SPECIAL GROUND ABSORPTION

SANITARY SEWER HANDLING SYSTEM

FOR

B & L DEVELOPMENT

LOTS 1, 2, AND 3

I-77 SOUTH INDUSTRIAL PARK

TRANSCO ROAD, DAVIDSON TOWNSHIP

IREDELL COUNTY, NORTH CAROLINA

PREPARED BY:

B. K. Barringer, Jr., P. E.

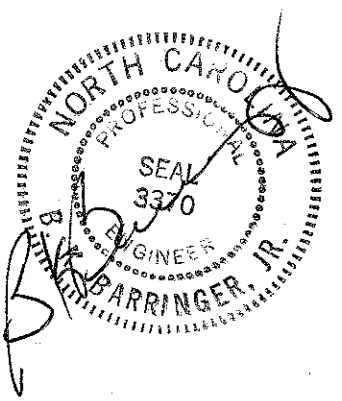
N. C. Registration #3370

154 E. Iredell Avenue

Mooresville, N. C. 28115

(704)663-1859 or NCWats 1-800-222-3600

December 18, 1984



DESIGN CONSIDERATIONS

By extensive sampling it was determined that the soil in this park is generally unsuitable for a conventional ground absorption system with the exception of several areas that have been determined as suitable for such a system.

A 17,550 square foot area that has an adequate absorption rate has been set aside to handle the effluent for developments on lots #1, #2, and #3.

The developments consist of warehousing, which will have a minimum number of employees. The maximum employees at any time is not expected to exceed 10 to 12.

The present gravity flow system consists of a 1,000 gallon septic tank serving the building on lot #1, a distribution box, and 300 lineal feet of drain line. Adequate area remains for expansion of the field if required at a future date.

In order to insure the perpetual care of the absorption system, an agreement has been made between the Iredell County Health Department and the owner, B & L Development.

Sewage from the building on lot #1 gravity flows to a 1,000 gallon septic tank and onto the drainage field through a distribution box. Sewage from the building on lot #2 gravity flows to a 1,500 gallon septic tank into a 1,000 gallon dosing tank, then pumped to a 440 gallon surge tank, then gravity flows to the distribution box and drain field.

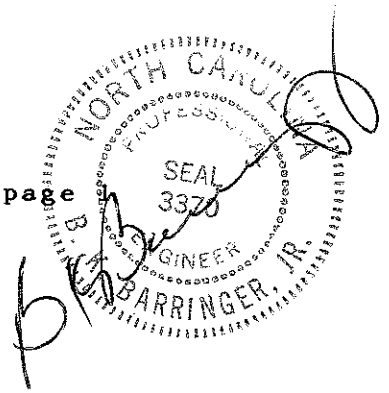
SCOPE OF WORK

This scope of work is to connect the sanitary sewer system of the building on lot #2 to the present drain field.

Furnish and install all items required for a complete system in accordance with plans and specifications; the requirements of the County Dept. of Environmental Health; the N. C. Building Code, Electrical Code, Plumbing Code; and the Engineer.

COMPONENTS:

1. Two compartment septic tank
2. Pumping chamber
3. Submersible effluent pump and level control
4. High water alarm signal
5. Supply line
6. surge tank



The septic tank shall consist of a 1,500 gallon capacity, reinformed, precast concrete tank with full baffle, and shall have easy access to each chamber from ground level for checking and pumping. The first chamber of the septic tank shall contain 2/3 to 3/4 of the volume of the toal tank and the baffle shall contain a horizontal opening across the tank at about midway its height. Locate the septic tank at such height as to provide approximately 8" of cover soil over top of the tank.

The dosing tank shall consist of a 1,000 gallon capacity, reinforced, precast concrete tank without baffle and shall have a concrete mounting pad (concrete blocks) for accommodating the pump. Provide access for entry into the tank directly over the pump location, and extending 6" above final grade.

The surge tank shall be a 440 gallon capacity precast concrete tank with no baffle and placed at a depth to allow gravity flow to the existing drainage field distribution box.

All piping and fittings shall be PVC Schedule 40 unless otherwise noted. Glue for all PVC pipe joints shall be as recommended by the pipe manufacturer.

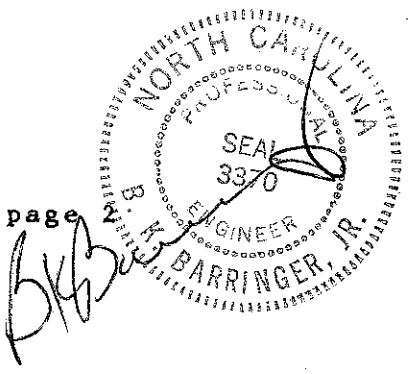
PUMP The submerged pump shall be equal to Model WHRH5-11C as manufactured by F. E. Myers Co., Ashland, Ohio; 1/2 hp, 115v/1ph, 12 amps, capable of pumping 63 gpm at a 13.8' head.

PUMP ON-OFF water level control switch shall be equal to MYERS, model MLC-20, mercury switch, with three point, piggy-back plug.

HIGH WATER ALARM SWITCH shall be equal to MYERS, model FLCA-30, mercury switch, red colored ball with support bracket.

HIGH WATER ALARM CONTROL BOX shall be equal to MYERS, model CA-SS4 alarm and connection box having buzzer alarm, on, off, test switch with terminal block for all connections. Control box shall be supplied by two separate 115v circuits, one pump circuit, and one alarm circuit.

A "Warning Sign" shall be located within the building to inform the owner of what action to take in case the "High Water Alarm" is activated. This sign shall contain the name, address, telephone number, and emergency telephone number of the person to contact immediately upon malfunction of the system.



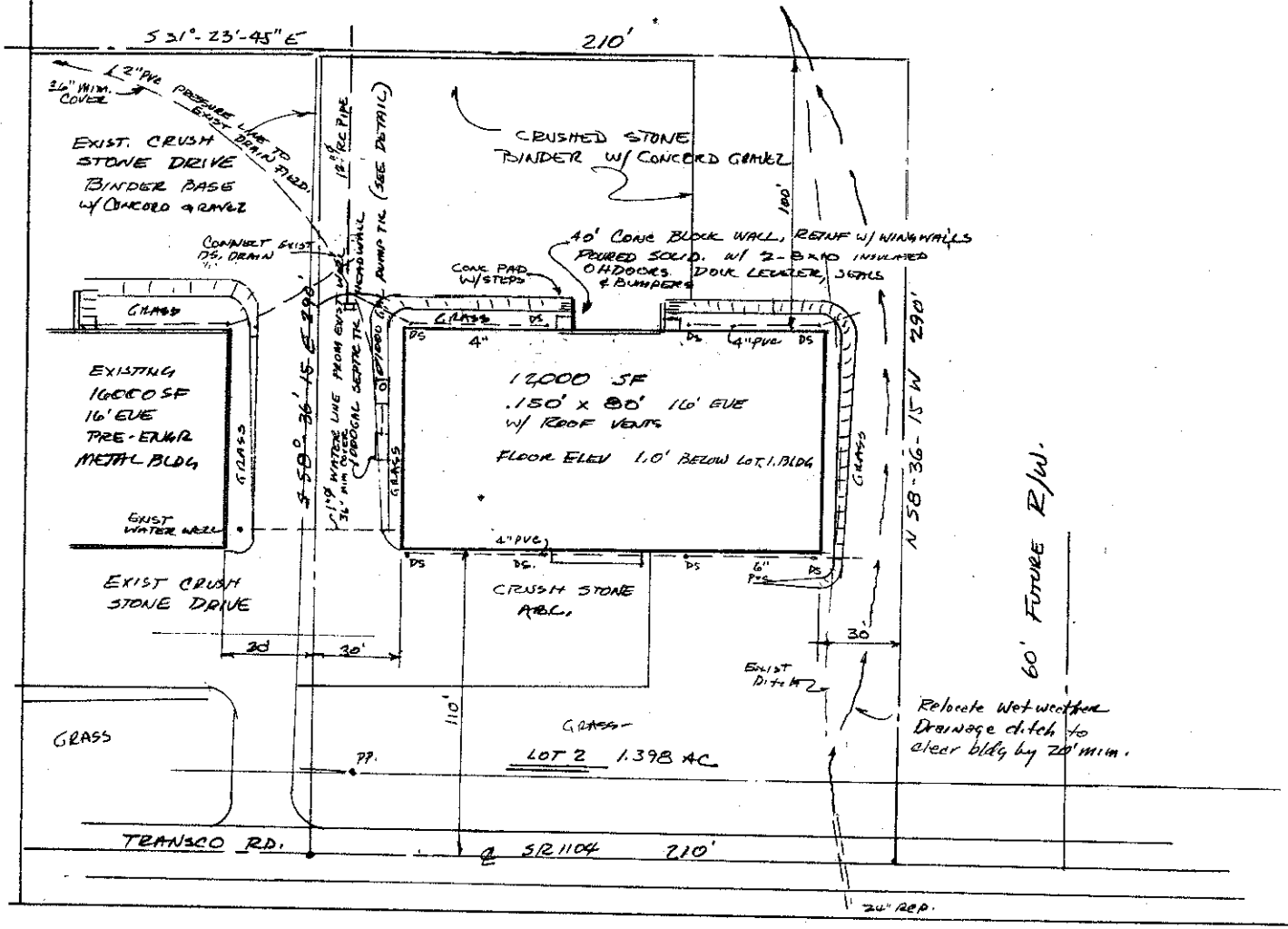
LOT NO 2 PLOT PLAN

I-77 SOUTH INDUSTRIAL PARK
TRANSCO RD (SR 1104)
DAVIDSON TOWNSHIP
IREDELL CO, N.C.

SCALE: 1" = 40' B.E. BARRINGER

B & L DEVELOPMENT CO.

NORTH CAROLINA PROFESSIONAL SEAL 8370 ENGINEER B. E. BARRINGER, JR.

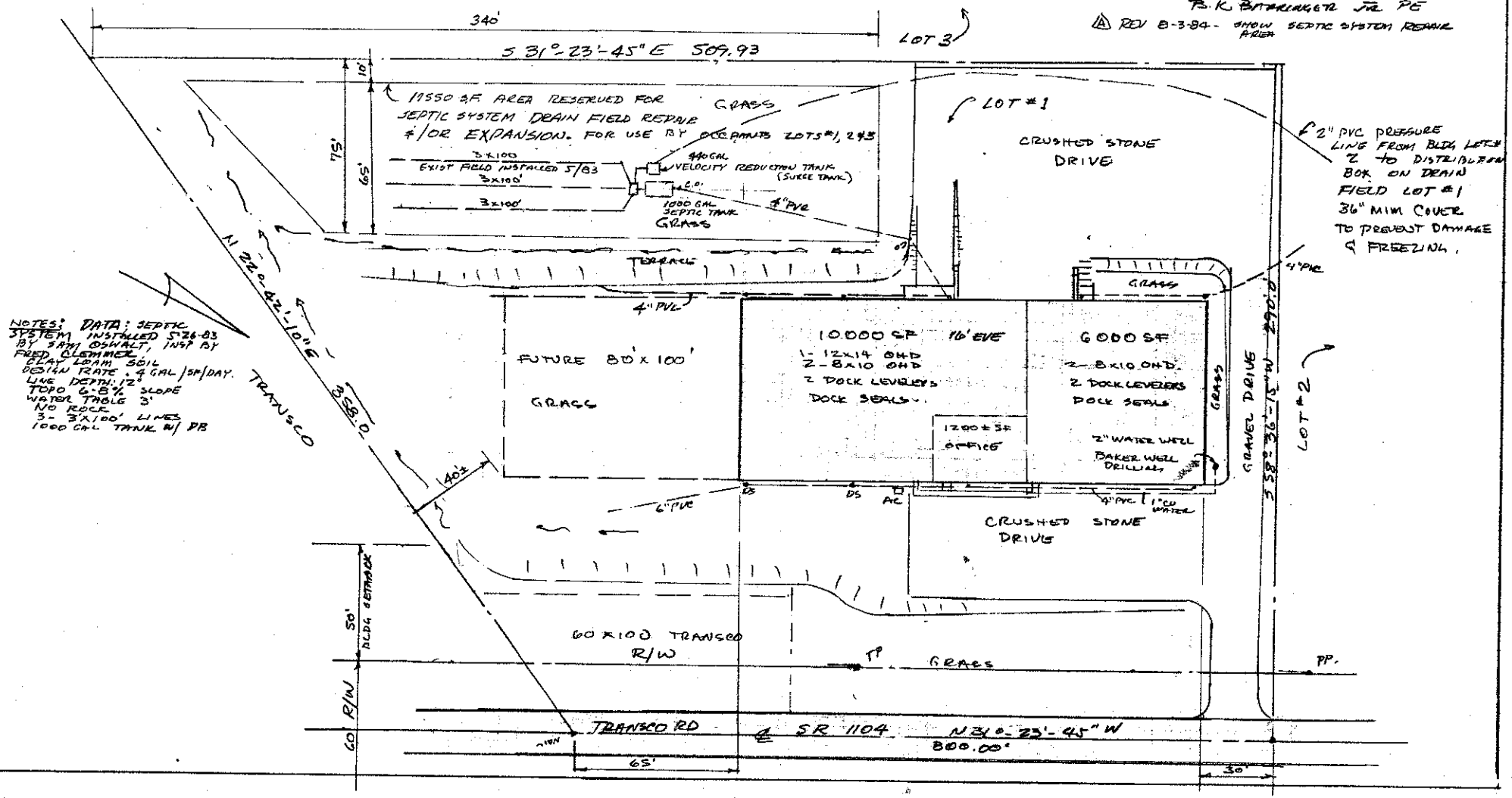


LOT NO 1
2.69. ACRES.

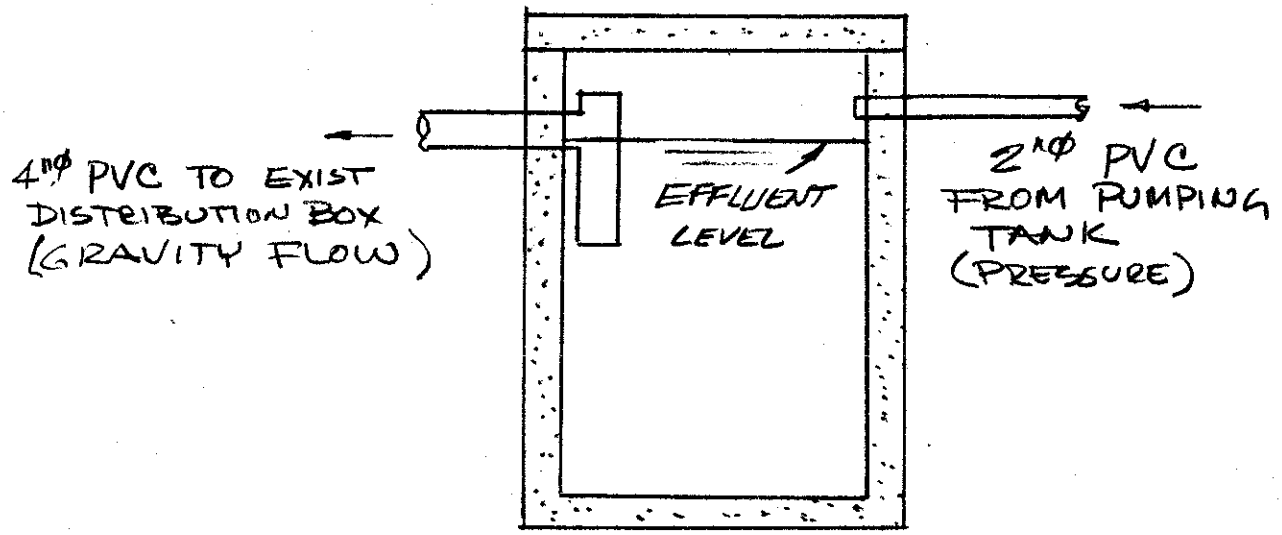
LOT NO 1 PLOT PLAN

I-77 SOUTH INDUSTRIAL PARK
TRANSCO RD (SR 1104)
DAVIDSON TOWNSHIP
IREDELL CO. N.C

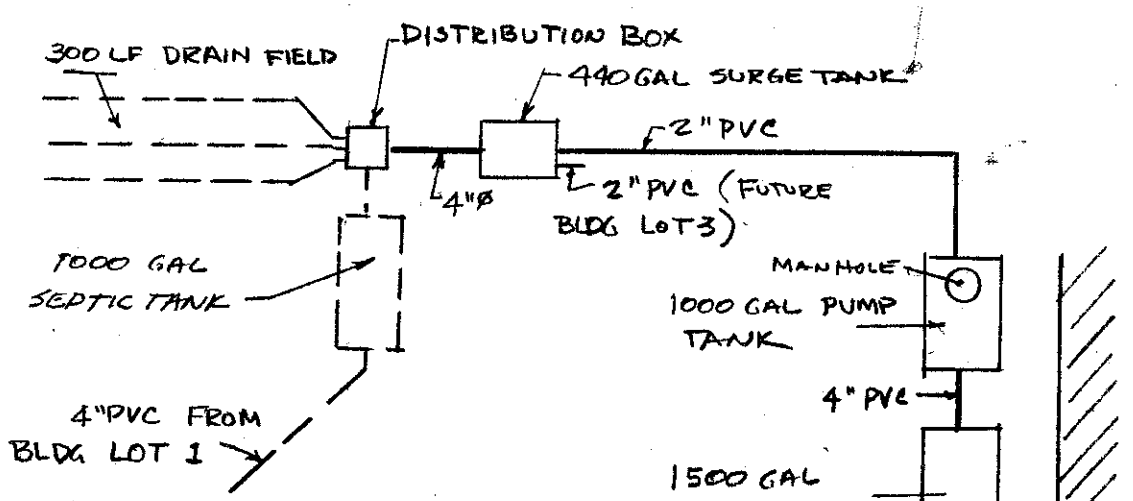
SCALE: 1" = 40' 2/9/83 REDRAWN 7/13/84
SHOWS ASBUILT INFORMATION.
OWNER: B & L DEVELOPMENT - J.V.
B. K. BUTBRINGER JR. PE
⚠ REV 8-3-84 - SHOW SEPTIC SYSTEM REPAIR AREA



NOTES: DATA: SEPTIC SYSTEM INSTALLED 5-26-83 BY SAM OSWALT, INSP BY FRED CLEMMER
CLAY LOAM SOIL
DESIGN RATE .4 GAL/SF/DAY.
LINE DEPTH: 12"
TOPO 6-8% SLOPE
WATER TABLE 3'
NO ROCK
3 - 3'X100' LINES
1000 GAL TANK W/ PB



440 GAL PRECAST CONCRETE SURGE TANK.
NO SCALE

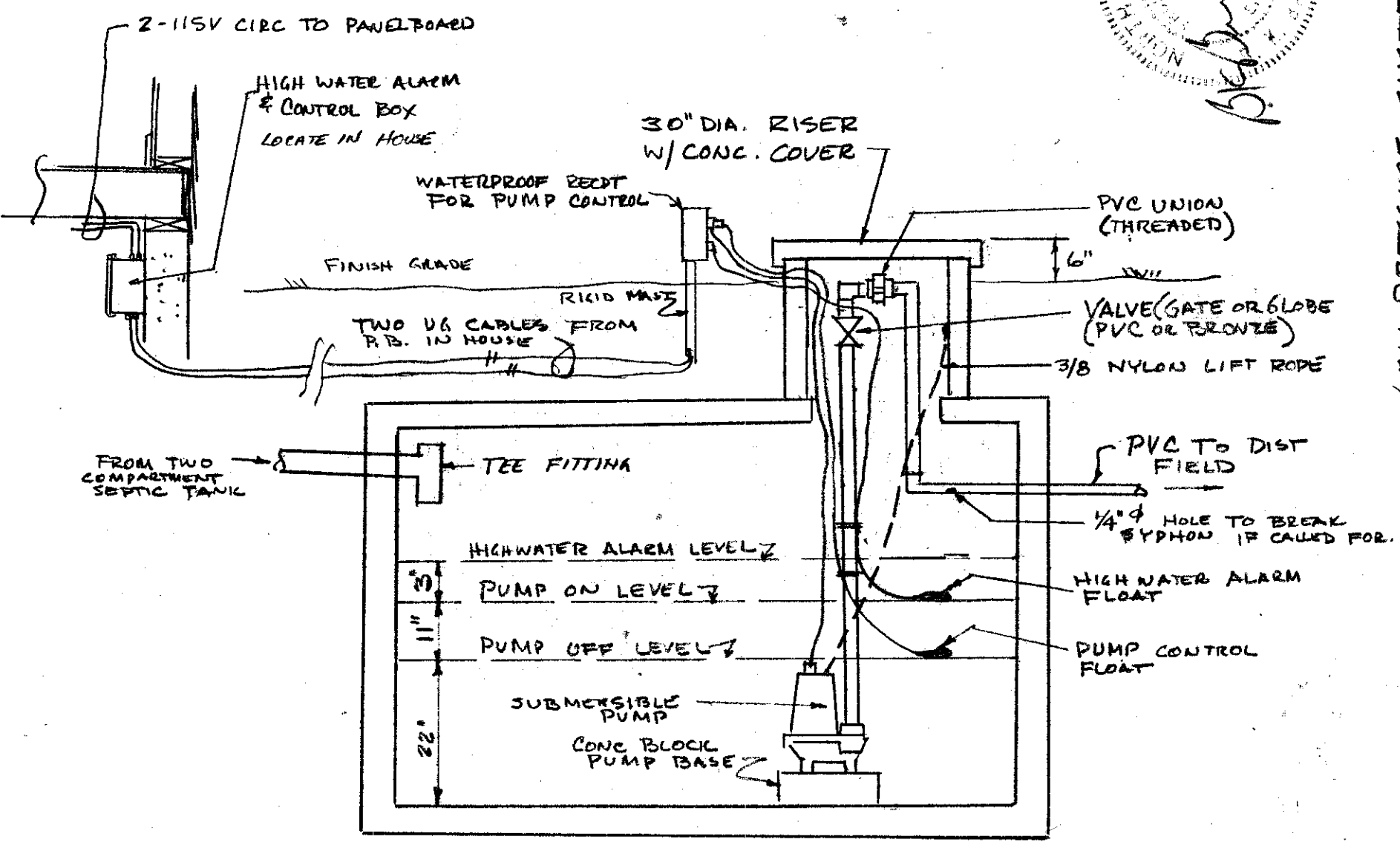


SYSTEM LAYOUT
NO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 3870 ENGINEER B. K. BARRINGER, JR.

SPECIAL SEWAGE HANDLING SYSTEM

PREPARED BY: B.K. BARRINGER JR PE. I-77 SOUTH INDUSTRIAL PARK
12-10-84. DAVIDSON TOWNSHIP
IREDELL CO. N.C.



PUMPING CHAMBER DIAGRAM

NO SCALE

1000 GAL PRECAST, REINF CONCRETE TANK

LOW PRESSURE SYSTEM
PUMPING SYSTEM DETAIL
B.K. BARRINGER JR. P.E.

NORTH CAROLINA

IREDELL COUNTY

AGREEMENT

THIS AGREEMENT, made and entered into this the 13th day of December, 1984, by the Iredell County Health Department (hereinafter Department); and B & L DEVELOPMENT, a joint venture (hereinafter Developer):

WITNESSETH:

1. Developer is the owner of certain real property in Davidson Township, Iredell County, North Carolina, upon which is or will be erected industrial warehouses and offices and other improvements, said development to be known as the I-77 South Industrial Park.

2. Developer desires to construct a sewage collection treatment and disposal system to provide sanitary sewage disposal to serve the development and other improvements on said property.

3. Developer has applied to the Department for the issuance of a permit pursuant to NCGS 130A-336 to construct, maintain, and operate a sewage collection, treatment and disposal system.

4. All parties desire to assure that the sewage collection, treatment and disposal system of the I-77 South Industrial Park are properly constructed, maintained, operated, and repaired in accordance with the applicable laws, rules, and permit conditions in order to protect public health, the quality of the waters of the state and the public interest therein.

NOW, THEREFORE, for and in consideration of the premises and the benefits to be derived by each of the parties hereto, the Department and the Developer, do hereby mutually agree as follows:

1. Developer shall construct the sewage collection, treatment and disposal facilities in accordance with the permit, applicable rules, and plans and specifications hereafter issued and approved by the Department; and shall thereafter operate, maintain, and repair such system in accordance with applicable permit provisions, rules, and laws until the entire system has been transferred to the owners of the I-77 South Industrial Park.

2. Developer shall not transfer ownership of the sewage collection, treatment and disposal system to the owners of the I-77 South Industrial Park served by said system until such time as the system has been inspected

permitted, and determined to be operating in accordance with the applicable rules and permit conditions.

3. The owners of the I-77 South Industrial Park served by the system shall,after transfer of ownership of the sewage collection, treatment and disposal system to them by the Developer, thereafter properly maintain, operate and repair the svstem in accordance with the applicable laws, rules and the conditions of the permit.

4. Developer and the owners shall provide for the continued proper operation, maintenance, and repair of the sewage collection, treatment and disposal system upon sale of the property to a third party by making such operation, maintenance and repair a condition and/or restriction of the sale or transfer.

5. A copy of this agreement shall be filed in the office of the Register of Deeds of Iredell County, North Carolina.

IN WITNESS WHEREOF, this Agreement was executed by the duly authorized representatives of the parties hereto on the date and year set out above.

IREDELL COUNTY HEALTH DEPARTMENT

By _____
Health Director

B & L DEVELOPMENT

By: _____
B. K. Barringer, Jr.

By _____
Donald J. Lang

NORTH CAROLINA, IREDELL COUNTY

This ___ day of _____, 198__, personally appeared before me, a Notary Public of said County and State, _____ _____, Health Director of the Iredell County Health Department, and acknowledged the due execution of the foregoing instrument as Health Director.

_____
Notary Public

My Commission Expires:

_____

NORTH CAROLINA, IREDELL COUNTY

I, LaRue M. Burleigh, Notary Public in and for said county and state, do hereby certify that B. K. BARRINGER,JR. personally appeared before me this date and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and Notarial Seal, this 13th day of December, 1984.

LaRue M. Burleigh
Notary Public

LARUE M. BURLEIGH NOTARY PUBLIC IREDELL COUNTY

My Commission Expires:
July 4, 1988

South CAROLINA, Richland COUNTY

I, Janet C Carlisle, Notary Public in and for said county and state, do hereby certify that DONALD J. LANG personally appeared before me this date and acknoweldged the due execution of the foregoing instrument.

WITNESS my hand and Notarial Seal, this 17 day of December, 1984.

Janet C. Carlisle
Notary Public

My Commission Expires:
May 1 1990