

MICHAEL ATHANAS & ASSOCIATES
LICENSED SOIL SCIENTIST
361 Ennis Rd.
Weddington, NC 28173
(704) 576-3887

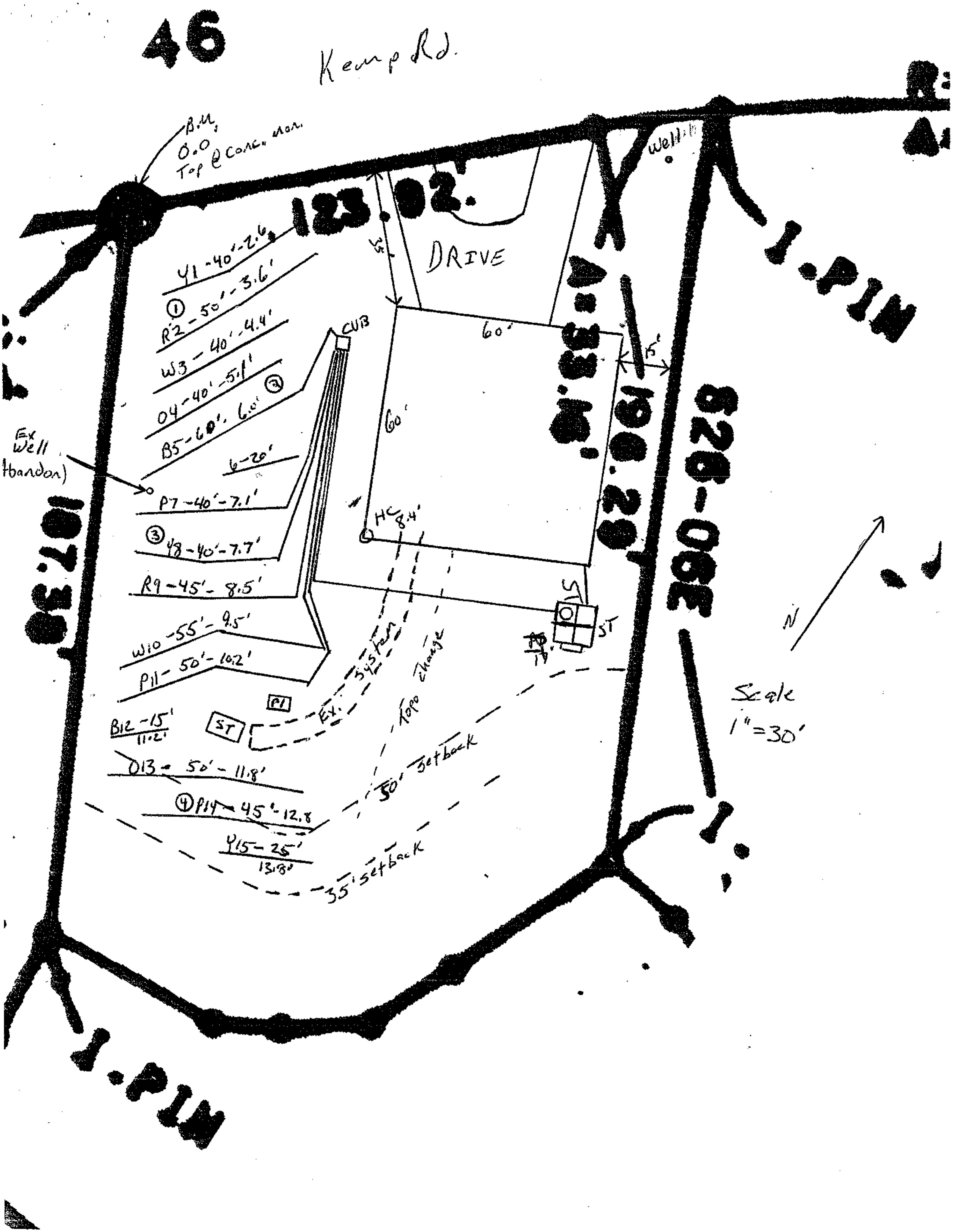
Reference: Data Sheet for 645 Kemp Rd., CL&T Sec 8 Lot 161
House Footprint: 60' x 60'
Building Setbacks: 35' front, 15' side, 50' lake
Water Source: Private well
Number of Bedrooms: 4/480 GPD
Proposed LTAR: 0.275 GPD/FT2
Proposed System Type: PPBPS
Proposed Repair System Type: Pretreatment PPBPS
Distribution: Low pressure-CVB
Flow per Orifice: 0.41 GPM
Orifice Size: 5/32"
System Flow: 27.47 GPM
Dosing Volume: 241.2 gallons
Pump Run Time: 8.8 minutes
Elevation Head: 16'
Friction Head: 2.3'
Pressure Head: 2'
Total Dynamic Head: 20.3
Supply Line Length: 125'
Septic/Pump Tank Size: 1000/1000 gallons
Proposed Trench Bottom: 36" maximum

