LP PPBPS SYSTEM
FOR WASTEWATER TREATMENT

Approved
6/28/16

Owner/Applicant:	Burton Melton
Current Address:	112 Stone Pointe Court Mooresville, NC 28117
Phone:	704.799.0340
County:	Iredell
Location:	112 Stone Pointe Court

Source of Wastewater Flow:	4 Bedroom Single Family Residence
Estimated Gallons Per Day Flow:	480 gpd
System Flow:	25.83

Design Specifications

Drainfield Size:	271
Loading Rate (gpd/ft.^{2}):	0.3
Depth of Gravel in Trench:	NA (PPBPS)
Gravel Size:	NA (PPBPS)
Trench Depth:	30 in. or existing, Repair 30 in. Trench Depth
Trench Width:	24 in.
Septic Tank Size:	1000
Pump Tank Size:	1000
Estimated Supply Line Length:	170
Supply Line Diameter:	2 in. SCH 40 PVC
Supply Line Volume:	10.44
Dosing Volume:	151.96
Supply Manifold:	N/A
Supply Manifold Length:	N/A
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:	1.07
Elevation Head:	11.30
Total Dynamic Head:	16.52
Threaded Union:	In Tank
Gate Valves:	1 in Tank 1 per lateral
Check Valves:	In Tank
Anti-Siphon Hole:	NA
Additional Comments:	Soil suitability was performed by Rollans Soil & Environmental Services

