

INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT NO. 14564

Site Address: S. SUNSET TRL 19500 29500 29700

Issued to: DUNN

Legal Description: P/E 1/2, SEC 9, T7S, R71W

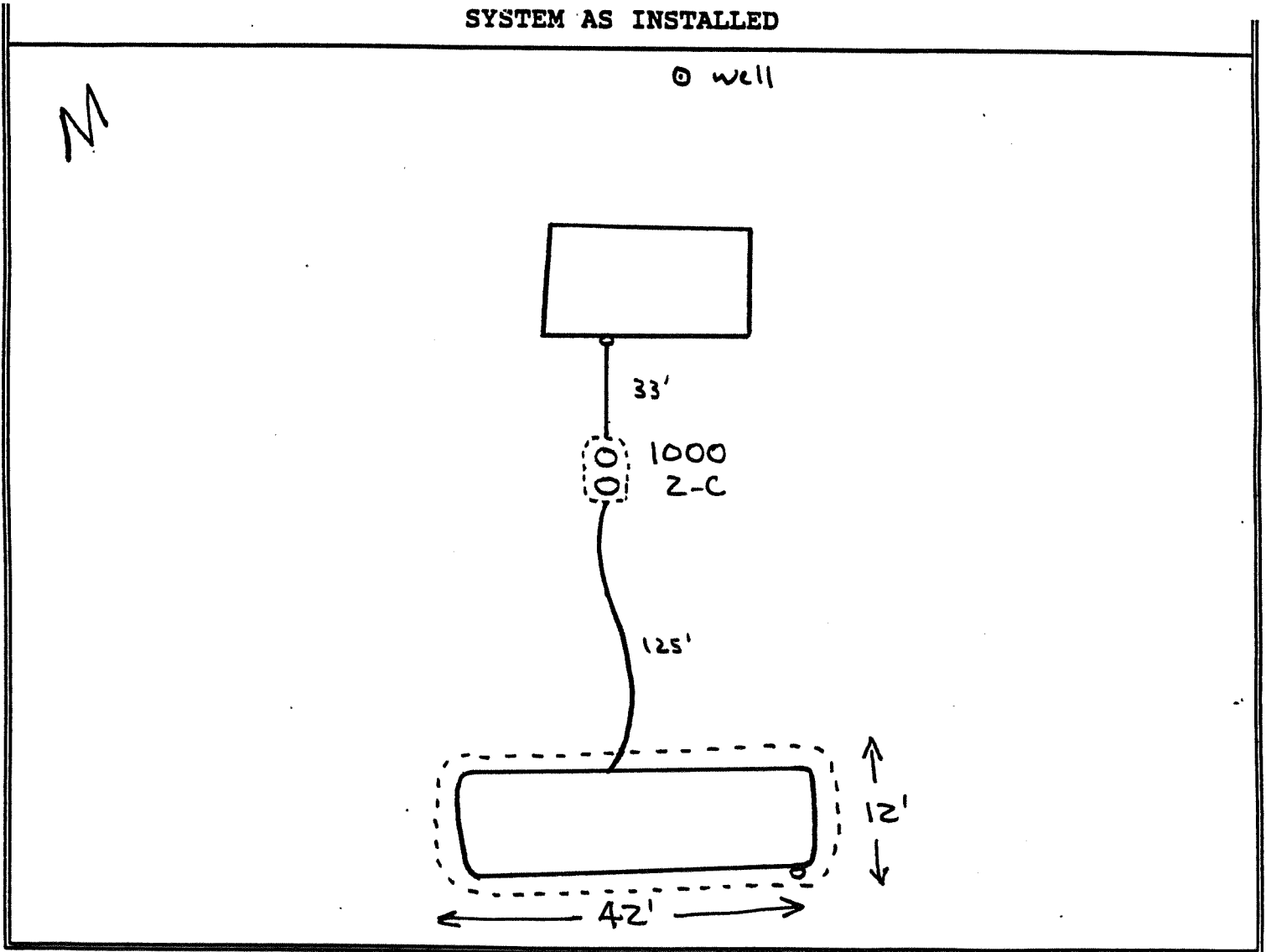
System Designed for 2 Bedroom Single Family Dwelling

