220 Walker Rd.
Sharps Chapel, TN 37866

220

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

CERTIFICATE OF COMPLETION OF SUBSURFACE SEWAGE DISPOSAL SYSTEM

Issued to: Cox John B.
Owner, Developer, Contractor, Installer, Etc.

Location Walker Rd.
Sharps Chapel, Tn.

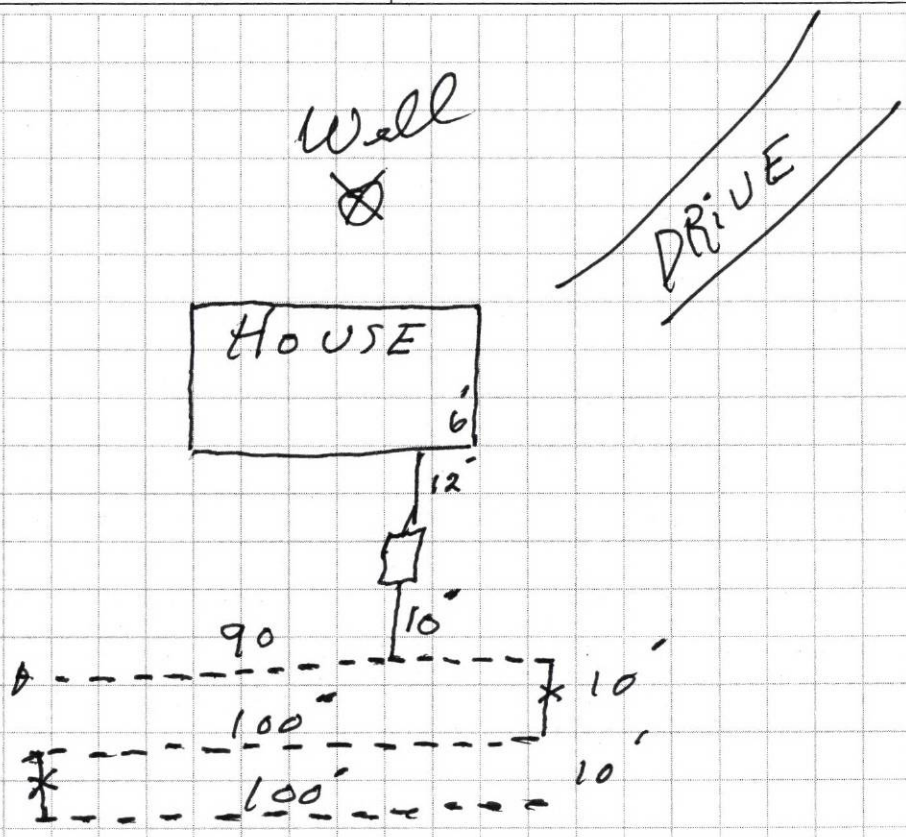
Type of system
( ) 1. Conventional
( ) 2. Low Pressure Pipe
( ) 3. Mound
( ) 4. Lagoon
(X) 5. Large Diameter Gravelless Pipe 10"
(a) Sand backfill required Yes ( ) No (X)
( ) 6. Other

5 (type) 1000 (volume) Septic Tank

Estimated Absorption Rate 45 (minutes per inch)

(X) New Installation ( ) Repair ( ) Other

Installed by: Steve Collins



Construction Approved By: Roy Taylor E-5-III 8-25-97
(Name and Title) (date)

CN-0872 (Rev. 4-93)

Original—File
Copy—Owner

SEPTIC TANK CARE

Residential sewage disposal systems are generally used in rural and unsewered suburban areas. A septic tank system must be properly designed, installed and maintained if reasonable service is to be expected.

A septic tank is a water tight structure in which organic solids are decomposed by natural bacterial processes. The flow of sewage is slowed in its passage through the tank so that larger solids settle to the bottom and accumulate as sludge. Grease and lighter particles rises to the surface and form scum.

The bacteria present in a tank are able to thrive in the absence of oxygen. Such decomposition in the absence of air is called "septic," which led to the naming of the tank. Solids and scum are digested and reduced to a smaller volume by the bacteria in the tank. However, a residue of sludge remains which must be stored during the interval between tank and cleanings.

The partially treated sewage, or effluent, flowing from the tank is still septic and contains large numbers of harmful bacteria and organic matter in a finely divided state or in solution. Foul odors, unsightly conditions and health hazards will develop if this effluent is ponded on the surface of the ground or carried away in open ditches. Final disposal of the effluent in a subsurface soil absorption system or filter is necessary to avoid these problems.

LOCATION

To facilitate inspection and maintenance, it is imperative that the homeowner knows the location of all parts of the disposal system. Such information may be obtained from the local health authority. Details and accurate measurements including the location of the tank, pumps, underground piping, and the absorption system should be shown on a sketch for future reference.

Then local health authority should be consulted to determine the minimum requirements relating to distance between disposal systems and water supply facilities.

MAINTENANCE

The frequency of cleaning depends on the size of the septic tank and the number of people it serves. When a garbage grinder is used, more frequent cleaning will be required. With ordinary use and care, a septic tank may require cleaning ever 2 or 3 years. However in many cases septic tanks can be satisfactorily operated even longer. The homeowner should determine for himself when his tank needs cleaning.

Actual measurement of sludge deposit and scum accumulation is the only method of determining when a tank need to be cleaned.

Scum can be measured with a stick to which a weighted flap has been hinged, or with any device that can be used to feel out the bottom of the scum mat. The stick if forced through the mat, the hinged flap falls into a horizontal position, and the stick is raised until resistance from the bottom of the scum felt. With the same tool, the distance to the bottom of the outlet device can be found.

A long stick wrapped with rough white toweling and lowered to the bottom of the tank will show the depth of sludge and the liquid depth of the tank. The stick should be lowered behind the outlet device to avoid scum particles. After several minutes, if the stick is carefully removed, the sludge line can be distinguished by sludge particles clinging into the toweling.

In two-compartment tanks, measurements should be made near the outlet of the first compartment.

The tank should be cleaned if either (a) The bottom of the scum mat is within 3 inches of the bottom of the outlet device; or (b) sludge comes within the limits specified in the accompanying table.

LIQUID CAPACITY OF TANK GALLONS	LIQUID DEPTH		
	3 feet	4 feet	5 feet
	Distance from bottom of outlet device to top of sludge, inches.		
750	6	10	13
900	4	7	10
1,000	4	6	8

Do not allow any person who does not have a health department permit to pump your septic tank. Septic tanks are usually cleaned by companies who make this operation a business. The homeowner should check with the local health department for the names of reputable companies in the area.

There are no known chemicals, yeasts or other substance capable of eliminating or reducing the solids in a septic tank so that cleaning is unnecessary. The use of such product is not necessary for the proper operation of a septic tank.

Septic tanks and absorption systems frequently are damaged by heavy trucks or equipment moving over them. Reference to the location sketch of the system will be found helpful in directing heavy vehicles away from the critical areas. If there is no way to avoid crossing a sewer line, cast iron should be used under the crossing.

The roots of trees and shrubbery may enter the tile lines and clog them completely. When this occurs, the roots can be removed only digging up and cleaning the tile line.

Neglect of the septic tank is the most common cause of damage to soil absorption systems. When the tank is not cleaned, solids build up and are carried over into the absorption system causing clogging of the soil. When this happens the absorption system must be relocated and rebuilt.

Field Test

220

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF GROUND WATER PROTECTION

PERMIT FOR CONSTRUCTION OF SUBSURFACE SEWAGE DISPOSAL SYSTEM

Issued to: Cox John B
Owner, Developer, Contractor, Installer, Etc.

Location: Walker Rd
Sharps Chapel, Tn.

