PRESSURE MANIFOLD SYSTEM
FOR WASTEWATER TREATMENT

Owner: Spear Builders, Inc.

Address: 172 Allendale Cr
Troutman 28166
Phone: 704-202-4964
County: Iredell
Location: DavidsonWoods LOT #63

Source of Wastewater Flow: 3 Bedroom Single Family Residence
Estimated Gallons Per Day Flow: 360
System Flow: 30.3

Design Specifications

Drainfield Size: 450
Loading Rate (gpd/ft.^{2}): 0.2
Depth of Gravel in Trench: NA (25% reduction)
Gravel Size: NA (25% reduction)
Trench Depth: 18 in.
Trench Width: 36 in.
Septic Tank Size: 1000
Pump Tank Size: 1000

Estimated Supply Line Length: 130
Supply Line Diameter: 2 in. SCH 40 PVC
Supply Line Volume: 22.62
Dosing Volume: 205.70
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.

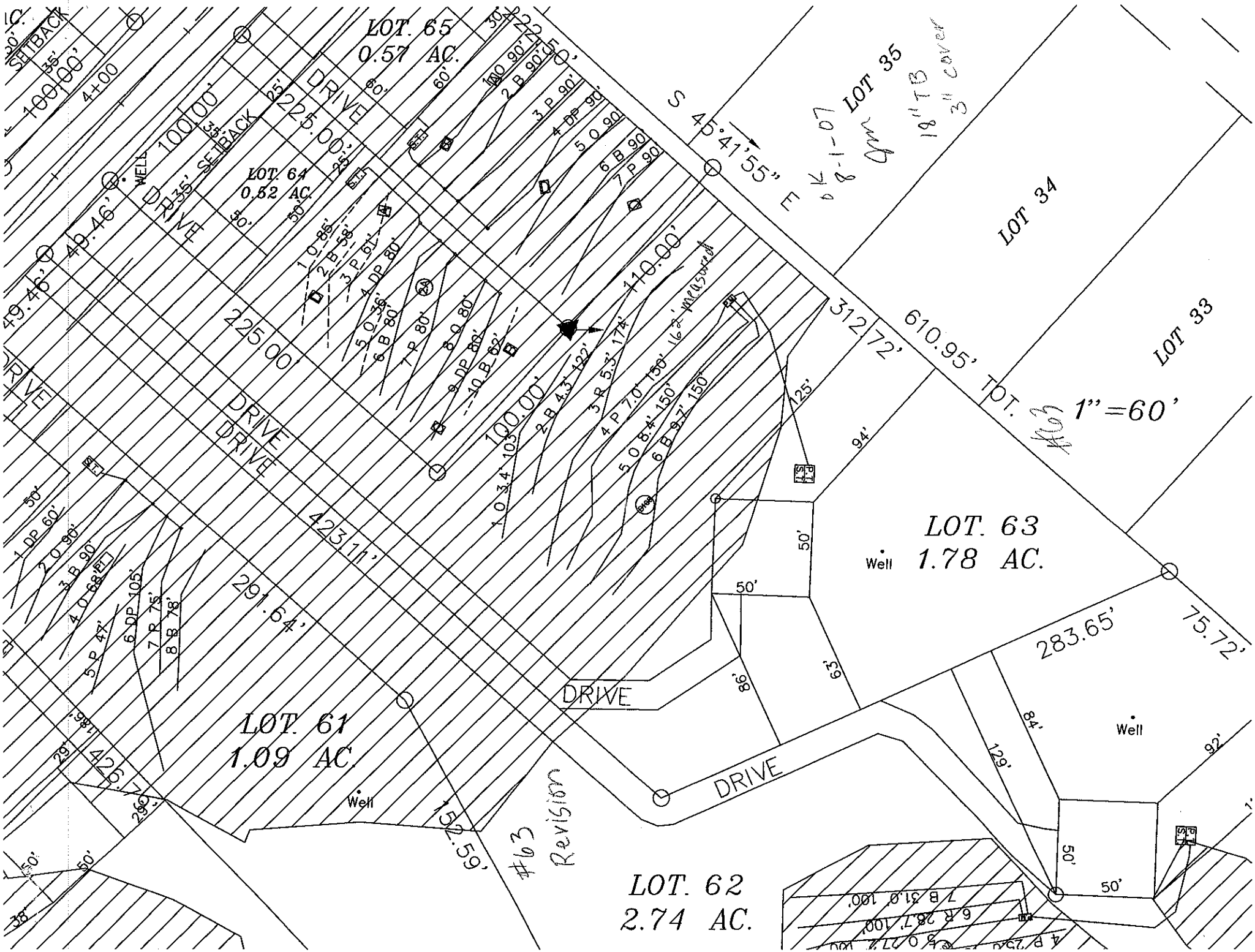
Pressure Head: 2 ft.
Friction Head: 2.31
Elevation Head: 16.30
Total Dynamic Head: 23.71

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.

DavidsonWoods LOT #63
PRESSURE MANIFOLD DESIGN

DESIGN FLOW (gpd):	360
SOIL APPLICATION RATE (gpd/ft.^{2}):	0.2
TOTAL AREA TRENCH BOTTOM:	1350
TOTAL LATERAL LENGTH:	450
NUMBER OF FIELDS:	1
LATERAL LENGTH REQUIRED PER FIELD:	450
SUPPLY LINE LENGTH:	130
TOTAL DYNAMIC HEAD:	23.71
MANIFOLD SIZE:	4 in.SCH 80 PVC
DOSING VOLUME:	205.70
PUMP TANK DRAW DOWN*:	9.8
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.*


LOT. 65
0.57 AC.
LOT. 64
0.52 AC.
LOT. 61
1.09 AC.
LOT. 62
2.74 AC.
LOT. 63
1.78 AC.
LOT 34
LOT 33
LOT 35
DRIVE
DRIVE
DRIVE
DRIVE
WELL
Well
Well
Well
S 45°41'55" E
610.95' TOT.
312.72'
283.65'
75.72'
110.00'
100.00'
100.00'
225.00'
225.00'
291.64'
423.11'
152.59'
#63 1"=60'
#63 Revision
1-07
18" TB
3" cover