

9938 WINDYGAP RD

19939103

12/21/2007

duponbj

Groundwater and Wastewater Services File Imaging Project
May 2007
Barcode Font = IDAutomationHC39M

CERTIFICATE OF COMPLETION/OPERATION PERMIT

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 14798 DATE: 7/17/00

TC: 199-391-03 ☒ L ☐ CRT

SERIAL Nº 18372

Name of Owner Stephanie & Ward Norris Juris.: _____

Address of Property 9938 Windy Gap Road

Inspection Data:

Tank Material PCC

Total Length of Drainfield 483'

Number of Lines 7 @ 69'

Cover Depth 12"

Water Supply Source Well

Distance to Water Source >50'

Excavation Inspected 7/12/00

Tank(s) Inspected 7/13/00

Wash Line Inspected _____

High Water Alarm Inspected 7/17/00

SEE Installation Permit

PLOT

Design 2000, 1500ST, 1000DT, P2, 1450SFT, INV, (CHAMBERS) CTR# Autrey

The undersigned has inspected the Septic Tank System described above, and certifies it has been

☒ installed or constructed ☐ altered or repaired

☒ in accordance with the permit issued ☐ as detailed in the plot above

and meets the provisions of I5A NCAC 18A. 1900, "Laws And Rules For Sewage Treatment and Disposal Systems" in effect on the date of issuance of the permit. This issuance of this

☐ Certificate of Completion ☒ Operation Permit

does not in any way guarantee that the system will operate properly or relieve any person now or hereafter owning, controlling, or using such system from any liability resulting from the failure of the system to operate properly. This document is issued subject to those restrictions and conditions shown on the permit(s) and the provisions of I5A NCAC 18A. 1990 in addition to those listed below under "COMMENTS." This document shall be null and void if any information contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

Notice: Disturbance of the designated repair area may result in the suspension/revocation of this permit.

COMMENTS: 4 Bedroom House

7 lines x 69' x 3' trenches Type III b Innovative System

NEMA 4X Simplex Control Panel

Jenny P. Nicholson
Environmental Health Specialist

Mecklenburg County services are available without regard to ethnic origin, sex, or disability.

INSTALLATION, CONSTRUCTION, ALTERATION, AND/OR REPAIR APPROVAL

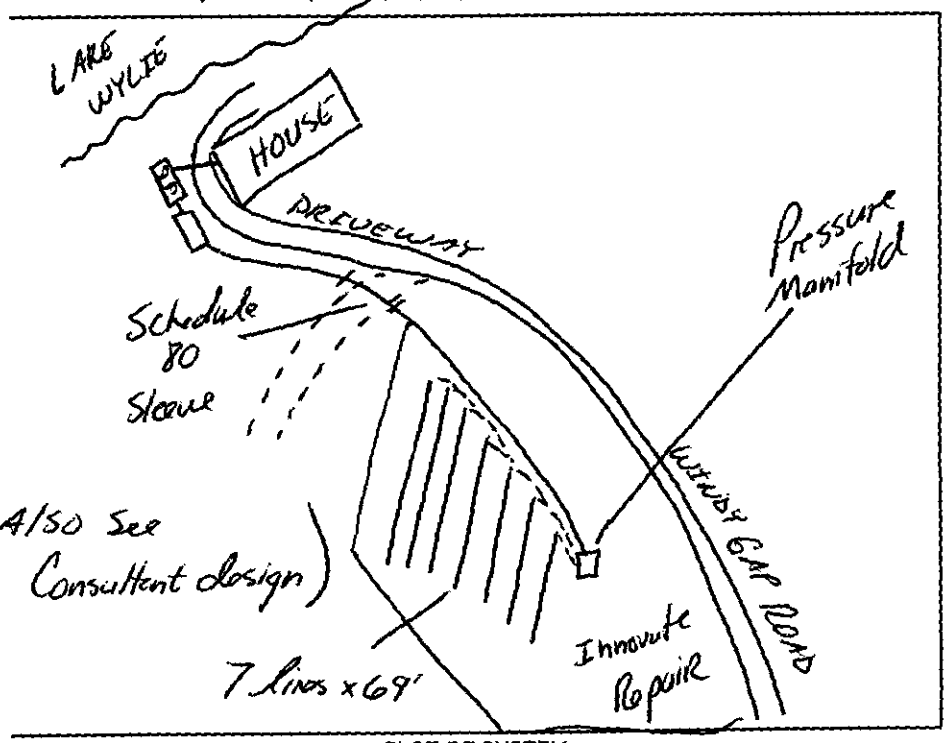
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON ST., SUITE 211
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 1479B DATE: 7/10/00

TC: 199-391-03 ☒ L

SERIAL Nº 18520

Permission is hereby given to ~~_____~~ Install or Construct, _____ Alter or Repair the individual septic tank wastewater treatment system with subsurface, soil absorption, effluent discharge as specified herein at the described location. This permit is granted based upon the information supplied in the application dated 5-11-99. All work shall be completed on or before 8/10/00, after which date this permit shall be null and void. The system shall meet all of the construction requirements of 15A NCAC 18A. 1900 which are in effect on the date of the granting of this permit. A Certificate of Completion or an Operation Permit must be obtained from the Mecklenburg County Health Department before any system can be covered up or placed into service. The issuance of this permit does not in any way guarantee that the system anticipated to be constructed will operate properly, or relieve any person now or hereafter owning, controlling or using such system from any liability resulting from the failure of the system to operate properly.



PLOT OF SYSTEM

Liquid Capacity of Septic Tank 1500 gallons

Liquid Capacity of Dosing Tank 1000 gallons

Tank Construction PCC

Trench Depth 24"

Absorption and/or Nitrification Lines:

Trench Width 3' feet

Trench Walls Scored and Porous Y/S

Total Line Length 483' feet

Number of Lines 7 lines x 69'

Depth of Stone NA inches

Distance from House >15' feet

Distance from Property Line >10' feet

Distance from Well >100' feet

NOTICE: This system shall not be installed while soils are in a wet condition.

NAME OF OWNER Stephanie & Ward Norris

LOCATION OF PROPERTY 9938 Windy Gap Road

Comments: Install 7 lines x 69' x 3' trench (Innovative)
Type IIIb Innovative System
Nema 4x Simplex Control Panel Required
Pressure Manifold required

Tommy P. Nichols
Environmental Health Specialist

WHITE - HEALTH DEPARTMENT's COPY • CANARY - E.H.S. COPY • PINK - OWNER OR AGENT's COPY

OK # 3133 V/W

FEE: 150.00 **AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION**
DATE: 8-13-99 **VOID SIXTY (60) MONTHS FROM DATE OF ISSUANCE** ACS

DATE: 8-13-99 PERMIT NO: 1479B
PARCEL NO: 199-391-03

JOB LOCATION ADDRESS: 9938 W. Rocky Gap Rd
PROPERTY OWNER: Ward Morris
BUILDING CONTRACTOR:
SUBDIVISION NAME:
AUTHORIZATION ISSUED BY: Larry B. Thompson Jr. L.S. DATE: 8-13-99
DEHNR AUTHORIZED AGENT

AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NO. 1479B, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN INSTALLATION, CONSTRUCTION, ALTERATION AND/OR REPAIR APPROVAL MUST BE SECURED PRIOR TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. OTHER CONDITIONS: See Conditions of Improvement Permit

OWNER CERTIFICATION

I CERTIFY THAT THERE HAVE BEEN NO ALTERATIONS IN SITE OR SOIL CONDITIONS OR MODIFICATIONS TO FACILITY, WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS FROM THOSE SPECIFIED IN THE ORIGINAL APPLICATION OR ASSOCIATED IMPROVEMENT PERMIT UNLESS AUTHORIZED IN WRITING BY THE MECKLENBURG COUNTY HEALTH DEPARTMENT. I ALSO UNDERSTAND THAT ANY SUCH ALTERATIONS, MODIFICATIONS, OR FALSE INFORMATION ARE GROUNDS FOR REVOCATION OF PERMITS AND AUTHORIZATION TO CONSTRUCT.

X C. Ward Morris 8-13-99
SIGNATURE OF OWNER/OWNER'S REPRESENTATIVE DATE

CONDITIONS OF IMPROVEMENT PERMIT

Permit Number: 1479 B

Tax Number: 199-391-03

- The IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling or disturbance of the soil in the area of the septic tank system or repair area.
- CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is NOT transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.
- Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

Basement	✓ Yes	✓ No	___ Partial Basement	
Type Primary Wastewater System Type (circle one): I II (III) IV V VI	___ Conventional ___ Prefabricated, permeable block panel system ___ Shallow Placed Conventional	___ Low Pressure Pipe ___ Large Diameter Pipe ___ Fill ___ Other	✓ Innovative or Experimental: ___ IWWS-93-1 ___ IWWS-93-2 ___ IWWS-94-1	
.25 Long-term acceptance rate	480 Max gallons/day wastewater flow	1920 Absorption Area (sq ft)	9' Trench spacing (min. on centers)	
Yes Serviced by private well	1500 Gallon septic tank	480 Total trench length (ft)	24" Maximum trench depth (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions)	
4 Bedrooms in residence	1000 Gallon pump tank	N/A Depth of stone Group I, II or III soil backfill		
Any surface waters present:	Type:	Minimum separation distance:		
Site modifications required:				
Additional Conditions: - Nema 4x Simplex Control Panel required - Group I, II or III Soil backfill required - Pressure Manifold required				
Repair Area System Type Type (circle one): I II (III) IV V VI	___ Conventional ___ Prefabricated, permeable block panel system ___ Shallow Placed Conventional	___ Low Pressure Pipe ___ Large Diameter Pipe ___ Fill ___ Other	✓ Innovative or Experimental: ___ IWWS-93-1 ___ IWWS-93-2 ___ IWWS-94-1	
1920 Absorption Area (Sq ft) 480 Total Trench Length (Ft)	N/A Depth of Stone Trench See above	9 Trench spacing (min. on centers)	24" Maximum Trench Depth	
For existing system, enter the year originally installed:				

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws and Rules For Sewage, Treatment and Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

- No work shall be conducted on the septic tank system until an Installation, Construction, Alteration and/or Repair Approval is granted by this Department.
- This Improvement permit is transferable.

Larry G. Thompson, L.S. 6-2-99
DEHNR Authorized Agent Date

Owner/Agent Signature 6/2/99
Date

MECKLENBURG COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR.
SUITE 211
700 N. TRYON ST.
CHARLOTTE, N.C. 28202.
(704) 336-5102

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL, HEALTH,
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Mecklenburg County
Health Department

Conditions of Improvement Permit

File Number: 1479 B
Site Address: 9938 Windy Gap Road

1. The wastewater treatment and disposal system permitted is a pump-to-innovative system designed by Toney C. Jacobs & Associates, Inc. The septic system must be installed as designed and approved.
2. The system will require a single phase, simplex control panel with alarm. The control panel must have a Nema 4x weather proof rating.
3. A pressure manifold shall be used to distribute effluent to the innovative drain field trenches.
4. Septic and pump tanks must be installed in an area not subject to vehicular traffic. System installer must ensure that finished soil cover over the tanks will not be greater than 36 inches in depth. Soil cover greater than 36 inches will require reinforced tanks.
5. Nitrification trenches shall be constructed as level as possible but in no case shall the fall in a single trench bottom exceed one-fourth inch in 10 feet as determined by an engineer's level or equivalent.
6. Any changes in the site must be pre-approved by the Mecklenburg County Environmental Health Department.
7. The wastewater treatment and disposal drain field area, including the designated repair areas, shall not be used for any of the following:

    - Grading or filling
    - Parking or driving heavy equipment in the area or subjecting the site to possible soil compaction
    - Construction staging area
    - Installation of lawn irrigation components
    - Installation of underground utilities or cables of any type
    - Burial of any debris or material
    - Utilizing the area for gravesites
    - Diversion of storm water runoff into this area

8. Septic system installer must be registered with Mecklenburg County prior to meeting for the required pre-construction conference.
9. System installer will be required to operate the system at the time of the final inspection. Arrangements must be made to have the pump tank filled with water prior to the requested final inspection. The required pressure head of 2 feet will be adjusted at the pressure manifold at the time of the final inspection.
10. The system owner shall have the contents of the septic tank checked, and the contents of the tank removed, periodically from all compartments, to ensure proper operation of the system. The contents of the septic tank shall be pumped whenever the solids level is found to be more than 1/3 of the liquid depth in any compartment.
11. All septic tank riser and effluent filter rules will apply to this system. It is strongly recommended that access risers be added to both ends of the septic tank, extending to at least finish grade. This will allow periodic inspection of the solids level in the tank as well as help facilitate the periodic cleaning of the effluent bio-filter.
12. The local Health Department is required, by the State, to perform system reviews of Type IIIb systems at a minimum of every 5 years. The owner of the system is responsible for paying any inspection fees, as determined by the Board of County Commissioners, at the time of the required inspection.

DOSED GRAVITY INFILTRATOR SYSTEM (OFF-SITE)

LOT62 - SECTION38

9938 WINDY GAP ROAD

MECKLENBURG COUNTY - NORTH CAROLINA
MCHD FILE #1479B TAX PARCEL 199-391-03

by
Toney C. Jacobs & Associates, Inc.
Consulting Soil Scientists
168 Broadbill Drive
Mooresville, N. C. 28117

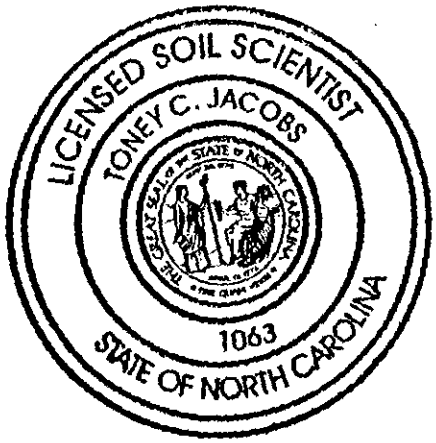
(704)663-6905
fax (704) 662-9845
e-mail jacobs@i-america.net

May 7, 1999



Submitted to: Larry Thompson, R.S.
Mecklenburg County Health Dept.
Charlotte, NC

Stephanie and Ward Norris
9300 Windy Gap Road
Charlotte, NC 28208



Toney C. Jacobs, CPSS

Windy Gap Road (Lot 62 – Section 38)

PRESSURE DOSE GRAVITY DISTRIBUTION INFILTRATOR SYSTEM Type IIIb

Design Considerations

The proposed system is for a 4-bedroom waterfront home on a 1.05 acre lot in a rural area of single family homes in southern Mecklenburg County. The plan was submitted for Crescent Resources, Inc. for a 3-bedroom in January 1998 with conditions issued on June 16, 1998. This plan is very similar to the earlier plan but with added line for the additional 4th bedroom, addition of a pressure manifold, and a minor change in line location. The lot will not support an on-site septic system/ therefore, the seller, Crescent Resources, Inc., has added a second parcel of 0.432 acres and will transfer this as a septic area (maps enclosed). This provisionally suitable area is approximately 450 feet from the lot and was the closest usable septic area. Because of soil quality, the LTAR for this parcel and system is 0.25, a conservative rate but applicable for this soil. The property was recorded prior to January 1983; however, because of the added septic the 100% repair area is required.

Soils were evaluated by both Mr. Kelly Randall of the Mecklenburg County Health Department and Toney C. Jacobs & Associates. The system layout was by Toney C. Jacobs & Associates. To best use the added easement the chambered system was considered as the best suited system for the tract. The chambers are for the initial system with same repair. The septic system drainfield was flagged in the field as shown in Figure 1. The wastewater will be pumped to a seven (7) tap manifold and chambered system, using 7 x 69' lines. During construction and tree removal precautions should be taken to prevent damaging the system area. One large pile of broken concrete will have to be slid to the 10' buffer or be removed. The pump supply line is on the easement supplied by CRI and utilizes no part of the DOT right-of-way.

Location

The lot is at the end of Windy Gap Road. The system adjoins Windy Gap Rd on the left, just before the end.

Reference

(1) *Laws and Rules for Ground Absorption Sewage Disposal Systems 15A NCAC 18A. 1900,* NCDEHNR-DEH.
(2) Infiltrator product information
(3) Pressure Manifold Design for Ground Absorption Sewage System (Berkowitz, 1986)

Recommendation

Four hundred and eighty three (483) lineal feet of dosed Infiltrator lines using gravity distribution. (Product information sheet on Infiltrator System, Inc. enclosed)

Ownership Responsibility

Conservation measures should be undertaken in plumbing fixture specifications to minimize the volume of wastewater entering the disposal system, including, but not limited to the following precautions:

(a) Provide water conserving plumbing fixtures within the facility. Waterclosets must be 1.6 gal. flush (per code). Shower head should also have restrictions or be of low volume design.

(b) Develop conservative water use habits.

(c) Monitor and maintain the system as necessary for proper operation. An Operation Permit will not require a maintenance contract to be filed with the Mecklenburg County Health Department for the system.

System must be properly installed by a *qualified* and *competent* contractor following the requirements of the Mecklenburg County Department of Environmental Health, DEH, the N.C. Building Code, Plumbing Code, and the Electrical Code. This plan, as any, is a guide to a minimum standard, but cannot take the place of experience and common sense.

Components of System

1. Two compartment septic tank - 1500 gal.
2. Pump tank 1000 gallons
3. Supply pipe
4. A 3" manifold with 7 each ½" sch 80 PVC taps
5. 483' of chambers with sand backfill on the sides.

Construction Sequence

1. Lines have been flagged as noted on drawing and in specifications.
2. Clear the area of all organic material with minimum soil disturbance (do not grade). Backfill any low areas with clean sandy loam to natural compaction and look. This includes soil evaluation pit and stump holes. There is old broken concrete to be removed in site preparation.
3. Install trenches per cited reference material and this plan.

4. Carefully install the pressure manifold in manifold box, per enclosed material. Taps to be sch 80 PVC with head to be 2'. Backfill distribution trenches to grade with clean clay or clay loam soil fill material which is carefully placed and compacted.

5. Final Landscaping: After the system is installed, the absorption field should be reshaped to shed rainwater and be free of low areas to insure that the system will not be overloaded with excess rainwater and run-on.

6. The installation contractor shall stabilize the area of construction by planting with Kentucky 31 tall Fescue and mulching. Area to be limed and fertilized with 0.5 tons lime, 75 units of N, 150 units P, and 100 units of K per disturbed acre.

7. The septic tank shall consist of an approved 1500 gallon capacity reinforced, precast watertight, concrete tank with full baffle and shall have easy access to each chamber from ground level for inspection. The first chamber of the septic tank shall consist of 2/3 to 3/4 of the volume of the total tank and the baffle shall contain a horizontal opening across the tank at about midway . Locate the septic tank at such height as to provide approximately 8" of cover soil over top of the tank installed with riser and filter per code.

8. Supply pipe must have a metal locator tape or wire should it have to be located. This is required of this plan. Where this pipe goes under the drive, it must be greater than 48" deep. It could be sleeved in metal, but deeper is better and less expensive. Along the ROW pipe must be 48" deep.

9. The dosing tank shall consist of an approved 1000 gallon capacity, reinforced, precast, watertight concrete tank without baffle and shall have a concrete mounting pad (concrete blocks) for accommodating the pump. Test for leakage per regulations. Provide access for entry into the tank directly over the pump location, and extending 6" above final grade. Use a 30" diameter concrete well casing or equivalent and concrete well cap or other approved type cover. There must be a seal (masonry or seal rope) between well tile and top of tank.

10. All piping and fitting shall be SCH 40 PVC. Glue for all PVC pipe joints shall be as recommended by the pipe manufacturer.

11. Pump: The submerged pump shall be Model 3885 1 hp manufactured by Goulds or equal, 115 or 230 v/l phase; capable of pumping 38.25 gallons per minute at 48.0' of head.

12. Pump controls and alarm to meet specifications of .1952, all being compatible and used with Simplex weatherproof controls with alarm.

13. A "Warning Sign" shall be located within the house to inform the occupants of 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 upon malfunction of the system.

14. Pump and Controls: Details of pump installation are shown in the plan. The pump must be placed on concrete blocks on the bottom of the tank. This prevents the pumping of any solid particles which can clog the pipe system. A piece of nylon rope or other non-corrodible material should be attached to the pump and the outlet pipe for lifting the pump in and out of the chamber. Controls should be fastened to a "tree" or the outlet pipe with clamps or brackets supplied by the manufacturer. The lower level control or "pump-off" must be positioned above the pump, so that the pump remains submerged at all times. The level control "pump-on" is positioned to pump a specified volume of effluent. The high water control float is then mounted about 3" above the upper pump-on control. (Note: Care must be taken to insure that floats do not become fouled by other components in the tank, such as the electric power cord or the lifting rope. It is highly recommended that a telescoping "tree" be used for floats to facilitate adjustments.) The pump outlet pipe should be connected to the supply manifold with a threaded PVC union (or dresser coupling) to allow quick removal.

15. Electrical Connections: The pump and high water alarm must be placed on separate electrical circuits. (If the pump circuit fails, the alarm must still be able to operate). Follow the manufacturers recommendations for the proper fuses or circuit breakers. All electrical connections must be made outside the pumping chamber. Power cords from the pumps and controls should be secured into a NEMA 4X Simplex weatherproof controller. This must not be located inside the pumping chamber due to the corrosive and explosive gasses that may form from the sewage. This box must be a minimum of 1' above finished grade. Wiring between the pumping chamber and the station should meet State and local code requirements. A lightning arrester is recommended to protect the pump and controls from electrical surges.

16. Proper Operation Check: After all components have been installed and connected, the system should be checked for proper operation. With electrical power turned off, fill the pumping chamber with water from garden hose until the liquid rises to the level of the high-water alarm float. Turn on the electrical power. The alarm light should go on in the

house, and the pump should start operating. The alarm light should go off when the liquid reaches the lowest float control. Be sure the pump is still completely submerged.

17. With someone at the manifold, turn pump on and set gate valve to deliver 38.25 gpm.

18. With an open end manifold and this pump size, the calculation for a pressure release valve indicator is not needed. Should an air lock occur, the valve can be added on the high point of the supply line.

Concluding Note:

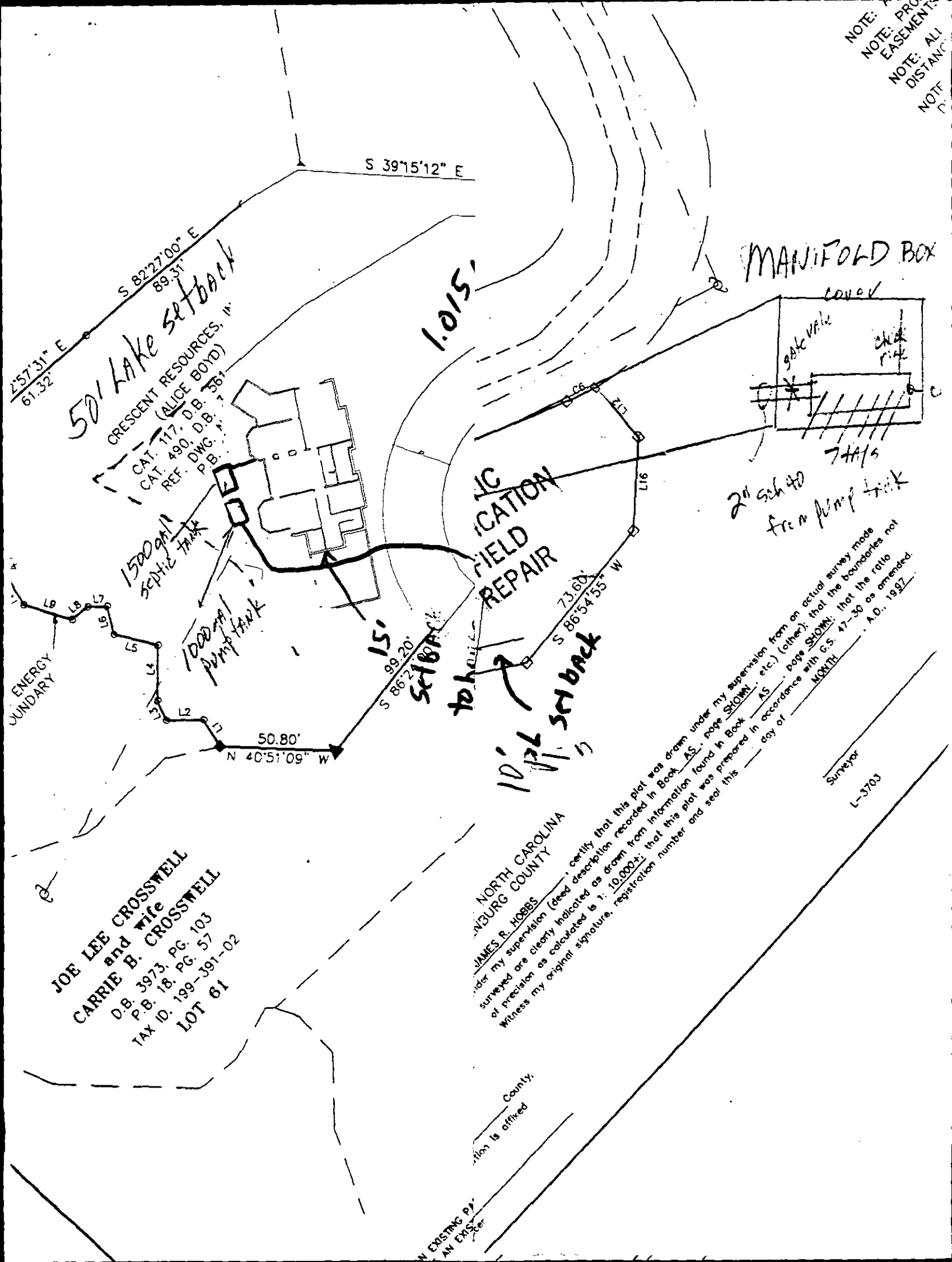
This plan was done to facilitate permitting by the Mecklenburg County Health Department by an agent of the property owner. Because of the complexity of this system, a pre-installation meeting between Toney C. Jacobs & Associates and the installer is recommended if needed. This pre-construction meeting will be billed to the builder or client at current rates. At this time the pump size can be adjusted if necessary. Any additions, or additional requirement(s), or deletions to enhance design or workability which will facilitate a permit are welcomed and may be made by note on this plan without returning entire design. The designer realizes that a plan with as many details as this can be changed and/or improved upon. The installer must realize that this is an exact plan and must be followed and installed with exacting measurements. Should the installer desire a change, it must be approved by the health department in writing. Final inspection will also require more time and detail than a conventional system. If there are questions, please give me a call.

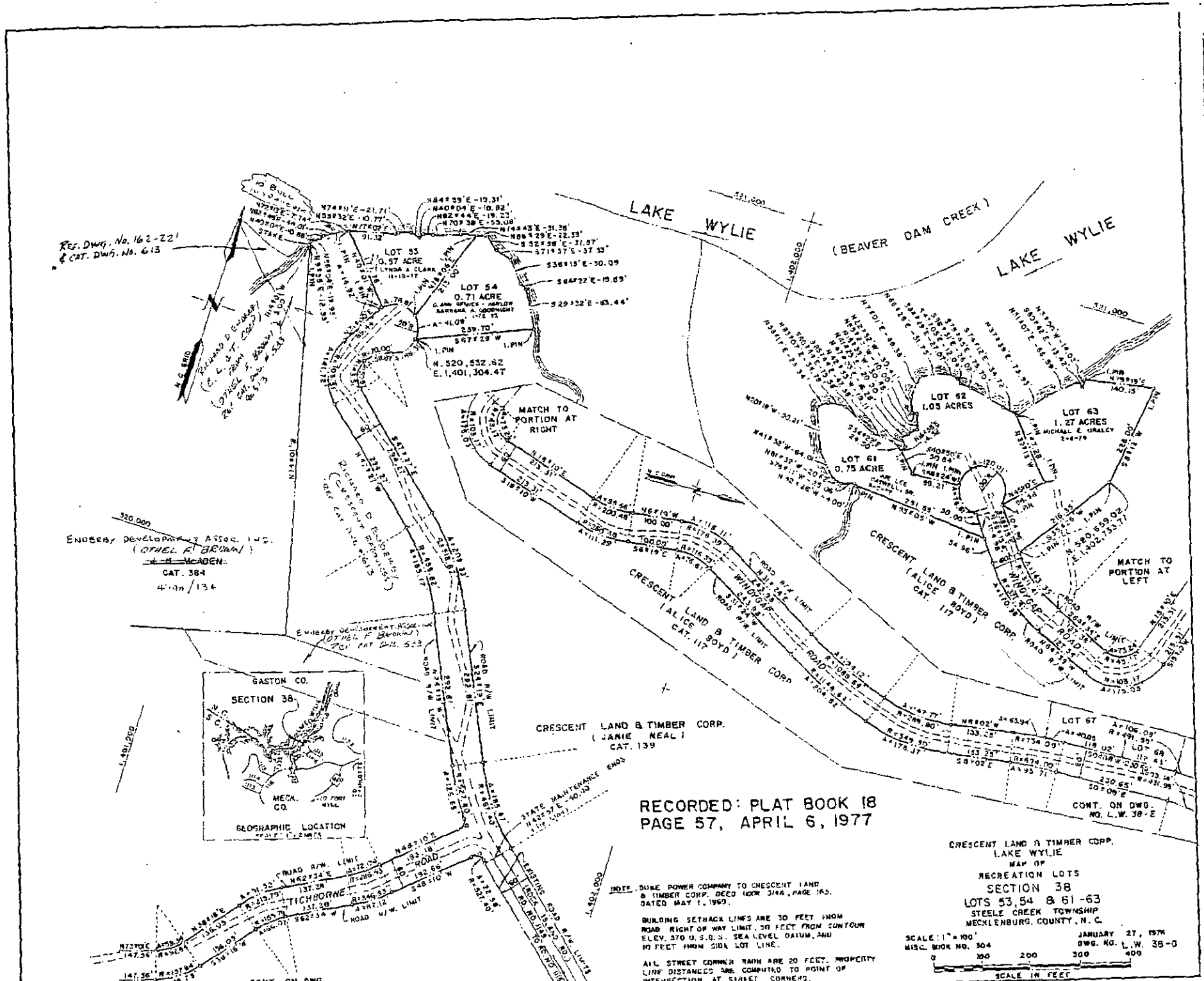
Design Specifications

Windy Gap Road (Lot 62 – Section 38)

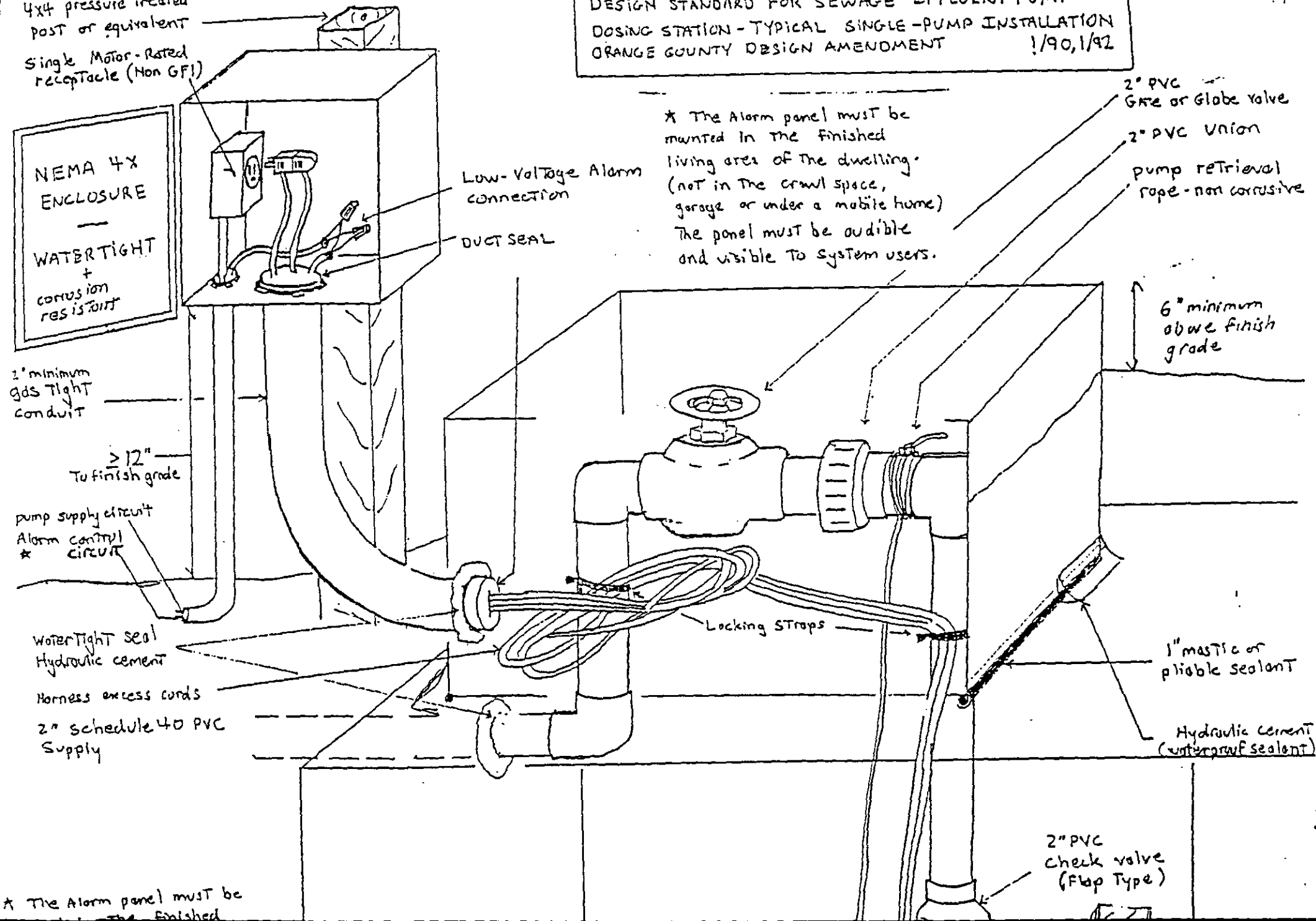
Daily design flow:	480gpd.
Septic tank size:	1500 gal. (2 compartments)
Pumping tank size:	1000 gal.
Effluent loading rate:	0.25gpd/sf initial system repair same
Total length and diameter of supply manifold:	app. 450 lf-2" 40 PVC
Number and length of laterals:	7 @ 69' long
Pressure manifold:	7 each ½" sch 80 taps from a 3" header
Flow rate through the system:	38.25 gpm capability
Elevation head:	30' *
Pressure head:	2.0'
Friction head:	8.0'
15% contingency	8.0'
Total head:	48.0'
Pump requirements:	38.25 gpm at 48.0' of head; use Goulds 3885 1.0hp pump or equivalent with compatible electrical
Dosing volume:	240 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 gals.)
Pump run per dose:	approx. 6.27 min. (run time control of dose
Check valve:	Yes
Siphon break hole:	No

* This is lowest pump tank placement. If house and tank are back from lake, this could be reduced and require a smaller pump. (Mecklenburg County topo enclosed)


S 39°15'12" E
S 82°27'00" E
89.31'
2°57'31" E
61.32'
50' Lake setback
CRESCENT RESOURCES, II
(ALICE BOYD)
CAT. 117, D.B. 561
CAT. 490, D.B.
REF. DWG.
P.B.
1.015'
MANIFOLD BOX
cover
gate valve
check valve
7 Hills
2" sch 40
from pump tank
1500 gal
septic tank
1000 gal
pump tank
ENERGY
BOUNDARY
L1
L2
L3
L4
L5
L6
L7
L8
L9
L16
50.80'
N 40°51'09" W
99.20'
S 86°27'
15'
setback
73.60'
S 86°54'55" W
10' setback
JOE LEE CROSSWELL
and wife
CARRIE B. CROSSWELL
D.B. 3973, PG. 103
P.B. 18, PG. 57
TAX ID. 199-391-02
LOT 61
NORTH CAROLINA
NBURG COUNTY
JAMES R. HOBBS
certify that this plat was drawn under my supervision from an actual survey made
der my supervision (deed description recorded in Book AS, page SHOWN, etc.) (other); that the boundaries not
surveyed are clearly indicated as drawn from information found in Book AS, page SHOWN; that the ratio
of precision as calculated is 1: 10,000+; that this plat was prepared in accordance with G.S. 47-30 as amended.
Witness my original signature, registration number and seal this day of MONTH, A.D., 1997
Surveyor
L-3703
County,
tion is affixed
N EXISTING PI
AN EXIS


LAKE WYLIE
(BEAVER DAM CREEK)
LAKE WYLIE
LOT 53
0.57 ACRE
LOT 54
0.71 ACRE
LOT 62
1.05 ACRES
LOT 63
1.27 ACRES
LOT 61
0.75 ACRE
MATCH TO PORTION AT RIGHT
MATCH TO PORTION AT LEFT
CRESCENT LAND & TIMBER CORP.
(ALICE BOYD)
CAT. 117
CRESCENT LAND & TIMBER CORP.
(JANIE NEAL)
CAT. 139
ENDERBY DEVELOPMENT ASSOC. INC.
(OTHEL F. BROWN)
CAT. 384
GASTON CO.
SECTION 38
MECK. CO.
GEOGRAPHIC LOCATION
WINDY GAP ROAD
STITCHBORNE ROAD
CRESCENT DRIVE
CONT. ON DWG. NO. L.W. 38-E
RECORDED: PLAT BOOK 18
PAGE 57, APRIL 6, 1977
CRESCENT LAND & TIMBER CORP.
LAKE WYLIE
MAP OF
RECREATION LOTS
SECTION 38
LOTS 53,54 & 61-63
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N.C.
SCALE: 1" = 100'
JANUARY 27, 1978
MISC. BOOK NO. 304
DWG. NO. L.W. 38-D
SCALE IN FEET

DESIGN STANDARD FOR SEWAGE EFFLUENT PUMP
DOSING STATION - TYPICAL SINGLE-PUMP INSTALLATION
ORANGE COUNTY DESIGN AMENDMENT 1/90, 1/92



* The Alarm panel must be ... the finished



Goulds

Submersible Effluent Pump

MODEL

3885

APPLICATIONS

Specifically designed for the following uses:

- Homes
- Farms
- Trailer courts
- Motels
- Schools
- Hospitals
- Industry
- Effluent systems

SPECIFICATIONS

Pump

- Solids handling capabilities: ¾" maximum.
- Discharge size: 2" NPT.
- Capacities: up to 128 GPM.
- Total heads: up to 123 feet TDH.
- Mechanical seal: silicon carbide-rotary seat/silicon carbide-stationary seat, 300 series stainless steel metal parts, BUNA-N elastomers.
- Temperature: 104°F (40°C) continuous 140°F (60°C) intermittent.
- Fasteners: 300 series stainless steel.
- Capable of running dry without damage to components.

Motor

Single phase:

- ⅓ HP, 115 V, 200 V, 230 V, 60 Hz, 1750 RPM; ½ HP, 115 V, 60 Hz, 3500 RPM; ½ HP – 1½ HP, 230 V, 60 Hz, 3500 RPM.
- Built-in overload with automatic reset.
- Class B insulation.

Three phase:

- ½ HP – 1½ HP 200/230/460 V, 60 Hz, 3500 RPM.
- Class B insulation.
- Overload protection must be provided in starter unit.
- Shaft: threaded, 400 series stainless steel.
- Bearings: ball bearings upper and lower.
- Power cord: 20 foot standard length (optional lengths available).

Single phase:

- ⅓ and ½ HP – 16/3 SJTO with 115 V or 230 V three prong plug.
- ¾-1½ HP – 14/3 STO with bare leads.

Three phase:

- ½-1½ HP – 14/4 STO with bare leads. On CSA listed models – 20 foot length SJTW and STW are standard.

FEATURES

■ **Impeller:** Cast iron, semi-open, non-clog with pump-out vanes for mechanical seal protection. Balanced for smooth operation. Silicon bronze impeller available as an option.

■ **Casing:** Cast iron volute type for maximum efficiency. 2" NPT discharge adaptable for slide rail systems.

■ **Mechanical Seal: SILICON CARBIDE VS. SILICON CARBIDE** sealing faces. Stainless steel metal parts, BUNA-N elastomers.

■ **Shaft:** Corrosion-resistant stainless steel. Threaded design. Locknut on three phase models to guard against component damage on accidental reverse rotation.

■ **Motor:** Fully submerged in high-grade turbine oil for lubrication and efficient heat transfer.

■ **Designed for Continuous Operation:** Pump ratings are within the motor manufacturer's recommended working limits, can be operated continuously without damage.

■ **Bearings:** Upper and lower heavy duty ball bearing construction.

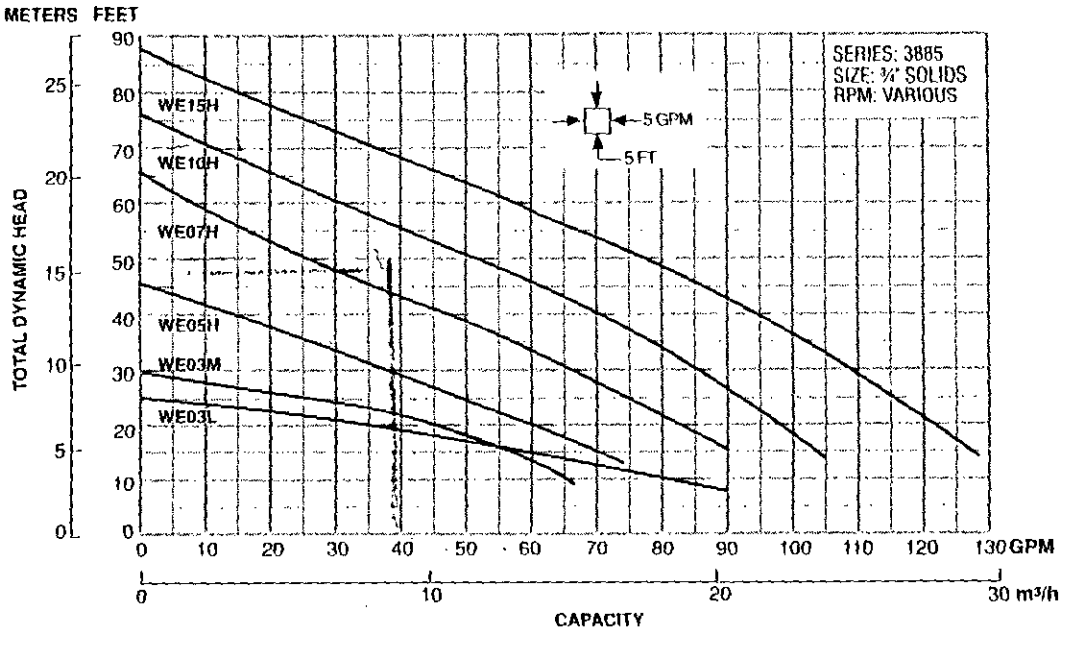
■ **Power Cable:** Severe duty rated, oil and water resistant. Epoxy seal on motor end provides secondary moisture barrier in case of outer jacket damage and to prevent oil wicking.

■ **O-ring:** Assures positive sealing against contaminants and oil leakage.

AGENCY LISTINGS

CSA Canadian Standards Association

UL Underwriters Laboratories



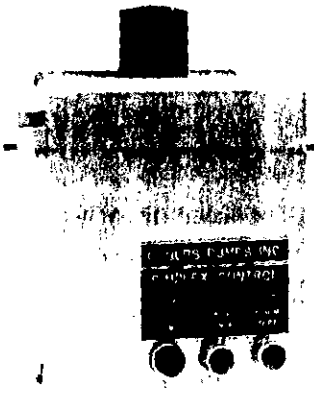
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Effective May, 1995
B3885

Goulds

SES Series Customized Control Panels

Simplex/Weather Proof Controller with Alarm



APPLICATIONS

Superior quality simplex liquid level controller, automatically maintains pump operation, includes high level alarm warning for a variety of sump, effluent, sewage and water transfer applications.

SPECIFICATIONS

- Accepts single or dual power feed.
- Hand-off automatic pump selection switch.
- On-off control circuit switch.
- Oversized magnetic contactor.
- Numbered terminal strip-screw type.
- NEMA 4X, 30 watt, flashing red light.
- NEMA 4X, fiberglass enclosure with gasketed, hinged door and stainless steel hardware.
- NEMA 4X, alarm horn – 95db.
- 115 V, 3 amp, control circuit breaker.

Single Phase

- Field adjustable for 115 or 230 V, 60 Hz.

Maximum Pump Running Amps	Panel Order No.
20	S10020
27 (3 HP)	S10027*
36 (5 HP)	S10036*

*For 3 and 5 HP single phase, includes run capacitors and pilot duty overloads.

Three Phase

- Field adjustable for 208/230 /460/575 V, 60 Hz.
- 115V control circuit transformer.
- Adjustable motor overload protectors.
- **Heaters not required.**

Maximum Pump Running Amps	Panel Order No.
1.6 to 2.5	S31625
2.5 to 4.0	S32540
4.0 to 6.3	S34063
6.3 to 10	S36310
10 to 16	S31016
16 to 20	S31620
20 to 25	S32025

FEATURES

■ Rugged NEMA 4X construction withstands even the most severe weather conditions and prevents corrosion.

■ Hinged door with lockable stainless steel latch for safe operation indoors and out.

■ High level alarm circuit includes spring loaded through door mounted silence switch for manual silence of alarm horn.

■ Through door mounted alarm test switch insures proper operation of the alarm circuit without the need to open the panel.

■ Through door mounted pump run light.

■ Top mounted high intensity flashing red light provides 360° visibility.

■ Pulsating, corrosion proof alarm horn.

■ Color coded wiring, screw type terminals and plug in sockets, ensure ease of field servicing.

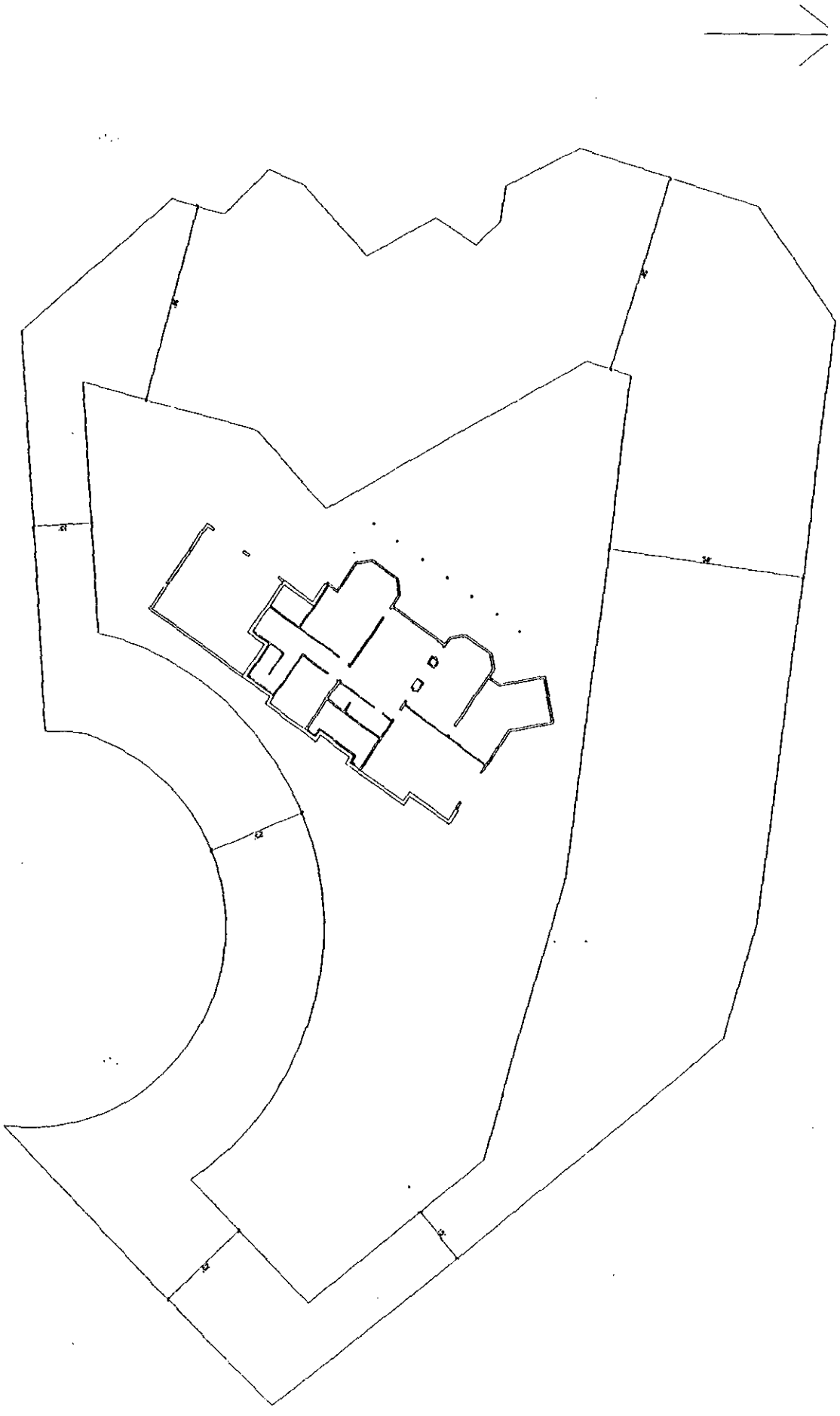
■ Field wiring diagram, panel schematic and installation instructions included.

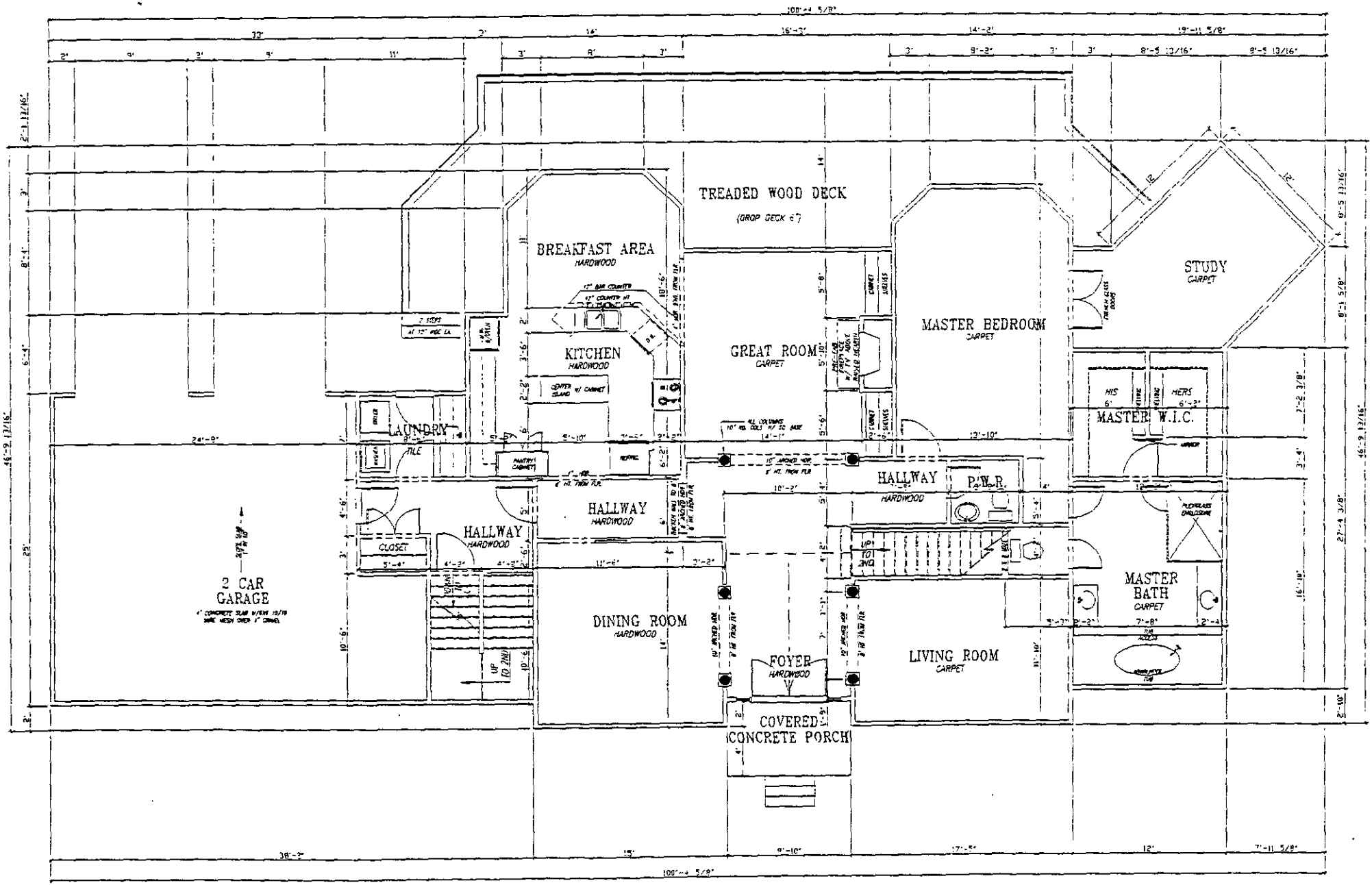
■ Panel can be wired for a single power feed for pump and control circuit or the control circuit can be wired to a separate power supply to insure alarm integrity in case of a tripped pump breaker.

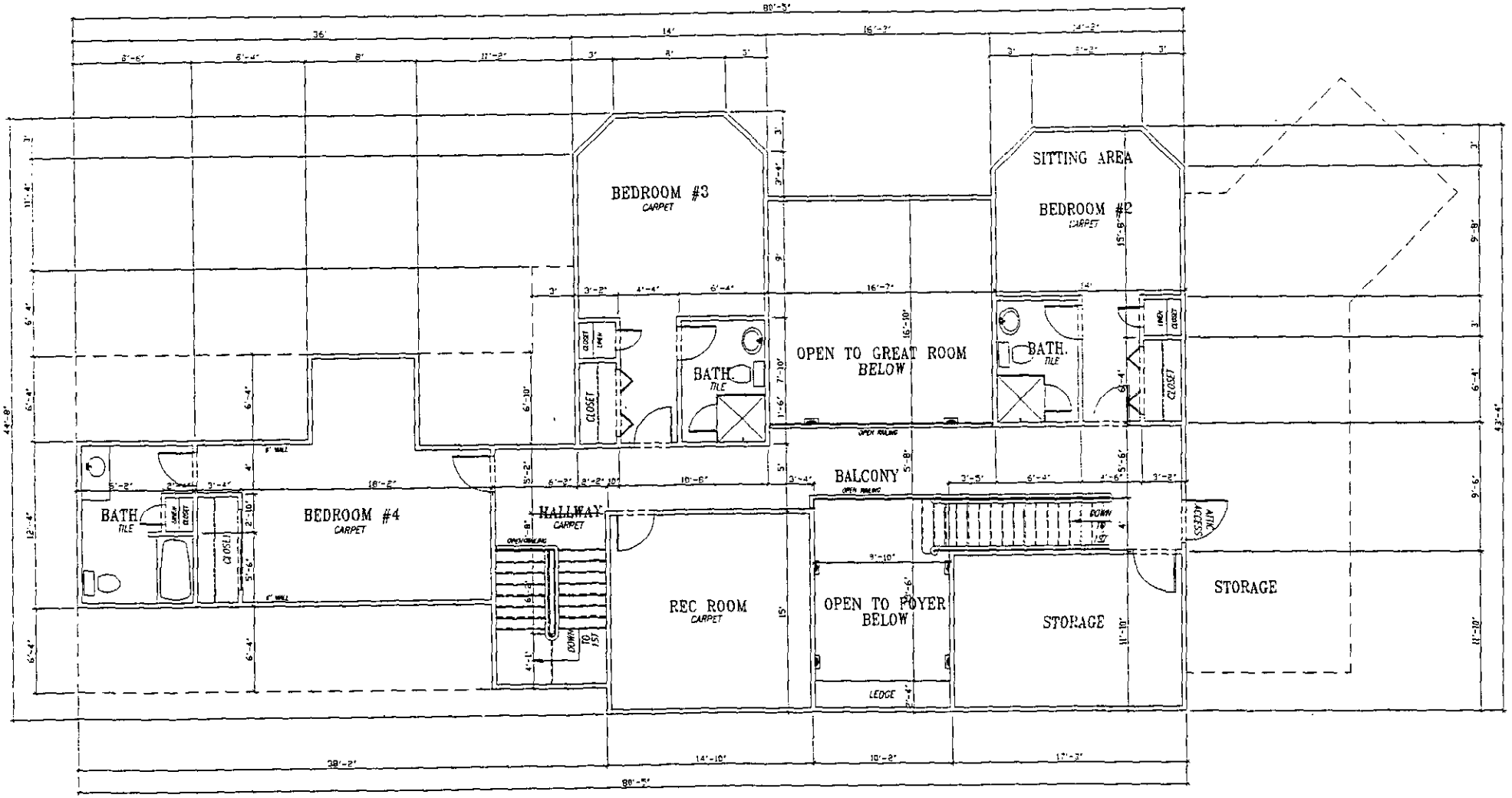
■ Entire unit is UL/CSA approved and listed.

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Effective May, 1995
BSPANEL



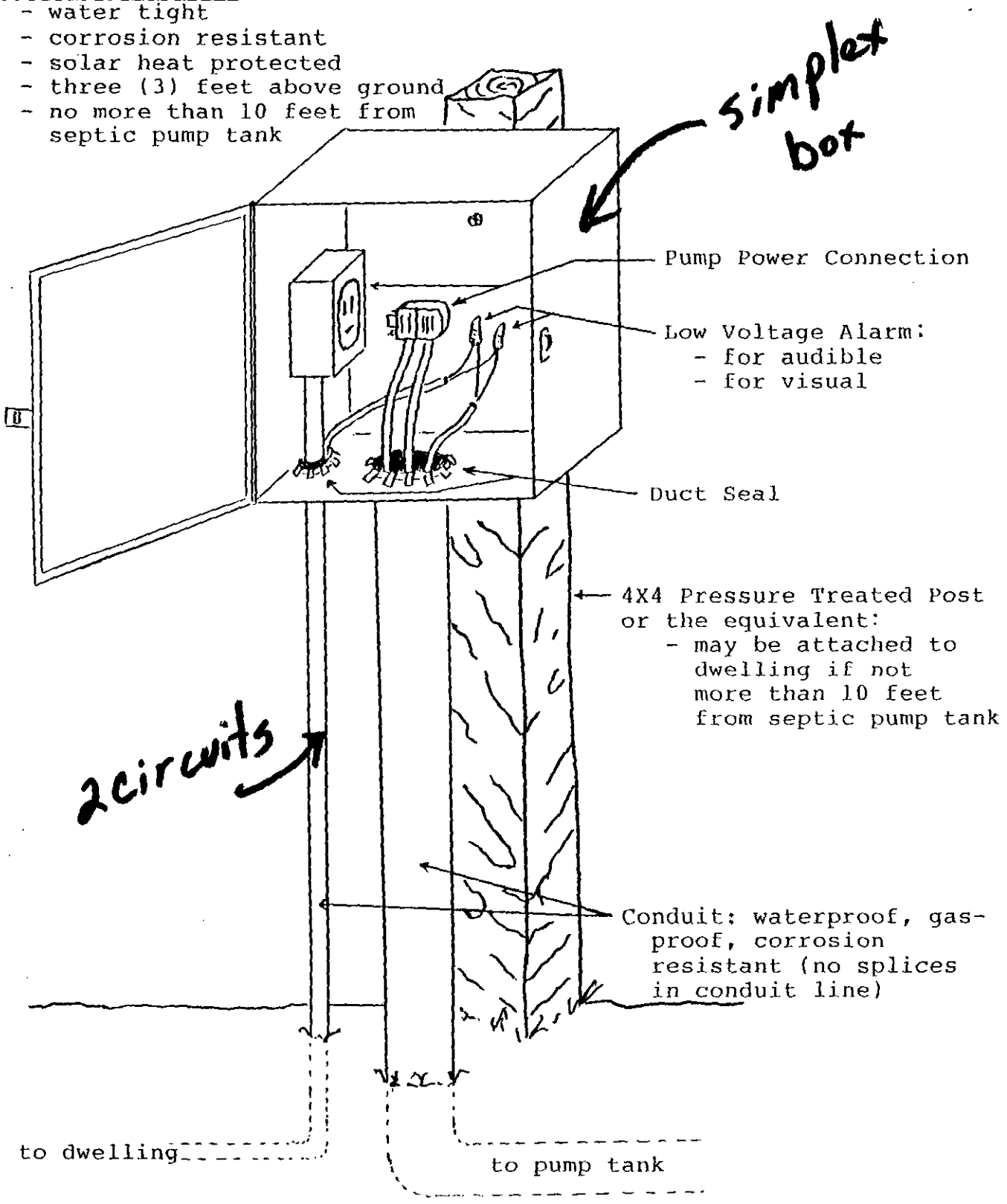

TREADED WOOD DECK
(GROUP DECK 6")
BREAKFAST AREA
HARDWOOD
KITCHEN
HARDWOOD
GREAT ROOM
CARPET
MASTER BEDROOM
CARPET
STUDY
CARPET
MASTER W.I.C.
HIS
HERS
LAUNDRY
TILE
HALLWAY
HARDWOOD
HALLWAY
HARDWOOD
HALLWAY
HARDWOOD
P.W.D.R.
2 CAR
GARAGE
DINING ROOM
HARDWOOD
FOYER
HARDWOOD
LIVING ROOM
CARPET
MASTER
BATH
CARPET
COVERED
CONCRETE PORCH
CLOSET


BEDROOM #3
CARPET
SITTING AREA
BEDROOM #2
CARPET
OPEN TO GREAT ROOM BELOW
BATH.
TILE
CLOSET
BALCONY
BATH
TILE
BEDROOM #4
CARPET
HALLWAY
CARPET
REC ROOM
CARPET
OPEN TO FOYER BELOW
STORAGE
STORAGE
LEDGE
ATTIC ACCESS
DOWN TO 1ST
80'-5"
38'-2"
14'-10"
18'-2"
17'-3"

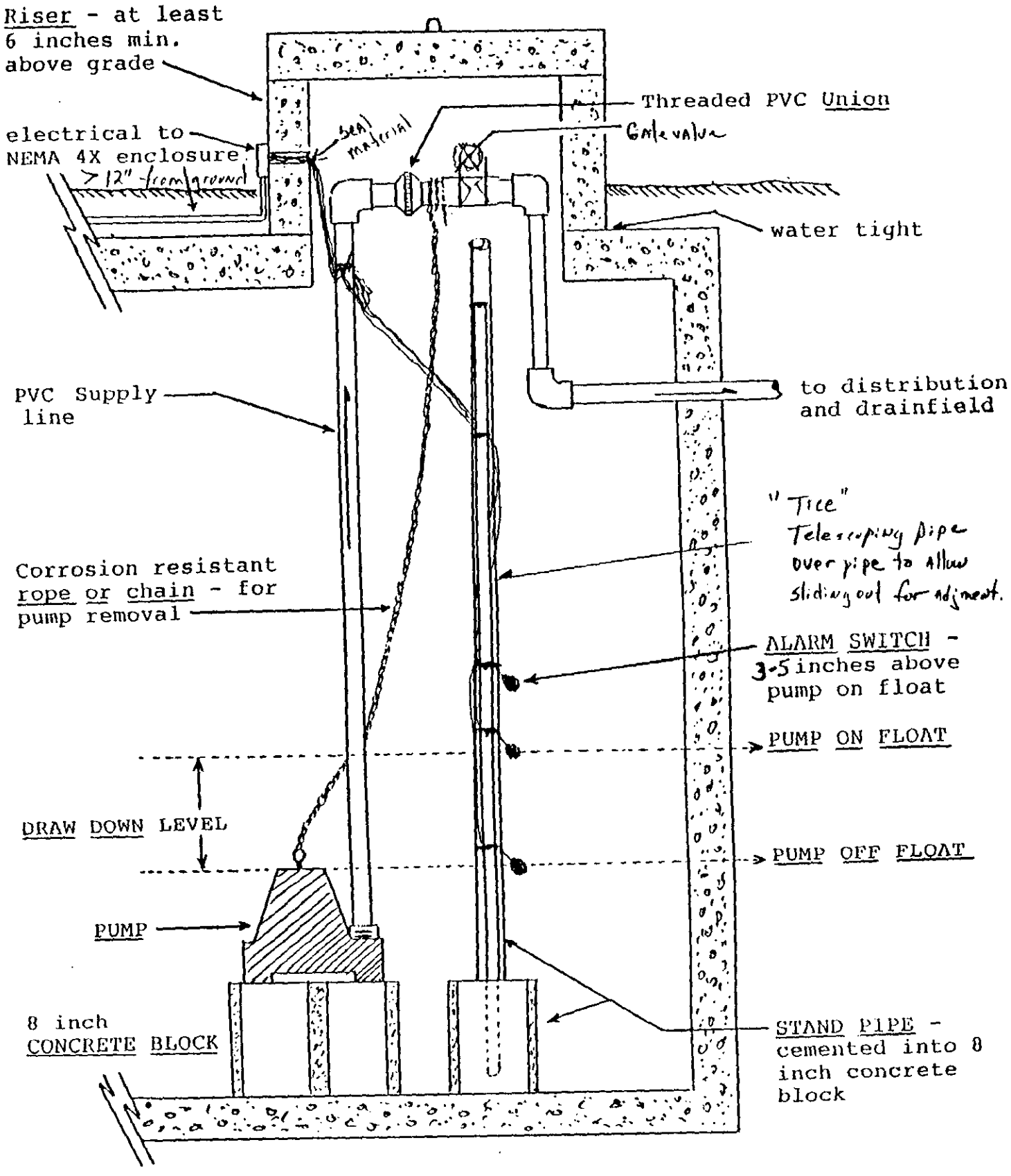
OFFICE
CARPET
UNFINISHED
GREAT ROOM
CARPET
BATH
TILE
UNFINISHED
DECK ABOVE
BILLIARD'S ROOM
CARPET
GARAGE
ON GROUND LEVEL
UNFINISHED
4" CONCRETE ON TOP OF 1/2" VL 22 GAGE DECK
PRECAST CONCRETE FOUNDATION FOR PORCH & STEPS
42'-2 13/16"
25'-10"
5'-4"
8'-11"
3'
2'-1 13/16"
24'-8"
23'-4"
20'-5"
12'-6 3/8"
8'-1 3/8"
8'-5 13/16"

NEMA 4X ENCLOSURE must be:

- water tight
- corrosion resistant
- solar heat protected
- three (3) feet above ground
- no more than 10 feet from septic pump tank



PUMP DIAGRAM



Norris

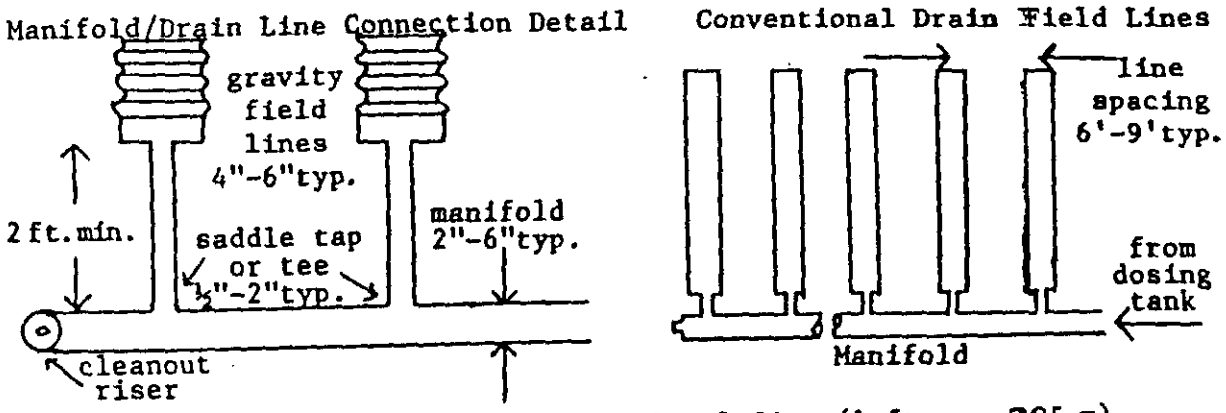


Fig. 1 Pressure Manifold For Level Site (1 ft. = .305 m)

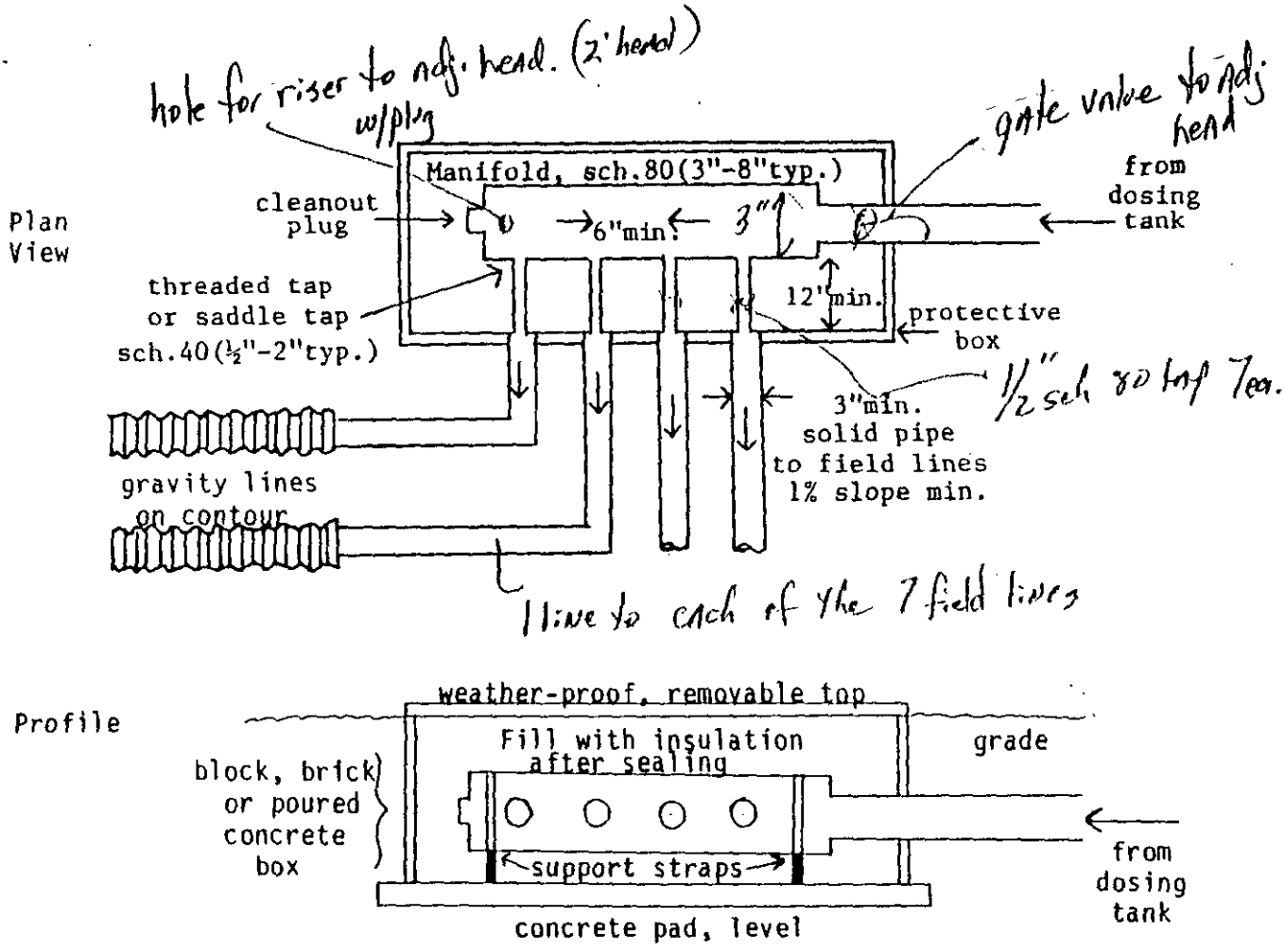


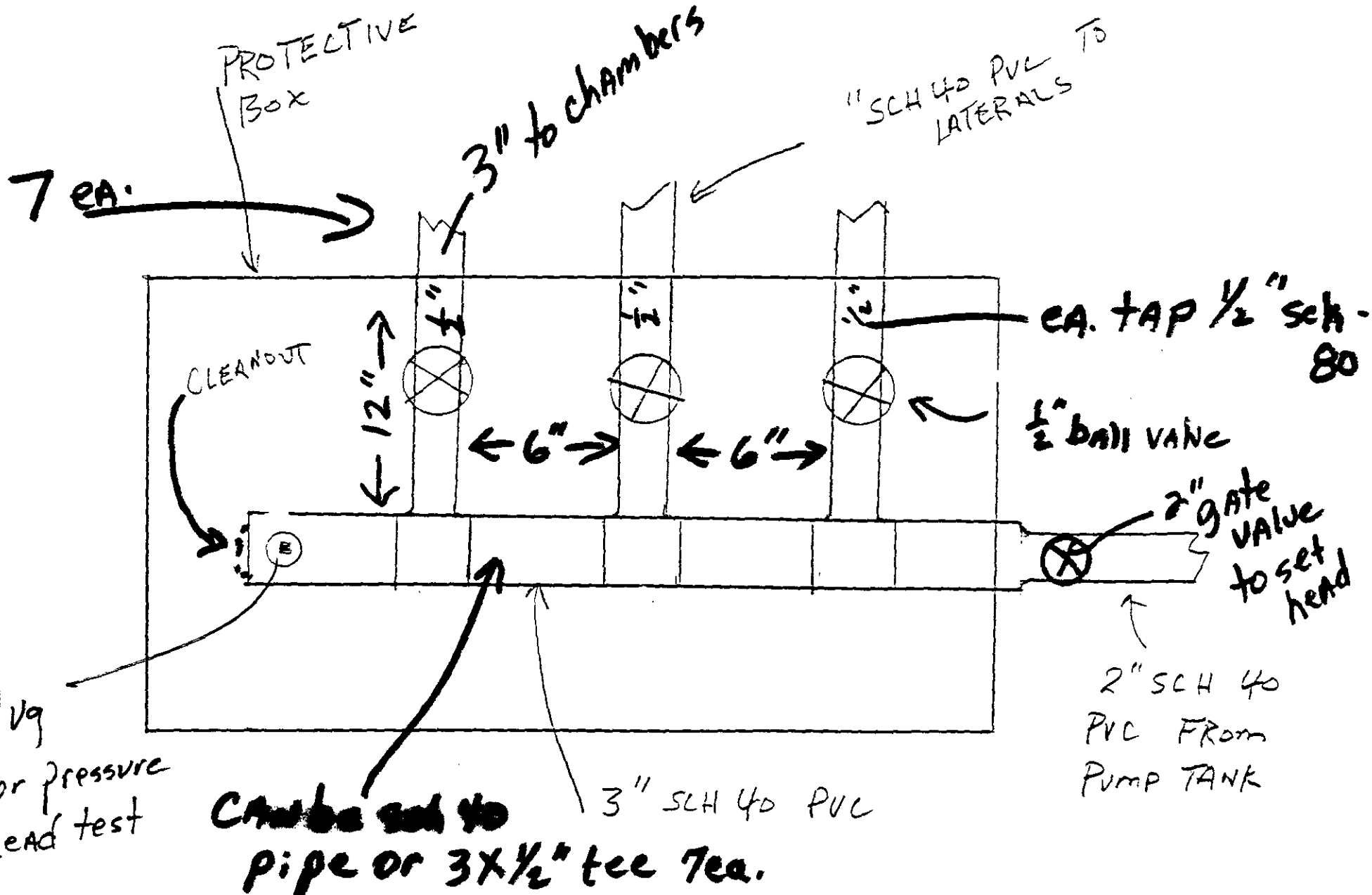
Fig. 2 Pressure Manifold For Sloping Sites

from Berkowitz, 1986

Norris

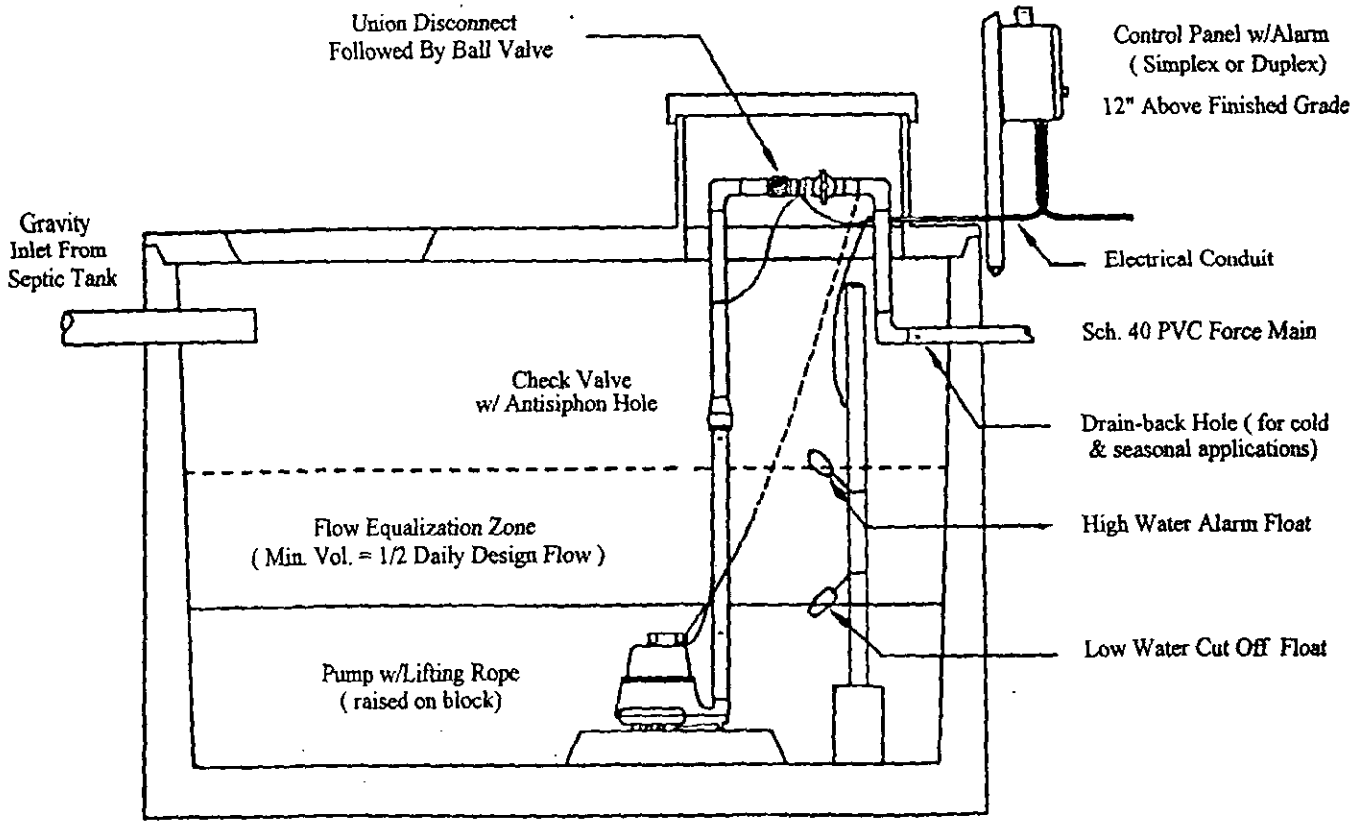
CENTRAL VALVE BOX DETAIL

MANIFOLD DETAIL



TYPICAL PUMP TANK DETAIL

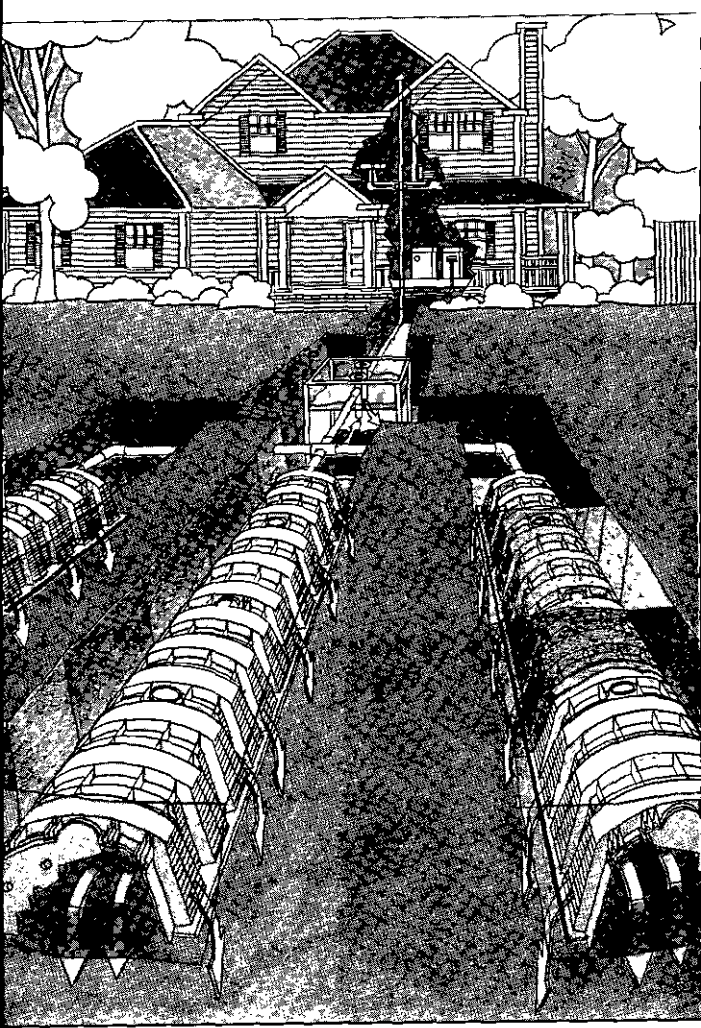
1. Pump tank shall have an access manhole extending at least 6 inches above finished grade.
2. Pump and control circuits shall be provided with manual circuit disconnects within a watertight, corrosion-resistant, outside enclosure (NEMA 4X or equivalent) adjacent to the pump tank, securely mounted at least 12 inches above finished grade. The pump(s) shall be manually operable without requiring the use of special tools or entrance into the tank for testing purposes. Conductors shall be conveyed to the disconnect enclosure through waterproof, gasproof, and corrosion-resistant conduits, with no splices or junction boxes provided inside the tank. Wire grips, duct seal, or other suitable material shall be used to seal around wire and wire conduit openings inside the pump tank and disconnect enclosure.
3. The pump tank shall have a properly functioning high-water alarm. The alarm circuit shall be supplied ahead of any pump overload and short circuit protective devices. The alarm shall be audible and visible by system users and included in the pump and control enclosure (Simplex or Duplex Control Panel).
4. Float switch for the high water alarm shall be set no more than 3 inches above the high water level of pump cycle.
5. Pump floats should be set so that level of water at end of pump cycle is above the top of the pump.
6. Float switch tie downs to be made of corrosion resistant material, no tape or metal hose clamps.
7. Pump discharge shall have a check valve.
8. Anti-siphon hole (three-sixteenth inch) is required between the pump and the check valve.
9. Watertight testing will be required on two piece pump tanks.



How to Operate and Maintain Your Infiltrator® Chamber Septic System.

Keep your septic system operating for years so that you can:

- Save thousands of dollars in repairs.
- Protect the environment.
- Preserve our groundwater resource.



INFILTRATOR® SYSTEMS INC

The world leader in chamber technology.

Now you're an informed septic system operator.

Most problems with septic systems are due to lack of proper care. With a little attention, your septic system can be a valuable asset to your property. It all comes down to knowing where your system is, protecting it from internal and external problems, giving it regular maintenance, and calling a professional septic contractor when you need help. Follow these simple guidelines and you'll benefit the environment, as well as yourself. Septic systems are the premier advanced wastewater treatment system and, now, you're an informed septic system operator.

For more information on polyolefin chamber septic leachfields, call Infiltrator Systems' customer resource department at 1-800-221-4436.

INFILTRATOR® SYSTEMS INC

The world leader in chamber technology.

4 Business Park Road, PO Box 768, Old Saybrook, CT 06475
(800) 221-4436 (860) 388-6639 Fax (860) 388-6810
www.infiltratorsystems.com

U.S. Patents: 4,759,661, 5,017,041, 5,156,488; 5,336,017, 5,401,116, 5,401,459, 5,511,903, 5,588,778, 5,716,163; 1,815,925; 1,974,938; 1,729,383; 448,338
Canadian Patents 1,329,959, 2,004,564 Other U.S., Canadian, and foreign patents pending

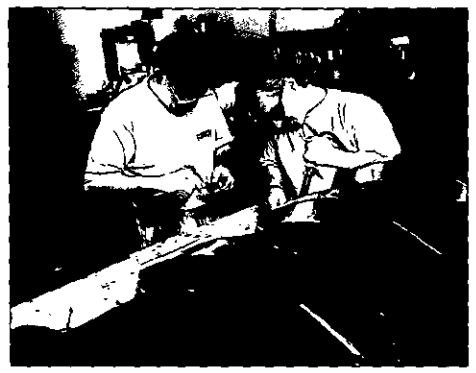
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Infiltrator Systems Inc., the world leader in septic and stormwater chamber system technology.

Over 9 million chambers already in service.
In just ten years, the innovative leaching chambers of Infiltrator Systems have drastically changed the technology of on-site septic and stormwater disposal. Already, 9 million chambers have been installed in 49 states, Canada, and throughout the world, forming over 165 million square feet of chamber systems with a success rate of 99.5%. And, we're expanding at the rate of 10,000 new systems a month.





Environmentally concerned company.
Infiltrator Systems devotes over $500,000 a year to research and development, creating new products that operate more and more efficiently and conserve natural resources. Besides using recycled resins, Infiltrator Systems' products take better care of the environment by avoiding the mining, crushing, grading, washing, and hauling of stone, as well as the environmental impact and site disruption that stone causes. That's one of our "greener" ideas for septic and stormwater disposal that just makes sense.

Infiltrator stormwater management.
Besides our septic chambers, Infiltrator Systems' High Capacity H-20 unit is designed to effectively handle stormwater runoff from large paved or roofed areas. This subsurface chamber replaces retention ponds, large diameter pipe and stone, concrete vaults, and other conventional methods, so valuable above-ground land can be used for additional parking, further development, or green space. The High Capacity H-20 chamber stores up to 122 gallons of runoff, can withstand loads of 32,000 lb/axle, and is available in CT, DE, FL, ID, IL, MA, MD, ME, NH, NJ, NY, OR, PA, RI, VT, WA, and British Columbia.

Call 1-800-221-4436 for a free copy of the septic installation instructions and video.

INFILTRATOR® SYSTEMS INC

The world leader in chamber technology℠

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800-221-4436 860-388-6639 FAX 860-388-6810
www.infiltratorsystems.com

800-221-4436

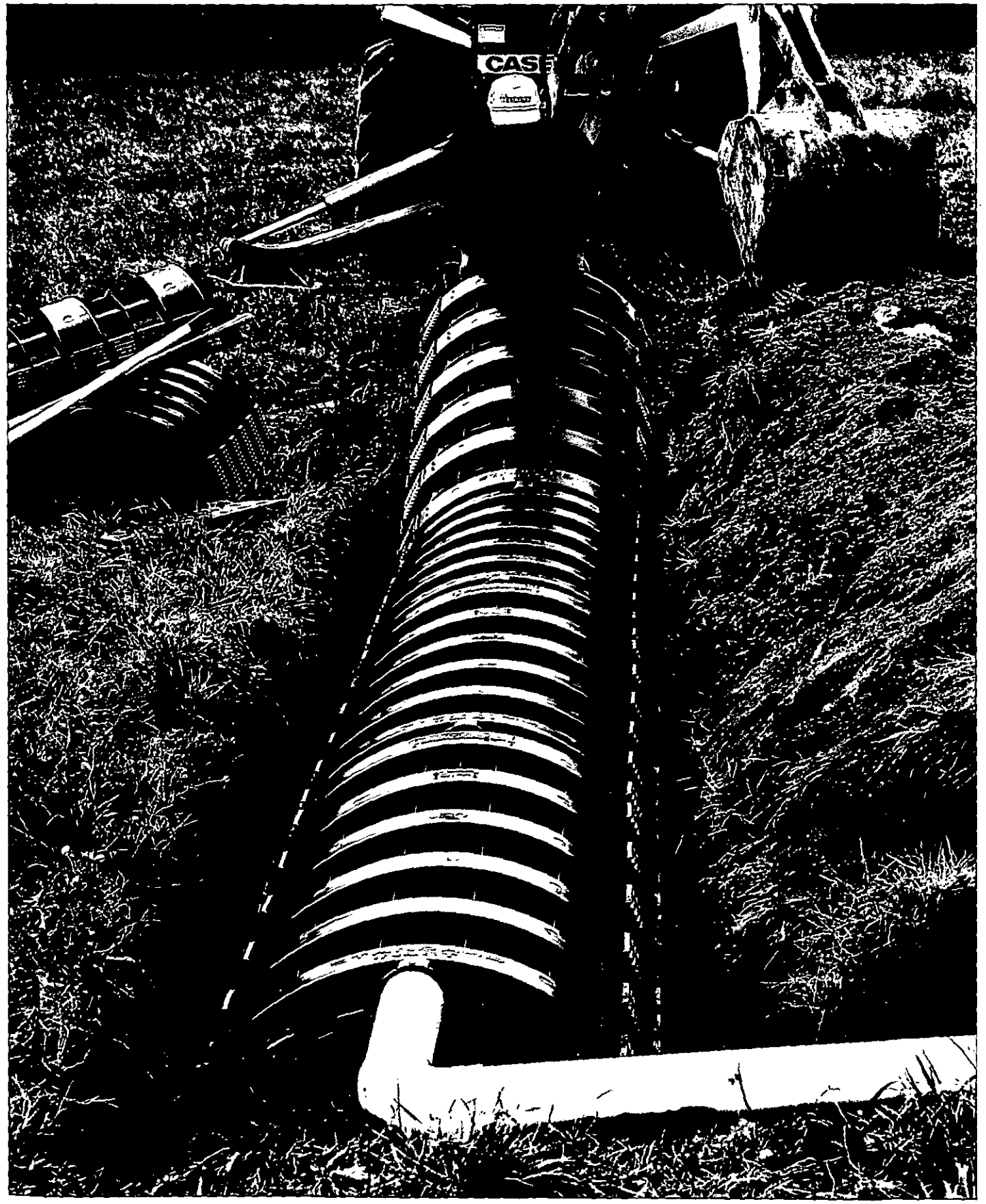
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U.S. Patents: 4,759,661; 5,017,041; 5,156,488, 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,588,778; 5,716,163; 1,815,925; 1,974;938; 1,729,383; 448,338
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The Infiltrator® Chamber System for Septic Leachfields.

INFILTRATOR® SYSTEMS INC

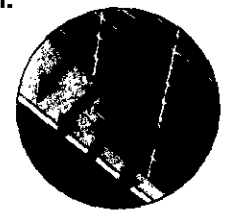


Original Standard and High Capacity Infiltrator chambers provide up to twice the infiltrative capacity of stone and pipe systems.

The Infiltrator Chamber System is a direct replacement for old-fashioned stone and pipe leachfields installed in 3-foot wide trenches. Infiltrator chambers sit directly on the trench bottom. The patented interlocks add strength and latch the chambers together quickly, end to end, so installation takes less than half the time of a labor-intensive stone and pipe job. It's that simple.

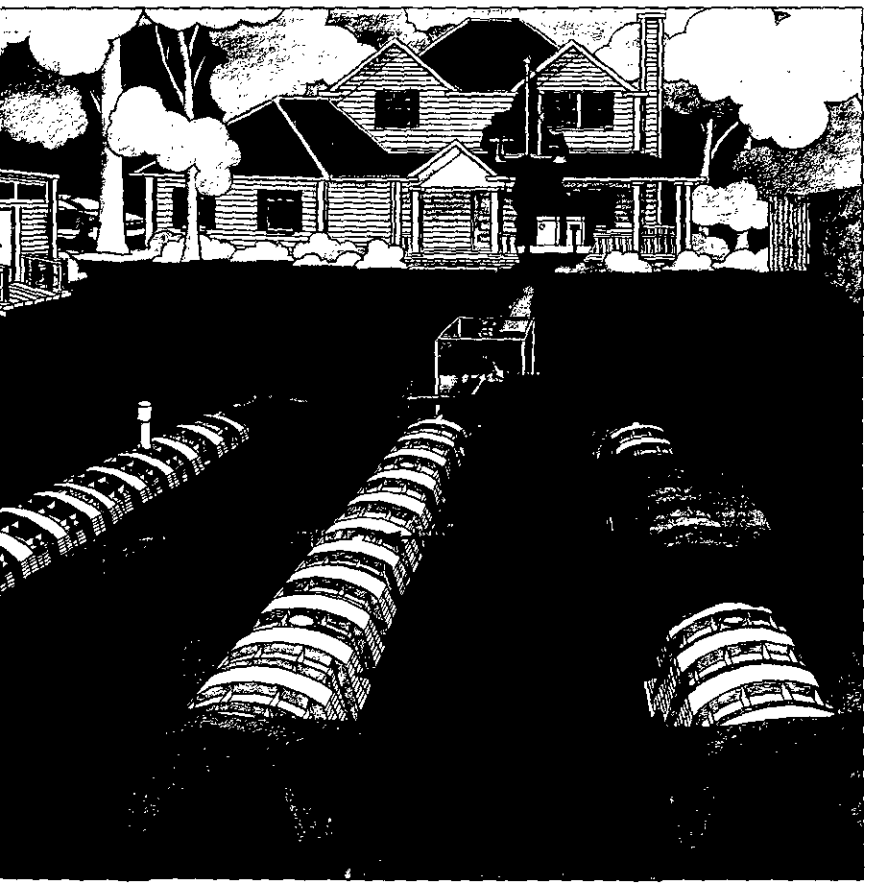
Infiltrator chambers may be used for any application that is suitable for stone and pipe. However, by offering greater infiltrative capacity per linear foot, chamber systems can require as little as half the space as conventional systems.*

Patented MicroLeaching™ sidewall.
The Infiltrator chamber has an engineered, louvered sidewall that allows effluent to pass laterally into the soil. The angled louvers prevent backfill intrusion into the chamber while 1/4" slots allow lateral leaching.



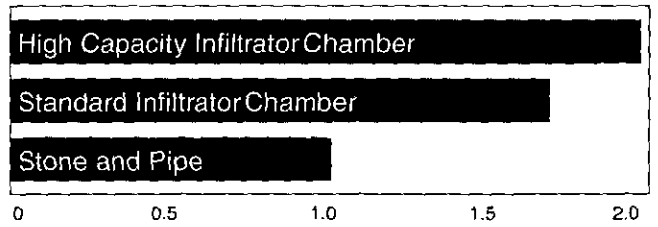
MicroLeaching sidewall

* Subject to state and local regulations.



Open chamber bottom boosts infiltration.
The chamber bottom is completely open, promoting effluent infiltration into the soil with 100% efficiency. The open-bottom area, in combination with the MicroLeaching sidewall, provides maximum infiltrative capacity for long-term, trouble-free service.

LTAR (Long-Term Acceptance Rate).



This graph demonstrates the dramatic efficiency improvement in LTAR of Infiltrator chambers over stone and pipe trenches. The LTAR is a measure of the long-term ability of the system to pass effluent into the soil. For example, the High Capacity Infiltrator chamber infiltrates up to twice the effluent of a same-size stone and pipe trench. This efficiency is recognized by many state and local jurisdictions, who in turn may allow up to 50% shorter trenches.

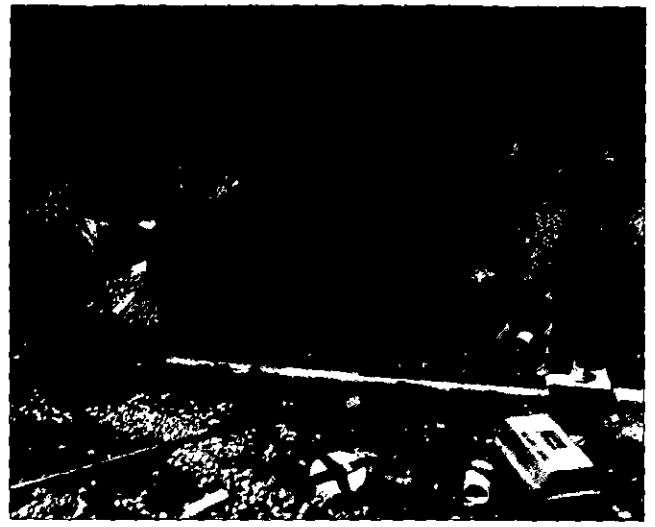
Polyolefin construction.
Infiltrator chambers are molded of PolyTuff™, a proprietary blend of polyolefin plastic that includes recycled resins and is formulated for optimum strength and chemical resistance. It's impervious to wastewater constituents and is stabilized to resist ultraviolet rays. Infiltrator chambers are manufactured using an exclusive patented process to assure consistent high quality. These combined factors make Infiltrator chambers the toughest, most reliable chambers in the industry.

AASHTO H-10 and H-20 load ratings.
Infiltrator chambers have been structurally tested by a registered professional engineer. Both Standard and High Capacity chambers are available with AASHTO ratings of H-10 (16,000 lb/axle with 12" of compacted cover) or H-20 (32,000 lb/axle with 18" of compacted cover).

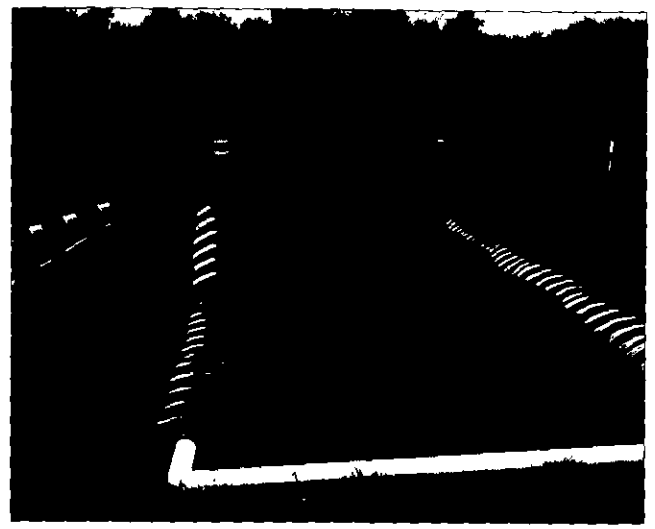
Nominal chamber specifications.

	Standard	High Capacity
Size (W x L x H)	34" x 75" x 12"	34" x 75" x 16"
Weight	25 lb	31 lb
Capacity	77 gal (10.3 ft³)	122 gal (16.3 ft³)

Compare the installation and operating advantages.

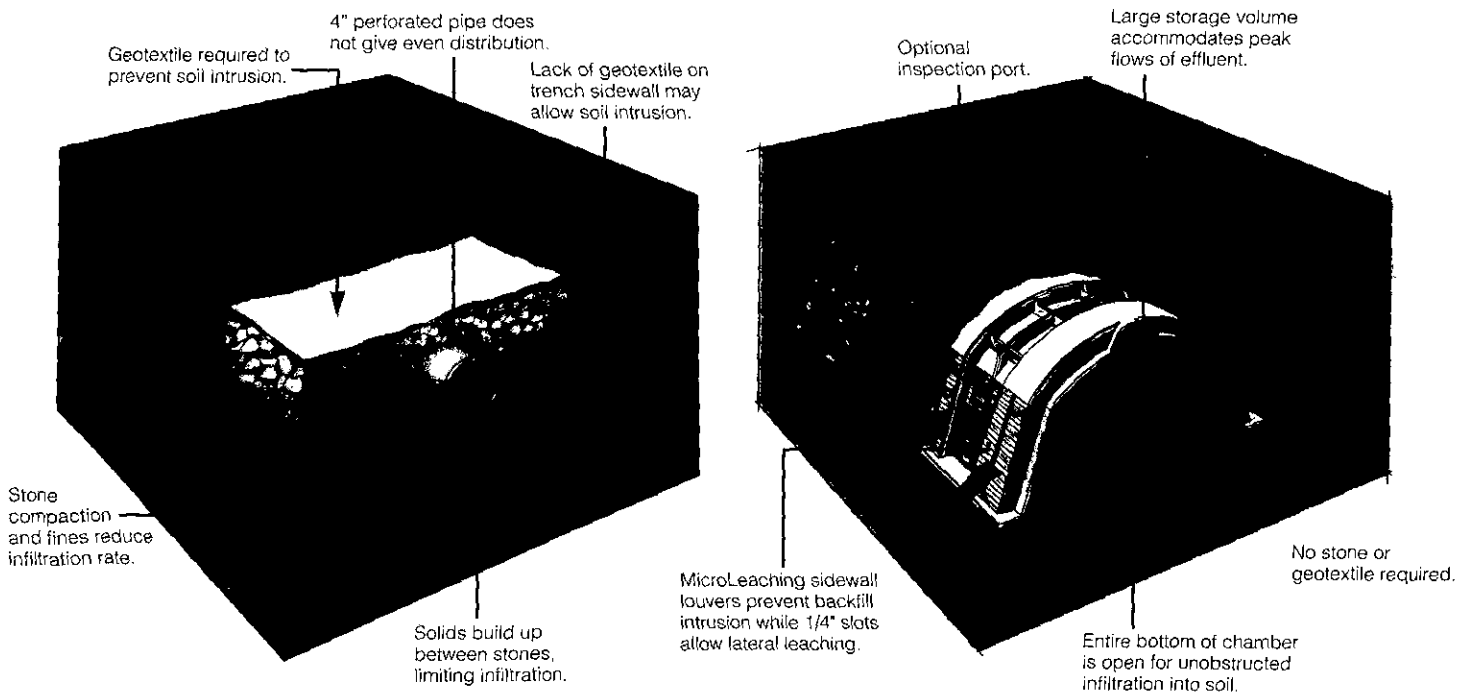


Conventional stone and pipe system.



Infiltrator Chamber System.

• Labor-intensive, lengthy installation.	• Easy assembly and installation by two people.
• Dump truck needed for stone delivery.	• Only a backhoe and pickup truck are required.
• Stone hauling adds expense and time, increases soil compaction.	• Lightweight chambers can be delivered in one pickup truck load and hand-carried into position.
• Stone in trench reduces Long-Term Acceptance Rate by more than 50%.	• Entire trench bottom is open for effluent infiltration with 100% efficiency.
• Heavy traffic across yard and spilled stone mean there is more site repair needed after installation.	• There is less regrading, tree damage, and landscape repair involved, and no stone cleanup.
• System lacks easy inspection and monitoring of leachfield without digging up the yard.	• Inspection port is available for easy access to leachfield with no site disruption.
• Geotextile required on top of stone.	• Solid-topped chambers need no geotextile.
• Overall increased cost.	• Overall lower cost.



FEE: 50.00 Check #7
DATE: 5/14/99 gc

APPLICATION FOR IMPROVEMENT PERMIT FOR RESIDENTIAL SITE INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM

[ ] CRT

TYPE APPLICATION: ___ NEW SYSTEM ✓ EXPANSION/ ALTERATION OF EXISTING SYSTEM ___ REPAIR OF EXISTING SYSTEM

NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT,
HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Chg w plot plan

FILE #: 1479B

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 199-391-03

STREET ADDRESS: 9938 Windy Gap Rd

SUBDIVISION OR MOBILE HOME PARK NAME:

LOT NUMBER: 62

TYPE OF BUILDING (CHECK ONE):

___ SINGLE MOBILE HOME(S)
___ DOUBLE WIDE (D)
✓ HOUSE (H)
___ MODULAR HOME (M)
___ MULTIPLE FAMILY (U)
___ OTHER (O)

TOWNSHIP (CHECK ONE):

✓ 0 MECKLENBURG
___ 1 CHARLOTTE
___ 2 DAVIDSON
___ 3 CORNELIUS
___ 4 PINEVILLE
___ 5 MATTHEWS
___ 6 HUNTERSVILLE
___ 7 MINT HILL

HEATED SQUARE FOOTAGE:

NUMBER OF BEDROOMS: 4

NUMBER OF OCCUPANTS:

CLOSING DATE_____

FOUNDATION FOR RESIDENCE:

✓ WITHOUT BASEMENT
___ ON SLAB
___ CRAWL SPACE
✓ WITH BASEMENT /PLUMBING
___ WITH BASEMENT /NO PLUMBING

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

WILL THERE BE A HOME BUSINESS IN THE RESIDENCE: ___ YES ___ NO TYPE: _____

WATER SUPPLY (CHECK ONE):

___ COMMUNITY (C)
___ MUNICIPAL (M)
✓ PRIVATE WELL (P)
___ SHARED WELL (S)
___ OTHER 'SPRINGS' (O)

IF ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY, PLEASE SHOW LOCATION ON PLAT:

BURIED CABLES, LANDFILLS, STUMPHOLES ___ YES ✓ NO
EXISTING WASTEWATER SYSTEMS ___ YES ✓ NO
EASTMENTS OR RIGHT-OF-WAYS ✓ YES ___ NO
WELL, SPRINGS OR WATERLINES ___ YES ✓ NO
DESIGNATED WETLANDS ___ YES ✓ NO

PROPERTY OWNER:	LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: Norris Ward (LAST) (FIRST) (MI)	NAME: Jacobs Toney C (LAST) (FIRST) (MI)
ADDRESS: 9300 Windy Gap Rd	DAYTIME PHONE: (704) 663 - 6905
CITY: Charlotte STATE: NC 28208 ZIP:	
DAYTIME PHONE: ( ) -	

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

SIGNED: Toney C Jacobs, CPSS DATE: 5-11-99

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR., SUITE 211, 700 N. TRYON ST., CHARLOTTE, N.C. 28202., (704) 336-5102

PROPOSED PLOT PLAN

Morris

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON STREET
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 14793

TC: 199-391-03

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.

See Attached Plan

OWNER/AGENT SIGNATURE

DATE 5/14/99

APPROVAL DATE _____

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy

FEE: _____

DATE: _____

APPLICATION FOR IMPROVEMENT PERMIT FOR RESIDENTIAL SITE INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM

[ ] CRT

TYPE APPLICATION: ✓ NEW SYSTEM __ EXPANSION/ ALTERATION OF EXISTING SYSTEM __ REPAIR OF EXISTING SYSTEM

NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT,
HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

FILE #: 1479-B

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 199-391-03

STREET ADDRESS: Windy Gap

SUBDIVISION OR MOBILE HOME PARK NAME:

LOT NUMBER:

TYPE OF BUILDING (CHECK ONE):

__ SINGLE MOBILE HOME(S)
__ DOUBLE WIDE (D)
✓ HOUSE (H)
__ MODULAR HOME (M)
__ MULTIPLE FAMILY (U)
__ OTHER (O)

TOWNSHIP (CHECK ONE):

__ 0 MECKLENBURG
__ 1 CHARLOTTE
__ 2 DAVIDSON
__ 3 CORNELIUS
__ 4 PINEVILLE
__ 5 MATTHEWS
__ 6 HUNTERSVILLE
__ 7 MINT HILL

CLOSING DATE_____

HEATED SQUARE FOOTAGE:

NUMBER OF BEDROOMS: 3

NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:

__ WITHOUT BASEMENT
__ ON SLAB
__ CRAWL SPACE
__ WITH BASEMENT /PLUMBING
__ WITH BASEMENT /NO PLUMBING

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

WILL THERE BE A HOME BUSINESS IN THE RESIDENCE: __ YES ✓ NO TYPE: _____

WATER SUPPLY (CHECK ONE):

__ COMMUNITY (C)
__ MUNICIPAL (M)
✓ PRIVATE WELL (P)
__ SHARED WELL (S)
__ OTHER 'SPRINGS' (O)

IF ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY, PLEASE SHOW LOCATION ON PLAT:

BURIED CABLES, LANDFILLS, STUMPHOLES	__ YES __ NO	WELL, SPRINGS OR WATERLINES	__ YES __ NO
EXISTING WASTEWATER SYSTEMS	__ YES __ NO	DESIGNATED WETLANDS	__ YES __ NO
EASTMENTS OR RIGHT-OF-WAYS	__ YES __ NO		

PROPERTY OWNER:

NAME: Norris Stephanie W
(LAST) (FIRST) (MI)

ADDRESS: 9300 Windygap Rd

CITY: Charlotte STATE: NC ZIP: 28208

DAYTIME PHONE: (704) 588-8266

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME:
(LAST) (FIRST) (MI)

DAYTIME PHONE: ( ) —

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? _____

An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

SIGNED: Stephanie Norris DATE: 6-18-98

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR., SUITE 211, 700 N. TRYON ST., CHARLOTTE, N.C. 28202., (704) 336-5102

FEE: _____ **AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION**
DATE: _____ **VOID SIXTY (60) MONTHS FROM DATE OF ISSUANCE**

DATE: 6-18-98 PERMIT NO: 1479-B
PARCEL NO: 199-391-03

JOB LOCATION ADDRESS: Windy Gap Rd
PROPERTY OWNER: Stephanie Norris
BUILDING CONTRACTOR: _____
SUBDIVISION NAME: _____
AUTHORIZATION ISSUED BY: _____ DATE: 6-18-98
DEHNR AUTHORIZED AGENT

AUTHORIZATION CONDITIONS

1. WASTEWATER SYSTEM CONSTRUCTION AND INSTALLATION MUST MEET ALL CONDITIONS AND SPECIFICATIONS AS SET FORTH IN IMPROVEMENT PERMIT NO. 1479-B, AND THE ATTACHED SITE PLAN WITH SYSTEM DETAILS. CONSTRUCTION AND INSTALLATION MUST ALSO MEET ALL REQUIREMENTS SET FORTH IN THE RULES GOVERNING SANITARY SEWAGE COLLECTION, TREATMENT, AND DISPOSAL AND ANY OTHER APPLICABLE RULES AND LAWS.

2. AN INSTALLATION, CONSTRUCTION, ALTERATION AND/OR REPAIR APPROVAL MUST BE SECURED **PRIOR** TO INSTALLATION OF THE SEPTIC TANK SYSTEM. THE INSTALLER OF THE SYSTEM SHALL BE A REGISTERED SEPTIC TANK CONTRACTOR WITH MECKLENBURG COUNTY HEALTH DEPARTMENT.

3. ANY ALTERATION IN SITE OR SOIL CONDITIONS (INCLUDING LOCATION OF STRUCTURES AND APPURTENANCES) OR MODIFICATION IN USE, DESIGN WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS AS SPECIFIED IN THE ASSOCIATED IMPROVEMENT PERMIT AND APPLICATION, MAY SUBJECT THIS AUTHORIZATION AND ASSOCIATED PERMIT(S) TO REVOCATION.

4. OTHER CONDITIONS: Use innovative system 3 BDRm. Home
agreement form on file
install exactly in accordance w/ plan on file

OWNER CERTIFICATION

I CERTIFY THAT THERE HAVE BEEN NO ALTERATIONS IN SITE OR SOIL CONDITIONS OR MODIFICATIONS TO FACILITY, WASTEWATER FLOW, OR WASTEWATER CHARACTERISTICS FROM THOSE SPECIFIED IN THE ORIGINAL APPLICATION OR ASSOCIATED IMPROVEMENT PERMIT UNLESS AUTHORIZED IN WRITING BY THE MECKLENBURG COUNTY HEALTH DEPARTMENT. I ALSO UNDERSTAND THAT ANY SUCH ALTERATIONS, MODIFICATIONS, OR FALSE INFORMATION ARE GROUNDS FOR REVOCATION OF PERMITS AND AUTHORIZATION TO CONSTRUCT.

+ Stephanie Norris 6-18-98
SIGNATURE OF OWNER/OWNER'S REPRESENTATIVE DATE

Permit Number: 1479-B

CONDITIONS OF IMPROVEMENT PERMIT

Tax Number: 199-391-03

The IMPROVEMENT PERMIT is subject to revocation if site plans or the intended use change. There is to be NO grading, filling or disturbance of the soil in the area of the septic tank system or repair area.

CONSTRUCTION AUTHORIZATION must be obtained prior to receiving a Building Permit. The Construction Authorization is NOT transferable. Do not clear, grade, fill or disturb soil prior to obtaining a Construction Authorization.

Domestic-type wastewater only. No industrial process wastewater may be discharged into the system.

Basement	___ Yes	X No	___ Partial Basement	
Type Primary Wastewater System Type (circle one): I II (III) IV V VI	___ Conventional ___ Prefabricated, permeable block panel system ___ Shallow Placed Conventional	___ Low Pressure Pipe ___ Large Diameter Pipe ___ Fill ___ Other	✓ Innovative or Experimental: ___ IWWS-93-1 ___ IWWS-93-2 ___ IWWS-94-1	
.25 Long-term acceptance rate	360 Max gallons/day wastewater flow	1080 Absorption Area (sq ft)	9 Trench spacing (min. on centers)	
YES Serviced by private well	1500 Gallon septic tank	360 Total trench length (ft)	24" Maximum trench depth (At least 12" of provisionally suitable soil must remain between trench bottom and unsuitable soil conditions)	
3 Bedrooms in residence	1000 Gallon pump tank	N/A Depth of stone		
Any surface waters present: Yes Type: Lake Wylie Minimum separation distance: 50'+				
Site modifications required:				
Additional Conditions: use innovative system - 3 BDRM home agreement form on file install exactly in accordance w/ plan on file				
Repair Area System Type Type (circle one): I II (III) IV V VI	___ Conventional ___ Prefabricated, permeable block panel system ___ Shallow Placed Conventional	___ Low Pressure Pipe ___ Large Diameter Pipe ___ Fill ___ Other	✓ Innovative or Experimental: ___ IWWS-93-1 ___ IWWS-93-2 ___ IWWS-94-1	
1000 Absorption Area (Sq ft) 360 Total Trench Length (Ft)	N/A Depth of Stone Trench	9 Trench spacing (min. on centers)	24" Maximum Trench Depth	
For existing system, enter the year originally installed:				

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws and Rules For Sewage, Treatment and Disposal in effect at the time of issuance of the permit and is subject to the following provisions:

- No work shall be conducted on the septic tank system until an Installation, Construction, Alteration and/or Repair Approval is granted by this Department.
- This Improvement permit is transferable.

Kelly Lund 6-10-98
DEHNR Authorized Agent Date

X Stephanie Norris 6-18-98
Owner/Agent Signature Date

MECKLENBURG COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR.
SUITE 211
700 N. TRYON ST.
CHARLOTTE, N.C. 28202.
(704) 336-5102

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENTAL, HEALTH,
AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Mecklenburg County
Health Department

July 17, 1996

Crescent Resources
Attn: Ms. Susie Williams
P.O. Box 1003
400 South Tryon Street, Suite 1300
Charlotte, NC 28201-1003

Re: Windy Gap Road
File: 1479B
Parcel: 199-391-03

Dear Ms. Williams:

Receipt of your Application for Improvement Permit for the above referenced property is acknowledged. A soil evaluation and a site visit have been conducted. The results of the evaluation indicated that the site is **UNSUITABLE** under Rules .1941 **SOIL CHARACTERISTICS (MORPHOLOGY)** .1943 **SOIL DEPTH**, and .1945 **AVAILABLE SPACE**. For these reasons your Application for Improvement Permit is denied. A possible way to develop the site exists under Rule .1948(d) which reads as follows:

> A site classified as **UNSUITABLE** may be used for a ground absorption sewage treatment and disposal system specifically identified in Rules .1955, .1956, or .1957 of this Section or a system approved under Rule .1969 if written documentation, including engineering, hydrogeologic, geologic or soil studies, indicates to the local Health Department that the proposed system can be expected to function satisfactorily. Such sites shall be reclassified as **PROVISIONALLY SUITABLE** if the local health department determines that the substantiating data indicated 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 the surface waters where it could come in contact with people, animals, or vectors.
> The state shall review the substantiating data if requested by the local health department.

Please be advised that you have the right to an informal review by this department. You also have the right to appeal under G.S. 130A-24, and to have the appeal held in Mecklenburg County.

If you have any questions regarding this matter please do not hesitate to call me at 336-5575.

Sincerely,

Kelly Randall, R.S., Soil Scientist
Individual Water and Wastewater Systems

KR:gc

Gaston Co

Mecklenburg County
Health Department

Ms Susie Williams
Crescent Resources
PO Box 1009
400 South Tryon Street Suite 1300
Charlotte NC 28201-1003

File: 1979-B
parcel: 199-391-03
Re: Windy Gap Rd.

Dear Ms Williams

Receipt of your Application for Improvement Permit for the above referenced property is acknowledged. A soil evaluation and a site visit have been conducted. The results of the evaluation indicated that the site is UNSUITABLE under Rules .1948 over For these reasons your Application for Improvement Permit is denied. A possible way to develop the site exists under Rule .1948(d) which reads as follows:

> A site classified as **UNSUITABLE** may be used for a ground absorption sewage treatment and disposal system specifically identified in Rules .1955, .1956, or .1957 of this Section or a system approved under Rule .1969 if written documentation, including engineering, hydrogeologic, geologic or soil studies, indicates to the local health department that the proposed system can be expected to function satisfactorily. Such sites shall be reclassified as **PROVISIONALLY SUITABLE** if the local health department determines that the substantiating data 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.

The State shall review the substantiating data if requested by the local health department.

Please be advised that you have the right to an informal review by this department. You also have the right to appeal under G.S. 130A-24, and to have the appeal held in Mecklenburg County.

If you have any questions regarding this matter, please call me at 336-5575.

Sincerely,

Kelly Randall, R.S., Soil Scientist
Individual Water and Wastewater Systems

FEE: 100.00
DATE: 5/11/96 CK # 1857

APPLICATION FOR IMPROVEMENT PERMIT FOR RESIDENTIAL SITE INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM

[ ] CRT

TYPE APPLICATION: ___ NEW SYSTEM ___ EXPANSION/ ALTERATION OF EXISTING SYSTEM ___ REPAIR OF EXISTING SYSTEM

NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT,
HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

COPY

FILE #: 14798

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 199-391-003

STREET ADDRESS: WINDY GAP ~~Rock Island~~ Road

SUBDIVISION OR MOBILE HOME PARK NAME: LAKE WYLIE

LOT NUMBER: CRESCENT LOT 62, SEC. 38

TYPE OF BUILDING (CHECK ONE):

___ SINGLE MOBILE HOME(S)
___ DOUBLE WIDE (D)
___ HOUSE (H)
___ MODULAR HOME (M)
___ MULTIPLE FAMILY (U)
___ OTHER (O)

TOWNSHIP (CHECK ONE):

___ 0 MECKLENBURG
___ 1 CHARLOTTE
___ 2 DAVIDSON
___ 3 CORNELIUS
___ 4 PINEVILLE
___ 5 MATTHEWS
___ 6 HUNTERSVILLE
___ 7 MINT HILL

HEATED SQUARE FOOTAGE:

NUMBER OF BEDROOMS: NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:

___ WITHOUT BASEMENT ON SLAB
___ CRAWL SPACE
___ WITH BASEMENT /PLUMBING
___ WITH BASEMENT /NO PLUMBING

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

WILL THERE BE A HOME BUSINESS IN THE RESIDENCE: ___ YES ___ NO TYPE: _____

WATER SUPPLY (CHECK ONE):
___ COMMUNITY (C) ___ MUNICIPAL (M) ___ PRIVATE WELL (P)
___ SHARED WELL (S) ___ OTHER 'SPRINGS' (O)

IF ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY, PLEASE SHOW LOCATION ON PLAT:

BURIED CABLES, LANDFILLS, STUMPHOLES ___ YES ___ NO
EXISTING WASTEWATER SYSTEMS ___ YES ___ NO
EASEMENTS OR RIGHT-OF-WAYS ___ YES ___ NO
WELL, SPRINGS OR WATERLINES ___ YES ___ NO
DESIGNATED WETLANDS ___ YES ___ NO

PROPERTY OWNER: CRESCENT RESOURCES, INC.

NAME: (LAST) SUSIE (FIRST) WILLIAMS (MI)

ADDRESS: P. O. Box 1003
400 South Tryon St. Suite 1300

CITY: Charlotte STATE: NC ZIP: 28201-1003

DAYTIME PHONE: (704 382-1708

LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:

NAME: MASK (LAST) NAN (FIRST) (MI)

DAYTIME PHONE: (704 362 0215

Charlotte, NC 28212

P.O. Box ~~100~~ 10225

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? May 1, 1969

An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

SIGNED Susie Williams Asst Sec. DATE: 6-11-96

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR., SUITE 211, 700 N. TRYON ST., CHARLOTTE, N.C. 28202., (704) 336-5102

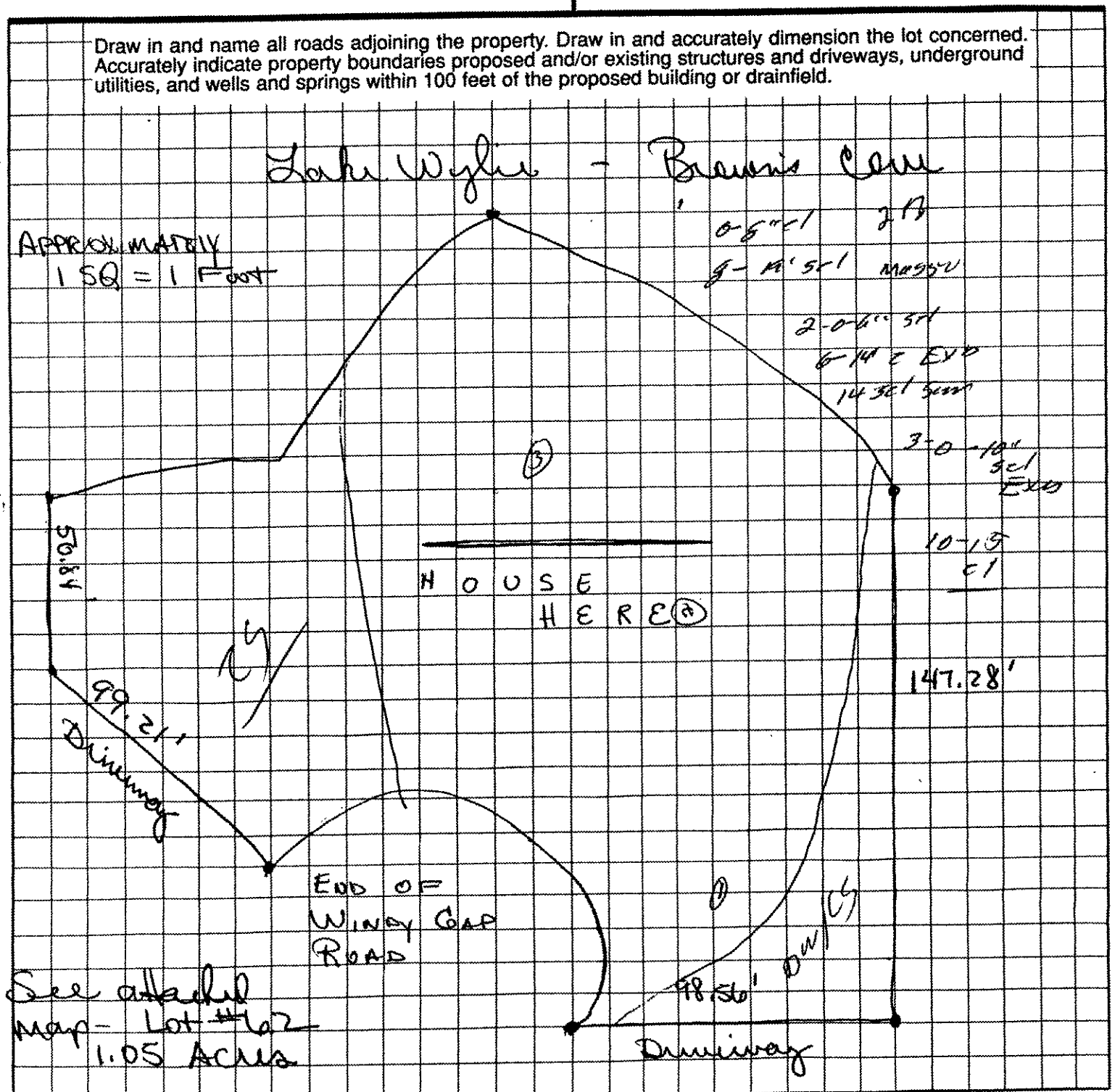
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON STREET
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 1479B.

TC: 99-391-03

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.

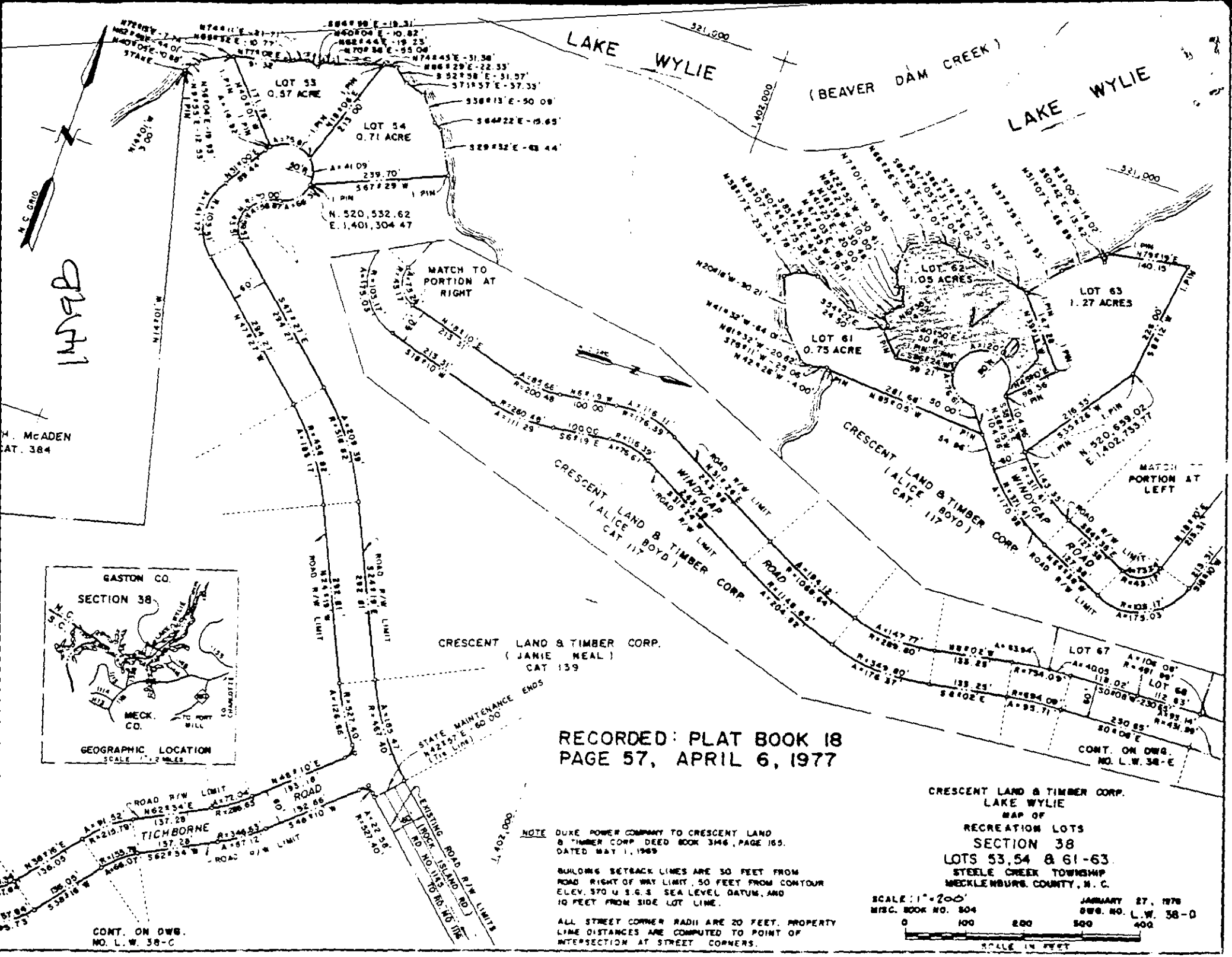


OWNER/AGENT SIGNATURE

DATE 7-1-96

APPROVAL DATE

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy



RECORDED: PLAT BOOK 18
PAGE 57, APRIL 6, 1977

NOTE DUKE POWER COMPANY TO CRESCENT LAND & TIMBER CORP DEED BOOK 3146, PAGE 165. DATED MAY 1, 1969

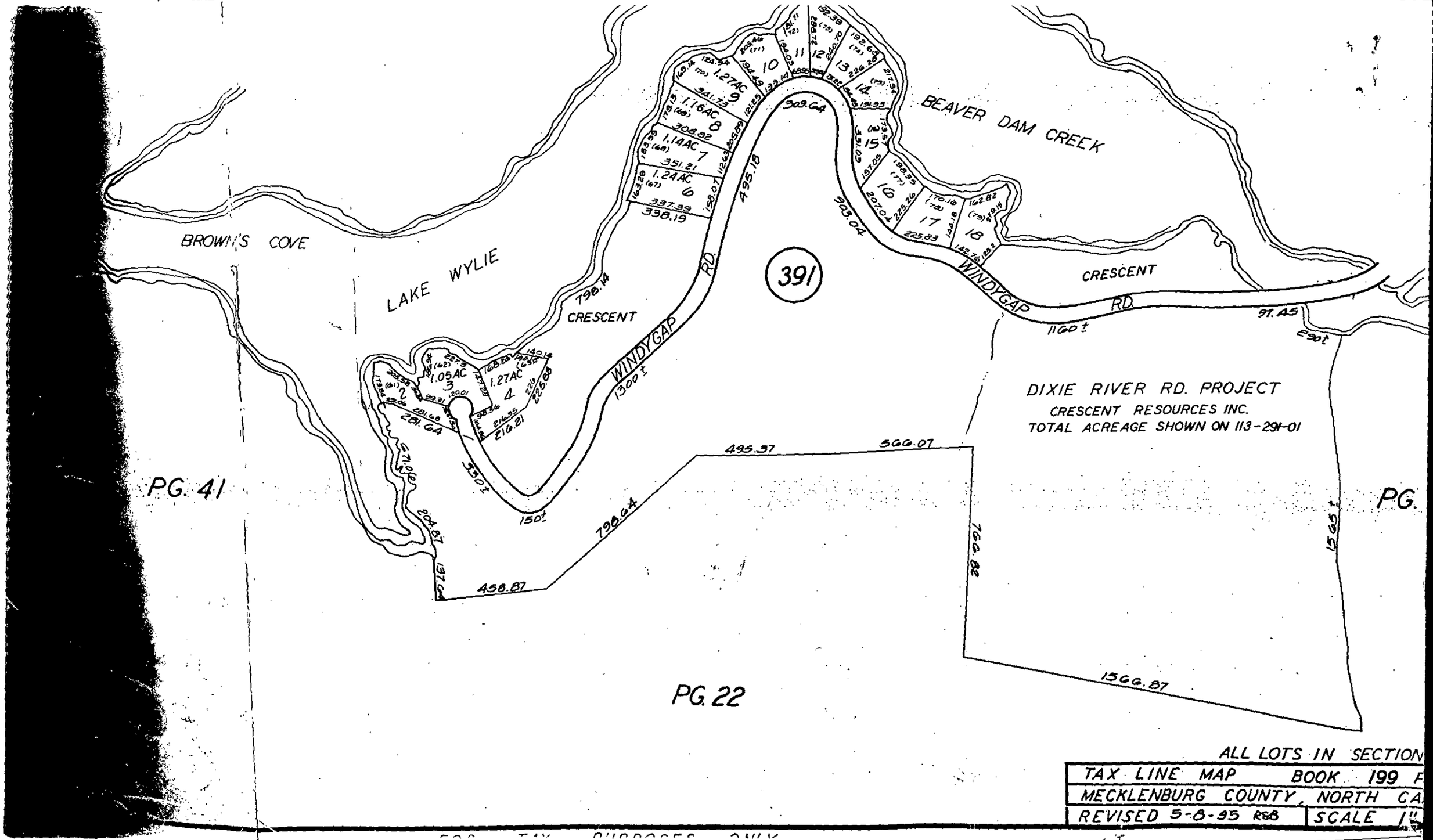
BUILDING SETBACK LINES ARE 30 FEET FROM ROAD RIGHT OF WAY LIMIT, 50 FEET FROM CONTOUR ELEV. 570 U.S.G.S. SEA LEVEL DATUM, AND 10 FEET FROM SIDE LOT LINE.

ALL STREET CORNER RADII ARE 20 FEET. PROPERTY LINE DISTANCES ARE COMPUTED TO POINT OF INTERSECTION AT STREET CORNERS.

CRESCENT LAND & TIMBER CORP.
LAKE WYLIE
MAP OF
RECREATION LOTS
SECTION 38
LOTS 53,54 & 61-63
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N. C.

SCALE: 1" = 200'
MISC. BOOK NO. 504
JANUARY 27, 1976
DWG. NO. L.W. 38-D

0 100 200 300 400
SCALE IN FEET


BROWN'S COVE
LAKE WYLIE
CRESCENT
WINDYGAP RD.
391
BEAVER DAM CREEK
CRESCENT
WINDYGAP RD.
1160 ±
97.45
290 ±
DIXIE RIVER RD. PROJECT
CRESCENT RESOURCES INC.
TOTAL ACREAGE SHOWN ON 113-291-01
PG. 41
PG. 22
PG.
ALL LOTS IN SECTION
TAX LINE MAP BOOK 199 F
MECKLENBURG COUNTY, NORTH CA
REVISED 5-8-95 RSB
SCALE 1"

DOSED GRAVITY INFILTRATOR SYSTEM (OFF-SITE)

LOT 62 - SECTION 38

9938 WINDY GAP ROAD

MECKLENBURG COUNTY - NORTH CAROLINA

MCHD FILE #1479B TAX PARCEL 199-391-03

by

Toney C. Jacobs & Associates, Inc.
Consulting Soil Scientists
168 Broadbill Drive
Mooresville, N. C. 28115

ofc (704)663-6905
fax (704)662-9845
e-mail jacobs@i-america.net



January 29, 1998



Submitted to: Mr. Kelly Randall, R.S.
Mecklenburg County Health Dept.
Charlotte, N. C.

Ms. Susie Williams
Crescent Resources, Inc.
P. O. Box 1003
Charlotte, NC 28201-1003

Toney C. Jacobs, CPSS

Paul G. Penninger

RECEIVED

Windy Gap Road (Lot 62 – Section 38)

GRAVITY DISTRIBUTION INFILTRATOR SYSTEM

Design Considerations

The proposed system is for a 3-bedroom waterfront home on a 1.05 acre lot in a rural area of single family homes in southern Mecklenburg County. The lot will not support an on-site septic system/ therefore, the seller, Crescent Resources, Inc., has added a second parcel of 0.432 acres and will transfer this as a septic area (maps enclosed). This provisionally suitable area is approximately 450 feet from the lot and was the closest usable septic area. Because of soil quality, the LTAR for this parcel and system is 0.25, a conservative rate but applicable for this soil. The property was recorded prior to January 1983; however, because of the added septic the 100% repair area is required.

Soils were evaluated by both Mr. Kelly Randall of the Mecklenburg County Health Department and Toney C. Jacobs & Associates. The system layout was by Toney C. Jacobs & Associates. To best use the added easement the chambered system was considered as the best suited system for the tract. The chambers are for the initial system with same repair. The septic system drainfield was flagged in the field as shown in Figure 1. The system will be pumped to a surge tank, gravity to d-box, and chambered system, using 5 x 72' lines. During construction and tree removal precautions should be taken to prevent damaging the system area. One large pile of broken concrete will have to be slid to the 10' buffer or be removed. The pump supply line is on the easement supplied by CRI and utilizes no part of the DOT right-of-way.

Location

The lot is at the end of Windy Gap Road. The system adjoins Windy Gap Rd on the left, just before the end.

Reference

(1) *Laws and Rules for Ground Absorption Sewage Disposal Systems 15A NCAC 18A. 1900,* NCDEHNR-DEH.

(2) Infiltrator product information

Recommendation

Three hundred and sixty (360) lineal feet of dosed Infiltrator lines using gravity distribution.

(Product information sheet on Infiltrator System, Inc. enclosed)

Ownership Responsibility

Conservation measures should be undertaken in plumbing fixture specifications to minimize the volume of wastewater entering the disposal system, including, but not limited to the following precautions:

(a) Provide water conserving plumbing fixtures within the facility. Waterclosets must be 1.6 gal. flush (per code). Shower head should also have restrictions or be of low volume design.

(b) Develop conservative water use habits.

(c) Monitor and maintain the system as necessary for proper operation. An Operation Permit will not require a maintenance contract to be filed with the Mecklenburg County Health Department for the system.

System must be properly installed by a *qualified* and *competent* contractor following the requirements of the Mecklenburg County Department of Environmental Health, DEH, the N.C. Building Code, Plumbing Code, and the Electrical Code. This plan, as any, is a guide to a minimum standard, but cannot take the place of experience and common sense.

Components of System

1. Two compartment septic tank - 1500 gal.
2. Pump tank 1000 gallons
3. Supply pipe
4. Minimum 50 gal concrete surge tank
5. Speed lever box or D-box with speed levelers
6. 360' of chambers with sand backfill on the sides.

Construction Sequence

1. Lines have been flagged as noted on drawing and in specifications.

2. Clear the area of all organic material with minimum soil disturbance (do not grade). Backfill any low areas with clean sandy loam to natural compaction and look. This includes soil evaluation pit and stump holes. There is old broken concrete to be removed in site preparation.

3. Install trenches per cited reference material and this plan.

4. Carefully backfill distribution trenches to grade with clean clay or clay loam soil fill material which is carefully placed and compacted.

5. The installation contractor shall stabilize the area of construction by planting with Kentucky 31 tall Fescue and mulching. Area to be limed and fertilized with 0.5 tons lime, 75 units of N, 150 units P, and 100 units of K per disturbed acre.

6. The septic tank shall consist of an approved 1500 gallon capacity reinforced, precast watertight, concrete tank with full baffle and shall have easy access to each chamber from ground level for inspection. The first chamber of the septic tank shall consist of 2/3 to 3/4 of the volume of the total tank and the baffle shall contain a horizontal opening across the tank at about midway . Locate the septic tank at such height as to provide approximately 8" of cover soil over top of the tank.

7. Final Landscaping: After the system is installed, the absorption field should be reshaped to shed rainwater and be free of low areas to insure that the system will not be overloaded with excess rainwater and run-on.

8. Supply pipe must have a metal locator tape or wire should it have to be located. This is required of this plan. Where this pipe goes under the drive, it must be greater than 48" deep. It could be sleeved in metal, but deeper is better and less expensive. Along the ROW pipe must be 48" deep.

9. The dosing tank shall consist of an approved 1000 gallon capacity, reinforced, precast, watertight concrete tank without baffle and shall have a concrete mounting pad (concrete blocks) for accommodating the pump. Test for leakage per regulations. Provide access for entry into the tank directly over the pump location, and extending 6" above final grade. Use a 30" diameter concrete well casing or equivalent and concrete well cap or other approved type cover. There must be a seal (masonry or seal rope) between well tile and top of tank.

10. All piping and fitting shall be SCH 40 PVC. Glue for all PVC pipe joints shall be as recommended by the pipe manufacturer.

11. Pump: The submerged pump shall be Model ME 50 manufactured by Myers or equal, 115 or 230 v/l phase; capable of pumping 16 gallons per minute at 47.2' of head.

12. Pump controls and alarm to meet specifications of .1952, all being compatible.

13. A "Warning Sign" shall be located within the house to inform the occupants of 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 upon malfunction of the system.

14. Pump and Controls: Details of pump installation are shown in the plan. The pump must be placed on concrete blocks on the bottom of the tank. This prevents the pumping of any solid particles which can clog the pipe system. A piece of nylon rope or other non-corrodible material should be attached to the pump and the outlet pipe for lifting the pump in and out of the chamber. Controls should be fastened to a "tree" or the outlet pipe with clamps or brackets supplied by the manufacturer. The lower level control or "pump-off" must be positioned above the pump, so that the pump remains submerged at all times. The level control "pump-on" is positioned to pump a specified volume of effluent. The high water control float is then mounted about 3" above the upper pump-on control. (Note: Care must be taken to insure that floats do not become fouled by other components in the tank, such as the electric power cord or the lifting rope. It is highly recommended that a telescoping "tree" be used for floats to facilitate adjustments.) The pump outlet pipe should be connected to the supply manifold with a threaded PVC union (or dresser coupling) to allow quick removal.

15. Electrical Connections: The pump and high water alarm must be placed on separate electrical circuits. (If the pump circuit fails, the alarm must still be able to operate). Follow the manufacturers recommendations for the proper fuses or circuit breakers. All electrical connections must be made outside the pumping chamber. Power cords from the pumps and controls should be plugged into a NEMA 4X approved outdoor receptacle. This must not be located inside the pumping chamber due to the corrosive and explosive gasses that may form from the sewage. This box must be a minimum of 1' above finished grade. Some level control switches have a box built into the housing, but are more expensive than the plug-in devices. Wiring between the pumping chamber and the station should meet State and local code requirements. A lightning arrester is recommended to protect the pump and controls from electrical surges.

16. Proper Operation Check: After all components have been installed and connected, the system should be checked for proper operation. With electrical power turned off, fill the pumping chamber with water from garden hose until the liquid rises to the level of the high-water alarm float. Turn on the electrical power. The alarm light should go on in the house, and the pump should start operating. The alarm light should go off when the liquid reaches the lowest float control. Be sure the pump is still completely submerged.

17. With someone at the surge tank, turn pump on and set gate valve at surge tank to deliver 13 gpm.

18. With an open end box and this pump size, the calculation for a pressure release valve indicator is not needed. Should an air lock occur, the valve can be added on the high point of the supply line.

Concluding Note:

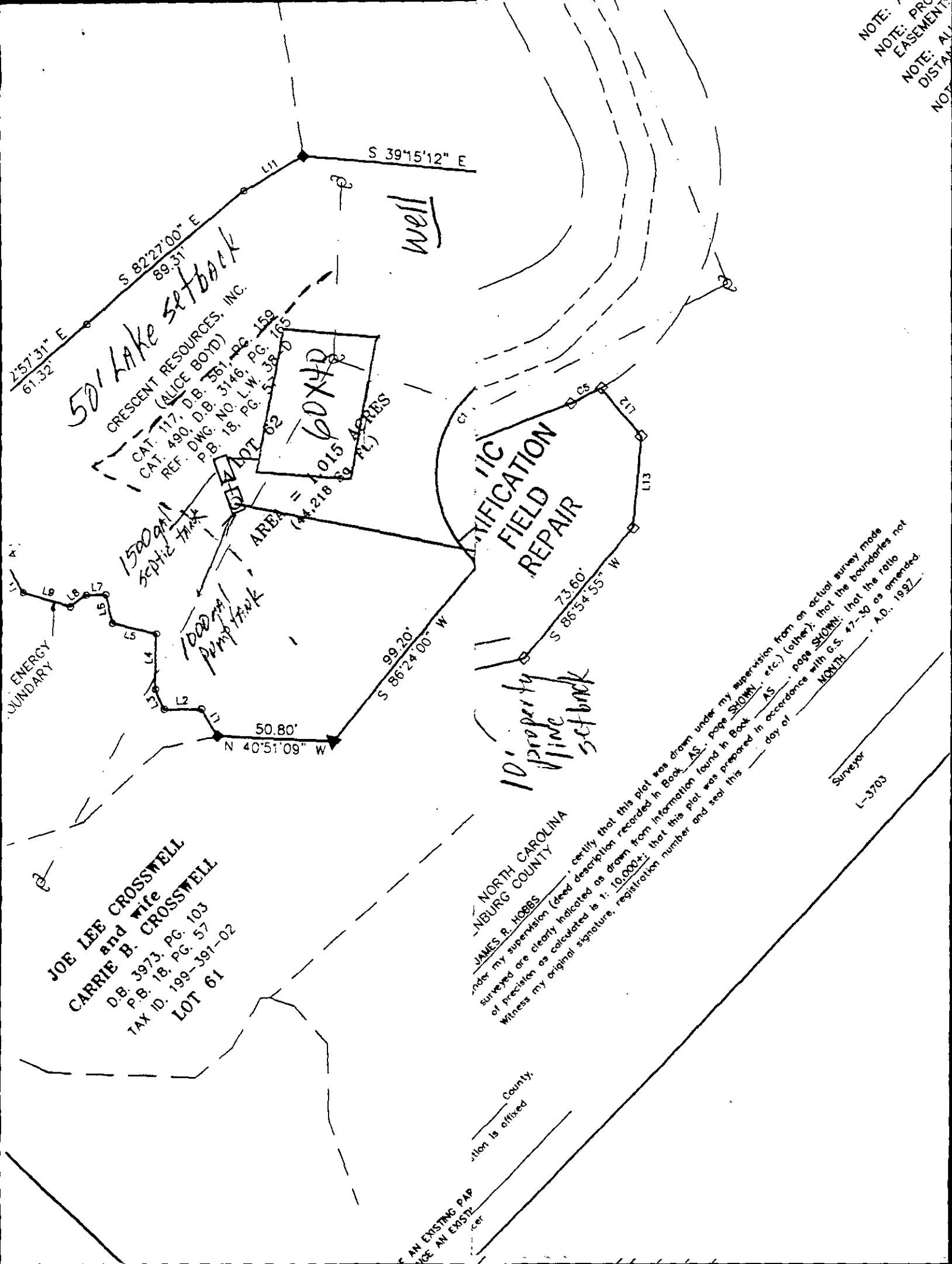
This plan was done to facilitate permitting by the Mecklenburg County Health Department by an agent of the seller (CRI). Because of the complexity of this system, a pre-installation meeting between Toney C. Jacobs & Associates and the installer is recommended if needed. This pre-construction meeting will be billed to the builder or client at current rates. At this time the pump size can be adjusted if necessary. Any additions, or additional requirement(s), or deletions to enhance design or workability which will facilitate a permit are welcomed and may be made by note on this plan without returning entire design. The designer realizes that a plan with as many details as this can be changed and/or improved upon. The installer must realize that this is an exact plan and must be followed and installed with exacting measurements. Should the installer desire a change, it must be approved by the health department in writing. Final inspection will also require more time and detail than a conventional system. If there are questions, please give me a call.

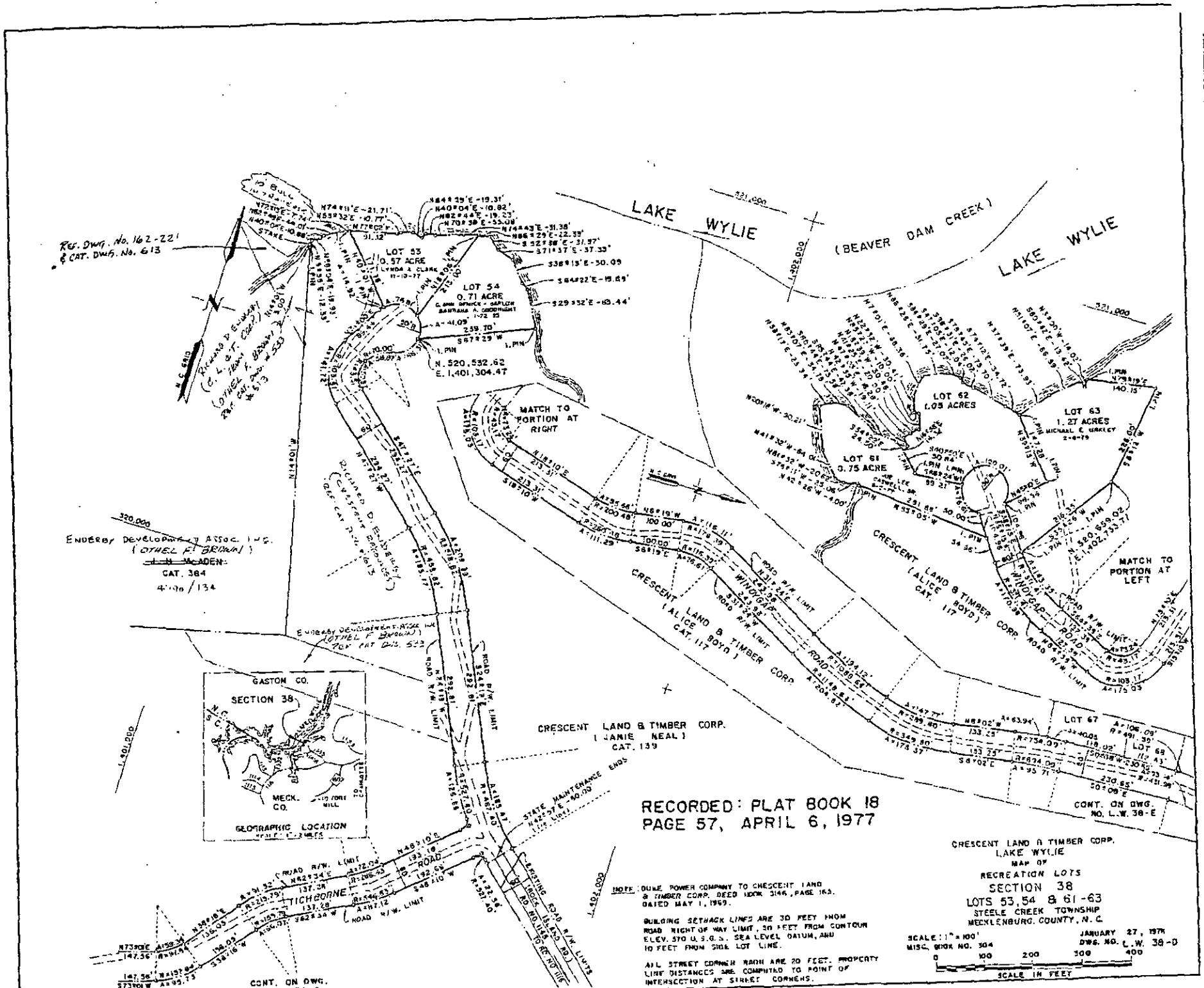
Design Specifications

Windy Gap Road (Lot 62 – Section 38)

Daily design flow:	360gpd.
Septic tank size:	1500 gal. (2 compartments)
Pumping tank size:	1000 gal.
Effluent loading rate:	0.25gpd/sf initial system concur w/ TJ+Associate soil evaluation repair same
Total length and diameter of supply manifold:	app. 450 lf-2" 40 PVC (R) 6-18-98
Number and length of laterals:	5 @ 72' long
Speed lever control:	5 required
Flow rate through the system:	25 gpm capability
Elevation head:	30' *
Pressure head:	3.0'
Friction head:	8.0'
15% contingency	6.2'
Total head:	47.2'
Pump requirements:	16 gpm at 47.2' of head; use Myers ME 50 ½hp pump or equivalent with compatible electrical
Dosing volume:	240 gal. – 1.5 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 gals.)
Pump run per dose:	approx. 15.0 min. (run time control of dose
Check valve:	Yes
Siphon break hole:	No

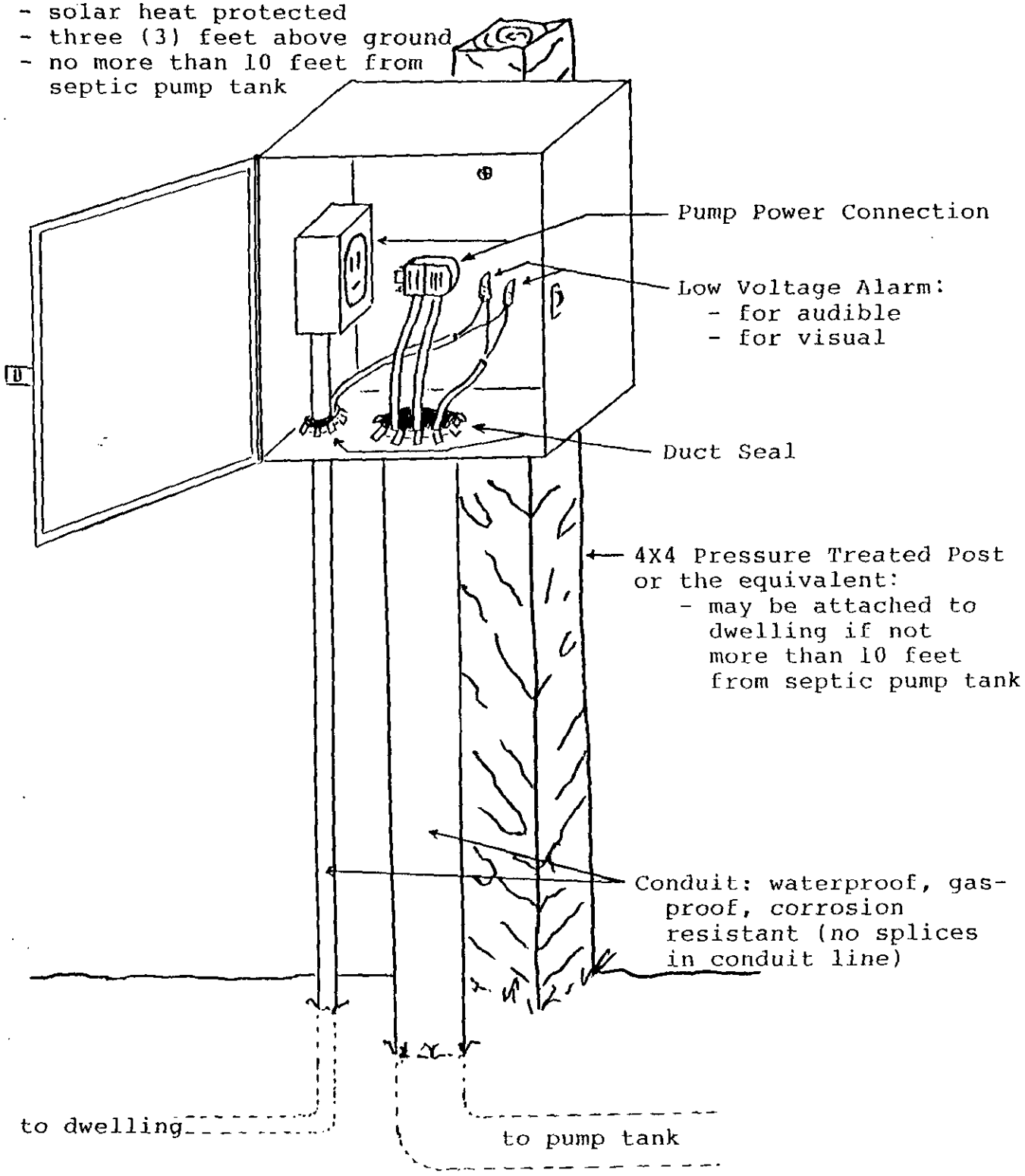
* This is lowest pump tank placement. If house and tank are back from lake, this could be reduced and require a smaller pump. (Mecklenburg County topo enclosed)


S 39°15'12" E
S 82°27'00" E
89.31'
2°57'31" E
61.32'
50' LAKE setback
well
CRESCENT RESOURCES, INC.
(ALICE BOYD)
CAT. 117, D.B. 361, PG. 159
CAT. 490, D.B. 3146, PG. 165
REF. DWG. NO. L.W. 38-D
P.B. 18, PG. 5
LOT 62
60'x40'
1,015 SQ. FT.)
AREA = 1.015 ACRES
(44,218 SQ. FT.)
1500gal
SEPTIC TANK
1000gal
pump tank
ENERGY
OUNDARY
99.20'
S 86°24'00" W
50.80'
N 40°51'09" W
73.60'
S 86°54'55" W
10' property line setback
FIELD
REPAIR
JOE LEE CROSSWELL
and wife
CARRIE B. CROSSWELL
D.B. 3973, PG. 103
P.B. 18, PG. 57
TAX ID. 199-391-02
LOT 61
NORTH CAROLINA
NBURG COUNTY
JAMES R. HOBBS, certify that this plot was drawn under my supervision from an actual survey made
nder my supervision (deed description recorded in Book AS, page SHOWN, etc.) (other); that the boundaries not
surveyed are clearly indicated as drawn from information found in Book AS, page SHOWN; that the ratio
of precision as calculated is 1: 10,000+; that this plot was prepared in accordance with G.S. 47-30 as amended.
Witness my original signature, registration number and seal this day of MONTH, A.D., 1997.
Surveyor
L-3703
County.
tion is affixed
F AN EXISTING PAR
NCE AN EXISTI
ver

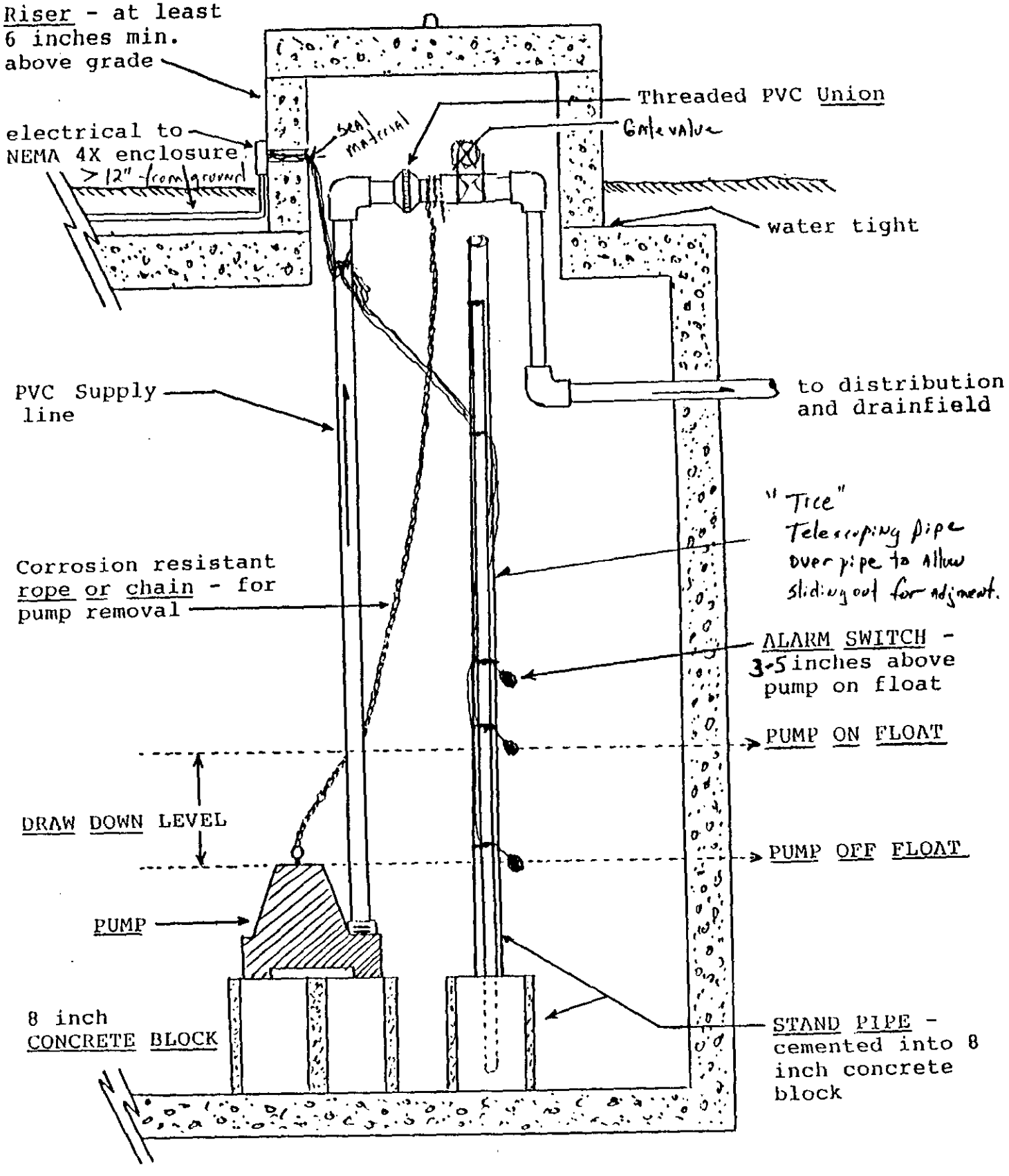

LAKE WYLIE
(BEAVER DAM CREEK)
LAKE WYLIE
LOT 53
0.57 ACRE
LOT 54
0.71 ACRE
LOT 62
1.03 ACRES
LOT 63
1.27 ACRES
LOT 61
0.75 ACRE
LOT 67
MATCH TO PORTION AT RIGHT
MATCH TO PORTION AT LEFT
CRESCENT LAND & TIMBER CORP.
(ALICE BOYD)
CAT. 117
CRESCENT LAND & TIMBER CORP.
(JANIE NEAL)
CAT. 139
ENDERBY DEVELOPMENT ASSOC. INC.
(OTHEL F. BROWN)
CAT. 384
WINDYGAP ROAD
TICHBORNE ROAD
GASTON CO.
SECTION 38
MECK. CO.
GEOGRAPHIC LOCATION
RECORDED: PLAT BOOK 18
PAGE 57, APRIL 6, 1977
CRESCENT LAND & TIMBER CORP.
LAKE WYLIE
MAP OF
RECREATION LOTS
SECTION 38
LOTS 53, 54 & 61-63
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N. C.
SCALE: 1" = 100'
JANUARY 27, 1978
DWG. NO. L.W. 38-D
MISC. BOOK NO. 304
0 100 200 300 400
SCALE IN FEET
NOTE: DUKE POWER COMPANY TO CRESCENT LAND & TIMBER CORP. DEED BOOK 3146, PAGE 165, DATED MAY 1, 1969.
BUILDING SETBACK LINES ARE 30 FEET FROM ROAD RIGHT OF WAY LIMIT, 30 FEET FROM CONTOUR ELEV. 570 U.S.G.S. SEA LEVEL DATUM, AND 10 FEET FROM SIDE LOT LINE.
ALL STREET CORNER RADII ARE 20 FEET. PROPERTY LINE DISTANCES ARE COMPUTED TO POINT OF INTERSECTION AT STREET CORNERS.
CONT. ON DWG. NO. L.W. 38-E
CONT. ON DWG.
Rec. Dwg. No. 162-221
& Cat. Dwg. No. 613

NEMA 4X ENCLOSURE must be:

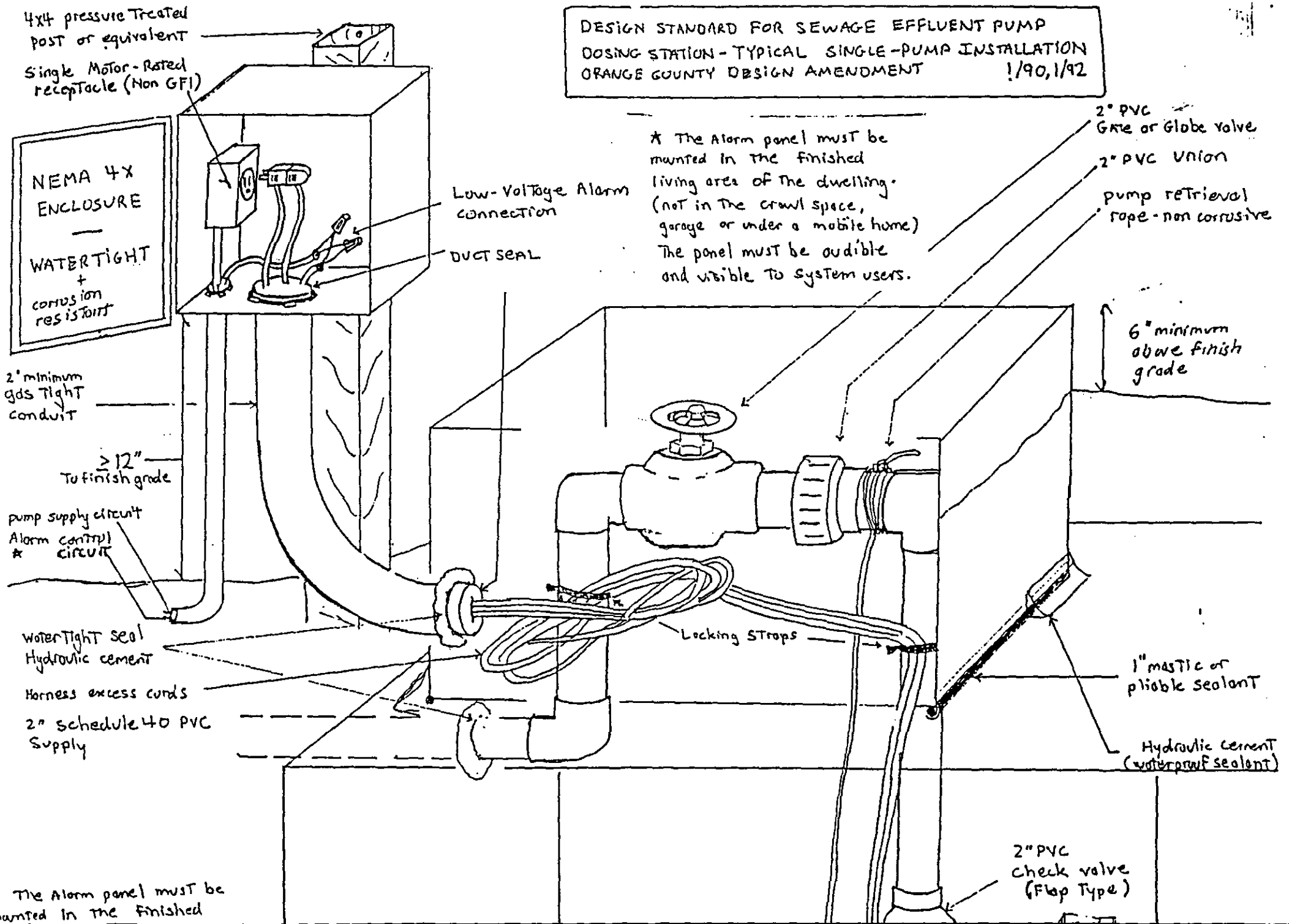
- water tight
- corrosion resistant
- solar heat protected
- three (3) feet above ground
- no more than 10 feet from septic pump tank



PUMP DIAGRAM



DESIGN STANDARD FOR SEWAGE EFFLUENT PUMP
DOSING STATION - TYPICAL SINGLE-PUMP INSTALLATION
ORANGE COUNTY DESIGN AMENDMENT 1/90, 1/92



* The Alarm panel must be mounted in the finished

Soil Notes

1

0-43

ml (cl)

PS. 3

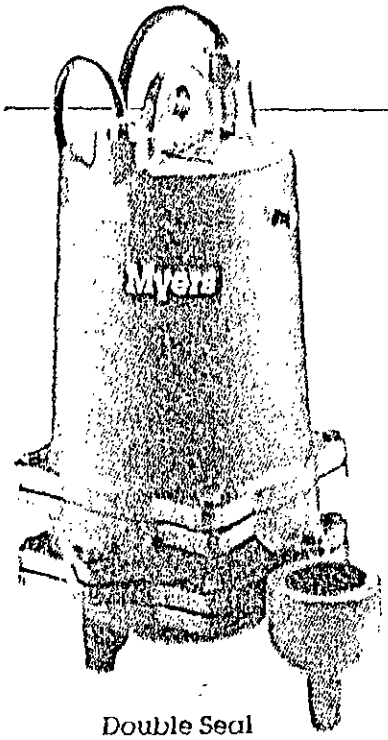
2

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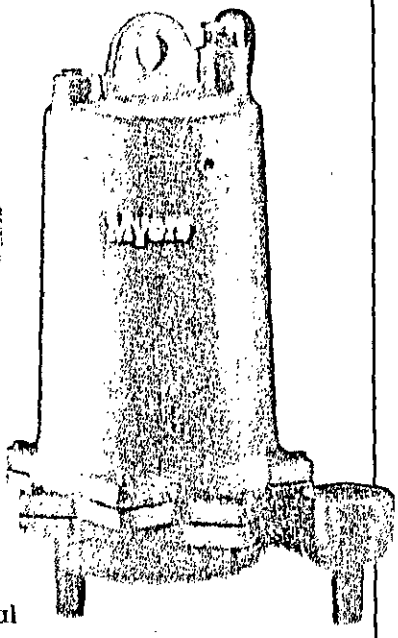
SM

ME SERIES

1/3 through 1-1/2 HP
Effluent Pumps



Double Seal



Single Seal

THE MYERS ME SERIES EFFLUENT PUMPS ARE DESIGNED SPECIFICALLY FOR TODAY'S EFFLUENT PRESSURE DISTRIBUTION MOUNDS, TRENCHES AND HIGH FLOW DRAINAGE APPLICATIONS. The ME Series effluent pumps with their efficient two vane, enclosed impellers, provide the ideal performance for optimum dosing. ME Series pumps are constructed of only corrosion resistant materials like cast iron, stainless steel and thermoplastics to assure that they will perform for years to come in the harsh effluent environment and drainage applications. For more information, call your Myers distributor today or the Myers Ashland, Ohio sales office at 419/289-1144.

ADVANTAGES BY DESIGN

IDEAL FOR USE IN MOUND AND TRENCH PRESSURE DISTRIBUTION SYSTEMS

- High efficiency, two vane, enclosed impeller provides ideal performance for most efficient dosing.
- Impeller passes full ¾ inch solids.
- Enclosed impeller design eliminates possibility of jamming or corrosion between impeller and volute.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- High torque, permanent split capacitor (PSC), single phase motors. No starting switches or relays to wear out.
- Optional seal leak probe warns of seal leak condition. (Dual seal motors only.) Helps prevent costly motor damage.
- Motors have on winding current and temperature sensitive overload. (Single phase only.)

THE ME SERIES EFFLUENT PUMPS ARE DESIGNED FOR YEARS OF MAINTENANCE FREE OPERATION

- Volute seal ring is replaceable. Restores pump to original performance if wear should occur.
- Motor is held in place by 4 screws. Easily removed if service is ever needed.

PRODUCT CAPABILITIES

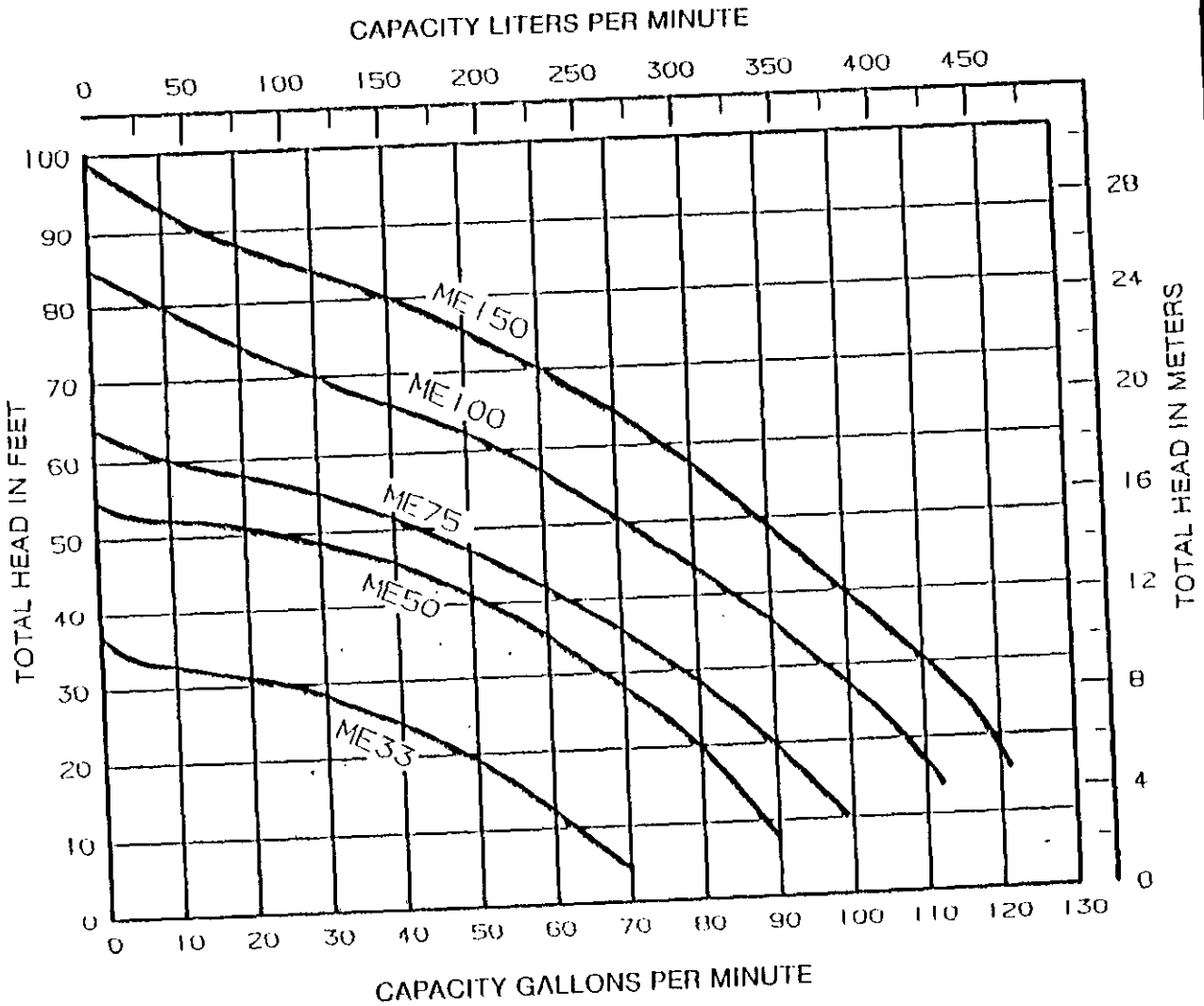
Capacities To	120 GPM	454 LPM
Heads To	98 ft.	29.8 m
Max. Spherical Solids	¾ in.	19 mm
Liquids Handling	domestic effluent & drain water	
Intermittent Liquid Temp.	up to 140° F	up to 60° C
Motor Electrical Data	1/3 & 1/2 HP, 115 volts, 1 ph 1/3 to 1-1/2 HP, 230 volts, 1 ph 208, 230, 460, 575 volts, 3 ph oil-filled, permanent split capacitor type, 1 ph, 3450 rpm, 60 Hz	
Motor Insulation	Class B (130°C)	
Third Party Approvals	Pending	
Acceptable pH Range	6-9	
Specific Gravity	.9-1.1	
Viscosity	28-35 SSU	
Discharge, NPT	2 in.	50.8 mm
Min. Sump Dia. Simplex Duplex	24 in. 36 in.	61 cm 91.4 cm

Construction Materials	
Motor Housing, Volute	cast iron, Class 30, ASTM A48-76
Enclosed Two Vane Impeller Standard Optional	engineered thermoplastic bronze
Impeller Wear Ring	304 SST
Volute Sealing Ring	Buna-N
Shaft	416 SST
Power Cord 1/3 & 1/2 HP, 1 Ph 3/4 - 1-1/2 HP, 1 Ph All 3 Ph	 20 ft. 16/3 SJOW/SJOW-A 20 ft. 14/3 SJOW/SJOW-A 20 ft. 14/4 SOW/SOW-A
Shaft Seals Standard Optional Opt. Lower	single carbon & ceramic tandem carbon & ceramic tungsten carbide
Fasteners	300 Series SST

WHERE INNOVATION MEETS TRADITION

Myers®

ME Series
1/3 through 1-1/2 HP
Effluent Pumps
Performance Curve



F.E. Myers, A Pentair Company • 1101 Myers Parkway, Ashland, Ohio 44805-1923
419/289-1144 FAX 419/289-6658 Telex 98-7443

Printed in U.S.A.

K3327 7/91

The Original Infiltrator® Chamber System for Septic Leachfields.

INFILTRATOR®
SYSTEMS INC



Infiltrator Systems Inc., the industry leader in septic and stormwater chamber system technology.

Five million chambers already in service.
In just ten years, the innovative leaching chambers of Infiltrator Systems have drastically changed the technology of on-site septic and stormwater disposal. Already, 5 million chambers have been installed in 46 states, Canada and other countries, forming over 90 million square feet of chamber systems with a success rate of 99.5%. And, we're expanding at the rate of 9,000 new systems a month.

Environmentally concerned company.
Infiltrator Systems devotes over $500,000 a year to research and development, creating new products that operate more and more efficiently and conserve natural resources. Besides using recycled resins, Infiltrator Systems' products take better care of the environment by avoiding the mining, crushing, grading, washing and hauling of stone, as well as the environmental impact and site disruption that stone causes. That's one of our "greener" ideas for septic and stormwater disposal that just makes sense.

Infiltrator stormwater management.
Besides our septic chamber systems, Infiltrator Systems is on the leading edge of the emerging stormwater management field. The subsurface Maximizer™ Chamber System, with its unmatched strength and practically 100% void volume, replaces ponds, large diameter pipe and stone, vaults, and dry wells. This system gives designers better solutions for both retention and detention projects, so they can fully utilize valuable above-ground land.







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U.S. Patents: 4,759,661; 5,017,041; 5,156,488; 5,336,017; 5,401,116; 5,401,459; 5,511,903; 5,588,778; 1,815,925; 1,974,938; 1,729,383; 448,338
Canadian Patents: 1,329,959; 2,004,564 Other U.S., Canadian, and foreign patents pending.

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BK: 09718 PG: 0876/0878 #:0393 12.35
JUDITH A GIBSON REG OF DEEDS MECK NC
FILED FOR REGISTRATION 06/04/98 13:37

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

WASTEWATER TREATMENT AND DISPOSAL SYSTEM DESIGN AGREEMENT: 15A NCAC 18A .1948 AND ANY OF THE FOLLOWING RULES: .1956; .1957(a); .1957(b); or .1957(c); OR .1969

FILE # 14798
PARCEL # 199-391-03

The undersigned, Crescent Resources, Inc., owner of property located at 9938 Windy Gap Rd., (the "site") and described in an instrument recorded in Book _____ at Page _____, Mecklenburg Public Registry, hereby acknowledges that the undersigned applied to the Mecklenburg County Health Department (the "Department") for a permit to install a septic tank sewage disposal system on the site; that the Department evaluated the site for suitability for such a system in accordance with the regulations promulgated by the North Carolina Commission for Health Services as 15A NCAC 18A .1900 et seq.; that the Department originally classified the site as "unsuitable" pursuant to the standards set forth in the regulations; that the undersigned requested that the Department reclassify the site as "provisionally suitable" in light of the particular septic tank system proposed by the undersigned; that the Department considered various studies, data, and other information which indicate to the Department that the septic tank system proposed by the undersigned is allowed by the rules; and that the Department therefore reclassified the site as "provisionally suitable" and issued an appropriate permit for such proposed septic tank system.

The undersigned further acknowledges that the proper design, construction, operation and maintenance of such septic tank system is the responsibility of the designer, owner, developer, installer, or user of the system, as applicable, and that neither the Department nor its officials, employees, or agents warrant or guarantee that the said system installed pursuant to the permit issued by the Department will function in a satisfactory manner for any given period of time or that the Department, its officials, employees or agents assume any liability for any damages of any kind which are caused, or which may be caused, by a malfunction of such system.

The undersigned further acknowledges that the following conditions will apply to the site:

- Any changes on the property may make the Improvement Permit Null and void and may make the Improvement Permit subject to revocation.

This instrument was prepared by: CRESCENT RESOURCES, INC.
Mail after recording to: Susie Williams, Crescent Resources, Inc.
P. O. Box 1003, Charlotte, NC 28201-1003

3

- Do not grade, cut, fill, pave, construct a building or deck, dig a well, install a swimming pool or otherwise cover or disturb the soil (except for planting and maintaining grass or other ground covers) in a manner which will adversely affect the repair area or area where the septic tank system is located.

- When a private certified operator is required, no improvement permit for the designated repair shall be issued unless there is a private certified operator to carry out this management program in the service area where the proposed system is to be located. (Refer to Rule .1961, "Maintenance of Sewage Systems," for further information.)

- Additional fees will be required according to the Mecklenburg County user fee schedule applicable at the time for the issuance of a repair permit for any subsequent repairs to the sewage treatment and disposal system or for installation of a replacement system.

- At the time repairs to the sewage treatment and disposal system are to be made or a replacement system installed, the regulations in effect at that time will govern the repairs or installation of a replacement system.

The undersigned further agrees for himself, his heirs and assigns that he shall indemnify and hold harmless the Department, its employees, and officials, as well as Mecklenburg County and its employees and officials, for any damages or other claims of any person or persons whatsoever arising out of the installation, operation, or failure of said septic tank system.

