. The system will require a pump and the effluent will be distributed to the trenches via a pressure manifold. The repair will be a 25-50% reduction system. Attached are the system specifications and sketch. Please call if you have any questions or comments.

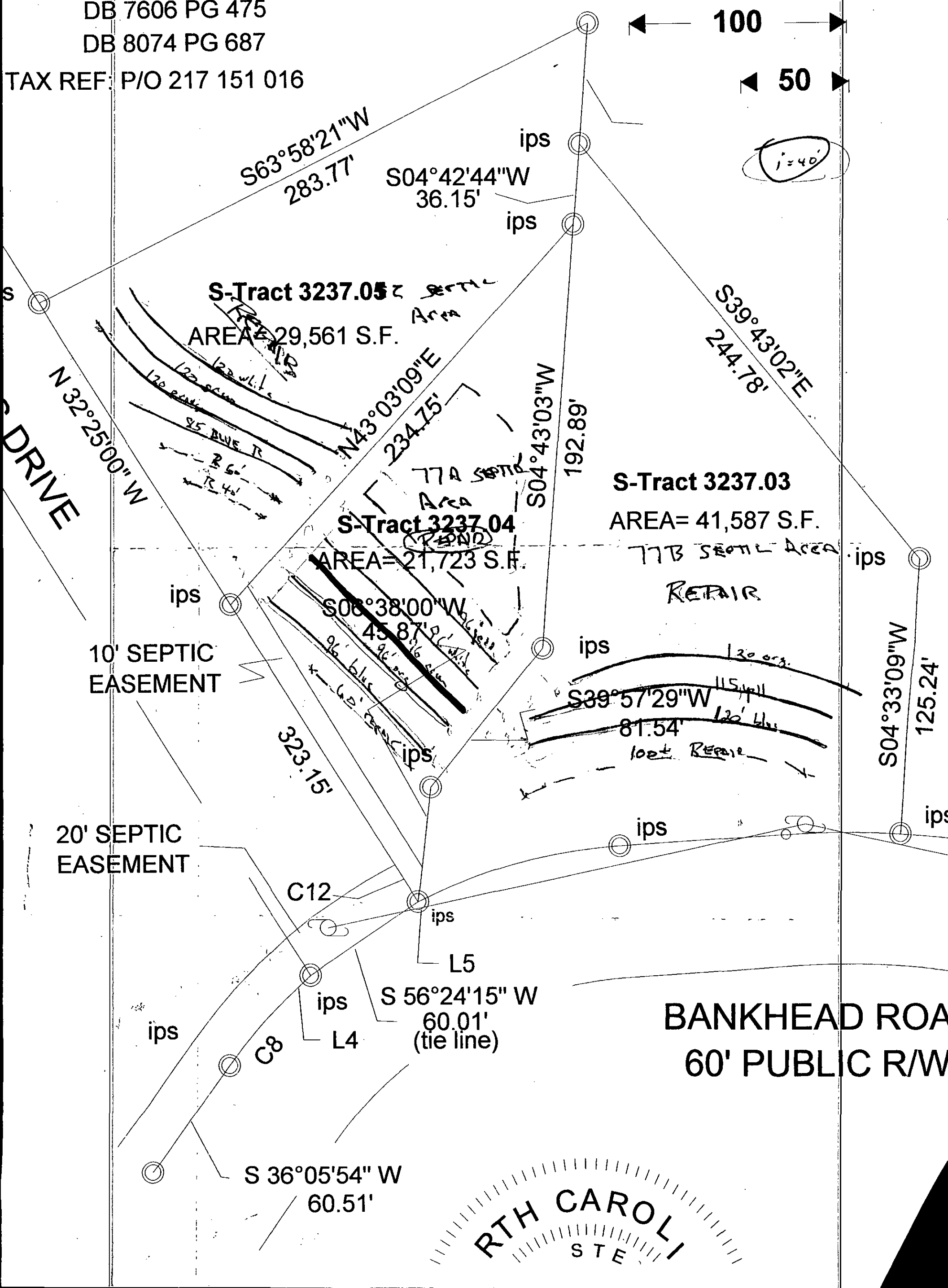
Design Specifications for Lot 77A Off-site Septic Area,

Bankhead Road, Lake Wylie.

