Residential Subsurface Wastewater Treatment and Disposal System Design

for

Tracts A & B, Lots 1, 2, &3
Idlewild Road
Mint Hill, NC

Tax Parcel #s 195-013-17 & 195-013-68
Mecklenburg County
July 11, 2007

Prepared for:

Edwards Construction Inc,
2419 Henry Baucom Rd.
Monroe, NC 28110

Prepared by:

Dan Spangler, LSS
Spangler Soil Investigations
802 Bradford Place
Monroe, NC 28110
Phone: 704-291-1909(M)
Fax: 704-282-2319
Email: spanglersi@aol.com



CC: Trevor Thomason, RS
Mecklenburg County Environmental Health

Have application
For permit
~~[illegible]~~

Need P. #'s
7045B

195-013-78

DAN SPANGLER
LICENSED SOIL SCIENTIST
802 BRADFORD PLACE
MONROE NC 28110-9355

TO: Edwards Construction Inc.
2419 Henry Baucom Road
Monroe, NC 28110

FROM: Dan Spangler

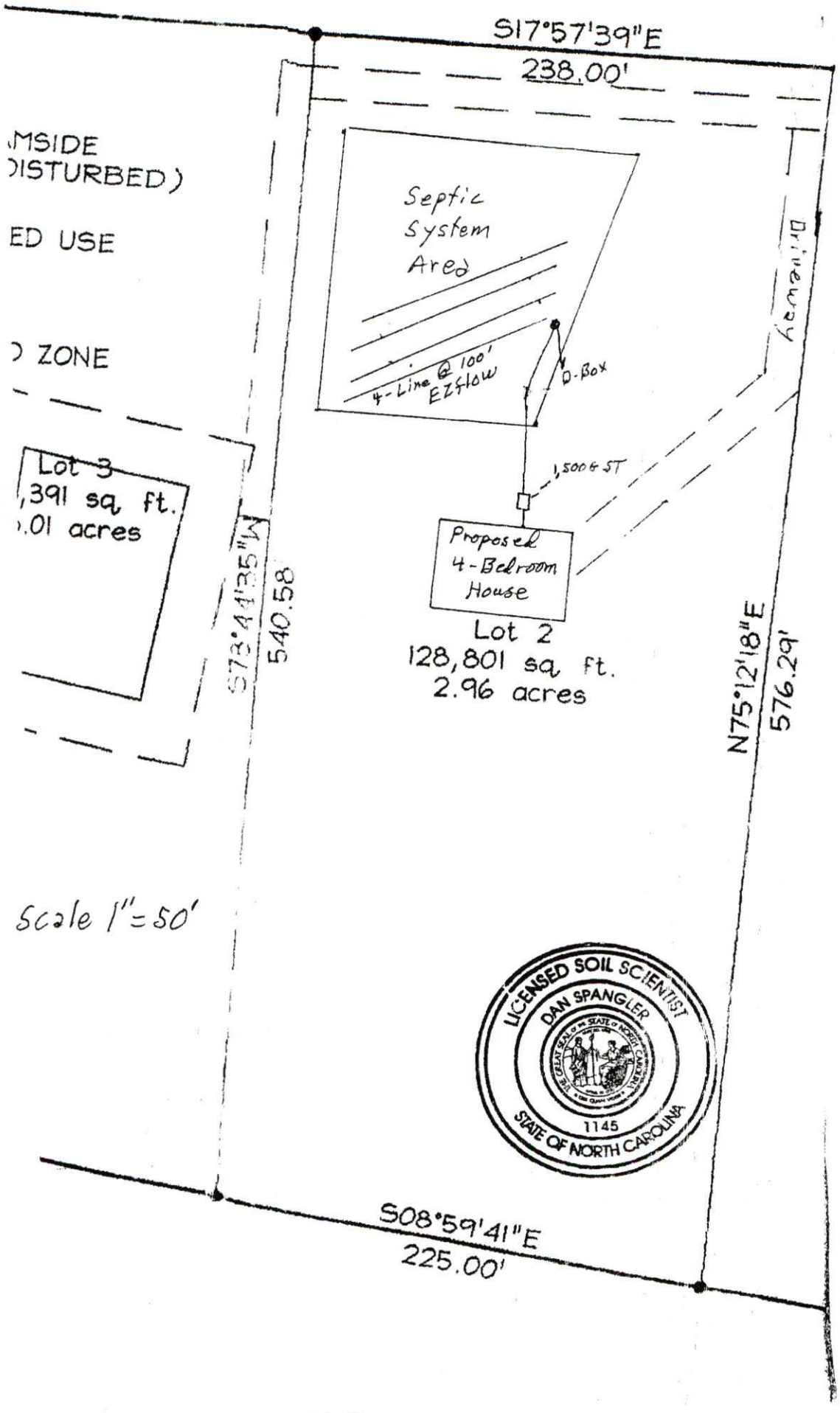
SUBJECT: Soils evaluation and septic system design on lot 2 (approximately 2.96 acres) off Idlewild Road, Mint Hill for a 4 bedroom house, Mecklenburg Co., NC.

DATE: July 12, 2007

This lot has an area that is **SUITABLE** for conventional or Innovative septic system. The soils are group 4 with mean depth to saprolite more than 40 inches and more than 42 inches to a seasonal water table. The septic system for a 4 bedroom house requires 400 linear feet of lines (500 liner feet for 5 bedroom) for an innovative system (EZflow or Infiltrator) at 0.3 LTAR or conventional lines of 534 total liner feet. The system is to have a 1500 gallon septic tank. The trench depths are to be 20 to 24 inches deep, 9 foot on center with 36 inch trench width. The repair area is down slope of the system area and can have the same innovative system with four lines of 100 feet or conventional lines of 534 total liner feet. (See attached soil/site evaluations, lot map and design specifics.)

