IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 201546 BP/

IMPROVEMENT PERMIT / AUTHORIZATION TO CONSTRUCT / OPERATION PERMIT / EXISTING SYSTEM

PIN # 4658087193

APPLICANT: Edwin Ruiz APPLICANT ADDRESS: 116 Comfort Dr.

SITE ADDRESS: 108 Sparta Dr. PHONE: 704-657-9606 ALT. PHONE: N/A

SITE DIRECTIONS: Hwy 21 S TR Cornelius Rd TR Olympia Dr. TR Sparta Dr.

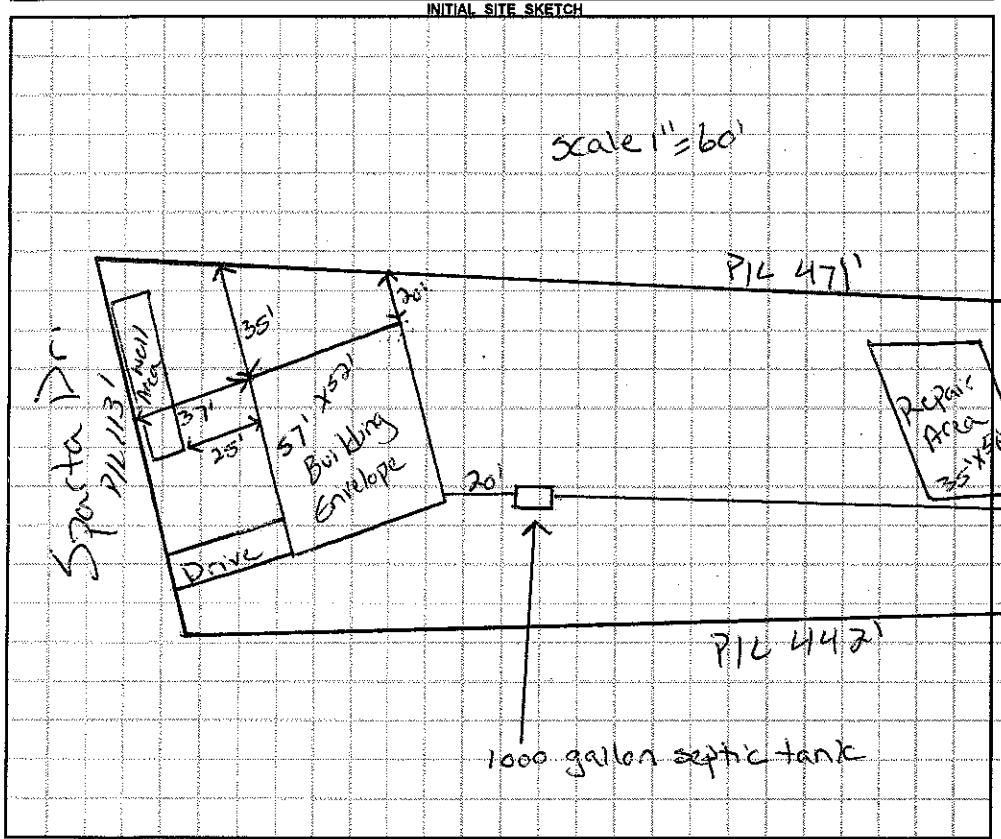
SUBDIVISION: Cornelius Estates SECTION: N/A LOT # 3 LOT AREA: 1.006 acres DESIGN FLOW: 360gpd L.T.A.R.: 0.4

Septic Tank	1000 (gal)	STB	794	Date	1-26-15	☑ New System ☐ Repair ☐ Expansion	System Type: I II III IV V VI	☑ Residence	No. Bedrooms	3	Water Supply
Pump Tank	(gal)	PT		Date		System Description:	2' wide Chamber	☐ Business	No. Persons	6	☑ Private
Pump Make		Model		Serial #		Repair System Description:	Drip	☐ Other	No. Employees		☐ Public
# Nitrification Fields	1	# Lines	6	Linear Ft:	300	Maintenance Agreement Required:	☐ YES ☑ NO	☐ Slab	☑ Crawl Space		☐ Community
Trench Width	24"	Max. Trench Bottom Depth	18" on low side	Gravel Depth	N/A		☑ GRAVITY ☐ PRESSURE	☐ Basement w/plumbing		☐ Basement w/o plumbing	

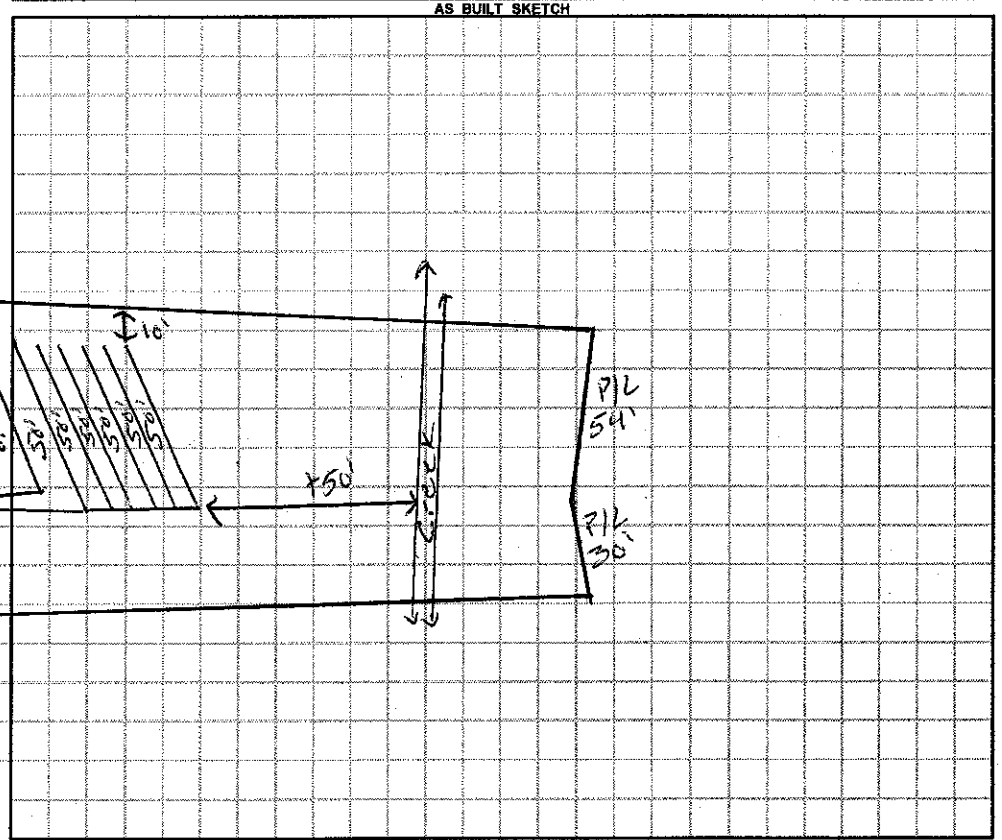
Comments / Conditions: Install a 2' wide Chamber system on contour with serial distribution. Install trenches a minimum of 7' on centers. Install trench bottom a maximum of 18" on low side ★★★

Installed as Drawn

INITIAL SITE SKETCH



AS BUILT SKETCH



Permit can be suspended or revoked if any false information is supplied toward securing the permit / any unauthorized changes are made to the site / any unauthorized changes are made in the installation of the system. **CONTACT A LOCATOR SERVICE PRIOR TO ANY EXCAVATION**

☐ **IMPROVEMENT PERMIT** *with plat valid without expiration.* ☑ **IMPROVEMENT PERMIT** *with site plan valid for 60 mos.* ☑ **AUTHORIZATION TO CONSTRUCT** *valid for period equal to IMPROVEMENT PERMIT--not to exceed 60 mo.*

Owner / Applicant Signature: Date: 5-14-14 Installed by: Richard Abernathy

IMPROVEMENT PERMIT by: Justin Abraham Date: 5-9-14 OPERATION PERMIT by: Marcus Hill Dotson RS Date: 3/25/15

AUTHORIZATION TO CONSTRUCT by: Justin Abraham Date: 5-9-14 Existing System Inspected by: Date:

Health Dept. Copy - WHITE Applicant (Final Approval) - YELLOW Applicant (Conditional Approval) - PINK

North Carolina Department of Health and Human Services
Division of Public Health

Pat McCrory
Governor

Aldona Z. Wos, M.D.
Ambassador (Ret.)
Secretary DHHS

Penelope Slade-Sawyer
Division Director

Date: 04/30/14

Mr. Brady Freeman
Environmental Health Program Specialist
610 East Center Ave.
Mooresville, NC 28115

RE: Subject: Soil/Site evaluation for Edwin Ruiz
Owner: Edwin Ruiz
Location: Cornelius Estates, Lot # 3
Pin Number: 4658087193.000
Size: 1.006 acres

Mr. Freeman:

On (04/16/14) we performed a soil and site evaluation of the aforementioned property to determine its suitability for a subsurface treatment and disposal system for a 3-bedroom residence. The water supply on the property is proposed to be a private well.

The property was evaluated in accordance with the North Carolina Laws and Rules for Sewage Treatment and Disposal Systems, 15A NCAC 18A .1900 with backhoe pits. Listed below are the results of the evaluation and recommendations for the site. Please share this report with the applicant/property owner.

The most limiting soil and site factors encountered are listed below:

Topography and Landscape Position (Slope) (Rule .1940)- Slopes within the provisionally suitable area where determined to be between 31 and 34% (unsuitable). This limitation may be reclassified as provisionally suitable in accordance with Rule .1956.

Soil Characteristics (Depth) (Rule .1943)- Soil depth to saprolite was encountered at depths ranging from 28 to 46 inches (unsuitable) below the natural soil surface. This limitation may be reclassified as provisionally suitable in accordance with Rule .1956 or .1957.

Available Space (Rule .1945)- The space on the property within soils that can be classified provisionally suitable (i.e. usable/modifiable soils) for the installation of an initial and a repair ground absorption sewage treatment and disposal system was not determined during my evaluation. The provisionally suitable soil area was bounded on the right hand side (looking down hill) by the 10' property line setback, on the bottom by the 50' creek setback, on the left and top by complex topography (unsuitable) as well as shallow soil depth described in pit 3. A general site plan is attached. A ten (10) foot horizontal separation distance to any property

line is required due to the property recording/plat date occurring after July 1, 1977. A review of the Iredell County Registry indicates the property/lot was recorded after January 1, 1983.

Recommendations

Initial System:

The drainfield lines need to be laid out on the site, within the provisionally suitable area, to determine the number of bedrooms available.

System Type: 2' wide chamber
LTAR: 0.4 (pit 2)
Trench Depth: 18" on the lower side wall
Trench Width: 2'

Repair area:

Most likely the area approvable for the 2' chamber will be used for the initial system. If that is the case a drip irrigation system is the only option for the repair system. Once the initial system is laid out in the field and the square footage for the repair area determined the number of bedrooms may be assigned. Pits 5-7 are unsuitable for drip irrigation; this soil boundary was discussed in the field and should not be encroached upon with the repair area.

System Type: Drip irrigation
LTAR: 0.25 (pits 1 and 3) (anaerobic drip LTAR)
Trench Depth: 6"
Trench width: 6"

Other Options available to the applicant:

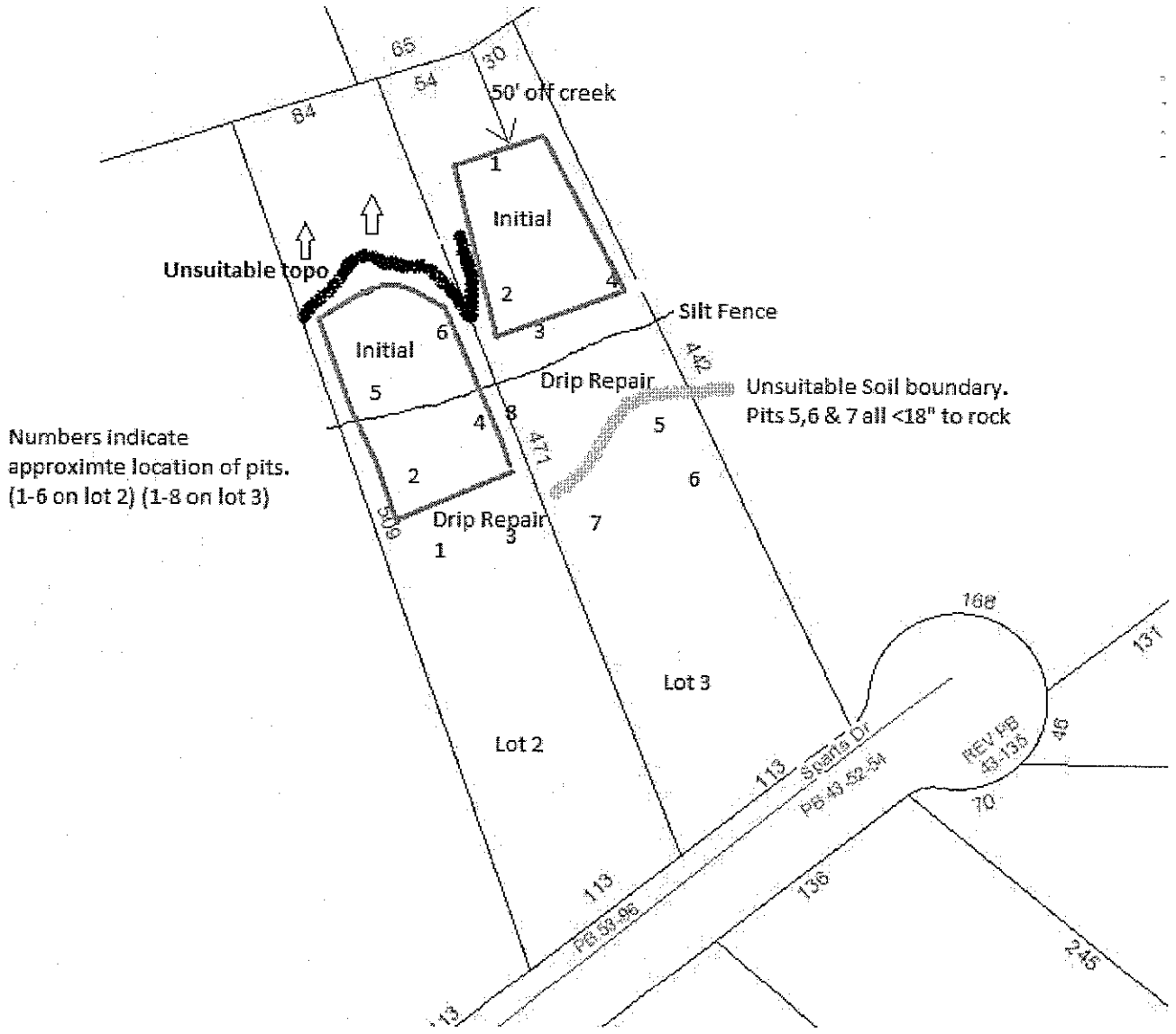
1. The applicant may purchase other suitable or provisionally suitable property to place the ground absorption sewage treatment and disposal system on.
2. The applicant may obtain an easement on a suitable or provisionally suitable property to place the ground absorption sewage treatment and disposal system on.
3. The Division of Water Resources, NC Dept. Environment and Natural Resources (NCDENR; previously Div. Water Quality/DWQ) in Raleigh, North Carolina may be contacted at (919) 791-4200 to pursue options available through that office.
4. A ground absorption sewage treatment and disposal system can be pursued under Rule .1948(d). Written documentation, including engineering, hydro-geologic, geologic or soil studies, shall indicate that the proposed system can be expected to function satisfactorily. The substantiating data shall indicate that:
    1. A ground absorption system can be installed so that the effluent will be non-pathogenic, non-infectious, non-toxic, and non-hazardous;
    2. The effluent will not contaminate groundwater or surface water; and
    3. The effluent will not be exposed on the ground surface or be discharged to surface waters where it could come in contact with people, animals, or vectors.

If you have any questions or if I can be of assistance, contact me at 828-764-5076, E-mail at alan.mckinney@dhhs.nc.gov, or PO Box 1972, Boone, NC 28607.

Sincerely,



Alan McKinney
Regional Soil Scientist



Soil evaluated by Alan McKinney, Regional Soil Scientist.