Installation:
(X) 1. New Installation
( ) 2. Repair to Existing System

Establishment:
(X) 1. Residential: # Bedrooms 3
( ) 2. Other: _____ (specify)
Gal/Day _____

Evaluation Based Upon:
( ) 1. Soil typing by Soil Scientist
( ) a. General
( ) b. High Intensity
( ) c. Extra High Intensity
( ) 2. Soil Percolation Test
(X) 3. Environmental Specialist
Estimated Absorption Rate: 45 MPI

Type of System:
(X) 1. Convential OR
( ) 2. Low Pressure Pipe
( ) 3. Mound
( ) 4. Lagoon
(X) 5. Large Diameter Graveless Pipe 10"
( ) a. Sand backfill required
( ) 6. Other

Approval based upon:
Statute No. T.C.A. 68-221-403
( ) (c) Percolation test
( ) (d) Grandfather clause. Current standards except those specified
(X) (f) 12" (karst) and 6" (non-karst) buffer required
( ) (i) 9" buffer required (24"-36" total soil depth)
( ) (k) Grandfather clause — meets June 30, 1990 standards (repair only)
( ) Other _____

This system shall consist of a two compartment septic tank holding 900 gallons, with 300 linear feet in 3 or More trenches, 36 inches wide and 24-36 inches deep. (Depth of gravel: 12 inches)

Also required:
( ) 1. Soil Improvement Practice (SIP)
( ) 2. Flow Diversion Valve
( ) 3. Sewage Pump
( ) 4. Other: _____

All installers of subsurface sewage disposal systems must hold a valid annual license from the Tennessee Department of Environment and Conservation.

The recipient of this permit agrees to construct or have constructed the above described system in accordance with T.C.A. 68-221-401 et. seq. and The Regulations To Govern Subsurface Sewage Disposal Systems. If any part of the system is covered before being inspected and approved, it shall be uncovered by the recipient of the permit at the direction of personnel of the Department of Environment and Conservation. **Any cutting, filling or alterations of the soil conditions on the aforementioned property after this day may render this approval null and void.** Sign Here

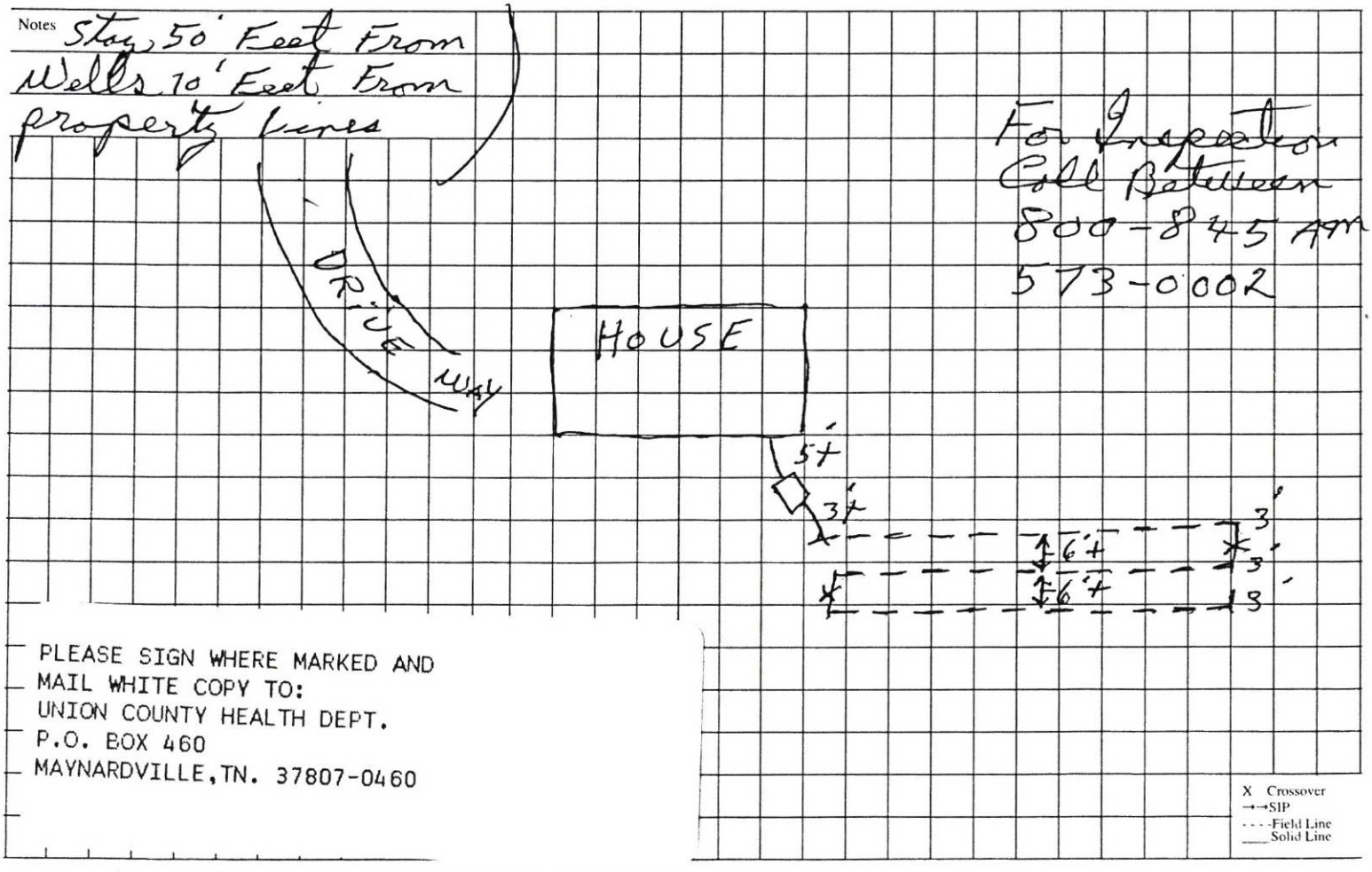
_____ Date 8-7-97
(Signature of Recipient)

Issued at Maynardville Tn Tennessee, in Union County

By Roy Taylor ES-II Date 8-7-97
(Name and Title) (Date of Issue)

This permit is valid for 3 years from date of issue.

Notes Stay 50' Feet From Wells 10' Feet From property lines



PLEASE SIGN WHERE MARKED AND
MAIL WHITE COPY TO:
UNION COUNTY HEALTH DEPT.
P.O. BOX 460
MAYNARDVILLE, TN. 37807-0460

This is a permit to construct and is not intended to imply approval of any work proposed or completed on this lot.

CN-0762 (Rev. 12/93) Original—File Copy—Owner RDA Pending

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
APPLICATION FOR GROUND WATER PROTECTION SERVICES

220

1. SERVICE REQUESTED: (check service)	APPLICANT COMPLETE QUESTIONS:	FEES DUE	PTBMIS CODES V689 Code	Supp/Code
____ Septic System Construction Permit				
_X_ Dwelling	2, 3, 4, 7, 8, 9	$____	78064	Yes
____ Commercial: gpd____	2, 3, 4, 7, 8, 9	$____	78064	Yes
____ System Modification	2, 3, 4, 7, 8, 9	$____	78064	Yes
____ Repair	2, 3, 4, 7, 8, 9	$____	78032	
____ Inspection Letter	2, 3, 5, 7, 8, 9	$____	78030	
____ Water Sample				
____ Total Coliform	2, 3, 6, 7, 8, 9	$____	78036	Yes
____ Fecal Coliform	2, 3, 6, 7, 8, 9	$____	78038	Yes
____ Alternative System Permit*		$____	78068	
____ Large Conventional System Plan Review*		$____	78099	
____ Large Alternative System Plan Review*		$____	78099	
____ Experimental System Plan Review*		$____	78072	
____ Subdivision Evaluation: Lots:____*		$____		
____ Soil Mapping: Type____ Acres____*		$____		Yes
____ Installer Permit: Type(s)____*		$____	78026	Yes
____ Pumper Permit*		$____	78028	
____ Plat Approval — Individual Lot		$____	78029	
____ Domestic Septage Disposal Site Permit		$____	78031	

*Applicant may review these service requests with Environmental Specialist prior to processing application.

2. **LANDOWNER:**
Names: JOHN B. COX
Address: 5115 BLUEFIELD RD
KNOXVILLE TN 37921
Day Phone: 584-1583

APPLICANT
Name: SAME AS LANDOWNER
Address: ____
Day Phone: ____

ORIGINAL OWNER
Name: LARRY DAY (FARM)

3. **LOCATION OF LOT OR SITE:** a) In a subdivision? NO b) Name: LARRY DAY FARM Lot # 6
b) Non-Subdivision ✓ Give specific directions and address to the lot or site: 220 WAKER RD SHARPS CHAPEL TN

4. **FOR SSDS PERMIT ONLY:** a) Size of lot 14.5 ACRES b) Number of Bedrooms 3
c) How many occupants? 2 d) Excavated Basement? Yes ✓ No____
e) Basement Plumbing Fixtures? Yes____ No____
f) Amount of water used monthly (gallons) ?
g) Water Supply: Public____ Well ✓ Spring____
h) Is the lot staked? YES If not, date it will be staked:____
Is the house staked? YES If not, date it will be staked:____
i) Installer, if known:____

4 Dr. From Lead mine Bend Rights

5. **FOR INSPECTION LETTER ONLY:** Will pick up____ Please mail
a) Age of house____ b) Is house vacant?____
c) Original sewage system inspected by Health Department?____
d) Date of previous repairs____ Inspected____
e) Is waste water "backing up" into plumbing fixtures?____
f) All waste water including washing machines routed into septic

PAT# 0001624628 CHART# NONE 087 01
ENC# 0039232 DATE 07/29/97 MCO:
NAME: COX, JOHN B
SSN 999999999 DOB RC SEX
YRS 0 MON 0 DAYS 0 423-584-1583
ADDR: 5115 BLUEFILED RD.
CITY: KNOXVILLE TN 37921

6. **FOR WATER SAMPLE ONLY:** a) Source of Supply: Spring____
b) Is there an outside faucet? ____ c) Is the source chl
d) For Wells: Is the casing 6" above the ground? ____ Is

7. MAKE A ROUGH SKETCH ON BACK OF THIS PAGE SHOWING DIRECTIONS TO PROPERTY, PROPERTY LINES, HOUSE SITE, WELL LOCATION, SPRING LOCATION, PLANED DRIVEWAY AND UTILITIES.

8. ALL FEES DUE IN ADVANCE AND ARE NON-REFUNDABLE (except upon appeal). See Fee Schedule on reserve. Make check payable to: **TREASURER, STATE OF TENNESSEE**

9. I certify that the above information is true and correct to the best of my knowledge, and that I have been authorized by the above named landowner to submit this Application for Environmental Services to the Division of Ground Water Protection.

DATE: 7-29-97 SIGNATURE: John B. Cox AMOUNT PAID: $ 100.00 RECEIPT NUMBER 9169

White: File Canary: Owner

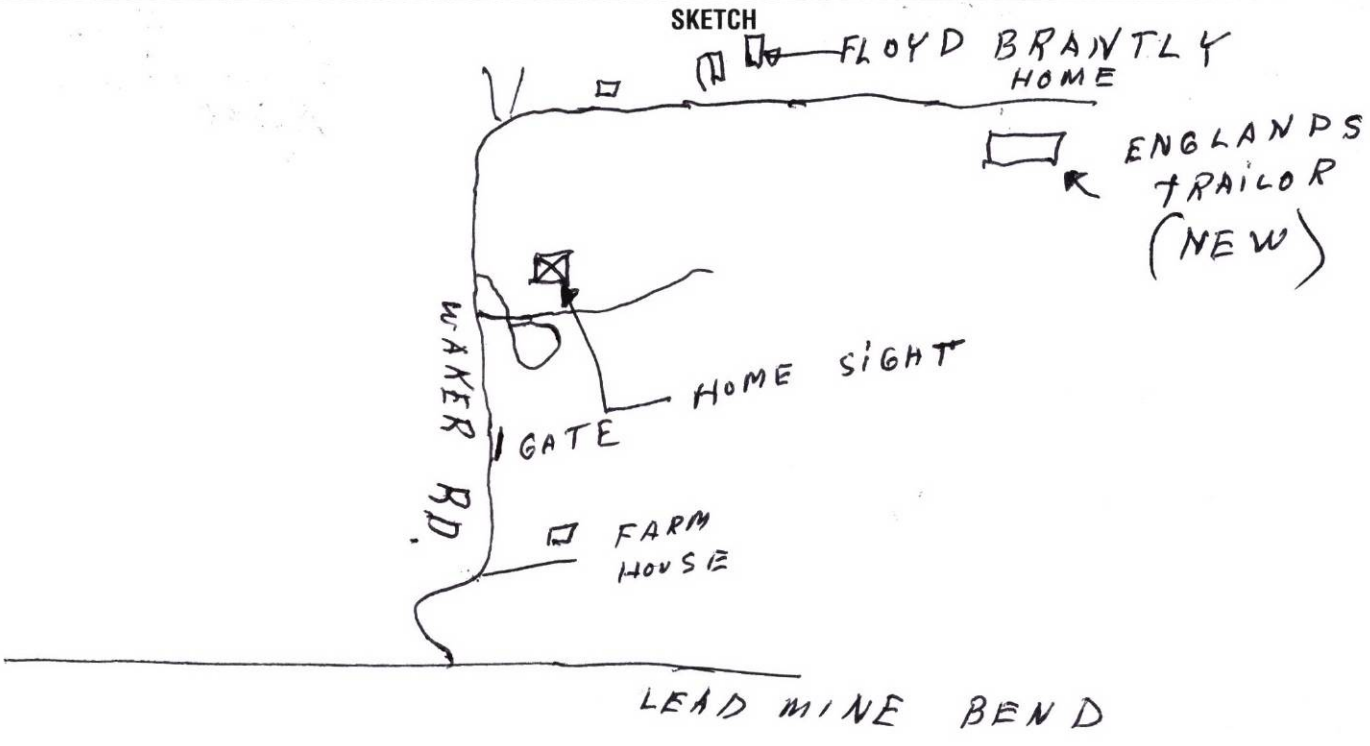
CN-0971 (Rev. 4-94) RDAs 2321 and 2403

FEE SCHEDULE

PTBMIS SUPP/CODE

Evaluation for Conventional or LDGP Septic System Permit	$100.00 up to 1000 gpd $ 50.00 for each additional 1000 gpd or portion thereof	78066
Repair	$None	
Inspection Letter	$100.00	
Subdivision Evaluation	$ 20.00 per lot	
Water Samples:		
Total Coliform	$ 25.00	78036P
Fecal Coliform	$ 50.00	78036P
Soil Mapping:		
Low Intensity	$ 65.00 up to 5 acres	78074
	$ 10.00 per acre thereafter	78076
General Intensity	$ 40.00 per acre — $ 40.00 minimum	78078
High Intensity	$ 65.00 per acre — $ 65.00 minimum	78040
Extra High Intensity	$ 100.00 per acre — $100.00 minimum	78042
(Minimum is for each separate acre or part of acre to be mapped)		
Alternative System Application Processing	$150.00 up to 1000 gpd $ 75.00 for each additional 1000 gpm or portion thereof	78070
Large Conventional or Large Alternative Plan Review	$300.00 per proposed system	
Experimental System Application Processing	$250.00	
Pumper Permit	$100.00	
Installer Permit	$100.00 for conventional & LDGP $ 50.00 for each alternative system	78080
Plat Approval — Individual Lots	$ 20.00 per lot	78029
Domestic Septage Disposal Site Permit	$200.00	78031

SKETCH



Official Use:

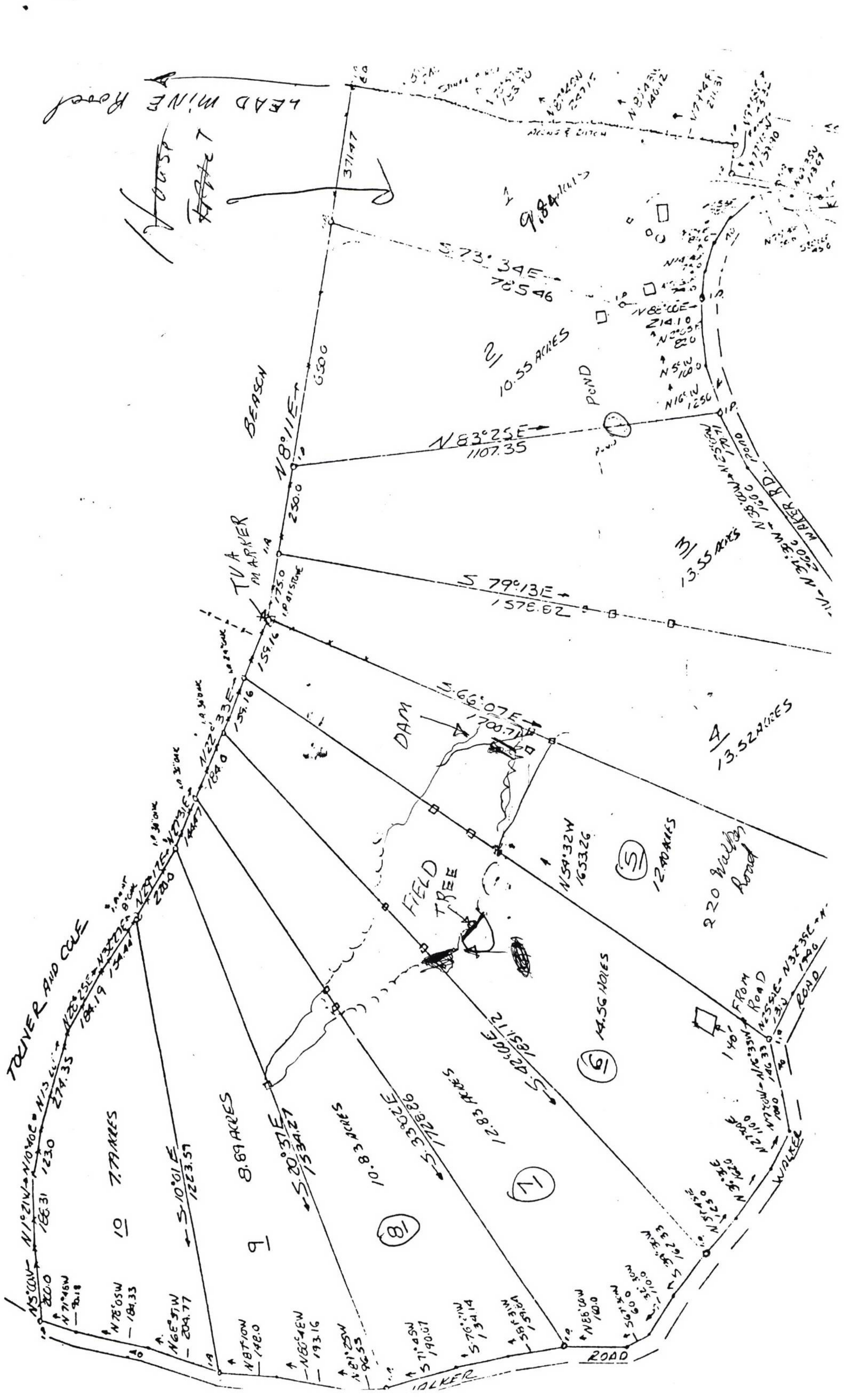
File Search

Absorption Rate _____ At Depth_____

Percolation Rate _____ At Depth_____

Other Requirements

220



LEAD MINE Road
BEASON
TVA MARKER
TOLIVER AND COLE
POND
DAM
FIELD TREE
WALKER RD.
WALKER ROAD
220 Walker Road
9.84 ACRES
10.55 ACRES
13.55 ACRES
13.52 ACRES
12.40 ACRES
14.56 ACRES
12.83 ACRES
10.83 ACRES
8.89 ACRES
7.79 ACRES
S 73°34E 785.46
N 83°25E 1107.35
S 79°13E 1578.82
S 66°07E 1700.71
N 54°32W 1653.26
S 20°37E 1534.27
S 33°02E 1718.86
S 10°01E 1223.57