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Paid $350.00 Statesville
Paid $500.00 4-3-14



**MICHAEL ATHANAS & ASSOCIATES**
**LICENSED SOIL SCIENTIST**
**1999 CANDLEWICK DRIVE**
**FORT MILL, S.C. 29715**
**803-802-4403 (office)**
**803-802-4402 (fax)**

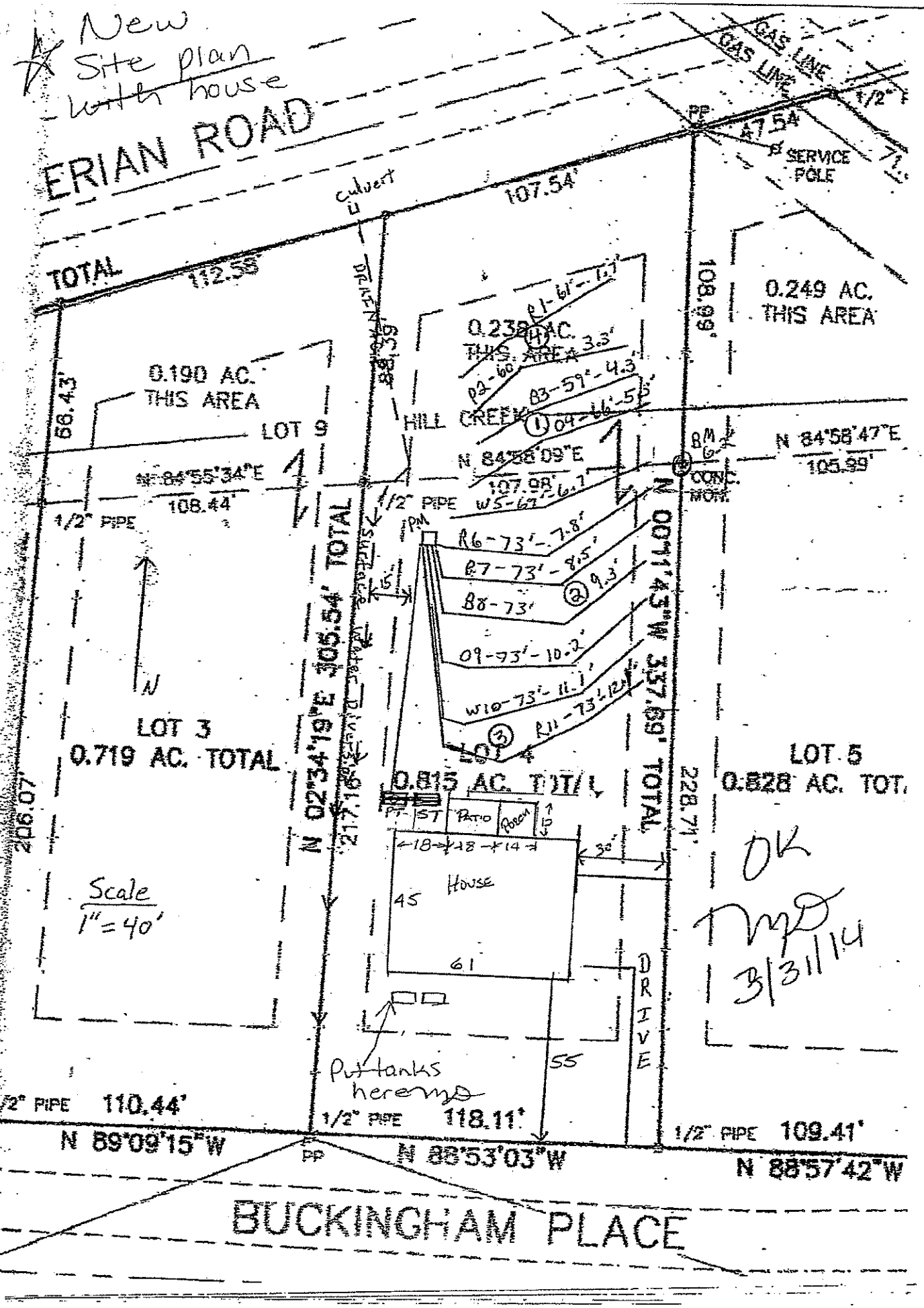
**Reference: Davidson Downs, Lot 4**
**House Footprint:** See attached plan
**Building Setbacks:** 35' front/rear, 15' side
**Water Source:** Community water
**Number of Bedrooms:** 4/480 GPD
**Proposed LTAR:** 0.275 GPD/FT2 (initial), 0.3 GPD/FT2 (repair)
**Proposed System Type:** 25% Reduction
**Proposed Repair System Type:** Shallow PPBPS
**Distribution:** Pressure manifold
**Flow per Tap:** 5.48 GPM
**Tap Size and Material:** ½" SCH 80
**System Flow:** 33 GPM
**Dosing Volume:** 192 gallons
**Pump Run Time:** 5.8 minutes
**Elevation Head:** 12.7'
**Friction Head:** 2.3'
**Pressure Head:** 2'
**Total Dynamic Head:** 17.0'
**Supply Line Length:** 95'
**Septic/Pump Tank Size:** 1000/1000 gallons
**Proposed Trench Bottom:** 24"

