

20800 BETHELWOOD LN

00112177

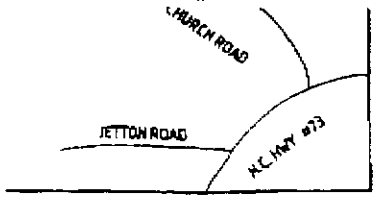
12/19/2007

duponbj

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

Line	# Panel	# Hole Per Panel	Size Hole	Line Head	Line Length	Hole Flow	Per Panel Line Flow min
A	15				67 '		
B	11				50 '		
C	11				50 '		
D	11				50 '		
E	11				50 '		
F		repair			40 '		
G		repair			70 '		
H		repair			50 '		
I		repair			60 '		
J		repair			40 '		
K		repair			40 '		
Totals	62				267 '		

3. THIS MAP IS PREDICATED ON THE POSSESSION LINE AND EXISTING MOUMENTATION FOUND IN THE FIELD AS SHOWN.
4. THIS PLAT IS SUBJECT TO ANY RIGHT-OF-WAYS, EASEMENTS, OR AGREEMENTS OF RECORD PRIOR TO DAYE OF SURVEY



VICINITY MAP

LAKE NORMAN

DUKE POWER
D.B.2162 PG.447

BASIS
SEE R

(1" pipe) EIP

S03°53'48"E 88.67'

NPS S13°19'00"E 94.22'

(#5 rebar) EIP

TRANSCONTINENTAL GAS PIPELINE CORPORATION EASEMENT (D.B.1392-PG.129)

50' SETBACK

S88°52'39"W 251.22'

N03°25'30"E 623.57'

617.22'

108.40'

DECK

38.98'

39.93'

22.51'

(#5 rebar) EIP

LOT #2
LAKEVIEW HOMES, INC.
D.B.7432-PAGE 425

W.R. and wife, JEAN H. OVERCASH
D.B 5070-PAGE 165

REFERENCES

1. DEEDS AS SHOWN HEREON.
2. PLAT TITED "BEHELWOOD BAY SUBDIVISION", PREPARED BY DELTA LAND SERVICES, INC. DATED JULY 14, 1993. RECORDED IN MB 25 PG. 622 IN THE MECKLENBURG COUNTY REGISTER OF DEEDS.
3. SUBJECT PROPERTY RECORDED IN MECKLENBURG COUNTY REGISTER OF DEEDS, IN DB 7432 PG 425 UNDER THE NAME OF LAKEVIEW HOMES, INC.

SCALE
1" = 40'

Lakeview Homes, Inc.

20464-A Chartwell Center Drive
Davidson, NC 28036

Facsimile Cover Letter

Date: 6/6/94

Total Number of Pages: 4 *(including cover sheet)*

Attention: Phil Walker

Company: Mech. County Environmental Health Dept.

Fax Number: 336-6894

From: Pam @ Lakeview Homes

Comments: File #8857A 20800 Bethelwood Lane

I hope this is what you need to release the hold for this job - Please call to verify that and also tell me what you need to release hold on File #8858A 20726 Bethelwood Lane.

OUR FAX NUMBER - (704) 892-9246

IF TRANSMISSION IS INCOMPLETE, PLEASE CALL PAM (704) 892-9196

Please let me know ASAP!

Thank you

CERTIFICATE OF COMPLETION/OPERATION PERMIT

HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH DIVISION
1200 BLYTHE BOULEVARD
CHARLOTTE, NC 28203
PHONE (704) 376-4603

FILE: 8857A DATE: 6/2/94

TC: _____ ☐ L ~~☐~~ CRT

SERIAL № 14220

Name of Owner Lakeview Homes Inc Juris.: _____

Address of Property 20800 Bethelwood Ln

Inspection Data:

Tank Material PCC

Total Length of Drainfield 267' PPBPS

Number of Lines 5 @ see plan

Cover Depth 8"

Water Supply Source CMUD

Distance to Water Source > 50'

Excavation Inspected 6/2/94

Tank(s) Inspected 6/2/94

Wash Line Inspected —

High Water Alarm Inspected —

PLOT

Design: 1994, 1500ST, 1000DT, No installed pump(Repair), 267' PPBPS Ccc.l CTR# 52

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 10 NCAC 10A .1900, "Laws And Rules For Sanitary Sewage Collection, Treatment, And Disposal" in effect on the date of issuance of the permit. The 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 ~~10 NCAC 10A~~ 15A .1900 in addition to those listed below under "COMMENTS." This document shall be null and void if any information 18A contained in the application is untrue or if any additions are made to the property which would increase the requirements for said system.

COMMENTS: 6/6/94 Plan altered from pressure dosed to gravity PPBPS system with pressure dosed repair. Type III

Philip S. Walker R.S.
Environmentalist

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

Date: June 14, 1993

From: T J Systems
P.O. Box 73
Scotts, N.C. 28699

To: Lakeview Homes Inc.
2046 4A Chartwell Center Drive
Davidson, NC 28036
Phone 704-892-9196 Attn. Charlie Thaker

Subject: Lot 1 Bethelwood Bay Mecklenburg County
File # : 8857A
Parcel : 00112102 PO

System type: 16 inch T & J Panel System with pressure distribution.

This system is designed for a four bedroom house at an application rate of .3 gpd. 480/.3 = 1600/3 = 534 LF of conventional drainfield multiplied by .5 = 267 LF of 16 inch T & J Panel System. This system shall be installed in accordance with all state and local rules and regulations and in compliance manufacturer's installation guidelines. Soil evaluation was supplied by the county.

VOID
new plan on file

APPROVED
ENVIRONMENTAL HEALTH
DIVISION
MECKLENBURG COUNTY
HEALTH DEPARTMENT
DATE

Line	# Panel	# Hole Per Panel	Size Hole	Line Head	Line Length	Hole Flow	Per Panel Line Flow min
A	8	one	5/32	3.0ft	35 '	.50	4.00
B	14	one	5/32	3.0ft	60 '	.50	7.00
C	20	one	3/16	2.0ft	90 '	.59	11.80
D	20	one	3/16	2.0ft	90 '	.59	11.80
F		repair			40 '		
G		repair			70 '		
H		repair			50 '		
I		repair			60 '		
J		repair			40 '		
K		repair			40 '		
Totals	62				275 '		34.60

CALCULATIONS FOR PUMPED SYSTEMS:

Head: Friction loss = 2.71
Total lift = 12.00 (105.00 + 2 - 95.00 = 12.00) elev.
TDH = 14.71
20% margin = 19 ft (14.71 / .8 = 18.39 = 19 ft)

Pump Size: 43 (34.60/.8) gallon per minute at 19 feet of head.

Pump cycle should be 6.1 min or 211 gallons.

Note: Each line shall have a globe valve as shown in the detail for pressure adjustment. Each valve or gruop of valves shall be placed inside a plastic valve box with a lid at ground level. Turn ups shall be cut off just below ground surface and covered with a plastic cup and cover. The line shall be capped with a threaded fitting and plug. The ends that are used for setting the heads shall be marked as to the line that they go to and saved for future system adjustment. Mark each valve and turn up end with marker to show what valve goes with what turn up.

Friction loss:

supply line = 110 lf = 1.10 * 2.05 = 2.26

fittings = 2.26 * .2 = 0.45

total 2.71

Date: June 14, 1993

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P.O. Box 73
Scotts, N.C. 28699

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2046 4A Chartwell Center Drive
Davidson, NC 28036
Phone 704-892-9196 Attn. Charlie Thaker

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File # : 8857A
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VOID
Revised plan on file

APPROVED
ENVIRONMENTAL HEALTH
DIVISION
MECKLENBURG COUNTY
HEALTH DEPARTMENT

Line	# Panel	# Hole Per Panel	Size Hole	Line Head	Line Length	Hole Flow	Per Panel Line Flow min
A	8	one	5/32	3.0ft	35 '	.50	4.00
B	14	one	5/32	3.0ft	60 '	.50	7.00
C	20	one	3/16	2.0ft	90 '	.59	11.80
D	20	one	3/16	2.0ft	90 '	.59	11.80
F		repair			40 '		
G		repair			70 '		
H		repair			50 '		
I		repair			60 '		
J		repair			40 '		
K		repair			40 '		
Totals	62				275 '		34.60

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TDH = 14.71
20% margin = 19 ft (14.71 / .8 = 18.39 = 19 ft)

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Friction loss:

supply line = 110 lf = 1.10 * 2.05 = 2.26

fittings = 2.26 * .2 = 0.45

total 2.71

ENBURG COUNTY HEALTH DEPARTMENT
EVALUATION REPORT
SERIAL NUMBER 19353

File: 1850/85-SFA Action L

Parcel: PO 001-121-02

Location: Bethelwood Lane

Subdivision:

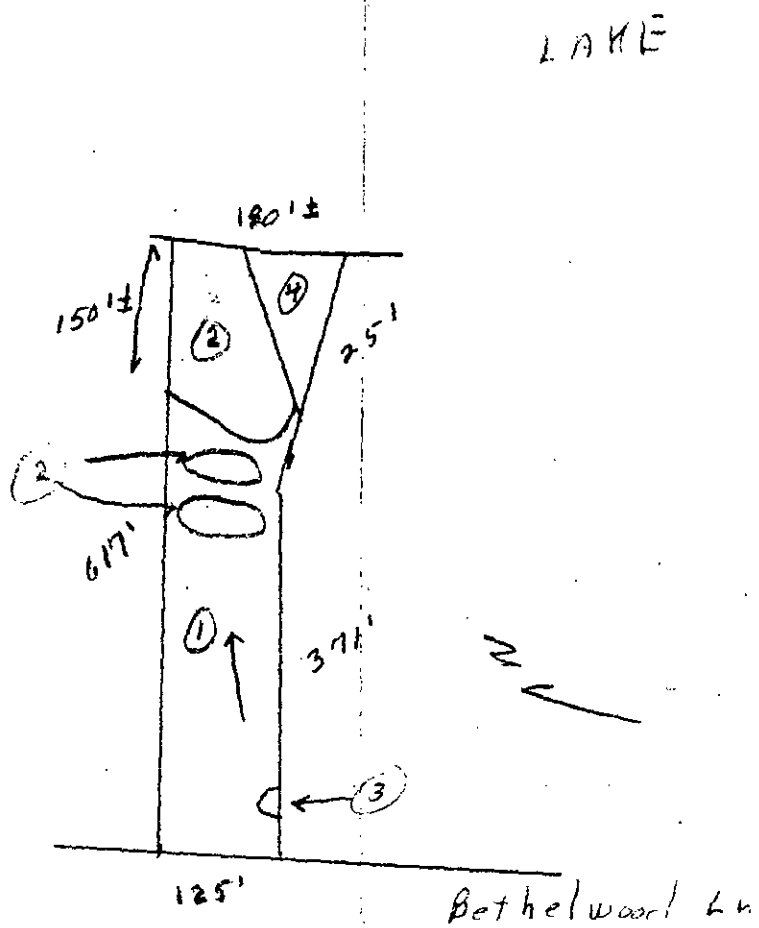
Lot: 1 Block: Acres: 1.93

Owner: McConnell Family Limited Partnership
Address: 20124 Bethelwood Ln.
Davidson, N.C. 28036