The above soils report is my opinion as a licensed soil scientist; however, wastewater treatment systems must be approved by the local health department.

CC: Trevor Thomason
Mecklenburg County Environmental Health


S17°57'39"E
238.00'
MSIDE
DISTURBED)
ED USE
ZONE
Lot 3
,391 sq ft.
.01 acres
Septic
System
Ared
4-Line @ 100'
EZflow
D-Box
1,500 G ST
Proposed
4-Bedroom
House
Lot 2
128,801 sq ft.
2.96 acres
S73°41'35"W
540.58
N75°12'18"E
576.29'
Driveway
Scale 1"=50'
LICENSED SOIL SCIENTIST
DAN SPANGLER
1145
STATE OF NORTH CAROLINA
S08°59'41"E
225.00'
N/E

DESIGN SPECIFICS

Daily Design Flow:	**480 GPD – 4 bedroom house**
Septic Tank Size:	**1500 gallons (2 compartments)**
Pump Tank Size:	**N/A**
Effluent Loading Rate:	**Design = 0.3 GPD per sq. ft** **25% reduction for EZflow**
Number and Size of Laterals:	**4 lines @ 100 ft EZflow**
Trench Depths:	**20 to 24 inches**
Trench Spacing:	**9 feet on center (minimum)**
Trench Width:	**36 inches**

DAN SPANGLER
802 BRADFORD PLACE, MONROE, NC 28110
MOBILE: (704) 291-1909 OFFICE/ FAX: (704) 282-2319

PROPERTY ID #: 195-D13-1746
PROPERTY RECORDED:
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
FOR
ON-SITE WASTEWATER SYSTEM

APPLICANT: Edwards Construction Inc. OWNER: ☐ AGENT: ☐ PHONE: 704-219-4663
ADDRESS: 2419 Henry Broom Rd. DATE EVALUATED: 5/23/07
Monroe, NC 28110 PROPOSED FACILITY: 4-Bedroom House
PROPERTY SIZE: 2.96 Acres
LOCATION OF SITE: Lot-2, Idlewild Rd, Mint Hill, NC
WATER SUPPLY: On-Site Well ☐ Comm. Well ☐ Public ☑ Other _____ EVALUATION METHOD: Auger Boring ☑ Pit ☐

PROFILE #	.1940 LANDSCP POS./ SLOPE %	HORIZON DEPTH (IN.)	.1941 (a)(1) TEXTURE	.1941 (a)(2) STRUCTURE	.1941 (a)(3) MINEROLOGY		
1	SS	Ap-0-36	2.5YR 4/8 CL	fr. 1 sbk	SS/SP	.1942 WETNESS CONDITION	- 742"
50' South	5%	BCt 36-42	2.5YR 4/8 CL	fr. 2 msbk	SS/SP	.1943/.1956 SAPROLITE	- 36"
of N P/L						.1944 RESTRICTIVE HORIZON	- 742"
@ Cem.						.1948 PROFILE CLASSIFICATION	- SC
						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Pocolet					
2	SS	Ap-0-4	5YR 4/8 CL	fr. 1 mgr.	SS/SP	.1942 WETNESS CONDITION	- 742"
100' E of	5%	Bt 4-42"	2.5YR 4/8 C	fr. 3 fsbk	SS/SP	.1943/.1956 SAPROLITE	- 742"
of #1						.1944 RESTRICTIVE HORIZON	- 742"
& 50' to						.1948 PROFILE CLASSIFICATION	- SC
Road						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Ceci					
3	Toe	Ap-0-15"	5YR 4/6 CL	fr. 1 mgr.	SS/SP	.1942 WETNESS CONDITION	- 742"
50' west	slope	Bt 15-42	2.5YR 4/8 C	fi. 3 fsbk	SS/SP	.1943/.1956 SAPROLITE	- 742"
of Rd +	4%					.1944 RESTRICTIVE HORIZON	- 742"
50' Not						.1948 PROFILE CLASSIFICATION	- SC
South P/L						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Ceci					
4	SS	Bt-0-40	2.5YR 4/8 C	fr. 3 fsbk	SS/SP	.1942 WETNESS CONDITION	- 740"
~~SS~~	6%					.1943/.1956 SAPROLITE	- 740"
120' west						.1944 RESTRICTIVE HORIZON	- 740"
of #3						.1948 PROFILE CLASSIFICATION	- SC
						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Ceci					

195-013-16

DAN SPANGLER
LICENSED SOIL SCIENTIST
802 BRADFORD PLACE
MONROE NC 28110-9355

TO: Edwards Construction Inc.
2419 Henry Baucom Road
Monroe, NC 28110

FROM: Dan Spangler

SUBJECT: Soils evaluation and septic system design on approximately 1.7 acre tract (A) on Idlewild Road, Mint Hill for a 4 bedroom house, Mecklenburg Co., NC.

DATE: March 21, 2007 (Revised-7/12/07)

This lot has an area that is **SUITABLE** for conventional or Innovative septic system. The soils are group 4 with mean depth to saprolite more than 42 inches and more than 42 inches to a seasonal water table. The septic system for a 4 bedroom house requires 400 linear feet of lines (500 liner feet for 5 bedroom) for an innovative system (EZflow or Infiltrator) at 0.3 LTAR or conventional lines of 534 total liner feet. The system is to have a 1500 gallon septic tank. The trench depths are to be 20 to 24 inches deep, 9 foot on center with 36 inch trench width. The repair area is down slope of the system area and can have the same innovative system with four lines of 100 feet or conventional lines of 534 total liner feet. (See attached soil/site evaluations and lot map.)

The above soils report is my opinion as a licensed soil scientist; however, wastewater treatment systems must be approved by the local health department.

