IREDELL COUNTY HEALTH DEPARTMENT

Statesville Office (704) 878-5305 Mooresville Office (704) 660-3625 PERMIT # 201548

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

PIN # 4658087009

APPLICANT: Edwin Ruiz APPLICANT ADDRESS: 116 Comfort Dr.

SITE ADDRESS: 112 Sparta Drive PHONE: 704-657-9606 ALT. PHONE: 828-312-7945

SITE DIRECTIONS: Hwy 21 S TR 215 TR Cornelius Rd TR Olympia Dr. TR Sparta Dr.

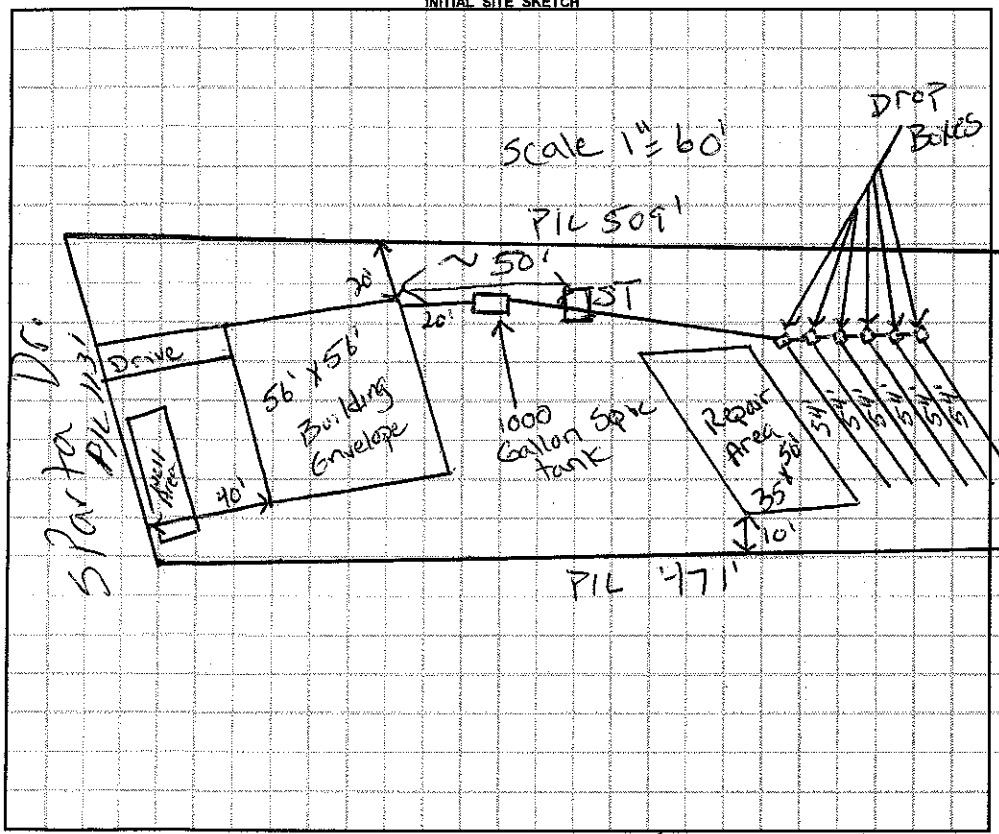
SUBDIVISION: Cornelius Estates SECTION: N/A LOT # 2 LOT AREA: 1.08 acres DESIGN FLOW: 360gpd L.T.A.R.: 0.45

Septic Tank	1000 (gal)	STB	794	Date	2-11-15	☑ New System ☐ Repair ☐ Expansion	System Type: I II ☒ IV V VI	☑ Residence	No. Bedrooms 3	Water Supply
Pump Tank	(gal)	PT		Date		System Description:	Large Diameter Pipe 10"	☐ Business	No. Persons 6	☑ Private
Pump Make		Model		Serial #		Repair System Description:	Drip	☐ Other	No. Employees	☐ Public
# Nitrification Fields	1	# Lines	6	Linear Ft:	324	Maintenance Agreement Required:	☐ YES ☑ NO	☐ Slab	☑ Crawl Space	☐ Community
Trench Width	14"	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 10" Large Diameter Pipe system on contour with serial distribution. Dig trenches with a 14" bucket, if a 14" bucket is unavailable, then hand installation may be required. Maximum trench depth is 18" on low side ~~3'~~ Install trenches a minimum of 7' on centers.

3/25/15

INITIAL SITE SKETCH



AS BUILT SKETCH

Checked Upper 4 lines & ST MD

Checked Lines 5 & 6 on 3/26/15 Essentially Installed As Drawn. SC

6 of 6 3/26/15 SC

	4 of 6	Date	Initials
Drain Lines Checked		3/25/15	MD
Tanks Checked		3/25/15	MD
Pressure Manifold or Valve Box Checked		3/26/15	SC
Pressure Head Set			
Electrical Checked			
Floats Set			
Alarm Checked			
Maintenance Contract Y / N			

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 Henderson Date: 5-9-14 OPERATION PERMIT by: APPROVED MAR 26 2015 Date:

AUTHORIZATION TO CONSTRUCT by: Justin Henderson 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 # 2
Pin Number: 4658087009.000
Size: 1.08 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 28 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 22 to 35 inches (unsuitable) below the natural soil surface. Soil depth to rock (unsuitable) was encountered at depth ranging from 34 to >48 inches. These limitations may be reclassified as provisionally suitable in accordance with Rule .1956 or .1957.