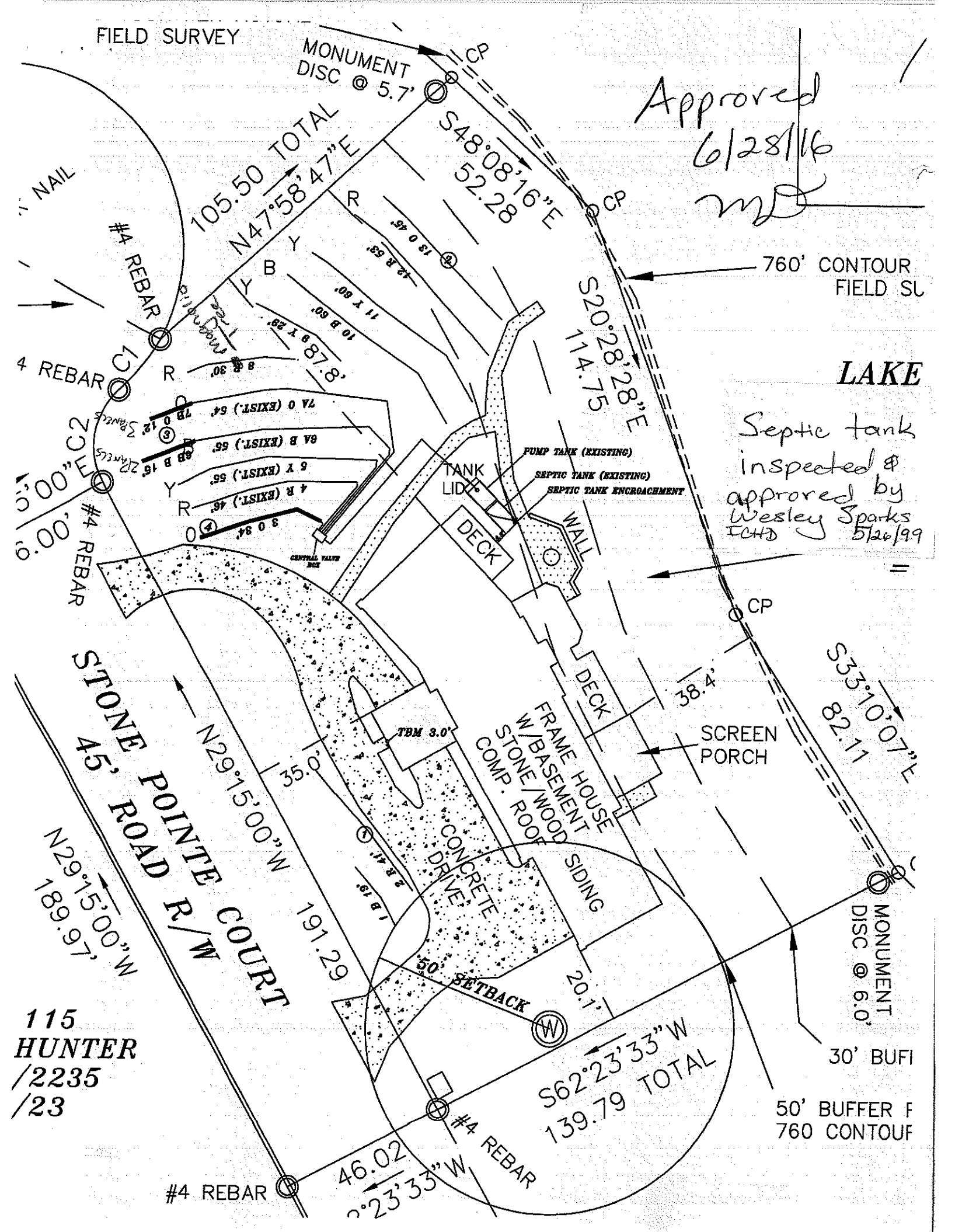
112 Stone Pointe Court

LP PPBPS

DESIGN FLOW (gpd):	480
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.3
TOTAL AREA TRENCH BOTTOM:	542
TOTAL LATERAL LENGTH:	271
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	266.6666667
SUPPLY LINE LENGTH:	60
TOTAL DYNAMIC HEAD:	16.52
MANIFOLD SIZE:	N/A
DOSING VOLUME:	151.96
PUMP TANK DRAW DOWN*:	7.2
SEPTIC TANK SIZE:	1000
PUMP TANK SIZE:	1000

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


FIELD SURVEY
MONUMENT DISC @ 5.7'
CP
105.50 TOTAL
N47°58'47"E
S48°08'16"E
52.28
CP
Approved
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760' CONTOUR
FIELD SU
NAIL
#4 REBAR
#4 REBAR
#4 REBAR
S20°28'28"E
114.75
LAKE
Septic tank
inspected &
approved by
Wesley Sparks
ECHD 5/26/99
PUMP TANK (EXISTING)
SEPTIC TANK (EXISTING)
SEPTIC TANK ENCROACHMENT
TANK LID
DECK
WALL
CENTRAL VALVE BOX
CP
DECK
38.4'
S33°10'07"E
82.11
SCREEN PORCH
TBM 3.0'
35.0'
N29°15'00"W
191.29
FRAME HOUSE W/BASEMENT STONE/WOOD COMP. ROOF
SIDING
CONCRETE DRIVE
20.1'
50' SETBACK
STONE POINTE COURT
45' ROAD R/W
N29°15'00"W
189.97'
115
HUNTER
/2235
/23
S62°23'33"W
139.79 TOTAL
MONUMENT DISC @ 6.0'
30' BUFI
50' BUFFER F
760 CONTOUF
#4 REBAR
46.02
S62°23'33"W
#4 REBAR

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112 Stone Pointe Court (STONEMARKER POINTE LOT # 3)

Project #: 01-3180

LAYOUT FOR 4 BEDROOM HOME

June 24, 2016

LINE #	FLAG COLOR	BS	HI	FS	ELEVATION	FLAGGED LINE LENGTH	DESIGN LINE LENGTH
TBM		3.0			100.00		
INSTR. 1			103.00				
HOUSE CNR				3.50	99.50		
P. TANK				12.30	90.70		
1	BLUE			0.50	102.50	19	19
2	RED			2.50	100.50	41	41
3	***ORANGE***	*(INSTALL)*		***6.20***	***96.80***	***34***	***34***
4	***RED***	*(EXISTING)*		***6.80***	***96.20***	***46***	***46***
5	***YELLOW***	*(EXISTING)*		***7.70***	***95.30***	***55***	***55***
6A	***BLUE***	*(EXISTING)*		***8.70***	***94.30***	***55***	***55***
6B	***BLUE***	*(INSTALL)*		***8.70***	***94.30***	***15***	***15***
7A	***ORANGE***	*(EXISTING)*		***9.40***	***93.60***	***54***	***54***
7B	***ORANGE***	*(INSTALL)*		***9.40***	***93.60***	***12***	***12***
8	RED			10.10	92.90	30	30
9	YELLOW			11.00	92.00	29	29
10	BLUE			12.30	90.70	60	60
11	YELLOW			13.40	89.60	60	60
12	RED			15.50	87.50	53	53
13	ORANGE			17.10	85.90	45	45
					Total	**608**	**608**

	LINE LENGTH	LTAR GPD/FT^2	SYSTEM TYPE	SOIL LTAR GPD/FT^2	TRENCH SYSTEM	DISTRIBUTION
**** System***	***271***	***0.300***	***MOD.***	***0.300***	***PPBPS***	**LOW PRESSURE**
Repair	337	0.300	***MOD.***	0.300	***PPBPS***	LOW PRESSURE

Notes:

** TBM located on top of ground at EIP (SEE SITE PLAN)
**TBM is assumed to be 100'
**All measures in feet
**Nitrification lines are demonstrated on contour via colored pin flags
**BS, HI, and FS indicate rod readings
** **Install Lines 3, 6B & 7B.**

