September 10, 2019
Revised December 15, 2019

ENTECH
ENGINEERING, INC.
505 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
PHONE (719) 531-5599
FAX (719) 531-5238

Jim Martens
8190 Poco Road
Colorado Springs, CO 80908

Re: Wastewater Study
8190 Poco Road
Parcel No. 52280-00-001
Colorado Springs, Colorado

Dear Mr. Martens:

## GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION

The site is located in a portion of the NW¼ of Section 28, Township 12 South, Range 66 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located approximately 1½ miles northeast of Colorado Springs city limits, northwest of Poco Road and Vollmer Road in El Paso County, Colorado. The location of the site is as shown on the Vicinity Map, Figure 1.

The topography of the site is gradually sloping generally to the south. A minor drainage is located in the western portion of the property. Water was not observed in the drainage at the time of this investigation. The site boundaries are indicated on the USGS Map, Figure 2. Previous land uses have included grazing and pasture land and a rural residential development. The site contains primarily field grasses and weeds with scattered areas of ponderosa pines. A house is located in the northeastern portion of the site with an existing septic system and water well. Site photographs, taken April 23, 2019, are included in Appendix A.

Total acreage involved in the proposed minor subdivision is 12 acres. Two single-family rural residential lots are proposed as part of the replat. The proposed lot sizes are 5-acres for the western lot and 7-acres for the eastern lot. The new lot will be serviced by an individual well and on-site wastewater treatment system. The existing house is located on the eastern 7-acre lot and will remain. The Site Plan with the proposed replat is presented in Figure 3.

## SOIL AND GEOLOGIC CONDITIONS

Soil Survey

The Natural Resource Conservation Service (NRCS) (Reference 1, Figure 4), previously the Soil Conservation Service (Reference 2) has mapped one soil type on the site. Complete descriptions of the soil type is presented in Appendix D. In general, the soils consist of sandy loam. The soils are described as follows:

| Type | Description |
|---|---|
| 71 | Pring Coarse Sandy Loam, 3 – 8% Slopes |

The soils have been described to have rapid permeabilities. The soils are described as well suited for use as homesites. Possible hazards with soils erosion are present on the site. The erosion potential can be controlled with vegetation. The soils have been described to have moderate erosion hazards (Reference 2).

Soils

The soils encountered in the test pit consisted of gravelly sandy loam (silty sand) overlying weathered to formational silty sandstone. Weathered bedrock was encountered at 3 feet in the test pit. The sample of sand tested had approximately 25 percent of the soil size particles passing the No. 200 sieve. The sample of sandstone tested had 29 percent of the soil size particles passing the No. 200 sieve. The upper sand soils are considered to have low expansion potential. An FHA Swell pressure of 280 psf was measured on the silty sandstone, indicating low expansion potential. Atterberg Limits Testing on the sandstone resulted in the sandstone being non-plastic.

Groundwater

Groundwater or signs of seasonally occurring water were not encountered in the test pit, which was excavated to 6 feet. It is anticipated groundwater will not affect shallow foundations on the majority of the site. An area of potentially seasonal shallow groundwater has been mapped in a drainage on the site that is discussed in the following sections. Fluctuations in groundwater conditions may occur due to variations in rainfall or other factors not readily apparent at this time. Isolated sand layers within the soil profile can carry water in the subsurface. Contractors should be cognizant of the potential for the occurrence of subsurface water features during construction.

Geology

Approximately 12 miles west of the site is a major structural feature known as the Rampart Range Fault. This fault marks the boundary between the Great Plains Physiographic Province and the Southern Rocky Mountain Province. The site exists within a large structural feature known as the Denver Basin. Bedrock in the area is typically gently dipping in a northerly direction (Reference 3). The bedrock underlying the site consists of the Dawson Formation of Cretaceous Age. The Dawson Formation typically consists of coarse-grained arkosic sandstone with interbedded layers siltstone or claystone.

The geology of the site was evaluated using the *Geologic Map of the Falcon NW Quadrangle,* by Madole in 2003, (Reference 4, Figure 5). The Geology for the site is presented in Figure 6. One mappable unit was identified on this site which is described as follows:

**Qc/Tkd** **Colluvium of Quaternary Age overlying Dawson Formation of Tertiary to Cretaceous Age:** The materials consist of colluvial or residual soils overlying the bedrock materials on-site. The colluvial soils were deposited by the action of sheetwash and gravity. The residual soils were derived from the in-situ weathering of the bedrock on site. These materials typically consist of silty to clayey sand with potential areas of sandy clays. The bedrock consists of the Dawson Formation. The Dawson Formation typically consists of coarse-grained, arkosic sandstone with interbedded lenses of fine-grained sandstone, siltstone and claystone.

The soils listed above were mapped from site-specific mapping, the *Geologic Map of the Falcon NW Quadrangle* distributed by the Colorado Geologic Survey in 2003 (Reference 4, Figure 5), The *Geologic Map of the Colorado Springs-Castle Rock Area,* distributed by the US Geological Survey in 1979 (Reference 5), and the *Geologic Map of the Pueblo 1° x 2° Quadrangle,* distributed by the US Geological Survey in 1978 (Reference 6). The Test Pit was also used in evaluating the site and is included in Appendix B. The Geology Map prepared for the site is presented in Figure 6.

## ON-SITE WASTEWATER TREATMENT

The Natural Resource Conservation Service (Reference 1), previously the Soil Conservation Service (Reference 2) has been mapped with one soil description. The Soil Survey Map (Reference 1) is presented in Figure 4, and the Soil Survey Descriptions (Reference 2) are presented in Appendix C. The soils are described as having rapid percolation rates.

Soils encountered in the tactile test pits consisted of gravelly sandy loam overlying weathered to formational silty sandstone. The limiting layers encountered in the test pit is the silty sandstone, which corresponds with USDA Soil Type 3A with an LTAR value of 0.30 gallons per day per square foot. Weathered bedrock was encountered at approximately 3 feet in the test pit. Signs of seasonally occurring groundwater were not observed in the test pit. Absorption fields must be maintained a minimum of 4 feet above groundwater or bedrock, or confining layer. Should groundwater or bedrock be encountered within 6 feet of the surface, designed systems will be required.