Available Space (Rule .1945)- The space on the property with soils that can be classified as suitable or 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 at during my evaluation. The provisionally suitable soil area was bounded on the sides by the 10' property line setback, on the bottom by complex (unsuitable) topography and on the top by the shallow soil depth described in pits 1 and 2. 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: 10" Large Diameter Pipe
LTAR: 0.45 (pit 3)
Trench Depth: 18" on the lower side wall
Trench Width: 14" This with of a bucket may be hard for an installer to attain. If a 14" wide bucket (12" with the side cutter) cannot be found then hand installation may be required. This should be discussed with the applicant and their installer as soon as possible.

Repair area:

Most likely the area available for the LDP 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. More holes may be needed to expand the evaluated area up hill.

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:

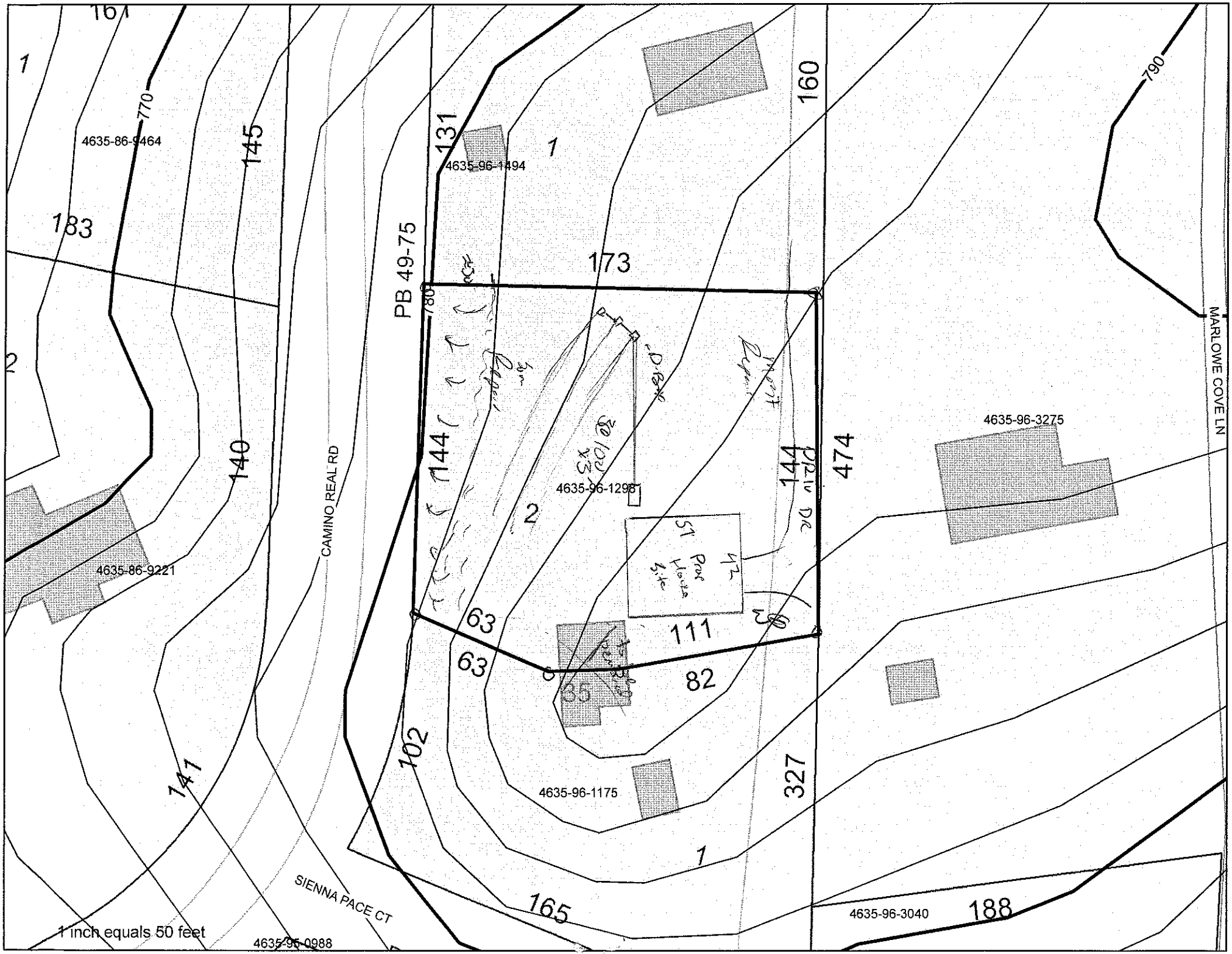
1. The applicant may purchase other suitable or provisionally suitable property to place the ground absorption sewage treatment and disposal system on.
2. The applicant may obtain an easement on a suitable or provisionally suitable property to place the ground absorption sewage treatment and disposal 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


4635-86-9464
4635-96-1494
4635-96-1298
4635-96-3275
4635-86-9221
4635-96-1175
4635-96-0988
4635-96-3040
CAMINO REAL RD
SIENNA PACE CT
MARLOWE COVE LN
PB 49-75
173
474
144
111
82
63
102
327
165
188
131
160
145
140
141
790
770
1 inch equals 50 feet