Daily design flow:	480 gpd.
Septic tank size:	1500 gal. (2 compartments)
Pumping tank size:	1500 gal.
Effluent loading rate:	0.25 gpd/ft^2 for primary and repair
Total length and diameter of supply pipe:	approx. 1500 ft. 3" SDR 13.5 PVC
Number and length of laterals:	5@ 96 ft. Infiltrator or EasyFlow 25% reduction primary with 25%-50% reduction repair
Flow rate through the system:	27.5 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 or owners agent when specific house and pump tank location are available
Dosing volume:	approx. 270 gal. – 1.7 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.)
Check valve:	YES
Siphon break hole:	No

CAROLINA CENTERS, LLC

DB 7606 PG 475
DB 8074 PG 687
TAX REF: P/O 217 151 016



CURVE	RADIUS			
C1	50.00'	127.04'	95.92	N46°20'48"W
C2	291.24'	59.09'	58.99'	N58°14'51"W
C3	261.24'	67.28'	67.09'	N78°39'04"W
C4	261.24'	93.73'	93.23'	N83°55'12"W
C5	479.90'	106.47'	106.25'	N72°34'51"W
C6	721.99'	125.59'	125.43'	S74°15'02"W
C7	148.21'	197.38'	183.11'	S76°57'30"W
C9	242.69'	80.49'	80.13'	S89°58'31"W
C10	436.59'	53.57'	53.54'	S88°38'39"W
C11	20.00'	14.79'	14.46'	N51°17'33"W
C12	20.00'	13.18'	12.94'	

1" = 100'

DUKE ENERGY CORP.
(WYLIE PROJECT)

LOT 77 A
TAX REF: 21131119

#5 rebar(f)
Land Hook
#4 rebar(f)
N16°16'40"E 99.70'
L1
L2
L3
S07°19'45"E 183.40'

C1
S-Tract 3237.02
Area = 0.798 Acres
Includes 0.498 acres in road r/w

ips
N39°13'03"W 89.86'
LOT 76B
TAX REF: 217 311 23

C2
S36°40'46"W 59.71'

APROX. 572 CONTOUR AND 100 YEAR FLOOD LINE

CONCRETE MON(S)
CONTROL MON

42.53'
S 89°43'27" W 142.57'
100.04'

20' SEPTIC LINE EASEMENT & SET-BACK LINE

N 77°33'51" W 194.46'

N 67°35'51" W 56.86'

INACCESSIBLE PT

S 36°05'54" W 60.51'

Add 10' Septic Supply Line Easement

LOT 76A
TAX REF: 217 311 18

VARIETY LANE

LOT 74C

C/L POWER LINE AND
DUKE ENERGY 30' R/W

3" SDR 13.5 PE
P.E. Supply Line

CAROLINA CENTERS, LLC
DB 7606 PG 475

CAROLINA CENTERS, LLC
DB 7606 PG 475
DB 8074 PG 687
TAX REF: P/O 217 151 016

TAX REF: P/O 217 151 016

ips
S04°42'44"W 54.57'
S63°58'21"W 283.77'
S04°42'44"W 36.15'
S39°43'02"E 244.76'
S04°43'03"W 192.89'
N43°03'09"E 234.75'
N 32°25'00" W

WILBANKS DRIVE
(UNOPENDED)

S-Tract 3237.03
AREA= 41,587 S.F.

S-Tract 3237.04
AREA= 21,723 S.F.

S-Tract 3237.05
AREA= 29,561 S.F.

S06°38'00"W 45.87'
S39°57'29"W 81.54'
S04°33'09"W 125.24'

10' SEPTIC EASEMENT
20' SEPTIC EASEMENT
323.15'

C12
L5
S 56°24'15" W 60.01' (tie line)
L4
C8

BANKHEAD ROAD
60' PUBLIC R/W

NORTH CAROLINA REGISTERED LAND SURVEYOR SEAL L-2605 TED M. BEVERLY

NOT FOR S

BOUNDARY SURVEY FOR:

BANKHEAD SEPTIC LOTS

SURPLUS TRACT NO.