In summary, it is our opinion the site is suitable for individual on-site wastewater treatment systems (OWTS) and that contamination of surface and subsurface water resources should not occur provided the OWTS sites are evaluated and installed according to El Paso County and State Guidelines and properly maintained. Based on the testing performed designed systems will be required for the new lot. The Septic Suitability Map is presented in Figure 6. Individual soil testing is required for proposed construction on each lot prior to construction. Absorption fields must be located a minimum of 100 feet from any well, including those on adjacent properties. Absorption fields must also be located a minimum of 50 feet from any drainages, floodplains or ponded areas and 25 feet from dry gulches.

## CLOSURE

This report has been prepared for Jim Martens, for application to the proposed project in accordance with generally accepted geologic soil and engineering practices. No other warranty expressed or implied is made.

Jim Martens
Wastewater Study
8190 Poco Road
Parcel No. 52280-00-001
Colorado Springs, Colorado

We trust that this report has provided you with all the information that you required. Should you require additional information, please do not hesitate to contact Entech Engineering, Inc.

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G.
Geologist

Reviewed by:

Joseph C. Goode, Jr., P.E.
President

COLORADO LICENSED
JOSEPH COLLIN GOODE JR
23725
12.15.19
PROFESSIONAL ENGINEER

LLL/lll

Encl.

Entech Job No. 190411
AAprojects/2019/190411 wws

## BIBLIOGRAPHY

1. Natural Resource Conservation *Service,* September 23, 2016. *Web Soil Survey.* United States Department Agriculture, http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm.

2. United States Department of Agriculture Soil Conservation Service. June 1981. *Soil Survey of El Paso County Area, Colorado.*

3. Scott, Gleen R.; Taylor Richard B.; Epis, Rudy C; and Wabus, Reinhard A. 1978. *Geologic Structure Map of the Pueblo 1° x 2° Quadrangle, South-Central Colorado.* Sheet 2. U.S. Geologic Survey. Map I-1022, Sheet 2.

4. Madole, Richard F., 2003. *Geologic Map of the Falcon NW Quadrangle, El Paso County, Colorado.* Colorado Geological Survey. Open-File Report 03-8.

5. Trimble, Donald E. and Machette, Michael N. 1979. *Geologic Map of the Colorado Springs-Castle Rock Area, Front Range Urban Corridor, Colorado.* USGS, Map I-857-F.

6. Scott, Gleen R.; Taylor Richard B.; Epis, Rudy C; and Wabus, Reinhard A. 1978. *Geologic Structure Map of the Pueblo 1° x 2° Quadrangle, South-Central Colorado.* Sheet 2. U.S. Geologic Survey. Map I-1022.

7. Federal Emergency Management Agency. December 7, 2018. *Flood Insurance Rate Maps for the City of Colorado Springs, Colorado.* Map Number 08041CO535G

# TABLES

# TABLE 1

## SUMMARY OF LABORATORY TEST RESULTS

CLIENT JIM MARTENS
PROJECT 8190 POCO ROAD
JOB NO. 190411

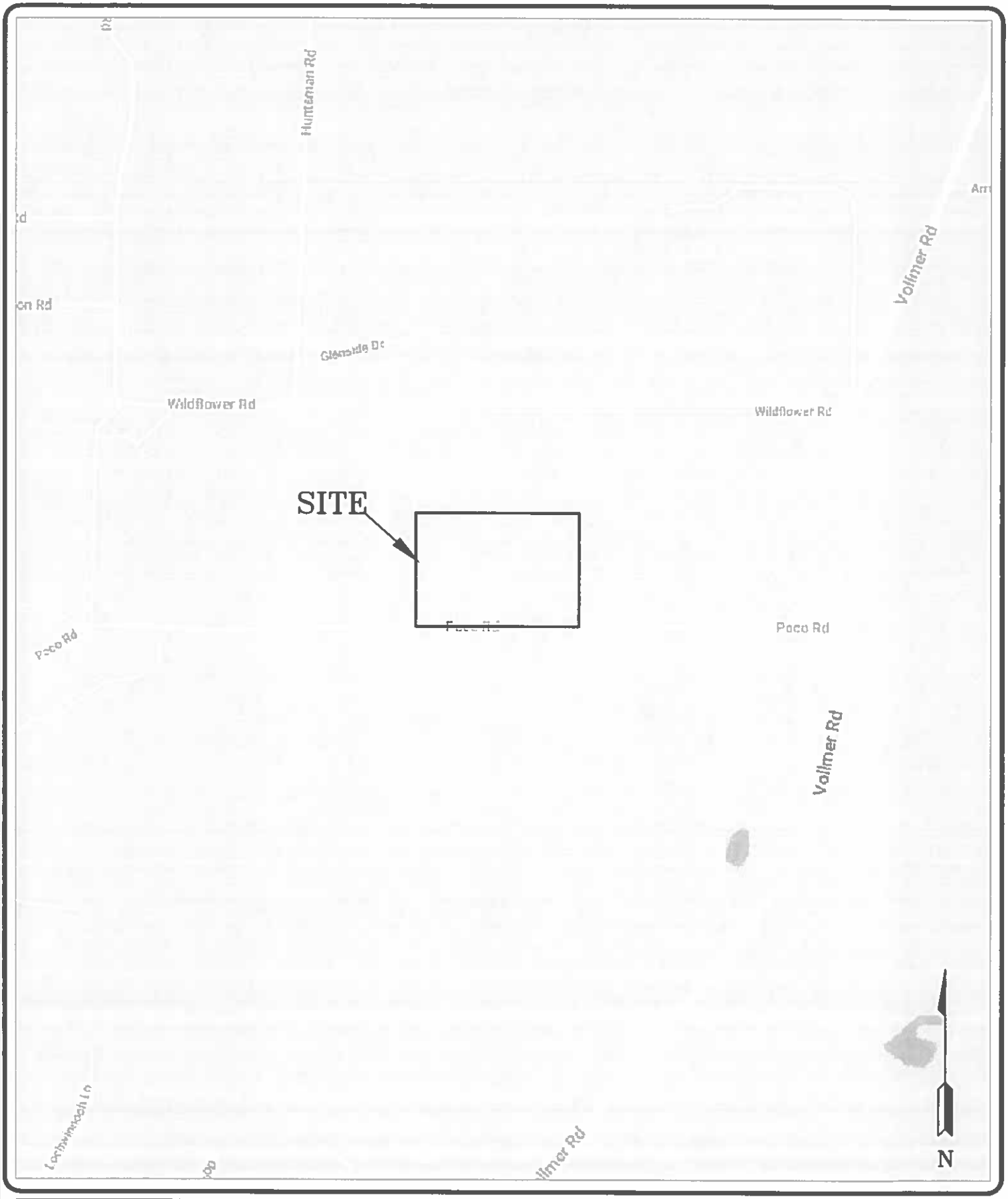
| SOIL TYPE | TEST BORING NO. | DEPTH (FT) | WATER (%) | DRY DENSITY (PCF) | PASSING NO. 200 SIEVE (%) | LIQUID LIMIT (%) | PLASTIC INDEX (%) | SULFATE (WT %) | FHA SWELL (PSF) | SWELL/ CONSOL (%) | UNIFIED CLASSIFICATION | SOIL DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | TP-1 | 0-2 | | | 25.4 | | | | | | SM | SAND, SILTY |
| 2 | TP-1 | 5-6 | | | 29.3 | NV | NP | | 280 | | SM | WX SANDSTONE, SILTY |

## Table 2: Summary Tactile Test Pit Results

| Test Pit No. | USDA Soil Type | LTAR Value | Depth to Bedrock (ft.) | Depth to Seasonally Occurring Groundwater (ft.) |
|---|---|---|---|---|
| 1 | 3A* | 0.30* | 3* | N/A |

*- Conditions that will require an engineered OWTS

# FIGURES




**ENTECH ENGINEERING, INC.**
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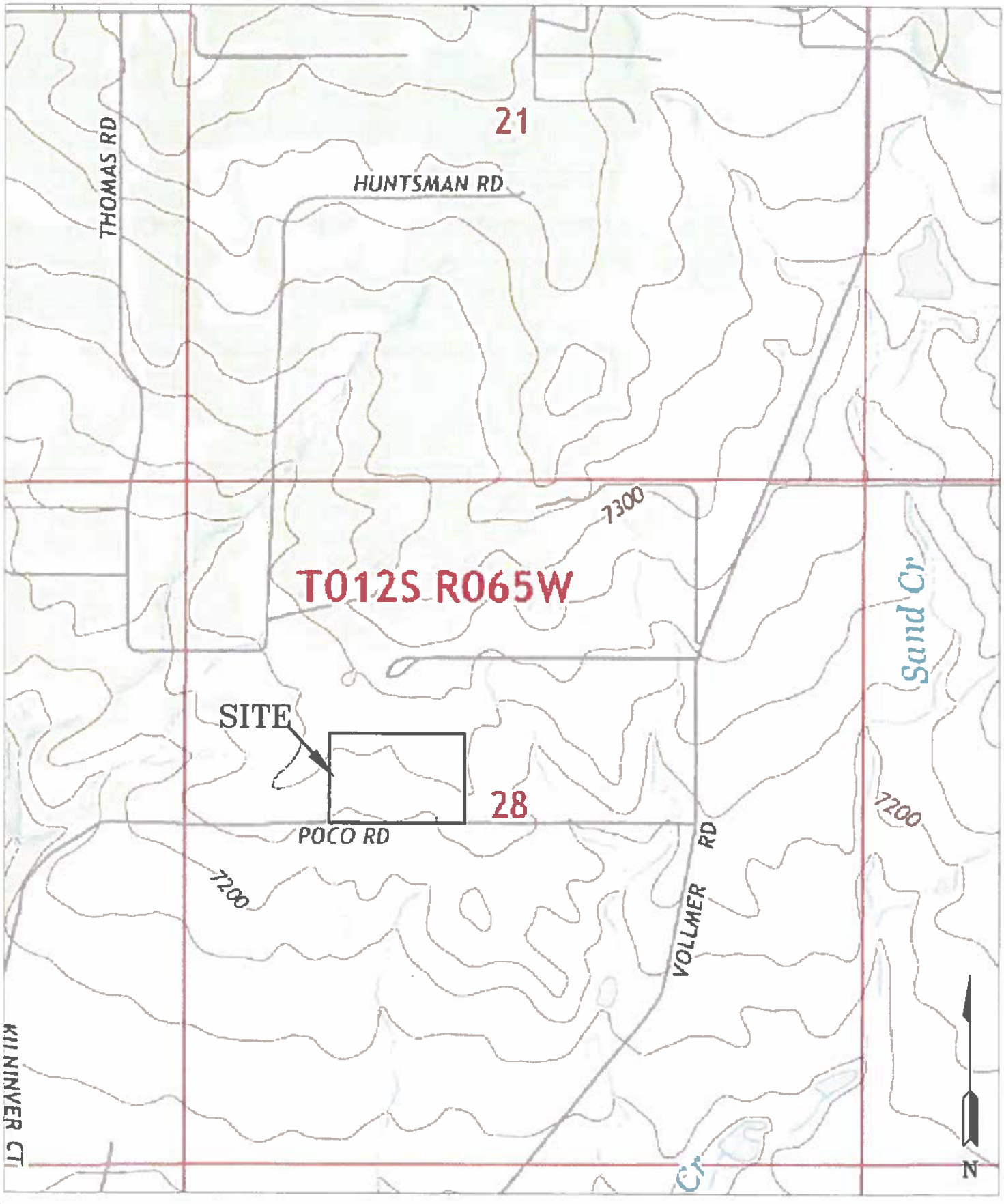
COLORADO SPRINGS, CO. 80907 (719) 531-5599

**VICINITY MAP**
**8190 POCO ROAD**
**COLORADO SPRINGS, CO.**
**FOR: JIM MARTENS**

| DRAWN: | DATE: | CHECKED: | DATE: |
|---|---|---|---|
| LLL | 5/24/19 | | |

JOB NO.: 190411

FIG NO.: 1

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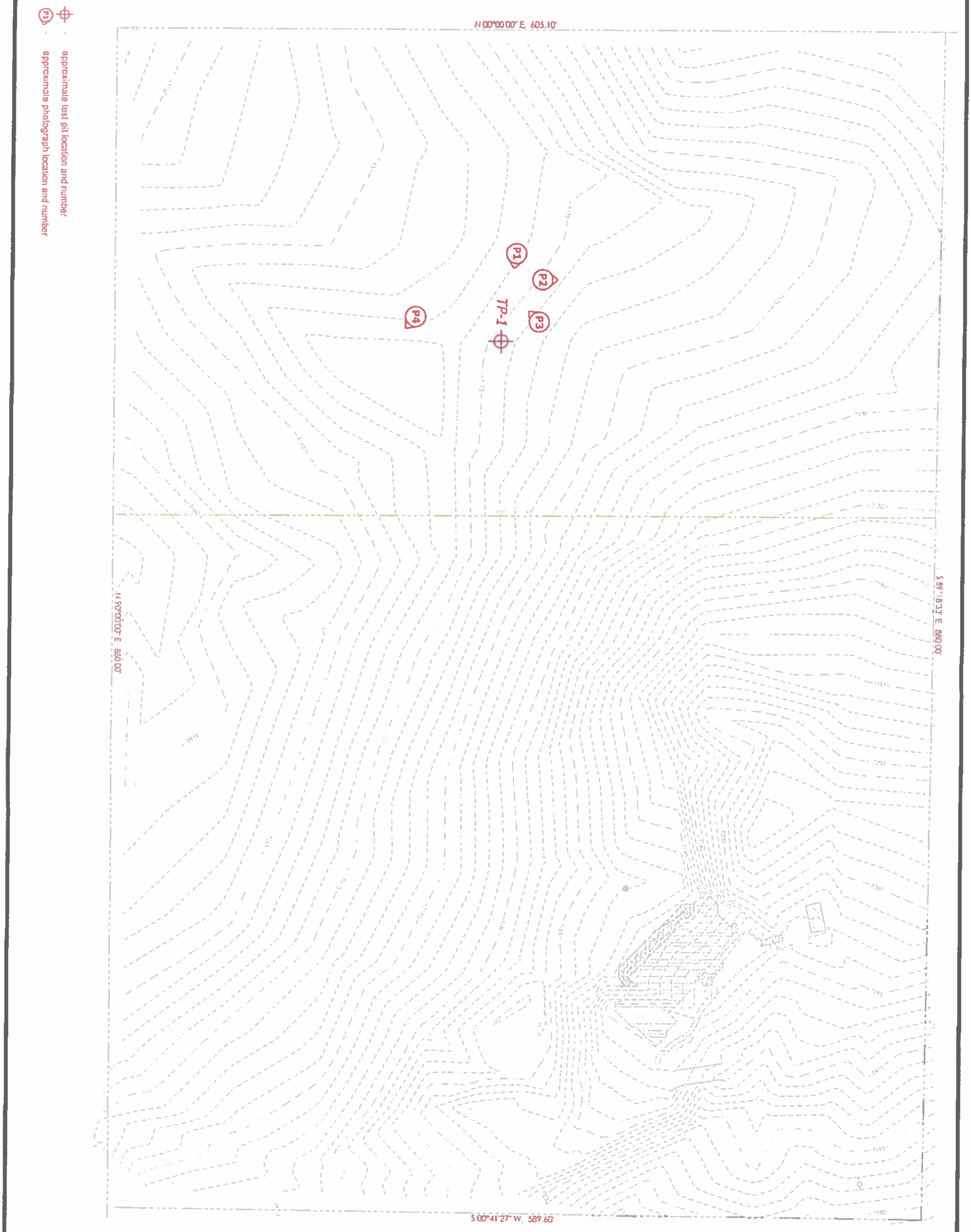
USGS MAP
8190 POCO ROAD
COLORADO SPRINGS, CO.
FOR: JIM MARTENS

| DRAWN: | DATE: | CHECKED: | DATE: |
|---|---|---|---|
| LLL | 5/24/19 | | |

JOB NO.: 190411

FIG NO.: 2




| | |
|---|---|
| DRAWN | MJM |
| DESIGN | TLL |
| DATE | 5/24/19 |
| SCALE | AS SHOWN |
| JOB NO. | 19011.1 |
| SHEET | 3 |

SITE PLAN/TEST PIT LOCATION MAP
8190 POCO ROAD
COLORADO SPRINGS, CO.
FOR: JIM MARTENS

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| REVISION | BY |
|---|---|
| | |


