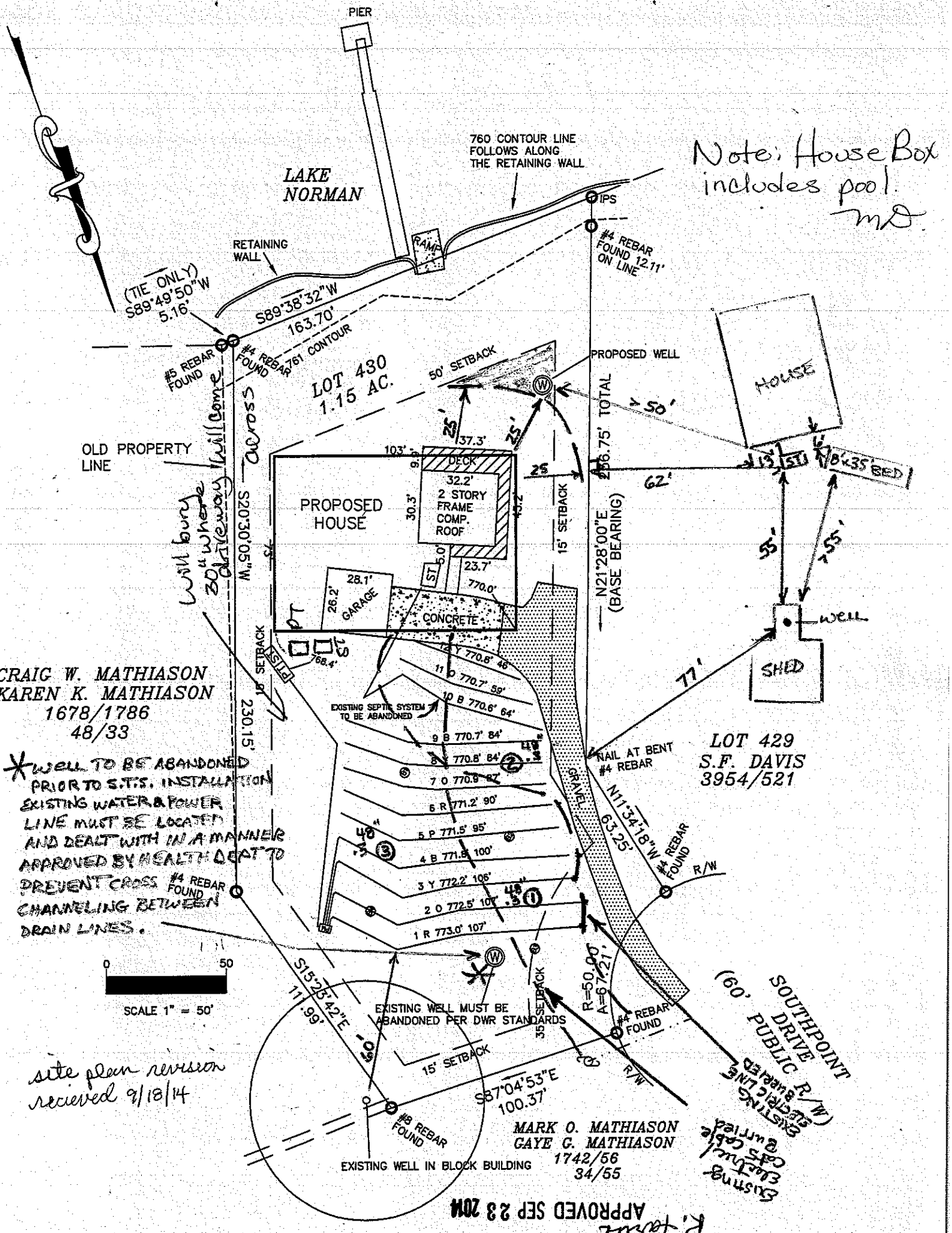

PIER
LAKE NORMAN
760 CONTOUR LINE FOLLOWS ALONG THE RETAINING WALL
Note: House Box includes pool. MO
RETAINING WALL
RAMP
IPS
#4 REBAR FOUND 12.11' ON LINE
(TIE ONLY) S89°49'50"W 5.16'
S89°38'32"W 163.70'
#5 REBAR FOUND
#4 REBAR FOUND
761 CONTOUR
LOT 430 1.15 AC.
50' SETBACK
PROPOSED WELL
HOUSE
OLD PROPERTY LINE
Will bury 20" where driveway will come across
S20°30'05"W 230.15'
PROPOSED HOUSE
DECK
32.2'
2 STORY FRAME COMP. ROOF
30.3'
103'
25'
37.3'
25'
25
15' SETBACK
N21°28'00"E (BASE BEARING)
236.75' TOTAL
>50'
62'
13'
5'
6'
8'x35' BED
55'
>55'
ST
5.0
23.7'
770.0'
28.1'
26.2'
GARAGE
CONCRETE
WELL
SHED
77'
SETBACK
15'
768.4'
CRAIG W. MATHIASON
KAREN K. MATHIASON
1678/1786
48/33
EXISTING SEPTIC SYSTEM TO BE ABANDONED
11 O 770.7' 59'
10 B 770.6' 64'
9 B 770.7' 84'
8 Y 770.8' 84'
7 O 770.9' 87'
6 R 771.2' 90'
5 P 771.5' 95'
4 B 771.8' 100'
3 Y 772.2' 106'
2 O 772.5' 107'
1 R 773.0' 107'
48"
GRAVEL
NAIL AT BENT #4 REBAR
LOT 429
S.F. DAVIS
3954/521
N11°34'18"W 63.25'
#4 REBAR FOUND
R/W
* WELL TO BE ABANDONED PRIOR TO S.T.S. INSTALLATION EXISTING WATER & POWER LINE MUST BE LOCATED AND DEALT WITH IN A MANNER APPROVED BY HEALTH DEPT TO PREVENT CROSS CHANNELING BETWEEN DRAIN LINES.
#4 REBAR FOUND
0
50
SCALE 1" = 50'
S15°25'42"E 11.99'
EXISTING WELL MUST BE ABANDONED PER DWR STANDARDS
35' SETBACK
R=50.00'
A=67.21'
15' SETBACK
S87°04'53"E 100.37'
#8 REBAR FOUND
EXISTING WELL IN BLOCK BUILDING
MARK O. MATHIASON
GAYE G. MATHIASON
1742/56
34/55
SOUTHPOINT DRIVE (60' PUBLIC R/W)
EXISTING ELECTRIC LINE BURIED
Existing Electric Cable Buried
site plan revision recieved 9/18/14
APPROVED SEP 23 2014

