ON0023342

✓

EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT Permit # 9786 P
INDIVIDUAL SEWAGE DISPOSAL SYSTEM INSPECTION FORM Date 3/29/96

APPROVED: YES ✓ **NO** # 41260003005 ENVIRONMENTALIST McCarthy

Address 11625 Fannin Circle, Owner Bill Goodman

Legal Description Lot 253, Reata Fil. #1

Residence ✓, # of bedrooms 3; Commercial ____; System Installer Munson

SEPTIC TANK:

Commercial ✓; Noncommercial ____, L ____, W ____, WD ____

Construction Material Concrete, capacity 1250 gallons.

DISPOSAL FIELD:

Rock Systems:

Trench: depth ____, width ____, total length ____, sq. feet ____

Bed: depth ____, length ____, width ____, sq. feet ____

Rock type ____, depth ____, under PVC ____, over PVC ____

Seepage Pits: # of pits ____, total # of rings ____, working depth(s) ____

size of pit(s) L X W ____, lining material ____, total sq. feet ____

Rockless Systems:

Chamber: Type Infiltrator, number of chambers 32, bed ✓, trench ____

sq. ft./section 18, reduction allowed N/A %, sq. ft required *

total sq. ft. installed *, depth of installation ____

Engineer Design Y or N, Designing Engineer Hank Danley,

Approval letter provided? Y or N Rec'd 4/9/96

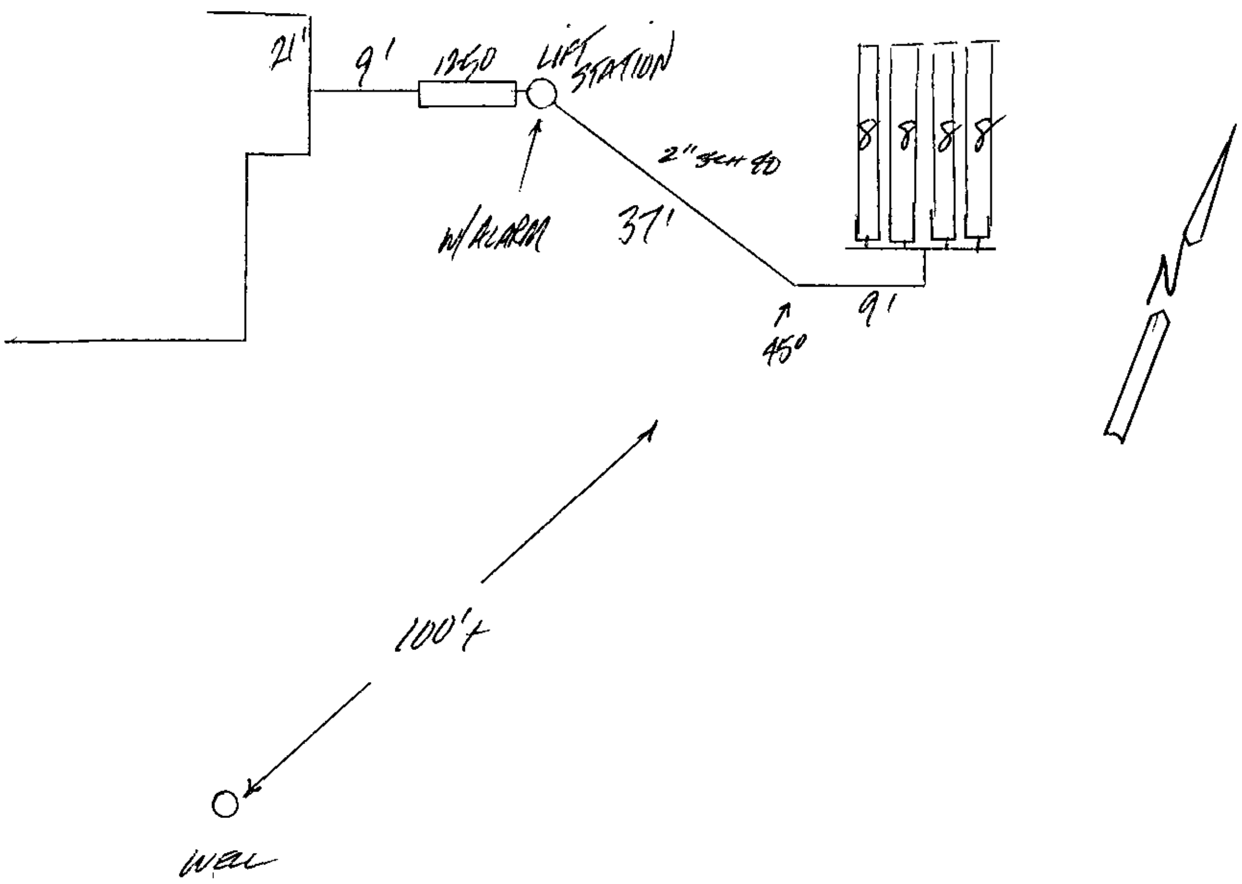
Well 50 feet from tank Y or N 100 feet from leach field Y or N

Well installed at time of septic system inspection Y or N Public Water ____

*Approval will be revoked if in the future the well is found to be within 50 feet of the septic tank and/or 100 feet of the disposal field.

* Per PE design

NOTES: - SJ Electro system audio/visual alarm.
- Discussed the low spot between the pump and leachfield and shallow installation may be subject to freezing.



DH

Acres 5 EL PASO COUNTY • DEPARTMENT OF HEALTH AND ENVIRONMENT

301 South Union Blvd. • Colorado Springs, Colorado • 578-3125

Water Supply well

Permit 9786

PERMIT

TO CONSTRUCT, ALTER, REPAIR OR MODIFY ANY INDIVIDUAL SEWAGE DISPOSAL SYSTEM

Receipt No. JCC

Issued to BILL GOODMAN Date 1-05-96

Address of Property 16525 FANNIN CIRCLE, LOT 253, REATA FIL. 1 Phone 548-1139

~~495-0451~~ (Permit valid at this address only)

Sewage-Disposal System work to be performed by JIM MUNSON Phone 495-0451

This Permit is issued in accordance with 25-10-106 Colorado Revised Statutes 1973, as amended. PERMIT EXPIRES upon completion-installation of sewage-disposal system or at the end of twelve (12) months from date of issue–whichever occurs first-(unless work is in progress). This permit is revokable if all stated requirements are not met.

–THIS PERMIT DOES NOT DENOTE APPROVAL OF ZONING AND ACREAGE REQUIREMENTS–

$150.00

PERMIT FEE (NOT REFUNDABLE)

1-5-97

DATE OF EXPIRATION

DIRECTOR, DEPARTMENT OF HEALTH AND ENVIRONMENT

Krueger

ENVIRONMENTALIST

NOTE: LEAVE ENTIRE SEWAGE-DISPOSAL SYSTEM UNCOVERED FOR FINAL INSPECTION. 48 HOUR ADVANCE NOTICE REQUIRED.

SEPTIC TANK:	TRENCH SYSTEM:	BED SYSTEM:	SEEPAGE PIT SYSTEM:
1250 ____ gallons	total square feet PER P.E. DESIGN ____ ft. of trench ____ inches wide ____ ft. of trench ____ inches wide	total square feet ____	total square feet ____ ____ rings or ____ diam.x ____ w/d

NOTES: System to be installed per regulations and engineer design. Ground water present at 42 inc Final approval pending written correspondence from engineer indicating the system was inspected and approved by the engineer prior to our office granting approval.

The Health Office shall assume no responsibility in case of failure or inadequacy of a sewage-disposal system, beyond consulting in good faith with the property owner or representative. Free access to the property shall be authorized at reasonable time for the purpose of making such inspections as are necessary to determine compliance with requirements of this law.