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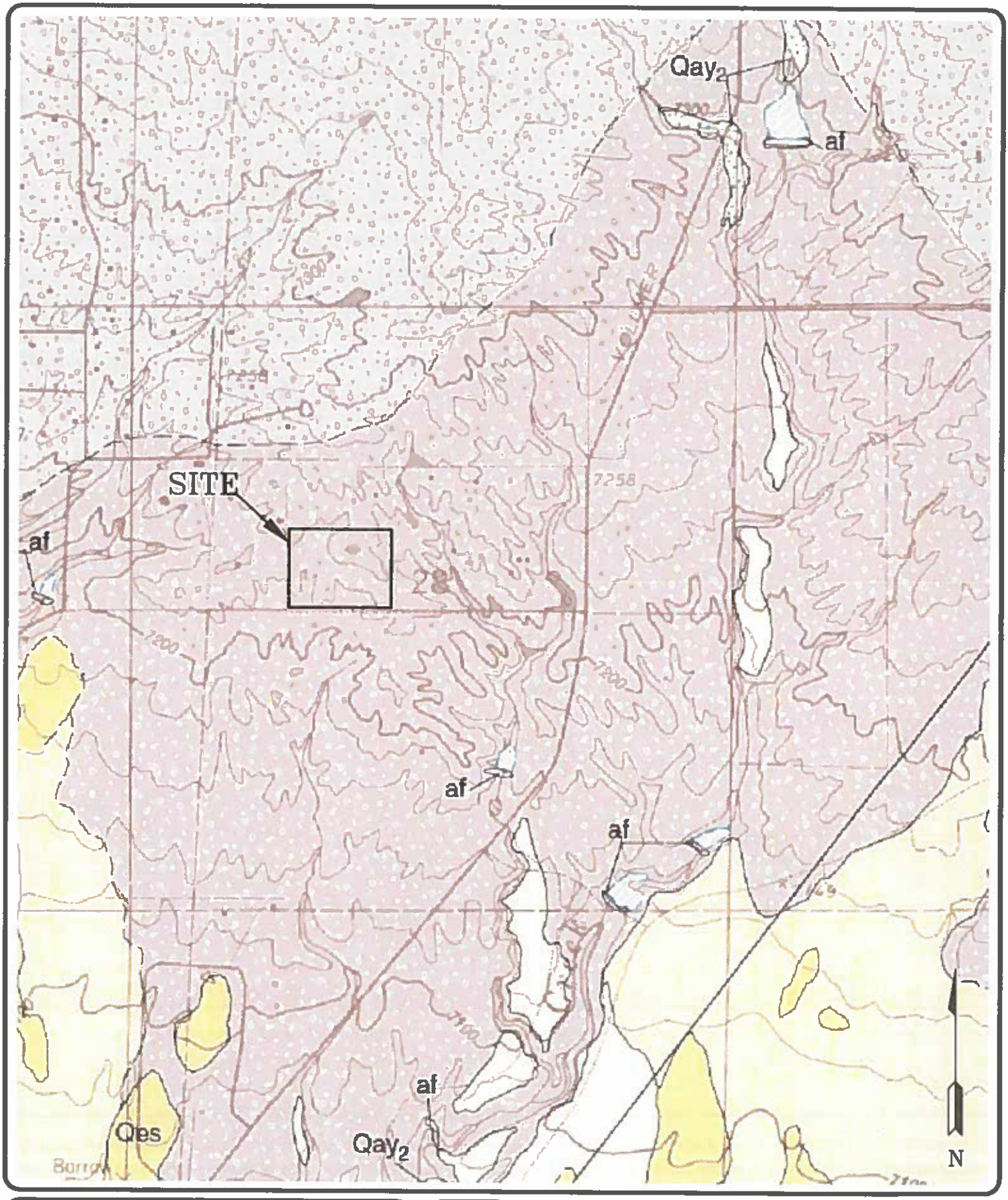
COLORADO SPRINGS, CO. 80907 (719) 531-5599

SOIL SURVEY MAP
8190 POCO ROAD
COLORADO SPRINGS, CO.
FOR: JIM MARTENS

| DRAWN: | DATE: | CHECKED: | DATE: |
|---|---|---|---|
| LLL | 5/24/19 | | |

JOB NO.: 190411

FIG NO.: 4

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FALCON NW QUADRANGLE GEOLOGIC MAP
8190 POCO ROAD
COLORADO SPRINGS, CO.
FOR: JIM MARTENS

| DRAWN: | DATE: | CHECKED: | DATE: |
|---|---|---|---|
| LLL | 5/24/19 | | |

JOB NO.: 190411

FIG NO.: 5

DRAWN
LLL
CHECKED

7/19/17
DATE

AS SHOWN
SCALE

170957
JOB NO.

6
SHEET NO.

# SEPTIC SUITABILITY MAP
ROLLIN RIDGE ESTATES
HODGEN ROAD AND HIGHWAY 83
EL PASO COUNTY, CO.
FOR: CARL TURSE


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ENGINEERING, INC.
505 ELKTON DRIVE
COLORADO SPRINGS, CO. 80907 (719) 531-5599