INDEX:

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

Sheet: 1
Property ID: PO 217-361-06
Lot #: 2
File #: 4959B
Code: 2

RCJ

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

Owner: Crescent Resources, Inc.
Applicant: Toney C. Jacobs
Address: PO Box 1003, Charlotte, N. C. 28201-1003
Date Evaluated: 05/21/2002
Proposed Facility: Residence
Design Flow (.1949): 480gpd
Property Size: .5a. Inv.
Location of Site: Wilbanks Road
Property Recorded:
Water Supply: [ ] Public [x] Individual [x] Well [ ] Spring [ ] Other
Evaluation Method: [x] Auger Boring [ ] Pit [ ] Cut
Type of Wastewater: [x] Sewage [ ] Industrial Process [ ] Mixed

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, 15	0-4	GR/SL	VFR/SEXP/NS/NP	>48" TO SOIL WETNESS	48+	N/A	NONE	PS, IV .25GPD/FT^2
		4-36	SBK/ABK/C	FI/SEXP/S/P					
		36-48+	SBK/CL	FR/SEXP/SS/SP					
2	LS, 20	0-4	GR/SL	VFR/SEXP/NS/NP	>43" TO SOIL WETNESS	43	"	"	PS, IV .3GPD/FT^2
		4-20	SBK/C	FI/SEXP/S/P					
		20-43	SBK/CL	FR/SEXP/SS/SP					
		43+	M/SL	VFR/SEXP/NS/NP					
3	LS, 23	0-11	GR/SL	VFR/SEXP/NS/NP	>48" TO SOIL WETNESS	48+	"	"	PS, IV .25GPD/FT^2
		11-42	SBK/ABK/C	FI/SEXP/S/P					
		42-48	SBK/CL	FR/SEXP/SS/SP					

Description	Initial System	Repair System
Available Space (.1945)	PS	US
System Type(s)		
Site LTAR	.25GPD/FT^2	.25GPD/FT^2

Other Factors (.1946): _____
Site Classification (.1948): UNSUITABLE
Evaluated By: W. R. Marlin, LSS, 5/24/02. W. R. Marlin
Others Present:

FILE # 49599

COMMENTS 100% Repair

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	CONSISTENCE 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