520-6600

EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
301 South Union Boulevard
Colorado Springs, CO 80910-3123

APPLICATION FOR A PERMIT TO CONSTRUCT, REMODEL, OR INSTALL A SEWAGE DISPOSAL SYSTEM

Builder - Gary Roth 548-1139

Name of Owner Bill Goodman **Daytime Phone** 548-1139

Address of Property 16525 Fannin Circle, Peyton, CO 80831 **Date** ~~12/15/95~~ 1-3-96

Legal Descripion of Property Lot 253 Reata Filing # 1

X **Tax Schedule Number** 4126003005 **Septic Contractor/Phone** Munson Excavating 495-3151

Type of House Construction Wood Frame 2 Story **Source of Water** Well

Size of Lot 5 acres **Basement (Y or N)** N **Percolation Test Attached (Y or N)** Y P.E. design

MAXIMUM POTENTIAL NUMBER OF BEDROOMS 3

I have supplied a plot plan as described on the back of this form. I acknowledge the completeness of the application is conditional upon such further mandatory & additional tests & reports as may be required by the Department to be made & furnished by the applicant for purposes of evaluating the application, & issuance of the permit is subject to such terms & conditions as deemed necessary to ensure compliance with rules & regulations adopted pursuant to C.R.S. 1973, 10-25-101 et. seq. I hereby certify all statements made, information and reports submitted by me are or will be represented to be true & correct to the best of my knowledge & belief, & are designed to be relied on by the El Paso County Department of Health in evaluating the same for purposes of issuing the permit applied for herein. I further understand any falsification or misrepresentation may result in the denial of the application or revocation of any permit granted based upon said application & in legal action for perjury as provided by law.

OWNER'S SIGNATURE William Goodman

****

DEPARTMENT OF HEALTH USE ONLY

Absorption Area P.E. Engineer design **Tank Capacity** 1250 gal **Date/Site Inspection** Jan 4, 96

Remarks: System to be installed per regulations, and engineer design. Ground water present at 42" inches. Final approval pending written correspondence from engineer indicating the system was inspected and approved prior to our office granting approval.
Approval pending land planning review.

Application is ( ) approved ( ) denied

Environmentalist Myslowski, S **Date** Jan 4, 96

****

Permit # 9786 **Receipt #** CPC **Date to Planning Dept** walk through
placed 1-8-96 JPC

EHS-10/93

PROPERTY AND PERC HOLES MUST BE CLEARLY MARKED/POSTED

The following information must be on your plot plan.
Please check ( ) the items that apply.

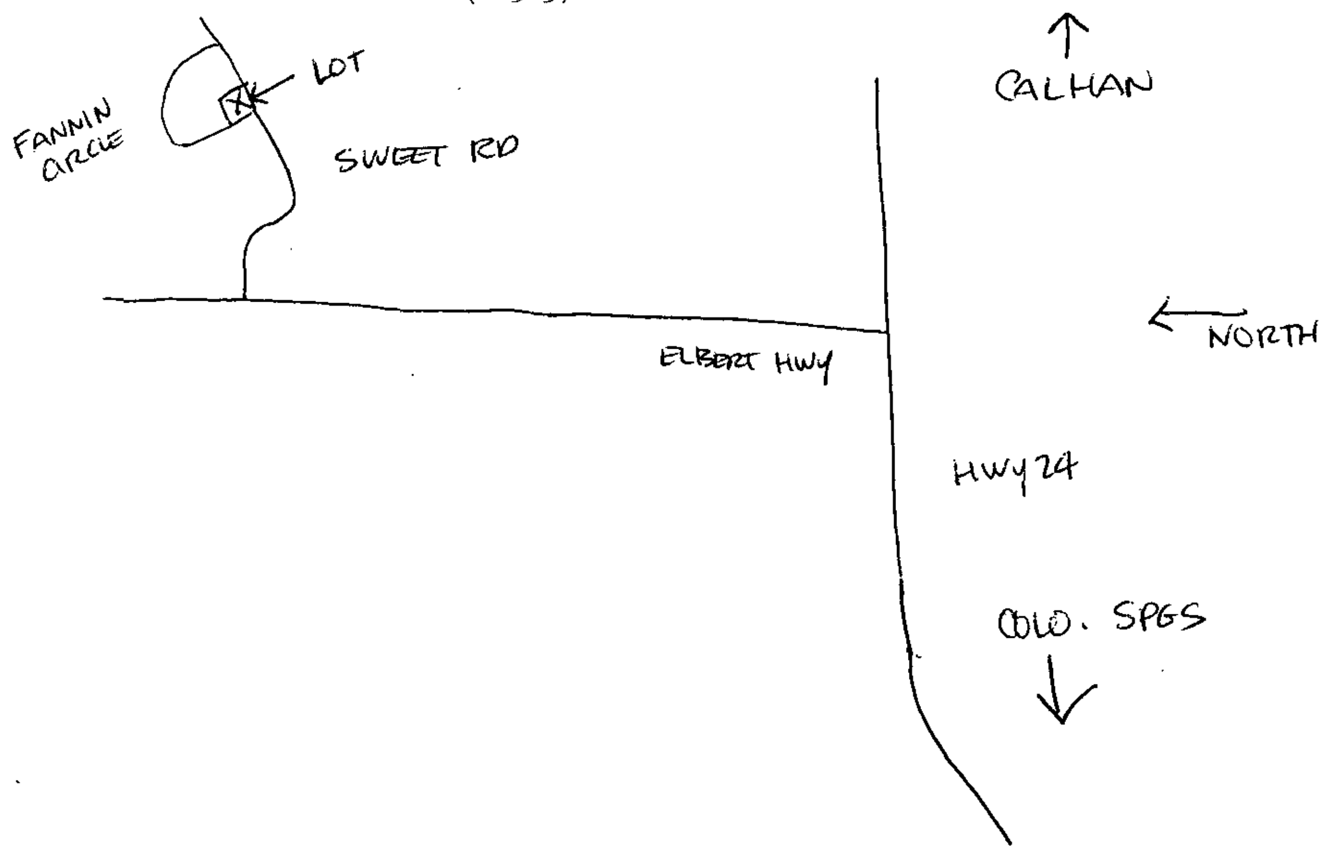
(XX) Property Lines
(XX) Property Dimensions
(XX) Proposed Septic System Site
(XX) Well(s)
(NA) Adjacent Well(s)
(NA) Building(s)
(XX) Proposed Building(s)
(XX) Water Line
(N/A) Cistern
(N/A) Subsoil Drain(s)

Are any of these within 100 feet of your proposed septic system (including adjoining property)? Also draw on the plot plan.

Spring(s) N/A
Lake(s) n/a
Pond(s) n/a
Stream(s) n/a
Dry Gulch(s) n/a
Natural Drainage Course(s) n/a

Give complete directions to the property from a main highway.

FROM HWY 24 EAST BOUND TURN NORTH ON ELBERT HWY TO SWEET ROAD. TURN EAST ON SWEET ROAD TO FANNIN CIRCLE. TURN LEFT. LOT IS ON THE RIGHT. CORNER LOT. ADDRESS IS MARKED ON LOT. (16525) FANNIN CIRCLE



16525 Fannin Circle
#4126003005 E

DARLOW ENGINEERING CO.

03-29-96

3405 N. SINTON RD.#138
COLO. SPGS. COLO. 80907
(719) 633-9440

WATER LEVEL 42"

Depth	DEEP SOIL SAMPLE HOLE DESCRIPTION
0-12"	Loose, fine trace sand, very heavy silt/clay, dark gray, moist
12"-24"	Loose, fine trace sand, very heavy silt/clay, olive/gray, slightly moist
24"-36"	Loose, fine trace moderate sand, heavy silt/clay, olive/gray, slightly moist
36"-48"	Loose packed, fine trace moderate sand, moderate heavy silt/clay, rust/gray/red, mottled, moist
48"-60"	Packed, fine-medium trace sand, heavy silt/clay, rust/olive, mottled, moist
60"-72"	Hard packed, fine-medium trace sand, very heavy silt/clay, rust/olive, mottled, moist, (claystone)
72"-96"	Very hard packed, fine-medium trace sand, very heavy silt/clay, rust/olive, mottled, moist, (claystone)

TIME	TEST HOLE #1		TEST HOLE #2		TEST HOLE #3		TEST HOLE #4		TEST HOLE #5		TEST HOLE #6	
4:30	INCH	DROP	INCH	DROP	INCH	DROP	INCH	DROP	INCH	DROP	INCH	DROP
4:45	24"	9/16	24"	3/16	24"	13/4						
5:00	24"	1/2	24"	1/8	24"	11/8						
5:15	24"	5/16	24"	1/8	24"	13/16						
5:30	24"	1/4	24"	1/8	24"	7/8						
5:45	24"	1/4	24"	3/16	24"	13/16						
6:00	24"	5/16	24"	1/8	24"	7/8						
	MIN./INCH		MIN./INCH		MIN./INCH		MIN./INCH		MIN./INCH		MIN./INCH	
	32.4		120		17.1							

"all ratiocination subject to final approval by your local health dept."