| BY | REVISION |
|---|---|
| | |

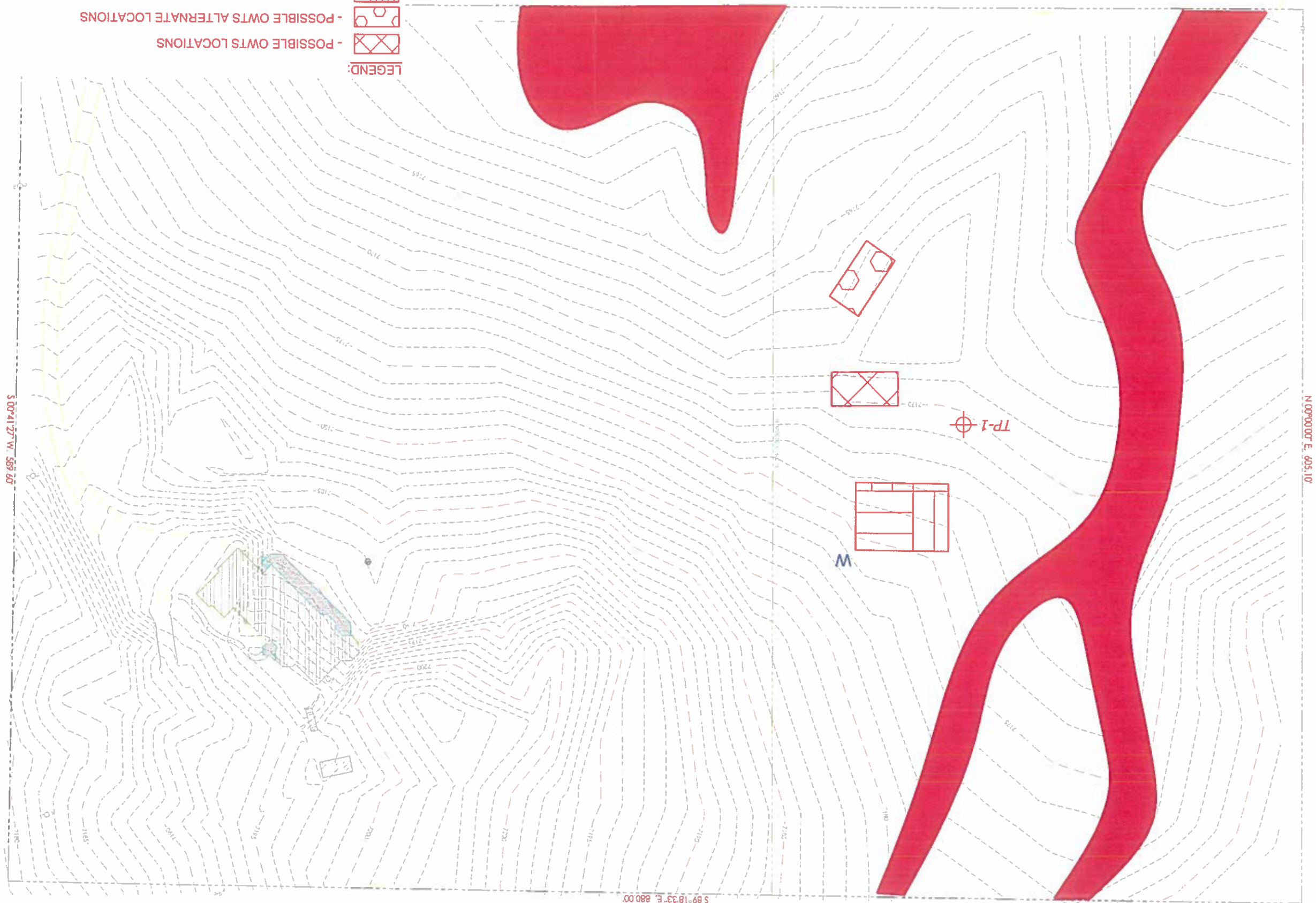
N

LEGEND:

- POSSIBLE OWTS LOCATIONS
- POSSIBLE OWTS ALTERNATE LOCATIONS
- POSSIBLE HOUSE LOCATIONS
- AREAS WHERE OWTS ARE NOT RECOMMENDED

W

*- WATER WELLS MUST BE A MINIMUM OF 100 FT FROM OWTS ABSORPTION FIELDS



# APPENDIX A: Test Pit Logs

TEST PIT NO. 1
DATE EXCAVATED 4/23/2019
Job # 190411

CLIENT JIM MARTENS
LOCATION 8190 POCO ROAD

| REMARKS | Depth (ft) | Symbol | Samples | Soil Structure Shape | Soil Structure Grade | USDA Soil Type |
|---|---|---|---|---|---|---|
| topsoil sandy loam, brown | 1 | | | | | |
| gravelly sandy loam, fine to coarse grained, light brown | 2 | | | gr | m | 2 |
| | 3 | | | | | |
| weathered to formational silty sandstone, fine to coarse grained, tan | 4 | | | ma | | 3A |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |

| REMARKS | Depth (ft) | Symbol | Samples | Soil Structure Shape | Soil Structure Grade | USDA Soil Type |
|---|---|---|---|---|---|---|
| | 1 | | | | | |
| | 2 | | | | | |
| | 3 | | | | | |
| | 4 | | | | | |
| | 5 | | | | | |
| | 6 | | | | | |
| | 7 | | | | | |
| | 8 | | | | | |
| | 9 | | | | | |
| | 10 | | | | | |

Soil Structure Shape
granular - gr
platy - pl
blocky - bl
prismatic - pr
single grain - sg
massive - ma

Soil Structure Grade
weak - w
moderate - m
strong - s
loose - l

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COLORADO SPRINGS, COLORADO 80907

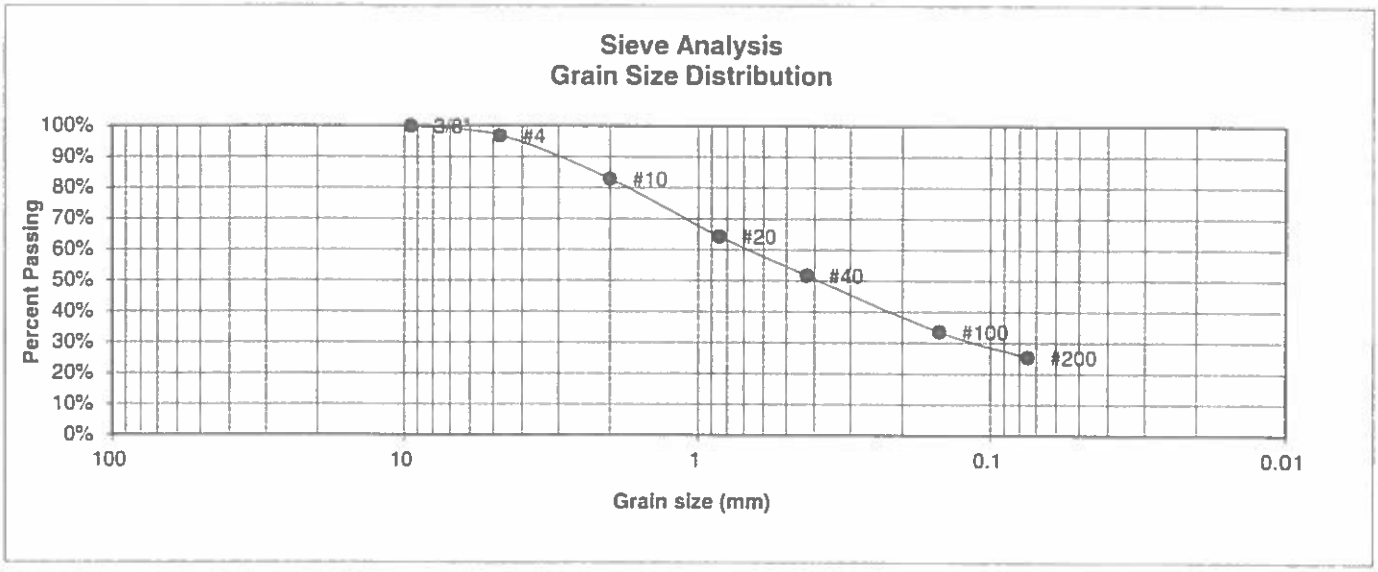
TEST PIT LOG

| DRAWN: | DATE | CHECKED: | DATE |
|---|---|---|---|
| | | LLL | 5/1/19 |

JOB NO: 190411
FIG NO: A-1

# APPENDIX B: Laboratory Test Results

| | | | | | |
|---|---|---|---|---|---|
| BORING NO. | TP-1 | UNIFIED CLASSIFICATION | SM | TEST BY | BL |
| DEPTH(ft) | 0-2 | AASHTO CLASSIFICATION | | JOB NO. | 190411 |
| CLIENT | JIM MARTENS | | | | |
| PROJECT | 8190 POCO ROAD | | | | |




| U.S. Sieve # | Percent Finer |
|---|---|
| 3" | |
| 1 1/2" | |
| 3/4" | |
| 1/2" | |
| 3/8" | 100.0% |
| 4 | 96.9% |
| 10 | 82.9% |
| 20 | 64.3% |
| 40 | 51.7% |
| 100 | 33.6% |
| 200 | 25.4% |