Comments: 440 Repair - 3gal/ft²/day LTAR

Described by: William A. Marlin

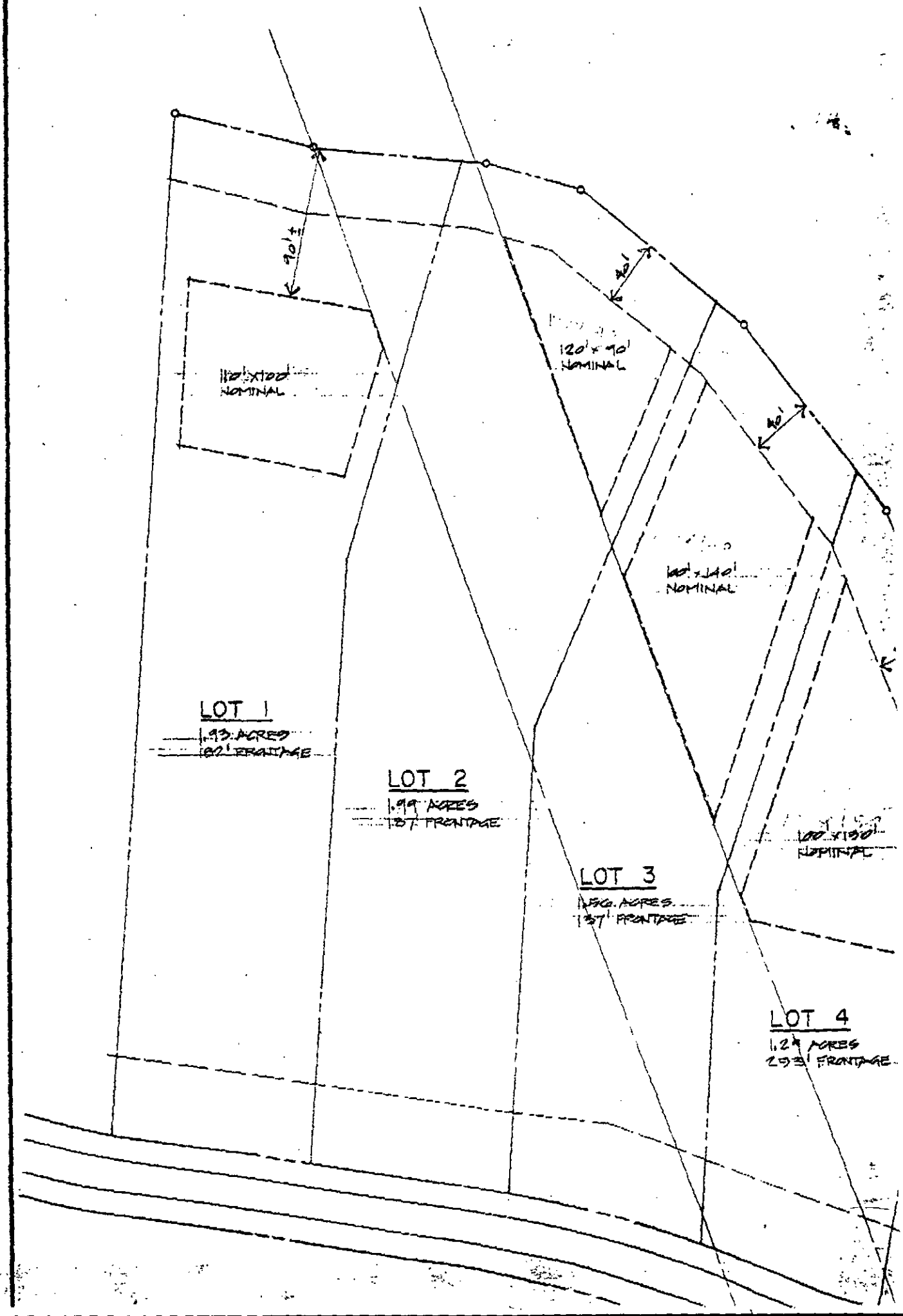
Date: 5-2093



***** EVALUATION KEY *****

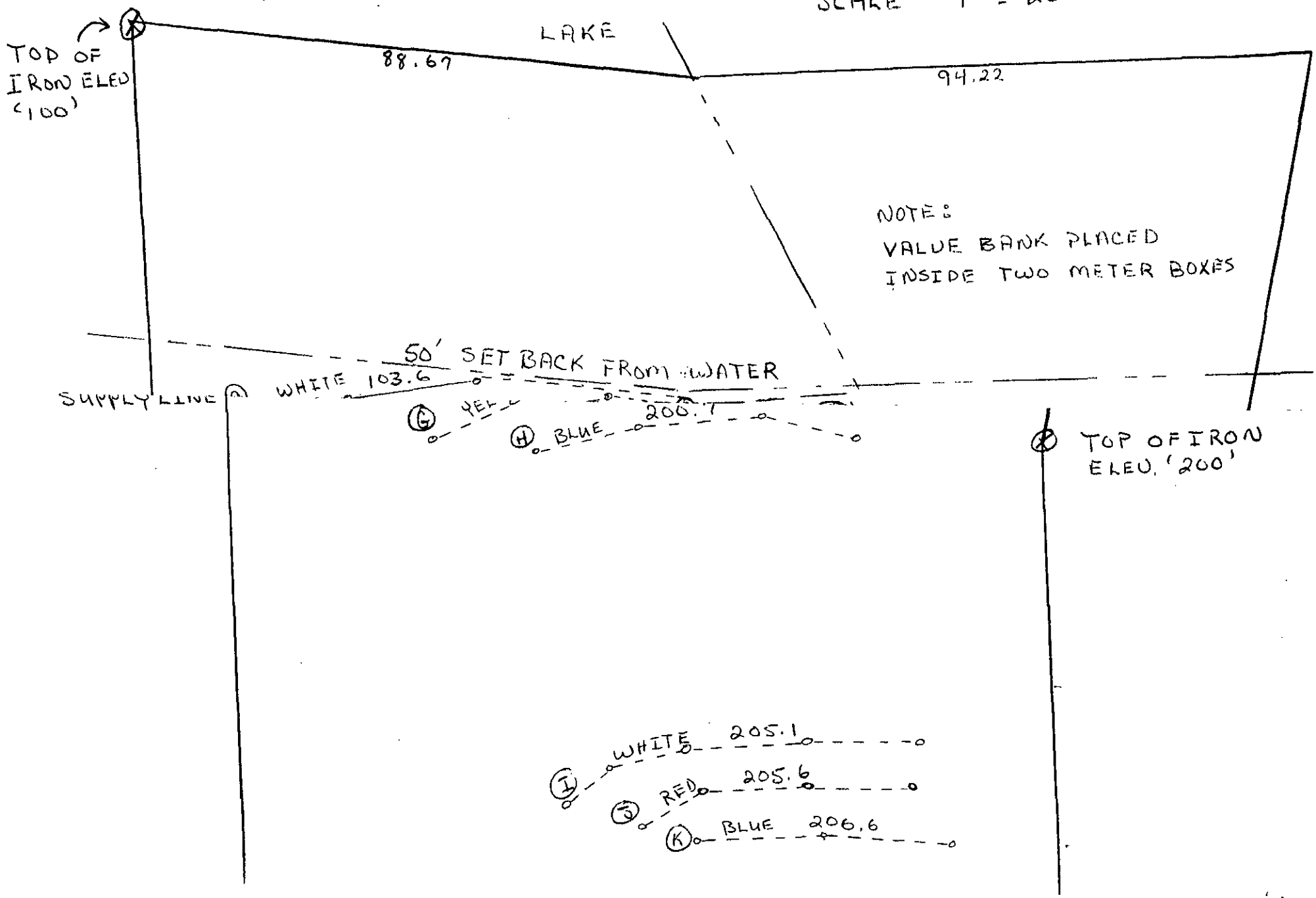
S = Suitable U = Unsuitable
PS = Provisionally Suitable
The "Area Classification" below indicates the suitability of areas in the diagram.

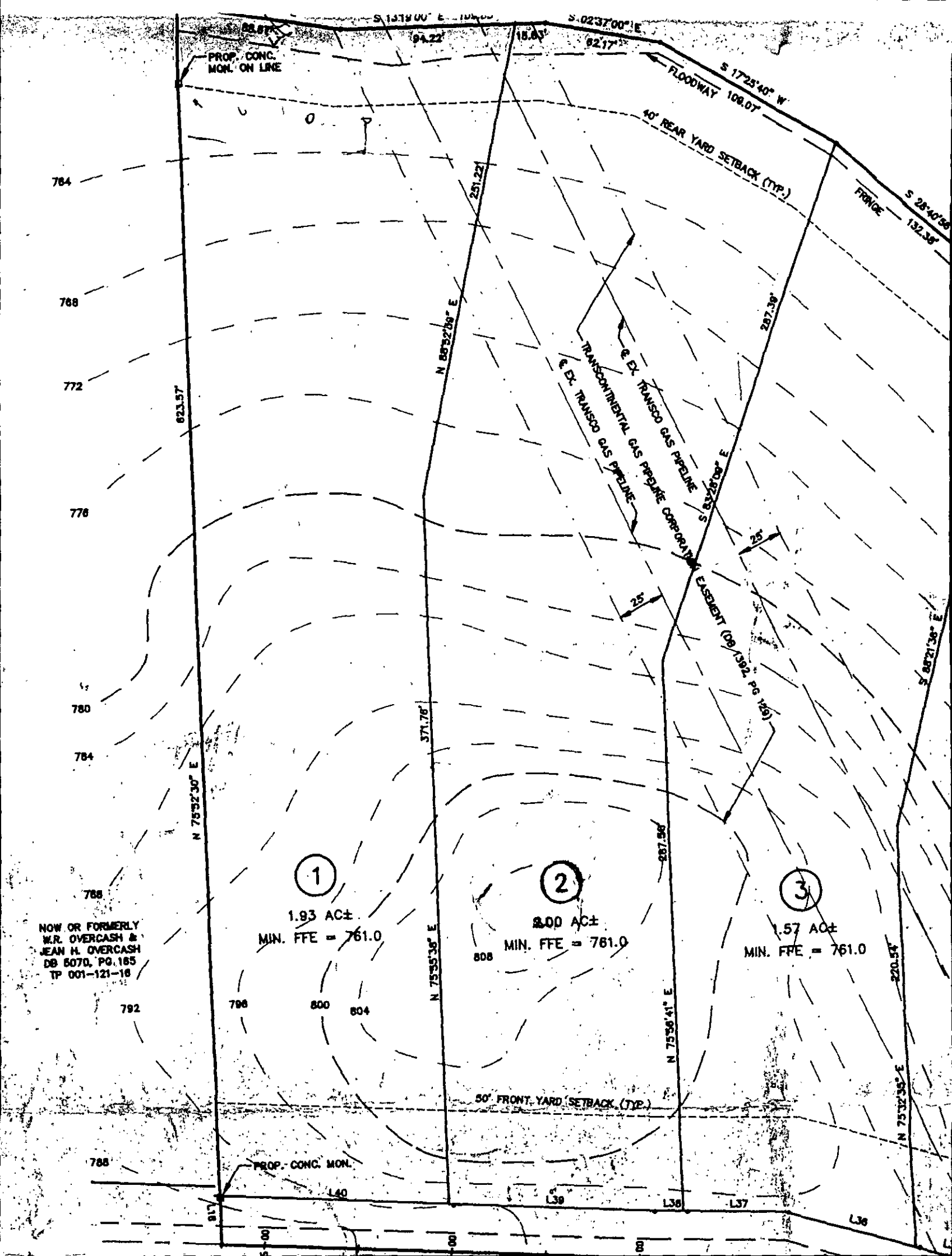
FACTORS	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	AREA
Topography	S PS (U) complex slopes	(S) PS U 6-15%	(S) PS U 2-10%	S PS U —	S PS U	S PS
Texture	S PS U —	S (PS) U slightly Expansive clay	S (PS) U slightly Expansive clay	S PS U —	S PS U	S PS
Structure	S PS U	S (PS) U subA Blocky	S (PS) U subA Blocky	S PS U —	S PS U	S PS
Drainage	S PS U	(S) PS U >48" to water	S (PS) U >36"	S PS U —	S PS U	S PS
Depth	S PS U	(S) PS U 48"+	S PS (U) 12-15"	S PS U	S PS U	S PS
Restrictive Horizons	S PS U —	(S) PS U 48"+	S (PS) U >36"	S PS U —	S PS U	S PS
Available Space	S PS U	S PS (U) Restricted	S PS (U) Restricted	S PS U	S PS U	S PS
Other (specify)	S PS U	S PS U	S PS U	S PS (U) Pipeline R/W	S PS U	S PS
Soil Group/Series	complex slopes	III Cecil-Lido	IV Pacolet-Lido	Pipeline R/W		
Area Classification	S PS (U)	S PS (U)	S PS (U)	S PS (U)	S PS U	S PS


90'±
40'
120'x100'
NOMINAL
120'x90'
NOMINAL
40'
140'x140'
NOMINAL
LOT 1
1.93 ACRES
182' FRONTAGE
LOT 2
1.99 ACRES
137' FRONTAGE
LOT 3
1.56 ACRES
137' FRONTAGE
100'x150'
NOMINAL
LOT 4
1.24 ACRES
293' FRONTAGE

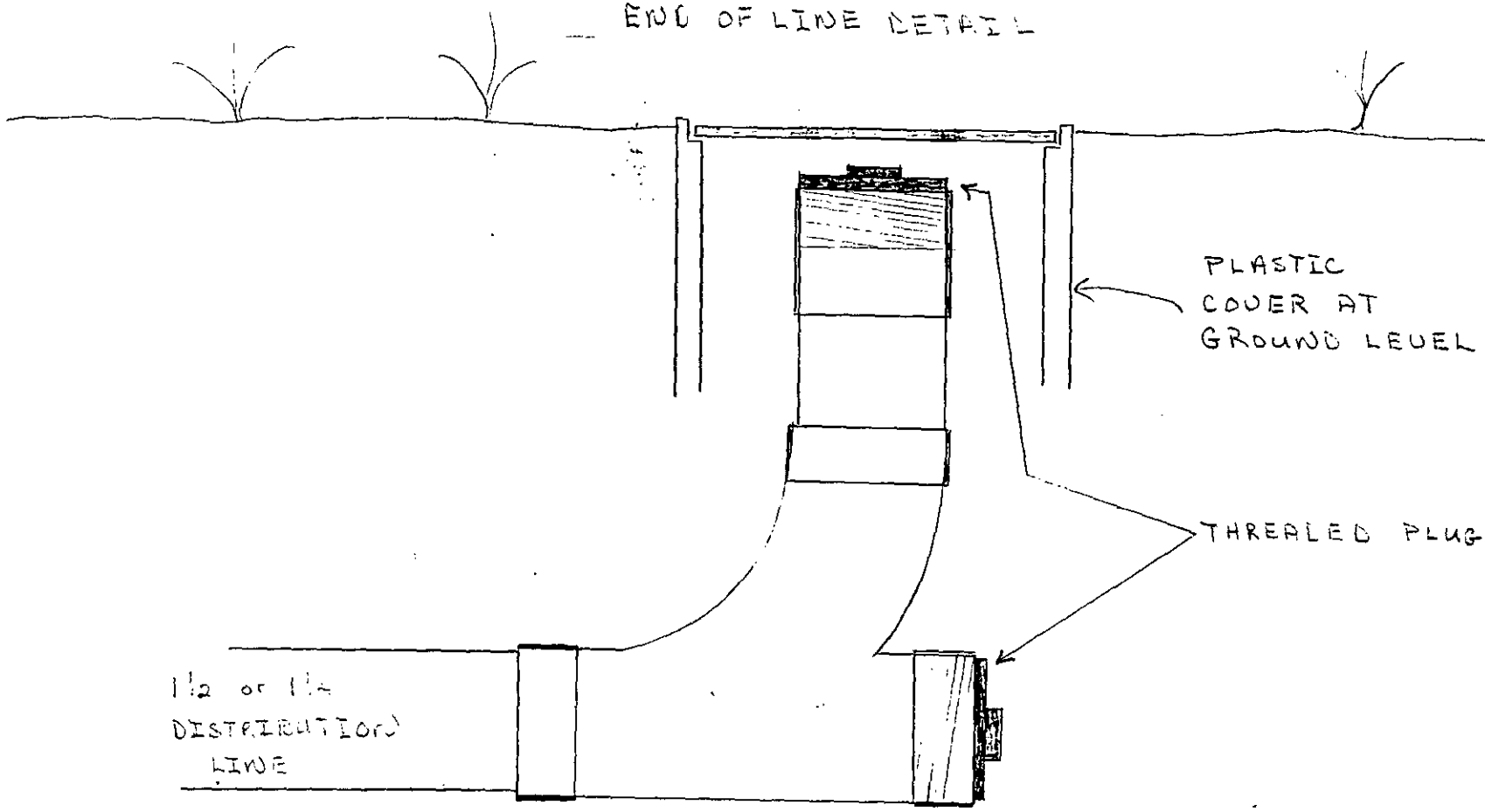
MECKLENBURG COUNTY
FILE # 8857 A

LOT 1
BETHELWOOD BAY
SCALE 1" = 20'




PROP. CONC. MON. ON LINE
S 17°25'40" W
FLOODWAY 109.07'
40' REAR YARD SETBACK (TYP.)
FRINGE
S 28°40'58"
132.39'
251.22'
N 88°32'58" E
287.38'
623.57'
TRANSCONTINENTAL GAS PIPELINE
℄ EX. TRANSCO GAS PIPELINE
℄ EX. TRANSCO GAS PIPELINE CORPORATION EASEMENT (DB 1392, PG 126)
S 83°28'08" E
25'
25'
S 88°21'38" E
371.76'
N 75°32'30" E
287.56'
220.54'
N 75°35'38" E
N 75°36'41" E
N 75°32'38" E
1
1.93 AC±
MIN. FFE = 761.0
2
2.00 AC±
MIN. FFE = 761.0
3
1.57 AC±
MIN. FFE = 761.0
NOW OR FORMERLY
W.R. OVERCASH &
JEAN H. OVERCASH
DB 5070, PG.165
TP 001-121-16
50' FRONT YARD SETBACK (TYP.)
PROP. CONC. MON.
L40
L39
L38
L37
L36
764
768
772
776
780
784
788
792
796
800
804
808

END OF LINE DETAIL



Design, Installation and Maintenance

Of The

T & J Panel Wastewater Treatment System

For

Sanitarians

And

Septic Tank Installers

Although this manual is sectioned for specific user groups, we at T & J Panel suggest that you familiarize yourself with the complete manual. Fourth Edition.

Sanitarians

In the early days of the T & J Panel System, when it was still considered an experimental system, the primary reason for permitting the Panel System was because of insufficient space for a conventional system. Now with inclusion in the Sewage Regulations(10NCAC 10A .1956(3)(a)(ii)), the Panel System should be considered when a quality effluent may be needed, space is limited, usable soil is limited, or there are indications that at some future time space may be needed for other uses. When there is a trend for added development such as additions to homes, pools, or other special landscaping development the T & J Panel System may prevent insufficient space later. As an example, there was a subdivision where three of five homes in the same block added in-ground pools. Each of these pools impacted the existing nitrification lines. As a sanitarian, if you can foresee such a trend developing, discuss the Panel System with the home owner.

As noted in the regulations, the PPBPS is only permitted where soils are suitable for a conventional system, however, only one-half of the space is needed. The Panel System will allow the use of the best soils on the lot. This system may be gravity fed or pumped using the LP Panel system as described. Most of the concepts for a T & J Panel layout are the same as for a conventional system. The biggest differences are areal area needs and quality of effluent being introduced into the soil.

Conversion

A three bedroom house with a 0.4 gpd application rate. (First three steps are the same as the conventional line)

1) 120 gallons per bedroom x 3 bedrooms = 360 gallons per day design flow rate.

2) 360 flow rate/0.4 application rate = 900 sq. ft. of trench bottom.

3) 900 sq. ft./3 ft. wide trench = 300 lineal feet of conventional system.

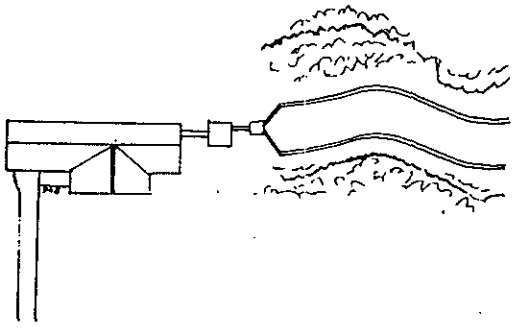
This conventional layout requires 2700 sq. ft. of area on the lot and equal space for repair for a total of 5400 sq. ft. of suitable and usable area. To calculate the T & J Panel system size, the above calculations must be made with an additional fourth step as described in 10NCAC 10A .1956 (3)(a)(ii)(B) for a PPBPS (the T & J Panel System)

4) 300 lineal feet of conventional system x 0.5 for a 16 inch high Panel system = 150 lineal feet of T & J Panel trench.

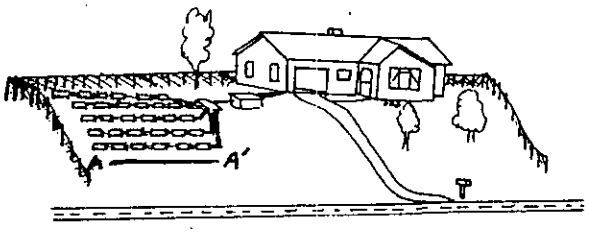
A Panel System requires only a 1200 sq. ft area on the lot for the system and equal area for repair. with the Panel System the installation and repair can go into the same space as the initial area required by a conventional gravel trench system.

Window Effect

Areal space should always be a consideration for any system, however, it is especially notable with the Panel System as with any system that reduces the size of the areal area drainfield. The following is a simplistic example of this concept.



RIGHT

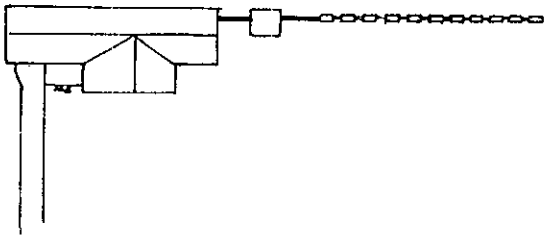


WRONG

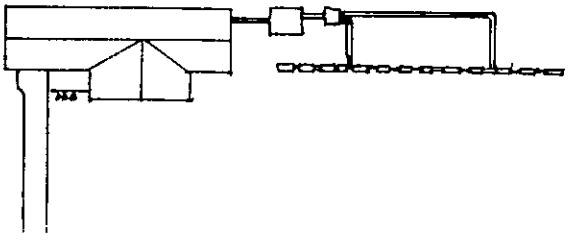
While both systems have the same lineal footage of trench the lower diagram is not a desireable design. The effluent must pass through the area A-A' which can cause a strain on that area and even a failure because of hydraulic overloading.

Distribution

Another extreme would be the use of a long single trench fed from only one end. In the first example, below the areal space is good and the chance of hydraulic overloading is greatly reduced. However downline distribution in the panel line will not give optimum treatment.



WRONG



RIGHT

In the lower example we see that the trench has been feed from multiple points. Because the Panel lines are put in as level as possible, never exceeding 1/4 inch of fall in 10 feet of run, they feed both ways equally. T & J recommends that no gravity line exceed 50 feet, unless it is fed from multiple points. In both of these examples, we are specifying the Panel System, but the logic applies to the conventional system as well.

COUNTY HEALTH DEPARTMENT

(SEPTIC TANK) IMPROVEMENTS PERMIT AND CERTIFICATE OF COMPLETION
(Ground Absorption Sewage Disposal System -- G. S. Chapter 130-A-Article 11)

OWNER OR CONTRACTOR _____ DATE _____ PERMIT NO. _____

PHONE: Business _____ Home _____

LOCATION _____

_____ S. R. No. _____

SUBDIVISION NAME _____ LOT NO. _____ SECTION OR BLOCK NO. _____

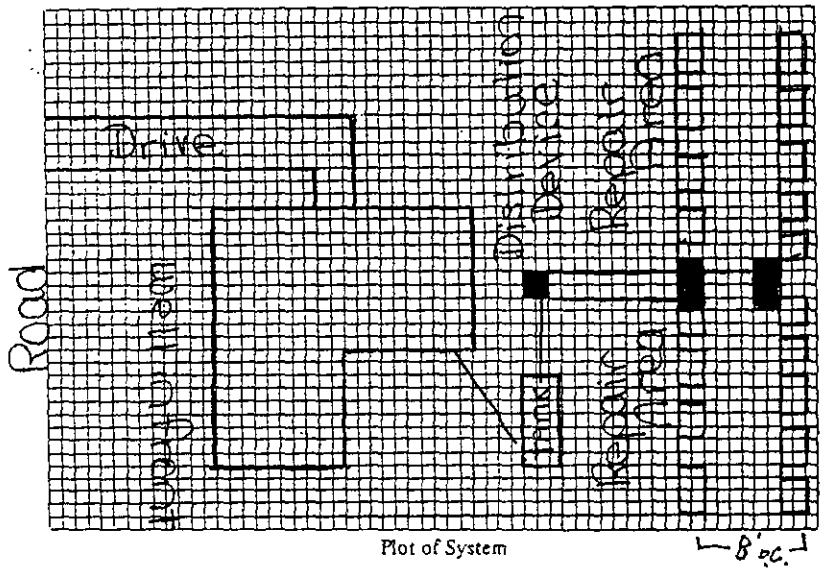
House (✓) Mobile Home ( ) Business ( ) Other _____

No. Bedrooms 3 No. Bathrooms 2 1/2
Garbage Disposal Unit n/a Yes ( ) No ( )
Auto. Dishwasher Yes (✓) No ( )
Auto. Wash. Machine Yes (✓) No ( )
Site Suitable Yes (✓) No ( )

Character & Porosity of Soil clay loam over clay
Percolation Rate 0.4 gal/ft²/day
Topography long slope
Depth to Water Table > 60"
Rock or other impervious formations none

Lot Area _____

_____ Basement with Plumbing _____ Basement without Plumbing ✓ No Basement



Size of Tank 1000 Gals.
Nitrification Field:
No. of Lines (2) 75' lines of
Sq. Ft. 900 Linear Ft. 150' panels
Depth of Stone in Lines 24" of Sand
Water Supply: Individual (✓)
Public ( )

Installed by _____

I understand and agree to install septic tank system as specified on this Improvements Permit.

Signed: _____

IMPROVEMENTS PERMIT BY _____

COMMENTS: 2 lines with 17 panels each line. flow split by flow divider. 2' wide and 75' long each split in middle by D-box. 25 tons sand

CERTIFICATE OF COMPLETION BY _____ DATE _____

EXISTING SYSTEM CHECKED BY: _____ DATE _____

CONSTRUCTION MUST COMPLY WITH ALL OTHER APPLICABLE STATE AND LOCAL REGULATIONS.

Permit is VOID if any unauthorized changes are made in installation of system and/or if any false information is supplied in making Improvements Permit.

Health Dept. Copy: White Inspection Dept. Copy: Yellow Sanitarian's Copy: Pink Owner's Copy: Gold

COUNTY HEALTH DEPARTMENT

(SEPTIC TANK) IMPROVEMENTS PERMIT AND CERTIFICATE OF COMPLETION
(Ground Absorption Sewage Disposal System -- G. S. Chapter 130-A-Article 11)

OWNER OR CONTRACTOR _____ DATE _____ PERMIT NO. _____

PHONE: Business _____ Home _____

LOCATION _____

_____ S. R. No. _____

SUBDIVISION NAME _____ LOT NO. _____ SECTION OR BLOCK NO. _____

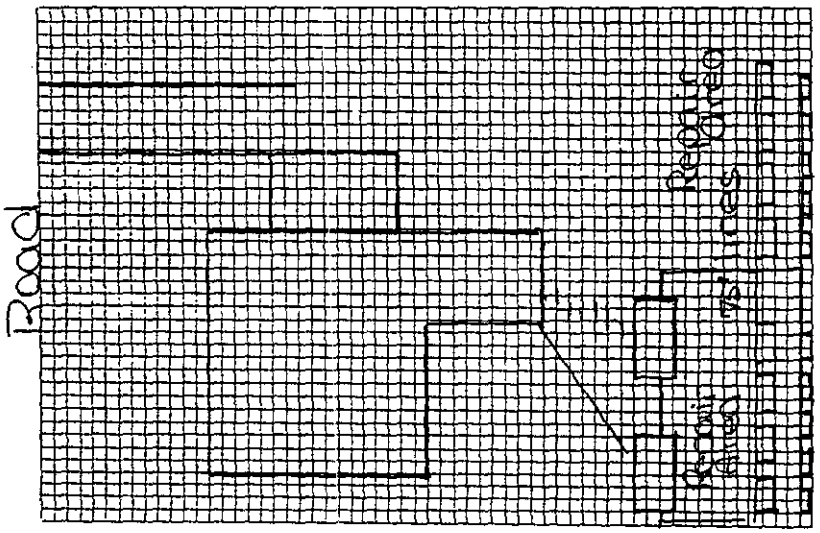
House (✓) Mobile Home ( ) Business ( ) Other _____

No. Bedrooms 3 No. Bathrooms 2 1/2
Garbage Disposal Unit N/A Yes ( ) No ( )
Auto. Dishwasher Yes (✓) No ( )
Auto. Wash. Machine Yes (✓) No ( )
Site Suitable Yes (✓) No ( )

Character & Porosity of Soil clay loam over clay
Percolation Rate 0.4 gal ft²/day
Topography 6% slope
Depth to Water Table >60"
Rock or other impervious formations _____

Lot Area 20,000

_____ Basement with Plumbing _____ Basement without Plumbing _✓_ No Basement Pressure Distributn



Plot of System

Size of Tank 1,000 septic/ 1000 pump Gals.
Nitrification Field:
No. of Lines 2 (15') lines of T-5
Sq. Ft. 900 Linear Ft. 150
Depth of Stone in Lines 24" sand
Water Supply: Individual ( )
Public ( )

Installed by _____

I understand and agree to install septic tank system as specified on this Improvements Permit.

Signed: _____

IMPROVEMENTS PERMIT BY _____

COMMENTS: pump sized by head 2-4' at turn up

CERTIFICATE OF COMPLETION BY _____ DATE _____

EXISTING SYSTEM CHECKED BY: _____ DATE _____

CONSTRUCTION MUST COMPLY WITH ALL OTHER APPLICABLE STATE AND LOCAL REGULATIONS.

Permit is VOID if any unauthorized changes are made in installation of system and/or if any false information is supplied in making Improvements Permit.

Health Dept. Copy: White Inspection Dept. Copy: Yellow Sanitarian's Copy: Pink Owner's Copy: Gold

How Many Panels Do You Need?

To calculate the number of 16 inch high panels needed for a 150 foot line, multiply 150'x 12" = 1800" then divide by 52" which is 46 inches for the panel and 6 inches for the space between the panels in the trench. 1800" /52" = 34.6 panels, so you would call for 34 panels. (A material order chart is included in the installer section of this manual.) If there is to be more than one trench, the sizing of the lines should be as equal as possible with as close to the same number of panels in each trench as is practical. A permit will normally show the panel as small blocks on the line. The following two pages are sample copies of permits for Panel systems.

Gravity or Pressure

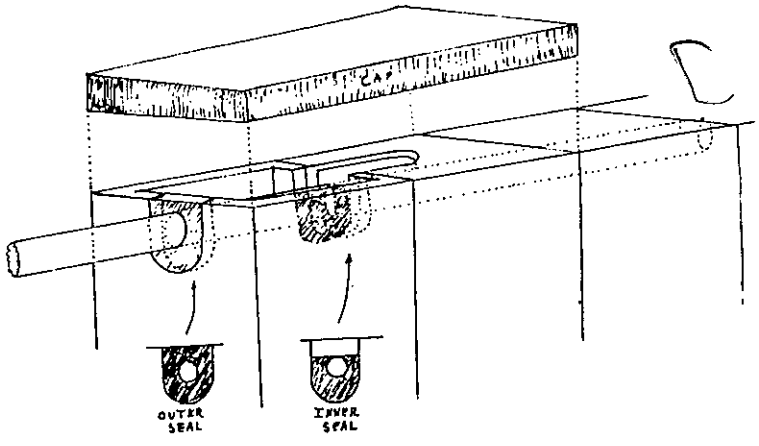
The T & J Panel System can be installed as either gravity or a low pressure distribution system. When designing a pressure system the principles of low pressure distribution are as described in the LPP manual. There is further discussion on pressure systems in the installer section of this manual. One of the attached permits is for a LP Panel drainfield.

Backfill

Backfill sand shall be a clean, washed, medium sand that is naturally occurring and falls within the gradation of ASTM C-33 specification. This specification is one that is used in the ready mix industry and is readily available in all areas. The second type of sand that you will need is a clean particle sand to coat the bottom of each panel's top chamber with a bed of sand one inch thick. This sand is a medium grade of sand blasting sand. Each one hundred pound bag should cover eight panels. Backfill sand calculations should be taken from the material sheet.

Tar Seals

The two drawings below illustrate the inner and outer seal. Note that while the outer seal is a complete seal, the inner seal is only up to the top of the connecting pipe. This is to allow for over flow of the effluent at peak use periods into the lower air chambers. At this point the air chambers become additional storage chambers for the effluent.



Trench Preparation

Trench grade should be established so that backfill cover will be four to six inches over the tops of the panels. (Note on severe slopes system depth should be adjusted to protect against brakeout of effluent) In clay type soils the trench side walls should be raked to bring slicked over areas back to as near to original structure as possible. A light dusting of lime on the side walls will help the system to continue the brake down of solids.

Final Inspection

The following list of points are things that an inspector should look for when issuing an completion permit.

1) Is depth of the panels within guidelines?

2) Are drain lines level or less than 1/4 inch fall in ten feet?

3) Have seals been properly constructed?

4) Was the proper sand used in the trench backfill?

5) If in clay type soils were the side walls raked and limed?

(For Pumped Systems)

6) Have pump size, head pressure, and dose cycle been properly sized and set?

(Set dose cycle for 3.6 gallons per 16 inch high panel.)

Installer

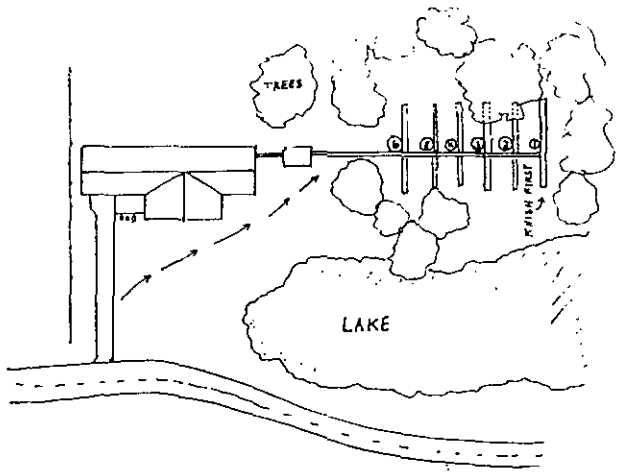
Generally, on level open land, a Panel System can be installed in about the same time as a conventional system; however, traditionally, Panel Systems have been installed where space and topography have restricted use of a conventional system. For this reason Panel System installations have required more time. Many installers enjoy the change of working with panels, not handling gravel, and the satisfaction of knowing a system is being installed where previously a conventional system was not possible.

Ordering Materials

Enclosed on following two pages you will find an order sheet for the T & J Panel System and a materials chart for 16 inch high Panel System. The distributor in your area will lead you through these sheets when ordering or pricing the system. For information on the distributor located closest to you call 1-800-222-2577 (inside N.C.) or 704-872-9566. After ordering, your panels will be shipped to the job site banded together on pallets.

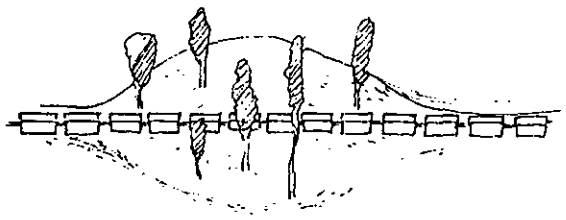
Installation Tips

Installation for multiple line systems should begin in the most confining area and be worked to the more open areas.

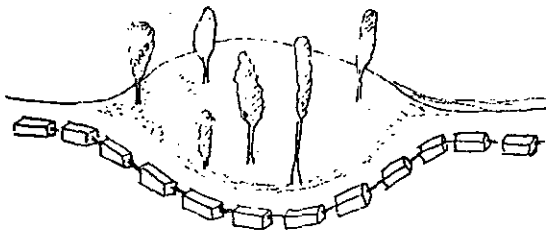


Above is an example of a multiple line installation. As you can see the installation should begin with the line marked 1 and proceed to 2, 3, then 4. This procedure will greatly ease material handling and backfilling. (Note sections of the drainlines should be left uncovered to allow for inspection of lines when area is confined and return access to lines is limited.)

On the following page are two examples of drain lines on sloping lots. The first drawing shows the drainline going through a slope making the center of the line deeper in the ground. This is not a desirable situation. The second drawing shows the drainline going around the slope keeping the trench depth and cover uniform for the entire length of the line. On slopes care should be given to avoid cutting away valuable top soil in an effort to make straight lines. Panel lines can be curved to almost any degree.



Wrong



Right

Digging The Trench

Start by shooting the grade and marking the contour. Then for a 16 inch panel add 28 inches to the shallowest or lowest grade that the trench must cross to obtain the trench bottom grade. Now dig the trench at the elevation derived, checking the grade frequently. The trench should be a minimum of two feet wide. With the trench open all sidewalls shall be raked to bring smeared areas back to their original structure before a light dusting of lime is applied. Now place a 6 inch layer of backfill sand in the trench and level to grade, then place a 1 x 4 or 6 inch board flat on it's side on top of the 6 inch layer of sand. Once more check the grade of the trench by shooting the top of the board. Once the grade boards have been set, the panels may be set into the ditch by hand or using the backhoe. Each panel weights about 155 pounds and placement by hand goes quickly. The panels should be placed about 6 inches apart in the trench to obtain equal spacing. Now place 10 to 12 pounds of clean particle sand (medium sand blasting sand) in the top chamber of each panel to form a bed of sand about one inch thick. Tar seal rope should be placed in the U outs to form seals as shown in earlier drawings. Once the tar rope is in place, a 24 inch section of two inch PR160 pipe is cut to span from the upper middle top chamber of the first panel to the upper middle chamber of the next panel. The tar seal rope that is used should be of tar or butyl that is soft and pliable to obtain a water tight seal. Now that the connection and sealing is complete a block cap is placed on each end of the panel covering all openings.(These will be delivered with the panels.) The cap block may well serve as an inspection port at some future date. The trench is ready to be backfilled to the top of the panel with the same backfill sand used in the trench bottom. With the sand to the top of the panel, trenches should be left for the sanitarian to inspect. Soil cover should be added after the final inspection.

Most Panel Systems are currently used due to space considerations and caution should be taken to preserve suitable soil structure and site conditions.

Materials Chart For 16 Inch Panels

Materials needed per panel:

- Three feet of half inch tar seal rope per panel.
- Two feet of two inch PR160 pipe per panel or same linear feet as line layout of pressure system of one and a quarter inch pipe. Add pipe for tie in of lines to tank and house.
- One hundred pounds of partical sand (sand blasting sand fine texture) per eight panels.
- Same linear feet of one by six boards as line length.
- Bag powder lime when in clay soils.

Panel and C-33 Sand fill

50 LF - 11 panels
8¼ tons sand

60 LF - 14 panels
10 tons sand

70 LF - 16 panels
11½ tons sand

80 LF - 18 panels
13¼ tons sand

90 LF - 21 panels
15 tons sand

100 LF - 23 panels
16½ tons sand

110 LF - 25 panels
18¼ tons sand

120 LF - 27 panels
20 tons sand

130 LF - 30 panels
21½ tons sand

140 LF - 32 panels
23 tons sand

150 LF - 34 panels
25 tons sand

160 LF - 37 panels
26½ tons sand

170 LF - 39 panels
28 tons sand

180 LF - 41 panels
30 tons sand

190 LF - 43 panels
31½ tons sand

200 LF - 46 panels
33 tons sand

T & J Panel Material Worksheet

Homeowner _____ County _____

Address _____

_____

Description of System _____

_____

_____

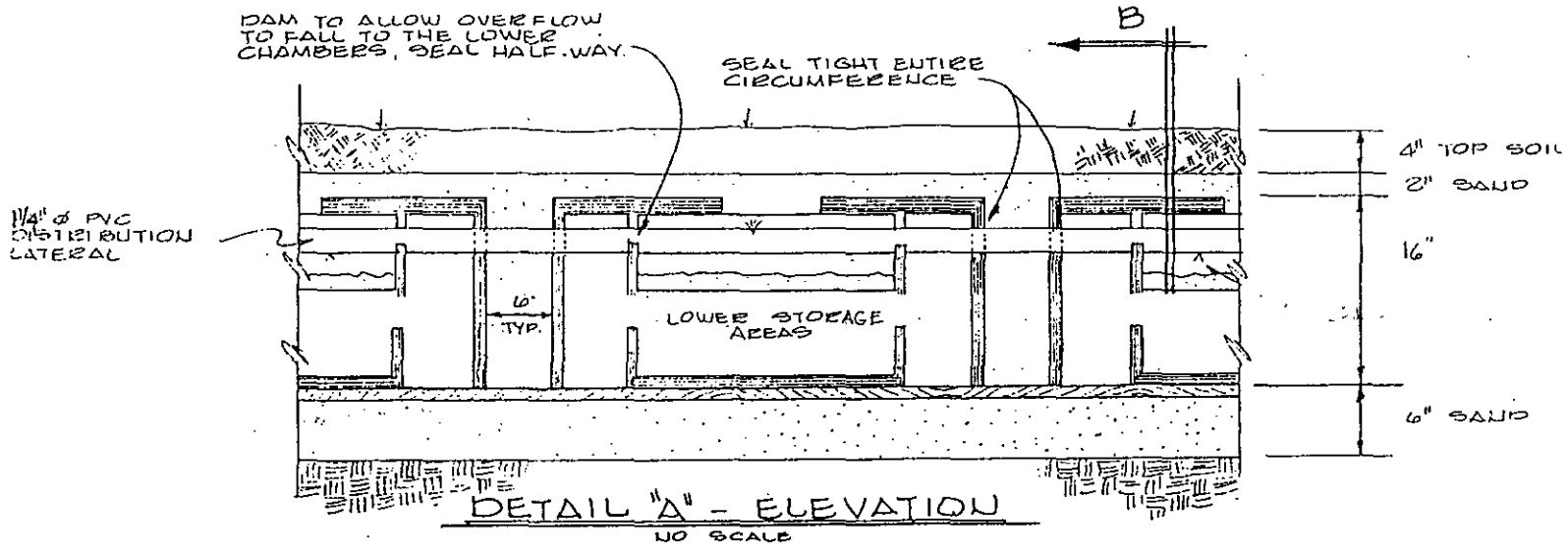
_____	T & J Panels _____ Inch (caps N/C)	_____
_____	2" Pipe	_____
_____	1 1/4" Pipe	_____
_____	Fittings for Pipe	_____
_____	Tar Seal Rope (3' per Panel)	_____
_____	Bag Partical Sand (100 lbs per 8 Panels)	_____
_____	Pallets (Returnable)	_____
_____	Screened Creek Sand (FM 2.3 to 3.0)	_____
_____	1x4 or 1x6 Boards	_____
_____	Power Lime	_____
_____	Sep Tank _____ Gallon	_____
_____	Tar Seal for Tank	_____
_____	4" PVC Pipe Schedule 40	_____
_____	Distrobution Box	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
	Sub-total	_____
	Delivery Charge	_____
	Tax	_____
	Total	_____

Panels With Pressure Distribution

The LP Panel uses Technology similar to that of Low Pressure Pipe (LPP) System. The tables and distribution design described in the LPP manual is applicable to the pressure Panel System. The system should be used with two to four feet of head. In many respects a LP Panel is similar to a LPP with the holes discharging into the panels.

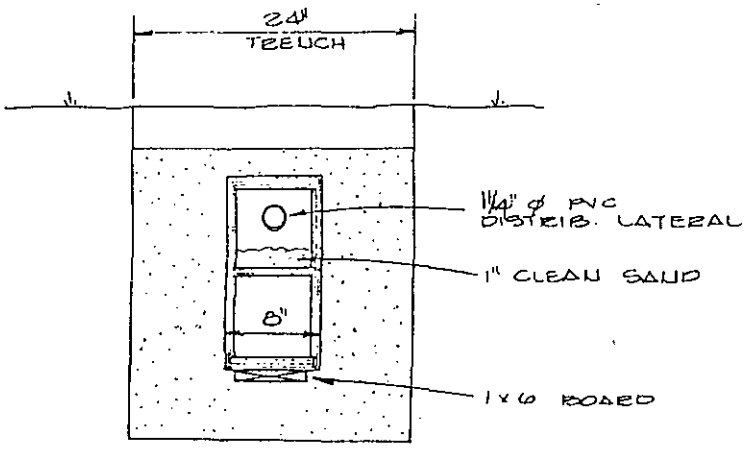
The dosing cycle for the Panel System is designed to pump enough effluent to fill the top chambers of all the panels in the system. The top chamber of a 16 inch panel holds 3.6 gallons. when the system has 34 panels and all the holes are the same size, then you would multiply 34 X 3.6 to get 122 gallon per dose cycle. The holes are drilled in the distribution pipe at the 10 and the 2 o'clock position. These are then placed so that the effluent is pumped into the top center chamber of the panel. If the hole sizing changes in the system the the pump cycle is set by the the hole that is discharging the fastest.

All valves and turn ups should be neatly capped, covered and labled for future service. Pump tanks should constructed as shown in the drawing as to allow for service and repairs.

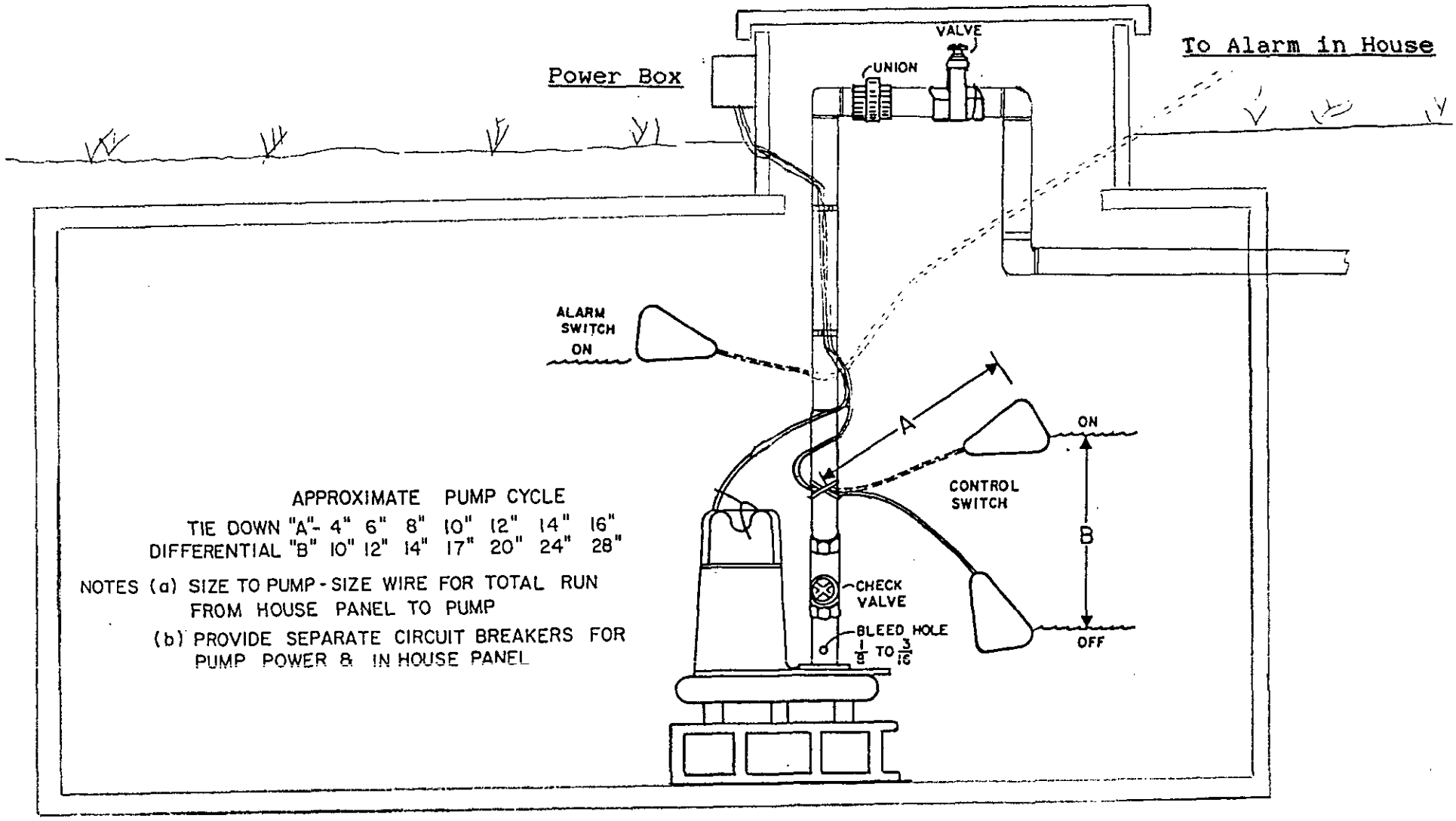


DETAIL "A" - ELEVATION

NO SCALE



DETAIL "B" - SECTION



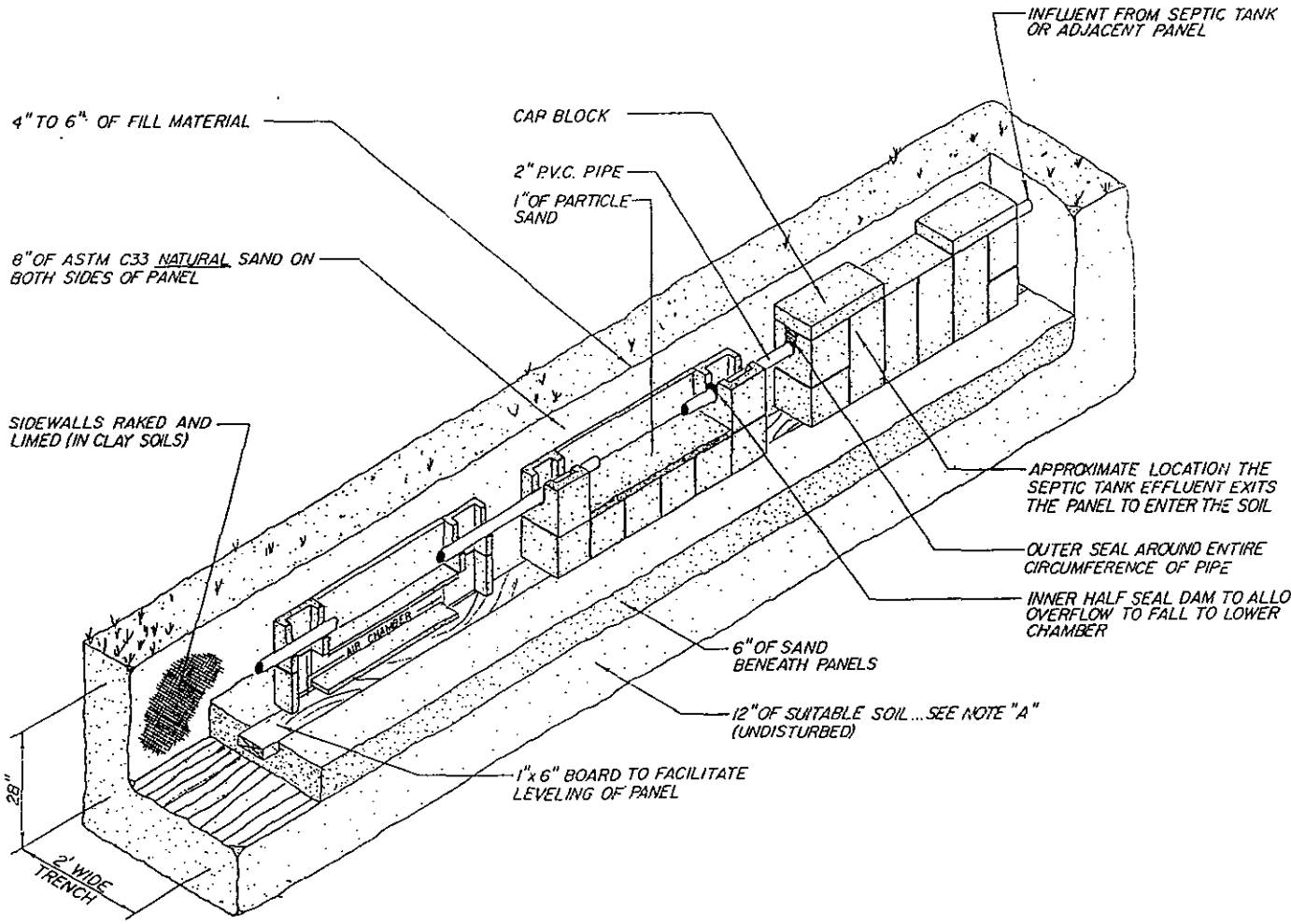
APPROXIMATE PUMP CYCLE

TIE DOWN "A"	4"	6"	8"	10"	12"	14"	16"
DIFFERENTIAL "B"	10"	12"	14"	17"	20"	24"	28"

NOTES (a) SIZE TO PUMP - SIZE WIRE FOR TOTAL RUN FROM HOUSE PANEL TO PUMP

(b) PROVIDE SEPARATE CIRCUIT BREAKERS FOR PUMP POWER & IN HOUSE PANEL

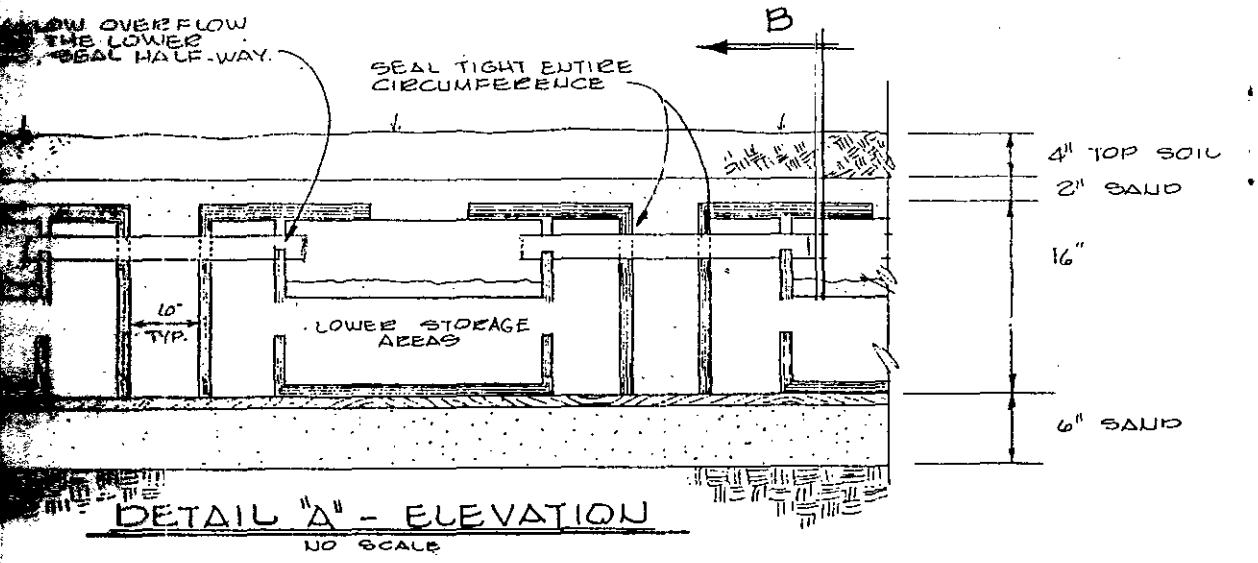
Isometric Drawing of a Segment of 16" T & J Panel System Drainfield



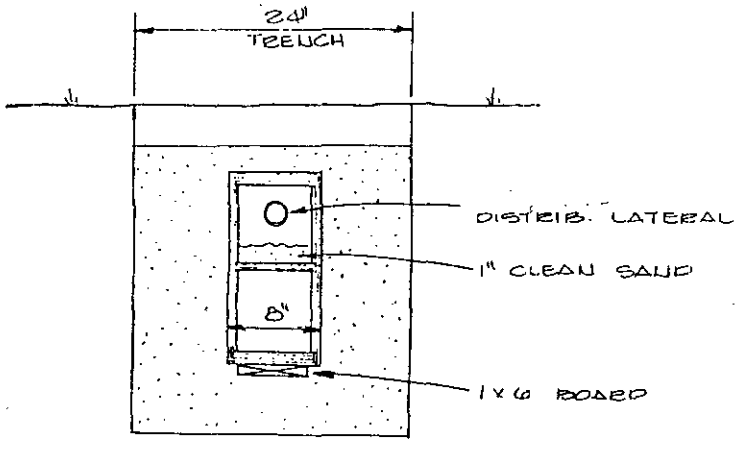
THE T. & J. PANEL
WASTE WATER TREATMENT SYSTEM

PATENT NUMBER 4013559

P.O. Box 288 • Statesville, North Carolina 28677
N.C. WATS 1-800-222-2577 • (704)872-9566



DETAIL "A" - ELEVATION
NO SCALE



DETAIL "B" - SECTION
NO SCALE

Tax Parcel # 001-121-02

8857A

INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM
APPLICATION FOR SERVICES

2500 | 30000 | 6/29/93 | 804 | GW | CERT

Mecklenburg County Health Dept.
Environmental Health Division
c/o Hal Marshall Ctr., Suite 211
700 N. Tryon St.
Charlotte, NC 28202

(704)336-5102

PERSON FILING APPLICATION:

NAME: Lakeview Homes, Inc (last) (first) (mi)

ADDRESS: 20464A Chartwell Center Dr PHONE: (704) 892-9196

CITY: Davidson STATE: N.C. ZIPCODE: 28036

Date:

PROPERTY INFORMATION (FROM ENGINEERING FORM):

TAX/PARCEL NUMBER: 001-121-02

STREET ADDRESS: 20900 Bethelwood Lane

ZONING:

PROPERTY OWNER:

NAME: McConnell Family Limited Partnership (last) (first) (mi)

ADDRESS: 20729 Bethelwood Ln PHONE: (704) 892-1480

CITY: Davidson STATE: N.C. ZIPCODE: 28036

SUBDIVISION OR MOBILE HOME PARK NAME:

Township (check one):
- [x] 0 Mecklenburg County
- [ ] 1 Charlotte
- [ ] 2 Davidson
- [ ] 3 Cornelius
- [ ] 4 Pineville
- [ ] 5 Matthews
- [ ] 6 Huntersville
- [ ] 7 Mint Hill

LOT NUMBER: 1 LOT SIZE (in acres):

TYPE APPLICATION (check one):

- [x] SOIL TEST - INDIVIDUAL LOT (D)
- [x] NEW CONSTRUCTION ON VACANT LOT - 4 BEDROOMS OR LESS (N)
- [ ] EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
- [ ] ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A or M)
- [ ] COMMERCIAL OR INDUSTRIAL (N)
- [ ] SOIL TEST DEVELOPMENT (P)
- [ ] ADDITION - GARAGE OR RENOVATION/NO MAJOR CHANGES (X)
- [ ] MODIFIED /ALTERNATIVE/ OR RESIDENCE > 4 BEDROOMS (Z)
- [ ] REPAIR TO SYSTEM (R)

RESIDENTIAL PROPERTY (Type Building, check one):
- [ ] SINGLE MOBILE HOME (S)
- [ ] DOUBLE WIDE (D)
- [x] HOUSE (H)
- [ ] MODULAR HOME (M)
- [ ] MULTIPLE FAMILY (U)
- [ ] OTHER _____ (O)

NUMBER BEDROOMS: 4 NUMBER OCCUPANTS:

SYSTEM CLASSIFICATION:

COMMERCIAL/INDUSTRIAL PROPERTY:
Type Business _____ # Employees ___ Per Shift ___ ___ ___
Industrial Wastes (Y/N) ___
Underground Storage Tanks On Property (Y/N) ___ Type _____

WATER SUPPLY (check one):
- [ ] Community (C)
- [x] Municipal (M)
- [ ] Private Well (P)
- [ ] Shared Well (S)
- [ ] Other 'spring' (O)

FUTURE ADDITIONS - ALL PLANNED ADDITIONS MUST BE ENTERED (check all that apply):
- [ ] Swimming Pool
- [ ] Garage
- [ ] Jacuzzi
- [ ] Storage Building
- [ ] Stable/Barn
- [ ] Deck/Patio
- [ ] Workshop
- [ ] Bedrooms
- [ ] None
- [ ] Other

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: Lydia A. McConnell Date: 6-7-93

NOTICE:

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws And Rules For Sanitary Sewage Collection, 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 permit is not transferable.

... PPBPS TYPE IV

AGREEMENT FORM ON FILE

CERTIFIED OPERATOR REQUIRED

- [x] IMPROVEMENT PERMIT - VALID 60 MONTHS FROM ISSUANCE
- [ ] MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE
- [ ] ADDITION/RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE

Environmentalist Date

Director or Authorized Section Head 9-15-93 Date

WATER : 122791

July 14, 1993

Mecklenburg County
Health Department

Betty S. Snow, R.N., M.A.
Health Director

Mr. Charlie Thaker
Lakeview Homes, Inc.
2046-A Chartwell Center Drive
Davidson, NC 28036

Re: 20800 Bethelwood Lane
File: 8857-A
Parcel: 001-121-02PO (Lot 1)

Dear Mr. Thaker:

Receipt of your plans for a modified waste disposal system for the above referenced property is acknowledged.

The plans as submitted are approved with the following comments:

-Water saving plumbing devices and low flush toilets should be installed when constructing the residence.

-Effectively rake and lime all trench sidewalls.

-Landscaping of original system area and the repair area is prohibited. No grading, shaping, or altering in any way.

-The well should be located 100 feet, but in no case less than 50 feet from the sewage system and repair area.

-This is a Type 4 sewage disposal system. A contract must be executed for periodic maintenance between the property owner and a certified operator prior to the issuance of an operation permit (final).

Upon execution and recording of the enclosed "Septic Tank Agreement Forms" an improvement permit can be issued by this department.

If your have any questions concerning this matter please contact me at 336-5575.

Sincerely,

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

KR/wpg
Enclosure

Mecklenburg County

Health Department

Betty S. Snow, R.N., M.A.
Health Director

Charlie Thaker
Lakeview Homes Inc.
20464-A Chartwell Center Dr.
Davidson N.C. 28036

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Lot: 1

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If you have any questions concerning this matter please contact me at 336-5575.

Sincerely,
Kelly Randall R.S.

TO: ENVIRONMENTAL HEALTH DEPT.
BUILDING STANDARDS DEPT.
DEPT. OF ENVIRONMENTAL PROTECTION/
SOLID AND HAZARDOUS WASTE

DATE: 6-29-93

FROM: COUNTY ENGINEERING DEPARTMENT

EHD FILE _____ JURISDICTION CODE MECK

PARCEL NUMBER # 001-121-02

ASSIGNED ADDRESS 20800 BETHELWOOD LN

EXISTING ADDRESS Lot #1

PROJECT NAME BETHELWOOD BAY

THE ABOVE DESCRIBED LOCATION HAS BEEN CHECKED CONCERNING:

		APPROVED	DISAPPROVED
1.	SUBDIVISION REGULATIONS	_____	_____*
2.	FLOODWAY REGULATIONS	_____	_____*
3.	EROSION CONTROL REGULATIONS	_____	_____*
4.	PUBLIC UTILITY EASEMENT	_____	_____*

		PRESENT	NOT PRESENT
5.	PUBLIC UTILITY EASEMENT	_____*	_____
6.	PROPERTY FRONTS ON THOROUGHFARE	_____*	_____
7.	DRIVEWAY PERMIT REQUIRED	_____*	_____

*If checked, further investigation will be required to determine whether a building permit can be issued by Building Standards for the site.

REMARKS: S.F. HOME

NOTE: THIS FORM MUST BE TURNED IN AT THE CASHIER'S OFFICE AT BUILDING STANDARDS WHEN PAYING PERMIT FEES.

A CERTIFICATE OF OCCUPANCY WILL NOT BE GRANTED UNTIL THE TRANSPORTATION DIVISION GRANTS FINAL APPROVAL ON DRIVEWAYS.

SIGNED: B. McConico

OPWEAR 06-88

NEW ADDRESS X *

FORM 100

Mecklenburg County

Health Department

Betty S. Snow, R.N., M.A.
Health Director

May 24, 1993

McConnell Family Limited Partnership
20729 Bethelwood
Davidson, NC 28031

Re: Property located at Bethelwood Lane (Lot #1)
File: 985B/8857A
Parcel: 001-121-02

Dear Sir:

At your request, a field investigation was conducted on the property designated above for the purpose of determining site suitability for the installation of a ground absorption sewage disposal system. The results of this investigation showed the property to be classified **UNSUITABLE** for the installation of such a system. A copy of the site evaluation report (Serial No. 19353) is enclosed for your information.

State regulations provide that sites originally classified unsuitable may be utilized for the installation of alternate or modified sewage disposal systems provided the requirements of 15A NCAC 18A .1957 (c) are met. A reprint of this section is enclosed for your information.

Should you desire to file for permission to install an alternate or modified sewage treatment system on the property, please submit an Application for an Improvement Permit with an accurately dimensioned plot plan detailing the location of current and/or proposed buildings, wells and sewage disposal systems to this office. They will be reviewed, and if it is determined that the proposed system may reasonably be expected to function satisfactorily, an Improvement Permit will be issued by the Department upon completion by you, of a formal request for lot reclassification.

If you need any assistance, please feel free to call Mr. Bill Marlin at 336-5574.

Sincerely,

Kelly Randall

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

KR/wpg
Enclosure (2)

MECKLENBURG COUNTY HEALTH DEPARTMENT File: 9858/8857A Action 2

SITE EVALUATION REPORT

SERIAL NUMBER 19353 405 Parcel: PO 001-121-02 ☐ PC

Location: Bethelwood Lane

Subdivision:

Lot: 1 Block: Acres: 1.93

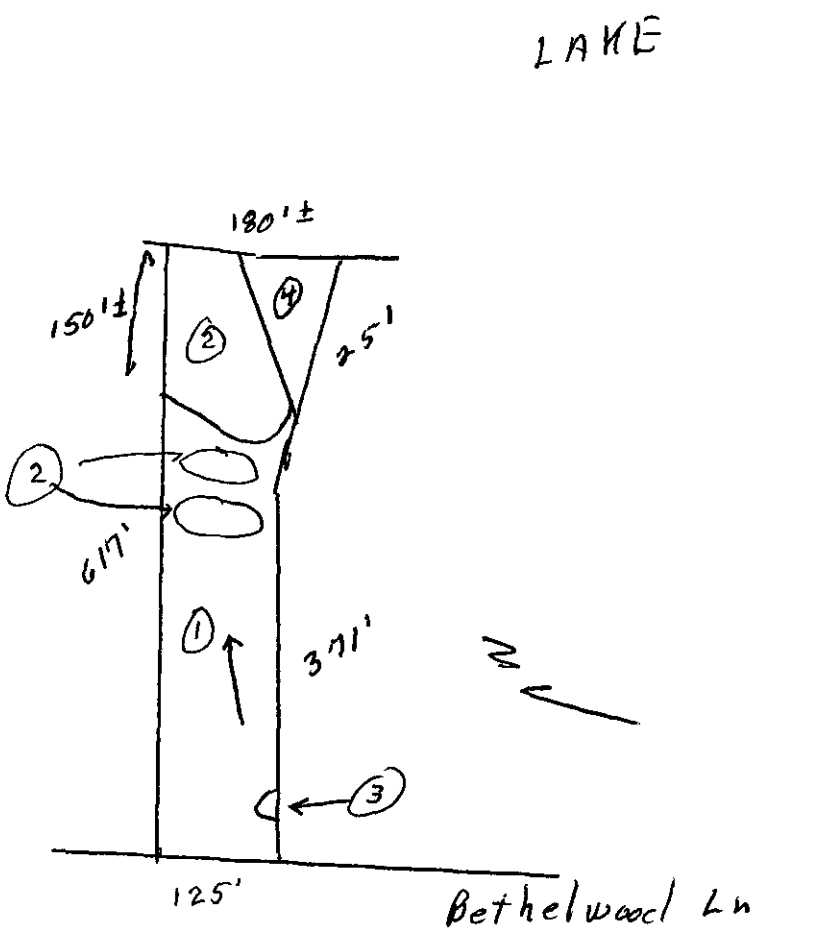
Owner: McConnell Family Limited Partnership

Address: 20129 Bethelwood Ln. Davidson, N.C. 28036

Comments: 1000 Repair - .3gal/ft²/day LTAR

Described by: William A. Marlin

Date: 5-2093



***** EVALUATION KEY *****

S = Suitable U = Unsuitable

PS = Provisionally Suitable

The "Area Classification" below indicates the suitability of areas in the diagram.

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	AREA 6
Topography	S PS (U) complex slopes	(S) PS U 6-15%	(S) PS U 2-10%	S PS U —	S PS U	S PS U
Texture	S PS U —	S (PS) U slightly Expansive clay	S (PS) U slightly Expansive clay	S PS U —	S PS U	S PS U
Structure	S PS U	S (PS) U subA Blocky	S (PS) U subA Blocky	S PS U —	S PS U	S PS U
Drainage	S PS U —	(S) PS U >48" to water	S (PS) U 36"	S PS U —	S PS U	S PS U
Depth	S PS U	(S) PS U 48"+	S PS (U) 12-15"	S PS U —	S PS U	S PS U
Restrictive Horizons	S PS U —	(S) PS U 48"+	S (PS) U >36"	S PS U —	S PS U	S PS U
Available Space	S PS U	S PS (U) Restricted	S PS (U) Restricted	S PS U —	S PS U	S PS U
Other (specify)	S PS U	S PS U	S PS U	S PS (U) Pipeline R/W	S PS U	S PS U
Soil Group/Series	complex slopes	IV Cecil-like	IV Pacolet-like	Pipeline R/W		
Area Classification	S PS (U)	S PS (U)	S PS (U)	S PS (U)	S PS U	S PS U

MECKLENBURG COUNTY HEALTH DEPARTMENT
SITE EVALUATION REPORT
SERIAL NUMBER 19353

File: Action _____

Parcel: ☐ PC

Location:

Subdivision:

Lot: Block: Acres:

Owner:
Address:

Comments: _____

_____

_____

_____

Described by: _____

Date: _____

***** EVALUATION KEY *****

S = Suitable U = Unsuitable
PS = Provisionally Suitable
The "Area Classification" below indicates the suitability of areas in the diagram.

FACTORS	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5	AREA 6
Topography	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Texture	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Structure	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Drainage	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Depth	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Restrictive Horizons	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Available Space	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Other (specify)	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U
Soil Group/Series						
Area Classification	S PS U	S PS U	S PS U	S PS U	S PS U	S PS U

Tax Parcel 001-121-02

INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM
APPLICATION FOR SERVICES

PD 100 MJ 4/22/93 [ ] CRT

9858/8857A

Mecklenburg County Health Dept.
Environmental Health Division
c/o Hal Marshall Ctr., Suite 211
700 N. Tryon St.
Charlotte, NC 28202

(704)336-5102

COPY

PERSON FILING APPLICATION:

NAME: Lakeview Homes, Inc (last) (first) (mi)

ADDRESS: 20464 Chartwell Center Dr PHONE: (704) 8929196

CITY: Davidson STATE: N.C. ZIPCODE: 28036

Date: 4/22/93

PROPERTY OWNER:

NAME: McConnell Family Limited Partnership (last) (first) (mi)

ADDRESS: 20729 Bethelwood PHONE: (704) 892 1480

CITY: Davidson STATE: N.C. ZIPCODE: 28036

PROPERTY INFORMATION (FROM ENGINEERING FORM):

TAX/PARCEL NUMBER: 001-121-02 pt

STREET ADDRESS: Bethelwood Ln

ZONING:

Township (check one):
[x] 0 Mecklenburg County [ ] 2 Davidson [ ] 4 Pineville [ ] 6 Huntersville
[ ] 1 Charlotte [ ] 3 Cornelius [ ] 5 Matthews [ ] 7 Mint Hill

SUBDIVISION OR MOBILE HOME PARK NAME:

LOT NUMBER: 1 LOT SIZE (in acres): 1.93

TYPE APPLICATION (check one):

[x] SOIL TEST - INDIVIDUAL LOT (D)
[ ] NEW CONSTRUCTION ON VACANT LOT - 4 BEDROOMS OR LESS (N)
[ ] EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
[ ] ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A or M)
[ ] COMMERCIAL OR INDUSTRIAL (N)
[ ] SOIL TEST DEVELOPMENT (P)
[ ] ADDITION - GARAGE OR RENOVATION/NO MAJOR CHANGES (X)
[ ] MODIFIED /ALTERNATIVE/ OR RESIDENCE > 4 BEDROOMS (Z)
[ ] REPAIR TO SYSTEM (R)

RESIDENTIAL PROPERTY (Type Building, check one):
[ ] SINGLE MOBILE HOME (S) [x] HOUSE (H) [ ] MULTIPLE FAMILY (U)
[ ] DOUBLE WIDE (D) [ ] MODULAR HOME (M) [ ] OTHER _____ (O)

NUMBER BEDROOMS: NUMBER OCCUPANTS:

SYSTEM CLASSIFICATION:

COMMERCIAL/INDUSTRIAL PROPERTY:
Type Business _____ # Employees ___ Per Shift ___ ___ ___
Industrial Wastes (Y/N) ___
Underground Storage Tanks On Property (Y/N) ___ Type _____

WATER SUPPLY (check one):
[ ] Community (C) [ ] Shared Well (S)
[x] Municipal (M) [ ] Other 'spring' (O)
[ ] Private Well (P)

FUTURE ADDITIONS - ALL PLANNED ADDITIONS MUST BE ENTERED (check all that apply):
[ ] Swimming Pool [ ] Jacuzzi [ ] Stable/Barn [ ] Workshop [ ] None
[ ] Garage [ ] Storage Building [ ] Deck/Patio [ ] Bedrooms [ ] Other

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.

X Signed: Luther G. McConnell Date: 4-21-93

NOTICE:

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the ... ment. This approval is granted in accordance with the provisions of Laws ... d Disposal in effect at the time of issuance of the permit and is subject to the ... m until ... pair

[ ] IMPROVEMENT PERMIT - VALID 60 MONTHS FROM ISSUANCE
[ ] MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE
[ ] ADDITION/RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE

Please mail results to applicant or Owner

Environmentalist Date

Director or Authorized Section Head Date

WATER : 122791

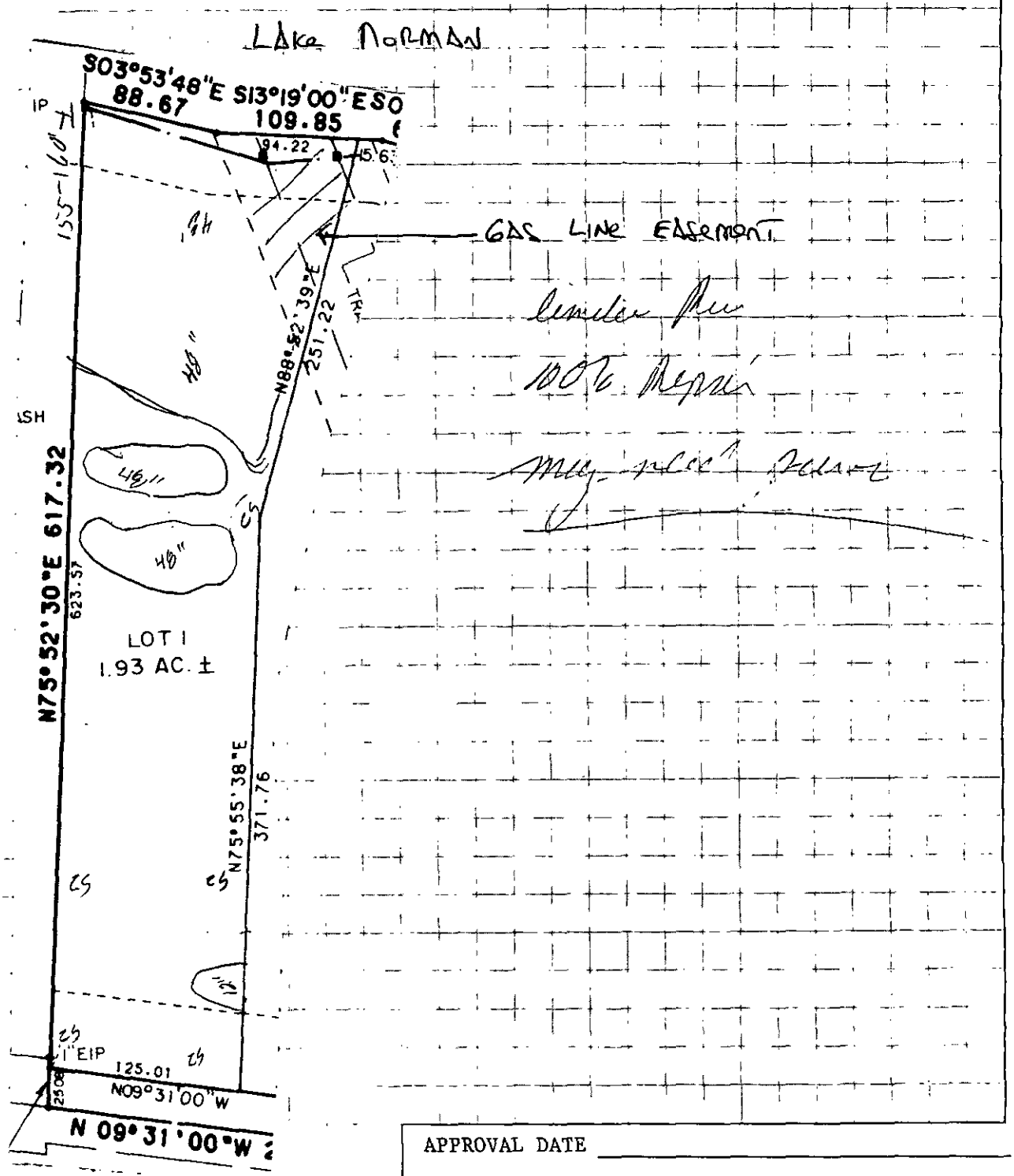
PROPOSED PLOT PLAN

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

FILE: 985B1885-7A

TC: 001-121-02 POR

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.



APPROVAL DATE _____

White - Health Department's Copy Canary - Environmentalist's Copy Pink - Owner's Copy

Tax Parcel # 001-121-02

INDIVIDUAL WATER AND WASTEWATER SYSTEMS PROGRAM
APPLICATION FOR SERVICES

985B/885TA

PD 100 yr 4/22/93 [ ] CRT

Mecklenburg County Health Dept.
Environmental Health Division
c/o Hal Marshall Ctr., Suite 211
700 N. Tryon St.
Charlotte, NC 28202

(704)336-5102

Date: 4/22/93

PROPERTY INFORMATION (FROM ENGINEERING FORM):

TAX/PARCEL NUMBER: 001-121-02 PD

STREET ADDRESS: Bethelwood LN

ZONING:

SUBDIVISION OR MOBILE HOME PARK NAME:

PERSON FILING APPLICATION:

NAME: Lakeview Homes, Inc. (last) (first) (mi)

ADDRESS: 20464A Chartwell Center Dr PHONE: (704) 8929196

CITY: DAVIDSON STATE: N.C. ZIPCODE: 28036

PROPERTY OWNER:

NAME: McConnell Family Limited Partnership (last) (first) (mi)

ADDRESS: 20729 Bethelwood PHONE: (704) 892 1480

CITY: DAVIDSON STATE: N.C. ZIPCODE: 28036

Township (check one):
[X] 0 Mecklenburg County [ ] 2 Davidson [ ] 4 Pineville [ ] 6 Huntersville
[ ] 1 Charlotte [ ] 3 Cornelius [ ] 5 Matthews [ ] 7 Mint Hill

LOT NUMBER: 1 LOT SIZE (in acres): 1.93

TYPE APPLICATION (check one):

[X] SOIL TEST - INDIVIDUAL LOT (D)
[ ] NEW CONSTRUCTION ON VACANT LOT - 4 BEDROOMS OR LESS (N)
[ ] EXCHANGE MOBILE HOME - SAME # BEDROOMS (Y)
[ ] ADDITION - INCREASE ROOMS/OCCUPANCY/MOBILE HOME SIZE (A or M)
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[ ] SOIL TEST DEVELOPMENT (P)
[ ] ADDITION - GARAGE OR RENOVATION/NO MAJOR CHANGES (X)
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[ ] REPAIR TO SYSTEM (R)

RESIDENTIAL PROPERTY (Type Building, check one):
[ ] SINGLE MOBILE HOME (S) [X] HOUSE (H) [ ] MULTIPLE FAMILY (U)
[ ] DOUBLE WIDE (D) [ ] MODULAR HOME (M) [ ] OTHER _____ (O)

NUMBER BEDROOMS: NUMBER OCCUPANTS:

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COMMERCIAL/INDUSTRIAL PROPERTY:
Type Business _____ # Employees ___ Per Shift ___ ___ ___
Industrial Wastes (Y/N) ___
Underground Storage Tanks On Property (Y/N) ___ Type _____

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[ ] Community (C) [ ] Shared Well (S)
[X] Municipal (M) [ ] Other 'spring' (O)
[ ] Private Well (P)

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[ ] Swimming Pool [ ] Jacuzzi [ ] Stable/Barn [ ] Workshop [ ] None
[ ] Garage [ ] Storage Building [ ] Deck/Patio [ ] Bedrooms [ ] Other

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.

X Signed: Luther G. McConnell Date: 4-21-93

NOTICE:

The undersigned, an authorized agent of the MECKLENBURG COUNTY HEALTH DEPARTMENT, certifies that the Department has approved the the Request for the Job Location contained in this document. This approval is granted in accordance with the provisions of Laws And Rules For Sanitary Sewage Collection, 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 permit is not transferable.

...

[ ] IMPROVEMENT PERMIT - VALID 60 MONTHS FROM ISSUANCE
[ ] MOBILE HOME EXCHANGE APPROVAL - VALID 6 MONTHS FROM ISSUANCE
[ ] ADDITION/RENOVATION APPROVAL - VALID 1 YEAR FROM ISSUANCE

Environmentalist Date

Director or Authorized Section Head Date

WWATER : 122791

PROPOSED PLOT PLAN

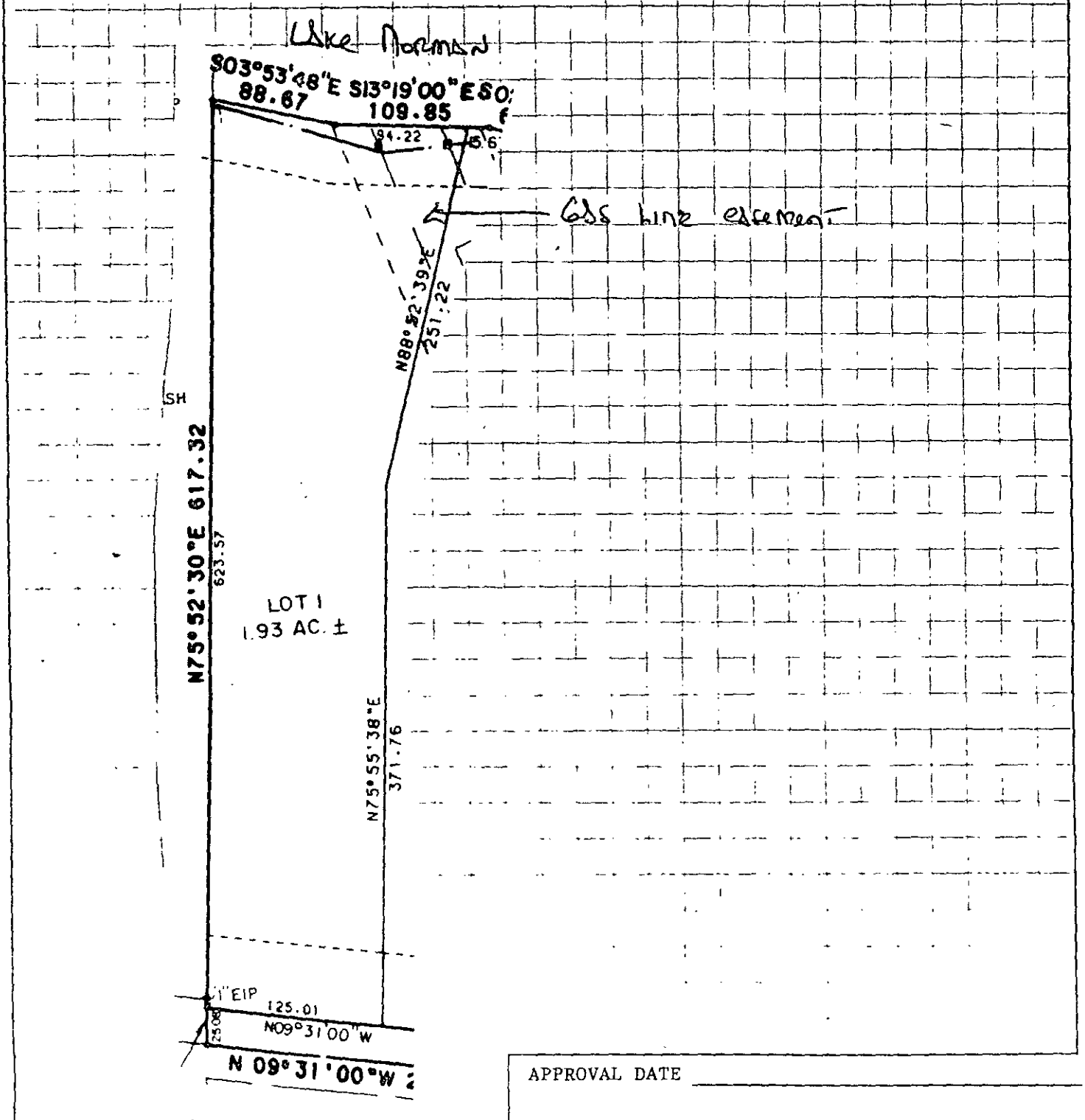
COPY

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

FILE: 985B/8857A

TC: 001-121-02 PO

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.



APPROVAL DATE _____

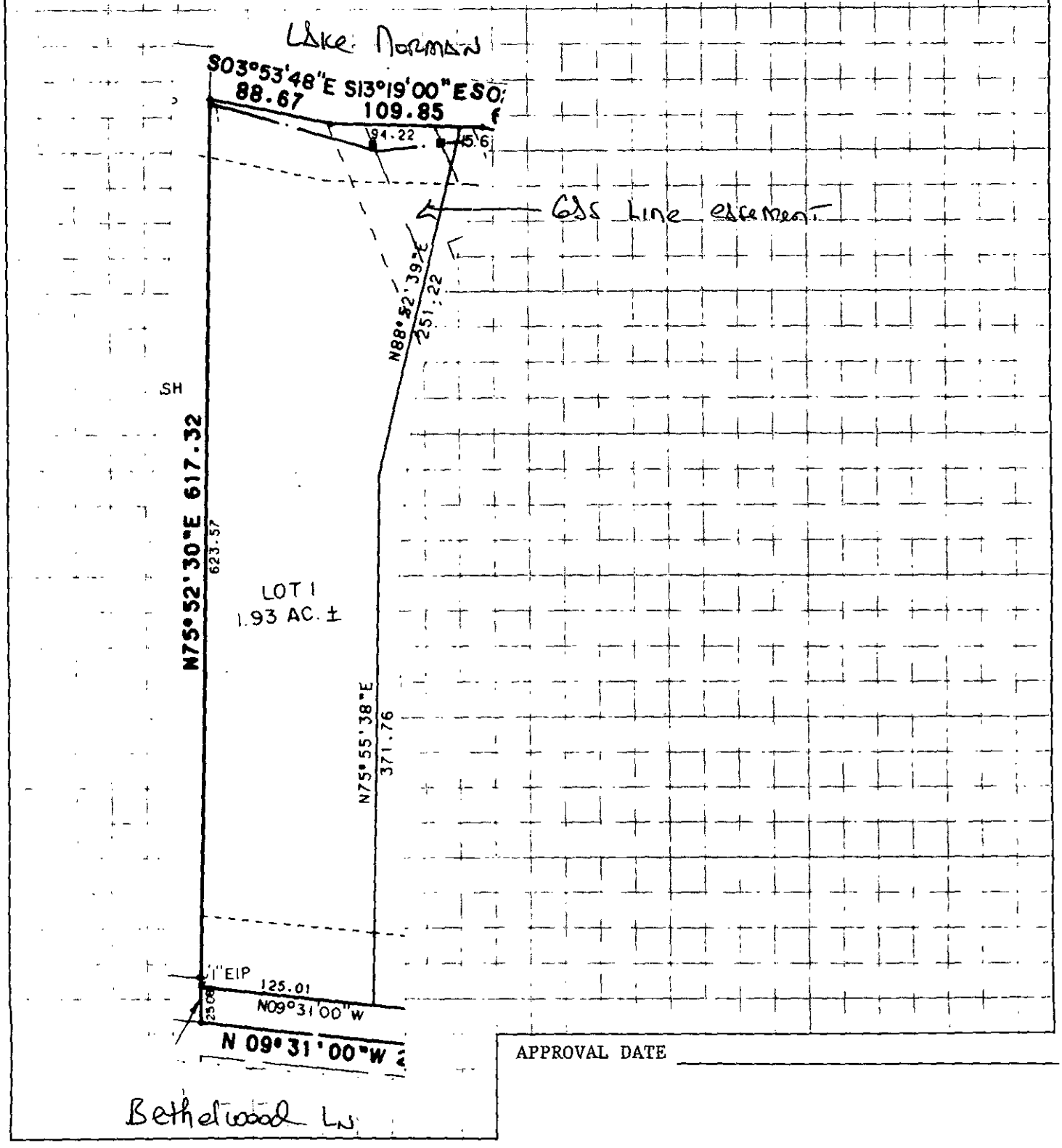
PROPOSED PLOT PLAN

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

FILE: 9858/8857A

TC: 001-121-02 PO

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.



APPROVAL DATE _____

White - Health Department's Copy Canary - Environmentalist's Copy Pink - Owner's Copy

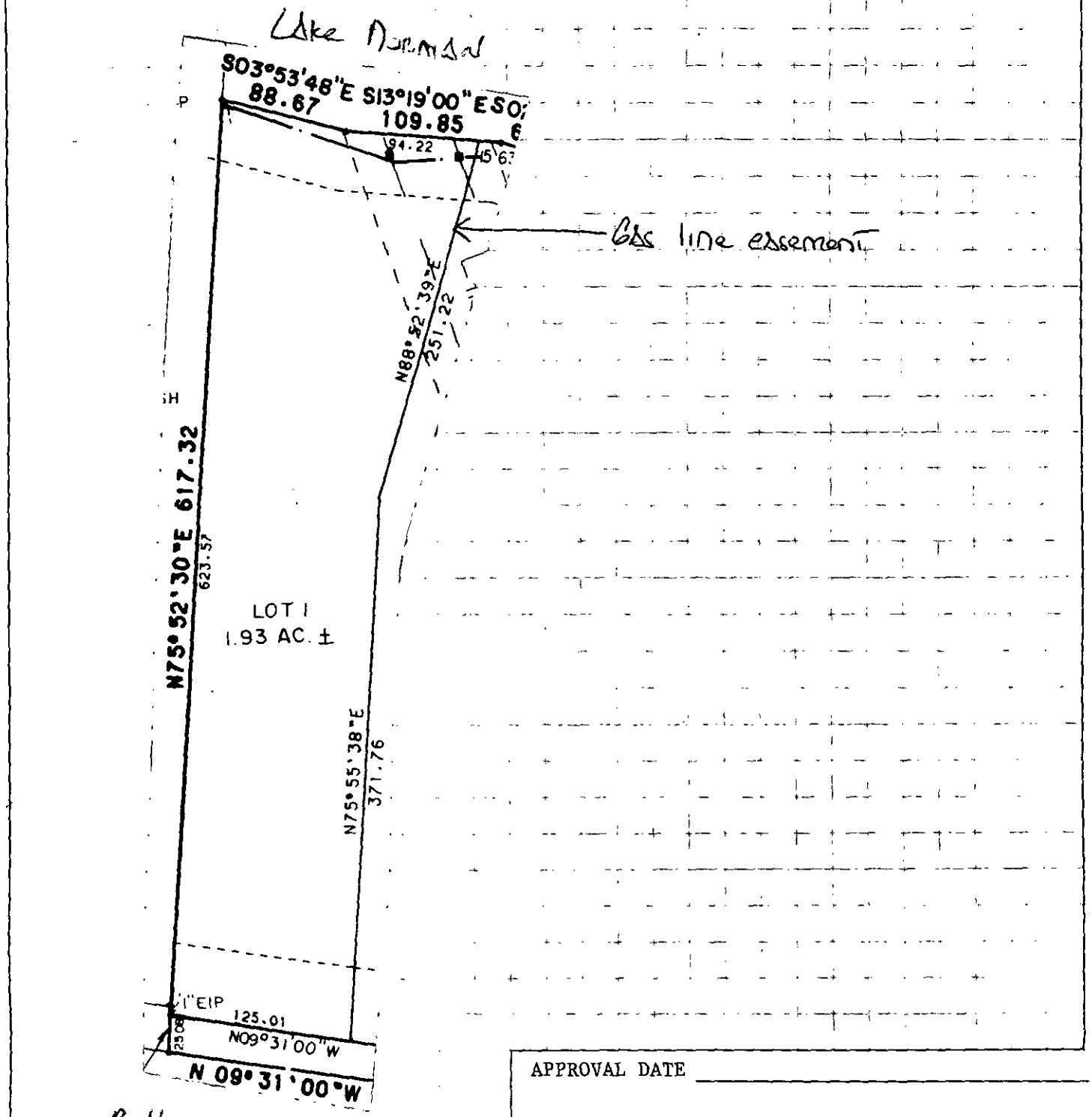
PROPOSED PLOT PLAN

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

FILE: 1958 1/2 57A

TC: 001-121-02 PO

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.



APPROVAL DATE _____

White - Health Department's Copy Canary - Environmentalist's Copy Pink - Owner's Copy

JUDITH A GIBSON REG OF DEEDS MECK NC
FILED FOR REGISTRATION 09/07/93 11:41
BK: 07448 PG: 0704/0705 #:0141 8.00

985 B1 8857A

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

COPY

ACKNOWLEDGEMENT OF REQUEST BY OWNER FOR RECLASSIFICATION OF SITE FROM "UNSUITABLE" TO "PROVISIONALLY SUITABLE" UNDER 15A NCAC 18A .1956, .1957, OR .1969 OF THIS SECTION.

The undersigned, Lakeview Homes, Inc., a North Carolina corporation owner of property located at Lot 1, Bethelwood Bay Subdivision, Mp Bk.25 Pg622. ("the site") and described in an instrument recorded in Book 7432 at Page 425, Mecklenburg Public Registry, hereby acknowledges that he 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 pursuant to 15A NCAC 18A .1948(d) 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 can reasonably be expected to function satisfactorily and thus that the findings specified in 15A NCAC 18A .1958(d)(1), (2), and (3) can be made; and that the Department therefore reclassified the site as "provisionally suitable" and issued on 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 his responsibility 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 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.

The undersigned further agrees for his heirs and assigns that, in the event any septic tank system installed under authority of the aforesaid permit fails to perform adequately in any respect, he will take whatever measures are required to correct same; or if such is impossible he will discontinue use of said system immediately.

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.

This 7th day of September, 1993.

Lakeview Homes, Inc., a North Carolina corporation
By: _____ (SEAL)
_____, President
Attest: Susan Register (SEAL)
Asst. Secretary
(Corporate Seal)

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, _____, a Notary Public for said County and State, do hereby certify that

_____ personally appeared before me this date and acknowledged the due execution of the foregoing instrument.

WITNESS my hand and notarial seal, this _____ day of _____, 199_____.

_____
Notary Public

My Commission Expires _____

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Kimberly J. Dudek, a Notary Public for said County and State, do hereby certify that

Susan S. Register personally came before me this day and acknowledged that he is

Asst. Secretary of Lakeview Homes, 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 her as its Asst. Secretary.

WITNESS my hand and notarial seal, this 7th day of September, 1993.

Kimberly J. Dudek
Notary Public

My Commission Expires 09/30/97

Amended 07/93

FILE # 8857A

BETHELWOOD BAY
SCALE 1" = 20'

TOP OF IRON ELEV (100)

LAKE

88.67

94.22

NOTE:
VALVE BANK PLACED
INSIDE TWO METER BOXES

50' SET BACK FROM WATER

(TU) (A) WHITE 103.6

(TU) (B) YELLOW 103.9

(TU) (C) BLUE 104.5

(TU) (D) RED 105.0

25' SET BACK

1000 GAL PUMP TANK

1500 GAL SEPTIC TANK

EST. ELEV. AT BOTTOM OF PUMP TANK 95.0

HOUSE SITE

251.22

(F) RED 199.0

(G) YELLOW 199.9

(H) BLUE 200.7

(X) TOP OF IRON ELEV. '200'

(I) WHITE 205.1

(J) RED 205.6

(K) BLUE 206.6

(TU) TURN UP AT END OF LINES

(V) PVC GLOBE VALVE

o FLAG MARKER

— — — SCH 40 2" PVC SUPPLY LINE

MECKLENBURG COUNTY
FILE # 8857A

LOT 1
BETHELWOOD BAY
SCALE 1" = 20'

TOP OF IRON ELEV ('100')

LAKE

88.67

94.22

NOTE:
VALVE BANK PLACED
INSIDE TWO METER BOXES

50' SET BACK FROM WATER

TU A WHITE 103.6

TU B YELLOW 103.9

TU C BLUE 104.5

TU D RED 105.0

V V V V

TU

S.S. SET BACK

1000 GAL PUMP TANK

1500 GAL SEPTIC TANK

EST. ELEV. AT Bottom OF PUMP TANK 95.0

251.22

HOUSE SITE

TU TURN UP AT END OF LINES

V PVC GLOBE VALVE

o FLAG MARKER

SCH 40 2 INCH SUPPLY LINE

F RED 199.0

G YELLOW 199.9

H BLUE 200.7

X TOP OF IRON ELEV. '200'

I WHITE 205.1

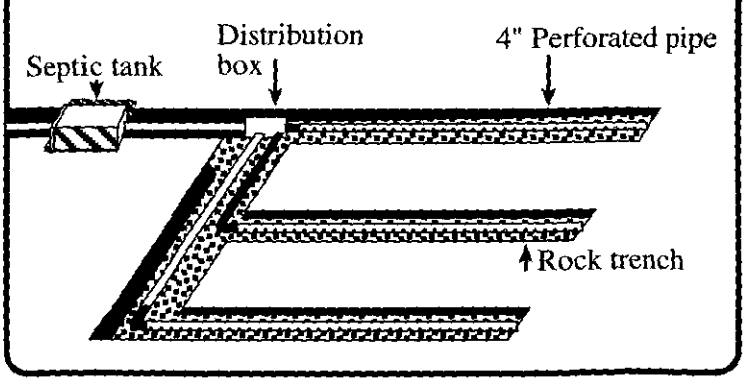
J RED 205.6

K BLUE 206.6

TIPS FOR PROPER SEPTIC SYSTEM MAINTENANCE

- Have your septic tank pumped out every 3-5 years, more frequently if you have a garbage disposal.
- Pratice water conservation. Repair leaking toilets and dripping water fixtures.
- Redirect gutter downspouts and surface water away from the septic system area.
- Schedule laundry at intervals through the week to reduce the risk of overloading the system.
- Keep vehicles off the septic system's drainfield to avoid soil compaction and subsequent damage to the system.
- Keep all chemical and hazardous materials out of the septic system.
- Do not flush non-degradables such as grease, plastic or disposable diapers.

If you begin to experience septic system troubles, contact the Mecklenburg County Health Department at 336-5102 for advice. If a repair is needed to the system, a permit to repair from the Health Department is required. There is no charge for a permit to repair.





Environmental

File #: 8858A Address: 20726 Bethelwood Ln

Our Environmental Health Specialist visited today:
Date: 4.2.98 a.m. ____ p.m. ____

TYPE OF SERVICE:

Building _____	☐	**REAL ESTATE:**	
Addition	☐	Septic Request	☐
Pool	☐	Water Sample Collected	☐
Mobile Home Exchange	☐	Other _____	☐

☐ Approved
☐ Disapproved
☐ Not Applicable

Comments: _____

_____

Environmental Health Specialist:

_____

Please call if you have any questions.

4.2.98 OSV – still on septic. Obvious malfunction at the time of this visit. CT