CC: Trevor Thomason
Mecklenburg County Environmental Health

DESIGN SPECIFICS

Daily Design Flow:	**480 GPD – 4 bedroom house**
Septic Tank Size:	**1500 gallons (2 compartments)**
Pump Tank Size:	**N/A**
Effluent Loading Rate:	**Design = 0.3 GPD per sq. ft** **25% reduction for EZflow**
Number and Size of Laterals:	**4 lines @ 100 ft EZflow**
Trench Depths:	**20 to 24 inches**
Trench Spacing:	**9 feet on center (minimum)**
Trench Width:	**36 inches**

195-013-79

DAN SPANGLER
LICENSED SOIL SCIENTIST
802 BRADFORD PLACE
MONROE NC 28110-9355

TO: Edwards Construction Inc.
2419 Henry Baucom Road
Monroe, NC 28110

FROM: Dan Spangler

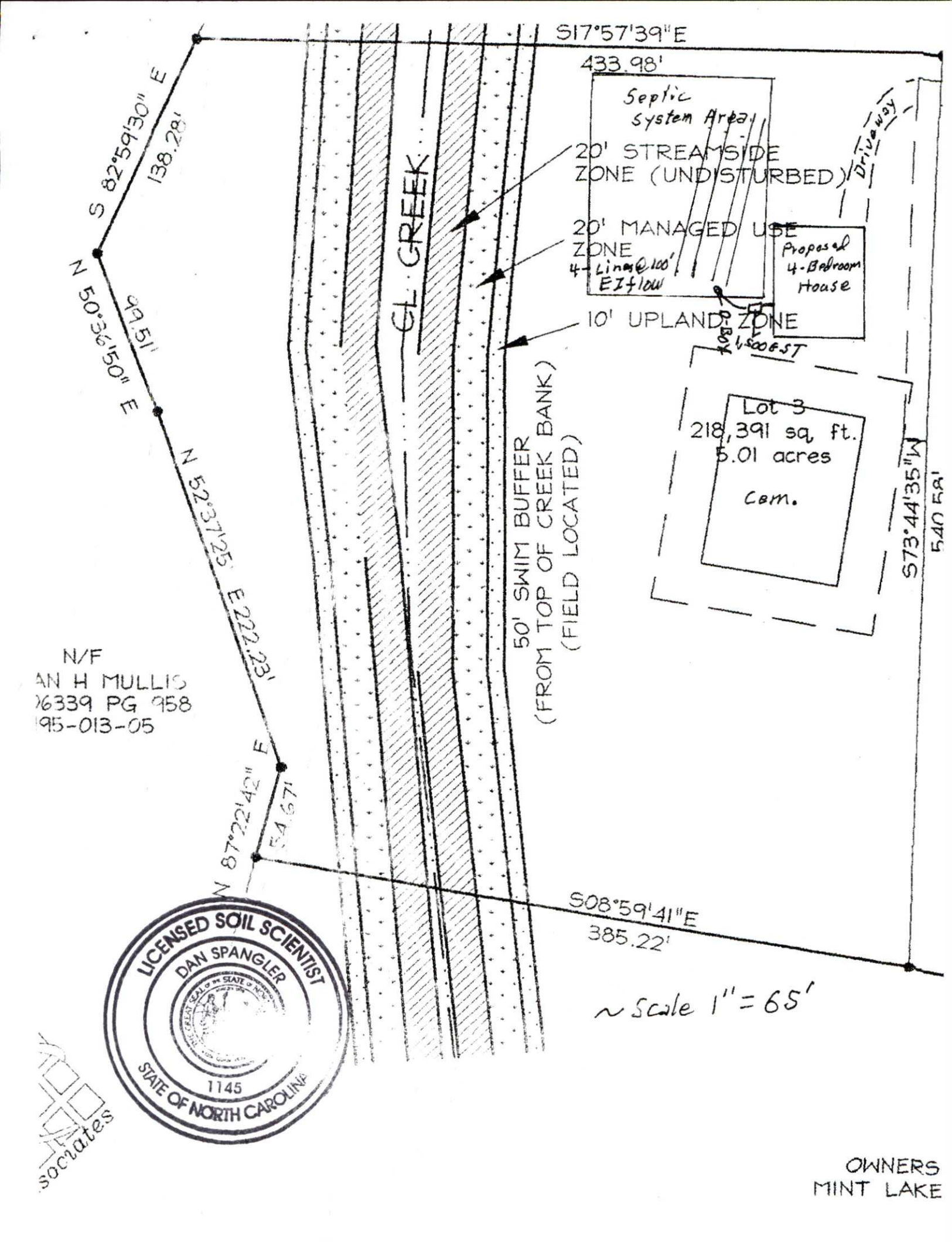
SUBJECT: Soils evaluation and septic system design on lot 3 (approximately 5.01 acres) on Idlewild Road, Mint Hill for a 4 bedroom house, Mecklenburg Co., NC.

DATE: July 12, 2007

This lot has an area that is **SUITABLE** for conventional or Innovative septic system. The soils are group 4 with mean depth to saprolite more than 42 inches and more than 42 inches to a seasonal water table. The septic system for a 4 bedroom house requires 400 linear feet of lines (500 liner feet for 5 bedroom) for an innovative system (EZflow or Infiltrator) at 0.3 LTAR or conventional lines of 534 total liner feet. The system is to have a 1500 gallon septic tank. The trench depths are to be 20 to 24 inches deep, 9 foot on center with 36 inch trench width. The repair area is down slope of the system area and can have the same innovative system with four lines of 100 feet or conventional lines of 534 total liner feet. (See attached soil/site evaluations, lot map and design specifics.)

The above soils report is my opinion as a licensed soil scientist; however, wastewater treatment systems must be approved by the local health department.