| Line | Design Length | Actual Length | Elevation |
|---|---|---|---|
| Red 1 | | 61' | 1.7' |
| Pink 2 | | 60' | 3.3' |
| Blue 3 | | 59' | 4.3' |
| Orange 4 | | 66' | 5.3' |
| White 5 | | 67' | 6.7' |
| **Red 6** | **73'** | **81'** | **7.8'** |
| **Pink 7** | **73'** | **90'** | **8.5'** |
| **Blue 8** | **73'** | **90'** | **9.3'** |
| **Orange 9** | **73'** | **93'** | **10.2'** |
| **White 10** | **73'** | **95'** | **11.1'** |

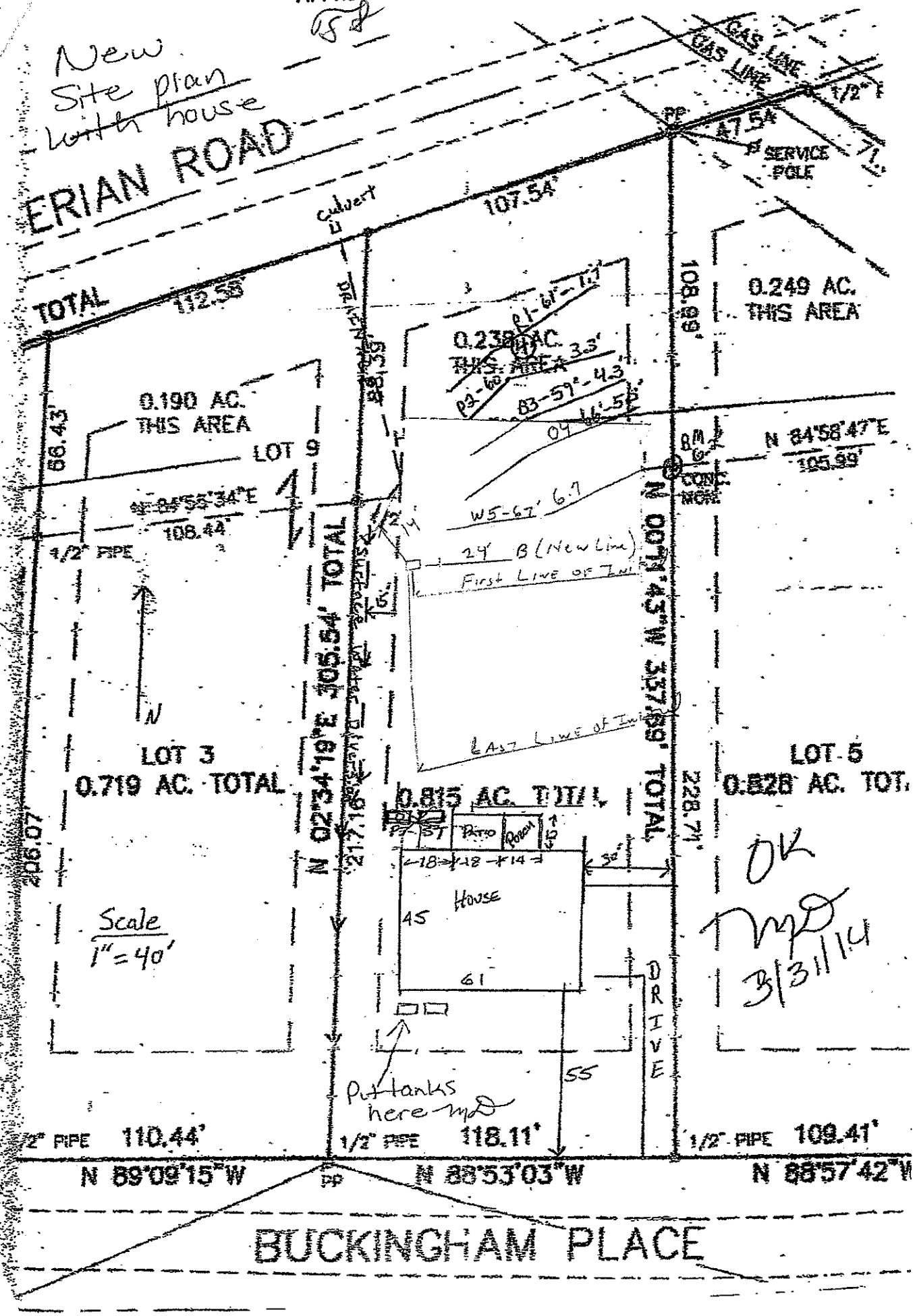
| Line | Design Length | Actual Length | Elevation |
|---|---|---|---|
| **Red 11** | **73'** | **92'** | **12.1'** |

