

JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
260 S. KIPLING, LAKEWOOD, CO 80226 PHONE: 239-7075

INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT NO. 15678

Site Address: 11 00 S. Ridge Road

Issued to: Mike Laden

Legal Description: P/S1/2, NW1/4, Sec 29, T6S, R70W

System Designed for 3 Bedroom Single Family Dwelling

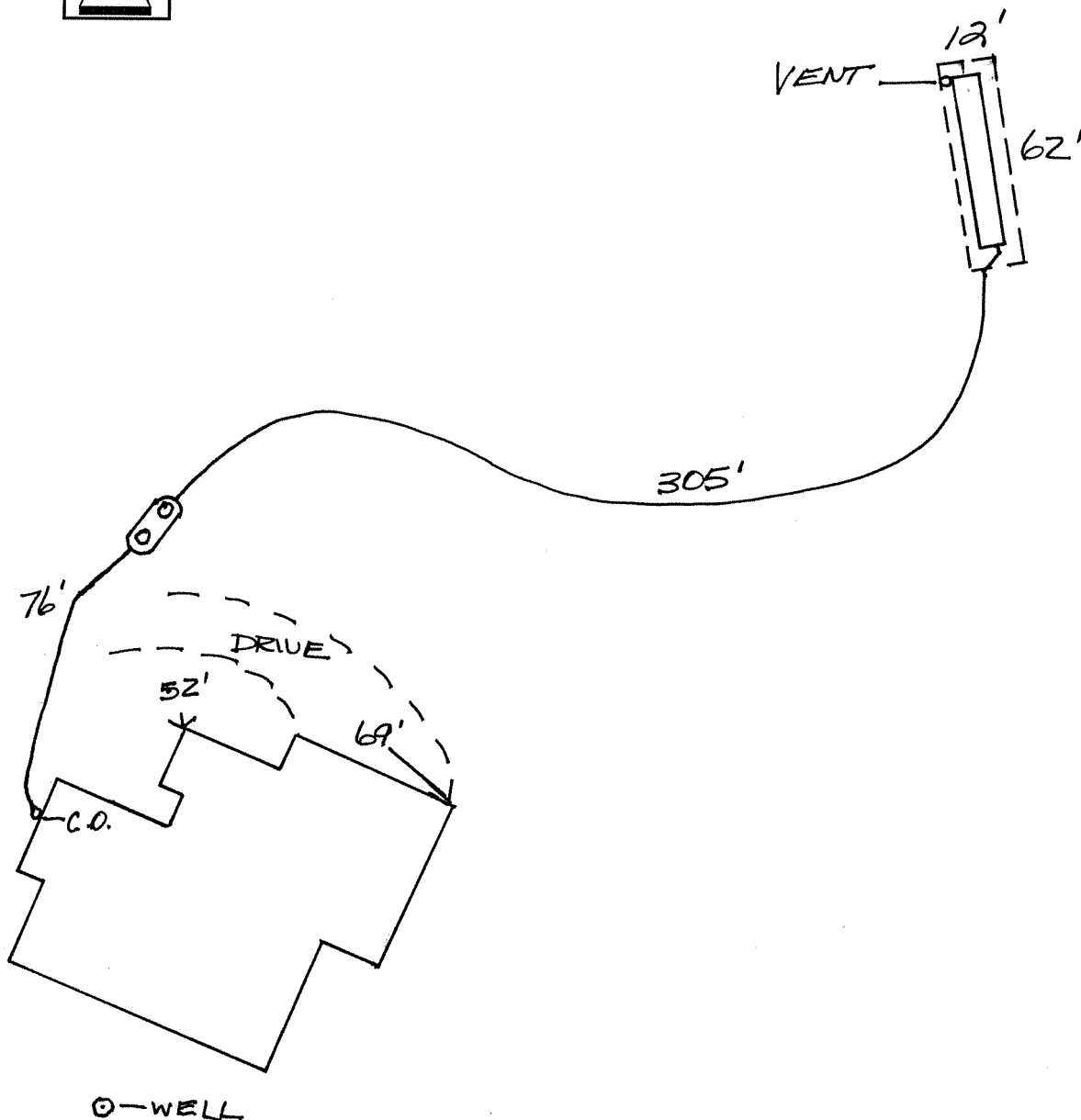
Tank Size: 1000 gal. (min)

Absorption Bed Size: 744 sq. ft. (min)

INSPECTOR: Victor J. Janssens FINAL APPROVAL DATE: 11/30/94

SYSTEM AS INSTALLED

NORTH



JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT
260 SOUTH KIPLING LAKEWOOD, CO 80226

PHONE: (303) 239-7075 FAX: 239-7076

INSPECTIONS FOR THIS PERMIT ARE DONE: MON., WED., AND FRI.
TO SCHEDULE SEPTIC SYSTEM INSPECTIONS CALL 239-7070 BEFORE 9:00 A.M.

PERMIT FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM NO. 15678

Permit Issued to: Mike Laden
215 Alpine Avenue
Golden, CO 80401

Location of system: P/S1/2, NW1/4, Sec 29, T6S, R70W
11800 S. RIDGE RD.

System designed for: 3 Bedroom Single Family Dwelling

Tank size: 1000 gal (min) Absorption area: 744 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 septs on or off-site, existing or proposed.

A preliminary inspection is required upon completion of the 6 foot excavation.

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

Permit issued: September 27, 1994 and expires **ONE YEAR FROM THIS DATE**

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

This sewage disposal system was installed by *Renard* 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.

INSPECTOR: *Victor Jenkins* DATE: *11/30/94*

JEFFERSON COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT

260 South Kipling Street, Lakewood, CO 80226

Phone: 232-6301 Fax #239-7076

89019 \$150.00 ✓ # 1631

SEP 20 1994

APPLICATION FOR INDIVIDUAL SEWAGE DISPOSAL SYSTEM PERMIT

Jefferson County Department of Health ADDITION

(X) NEW

() REPAIR

() RENEWAL

Name of Owner: ~~Teter Construction~~ Mike Laden Phone: ~~838-4137~~

Mailing Address of Owner: ~~24152 Black Bear Lane, Conifer, CO 80433~~

Name of Applicant: SAME 215 Alpine Ave. Golden, Co. 80401
~~Teter Construction~~ 526-0039

Mailing Address of Applicant: 215 Alpine Ave. Golden, Co. 80401

Location of Proposed System (Legal Description):

Part of S/2, NW/4, Section 29, T6S, R70W, 6th P.M.

Street Address: 11700 S. Ridge Rd. Conifer, Co. 80401
35 Acres

Size of Property:

Type of Structure: (X) Single Family Dwelling No. of Bedrooms 3
() 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:

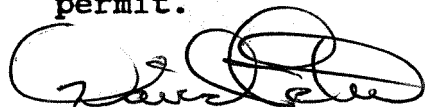
1. Soil test data.
2. Sewer system design for systems in mountain areas and certain other areas.
3. A plot plan showing relevant features.
4. A geologic report if the separation distance between any well and absorption field is between 100 and 200 feet.
5. Adjacent property information.

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

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

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.



Signature of Owner or Authorized Agent

Sept. 20, 1994
Date of Application

E. O. CHURCH, INC.
CONSULTING GEOLOGICAL ENGINEER

925 E. 17th AVENUE • DENVER, COLORADO 80218 • (303) 832-9692
FAX (303) 832-3517



September 15, 1992

Teter Construction, Attn. Dave Teter
24152 Black Bear Lane
Conifer, CO 80433

Subject: Subsurface Investigation & OSDS Design
Part S/2, NW/4, Section 29, T6S, R70W, of 6th P.M.
Jefferson County, Colorado
Job No. 3809

Dear Mr. Teter,

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 35 acre parcel as indicated on Fig. 1. The site is located in a rural mountain area where OSDS and wells are required. The general ground surface slopes moderately to the southeast. The slope at the disposal field is 5% to the southeast. There is a moderate cover of trees and native grasses at the proposed disposal field.

PROPOSED CONSTRUCTION - A 3 bedroom residence is proposed in the central portion of the site as indicated on Fig. 1. The sewage load for a 3 bedroom dwelling is 450 gallons per day (GPD). A garbage grinder and clothes washer are included in the design calculations. The disposal field is proposed to the northeast of the structure and is 200+ feet from the proposed onsite well. The well and proposed field are greater than 200 feet from other wells and fields.

SUBSURFACE CONDITIONS - The disposal field site is underlain by a thin topsoil layer, underlain to 1 foot by silty sand and gravel, underlain to 5 feet by weathered quartz monzonite. No free water was observed to a depth of 5 feet at the excavation. No ground water is anticipated within 10 feet of the ground surface during the spring. A gradation analysis was performed on material excavated from a test pit at the proposed field. The gradation analysis indicates the material is a gravelly sand 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. The OSDS design is based on a sewage load of 450 GPD, and a percolation rate of 30 MPI with the use of a sand filter system. A 1000 gallon two compartment septic tank is required. We recommend the installation of a 12 feet by 62 feet field, for an area of 744 square feet. The field should be constructed similar to the details presented on Figs. 2 and 3.

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 will serve a 3 bedroom home. For greater than 3 bedrooms, the septic tank must be increased 250 gallons for each bedroom. Each additional bedroom will require an additional 247 SF of disposal field.

Under current Jefferson County practice, it is allowable to replace Jefferson County specified sand filter material with a suitable filter material as specified by the design engineer. We believe the near surface silty sand will be suitable filter media if no particles larger than 3 inches in diameter are used in the overexcavated 4 feet below the dispersal gravel layer. We recommend the silty sand be collected from the excavation for the disposal field and other onsite excavations for use as filter media in the disposal field. Additional filter material may have to be generated from offsite if sufficient material is not found in the proposed excavations. Our office must be called to observe the filter material and authorize its use.

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 into 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 only 450 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. It is the owner's responsibility to assure where the property boundaries are, and that all features are located within the surveyed site. If subsurface conditions considerably different from those described in this report are encountered, we should be called to observe 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

Edward O. Church



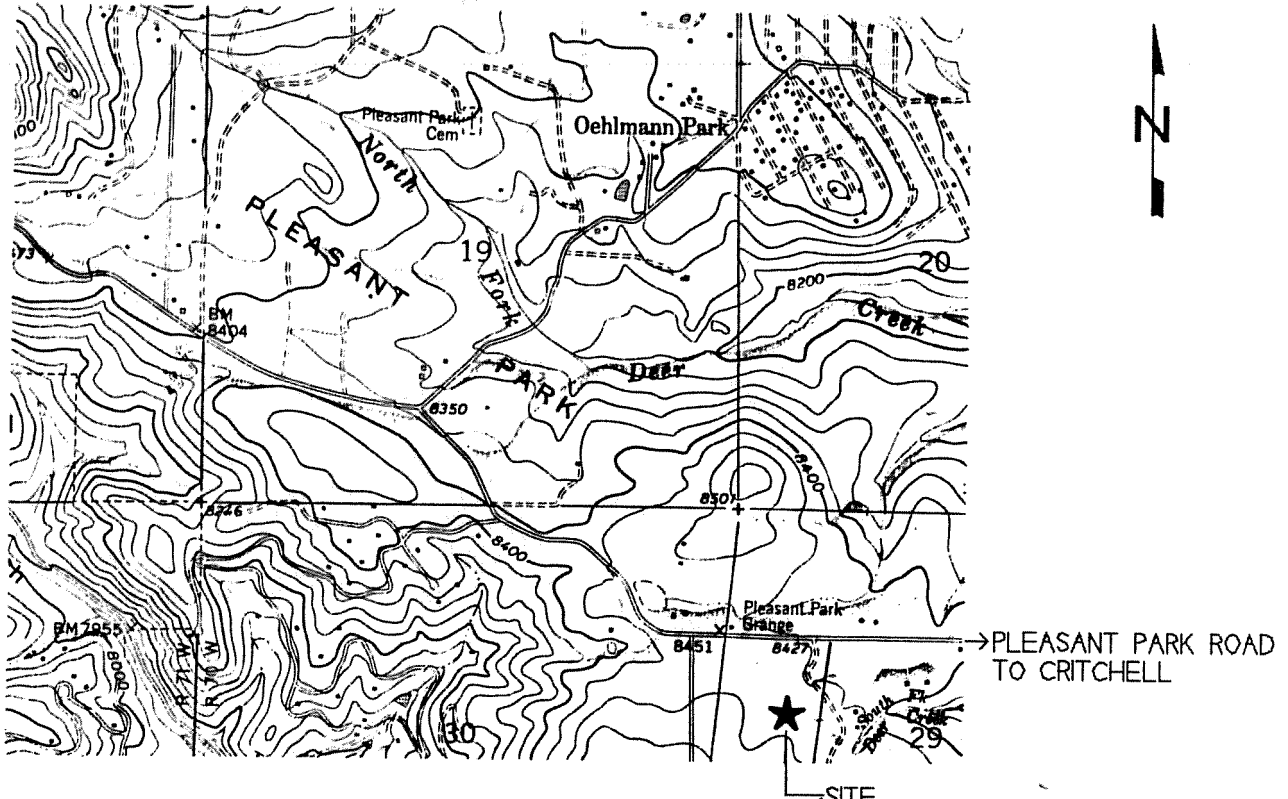
EOC/cch

3 copies sent

A. VICINITY MAP

CONIFER QUADRANGLE USGS 7.5 MINUTE SERIES

SCALE
1" = 2000'

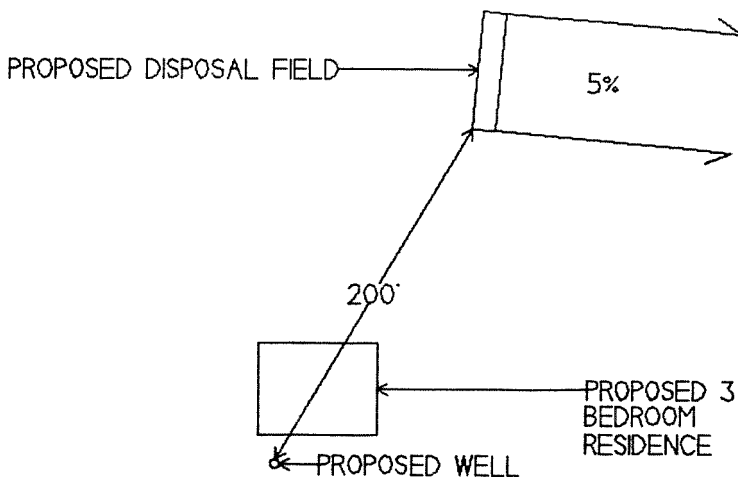


B. SITE PLAN

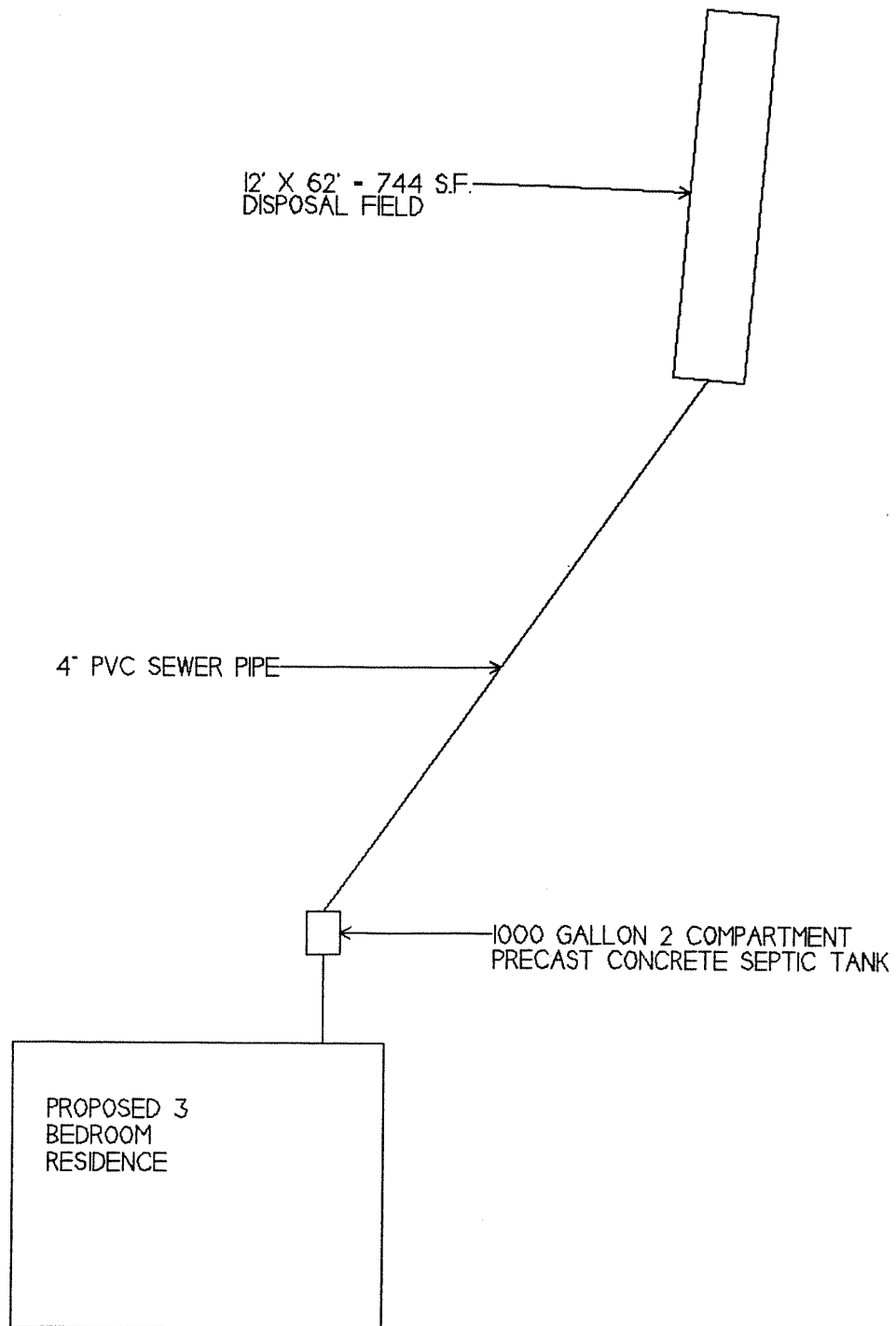
300' utility 750' →
Yellow ribbons
panic bench

PART OF S/2, NW/4, SECTION 29,
 T6S, R70W, 6th P.M. JEFFERSON COUNTY
 APPROXIMATELY 35 ACRES

SCALE
1" = 100'



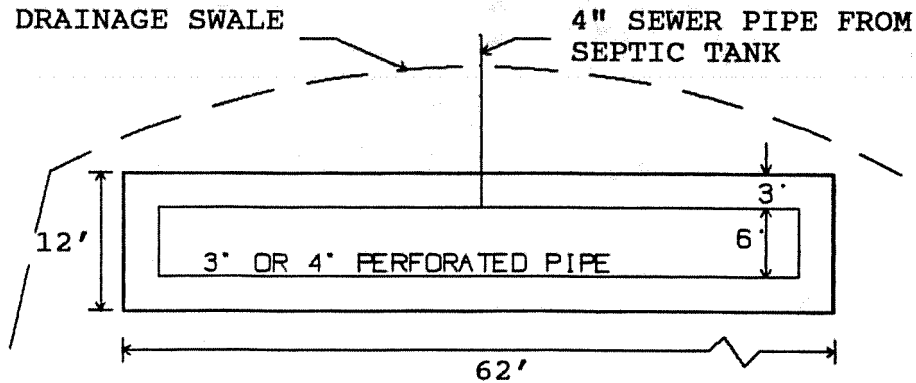
SCALE
1" = 30'



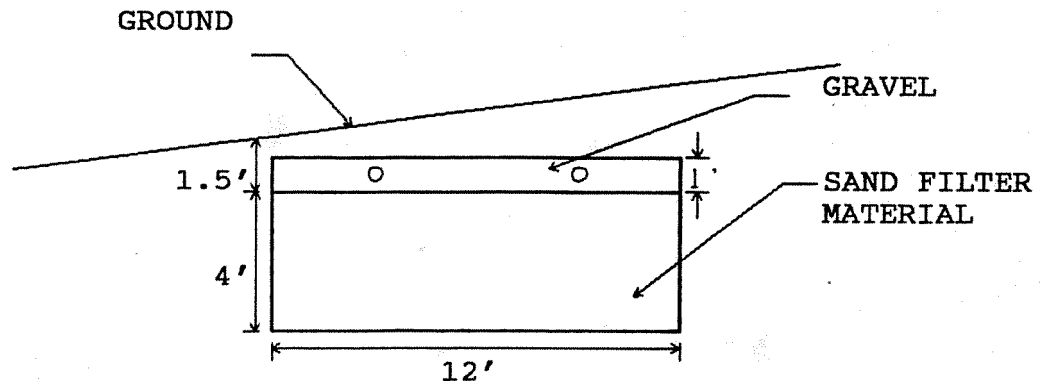
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LOCATION OF OSDS

A. PLAN SECTION



B. CROSS-SECTION



C. SPECIFICATIONS

DESIGN CRITERIA:

NO. OF BEDROOMS - 3

LOAD Q - 450 GPD

PERCOLATION RATE, T -
LESS THAN 30 MPI

$$A = Q \times \sqrt{T} \times 1.5/5$$

$$A = 739 \text{ S.F.}$$

FIELD SPECIFICATIONS:

LENGTH - 62 FEET

WIDTH - 12 FEET

AREA - 744 S.F.

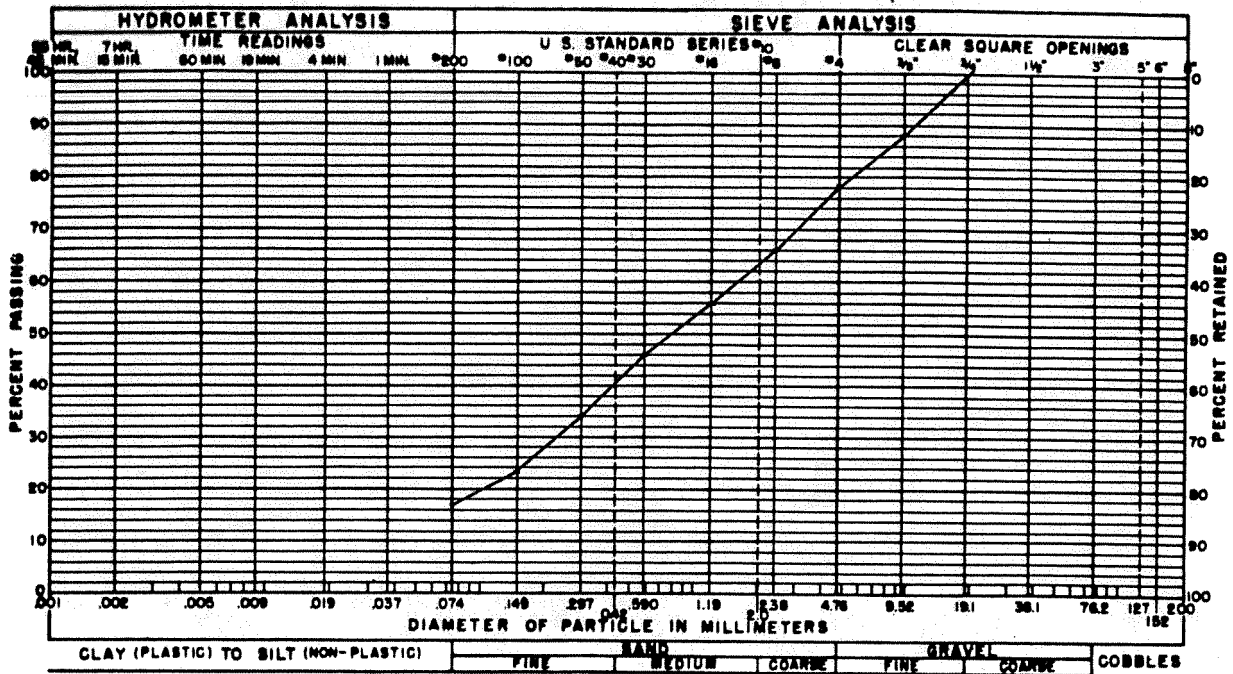
SAND FILTER MATERIAL
- JEFFCO SPECS.

GRAVEL - 1 1/2 INCH

TREATMENT UNIT SPECIFICATIONS:

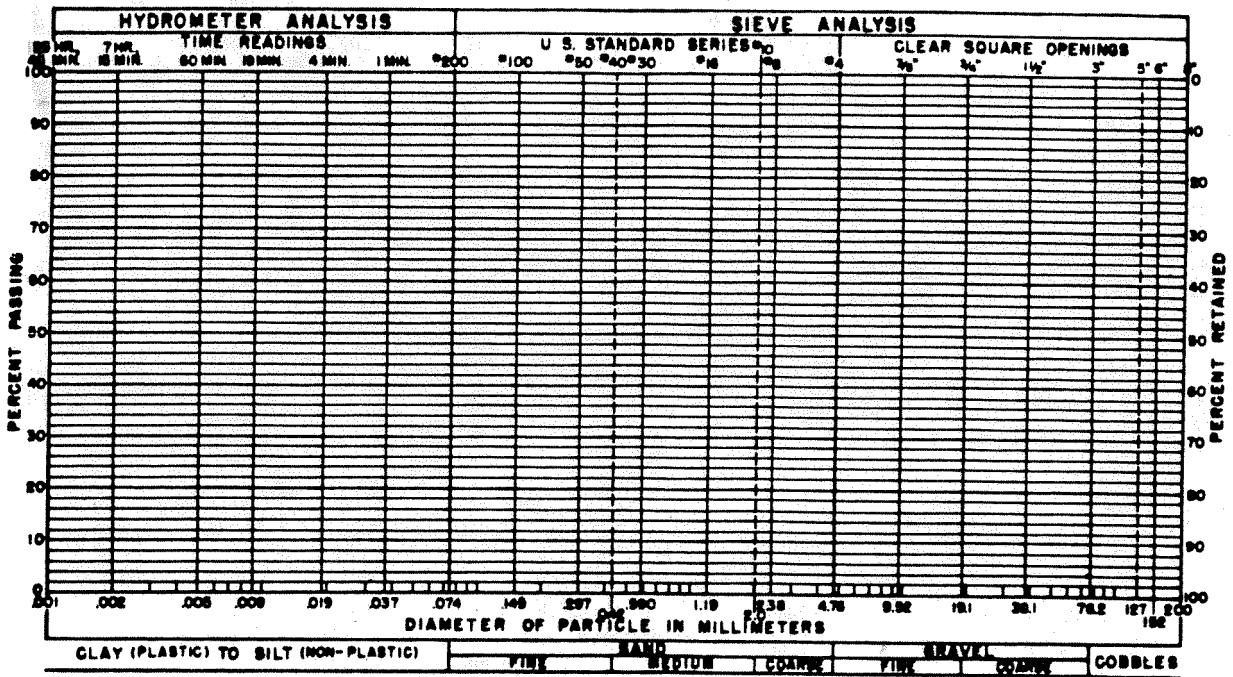
1000 GALLON 2 COMPARTMENT PRECAST CONCRETE SEPTIC TANK.
IF ADDITIONAL BEDROOMS ARE ANTICIPATED, 250 GALLONS OF
SEPTIC TANK CAPACITY AND 247 SQUARE FEET OF DISPOSAL
FIELD SHOULD BE ADDED PER BEDROOM.

DISPOSAL FIELD DETAILS



GRAVEL 22 % SAND 61 % SILT AND CLAY 17 %
 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

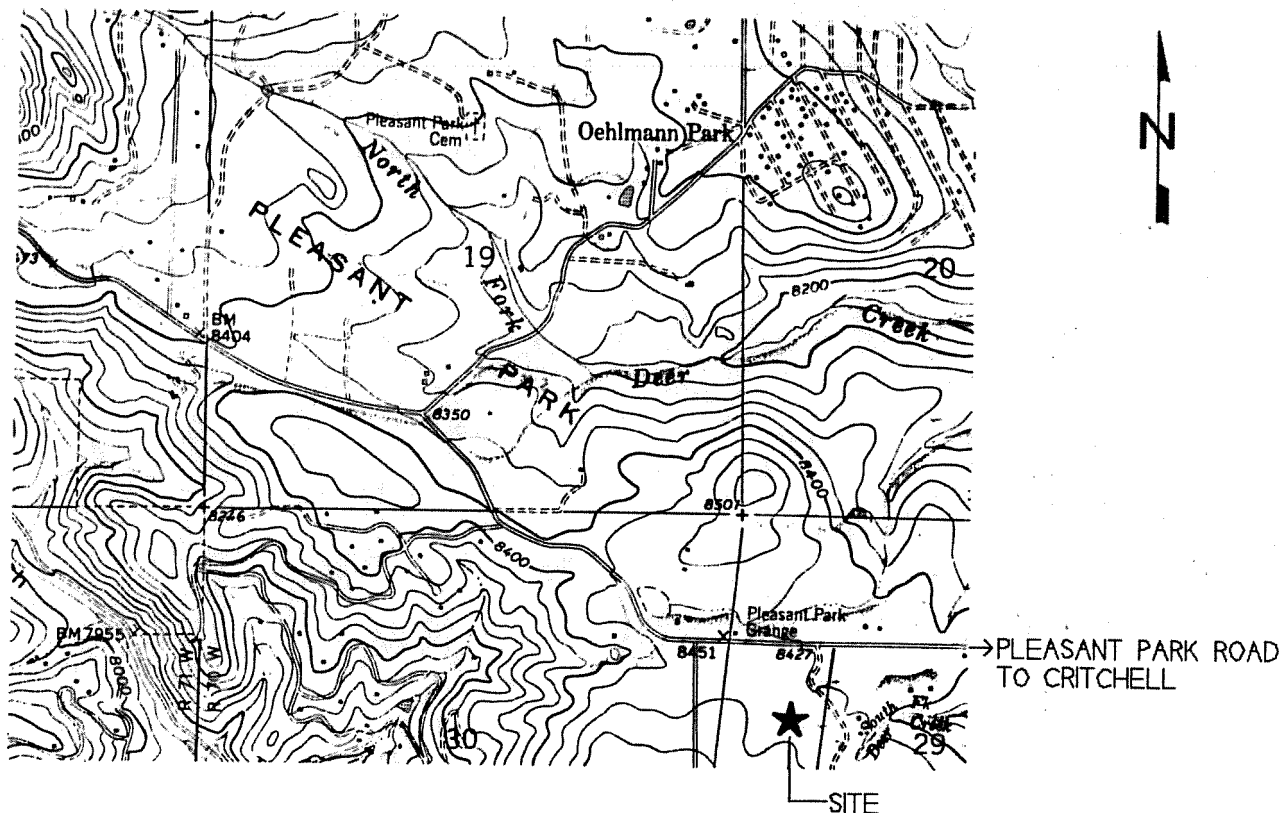
JOB NO. 3809

FIG. 4

A. VICINITY MAP

CONIFER QUADRANGLE USGS 7.5 MINUTE SERIES

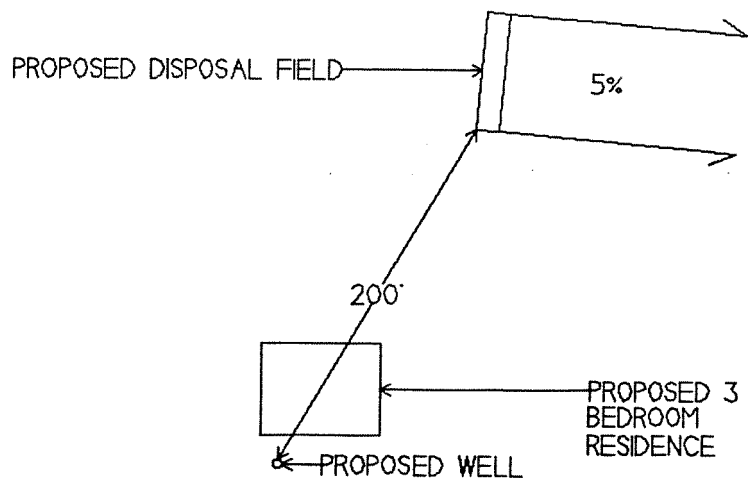
SCALE
1" = 2000'



B. SITE PLAN

PART OF S/2, NW/4, SECTION 29,
T6S, R70W, 6th P.M. JEFFERSON COUNTY
APPROXIMATELY 35 ACRES

SCALE
1" = 100'



ADJACENT PROPERTY INFORMATION

RECORDS EXIST OF THE SEPTIC SYSTEMS AND/OR WELLS ON THE LOTS IDENTIFIED BELOW. LOTS WITHOUT REFERENCE NUMBERS MAY ALSO BE DEVELOPED BUT THERE IS NO FILE INFORMATION AVAILABLE ON THOSE SITES.

LOT	BLK	FLG	FILE NUMBER	CURRENT PERMIT NUMBER

FILE NOTES _____

RECORD OF INSPECTIONS

PERMIT NO _____	LEGAL _____
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PRELIMINARY INSPECTION		FINAL INSPECTION	
DATE	COMMENTS	DATE	COMMENTS
10-28-94	Field ok 6'x12'x62' Soil ok decom R.T. No Well	11/30/94	FIELD, TANK, LINES FOUNDATION & WELL OK. LF. NO CARD.

INDIVIDUAL SEWAGE DISPOSAL
SYSTEM WORKSHEET

LEGAL

Sec 29, T6S, R80W

TECHNICAL REVIEW

- (☒) MEETS MIN LOT SIZE 35ac (☒) ENGINEERING MEETS ISDS REGULATIONS
(☒) ADJACENT DEVELOPMENT OK (☒) GEOLOGICAL REPORT ACCEPTABLE OR N/A
(☒) PARCEL LEGALITY FORM OK (☒) SLOPE <30% OR () PROPERLY DESIGNED

FIELD REVIEW

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

PERMIT CONDITIONS

(☒) 3 BDRMS () _____

TANK
SIZE
(gal)

1000

ABS
AREA
(ft²)

12x62
744

- (☒) WELLS200 () WtrSwr () OLDTANK
() REDUCTNS _____ () PROPERTY () PRIVY

() LineWell () OTHER1 _____

() TankWell _____
() ETWELLS () DRYGULCH () OTHER2 _____
() ABANDWELL _____ () SURFACE _____
(☒) PRELIM (☒) 6 FT () ALARM () OTHER3 _____
() SLOPECON () LIFTSTN _____
() ROADCUT () SUBMIN () ENGR _____
() FRENCH () CONTAMIN () TEMPRPR _____

FIELD NOTES AND APPROVALS

NOTES 5' P.H., no water, det. rock & rock, slope
<30% lots of room for a well.

SITE INSPECTED BY

DATE

FINAL REVIEW BY

DATE

J. F. Williams

9/26/94

Chris Sullivan

9/26/94

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.

11700 S. Ridge Rd. Conifer CO 80433 Sept. 20, 1994
 Job Address Date
 SW 1/4 NW 1/4 Sect. 29 Twp. 6S Range 70 W 6th P. 14
 Legal description
 Residential
 Use of Building
 Mike Haden
 Owner Address

SEWER	
☐ SEWER SERVICE AVAILABLE	☒ SEWER SERVICE NOT AVAILABLE
Individual sewage permit <u>15678</u>	
Name of Sanitation District _____	
COMMENTS OR CONDITIONS <u>3 bedroom single family residence</u>	
I hereby certify the availability of service listed above:	
Agent for Sanitation District _____	Date _____
<u>Victor Farkaus</u>	<u>9/26/94</u>
Reviewed by Jeffco Health or Zoning _____	Date _____

WATER	
☐ WATER SERVICE AVAILABLE	☐ WATER SERVICE NOT AVAILABLE
Colorado well permit <u>181579</u>	
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