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

Swell
Moisture at start
Moisture at finish
Moisture increase
Initial dry density (pcf)
Swell (psf)

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505 ELKTON DRIVE
COLORADO SPRINGS, COLORADO 80907

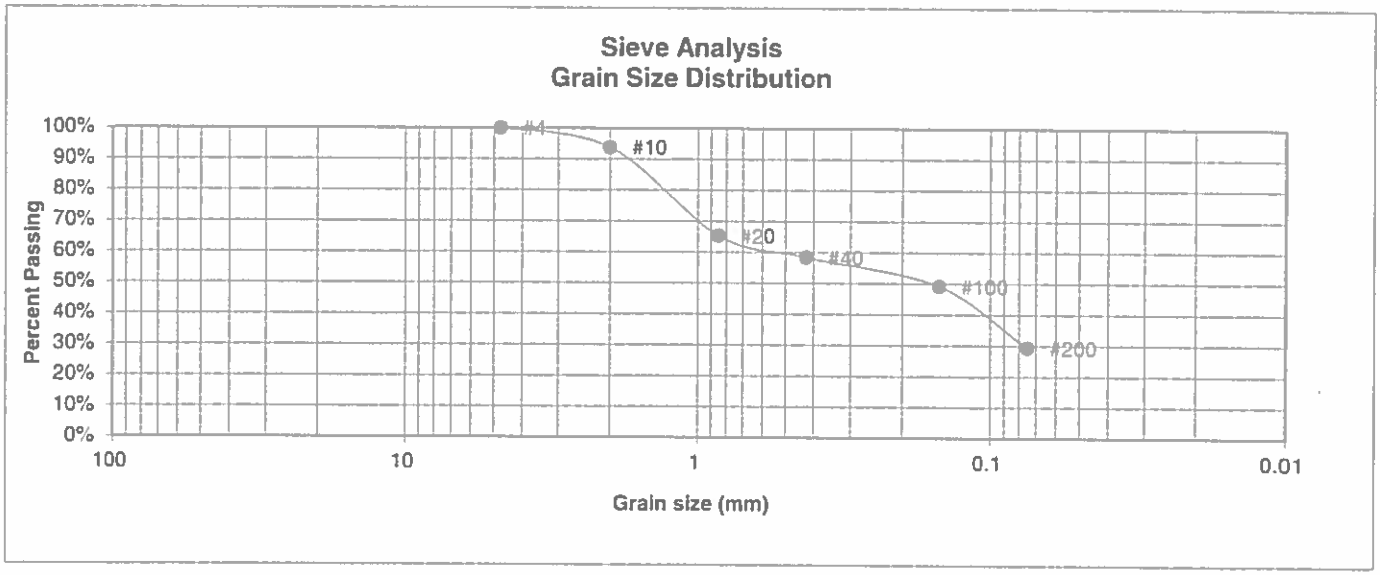
LABORATORY TEST RESULTS

| DRAWN | DATE | CHECKED | DATE |
|---|---|---|---|
| | | LLL | 5/18/19 |

JOB NO. 190411

FIG NO. B-1

| | | | | | |
|---|---|---|---|---|---|
| BORING NO. | TP-1 | UNIFIED CLASSIFICATION | SM | TEST BY | BL |
| DEPTH(ft) | 5-6 | AASHTO CLASSIFICATION | | JOB NO. | 190411 |
| CLIENT | JIM MARTENS | | | | |
| PROJECT | 8190 POCO ROAD | | | | |




| U.S. Sieve # | Percent Finer |
|---|---|
| 3" | |
| 1 1/2" | |
| 3/4" | |
| 1/2" | |
| 3/8" | |
| 4 | 100.0% |
| 10 | 93.8% |
| 20 | 65.3% |
| 40 | 58.4% |
| 100 | 49.2% |
| 200 | 29.3% |

Atterberg Limits

| | |
|---|---|
| Plastic Limit | NP |
| Liquid Limit | NV |
| Plastic Index | NP |

Swell

| | |
|---|---|
| Moisture at start | 13.0% |
| Moisture at finish | 24.2% |
| Moisture increase | 11.2% |
| Initial dry density (pcf) | 93 |
| Swell (psf) | 280 |


**ENTECH**
**ENGINEERING, INC.**
505 ELKTON DRIVE
COLORADO SPRINGS, COLORADO 80907


LABORATORY TEST RESULTS

| DRAWN: | DATE: | CHECKED: | DATE: |
|---|---|---|---|
| | | LL | 5/16/19 |

JOB NO: 190411

FIG NO: B-2

# APPENDIX C: Soil Survey Descriptions

**71—Pring coarse sandy loam, 3 to 8 percent slopes.** This deep, noncalcareous, well drained soil formed in sandy sediment derived from arkosic sedimentary rock on valley side slopes and on uplands. Elevation ranges from 6,800 to 7,600 feet. The average annual precipitation is about 17 inches, the average annual air temperature is about 43 degrees F, and the average frost-free period is about 120 days.

Typically, the surface layer is dark grayish brown coarse sandy loam about 4 inches thick. The substratum is dark grayish brown coarse sandy loam about 10 inches thick over pale brown gravelly sandy loam that extends to a depth of 60 inches or more.

Included with this soil in mapping are small areas of Alamosa loam, 1 to 3 percent slopes, along drainageways; Cruckton sandy loam, 1 to 9 percent slopes; Peyton sandy loam, 1 to 5 percent slopes; Peyton sandy loam, 5 to 9 percent slopes; and Tomah-Crowfoot loamy sands, 3 to 8 percent slopes. In some places arkose beds of sandstone and shale are at a depth of 0 to 40 inches.