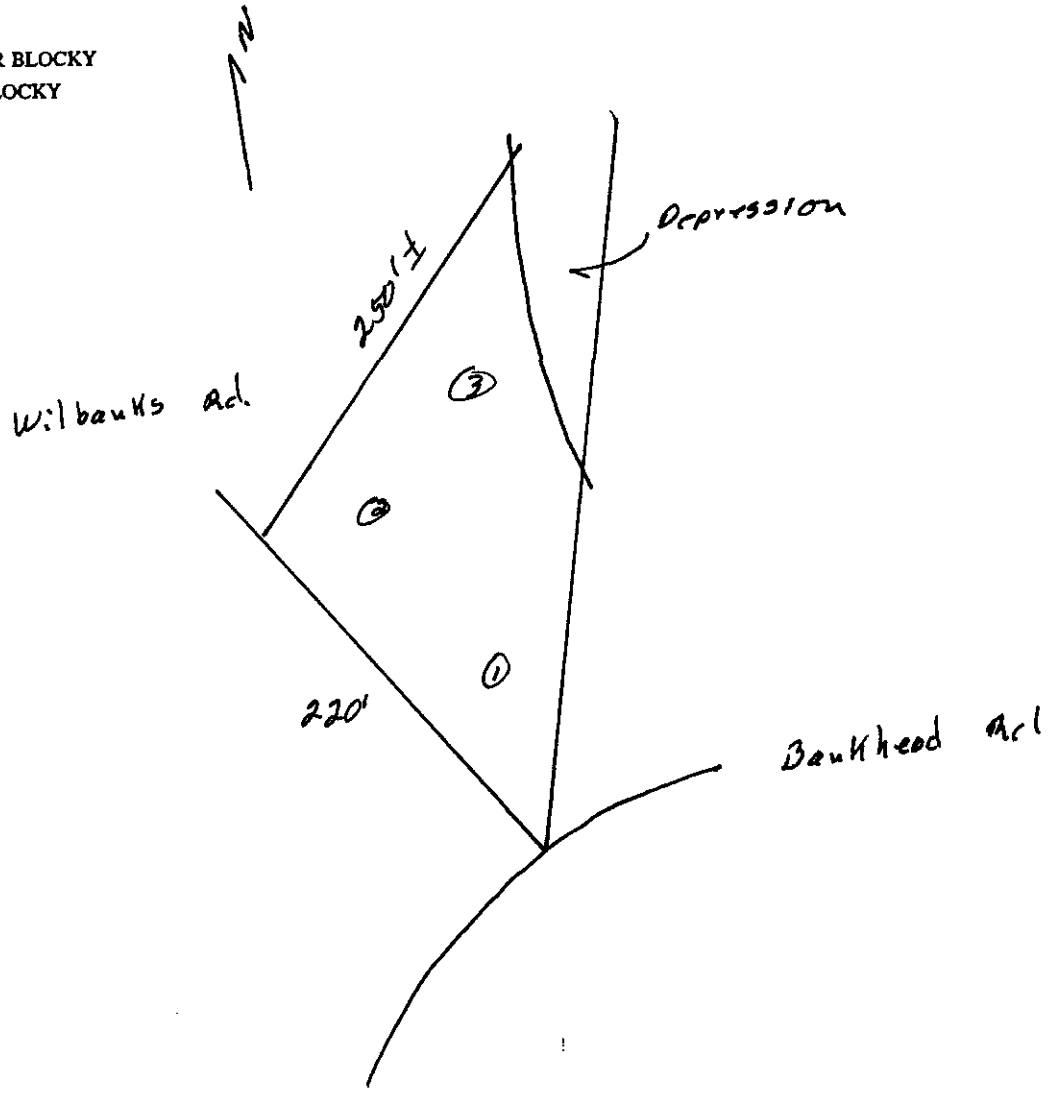
STRUCTURE

SG-SINGLE GRAIN
M-MASSIVE
CR-CRUMB
GR-GRANULAR
SBK-SUBANGULAR BLOCKY
ABK-ANGULAR BLOCKY
PL-PLATY
PR-PRISMATIC

MINERALOGY

SLIGHTLY EXPANSIVE

EXPANSIVE



FEE: 200-
DATE: 5/17/02 cf

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

[ ] CRT

TYPE APPLICATION: ___ NEW SYSTEM ___ 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 #: 4959B

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION: 361-06

TAX/PARCEL NUMBER: 00 217 ~~15 005~~

STREET ADDRESS: Bonthend Rd (Z)

SUBDIVISION OR MOBILE HOME PARK NAME:

LOT NUMBER:

TYPE OF BUILDING (CHECK ONE):

___ SINGLE MOBILE HOME(S)
___ DOUBLE WIDE (D)
___ HOUSE (H)
___ MODULAR HOME (M)
___ MULTIPLE FAMILY (U)
___ OTHER (O)

HEATED SQUARE FOOTAGE:

NUMBER OF BEDROOMS: 4

NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:

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

TOWNSHIP (CHECK ONE):

___ 0 MECKLENBURG
___ 1 CHARLOTTE
___ 2 DAVIDSON
___ 3 CORNELIUS
___ 4 PINEVILLE
___ 5 MATTHEWS
___ 6 HUNTERSVILLE
___ 7 MINT HILL