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LP PPBPS TAPSHEET -StoneMarker Pointe # 3

SYSTEM

Line #	Color	Elevation	Length	Hole Size	Flow/hole	Trench Area	# of Panels
3	*ORANGE*	*96.80*	*34*	*0.156*	*0.41*	*102*	*8*
4	*RED(ext)*	*96.20*	*46*	*0.156*	*0.41*	*138*	*11*
5	*YELLOW(ext)*	*95.30*	*55*	*0.156*	*0.41*	*165*	*13*
6A	*BLUE(ext)*	*94.30*	*55*	*0.156*	*0.41*	*165*	*13*
6B	*BLUE*	*94.30*	*15*	*0.156*	*0.41*	*45*	*3*
7A	*ORANGE(ext)*	*93.60*	*54*	*0.156*	*0.41*	*162*	*12*
7B	*ORANGE*	*93.60*	*12*	*0.156*	*0.41*	*36*	*3*
	total	feet =	271	gal/min =	25.640769		63

Des. Flow	480
Pump Run=	5.88
soil LTAR	0.3
LTAR +5%	0.315
LTAR with mod.	0.6
LTAR with mod.. + 5%	0.63

.156 equals 5/32 inch hole

****ONLY LINES 3, 6B & 7B ARE TO BE INSTALLED, ALL OTHER LINES ARE EXISTING**

CALCULATIONS

Location 112 Stone Pointe Court

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6/28/14
MD

Project Number	01-3180	
Lot No:	3	
No. of Bedrooms	4	
Design Flow	480	$^{gal}/_{day}$
LTAR	0.3	$^{gal}/_{ft^2\,day}$
PPBPS? (YES OR NO)	YES	
Supply Line Length	60	ft.
Supply Line Volume	10.44	gal.
Required Feet of Line	266.6667	ft.
Amount of Line from Layout	271	ft.
Gallons per Minute	25.64077	$^{gal}/_{min}$
Required Septic Tank Capacity	1000	gal.
Pump Tank Capacity	1000	gal.
Panel Volume	3.6	gal.
# of Panels	63	
Dosing Volume	151.96	gal.

Note: Dosing Volume based on 67% of # of panels times 3.6 gal/panel

Tank Draw Down	7.2	*Generic Draw Down of 21 gal.per in.*
Pump Run Time	5.93	minutes
Elevation Head	11.3	ft.
Pressure Head	2	ft.
Friction Factor	1.78	ft./100 ft. *(From the interpolater.)*
Friction Head	1.07	ft.
Total Dynamic Head (+15%)	16.52	ft.

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

DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH, ENVIRONMENTAL HEALTH SECTION
ON-SITE WATER PROTECTION BRANCH

Approved 6/28/16 MD

Sheet 1 of 1
PROPERTY ID #: 4615920068
COUNTY: Iredell

SOIL/SITE EVALUATION
***for* ON-SITE WASTEWATER SYSTEM**
(Complete all fields in full)

OWNER: Burton Melton
ADDRESS: 112 Stone Pointe Court, Mooresville NC 28117
PROPOSED FACILITY: 4BR Single Family PROPOSED DESIGN FLOW (.1949): 480 gpd
LOCATION OF SITE: 112 Stone Pointe Court, Mooresville NC 28117
WATER SUPPLY: ☑ ~~Private~~ ☐ Public ☑ ~~Well~~ ☐ Spring ☐ Other
EVALUATION METHOD: ☑ ~~Auger Boring~~ ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☑ ~~Sewage~~ ☐ Industrial Process ☐ Mixed

APPLICATION DATE: 10/24/16
DATE EVALUATED: 6/20/16
PROPERTY SIZE: N/A
PROPERTY RECORDED:

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
B 1	L/7%	0-45	RC mmsbk/Absk	Fr SS SP		48"			PS .3
		45-48	RCL mmsbk	Fr SS SP					
B 2	L/19%	0-48	RC mmsbk/Absk	F SS SP	Few wh. Rock/ SAPR@46" Plus	48"			PS .3
B 3	L/8%	0-5	Fill			50"			PS .3
		5-16	BCL wmsbk	Fr SS SP					
		16-50	RC wmsbk/Absk	Fr SS SP					
B 4	L/10%	0-12	RC wmsbk/Absk	F SS SP	Compacted	48"			PS .3
		12-48	RC wmsbk	Fr SS SP					

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	PS	PS
System Type(s)	PPBPS	PPBDS w/TS-II
Site LTAR	.3	.3

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): PS
EVALUATED BY: S Ashley Rollans
OTHER(S) PRESENT: Curt Wagner

COMMENTS: