

MICHAEL ATHANAS & ASSOCIATES

LICENSED SOIL SCIENTIST

561 Ennis Rd.

Weddington, NC 28173

(704) 576-3887

Reference: Data Sheet for Lot 3 Wood Duck Loop; Lakeside Farms, Iredell County NC

House Footprint: TBD
Building Setback: 35' Front, 15' Side, 50' from Private Lake
Water Source: Community Water
Number of Bedrooms: 3/360gpd
Pre-determined LTAR: 0.25gpd/ft2
Suggested System Type: PPBPS/ 8' center
Distribution: LP-CVB
Flow per Orifice: .59 ✓
Hole Size & Material: 3/16 ✓ 5/32
Number of Panels: 55 ✓
System Flow: 32.5 gal/min ✓
Dosing Volume: 198 gal/dose ✓ 100% DOSE
Pump Run Time: 6.10 min
Total Linear Footage: 240'
Trench Bottom Square Footage: 480 ft2
Elevation Head: 13.9'
Friction Head: 1.54'
Pressure Head: 2'
Total Dynamic Head: 20.9'
Supply Line Length: 100'
Proposed Trench Bottom Depth: 40"
Septic/ Pump tank size: 1000 ST, 1000 PT

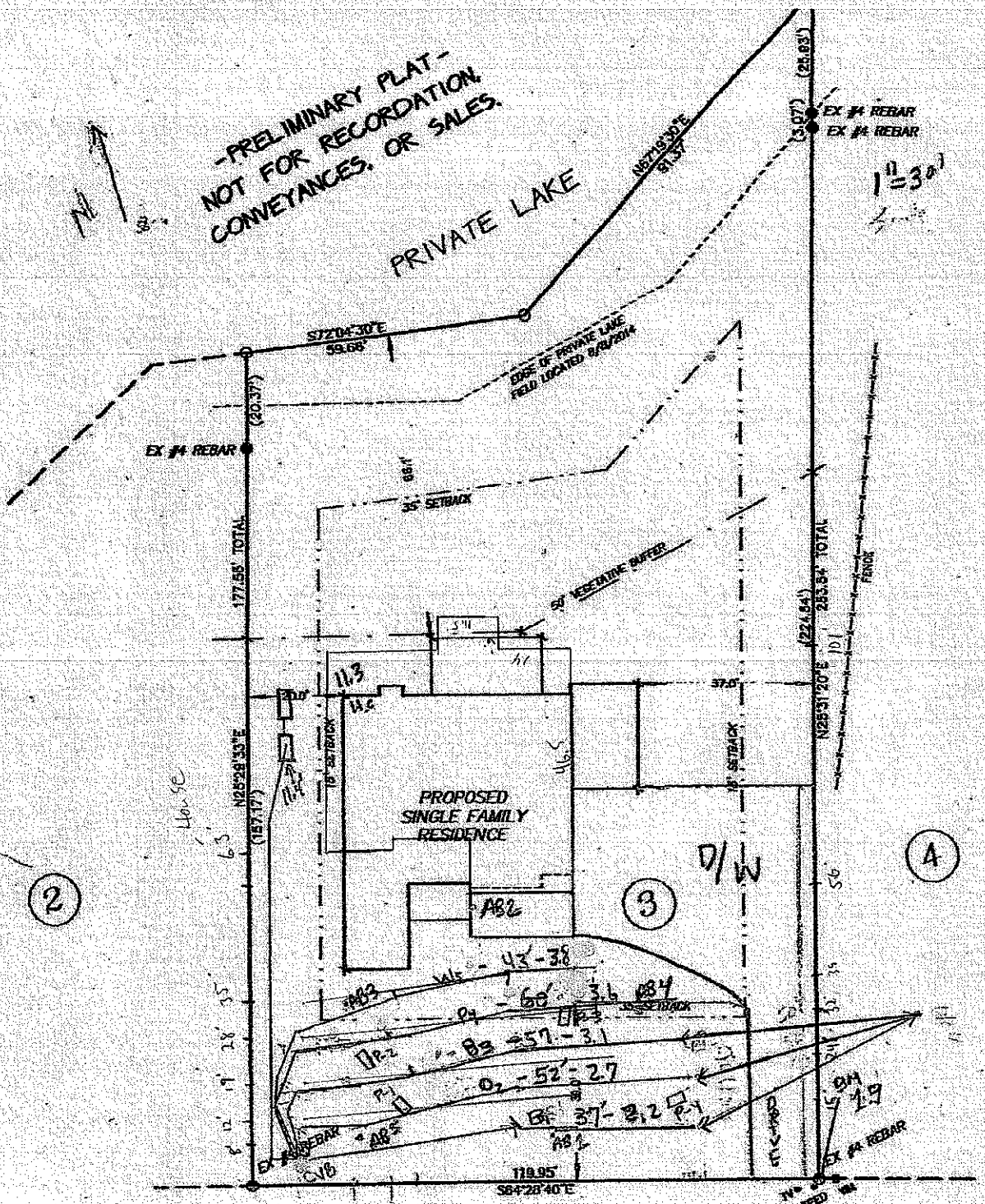
Line	Actual Length	# of Panels	Design Length	Elevation
Blue 1	37'	8	35' ✓	2.2'
Orange 2	52'	11	50' ✓	2.7'
Blue 3	57'	13	55' ✓	3.1'
Pink 4	60'	14	60' ✓	3.6'
White 5	43'	9	40 ✓	3.8'
		8		

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Septic/Pump Tanks: 9.1'
Initial System: 240' of PPBPS
Septic Tank/Pump tank: 1000/1000gal
House Corner: 9.0 Rear left corner

CVB: 2.2'
Repair System: N/A; Deeded prior to 1983
Benchmark: 1.9' Front right corner iron of lot.

Comments: The purpose of the evaluation is acquire a permit for a three bedroom residence. MA&A Inc. evaluated 9 soil observations, 5 auger borings and 4 pits, we are proposing a trench bottom of 40 inches due to the fill depth present on this lot. MA&A has referenced NCAC 1956 © II and have spoken with the manufactor and received their approval for the panels to be installed at 40 inches with an additional 4 inches of sand placed in the trench bottom. This lot was deeded prior to 1983 and therefore does not require repair area. The system should not be installed any closer than 50 feet from the neighbor's well or five feet from the house foundation, please note the subdivision is on community water. If there are any question, please feel free to call at 704-576-3887.


-PRELIMINARY PLAT-
NOT FOR RECORDATION,
CONVEYANCES, OR SALES.
PRIVATE LAKE
1" = 30'
EX #4 REBAR
EX #4 REBAR
EX #4 REBAR
S72°04'30"E
59.68'
N62°19'30"E
91.37'
(25.83')
(3.07')
(26.37')
EDGE OF PRIVATE LAKE
FIELD LOCATED 8/8/2014
35' SETBACK
50' VEGETATIVE BUFFER
177.55' TOTAL
283.34' TOTAL
(224.84')
N25°31'20"E
N25°28'33"E
(187.17')
FENCE
10' SETBACK
PROPOSED
SINGLE FAMILY
RESIDENCE
D/W
AB2
AB1
2
3
4
119.95'
S64°28'40"E
EX #4 REBAR
EX #4 REBAR
TPED
DRIVEWAY
WOOD DUCK LOOP
60' PUBLIC R/W

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

PROPERTY ID #: Lot 3; Lakeside Farms; Wood Duck Loop
COUNTY: Iredell

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: IQ Custom Homes
ADDRESS:
APPLICATION DATE:
DATE EVALUATED: 8/12/2014
PROPOSED FACILITY: 3-Bedroom Residence
PROPOSED DESIGN FLOW (.1949): 360 GPD
PROPERTY SIZE: 0.55 Acres
LOCATION OF SITE: Lot 3; Lakeside Farms Subdivision; Wood Duck Road
PROPERTY RECORDED: 10/4/1978
WATER SUPPLY: ☐ Private ☒ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☒ Auger Boring ☐ Pit ☐ Cut
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
AB 1	L 4-5%	0"-12"	Br Cl WSBK	SS SP FR SEXP	Mn @ 38" Few Yellow/Brown @45"-48"	48"	n/a	None	.275
		12"-48"	R C SBK	SS SP FR SEXP					
AB 2	L 4-5%	0"-8"	Br Cl WSBK	SS SP FR SEXP		48"	Few saprolite inclusions	None	.3+
		8"-36"	R C SBK	SS SP FR SEXP					
		36"-48"	R CL WSBK	SS SP FR SEXP					
AB 3	L 4-5%	0"-10"	Fill	Fill	Mn @ 32"-48"	48"	n/a	None	.275
		10"-20"	Br Cl WSBK	SS SP FR SEXP					
		20"-48"	R C WSBK	SS SP FR SEXP					
AB 4	L 4-5%	0"-10"	Fill	Fill		48"	Few-Common saprolite inclusions	None	.3+
		10"-44"	R C SBK	SS SP FR SEXP					
		44"-48"	R CL WSBK	SS SP FR SEXP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	440ft2	N/A
System Type(s)	LP-PPBPS	N/A
Site LTAR	.275	N/A

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948):
EVALUATED BY: Michael Athanas and Associates
OTHER(S) PRESENT:

COMMENTS:

SOIL/SITE EVALUATION

(Continuation Sheet)

DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

PROPERTY ID #: Lot 3 Lakeside Farms; Wood Duck Loop
DATE OF EVALUATION: 8/12/2014
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	
AB #5	4-5%	0"-18"	Historical Fill		Mn Staining 26"-48"	48"	n/a	n/a	.275
		18"-26"	Br Cl	SS SP FR SEXP					
		26"-48"	R C	SS SP FR SEXP					

COMMENTS:

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8-20-14