**Initial System:** 438' **Repair System:** 313'
**Pump Tank:** 15.5' **House Corner:** 15.4' **Benchmark:** 6.2' (top of conc. mon.)

**Comments:**


New
Site plan
with house
ERIAN ROAD
GAS LINE
PP
1/2" I
47.54'
SERVICE POLE
107.54'
culvert
TOTAL
112.58'
108.99'
0.249 AC.
THIS AREA
0.238 AC.
THIS AREA
0.190 AC.
THIS AREA
66.43'
LOT 9
HILL CREEK
N 84°58'09"E
107.98'
N 84°58'47"E
105.99'
CONC. MON.
BM
N 84°55'34"E
108.44'
1/2" PIPE
1/2" PIPE
IPM
N 02°34'19"E 305.54' TOTAL
N 00°11'45"W 357.89' TOTAL
206.07'
228.71'
LOT 3
0.719 AC. TOTAL
LOT 4
0.815 AC. TOTAL
LOT 5
0.828 AC. TOT.
PT
ST
PATIO
PORCH
UP
18
18
14
30'
House
45
61
DRIVE
55
Scale
1"=40'
Put tanks here
OK
MD
3/31/14
1/2" PIPE 110.44'
N 89°09'15"W
1/2" PIPE 118.11'
PP
N 88°53'03"W
1/2" PIPE 109.41'
N 88°57'42"W
BUCKINGHAM PLACE

APPROVED APR 18 2016



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

*Sheet* _1_ *of* _1_
PROPERTY ID #: 4654882251
COUNTY: Iredell

# SOIL/SITE EVALUATION
## *for* ON-SITE WASTEWATER SYSTEM

OWNER: Chris Mozley — APPLICATION DATE 3/28/14
ADDRESS: Davidson, NC — DATE EVALUATED: _____
PROPOSED FACILITY: 4 bdrm — PROPOSED DESIGN FLOW (.1949): 480 GPD — PROPERTY SIZE: 0.82 AC
LOCATION OF SITE: Davidson downs Lot 4, 129 Buckingham Place — PROPERTY RECORDED: 9/20/2005
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut — TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

OK MD 3/31/14

| 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 | .1956 SAPRO CLASS | .1944 RESTR HORIZ | PROFILE CLASS & LTAR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | LS 7% | 0-22 | Br SCL WSBK | FR SS SP | N/A | 48" | F-C SAP | N/A | PS 0.3 |
| | | 22-48 | R C SBK | FR SS SP | | | | | |
| 2 | LS 5% | 0-20 | Br SCL WSBK | FR SS SP | N/A | 46" | F-C SAP @ 41" | N/A | PS 0.3 |
| | | 20-46 | R C SBK | FR SS SP | | | | | |
| | | 46-48 | VER SL SAP M | FR SS SP | | | | | |
| 3 | LS 5% | 0-4 | Br SCL WSBK | FR SS SP | Few YBs | 46" | N/A | N/A | PS 0.275-0.25 |
| | | 4-46 | R C SBK | FR SS SP | | | | | |
| 4 | LS 7% | 0-18 | R C SBK | FR SS SP | N/A | 42" | Com-Many SAP | N/A | PS 0.3 |
| | | 18-42 | R CL WSBK | FR SS SP | | | | | |
| | | 42-49 | VER SL SAP M | FR SS SP | | | | | |

| DESCRIPTION | INITIAL SYSTEM | REPAIR SYSTEM |
|---|---|---|
| Available Space (.1945) | 1314 FT2 | 939 FT2 |
| System Type(s) | 25% Reduction | PPBPS |
| Site LTAR | 0.275 | 0.3 |

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): _____ PS
EVALUATED BY: M A & Associates
OTHER(S) PRESENT: _____

COMMENTS: _____