Tank Size: 1000 gal (min)

Absorption Bed Size: 504 sq. ft. (min)

INSPECTOR D. DEARBORN DATE 11-6-92

SYSTEM AS INSTALLED



**JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
260 SOUTH KIPLING, LAKEWOOD, CO. 80226
PHONE: (303) 239-7075 FAX: 239-7076
TO SCHEDULE SEPTIC SYSTEM INSPECTIONS CALL 239-7070**

PERMIT FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM NO. 14564

**Permit Issued To: Mark and Retta Dunn
372 Old Corral Road
Bailey, CO 80421**

Location of System: Part of E1/2, Sec 9, T7S, R71W

System designed for; 2 Bedroom Single Family Dwelling

Tank size: 1000 gal (min) Absorption area: 504 sq ft (min)

The installation of this system is governed by the regulations of the Jefferson County Department of Health and Environment, as amended. Your attention is called to the following:

Maintain 200 foot minimum separation between all wells and septic systems on or off-site, existing or proposed.

The existing privy shall be pumped, treated with disinfectant and backfilled.

No acceptance of the system will be made without final inspection by this Department.

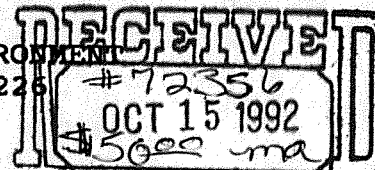
Permit issued: October 21, 1992 and expires ONE YEAR FROM THIS DATE

APPROVED BY MARK B. JOHNSON, M.D., DIRECTOR OF HEALTH

**This sewage disposal system was installed by Jim Noble
and has been inspected and accepted for use by a representative of the
Jefferson County Department of Health and Environment. The owner assumes
all responsibility in case of failure or other inadequacy of this sewage disposal
system.**

DATE: 11/6/92 INSPECTOR [Signature]

JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
260 South Kipling Street, Lakewood, CO 80226
Phone: 232-6301 Fax #239-7076



APPLICATION FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT
Jefferson County Health Dept

(X)NEW ()REPAIR ()RENEWAL ()ADDITION

Name of Owner: Mark and Retta Dunn Phone: 838-1248

Mailing Address of Owner: 372 Old Corral Road, Bailey, CO 80421

Name of Applicant: SAME

Mailing Address of Applicant:

Location of Proposed System (Legal Description):

Part of E/2, Section 9, T7S, R71W, of 6th P.M.

Street Address: 29500 Sunset Trail

Size of Property: 110 Acres

Type of Structure: (X)Single Family Dwelling No. of Bedrooms 2
()Other

Water Supply: (X)Private well ()Public

Type of proposed Individual Sewage Disposal System: MOUNTAIN SEPTIC

The following data must be provided with this application:

1. Soil test data.
2. Sewer system design for systems in mountain areas and certain other areas.
3. A plot plan showing relevant features.
4. A geologic report if the separation distance between any well and absorption field is between 100 and 200 feet.
5. Adjacent property information.

Application Fee:	NEW PERMIT/ADDITION	- \$150.00
	REPAIR	- \$ 75.00
	RENEWAL	- \$ 75.00

Permit to be mailed to ()Owner ()Applicant (X)Picked Up

741-4422 (MARK)

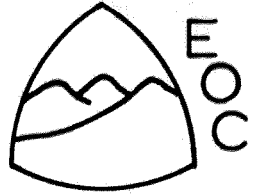
PERMIT MUST BE ISSUED BEFORE A BUILDING PERMIT CAN BE OBTAINED.

Application for an individual sewage disposal system permit is hereby submitted. The individual sewage disposal system will be constructed and installed in accordance with the regulations governing individual sewage disposal systems in Jefferson County. I hereby acknowledge that the above information is true and that false information will invalidate this application or subsequent permit.

Mark Dunn
Signature of Owner or Authorized Agent

10-15-92
Date of Application

E. O. CHURCH, INC.
CONSULTING GEOLOGICAL ENGINEER



925 E. 17th AVENUE • DENVER, COLORADO 80218 • (303) 832-9892
FAX (303) 832-3517

October 14, 1992

Mark and Retta Dunn
372 Old Corral Road
Bailey, CO 80421

Subject: Subsurface Investigation & OSDS Design
Part of E/2, Section 9, T7S, R71W
Jefferson County, Colorado
Job No. 3848

Dear Mr. and Mrs. Dunn,

As requested, we have investigated subsurface conditions and prepared an Onsite Sewage Disposal System (OSDS) design for the subject site. The purpose of our investigation was to evaluate subsurface conditions and to design an OSDS for the property.

SITE CONDITIONS - The investigated site is a 110 acre parcel as indicated on Fig. 1. The subject site is located in a rural mountain area where onsite sewage disposal systems and wells are required. All wells and fields are 200+ feet from the well and proposed field. The ground surface slopes gently to the southwest. The slope at the disposal field is 10% to the southwest. There are no trees and a moderate cover of native grasses at the proposed field.

PROPOSED CONSTRUCTION - A 2 bedroom residence (cabin) exists in the southern portion of the site, as indicated on Figs. 1 and 2. The sewage load for a 2 bedroom dwelling is 300 gallons per day (GPD). A garbage grinder and clothes washer are included in the design calculations. The disposal field is proposed to the south of the structure and is 200 feet from the proposed and existing onsite well. There are two outhouses at the site to be filled and removed. The well and field are proposed greater than 200 feet from other wells and fields.

SUBSURFACE CONDITIONS - The proposed disposal field site is underlain by silty sand and gravel loam to 9 feet. No free water was observed to a depth of 9 feet at the excavation. A gradation analysis was performed on material excavated from a test pit at the proposed field. The gradation analysis indicated this material is a silty sand loam with a moderately rapid percolation rate ranging from 20 to 30 minutes per inch (MPI). The results of the gradation analysis are presented on Fig. 4.

RECOMMENDATIONS - The results of our investigation indicates an OSDS can be installed at the location presented on Fig. 2 with the use of a "standard" system. The OSDS design is based on a sewage load of 300 GPD, and a percolation rate of 30 MPI. We recommend the installation of a 12 feet by 42 feet field, for an area of 504 square feet. The field should be constructed similar to the details presented on Figs. 2 and 3. A 1000 gallon two compartment septic tank is required.


If the owner is anticipating future finishing of additional bedrooms in unfinished areas, we recommend the OSDS be constructed to handle the additional loading. The proposed septic tank configuration will serve a 3 bedroom home. For greater than 3 bedrooms, the septic tank must be increased in size 250 gallons for each bedroom over 2 bedrooms. Each additional bedroom will require an additional 247 SF of disposal field.

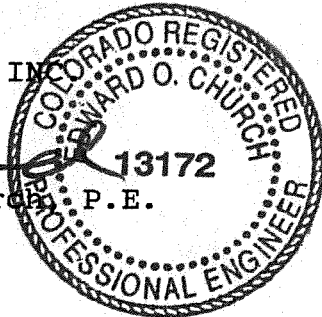
The owner must realize an OSDS is considerably different from a public sewer system. The owner must be aware of and assume responsibility for continued maintenance of the system. We recommend the septic tank be pumped at least every 2 years. There are daily considerations such as not putting plastic or other nonbiodegradable materials down the septic system. Water use must be carefully monitored so toilets are not allowed to run when seals malfunction. To illustrate the point, it should be noted a running toilet will consume in excess of 1,000 GPD if allowed to run. As the system is designed for 300 GPD, an excess 1000 gallon loading will flood and irreparably harm the system and stress the onsite well.

LIMITATIONS - Our investigation, layout, design and recommendations are based on data submitted. If subsurface conditions considerably different from those described in this report are encountered, we should be called to inspect the subsurface conditions. If proposed construction is changed, we should be notified to evaluate the effect of the changes on the proposed sewage disposal system.

If there are any questions, or if we can be of further service, please call.

E. O. CHURCH, INC.

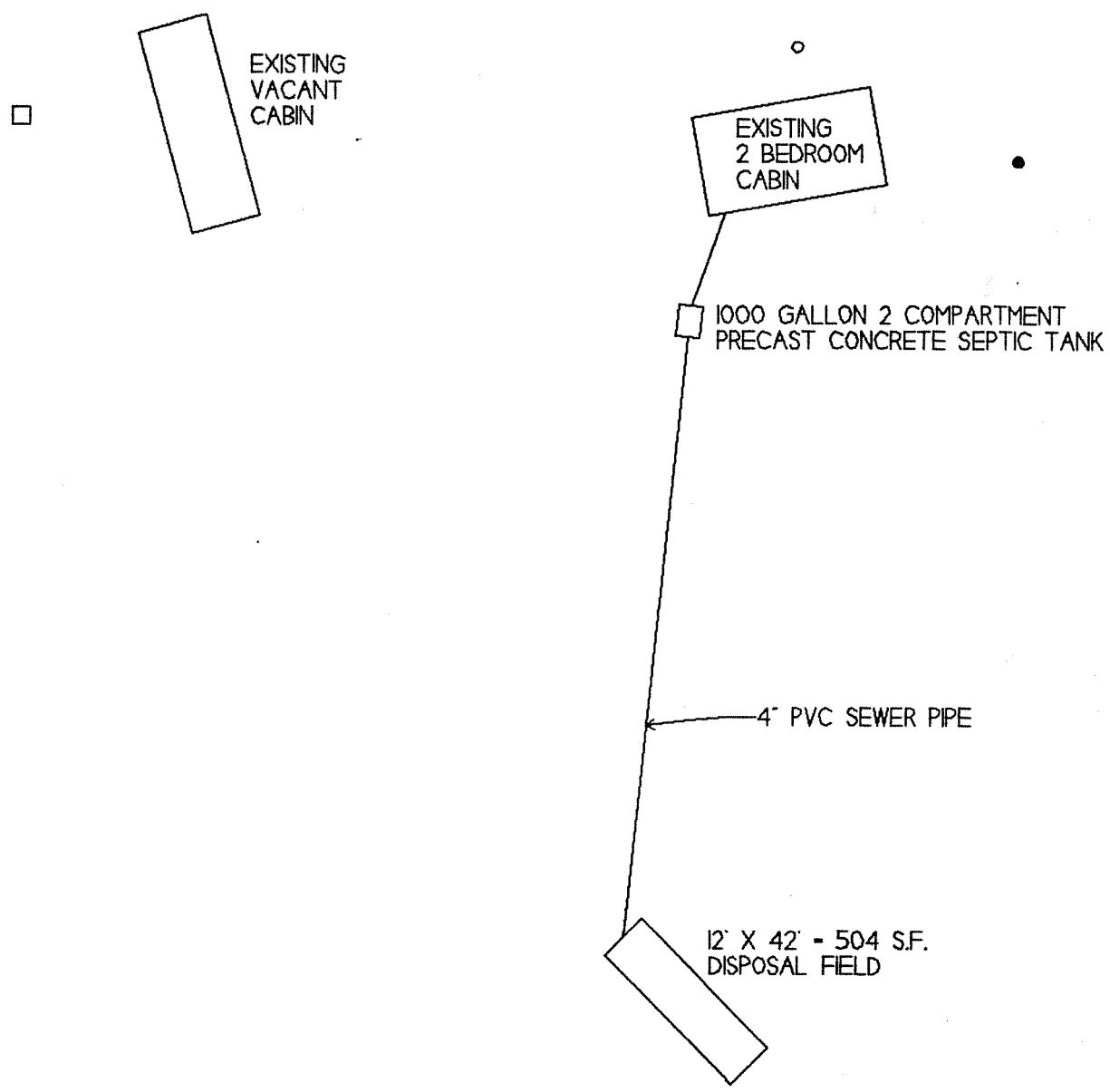

Edward O. Church, P.E.



EOC/jck

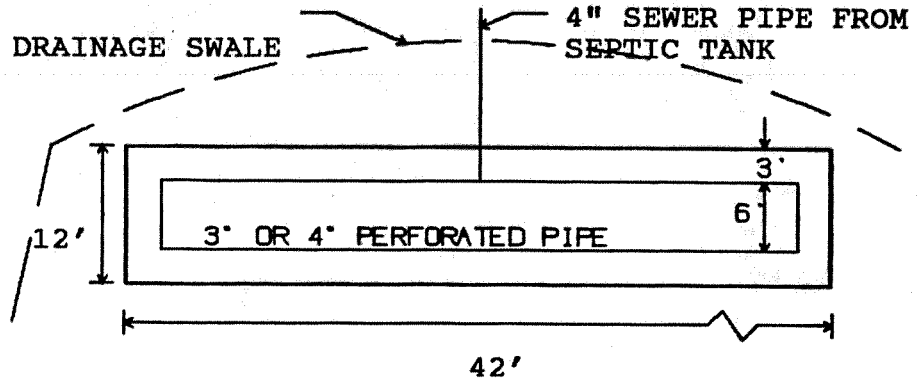
3 copies sent

SCALE
1" = 40'

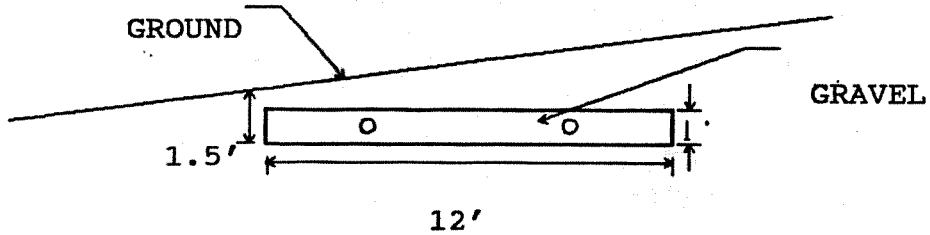


LOCATION OF OSDS

A. PLAN SECTION



B. CROSS-SECTION



C. SPECIFICATIONS

DESIGN CRITERIA:

NO. OF BEDROOMS - 2
 LOAD Q - 300 GPD
 PERCOLATION RATE, T -
 LESS THAN 30 MPI
 $A = Q \times T^{(1/2)} \times 1.5/5$
 $A = 493 \text{ S.F.}$

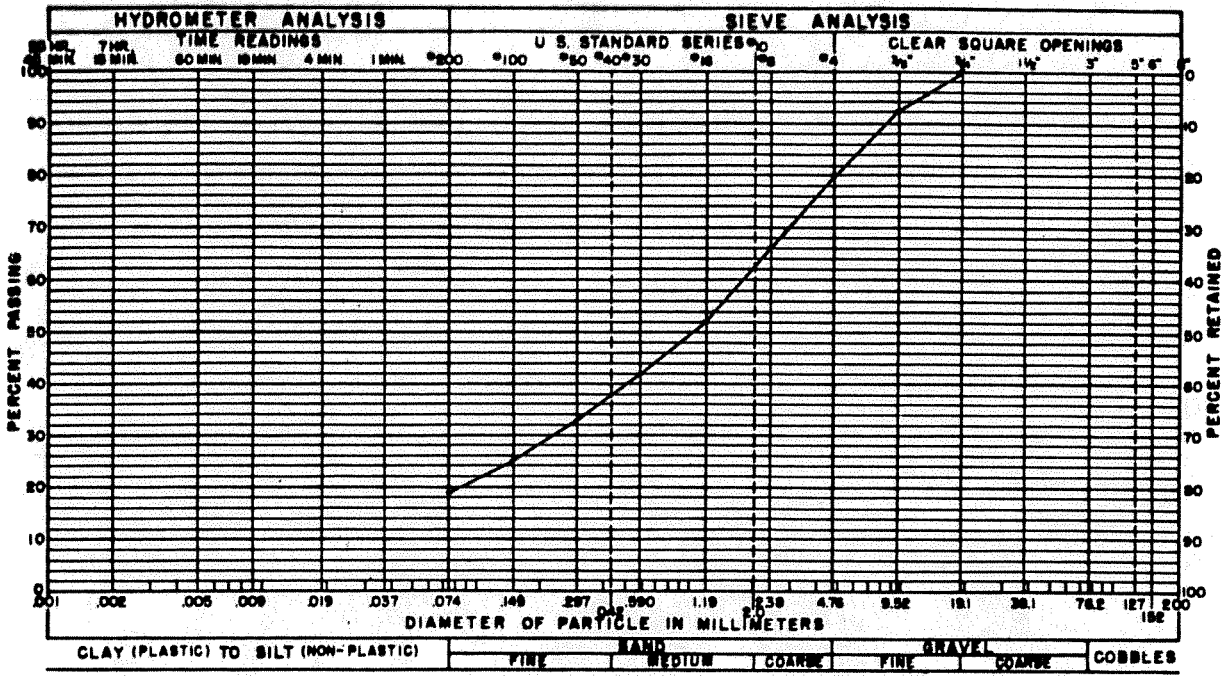
FIELD SPECIFICATIONS:

LENGTH - 42 FEET
 WIDTH - 12 FEET
 AREA - 504 S.F.
 SAND FILTER MATERIAL
 - JEFFCO SPECS.
 GRAVEL - 1 1/2 INCH

TREATMENT UNIT SPECIFICATIONS:

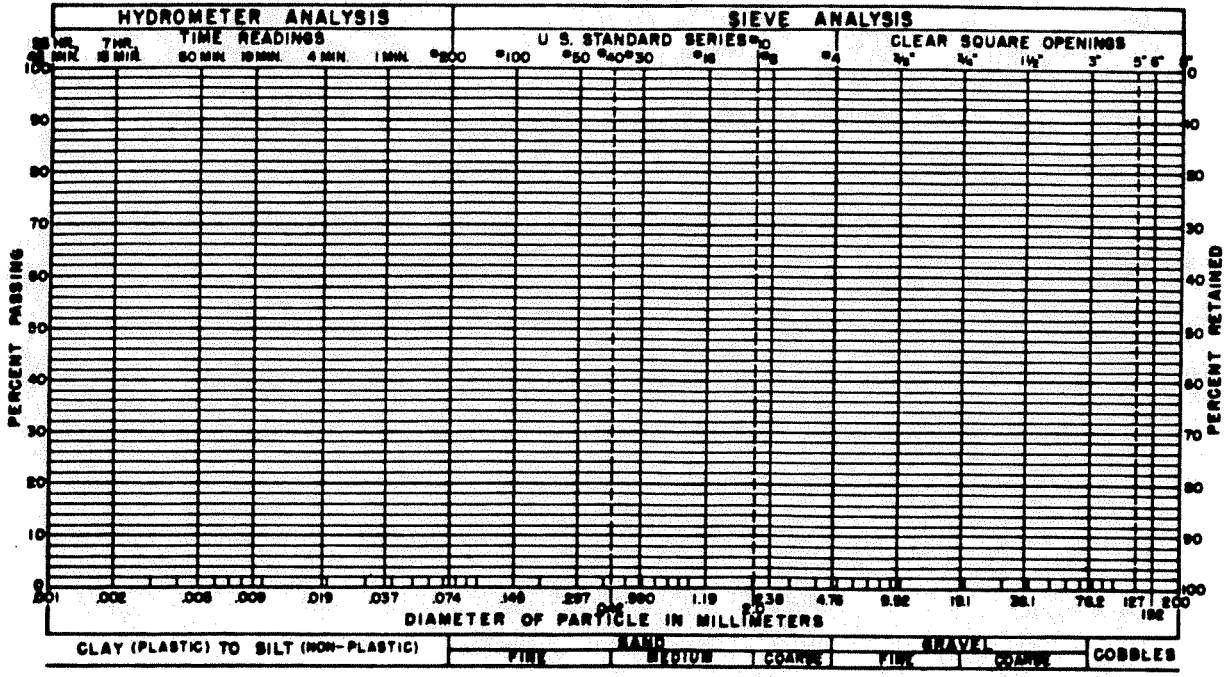
1000 GALLON 2 COMPARTMENT PRECAST CONCRETE SEPTIC TANK.
 IF ADDITIONAL BEDROOMS ARE ANTICIPATED, 250 GALLONS OF
 SEPTIC TANK CAPACITY FOR EACH BEDROOM OVER 3 BEDROOMS AND
 247 SQUARE FEET OF DISPOSAL FIELD SHOULD BE ADDED PER
 BEDROOM.

DISPOSAL FIELD DETAILS



GRAVEL 20 % SAND 61 % SILT AND CLAY 19 %
 LIQUID LIMIT % PLASTICITY INDEX %

SAMPLE OF SAND, GRAVELLY, SILTY FROM PROFILE PIT



GRAVEL % SAND % SILT AND CLAY %
 LIQUID LIMIT % PLASTICITY INDEX %

SAMPLE OF FROM

GRADATION TEST RESULTS

Form 12

INDIVIDUAL SEWAGE DISPOSAL SYSTEM WORKSHEET

LEGAL Sec 9, T7S, R91W

TECHNICAL REVIEW

- MEETS MIN LOT SIZE 110ac ENGINEERING MEETS ISDS REGULATIONS
- ADJACENT DEVELOPMENT OK GEOLOGICAL REPORT ACCEPTABLE OR N/A
- PARCEL LEGALITY FORM OK N/A SLOPE <30% OR () PROPERLY DESIGNED

FIELD REVIEW

- SOIL TESTS OK DISTANCES OK SLOPE OK OR () ENGINEERED

PERMIT CONDITIONS

2 BDRMS () _____ TANK SIZE (gal) 1000 ABS AREA (ft²) 12' x 42'
504

- WELLS200 () WtrSwr () OLDTANK
- () REDUCTNS _____ () PROPERTY PRIVY
- _____ () LineWell () OTHER1 _____
- _____ () TankWell _____
- () ETWELLS () DRYGULCH () OTHER2 _____
- () ABANDWELL _____ () SURFACE _____
- () PRELIM () _____ FT () ALARM () OTHER3 _____
- () SLOPECON () LIFTSTN _____
- () ROADCUT () SUBMIN () ENGR _____
- () FRENCH () CONTAMIN () TEMPRPR _____

FIELD NOTES AND APPROVALS

NOTES NO 6' EXC?

SITE INSPECTED BY <u>[Signature]</u>	DATE <u>10-20-92</u>	FINAL REVIEW BY <u>[Signature]</u>	DATE <u>10/21/92</u>
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JEFFERSON COUNTY CERTIFICATE OF WATER AND SEWER SERVICE AVAILABILITY

NOTE TO APPLICANT: A building permit shall not be issued without this Certificate properly signed by the District or Agency involved. See reverse side for facilities requiring Health Department plan review.

29700 S. Sunset Trail Conifer, CO 80433 10-15-92
 Job Address Date

Part of E/2, Section 9, T7S, R71W, of 6th P.M.
 Legal description

Residence
 Use of Building

Mark Dunn 29700 S. Sunset Trail Conifer, CO 80433
 Owner Address

SEWER	
<input type="checkbox"/> SEWER SERVICE AVAILABLE	<input checked="" type="checkbox"/> SEWER SERVICE NOT AVAILABLE
Individual sewage permit <u>14564</u>	
Name of Sanitation District _____	
COMMENTS OR CONDITIONS <u>Two (2) bedroom single family residence</u>	
I hereby certify the availability of service listed above:	
Agent for Sanitation District _____	Date _____
<u>[Signature]</u>	<u>Oct 20, 1992</u>
Reviewed by Jeffco Health or Zoning _____	Date _____

WATER	
<input type="checkbox"/> WATER SERVICE AVAILABLE	<input type="checkbox"/> WATER SERVICE NOT AVAILABLE
Colorado well permit _____	
Name of Water District _____	
COMMENTS AND CONDITIONS _____	
I hereby certify the availability of service listed above:	
Agent for Water District _____	Date _____
Reviewed by Jeffco Health or Zoning _____	Date _____

JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
 Environmental Health Division
 260 South Kipling Street
 Lakewood, Colorado

Phone 303 239-7075
 Fax 303 239-7076