CLOSING DATE_____

Off-site

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

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		

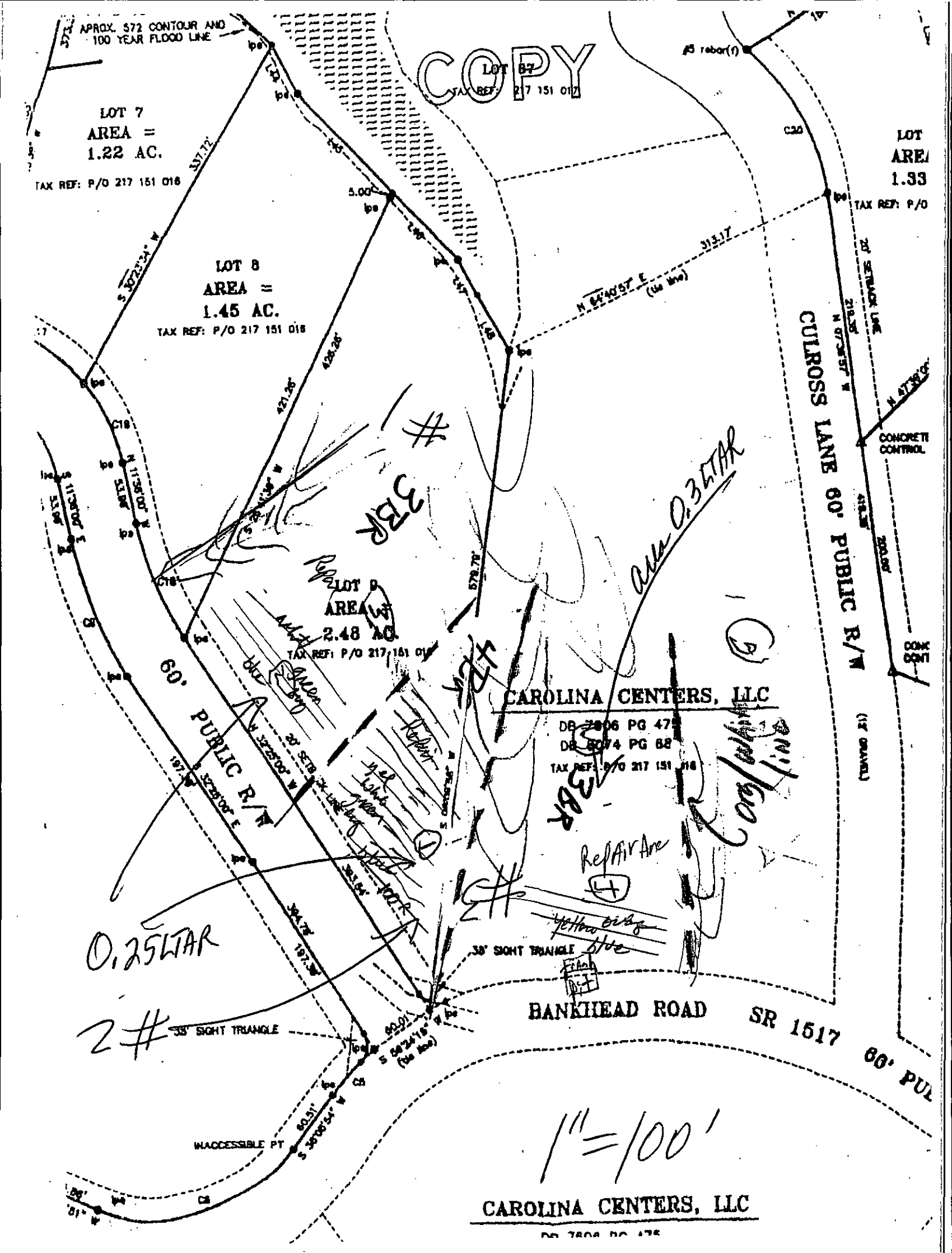
PROPERTY OWNER:	LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: (LAST) Crescent (FIRST) Resources, Inc (MI)	NAME: (LAST) Jacobs (FIRST) Tracy (MI) C
ADDRESS: PO Box 1003	DAYTIME PHONE: ( ) 663-6905
CITY: Chas STATE: NC ZIP: 28201-1003	
DAYTIME PHONE: ( ) 663-6905	

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

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: Tracy C Jacobs DATE: 5/17/02

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


COPY
APROX. 572 CONTOUR AND 100 YEAR FLOOD LINE
LOT 7
AREA = 1.22 AC.
TAX REF: P/O 217 151 016
LOT 8
AREA = 1.45 AC.
TAX REF: P/O 217 151 016
LOT 9
AREA = 2.48 AC.
TAX REF: P/O 217 151 016
LOT 67
TAX REF: 217 151 017
CAROLINA CENTERS, LLC
DB 7806 PG 475
DB 8074 PG 62
TAX REF: P/O 217 151 016
CULROSS LANE 60' PUBLIC R/W
60' PUBLIC R/W
BANKHEAD ROAD SR 1517
38' SIGHT TRIANGLE
INACCESSIBLE PT
20' SETBACK LINE
1" = 100'
CAROLINA CENTERS, LLC