Line	Design Length	Actual Length	Elevation
Yellow 1		40'	2.6'
Red 2		50'	3.6'
White 3		40'	4.4'
Orange 4		40'	5.1'
Blue 5	**60' (14 panels)**	**65'**	**6.0'**
Orange 6		20'	
Pink 7	**40' (9 panels)**	**40'**	**7.1'**
Yellow 8	**40' (9 panels)**	**40'**	**7.7'**
Red 9	**45' (10 panels)**	**45'**	**8.5'**
White 10	**55' (13 panels)**	**55'**	**9.5'**
Pink 11	**50' (12 panels)**	**53'**	**10.2'**

Line	Design Length	Actual Length	Elevation
Blue 12		15'	11.2'
Orange 13		20' (25%), 30' (50%)	11.8'
Pink 14		45' (25%)	12.8'
Yellow 15		25' (25%)	13.8'

Initial System: 290' **Repair System:** 235' @ 50%, 90' @ 25%
Pump Tank: 17.0' **House Corner:** 8.4' **Benchmark:** 0.0'

Comments:
This property has an existing system that will be abandoned. M A & Associates are proposing a new PPPBS system with a pretreated PPBPS repair. The existing well must be abandoned and a new well installed.


46
Kemp Rd.
B.M. 0.0 Top @ Conc. Mon.
123.92
DRIVE
Y1-40'-2.6
① R2-50'-3.6'
W3-40'-4.4'
O4-40'-5.1' ②
B5-60'-6.0'
6-20'
Ex Well (Abandon)
P7-40'-7.1'
③ Y8-40'-7.7'
R9-45'-8.5'
W10-55'-9.5'
P11-50'-10.2'
B12-15' 11.2'
O13-50'-11.8'
④ P14-45'-12.8
Y15-25' 13.8'
CUB
60'
60'
HC 8.4'
ST
ST
PT
Topo change
50' Setback
35' Setback
15'
I-PIN
I-PIN
N
Scale 1"=30'

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

PROPERTY ID #: 4626178775
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Sean Gallagher APPLICATION DATE
ADDRESS: 645 Kemp Rd., Mooresville, NC DATE EVALUATED:
PROPOSED FACILITY: 4 bdrm PROPOSED DESIGN FLOW (.1949): 480 GPD PROPERTY SIZE: 0.72 AC
LOCATION OF SITE: 645 Kemp Rd, CL&T Sec 8 Lot 161 PROPERTY RECORDED: 10/5/1977
WATER SUPPLY: Ξ Private ☐ Public Ξ Well ☐ Spring ☐ Other
EVALUATION METHOD: Ξ Auger Boring Ξ Pit ☐ Cut TYPE OF WASTEWATER: Ξ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
AB 1	LS 7%	0-3	Br SCL WSBK	FR SS SP	N/A	48"	Few SAP	N/A	PS 0.3
		3-38	R C SBK	FR SS SP					
		38-48	R CL WSBK	FR SS SP					
AB 2	LS 7%	0-4	Br SCL WSBK	FR SS SP	Few Mn	48"	N/A	N/A	PS 0.275-0.3
		4-48	R C SBK	FR SS SP					
AB 3	LS 7%	0-12	Br SCL WSBK	FR SS SP	Few Mn	48"	N/A	N/A	PS 0.275
		12-48	R C SBK	FR SS SP					
AB 4	LS 7%	0-5	Br CL WSBK	FR SS SP	Few Mn	48"	N/A	N/A	PS 0.275
		5-48	R C SBK	FR SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	870 FT2	975 FT2
System Type(s)	PPBPS	PPBPS
Site LTAR	0.275	0.275

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

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: 4626178775
DATE OF EVALUATION:
COUNTY: IREDELL

PROFILE #	.1940 LANDSCAPE POSITION/ SLOPE %	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941)		OTHER PROFILE FACTORS				PROFILE CLASS & LTAR
			.1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	.1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	
P 1	LS 7%	0-3	Br SCL WSBK	FR SS SP		48"	N/A	N/A	PS 0.275
		3-28	R C SBK	FR SS SP					
		28-48	R CL WSBK	FR SS SP	Few Mn				

COMMENTS: