FAST TRACK LOW PRESSURE MANIFOLD DOSING
FOR A
25% REDUCTION SEPTIC SYSTEM
FOR
SUBSURFACE WASTEWATER DISPOSAL
FALLS PARK SUBDIVISION
___ STILLWATER ROAD – LOT 15
TROUTMAN NC

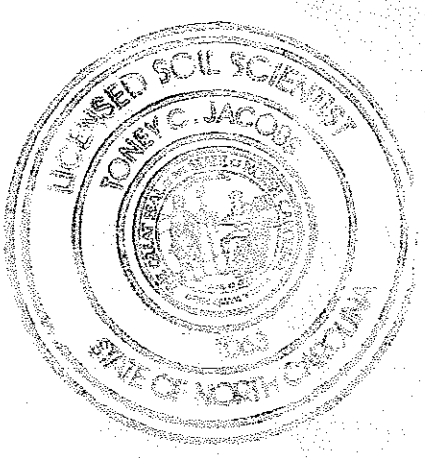
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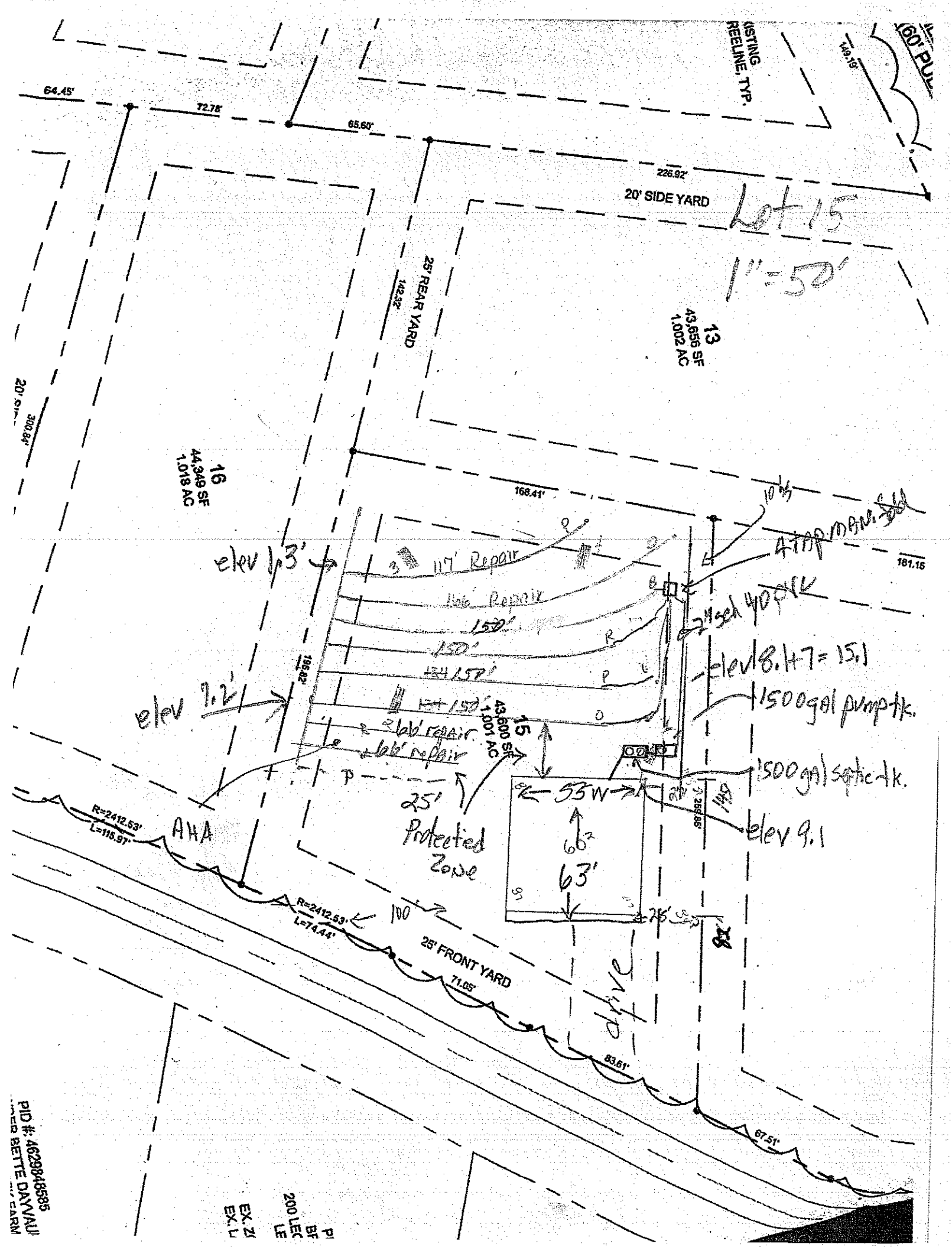
July 21, 2014
Revised: October 17, 2014
Request for Authorization to Construct at 6 bedrooms



Copy: Justin Henderson, RS
Iredell County Health Dept.
Statesville, NC
704-902-3741

Toney C. Jacobs, LSS

Kathleen M. Saunders, LSS


64.45'
72.78'
65.60'
226.92'
20' SIDE YARD
Lot 15
1"=52'
25' REAR YARD
142.32'
13
43,656 SF
1.002 AC
16
44,349 SF
1.018 AC
168.41'
181.15'
elev 1.3'
elev 2.2'
117' Repair
166' Repair
150'
150'
150'
150'
166' repair
166' repair
15
43,600 SF
1.001 AC
25' Protected Zone
55'W
66'
63'
AHA
R=2412.53'
L=115.97'
R=2412.53'
L=74.44'
100'
25' FRONT YARD
71.05'
83.61'
67.51'
drive
elev 18.1+7 = 15.1
1500 gal pump tk.
1500 gal septic tk.
elev 9.1
259.85'
PID #: 462948585

DESIGN SPECIFICATIONS
___ Stillwater Road – Lot 15 Falls Park Subdivision

Daily design flow	720 gpd. (6) bedroom
Septic tank size	1500 gal. ✓
Pumping tank size	1500 gal. ✓
Initial system	600' of 25% reduction, 4 @ 150'
Effluent loading rate, Initial system	0.3 gpd/ft^2
Total length and diameter of supply pipe	approx. 70 ft. 2" sch 40 PVC ✓
Number and length of laterals	4 @ 150' end-fed ✓
Trench depth	29" maximum on high side ✓
Flow rate through the system	28.4 gpm from 4 each ½" sch 40 taps from a 3" manifold ✓
Tank depth	7.0'
Elevation head	approx. 14.5' (to be verified by installer after tanks are set)
Pressure head	2.0'
Friction head	3.2'
20% contingency	4.0'
Total head	23.7'
Pump requirements	28.4 gpm at 23.7' of head; use Goulds WE05H pump, pump and compatible panel or equivalent
Dosing volume	360 gal. – 2.0 doses/day at design flow
Depth of water pumped per dose	calculated to specific tank by measure or dealer engineering specifications (1 cubic ft. of water equals 7.48 gal.)
Pump run per dose	approx. 12.7 min.
Check valve	yes
Siphon break hole	no
Effluent loading rate, Repair system	0.3 gpd/ft^2
Repair system	pressure dose PPBPS designated on site plan as 117', 166', (2) x 66'=415' (required 400')
Design constraints	remove old berms/terraces
Protected zone	there has to be a 25' protected zone between the lowest septic line and any drain, and 15' to any cut greater than 2'.