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

SITE/SOIL EVALUATION for ON-SITE WASTEWATER SYSTEMS

Sheet ____ of ____
PROPERTY ID # ____

OWNER: Marcy O'connor APPLICANT: Ashley Rollins c/o Kevin O'Connor (fasttrack)
ADDRESS: 100 Brownstone Dr. Mooresville 28117 APPLICATION DATE: ____ DATE EVALUATED: ____
PROPOSED FACILITY: ____ PROPOSED DESIGN FLOW (.1949): 480 PROPERTY SIZE: ____
LOCATION OF SITE: 163 South Point Dr cul-de-sac lot 430 PROPERTY RECORDED: ____
WATER SUPPLY: ☐ Private ☐ Public ☑ Well ✗ ☐ Spring ☐ Other ____
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ Sewage ☐ Industrial Process ☐ Mixed
* abandon existing well, drill new well

PROFILE	1940 LANDSCP POS. / SLOPE %	HORIZON DEPTH (IN)	SOIL MORPHOLOGY .1941 (a)(1) TEXTURE	(a)(2) STRUCTURE	(a)(3) MINERALOGY CONSISTENCE	SOIL MATRIX COLOR	SOIL MOTTLE COLOR	OTHER PROFILE FACTORS	
1	4%	0-12	CL	WSB	SE fr			.1942 WETNESS CONDITION	S
		12-48	C+SAP+mica	WSB/BK	SE fr			.1941 SOIL STRUCTURE	PS
								.1945 SOIL DEPTH/ .1956 SAP ROUTE	S
								.1944 RESTRICTIVE HORIZON	S
								.1947 PROFILE CLASSIF.	PS
								PROFILE LTAR	.3
2	4%	0-4	L+SCL	WSB-gr	SE fr			1942 WETNESS CONDITION	S
		4-20	C+ mica	WSB	SE fr			.1941 SOIL STRUCTURE	PS
		20-48	C+SAP+mica	WSB	SE Fi			1945 SOIL DEPTH/ 1956 SAP ROUTE	S
								1944 RESTRICTIVE HORIZON	S
								PROFILE CLASSIF.	PS
								PROFILE LTAR	.3
3	4%	0-6	L	WSB-gr	SE fr			1942 WETNESS CONDITION	S
		6-12	CL	WSB	SE fr			.1941 SOIL STRUCTURE	PS
		12-25	C	WSB	SE Fi			1945 SOIL DEPTH/ 1956 SAP ROUTE	S
		25-48	C+SAP	WSB	SE fp			1944 RESTRICTIVE HORIZON	S
								PROFILE CLASSIF.	PS
								PROFILE LTAR	.3
4								1942 WETNESS CONDITION	
								.1941 SOIL STRUCTURE	
								1945 SOIL DEPTH/ 1956 SAP ROUTE	
								1944 RESTRICTIVE HORIZON	
								PROFILE CLASSIF.	
								PROFILE LTAR	

COMMENTS Locate all known water and utilities lines in existing/repair area and propose method to remediate. channel short circuit abandon existing well. Trench depth TBD from known water / sewer line. Verify well locations and STS locations on adjacent lots

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	S	S
System Type(s)	IIIb	IIIb
Site LTAR	.3	.3

OTHER FACTORS (.1946): ____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: Richard Jenner
OTHER(S) PRESENT: Allan McKinney, O'Conner, Ashley Rollins

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

Sheet 1 of 1
PROPERTY ID #: 46842 32134
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Mary O'Connor
ADDRESS: 100 Brownstone Dr, Mooresville NC 28117
PROPOSED FACILITY: Single Family PROPOSED DESIGN FLOW (.1949): _____
LOCATION OF SITE: 163 SouthPoint Dr, Mooresville
WATER SUPPLY: ☑ Private ☐ Public ☒ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut

APPLICATION DATE 9/5/14
DATE EVALUATED: 8/14
PROPERTY SIZE: 1.15 AC
PROPERTY RECORDED: _____
TYPE OF WASTEWATER: ☒ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.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
3		0-6	Bi Gr	Fr SS SP					
1	3%	6-26	RBC wmsbk	Fr SS SP		48"			PS .3
		26-48	RC mfsbk	Fr SS SP					
3		0-6	Bl Gr	Fr SS SP					
2	4%	6-42	RC wmsbk/mbk	Fr SS SP		48"			PS .3
		42-48	RCl wfsbk	Fr SS SP					
3		0-6	Bl-cl Gr	Fr SS SP					
	6%	6-24	RBC wmsbk/mbk	Fr SS SP		48"			PS .3
		24-48	RC wmsbk/mbk	Fr SS SP					
		0-5	Bl-cl Gr	Fr SS SP					
4	3%	5-42	RC wmsbk	Fr SS SP		46"			PS .3
		42-48	RCl wfsbk	Fr SS SP	+f SAP.				

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	Accepted	Accepted
Site LTAR	0.3	0.3

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S Ashley Rollins
OTHER(S) PRESENT: Chad Wagner

COMMENTS: _____

APPROVED SEP 23 2014
R. Farris

RECEIVED SEP 1 8 2014

Revision

ROLLANS ***Soil & Environmental Services, PA.***

P.O. Box 832, Mooresville, NC 28115 Phone: (704) 746-5046 Fax: (704) 278-0989

Ashley Rollans, NC Licensed Soil Scientist
Mobile: (704) 746-5046
Email: rollans.ashley@yahoo.com

NC Certified Septic Installer
NC Certified Subsurface Operator
NC Certified Septic Inspector

Attached is a proposed design for an Accepted (25% reduction) Septic System with Pressure Manifold distribution for a 4 bedroom single family residence on PIN 4624232134, Lot #430 CL&T Subdivision, Iredell County, North Carolina.

Contents:

	Page
Information for the Installer	1
Design Information	
Design Specifications	2-3
Layout Specifications	4
System Tapsheet	5
Pressure Manifold Diagram	6
Site Plan/System Plan	7
Calculations	8
Profile Descriptions	9

September 17, 2014
Project No. 01-2017
Design By: Rollans Soil and Environmental Services, PA

INFORMATION FOR THE INSTALLER:

- The permit should be read very carefully prior to bidding. The following are details that must be considered along with all other considerations.
- Tanks shall be approved by DENR, and certification supplied by the manufacturer.
- Tanks shall be water tested prior to installation.
- The installer shall be responsible to the owner for placement of the tanks and to insure that final grades are returned to the original natural grade, with exception of added structural features.
- The supply trench shall be compacted to eliminate cavities left during initial fill placement.
- Installation of the system shall be during dry conditions in order to protect the soil structure.
- All fittings shall be pressure rated fittings.
- All joints shall be cleaned with PVC pipe cleaner and a heavy bodied glue applied to weld all joints.
- Trenches shall be carefully excavated so the bottom is within 2" from the highest to . the lowest points of elevation within the trench. If the bottom elevation needs adjusting after it has been trenched, it will be done by removing high points rather than filling low points. It is extremely important to insure that trenches are not over excavated during initial trenching. All fine grading within the trench will be hand done with a shovel. No loose material will be left in the trench
- All pipe openings in the tanks shall be properly grouted. This also applies to the joints around the riser.
- All tanks shall be properly back filled and compacted to prevent slump at a later date.
- Earth dams, constructed of relatively impervious material, shall be installed at the beginning and end of each lateral.
- No heavy equipment shall be used on the field during or after installation. The use of a small loader (i.e. Bobcat) or a trencher (i.e. Ditch Witch 2300/2310) may be used for installation.
- Elevations at pinflag locations should be checked by the installer prior to beginning trenches.
- Pumptank riser should be 6" above grade, control panel should be 12" above grade.
- Septic tank riser shall be a minimum of 6" above finished grade.
- System is specified as an innovative 25% reduction installation w/pressure manifold.
- Repair is specified as an innovative 25% reduction installation w/pressure manifold.
- Iredell County is given approval to move pressure manifold, tanks, etc. reasonable distances from locations provided on the attached site plan.

PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner: Kevin Oconnor

Address: 100 Brownstone Drive
Mooresville, NC 28117
Phone: 704.402.6024
County: Iredell
Location: CL&T Lot # 430

Source of Wastewater Flow: 4 Bedroom Single Family Residence
Estimated Daily Wastewater Production: 480 gpd
System Flow: 28.44

Design Specifications

Drainfield Size: 400
Loading Rate: 0.3
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Trench Depth: 24-30 in.
Trench Width: 36 in.
Septic Tank Size: 1000
Pump Tank Size: 1000

Estimated Supply Line Length: 112
Supply Line Diameter: 2 in. SCH 40 PVC
Supply Line Volume: 19.49
Dosing Volume: 182.84
Supply Manifold: 4 in. SCH 80 PVC
Supply Manifold Length: 4 ft. (minimum)
Supply Manifold Volume: N/A

Recommended Float Controls: SJE Sensor Float Control Switches as Required for Control Panel or County Approved Equivalents
Recommended Control Panel: SJE-Rhombus Model 112 (NEMA 4x) Control Panel or County Approved Control Panel.

Pressure Head: 2 ft.
Friction Head: 0.99
Elevation Head: 10.00
Total Dynamic Head: 14.93

Threaded Union: In Tank
Gate Valves: 1 in Tank
1 at Pressure Manifold
Check Valves: In Tank
Anti-Siphon Hole: NA
Additional Comments: Soil suitability was performed by Rollans Soil & Environmental Services.

APPROVED SEP 23 2014
RJarvis

CL&T Lot # 430
PRESSURE MANIFOLD DESIGN

DESIGN FLOW:	480	
SOIL APPLICATION RATE:	0.3	
TOTAL AREA TRENCH BOTTOM:	1200	
TOTAL LATERAL LENGTH:	400	
NUMBER OF FIELDS:	1	
LATERAL LENGTH REQUIRED PER FIELD:	400	
SUPPLY LINE LENGTH:	112	
TOTAL DYNAMIC HEAD:	14.93	
MANIFOLD SIZE:	4 in.SCH 80 PVC	
DOSING VOLUME:	182.84	
PUMP TANK DRAW DOWN*:	8.7	
SEPTIC TANK SIZE:		1000
PUMP TANK SIZE:		1000

**Pump tank draw down based on a volume basis of 21 gallons per inch. Draw down may vary among pump tank manufacturers.*

APPROVED SEP 23 2014
R Jarvis

CL&T LOT 430

Project #: 01-2017

LAYOUT FOR 4 BEDROOM HOME

September 5, 2014

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
HOUSE CNR					770.00		
P. TANK					768.40		
1	***PINK***				***773.20***	~~***109*** 111~~	***100***
2	***RED***				***773.00***	***107*** 109	***100***
3	***ORANGE***				***772.50***	***107*** 109	***100***
4	***YELLOW***				***772.20***	***106*** 107	***100***
5	BLUE				771.80	100 100	80
6	PINK				771.50	95 94	80
7	RED				771.20	90 92	80
8	ORANGE				770.90	87 87	80
9	YELLOW				770.80	84 84	80
10	BLUE	(EXISTING-TO BE ABANDONED)			770.60	64	64
11	ORANGE	(EXISTING-TO BE ABANDONED)			770.70	59	59
12	YELLOW	(EXISTING-TO BE ABANDONED)			770.80	46	46
					Total	**885**	**800**

	LINE LENGTH	LTAR GPD/FT²	SYSTEM TYPE	SOIL LTAR GPD/FT²	TRENCH SYSTEM	DISTRIBUTION
**** System***	***400***	***0.300***	***ACCEPT.***	***0.300***	***25% RED.***	**PRESSURE**
Repair	400	0.300	*ACCEPT.*	0.300	***25% RED.***	**MANIFOLD** PRESSURE MANIFOLD

Notes:

**All septic lines located via survey
**Septic line elevations via survey
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings

office copy

CL&T LOT 430

Project #: 01-2017

LAYOUT FOR 4 BEDROOM HOME

September 17, 2014

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM							
INSTR. 1							
HOUSE CNR					770.00		
P. TANK					768.40		
1	***RED***				***773.00***	***107***	***100***
2	***ORANGE***				***772.50***	***107***	***100***
3	***YELLOW***				***772.20***	***106***	***100***
4	***BLUE***				***771.80***	***100***	***100***
5	PINK				771.50	95	80
6	RED				771.20	90	80
7	ORANGE				770.90	87	80
8	YELLOW				770.80	84	80
9	BLUE				770.70	84	80
10	BLUE	(EXISTING-TO BE ABANDONED)			770.60	64	64
11	ORANGE	(EXISTING-TO BE ABANDONED)			770.70	59	59
12	YELLOW	(EXISTING-TO BE ABANDONED)			770.80	46	46
					Total	**776**	**720**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
** System*	***400***	***0.300***	***ACCEPT.***	***0.300***	***25% RED.***	**PRESSURE MANIFOLD**
Repair	400	0.300	*ACCEPT.*	0.300	***25% RED.***	PRESSURE MANIFOLD

Notes:

**All septic lines located via survey
**Septic line elevations via survey
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings

APPROVED SEP 23 2014

R. Farris

PRESSURE MANIFOLD TAPSHEET - CL&T LOT 430

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/Tap	Trench Area	Line LTAR
1	***RED***	773	***100***	SCH 40 1/2	**7.11**	300	0.15
2	***ORANGE***	772.5	***100***	SCH 40 1/2	**7.11**	300	0.15
3	***YELLOW***	772.2	***100***	SCH 40 1/2	**7.11**	300	0.15
4	***BLUE***	771.8	***100***	SCH 40 1/2	**7.11**	300	0.15
	total	**feet =**	**400**	**gal/min =**	**28.44**		

Des. Flow	**480**
Pump Run=	**6.43**
soil LTAR	**0.3**
LTAR +5%	**0.315**
LTAR with ACCEPTED	**0.4**
LTAR with ACCEPTED + 5%	**0.42**

APPROVED SEP 23 2014

R. Jarvis

CALCULATIONS

Location CL&T LOT 430

Project Number 01-2017

Lot No: 430

No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.30	$^{gpd/ft^2}$
25% RED.? (YES OR NO)	YES	
Supply Line Length	112	ft.
Supply Line Volume	19.488	gal.
Required Feet of Line	400	ft.
Amount of Line from Layout	400	ft.
Gallons per Minute	28.44	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Minimum Standard Tank Size	1000	
Lateral Line Volume	261.2	gal.
Dosing Volume	182.84	gal.

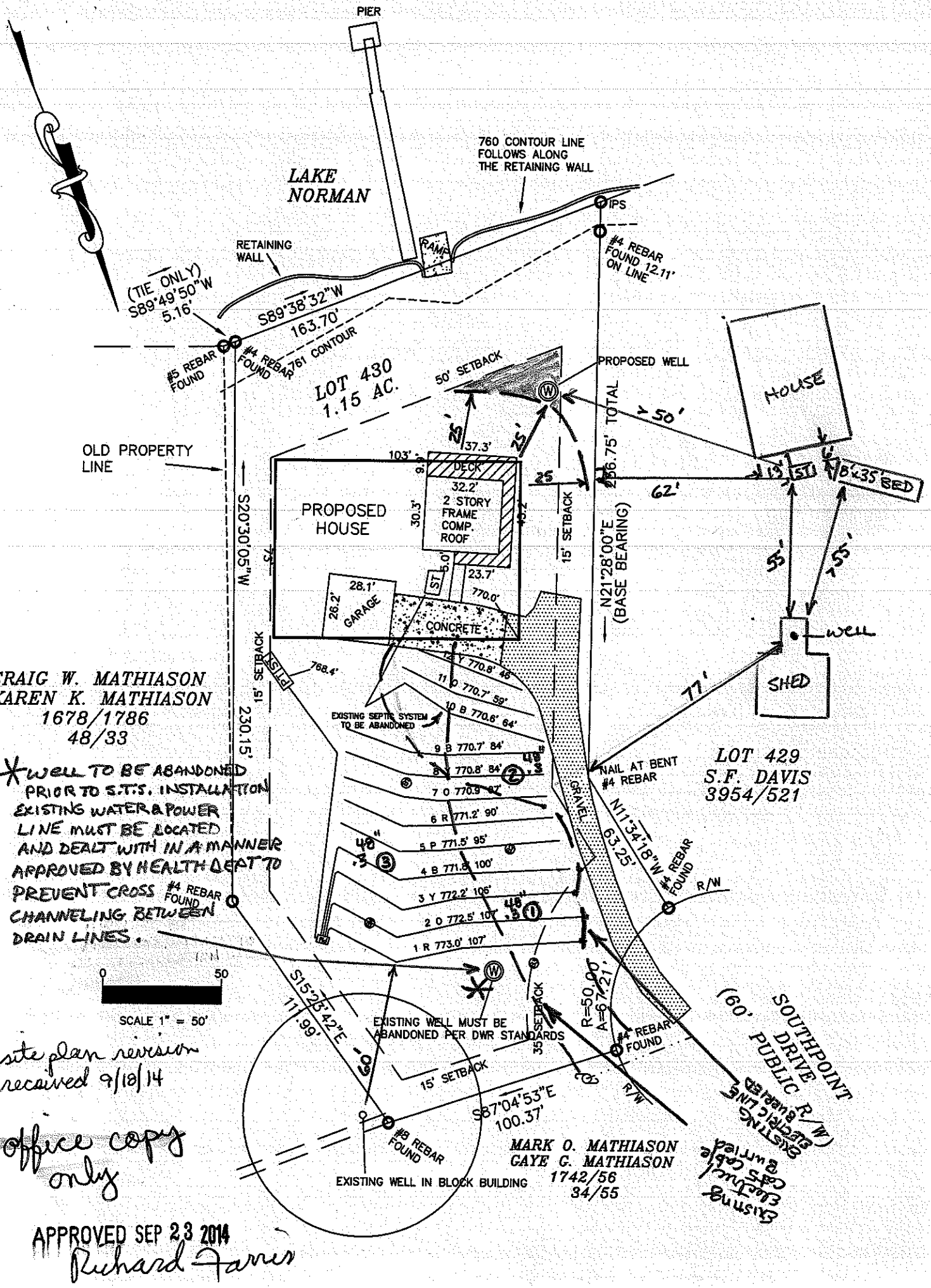
Note: Dosing Volume based on70% of lateral line volume

FRICTION FACTOR INTERPOLATER
2" SCH 40 PVC

GPM	*f*
20	0.84
	-0.88
25	1.27
	-1.28
30	1.78
	-1.76
35	2.37
	-2.25
40	3.03
43.07	3.48
45	3.77
48.14	4.28
50	4.58
57.11	5.89
60	6.42

Tank Draw Down	8.7	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	6.43	minutes
Elevation Head	10	ft.
Pressure Head	2	ft.
Friction Factor	0.88	ft./100 ft. *(From the interpolater.)*
Friction Head	0.99	ft.
Total Dynamic Head (+15%)	14.93	ft.

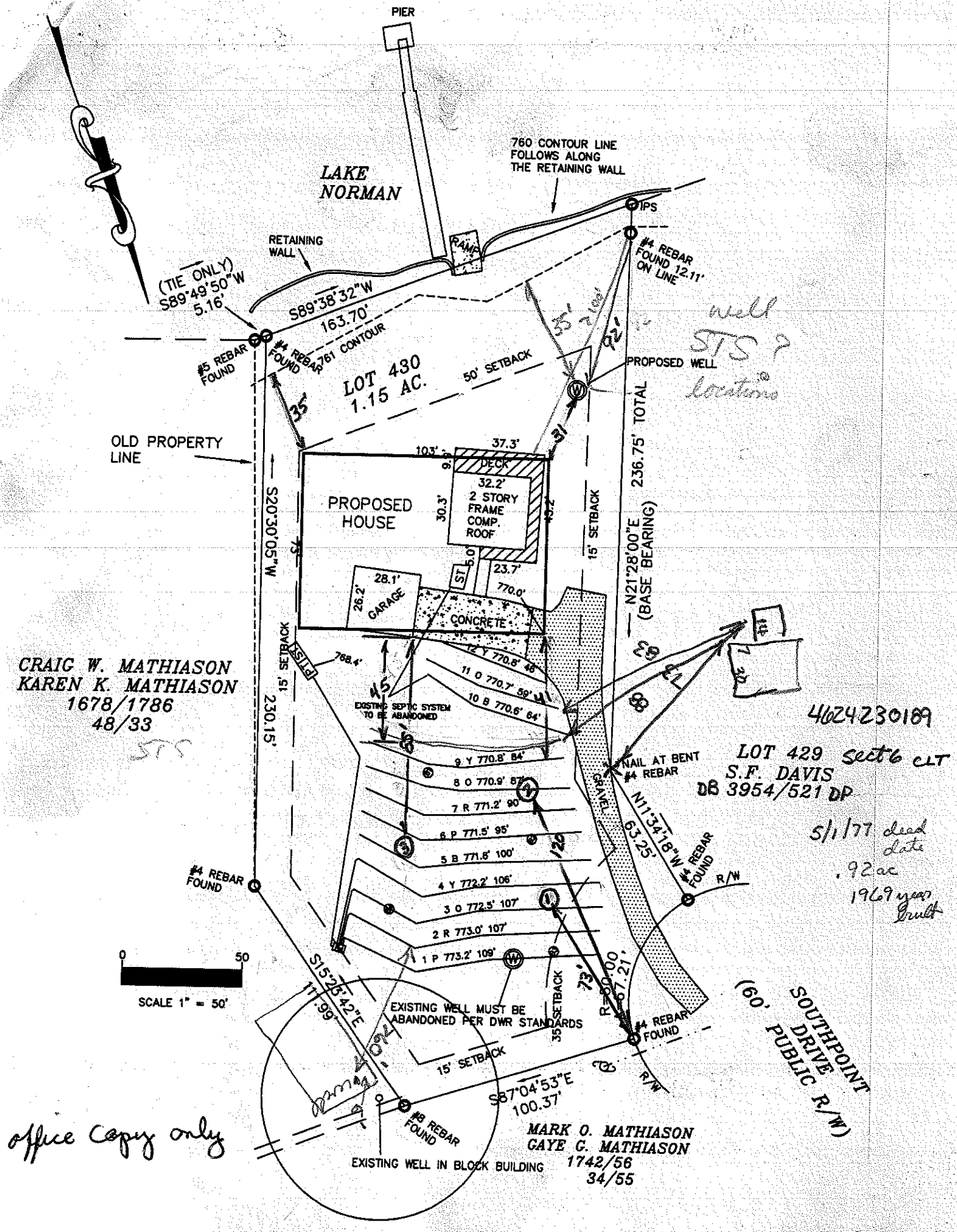
APPROVED SEP 23 2014
Richard Farris

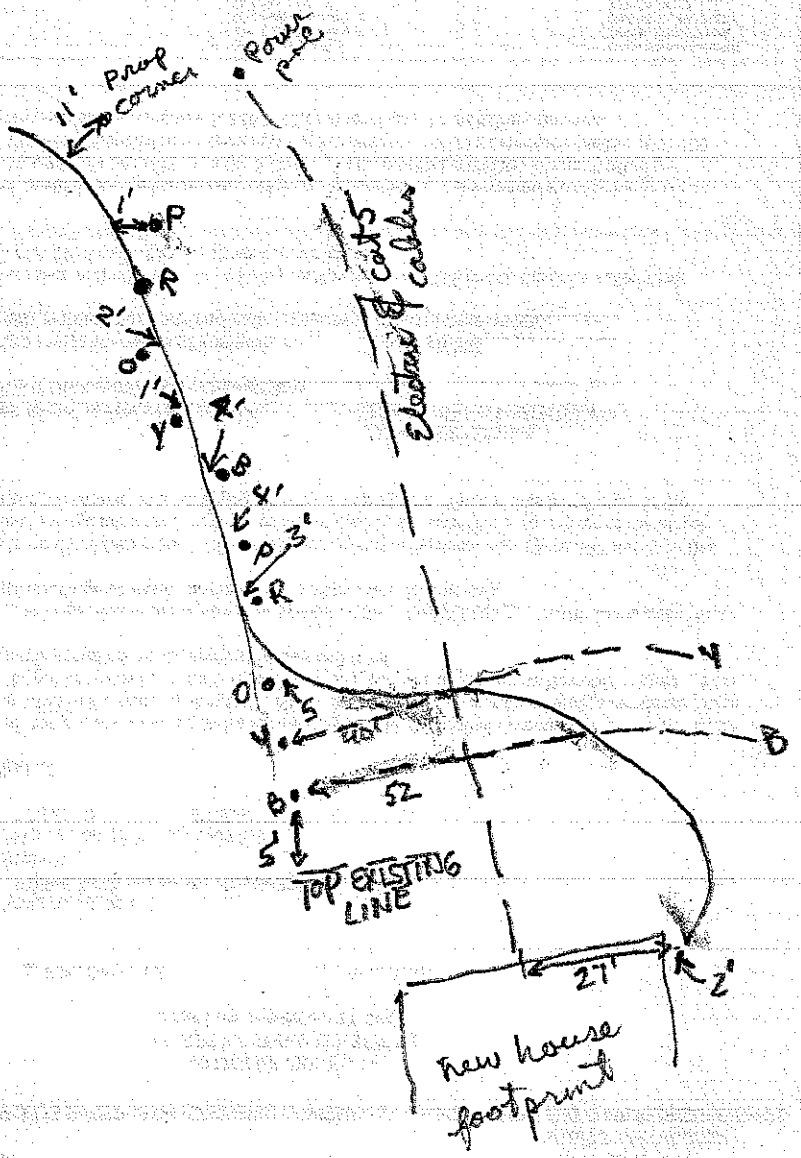


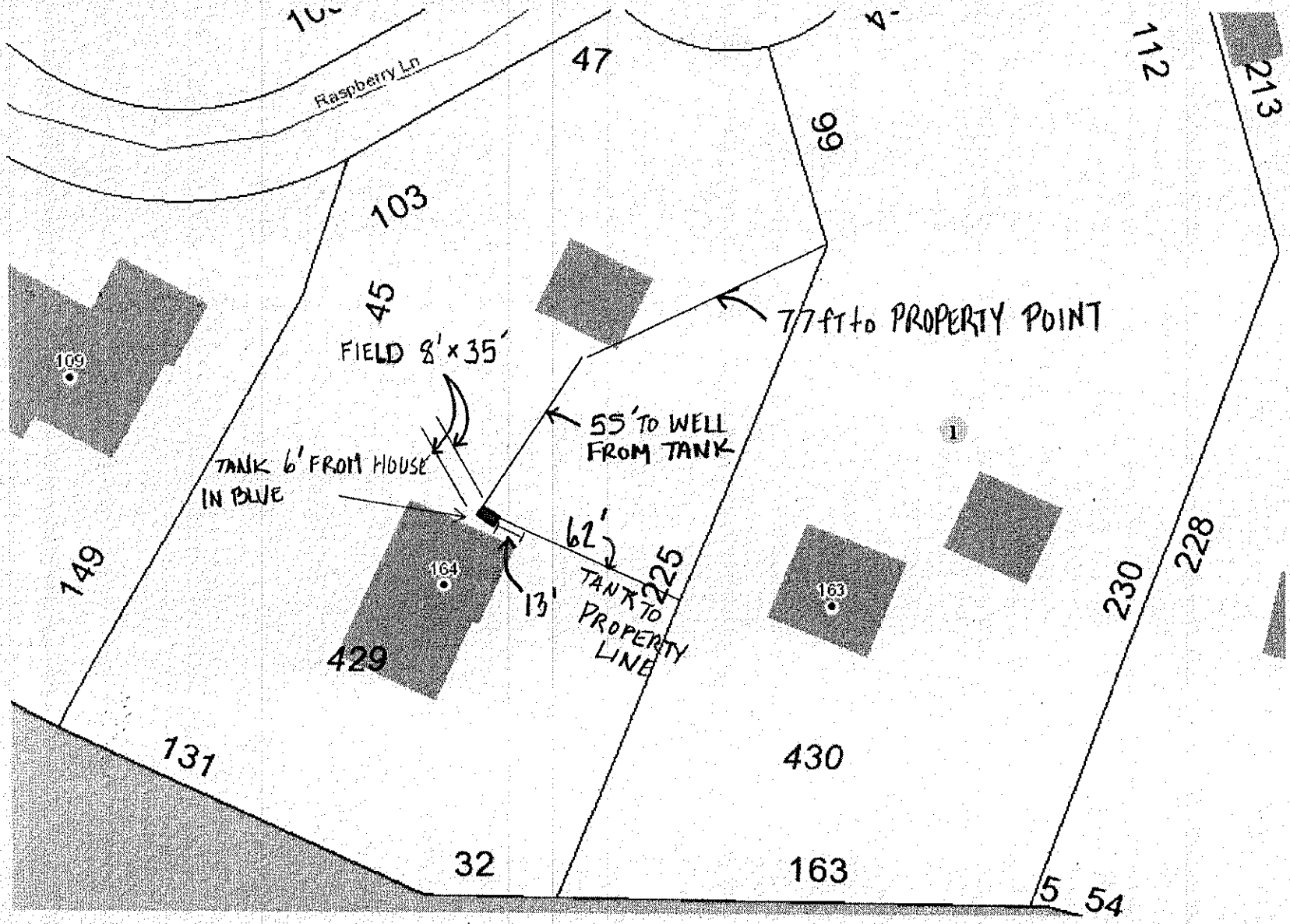
site plan revision received 9/18/14

office copy only

APPROVED SEP 23 2014
Richard Farmer

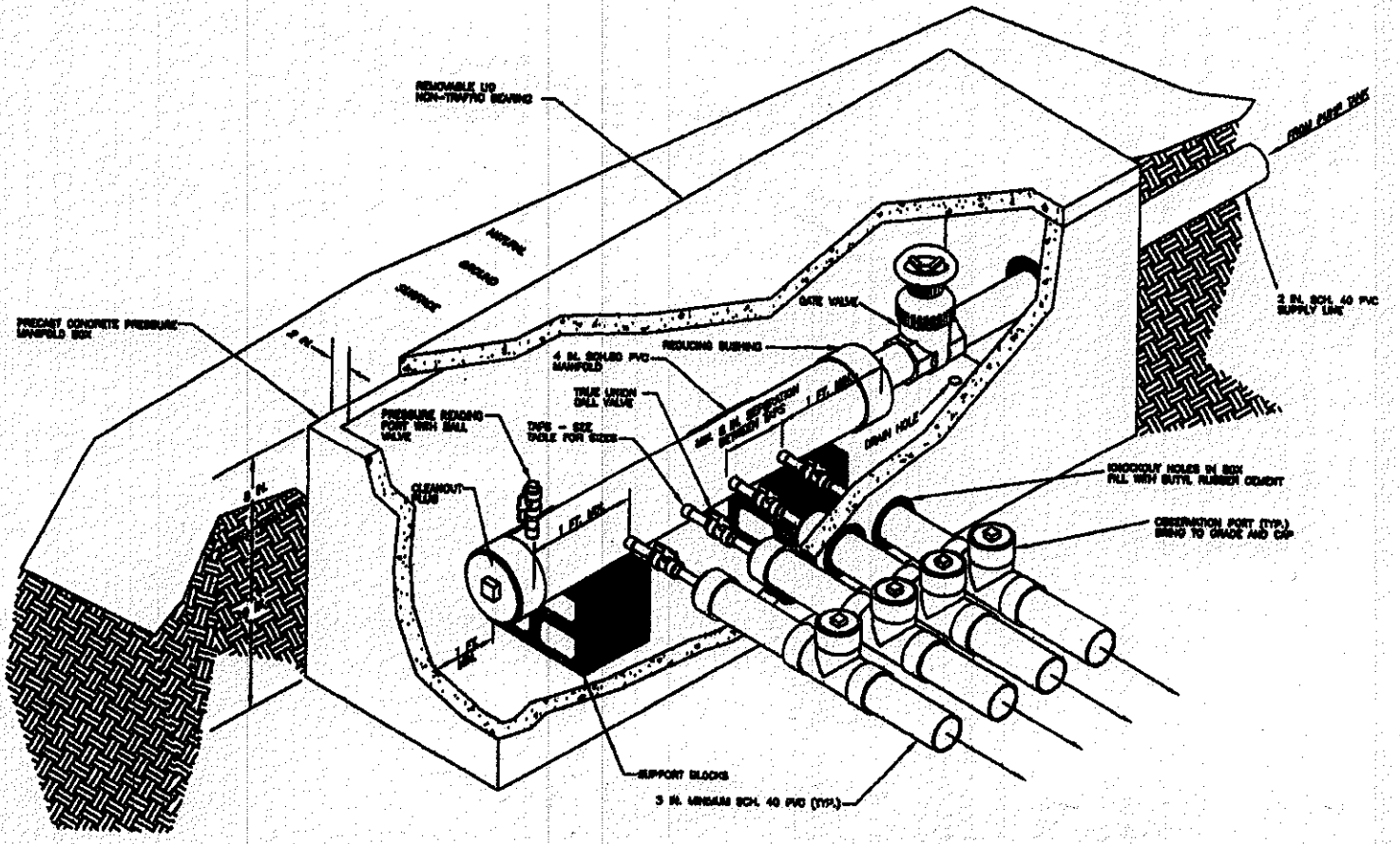

PIER
LAKE NORMAN
760 CONTOUR LINE FOLLOWS ALONG THE RETAINING WALL
IPS
#4 REBAR FOUND 12.11' ON LINE
RETAINING WALL
RAMP
(TIE ONLY) S89°49'50"W 5.16'
S89°38'32"W 163.70'
#5 REBAR FOUND
#4 REBAR FOUND
761 CONTOUR
LOT 430 1.15 AC.
50' SETBACK
PROPOSED WELL
well STS? location
OLD PROPERTY LINE
PROPOSED HOUSE
2 STORY FRAME COMP. ROOF
DECK
32.2'
37.3'
30.3'
23.7'
28.1'
26.2'
GARAGE
CONCRETE
ST
5.0'
15' SETBACK
S20°30'05"W 230.15'
N21°28'00"E (BASE BEARING) 236.75' TOTAL
CRAIG W. MATHIASON
KAREN K. MATHIASON
1678/1786
48/33
STS
EXISTING SEPTIC SYSTEM TO BE ABANDONED
12 Y 770.8' 48'
11 O 770.7' 59'
10 B 770.6' 64'
9 Y 770.8' 84'
8 O 770.9' 87'
7 R 771.2' 90'
6 P 771.5' 95'
5 B 771.8' 100'
4 Y 772.2' 106'
3 O 772.5' 107'
2 R 773.0' 107'
1 P 773.2' 109'
NAIL AT BENT #4 REBAR
N11°34'18"W 63.25'
#4 REBAR FOUND
R/W
4602430189
LOT 429 Sect 6 CLT
S.F. DAVIS
DB 3954/521 DP
5/1/77 deed date
.92 ac
1969 year built
0
50
SCALE 1" = 50'
S15°25'42"E 11.99'
EXISTING WELL MUST BE ABANDONED PER DWR STANDARDS
35' SETBACK
R=60.00'
67.21'
SOUTHPOINT DRIVE (60' PUBLIC R/W)
15' SETBACK
S87°04'53"E 100.37'
#8 REBAR FOUND
EXISTING WELL IN BLOCK BUILDING
MARK O. MATHIASON
GAYE G. MATHIASON
1742/56
34/55
office copy only


11' prop corner
Power pole
Electric & Cable
P
R
2'
1'
Y
R
B
4'
P
3'
R
Y
B
52
5'
TOP EXISTING LINE
27'
2'
new house footprint



APPROVED SEP 23 2014
Richard Fouts

TYPICAL PRESSURE MANIFOLD DETAIL



APPROVED SEP 23 2014
Richard Harris

Ashley,

Richard Farris who is with Iredell County and I spoke this afternoon and he needs you to change a few things on the submittal.

Specifically to show the last farthest from the house line not being installed directly over the well that is to be abandoned. I leave to the two of you what this means for the design.

Richard is requiring the utilities be marked and as I noted to you, this has been done on the property. (phone, cable and power).

As for the water line, Richard is ok with not specifically locating the line by digging up the water line at the well and at the house, but he did require my commitment to do what is necessary on this issue when we actually go to install the 4 drain lines.

I was to provide Richard Sam Davis's contact information so that he could discuss with Sam the authorization to enter his property to stake the septic lines and the septic tanks at 164 Southpoint. I am not sure Sam wants his information shared, so I sent same Richard's contact information, but in the same correspondence asked Sam to allow us to locate and flag the tank and the field. Richard is requiring this in order to approve the well 25 feet from the house and NOT 50' back from the lot line.

I will let you both know when I have received Sam's approval and then I will go with you and Richard to locate the tank and lines like we did previously when you needed this for your design. Sam is aware that we were on his property for this purpose as you recall, he verified that the well is in the small structure attached to the pole barn.

From: Sam Davis [mailto:sdavis@ removed for privacy]
Sent: Friday, August 15, 2014 8:54 AM
To: Kevin O'Connor
Subject: RE: couple of questions on Southpoint property

Kevin,

I do not know the location of the septic tank and drain field. You are correct that the well is in the small building attached to the garage.

I wish I could be more helpful.

Sam

980.XXX.XXXX

Hopefully he meant that he will be more helpful by allowing us back on the property to show Richard where this system is on 164 Southpoint.

APPROVED SEP 23 2014

Richard Farris

Thanks and I will be in touch shortly, but I do hope you have an opportunity to speak with Richard. His contact info is 704 664-3718 and email Richard.Farris@co.iredell.nc.us

Regards,

Kevin P O'Connor
kevinpoconnor@roadrunner.com
704.402.6024

APPROVED SEP 23 2014

Richard Farris

Richard Farris

From:	Kevin O'Connor <kevinpoconnor@roadrunner.com>
Sent:	Tuesday, September 16, 2014 3:19 PM
To:	Richard Farris; rollans.ashley@yahoo.com
Subject:	image of measurements for lot 429 today
Attachments:	Lot 429 locates for septic tank and field lines and well house.pdf

Richard and Ashley,

Attached is the drawing from our measurements today on lot 429.

The septic tank sits center to back of house 6 ft off of the foundation, corner on southeast of tank is 13' to the corner of the house structure.
Tank is ~9' by 5' and is located ~3.5 feet below the surface.

Gravel field runs from the tank for ~35' and could be measured at 8' width.

From the nearest corner of the tank to the property line measures 62'

From the corner of the tank to the small structure that the well has been indicated in, it measures 55"

From this same structure to the property point 66' back from the property corner at the street, the measurement is 73'

As indicated the tank sits more than 50ft back from the property line which was the intended purpose of our measurements today. In addition, no part of any proposed field on lot 430 comes within 50' of lot 429's well.

I look forward to receiving from you the septic permit as revised for other design considerations as the two of you discussed today.

In conclusion, the house box as proposed is situated properly to reflect the adequate septic design for 430. I will remove the stakes on lot 430 on Saturday, but intend to leave the flags on lot 429 for Sam Davis review. Sam can remove these at his leasure.

I have blind cc'd Sam on this correspondence.

Regards,

Kevin P O'Connor
kevinpoconnor@roadrunner.com
704.402.6024

APPROVED SEP 23 2014

Richard Farris