Use of the singular masculine pronoun forms herein shall be deemed to also include the plural and feminine forms as the context may require.

This document shall be placed on the public records of the Register of Deeds of Mecklenburg County and indexed therein under the Grantor Index in the name or names of the undersigned, and the foregoing acknowledgements shall henceforth be binding on all persons claiming any right, title, or interest in the site.

IN WITNESS WHEREOF, the undersigned has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, this 9th day of February, 1998.

CRESCENT RESOURCES, INC. _____ (SEAL)
(Corporate Name)

_____ (SEAL)

By: James M. Short, Jr. _____ (SEAL)
James M. Short, Jr.

Vice President _____ (SEAL)

ATTEST:

Ethelene G. Williams
Assistant Secretary

(Corporate Seal)

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Linda Myers, a Notary Public for said County and State, do hereby certify that Ethelene G. Williams personally came before me this day and acknowledged that she is Assistant Secretary of CRESCENT RESOURCES, INC., a North Carolina corporation, and that by authority duly given and as the act and deed of said corporation, the foregoing instrument was signed in its name by its Vice President. sealed with its corporate seal and attested by herself as its Assistant Secretary.

WITNESS my hand and notarial seal, this 9th day of February, 1998.

LINDA MYERS NOTARY PUBLIC MECKLENBURG COUNTY, N.C. My Comm. Exp. February 12, 2002

Notary Public

My Commission Expires:
February 2, 2002

RBCWM:24751_1/8-30-95

FEE: 100.00
DATE: 7/11/96 Ck # 1857

APPLICATION FOR IMPROVEMENT PERMIT FOR RESIDENTIAL SITE INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM

I] CRT

TYPE APPLICATION: ___ NEW SYSTEM __ EXPANSION/ ALTERATION OF EXISTING SYSTEM ___ REPAIR OF EXISTING SYSTEM

NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT,
HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

FILE #: 1479B

PROPERTY INFORMATION (FROM ENGINEERING FORM) FOR JOB LOCATION:

TAX/PARCEL NUMBER: 199-391-003

STREET ADDRESS: WINDY GAP ~~Rock Island~~ Road

SUBDIVISION OR MOBILE HOME PARK NAME: LAKE WYLIE

LOT NUMBER: CRESCENT LOT 62, SEC. 38

TYPE OF BUILDING (CHECK ONE):

___ SINGLE MOBILE HOME(S)
___ DOUBLE WIDE (D)
___ HOUSE (H)
___ MODULAR HOME (M)
___ MULTIPLE FAMILY (U)
___ OTHER (O)

TOWNSHIP (CHECK ONE):

___ 0 MECKLENBURG
___ 1 CHARLOTTE
___ 2 DAVIDSON
___ 3 CORNELIUS
___ 4 PINEVILLE
___ 5 MATTHEWS
___ 6 HUNTERSVILLE
___ 7 MINT HILL

HEATED SQUARE FOOTAGE:

NUMBER OF BEDROOMS: NUMBER OF OCCUPANTS:

FOUNDATION FOR RESIDENCE:

___ WITHOUT BASEMENT
___ ON SLAB
___ CRAWL SPACE
___ WITH BASEMENT /PLUMBING
___ WITH BASEMENT /NO PLUMBING

IF EXPANSION/ALTERATION OF EXISTING SYSTEM, DESCRIBE THE PROPOSED BUILDING ADDITION:

WILL THERE BE A HOME BUSINESS IN THE RESIDENCE: ___ YES ___ NO TYPE: _____

WATER SUPPLY (CHECK ONE):
___ COMMUNITY (C) ___ MUNICIPAL (M) ___ PRIVATE WELL (P)
___ SHARED WELL (S) ___ OTHER 'SPRINGS' (O)

IF ANY OF THE FOLLOWING ARE LOCATED ON THE PROPERTY, PLEASE SHOW LOCATION ON PLAT:

BURIED CABLES, LANDFILLS, STUMPHOLES ___ YES ___ NO
EXISTING WASTEWATER SYSTEMS ___ YES ___ NO
EASEMENTS OR RIGHT-OF-WAYS ___ YES ___ NO
WELL, SPRINGS OR WATERLINES ___ YES ___ NO
DESIGNATED WETLANDS ___ YES ___ NO

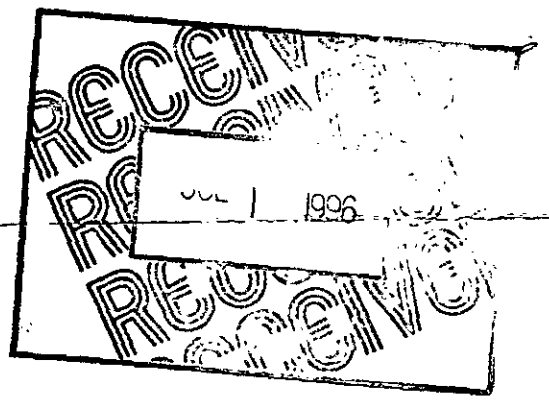
PROPERTY OWNER: CRESCENT RESOURCES, INC.	LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE:
NAME: (LAST) (FIRST) (MI)	NAME: Mask Nan (LAST) (FIRST) (MI)
ADDRESS: P. O. Box 1003 400 South Tryon St. Suite 1300	DAYTIME PHONE: (704 362 0215
CITY: Charlotte STATE: NC ZIP: 28201-1003	Charlotte, NC 28212
DAYTIME PHONE: (704 382-1708	P.O. Box ~~100~~ 10275

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? May 1, 1969

An Improvement Permit is subject to suspension or revocation if site plans or the intended use change or if information submitted in this application is falsified or changed. The undersigned, owner, or legal agent for the owner, of the property described above as the "Job Location" has read the foregoing application, acknowledges that the contents of same are true, and authorizes agents of the Mecklenburg County Health Department to enter onto the property for the purpose of processing this request.

SIGNED Susie Williams, Asst Sec. DATE: 6-11-96

MECKLENBURG COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
c/o HAL MARSHALL CTR., SUITE 211, 700 N. TRYON ST., CHARLOTTE, N.C. 28202., (704) 336-5102


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DEC 1 1996
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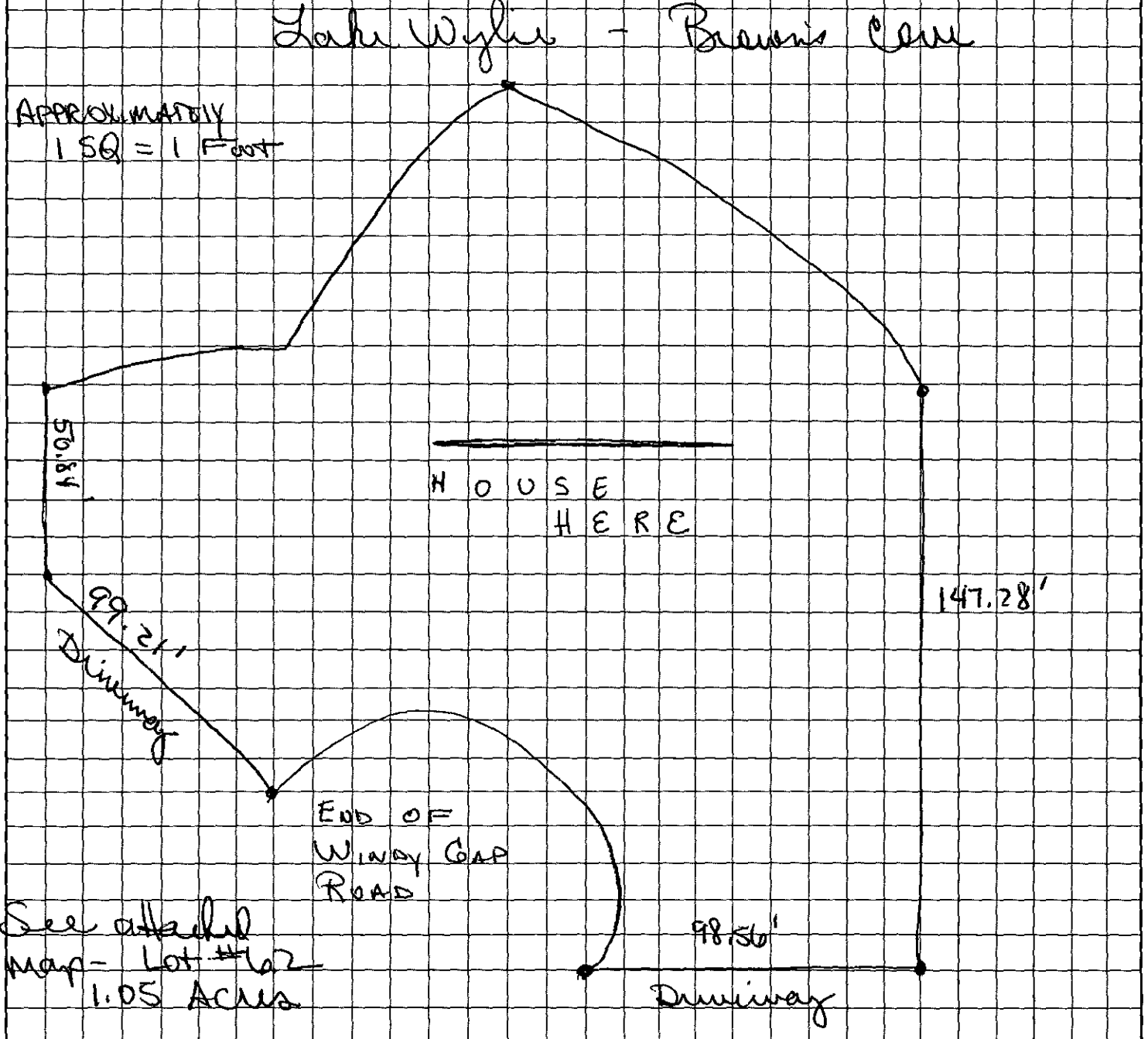
PROPOSED PLOT PLAN

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
700 NORTH TRYON STREET
CHARLOTTE, NC 28202
PHONE (704) 336-5102

FILE: 1479B

TC: 99-391-03

Draw in and name all roads adjoining the property. Draw in and accurately dimension the lot concerned. Accurately indicate property boundaries proposed and/or existing structures and driveways, underground utilities, and wells and springs within 100 feet of the proposed building or drainfield.

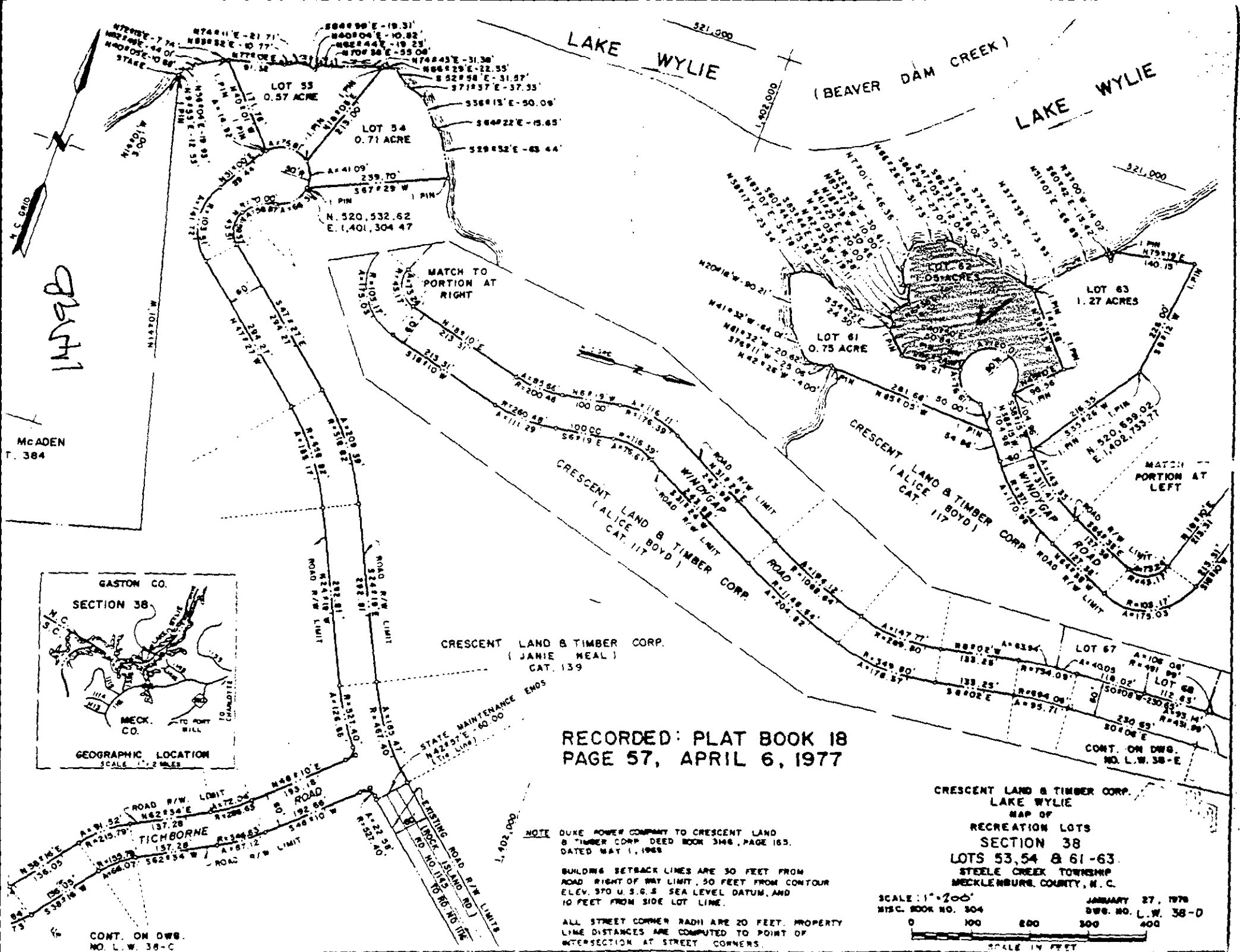


D. Mask
OWNER/AGENT SIGNATURE

DATE 7-1-96

APPROVAL DATE _____

White - Health Department's Copy Canary - E.H.S. Copy Pink - Owner's Copy



RECORDED: PLAT BOOK 18
PAGE 57, APRIL 6, 1977

NOTE DUKE POWER COMPANY TO CRESCENT LAND & TIMBER CORP. DEED BOOK 3146, PAGE 165. DATED MAY 1, 1968

BUILDING SETBACK LINES ARE 30 FEET FROM ROAD RIGHT OF WAY LIMIT, 50 FEET FROM CONTOUR ELEV. 570 U.S.G.S. SEA LEVEL DATUM, AND 10 FEET FROM SIDE LOT LINE.

ALL STREET CORNER RADII ARE 20 FEET. PROPERTY LINE DISTANCES ARE COMPUTED TO POINT OF INTERSECTION AT STREET CORNERS.

CRESCENT LAND & TIMBER CORP.
LAKE WYLIE
MAP OF
RECREATION LOTS
SECTION 38
LOTS 53, 54 & 61-63
STEELE CREEK TOWNSHIP
MECKLENBURG COUNTY, N. C.

SCALE: 1" = 200' JANUARY 27, 1978
MISC. BOOK NO. 304 DWG. NO. L.W. 38-D

0 100 200 300 400
SCALE IN FEET

DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Sheet
PROPERTY ID #:
COUNTY:

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

#3 14798
149-391-03

OWNER: Coastal Resources Corp.
ADDRESS: Box 1003 Hwy 17 Tryon St. Chas.
PROPOSED FACILITY: residence
LOCATION OF SITE: Wilmington Bypass Rd
APPLICANT:
APPLICATION DATE:
PROPOSED DESIGN FLOW (.1949): Not given
DATE EVALUATED:
PROPERTY SIZE: Lot
PROPERTY RECORDED:

WATER SUPPLY: ☑ Private ☐ Public ☐ Well ☐ Spring ☐ Other
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	1940 LANDSCAPE POSITION/ SLOPE % (Slope 2%)	HORIZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) STRUCTURE/ TEXTURE	SOIL MORPHOLOGY (.1941) CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
1	LS	0-8"	gr/cl	Fr/SEAP/SS/SP	> 14" To Chroma 2 Colors	14"	N/A	None	US
		8-19"	Mod vfsbk/cl	VF/SEAP/SS/SP					
2	LS	0-6"	gr/scl	Fr/SEAP/SS/SP	> 14" To Chroma 2 Colors	14"	N/A	None	US
		6-14"	SBK/c	F/EXP/S/P					
3	LS	0-10"	SBK/c	F/EXP/SP	> 10" To Chroma 2 Colors	10"	N/A	None	US
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	US	US
System Type(s)		

OTHER FACTORS (.1946):
SITE CLASSIFICATION (.1948): Recommended
EVALUATED BY: W. R. Meeks 2-12-96
OTHER(S) PRESENT:

OMMENTS: Does not appear to be wet at depth

LEGEND

use the following standard abbreviations

ANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL 1955 LTAR	LPP 1957 LTAR	MINERALOGY/ CONSISTENCE	STRUCTURE
C (Concave Slope) V (Convex Slope) (Drainage Way) S (Debris Slump) P (Flood Plain) S (Foot Slope) (Head Slope) (Linear Slope) (Nose Slope) (Ridge) (Shoulder Slope) (Terrace)	I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4	NEXP (Non-expansive) SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain) M (Massive) CR (Crumb) GR (Granular) SBK (Subangular Blocky) ABK (Angular Blocky) PL (Platy) PR (Prismatic)
	II	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3		
	III	SI (Silt) SICL (Silty Clay Loam) CL (Clay Loam) SCL (Sandy Clay Loam) SLC (Silt Loam Clay)	0.6 - 0.3	0.3 - 0.15		
					MOIST	WET
	IV	SC (Sandy Clay) SIC (Silty Clay)	0.4 - 0.1	0.2 - 0.05	VFR (Very Friable) FR (Friable) FI (Firm) VFI (Very Firm v. Very Sticky) EFI (Extremely Firm)	NS (Non-sticky) SS (Slightly Sticky) S (Sticky) VS (Very Sticky) NP (Non-plastic) SP (Slightly Plastic) P (Plastic) VP (Very Plastic)
		O (Organic)	None			

OTES

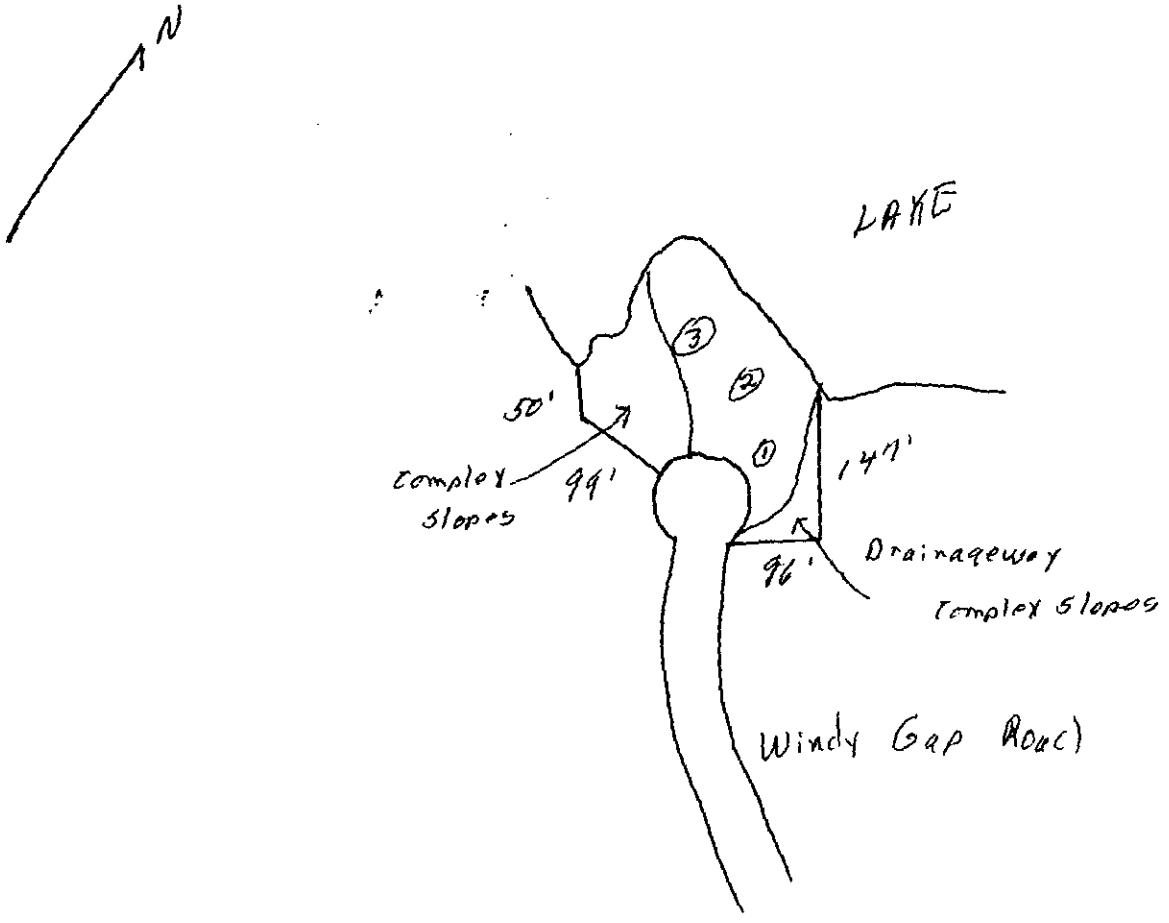
ORIZON DEPTH	In inches below natural soil surface
EPTH OF FILL	In inches from land surface
ESTRUCTIVE HORIZON	Thickness and depth from land surface
APROLITE	S(suitable) or U(unsuitable)
OIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
LASSIFICATION	S (Suitable), PS (Provisionally Suitable), or U (Unsuitable)

valuation of saprolite shall be by pits.

ong-term Acceptance Rate (LTAR): gal/day/ft²

Show profile locations and other site features (dimensions, reference or benchmark, and North).

14798



DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH
ON-SITE WASTEWATER SECTION

Q400

Sheet
PROPERTY ID #: #3 1499B
COUNTY: 149-391-03

SOIL/SITE EVALUATION
for ON-SITE WASTEWATER SYSTEM

OWNER: Cherokee Resources Dev. APPLICANT: _____
ADDRESS: Box 1003 440 S Tryon St Clem. APPLICATION DATE: _____ DATE EVALUATED: _____
PROPOSED FACILITY: residence PROPOSED DESIGN FLOW (.1949): Not given PROPERTY SIZE: 1.05
LOCATION OF SITE: Windy Gap Rd PROPERTY RECORDED: _____
WATER SUPPLY: ☑ Private ☐ Public ☐ Well ☐ Spring ☐ Other _____
EVALUATION METHOD: ☑ Auger Boring ☐ Pit ☐ Cut
TYPE OF WASTEWATER: ☐ Sewage ☐ Industrial Process ☐ Mixed

PROFILE #	.1940 LAND-SCAPE POSITION/ SLOPE %	HORI-ZON DEPTH (IN.)	SOIL MORPHOLOGY (.1941) .1941 STRUCTURE/ TEXTURE	.1941 CONSISTENCE/ MINERALOGY	OTHER PROFILE FACTORS .1942 SOIL WETNESS/ COLOR	.1943 SOIL DEPTH	.1956 SAPRO CLASS	.1944 RESTR HORIZ	PROFILE CLASS & LTAR
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		6-14"	SBK/c	F/EXP/S/P					
3	LS	0-10"	SBK/c	F/EXP/SP	>10" to chroma 2 colors	10"	N/A	None	US
4									

DESCRIPTION	INITIAL SYSTEM	REPAIR SYSTEM
Available Space (.1945)	US	US
System Type(s)		

OTHER FACTORS (.1946): _____
SITE CLASSIFICATION (.1948): Recommended
EVALUATED BY: W.R. Medlin 7-12-96
OTHER(S) PRESENT: _____

OMMENTS: Does not appear to be 100% Report

LEGEND

use the following standard abbreviations

ANDSCAPE POSITION	GROUP	SOIL TEXTURE	CONVENTIONAL 1955 LTAR	LPP 1957 LTAR	MINERALOGY/ CONSISTENCE	STRUCTURE
C (Concave Slope) V (Convex Slope) (Drainage Way) S (Debris Slump) P (Flood Plain) S (Foot Slope) (Head Slope) (Linear Slope) (Nose Slope) (Ridge) (Shoulder Slope) (Terrace)	I	S (Sand) LS (Loamy Sand)	1.2 - 0.8	0.6 - 0.4	NEXP (Non-expansive) SEXP (Slightly Expansive) EXP (Expansive)	G (Single Grain) M (Massive) CR (Crumb) GR (Granular) SBK (Subangular Blocky) ABK (Angular Blocky) PL (Platy) PR (Prismatic)
	II	SL (Sandy Loam) L (Loam)	0.8 - 0.6	0.4 - 0.3		
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	IV	SC (Sandy Clay) SIC (Silty Clay)	0.4 - 0.1	0.2 - 0.05	VFR (Very Friable) FR (Friable) FI (Firm) VFI (Very Firm v. Very Sticky) EFI (Extremely Firm)	NS (Non-sticky) SS (Slightly Sticky) S (Sticky) VS (Very Sticky) NP (Non-plastic) SP (Slightly Plastic) P (Plastic) VP (Very Plastic)
		O (Organic)	None			

OTES

ORIZON DEPTH	In inches below natural soil surface
EPTH OF FILL	In inches from land surface
ESTRICTIVE HORIZON	Thickness and depth from land surface
APROLITE	S(suitable) or U(unsuitable)
OIL WETNESS	Inches from land surface to free water or inches from land surface to soil colors with chroma 2 or less - record Munsell color chip designation
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Show profile locations and other site features (dimensions, reference or benchmark, and North).

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