CC: Trevor Thomason
Mecklenburg County Environmental Health


S17°57'39"E
433.98'
Septic System Area
20' STREAMSIDE ZONE (UNDISTURBED)
20' MANAGED USE ZONE
4-Lines @ 100' EIflow
10' UPLAND ZONE
Driveway
Proposed 4-Bedroom House
8-Bdrm 1500 GST
CL. CREEK
50' SWIM BUFFER (FROM TOP OF CREEK BANK) (FIELD LOCATED)
Lot 3
218,391 sq. ft.
5.01 acres
Com.
S73°44'35"W
540.58'
S 82°59'30" E
138.28'
N 50°36'50" E
99.51'
N 52°37'25" E 222.23'
N 87°22'42" E
54.67'
S08°59'41"E
385.22'
N/F
AN H MULLIS
)6339 PG 958
195-013-05
~Scale 1" = 65'
LICENSED SOIL SCIENTIST
DAN SPANGLER
1145
STATE OF NORTH CAROLINA
OWNERS
MINT LAKE

DESIGN SPECIFICS

Daily Design Flow:	**480 GPD – 4 bedroom house**
Septic Tank Size:	**1500 gallons (2 compartments)**
Pump Tank Size:	**N/A**
Effluent Loading Rate:	**Design = 0.3 GPD per sq. ft** **25% reduction for EZflow**
Number and Size of Laterals:	**4 lines @ 100 ft EZflow**
Trench Depths:	**20 to 24 inches**
Trench Spacing:	**9 feet on center (minimum)**
Trench Width:	**36 inches**

DAN SPANGLER
802 BRADFORD PLACE, MONROE, NC 28110
MOBILE: (704) 291-1909 OFFICE/ FAX: (704) 282-2319

PROPERTY ID #: 195-013-17+68
PROPERTY RECORDED:
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
FOR
ON-SITE WASTEWATER SYSTEM

APPLICANT: Edwards Construction Inc. OWNER: ☐ AGENT: ☐ PHONE: 704-219-4663
ADDRESS: 2419 Henry Beacom Rd. DATE EVALUATED: 5/23/07
Monroe, NC 28110 PROPOSED FACILITY: 4- Bedroom House
PROPERTY SIZE: 5.01 Acres
LOCATION OF SITE: Lot-3, Idlewild Rd, Mint Hill, NC
WATER SUPPLY: On-Site Well ☐ Comm. Well ☐ Public ☑ Other _____ EVALUATION METHOD: Auger Boring ☑ Pit ☐

PROFILE #	.1940 LANDSCP POS./ SLOPE %	HORIZON DEPTH (IN.)	.1941 (a)(1) TEXTURE	(a)(2) STRUCTURE	(a)(3) MINEROLOGY		
1	SS	Bf. 0-40	2.5YR 4/8 cl/sy	fi. 2 sbk	SS/SP	.1942 WETNESS CONDITION	- 740"
50"	5%					.1943/.1956 SAPROLITE	- 740"
East of						.1944 RESTRICTIVE HORIZON	- 740"
corn.						.1948 PROFILE CLASSIFICATION	- SC
						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conventional
		COMMENTS: Loci					
2	SS	Bf. 0-42	2.5YR 4/8 C	fi. Bf sbk	SS/SP	.1942 WETNESS CONDITION	- 742"
100' East	4%					.1943/.1956 SAPROLITE	- 742"
of #1						.1944 RESTRICTIVE HORIZON	- 742
						.1948 PROFILE CLASSIFICATION	- SC
						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conventional
		COMMENTS: Loci					
3	SS	Bf. 0-42"	2.5YR 4/8 C	fr. 3 sbk	SS/SP	.1942 WETNESS CONDITION	- 742"
45' from	4%					.1943/.1956 SAPROLITE	- 742"
East P/L						.1944 RESTRICTIVE HORIZON	- 742"
+150'						.1948 PROFILE CLASSIFICATION	- SC
To SE						PROFILE LTAR	- 0.3
for Hovel						SYSTEM TYPE	- Conv.
Lot							
		COMMENTS: Loci					
104 West	SS	Bf. 0-42	2.5YR 4/8 cl/sy	fr. 3 sbk	SS/SP	.1942 WETNESS CONDITION	- 742"
45' from	6%					.1943/.1956 SAPROLITE	- 742"
East P/L						.1944 RESTRICTIVE HORIZON	- 742"
						.1948 PROFILE CLASSIFICATION	- SC
						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Loci					

195-013-77

DAN SPANGLER
LICENSED SOIL SCIENTIST
802 BRADFORD PLACE
MONROE NC 28110-9355

TO: Edwards Construction Inc.
2419 Henry Baucom Road
Monroe, NC 28110

FROM: Dan Spangler

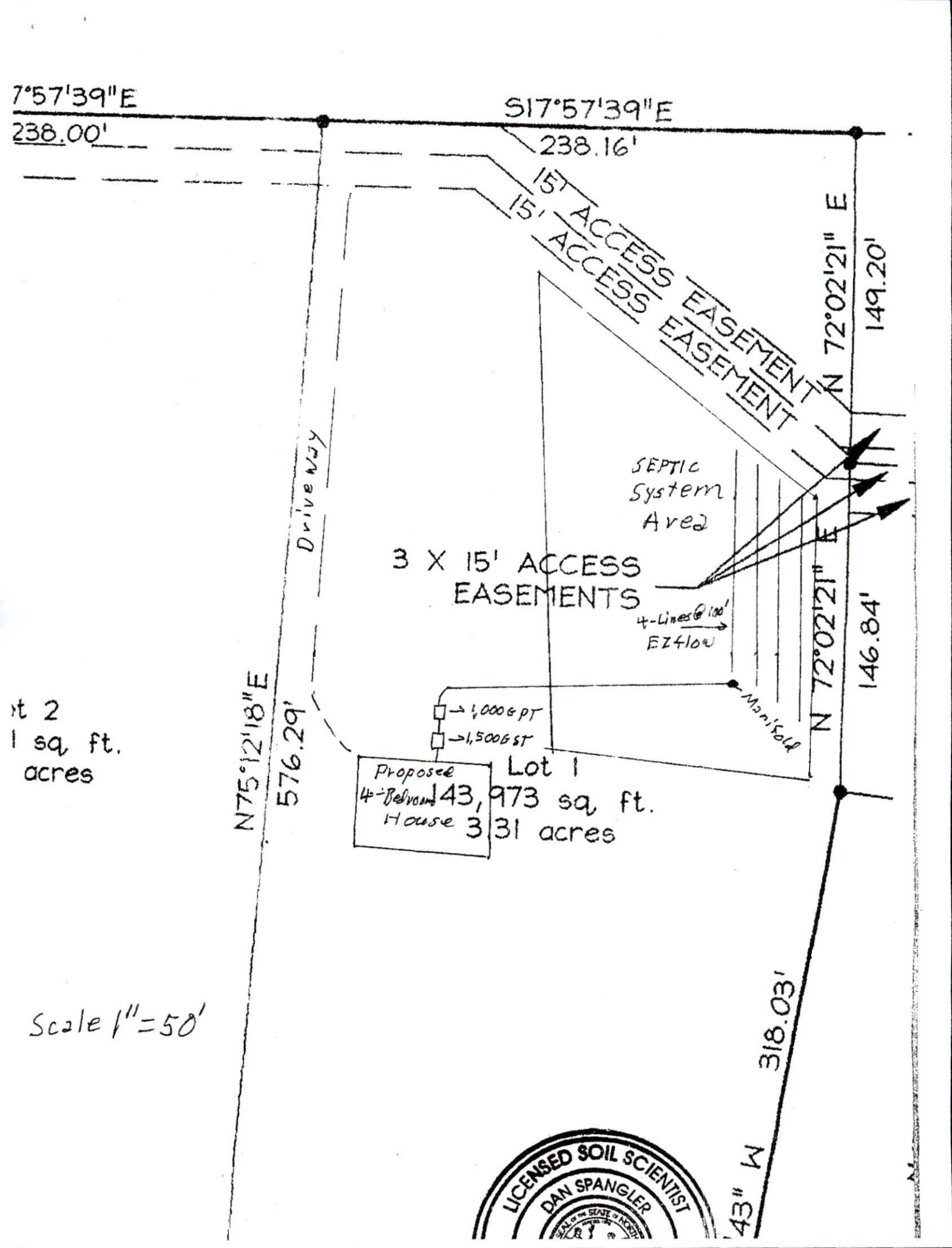
SUBJECT: Soils evaluation and septic system design on lot 1 (approximately 3.31 acres) off Idlewild Road, Mint Hill for a 4 bedroom house, Mecklenburg Co., NC.

DATE: July 12, 2007

This lot has an area that is **SUITABLE** for conventional or Innovative septic system. The soils are group 4 with mean depth to saprolite more than 40 inches and more than 42 inches to a seasonal water table. The septic system for a 4 bedroom house requires 400 linear feet of lines (500 liner feet for 5 bedroom) for an innovative system (EZflow or Infiltrator) at 0.3 LTAR or conventional lines of 534 total liner feet. The system is to have a 1500 gallon septic tank and 1000 gallon pump tank. The trench depths are to be 20 to 24 inches deep, 9 foot on center with 36 inch trench width. The repair area is down slope of the system area and can have the same innovative system with four lines of 100 feet or conventional lines of 534 total liner feet. (See attached soil/site evaluations, lot map, design specifics and general design information.)

The above soils report is my opinion as a licensed soil scientist; however, wastewater treatment systems must be approved by the local health department.

CC: Trevor Thomason
Mecklenburg County Environmental Health


7°57'39"E
238.00'
S17°57'39"E
238.16'
15' ACCESS EASEMENT
15' ACCESS EASEMENT
N 72°02'21" E
149.20'
Driveway
SEPTIC System Area
3 X 15' ACCESS EASEMENTS
4-Lines @ 100'
EZ flow
Manifold
N 72°02'21" E
146.84'
1,000 g PT
1,500 g ST
Proposed 4+Bedroom House
Lot 1
43,973 sq. ft.
3.31 acres
N75°12'18"E
576.29'
318.03'
43" W
t 2
l sq. ft.
acres
Scale 1"=50'
LICENSED SOIL SCIENTIST
DAN SPANGLER

DESIGN SPECIFICS

Daily Design Flow:	**480 GPD – 4 bedroom house**
Septic Tank Size:	**1500 gallons (2 compartments)**
Pump Tank Size:	**1000 gallons (one piece**
Effluent Loading Rate:	**Design = 0.3 GPD per ft sq (25% reduction for EZflow)**
Supply Length and Diameter:	**Approx. 160 ft of 2 in. Sch. 40 PVC (please see note)**
Number and Size of Laterals:	**4 lines @ 100 ft**
Dosing Volume:	**195 gallons per dose**
Flow Rate through system:	**28.4 gallons per minute**
Elevation Head:	**11.4 feet (may vary, see note)**
Pressure Head:	**2 feet**
Pump Requirements:	**30.4 GPM at 11.4 TDH (2 GPM added for vapor lock)**
Depth of Water Pumped:	**9.3 inches**
Pump Run:	**6.9 Minutes**
Check Valve:	**Yes**
Vapor Lock Hole:	**Yes**

*** Please note that supply line and elevation head measurements are approximate. It is the contractor's responsibility to confirm these values based upon the actual house and plumbing location. If there is a discrepancy, contact the system designer prior to beginning construction.**

Lot - 1 Owner: Edwards Construction Inc.

Tax Map: _____ Parcel #: 195-013-17468 Date: 7/12/07

Line #	Tap Diameter(in)	Tap (Sch)	Tap Flow (gpm)	Line Length (ft)	Flow / foot
1	1/2	40	7.1	100	0.071
2	1/2	40	7.1	100	0.071
3	1/2	40	7.1	100	0.071
4	1/2	40	7.1	100	0.071
5			28.4 gpm		
6					
7					
8					
9					
10					

400 ft of line x 65 gal. per 100 ft = 260 _____ ÷ 100 = _____ gal

75% x _____ gal = 195 **gal per dose** 28.4 gal per minute (gpm) = **Flow Rate**

Friction Head

Loss: 1.78 ft per 100 ft of supply line x 160 ft of supply line ÷ 100 = 2.8 ft

2.8 ft x 1.2 = 3.4 ft of friction head

Manifold Size: 3 " **Force Main Size:** 2 " PVC

Total Dynamic Head = 6 ft of Elevation head + 2 ft of Pressure head + 3.4 ft of Friction Head = 11.4 TDH

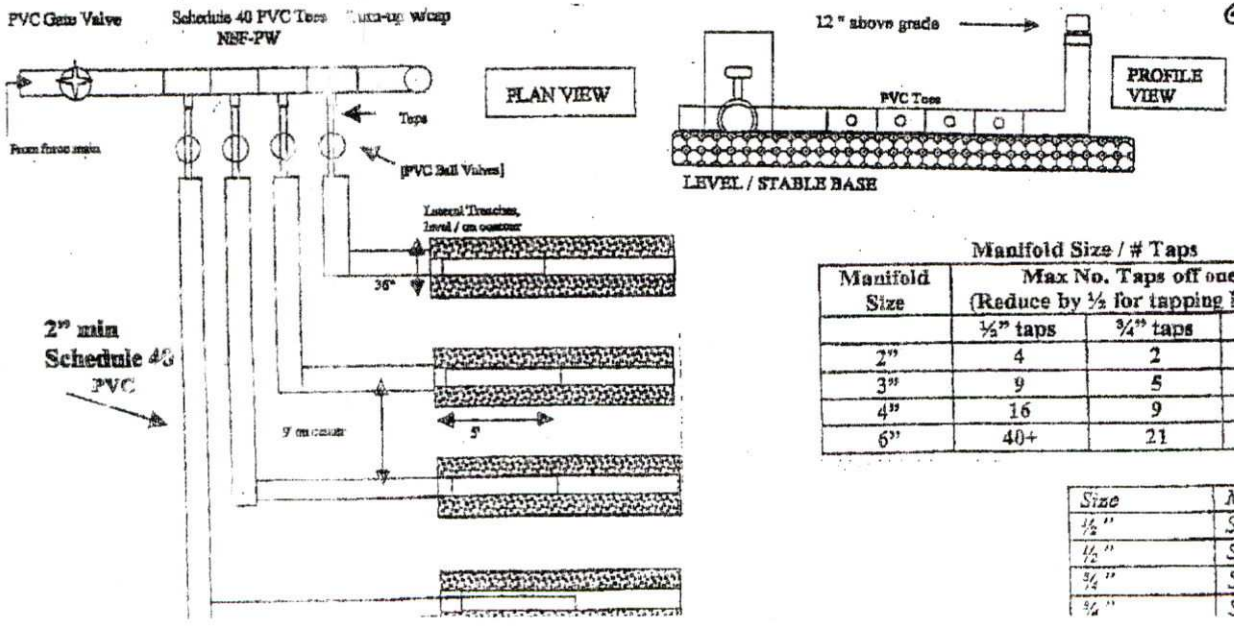
Pump Requirement: 28.4 GPM @ 11.4 ft of Head

Drawdown: 195 gal per dose ÷ 21 gal per inch = 9.3 inch drawdown per dose

Pump: Zoeller 980 or Equivalent

6.9 minute Pump Run time

General Design Information



Manifold Size / # Taps

Manifold Size	Max No. Taps off one side (Reduce by ½ for tapping both sides)		
	½" taps	¾" taps	1" taps
2"	4	2	
3"	9	5	3
4"	16	9	5
6"	40+	21	12

Flow per Tap

Size	Material	Flow GPM
½"	Sched 80	5.5
½"	Sched 40	7.1
¾"	Sched 80	10.1
¾"	Sched 40	12.5

DAN SPANGLER
802 BRADFORD PLACE, MONROE, NC 28110
MOBILE: (704) 291-1909 OFFICE/ FAX: (704) 282-2319

PROPERTY ID #: 195-013-17468
PROPERTY RECORDED:
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
FOR
ON-SITE WASTEWATER SYSTEM

APPLICANT: Edwards Construction Inc. OWNER: ☐ AGENT: ☐ PHONE: 704-219-4663
ADDRESS: 2419 Henry Bracom Rd DATE EVALUATED: 5/23/07
Monroe, NC 28110 PROPOSED FACILITY: ~~4-3-07~~ 4-Bedroom House
PROPERTY SIZE: 3.31 Acres
LOCATION OF SITE: Lot-1, Idlewild Rd, Mint Hill, NC
WATER SUPPLY: On-Site Well ☐ Comm. Well ☑ Public ☐ Other _____ EVALUATION METHOD: Auger Boring ☑ Pit ☐

PROFILE #	.1940 LANDSCP POS./ SLOPE %	HORIZON DEPTH (IN.)	.1941 (a)(1) TEXTURE	.1941 (a)(2) STRUCTURE	.1941 (a)(3) MINEROLOGY		
1	Ridge	BT. 0-40"	2.5YR4/8 C	lay fr. 3fsbk	ss/sp	.1942 WETNESS CONDITION	- 742"
35' west	5%					.1943/.1956 SAPROLITE	- 41"
of Road						.1944 RESTRICTIVE HORIZON	- 742"
& 75' to						.1948 PROFILE CLASSIFICATION	- SL
South P/L						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Cecil					
2	3S	BT. 0-47"	2.5YR4/6 C	fr. 3fsbk	ss/sp	.1942 WETNESS CONDITION	- 742"
50' west	5%					.1943/.1956 SAPROLITE	- 742"
of Road						.1944 RESTRICTIVE HORIZON	- 742"
& 50' S						.1948 PROFILE CLASSIFICATION	- SL
of N P/L						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Cecil					
3	6S	BT. 0-37	2.5YR4/8 CL	fr. 2fsbk	ss/sp	.1942 WETNESS CONDITION	- 740"
100' NW	6%	CB. 36-40	2.5YR5/6 SiL	fr. 1msbk	ss/sp	.1943/.1956 SAPROLITE	- 32"
of #1"						.1944 RESTRICTIVE HORIZON	- 740"
East of						.1948 PROFILE CLASSIFICATION	- SA
System Area						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Pacolet					
4	Ridge	BT. 0-36	2.5YR4/8 C	fr. 3fsbk	ss/sp	.1942 WETNESS CONDITION	- 742"
Near SCR/1	4%	C-36-42			ss/sp	.1943/.1956 SAPROLITE	- 36"
P/L +						.1944 RESTRICTIVE HORIZON	- 742"
150' west						.1948 PROFILE CLASSIFICATION	- SA
						PROFILE LTAR	- 0.3
						SYSTEM TYPE	- Conv.
		COMMENTS: Pacolet					

80/40/20

195-013-75
NO46B

DAN SPANGLER
LICENSED SOIL SCIENTIST
802 BRADFORD PLACE
MONROE NC 28110-9355

TO: Edwards Construction Inc.
2419 Henry Baucom Road
Monroe, NC 28110

FROM: Dan Spangler

SUBJECT: Soils evaluation and septic system design on approximately 1.7 acre tract (B) on Idlewild Road, Mint Hill for a 4 bedroom house, Mecklenburg Co., NC.

DATE: March 21, 2007 (Revised – 7/12/07)

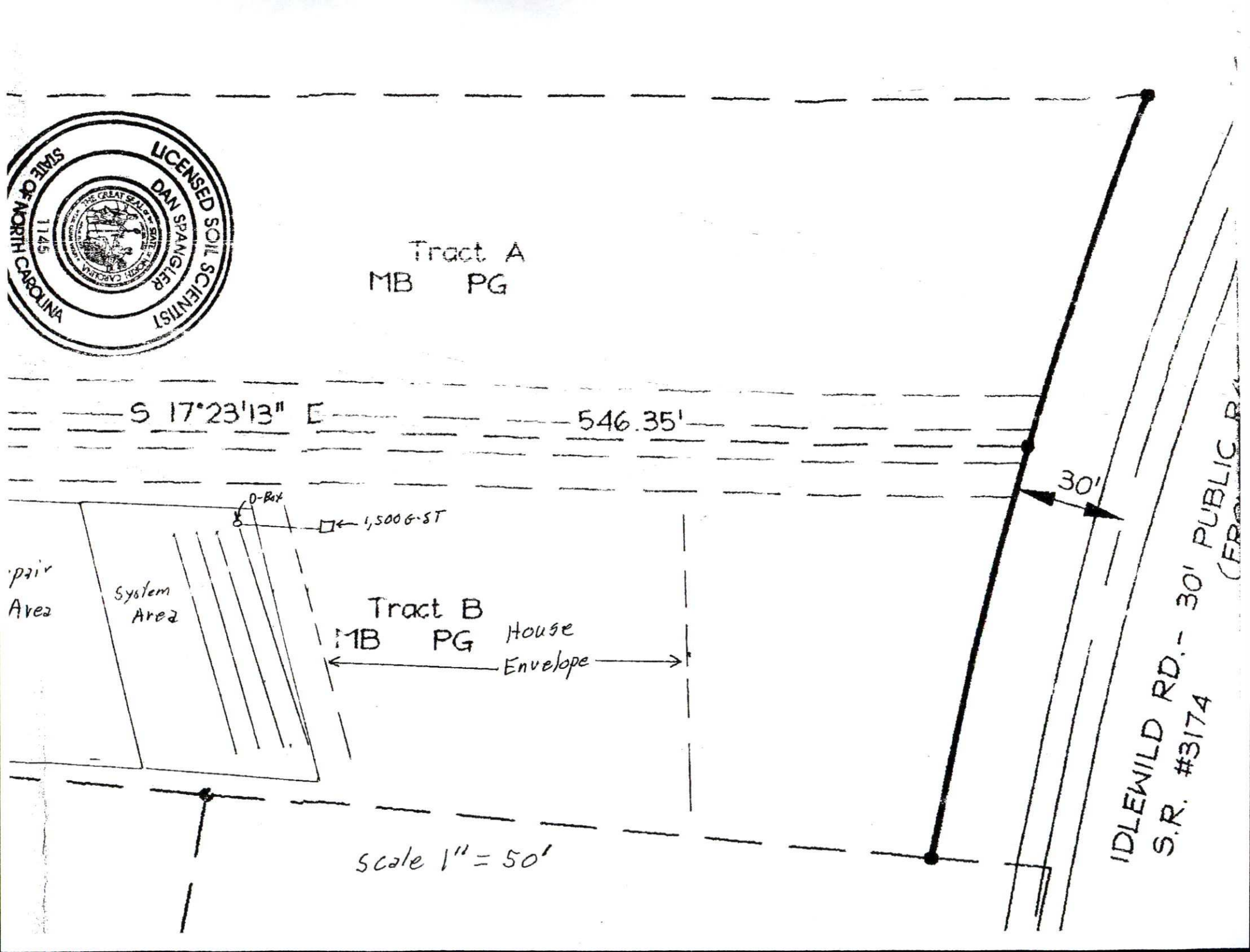
This lot has an area that is **SUITABLE** for conventional or Innovative septic system. The soils are group 4 with mean depth to saprolite more than 42 inches and more than 42 inches to a seasonal water table. The septic system for a 4 bedroom house requires 400 linear feet of lines (500 liner feet for5 bedroom) for an innovative system (EZflow or Infiltrator) at 0.3 LTAR or conventional lines of 534 total liner feet. The system is to have a 1500 gallon septic tank. The trench depths are to be 20 to 24 inches deep, 9 foot on center with 36 inch trench width. The repair area is down slope of the system area and can have the same innovative system with four lines of 100 feet or conventional lines of 534 total liner feet. (See attached soil/site evaluations and lot map.)

The above soils report is my opinion as a licensed soil scientist; however, wastewater treatment systems must be approved by the local health department.

CC: Trevor Thomason, RS
Mecklenburg County Environmental Health

DESIGN SPECIFICS

Daily Design Flow:	**480 GPD – 4 bedroom house**
Septic Tank Size:	**1500 gallons (2 compartments)**
Pump Tank Size:	**N/A**
Effluent Loading Rate:	**Design = 0.3 GPD per sq. ft** **25% reduction for EZflow**
Number and Size of Laterals:	**4 lines @ 100 ft EZflow**
Trench Depths:	**20 to 24 inches**
Trench Spacing:	**9 feet on center (minimum)**
Trench Width:	**36 inches**


LICENSED SOIL SCIENTIST
DAN SPANGLER
1145
STATE OF NORTH CAROLINA
Tract A
MB PG
S 17°23'13" E
546.35'
30'
D-Box
1,500 G-ST
System Area
Repair Area
Tract B
MB PG
House Envelope
IDLEWILD RD. - 30' PUBLIC
S.R. #3174
Scale 1" = 50'

DAN SPANGLER
803 BRADFORD PLACE, MONROE, NC 28110
MOBILE: (704) 291-1909 OFFICE/ FAX: (704) 282-2319

PROPERTY RECORDED:
COUNTY: Mecklenburg

SOIL/SITE EVALUATION
FOR
ON-SITE WASTEWATER SYSTEM

APPLICANT: Edwards Construction Inc. OWNER: ☐ AGENT: ☐ PHONE: 704-219-4663
ADDRESS: 2419 Henry Broom Rd DATE EVALUATED: 3/19/07
Monroe, NC 28110 PROPOSED FACILITY: 4-Bedroom House
PROPERTY SIZE: ~1.7 Acres
LOCATION OF SITE: Tract 3 Idlewild Rd, Mint Hill, NC.
WATER SUPPLY: On-Site Well ☐ Comm. Well ☐ Public ☑ Other _____ EVALUATION METHOD: Auger Boring ☐ Pit ☑

PROFILE #	.1940 LANDSCP POS./ SLOPE %	HORIZON DEPTH (IN.)	.1941 (a)(1) TEXTURE	.1941 (a)(2) STRUCTURE	.1941 (a)(3) MINEROLOGY	
1	Ridge	A 0-3"	Red CL	fr. 2msbk	SS/SP	.1942 WETNESS CONDITION - 742"
~175' South	5% To	B1 3-32"	Red clay	fr. 3f-sbk	ms/sp	.1943/.1956 SAPROLITE - 742"
of Back		B2 32-42"	Red CL	fr. 2msbk	SS/SP	.1944 RESTRICTIVE HORIZON - 742"
P/L +						.1948 PROFILE CLASSIFICATION - Suitable
~50' East						PROFILE LTAR - 0.3
of well						SYSTEM TYPE - Conventional/EZflo
P/C						
		COMMENTS: Cecil				
2	Ridge	A 0-6"	Brown SL	fr. 2mgr.	SO/PO	.1942 WETNESS CONDITION - 742"
~60' East	4%	B1 6-42"	Red clay	fr. 3f-sbk	ms/sp	.1943/.1956 SAPROLITE - 742"
of SB-1						.1944 RESTRICTIVE HORIZON - 742"
& 20'						.1948 PROFILE CLASSIFICATION - Suitable
from Driveway						PROFILE LTAR - 0.3
						SYSTEM TYPE - Conventional/EZ
		COMMENTS: Cecil				
3	Ridge	A 0-8"	Brown SL	fr. 2mgr	SO/PO	.1942 WETNESS CONDITION - 742"
~75'	2%	B1 8-42"	Red clay	fr. 3f-sbk	ms/sp	.1943/.1956 SAPROLITE - 742"
North						.1944 RESTRICTIVE HORIZON - 742"
of SB-2						.1948 PROFILE CLASSIFICATION - Suitable
						PROFILE LTAR - 0.3
						SYSTEM TYPE - Conventional/EZ
		COMMENTS: Cecil				
4	Ridge	A 0-2"	Red CL	fr. 2msbk	SS/SP	.1942 WETNESS CONDITION - 742"
~60'	3%	B1 2-42"	Red clay	fr. 3f-sbk	ms/sp	.1943/.1956 SAPROLITE - 742"
Northwest						.1944 RESTRICTIVE HORIZON - 742"
of SB-3						.1948 PROFILE CLASSIFICATION - Suitable
						PROFILE LTAR - 0.3
						SYSTEM TYPE - Conventional/EZ
		COMMENTS: Cecil				