	DATE	TIME
DRILL	9/22/95	11:00 AM
FILL	9/23/95	3:30 PM
TEST	9/23/95	4:30 PM

CUSTOMER & LOCATION
COLORADO HOME BUILDERS
16525 Fannen Cir.
ALL TESTS SUBJECT TO FINAL APPROVAL OF YOUR LOCAL HEALTH DEPT.

AVERAGE: 56.5 MIN./INCH

HENRY W. DANLEY
REGISTERED PROFESSIONAL ENGINEER
6418
STATE OF COLORADO

SEPTIC SYSTEM FOR
16595 FANNEN CIR
COLORADO HOME BUILDERS
EL PASO COUNTY, CO

INFORMATION:

PERC TEST 56.5 MINS/INCH
NUMBER OF BEDROOMS = 3
CONSUMPTION = 3 × 150 × 1.5 = 675 G/D

BASE AREA REQ'D = A = $\dfrac{675(\sqrt{56.5})}{5}$
= 1015 □'

BED AREA REQ'D = 675/1.2 GAL/DAY
= 563 □'
NUMBER OF INFILTRATORS (OR BIODIFFUSERS) = 563 □'/18 □'/EACH
= 32
USE 4 ROWS OF 8 EACH

HENRY W. DANLEY
REGISTERED PROFESSIONAL ENGINEER
6418
STATE OF COLORADO

* (NO REDUCTION BECAUSE OF SOIL CONDITIONS)

SLOPE = FLAT

WATER LEVEL IS AT 42"

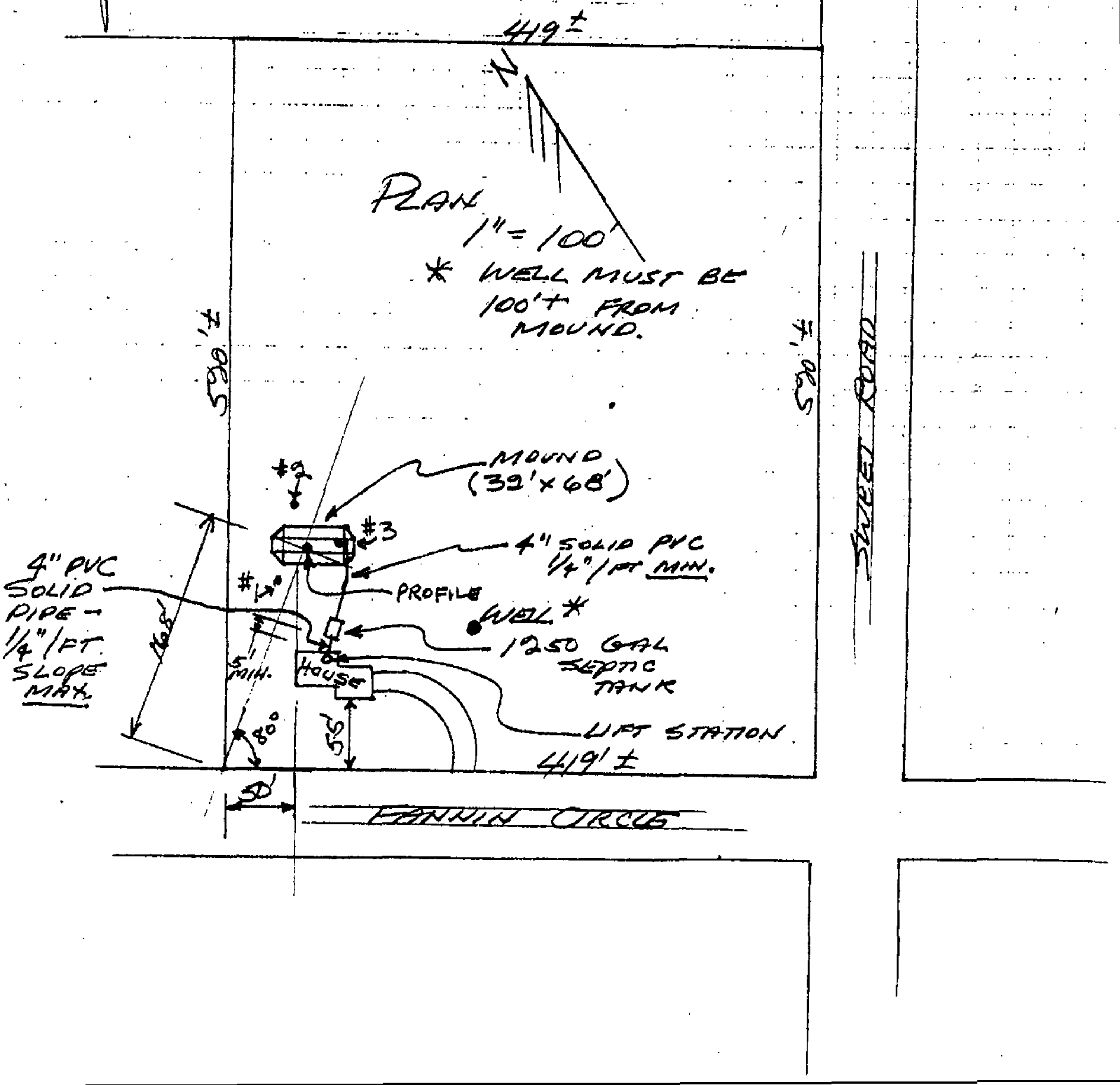
(SYSTEM MUST BE 48" MIN ABOVE WATER LEVEL)

Darlow Engineering
Hank Danley P.E.
34[illegible] Sinton Rd. #138
[illegible] Springs, CO 80907
[illegible]19) 598 [illegible]60

HENRY W. DANLEY
REGISTERED PROFESSIONAL ENGINEER
8418
STATE OF COLORADO

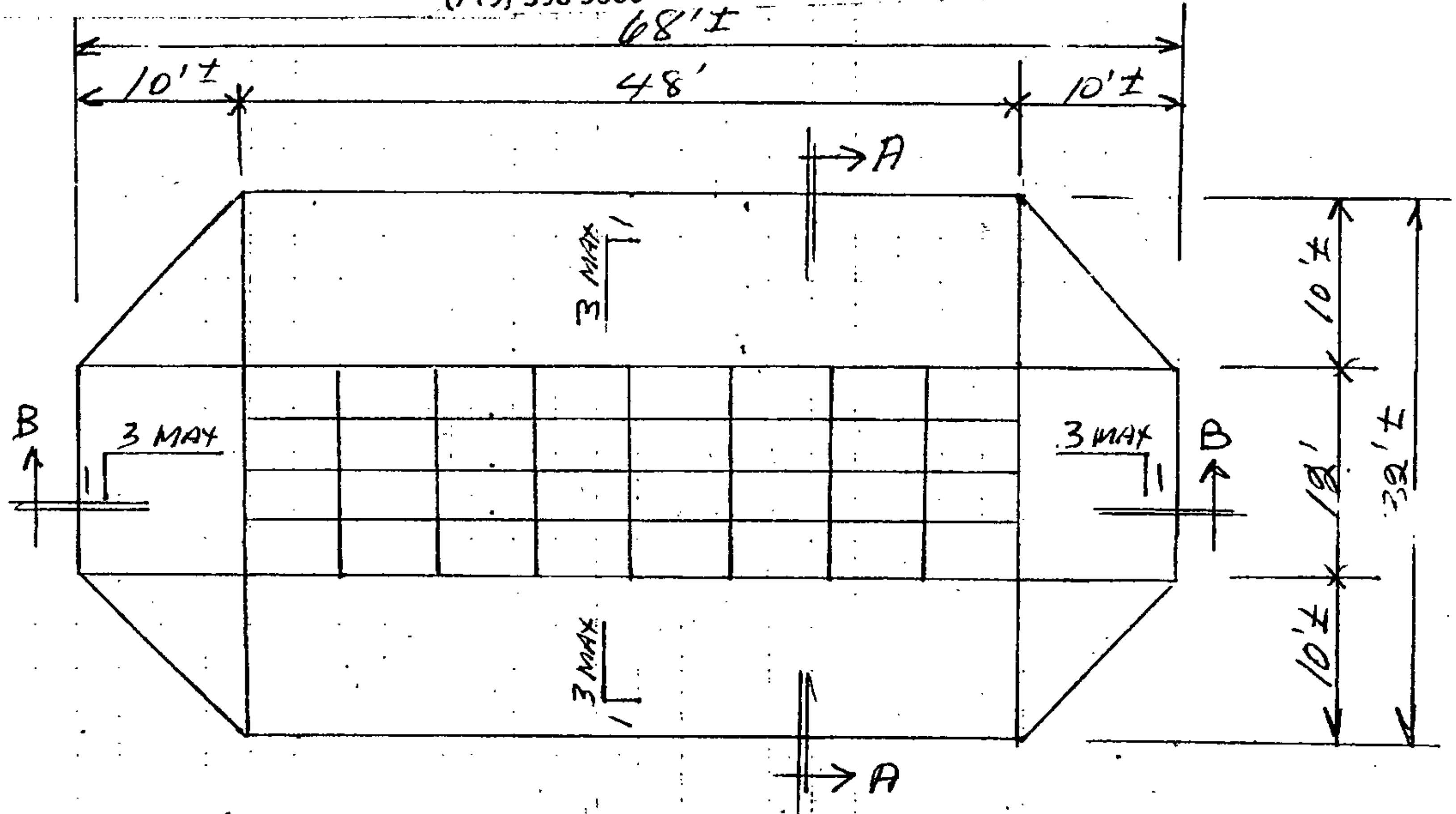
SEPTIC SYSTEM - 16525 FANNIN CIRCLE - GOODMAN RESIDENCE - EL PASO COUNTY, CO. (CON'T)

Darlow Engineering
Hank Danley P.E.
3405 Sinton Rd. #138
Colorado Springs, CO 80907
(719) 598-5660



Darlow Engineering
Hank Danley P.E.
3405 Sinton Rd. #138
Colorado Springs, CO 80907
(719) 598-5660

Septic System - 16525 Fannin Circle - Goodman Residence - El Paso County, Co. (Con't)



PLAN OF ABSORBTION BED
N.T.S.

BASEL AREA = (32' × 48') + (2 × 10 × 12) + (2 × 10 × 10)
= 1976 □' > 1015 □' OK

HENRY W. DANLEY
REGISTERED PROFESSIONAL ENGINEER
8418
STATE OF COLORADO

To My Customer:

I thought it might be helpful to you to know a little bit about the percolation test process. After all, you're paying for this and I always feel bett- if I understand what I'm paying for. So here is a brief look at what you're get- ing for your money.

What is a Percolation Test? The percolation test consists of several step. In the area where the septic system is to be installed, an 8 foot hole is drilled. The soils are examined visually as they are augured, so that a description of the soil at different levels can be made. This is called the profile hole. Comments are made concerning type of material and depth at which any change is observed. The presence of water, if detected, is also noted.

Three other holes are drilled around the profile. These are drilled to the appropriate depth for the expected septic installation; usually 3 feet. They are filled with water and left to soak for approximately 24 hours. They are then cleaned, refilled and soaked for approximately another hour. Then they are refilled, and the rate at which the water level drops in each hole is recorded. This will tell how fast the water percolates through the surrounding soil. An "inch per hour" value is calculated from these readings.

What does this information do for me? The rate of percolation tells the septic designer and/or installer how well the system should function. It tells him how large the system must be and if a specially designed system is needed. If the percolation rate is too slow, special care must be given, since the effluent wil' move through the system too slowly, backing up into your house or yard. If th. percolation rate is too fast, effluent may move through too quickly, possibl, entering the water system before fully purified by soil filtering. Since it's better to have a proper design now then to replace it later, an accurate percolation test is a vary desirable thing.

A percolation test is not only a good idea, but is required by the County Health Department in almost every county in Colorado before the issuing of a septic installation permit.

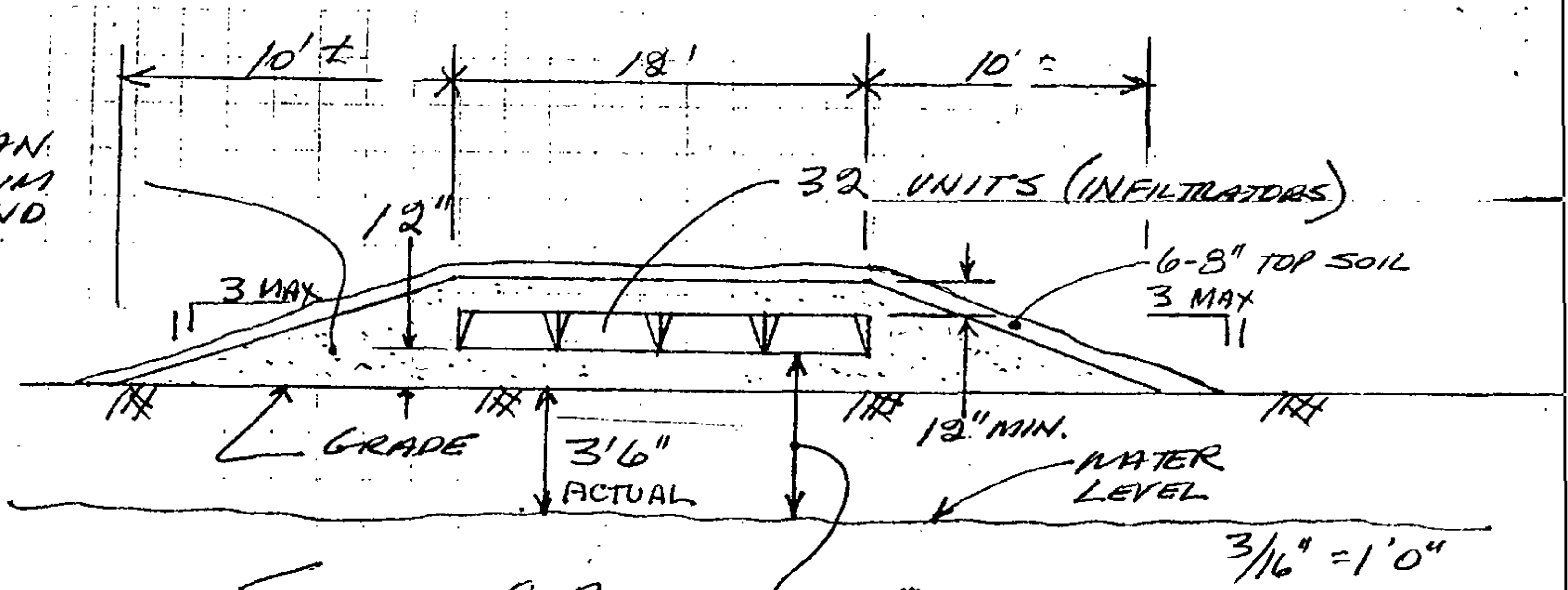
Does a percolation test then insure a perfectly functioning septic system? The health department has done their best to put in place guidelines that will allow proper design. We work hard to give you valid information and conform to health department standards. All conscientious designers and installers are careful to comply with health department requirements. All these factors are designed to minimize your risk.

However, there is still no surety that all will be perfect. Soil conditions can very tremendously within a few feet. Outstanding percolation test results may occur inches from an area that would have failed and is part of the installation area. Also, conditions in the soil can change regarding underground water flow and other factors. Therefore, although everything reasonable is done to minimize your risk and to employ the best techniques known at this time, there is no absolute guarantee.

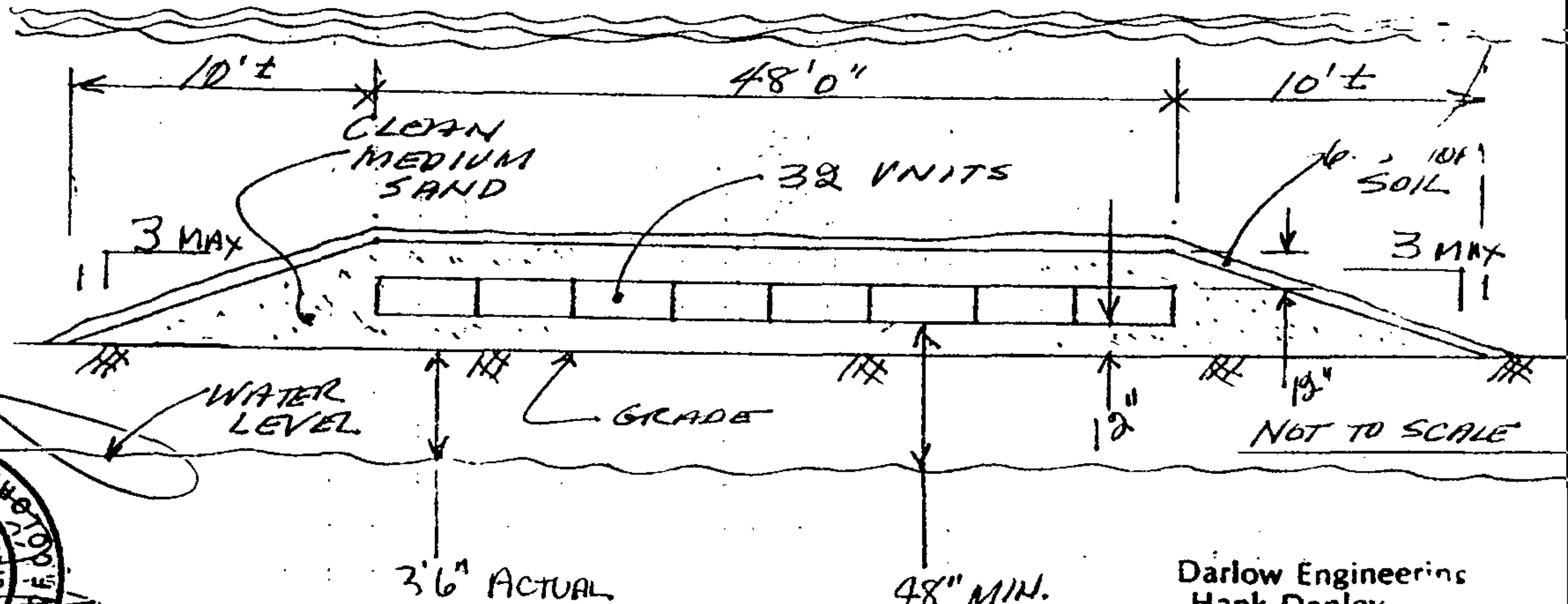
I hope this has been of some help. If you have any further questions, please let me know.

Darlow Engineering
Certified Perc Test

Septic System for 16525 Fannen Cir. Home Builders Colo. El Paso County, Co.



Section A-A.



Section B-B

HENRY W. DANLEY
REGISTERED PROFESSIONAL ENGINEER
STATE OF COLORADO

Darlow Engineering
Hank Danley
3405 Sinton Rd.
Colorado Springs, CO 80907
(719) 598-5660

Darlow Engineering
Hank Danley P.E.
3405 Sinton Rd. #138
Colorado Springs, CO 80907
Office (719) 598-5660
Home (719) 633-9440

Construction

a) Site preparation

Good construction techniques are essential if the mound is to function properly. The following techniques should be considered.

Step #1 Rope off the site to prevent damage to the area during other construction activity on the lot. Vehicular traffic over the area should be prohibited to avoid soil compaction.

Step #2 State out the mound perimeter and bed in the proper orientation. Reference stakes set some distance from the mound perimeter are also required in case the corner stakes are disturbed.

Step #3 Cut and remove any excessive vegetation. Trees should be cut at ground surface and the stumps left in place.

Step #4 Measure the average ground elevation along the upslope edge of the bed to determine the bottom elevation of the bed.

Step #5 Plow the area within the mound perimeter. Use a two bottom or larger moldboard plow, plowing 7-8" deep parallel to the contour. Single bottom plows should not be used as the trace wheel runs in every furrow, compacting the soil. Each furrow should be thrown upslope. A chisel plow may be used in place of a moldboard plow. Roughening the surface with backhoe teeth may be satisfactory, especially in wooded sites with stumps. Rototilling is not recommended because of the damage it does to the soil structure. However, rototilling may be used in granular soils, such as sands.

Plowing should not be done when the soil is to wet. Ssmearing and compaction of the soil will occur. If a sample of the soil taken from the plow depth forms a wire when rolled between the palms, the soil is to wet. If it crumbles, plowing may proceed.

Darlow Engineering
Hank Danley P.E.
3405 Sinton Rd. #138
Colorado Springs, CO 80907
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Construction (Sheet #2)

Fill Placement

Step #1 Place the fill material on the upslope edges of the plowed area. Keep trucks off the plowed area. Minimize traffic on the downslope side.

Step #2 Move the fill material into place using a small track type tractor with a blade. Always keep a minimum of 6 inches of material beneath the tracks of the tractor to minimize compaction of the natural soil. The fill material should be worked in this manner until the height of the fill reaches the elevation of the top of the absorbtion bed.

Step #3 With the blade of the tractor, form the absorbtion bed. Hand level the bottom of the bed, checking it for the proper elevation. Shape the sides to the desired slope.

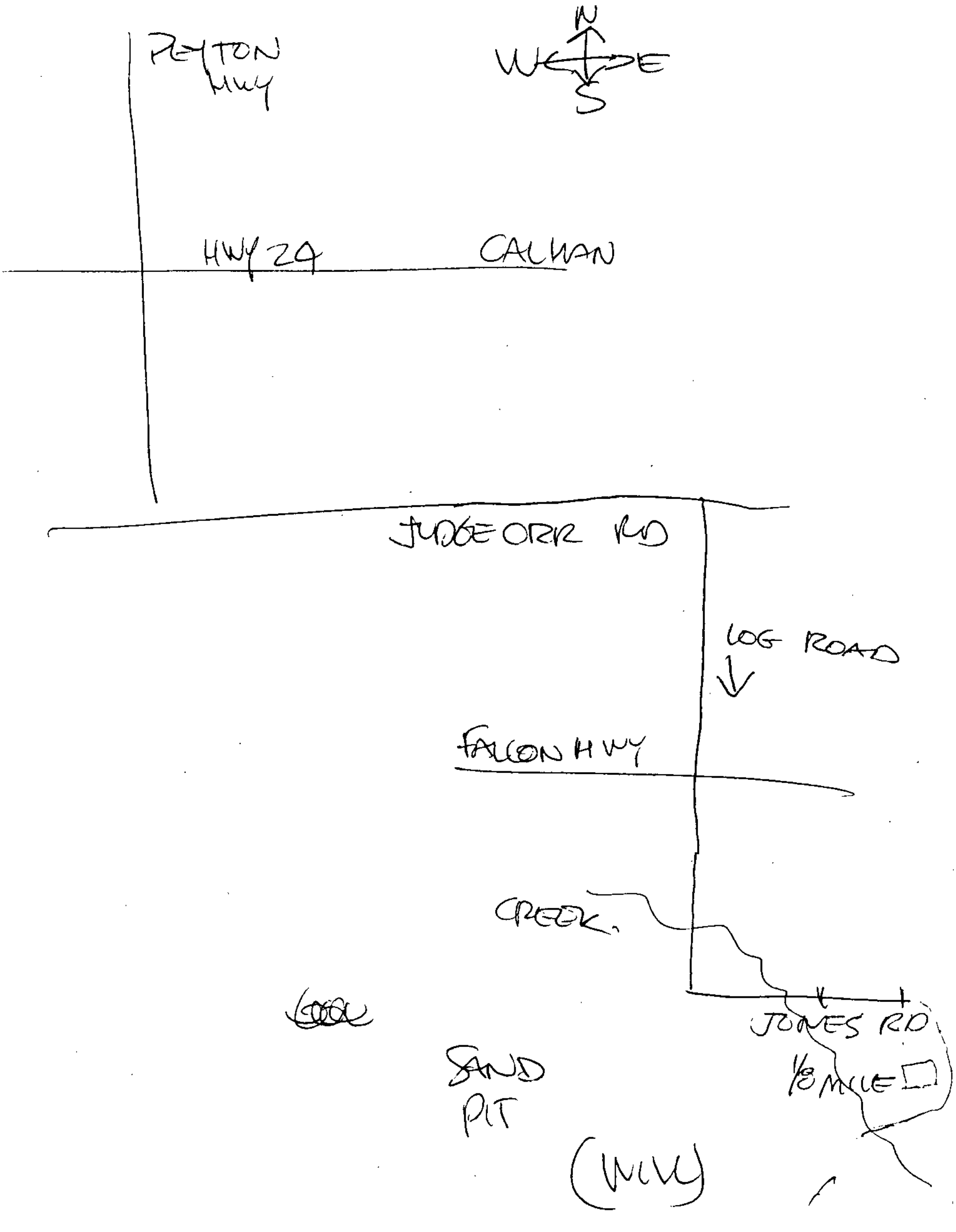
Covering

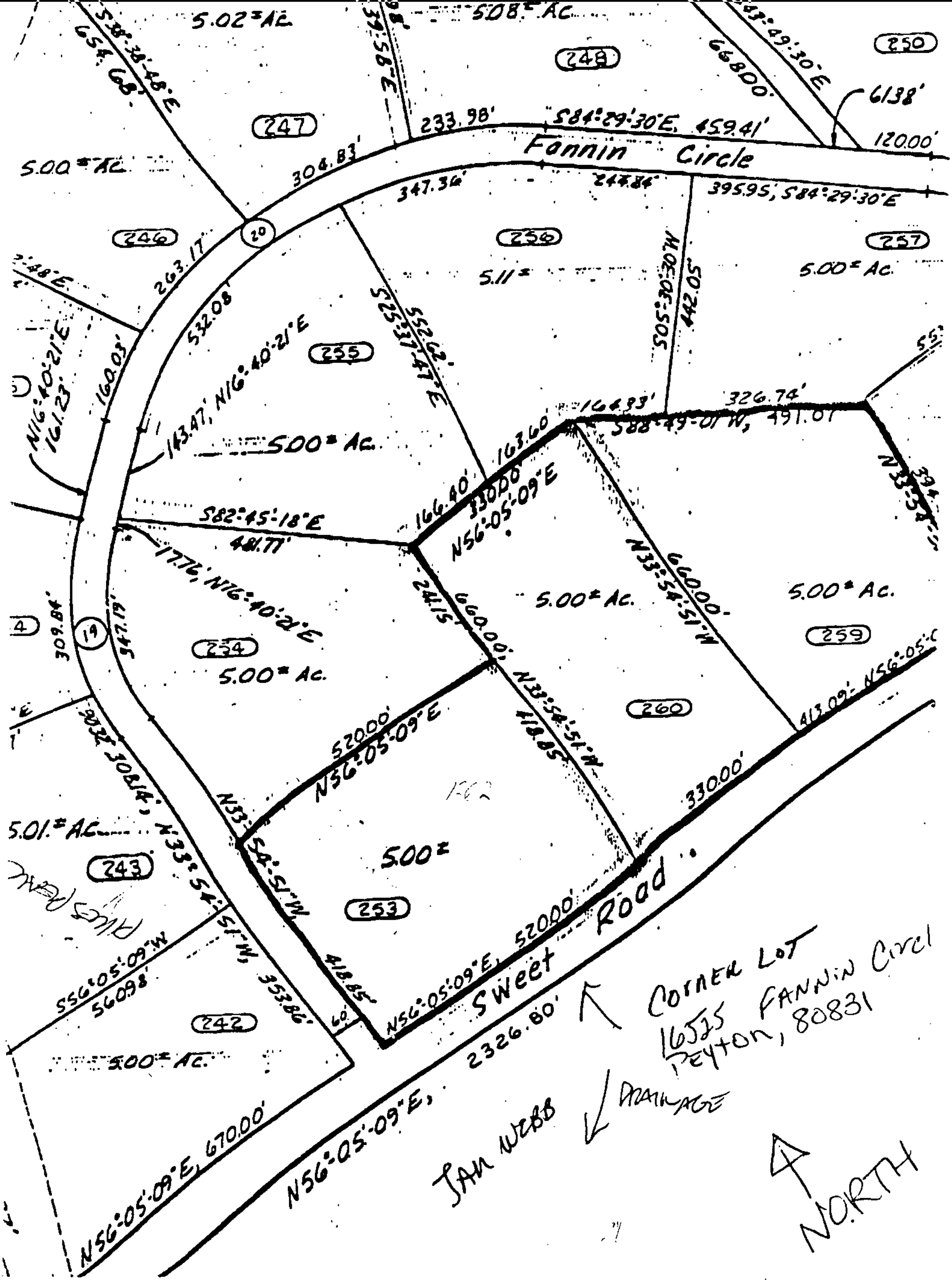
Step #1 Place a finer textured soil material such as clay or silt loam over the top of the bed to a minimum depth of 6 inches.

Step #2 Place 6 inches of good quality topsoil over the entire mound surface.

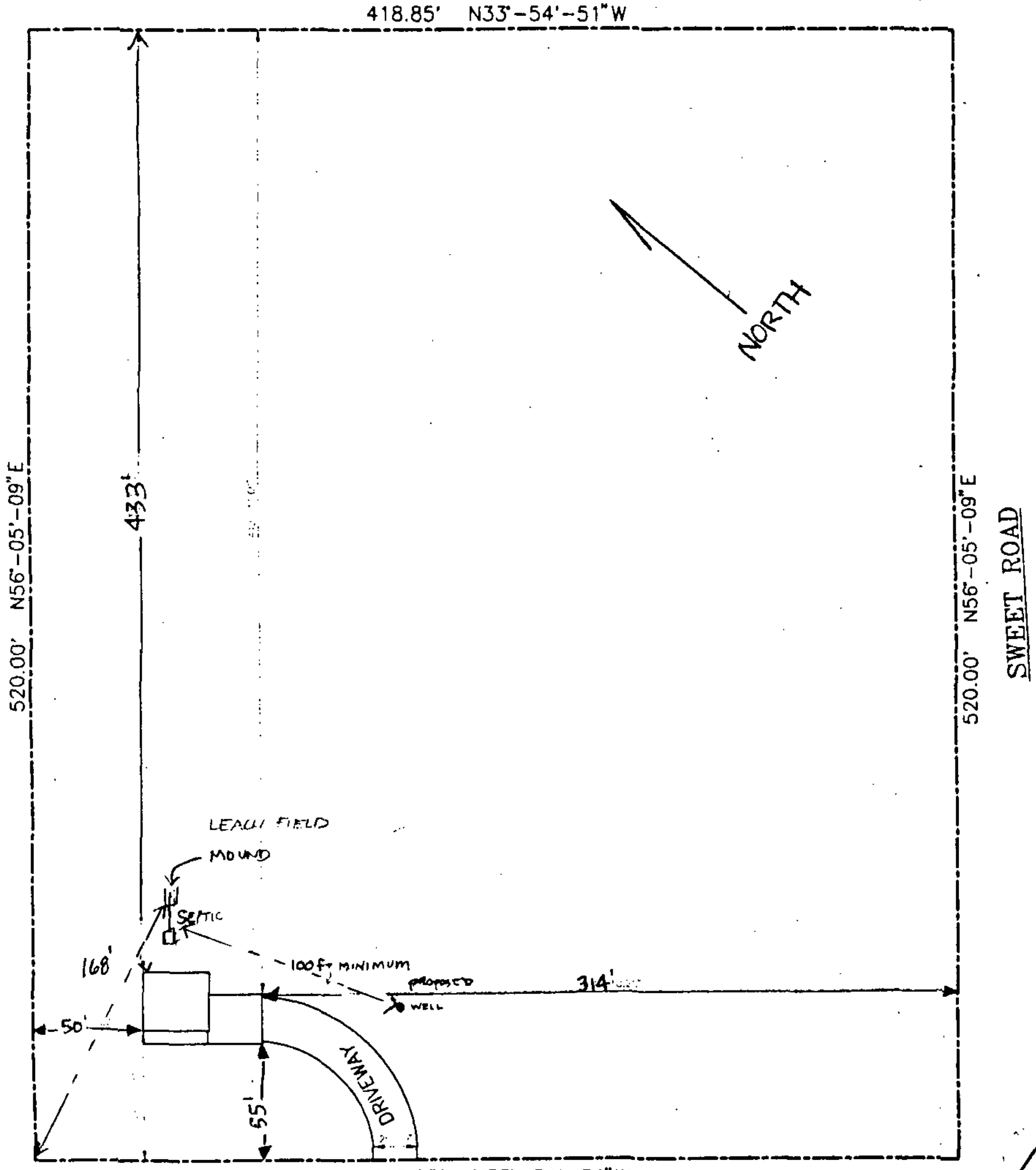
Step #3 Plant grass over the entire mound using grasses adapted to the area. Shurbs can be planted around the base and up to the side slopes. Shrubs should be somewhat moisture tolerant since the downslope perimeter ma become moist during early spring and late fall. Plantings on top of the mou should be drought tolerant, as the upper portion of the mound can become dry during the summer.

LOCATION OF SAND





Fannin Circle
Sweet Road
247
248
250
246
255
256
257
234
259
260
253
243
242
19
20
5.02± Ac.
5.08± Ac.
5.00± Ac.
5.11±
5.01± Ac.
5.00±
S84°29'30"E, 459.41'
395.95, S84°29'30"E
233.98'
304.83'
347.36'
247.84'
120.00'
6138'
668.00'
263.17
160.03'
N16°40'21"E
161.23'
163.47, N16°40'21"E
532.08'
552.62'
S25°37'47"E
S05°30'30"W
442.05'
326.74'
164.33'
S88°49'01"W, 491.07'
163.60
166.40'
330.00'
N56°05'09"E
S82°45'18"E
481.77'
177.76, N16°40'21"E
309.84'
347.19'
241.15'
660.00'
N33°54'51"W
418.85'
520.00'
330.00'
413.09', N56°05'09"E
308.14', N33°54'51"W
353.86'
S56°05'09"W
560.98'
N56°05'09"E, 2326.80'
N56°05'09"E, 670.00'
60
Corner Lot
16525 Fannin Circl
Peyton, 80831
Jan Webb
Drainage
North



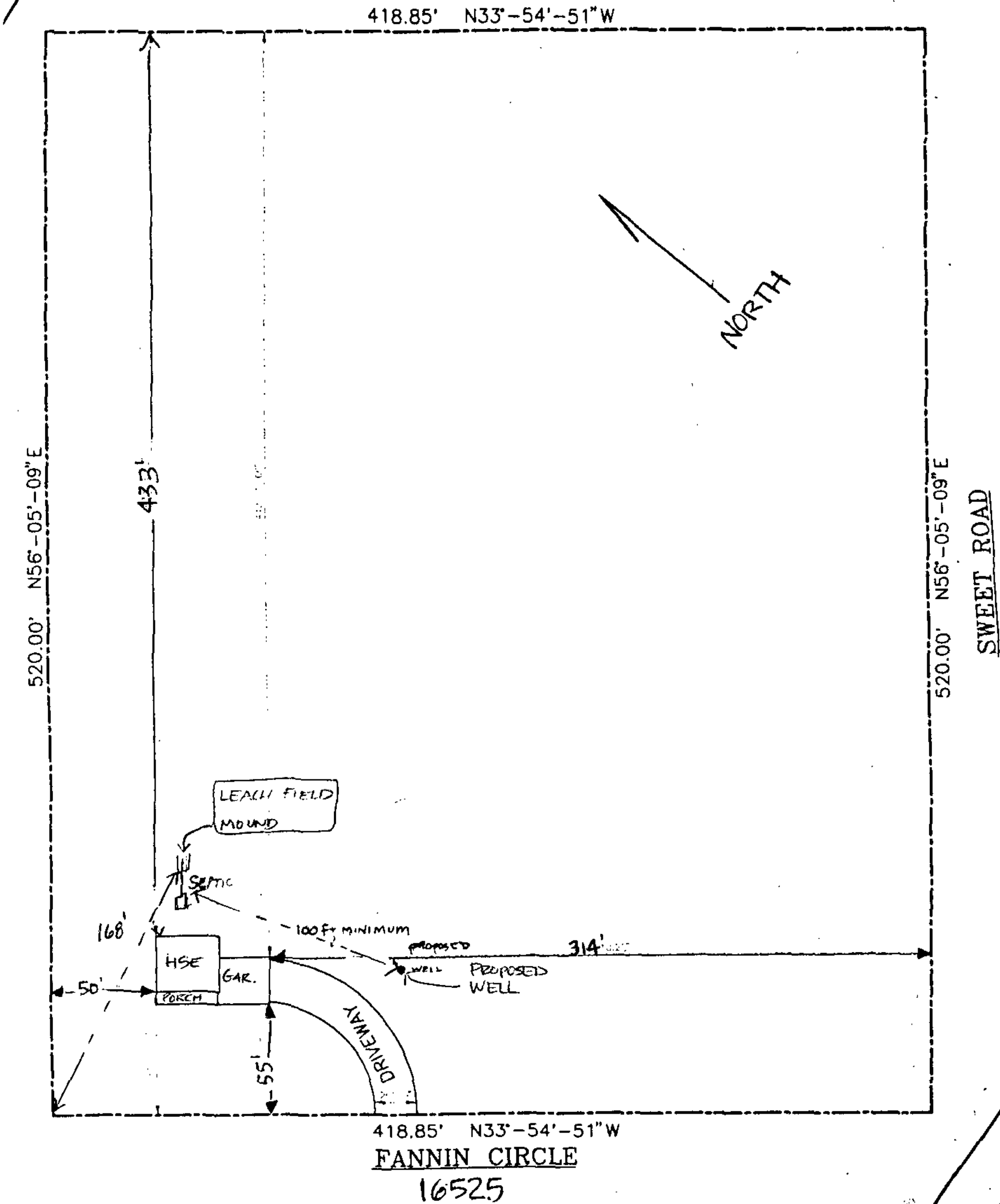
FANNIN CIRCLE

16525

PROPOSED RESIDENCE

PROPOSED WELL

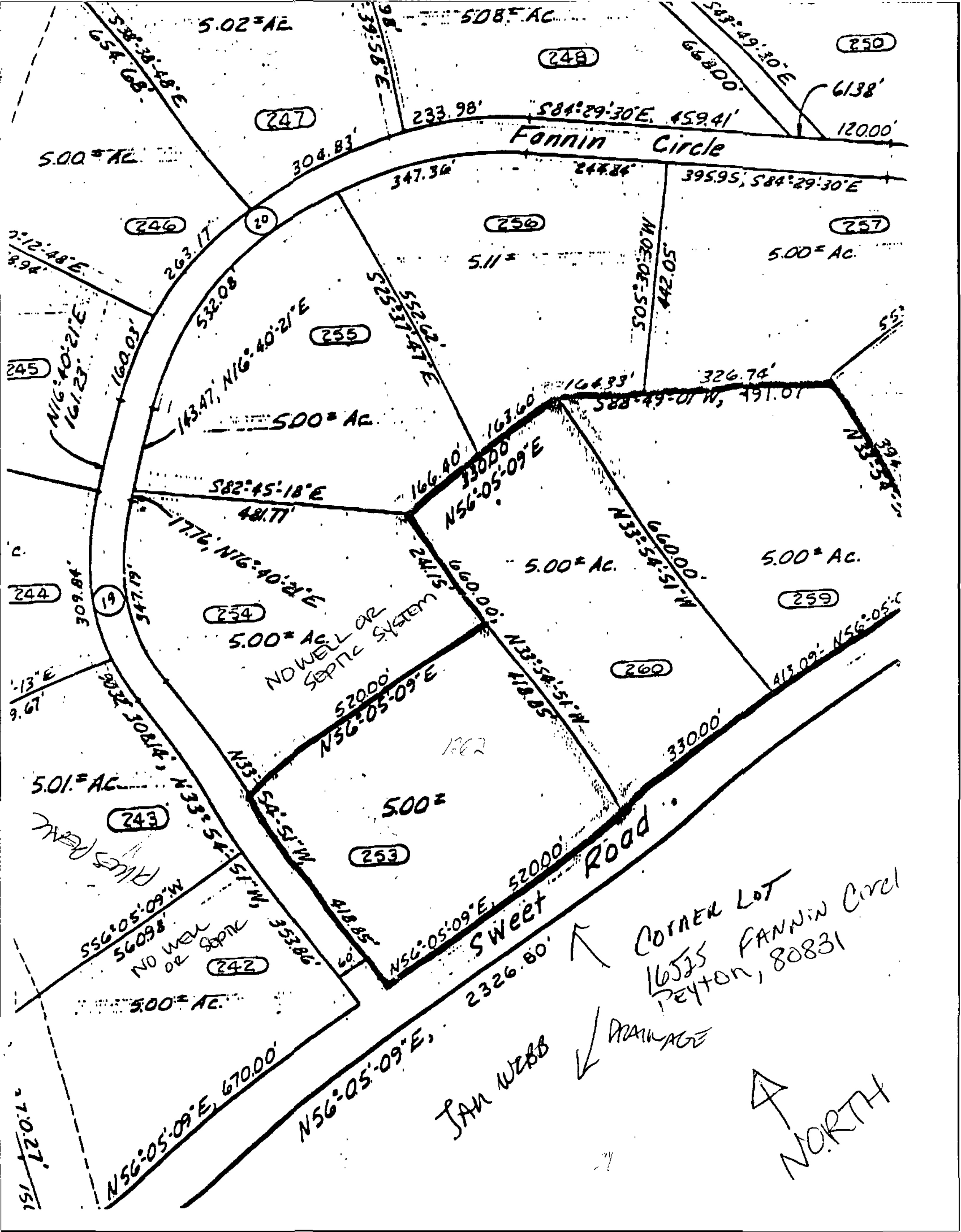
PROPOSED SEPTIC SYSTEM



PROPOSED RESIDENCE

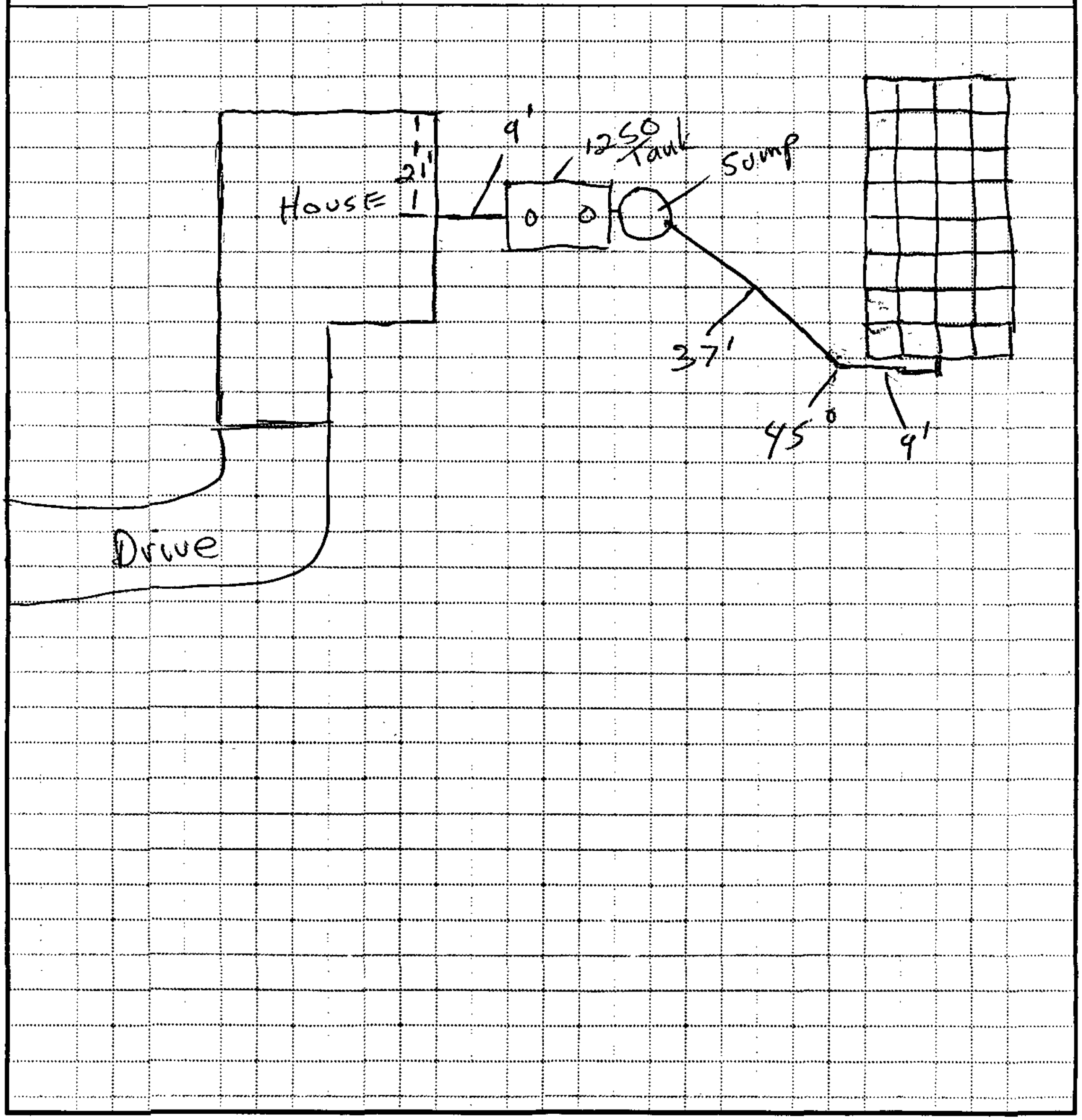
PROPOSED WELL

PROPOSED SEPTIC SYSTEM


5.02± Ac.
5.08± Ac.
248
250
S38°38'48"E
654.68'
39.58'
S38°49'30"E
668.00'
6138'
247
233.98'
S84°29'30"E, 459.41'
120.00'
Fannin Circle
5.00± Ac.
304.83'
347.36'
247.84'
395.95', S84°29'30"E
246
20
256
257
5.11±
5.00± Ac.
263.17'
S25°37'47"E
552.62'
S05°30'30"W
442.05'
532.08'
255
245
160.03'
N16°40'21"E
161.23'
143.47', N16°40'21"E
164.33'
326.74'
S88°49'01"W, 491.07'
163.60'
5.00± Ac.
166.40'
330.00'
N56°05'09"E
N33°54'51"W
660.00'
S82°45'18"E
481.77'
177.76', N16°40'21"E
5.00± Ac.
5.00± Ac.
244
19
309.84'
347.19'
241.15'
660.00'
259
254
5.00± Ac.
NO WELL OR SEPTIC SYSTEM
N33°54'51"W
418.85'
260
413.09', N56°05'09"E
520.00'
N56°05'09"E
1262
330.00'
5.01± Ac.
308.14', N33°54'51"W
N33°54'51"W
5.00±
243
253
Sweet Road
520.00'
S56°05'09"W
560.98'
NO WELL OR SEPTIC
242
353.86'
418.85'
60'
N56°05'09"E
5.00± Ac.
2326.80'
N56°05'09"E, 670.00'
N56°05'09"E
Corner Lot
16525 Fannin Circl
Peyton, 80831
Drainage
Jan Webb
NORTH
120.27'

Onsite System
As-Built
Drawing

Property Address 16525 Fannin Cir
Permit #
Date System Completed 3-28-96
Installer's Name Munson
Installer's License #
Installer's Address and Phone 495-0451



MOH30M

Hank Danley P.E.
3405 Sinton Rd. #138
Colorado Springs, CO 80907
(719) 633-9440
HOME

4445 NORTHPARK DRIVE, #200
COLORADO SPRINGS, CO 80907
(719) 598-5660
WORK

RECEIVED
APR - 9 1996
C-CHD
ENV. HEALTH

EL PASO COUNTY HEALTH DEPT.
ENVIORNMENTAL HEALTH
301 S. UNION BLVD.
COLORADO SPRINGS, CO 80910

REF: SEPTIC SYSTEM AT
1625 FANNEN CIRCLE
EL PASO COUNTY
COLORADO

TO WHOM IT MAY CONCERN:

THE SEPTIC SYSTEM INSTALLED AT THE ABOVE ADDRESS WAS INSTALLED IN ACCORDANCE WITH STATE AND LOCAL CODES AND MY DESIGN.

YOURS TRULY,

HENRY W. DANLEY, PE
COLORADO # 6418

HWD/SF

HENRY W. DANLEY
REGISTERED PROFESSIONAL
6418
ENGINEER
STATE OF COLORADO