Permeability of this Pring soil is rapid. Effective rooting depth is 60 inches or more. Available water capacity is moderate. Surface runoff is medium, and the hazard of erosion is moderate.

Almost all areas of this soil are used as rangeland. Some areas previously cultivated have been reseeded to grass. This soil is also used for wildlife habitat and homesites.

This soil is well suited to the production of native vegetation suitable for grazing by cattle and sheep. Rangeland vegetation is mainly mountain muhly, little bluestem, needleandthread, Parry oatgrass, and junegrass.

Deferment of grazing in spring helps to maintain vigor and production of the cool-season bunchgrasses. Fencing and properly locating livestock watering facilities help to control grazing.

Windbreaks and environmental plantings generally are suited to this soil. The hazard of soil blowing is the main limitation to the establishment of trees and shrubs. This limitation can be overcome by cultivating only in the tree rows and leaving a strip of vegetation between the rows. Supplemental irrigation may be needed when planting and during dry periods. Trees that are best suited and have good survival are Rocky Mountain juniper, eastern redcedar, ponderosa pine, Siberian elm, Russian-olive, and hackberry. Shrubs that are best suited are skunkbush sumac, lilac, and Siberian peashrub.

This soil is suited to habitat for openland and rangeland wildlife. Rangeland wildlife, such as pronghorn antelope, can be encouraged by developing livestock watering facilities, properly managing livestock grazing, and reseeding range where needed.

This soil is well suited for use as homesites. Erosion control practices are needed to control soil blowing and water erosion on construction sites where the ground cover has been removed. Capability subclass IVe.

# APPENDIX D: El Paso County Health Department Septic Records

400

EL PASO COUNTY DEPARTMENT OF HEALTH AND ENVIRONMENT Permit # 12908
INDIVIDUAL SEWAGE DISPOSAL SYSTEM INSPECTION FORM Date 05/20/99

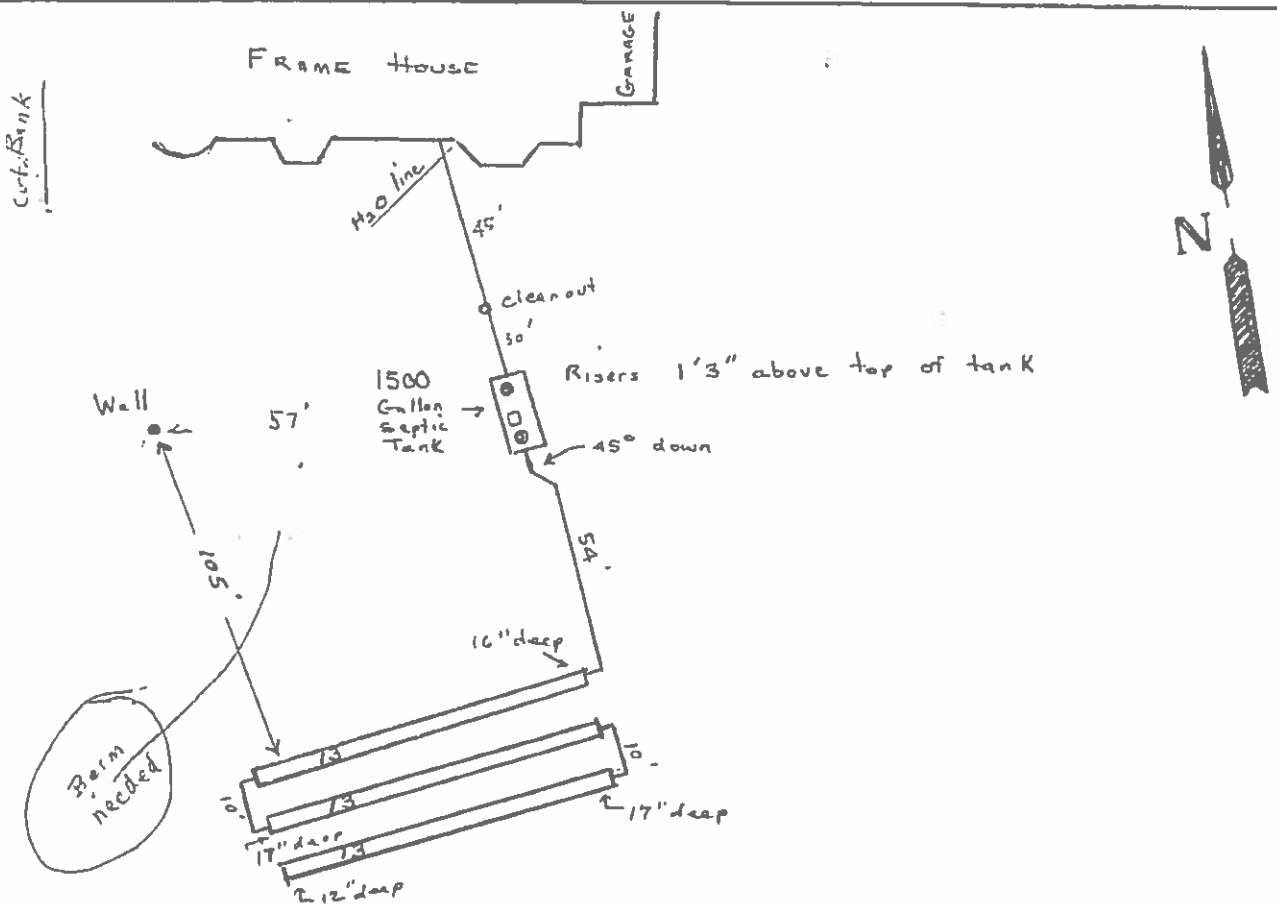
P

APPROVED: YES ✓ NO #5228000011 ENVIRONMENTALIST J. CHRISTENSEN

Address 8190 POCO ROAD Owner JIM AND KAREN MARTENS

Legal Description W 2/3, S2, SE4, NW4 SEC: 28-12-65
Residence ✓, # of bedrooms 4; Commercial ____; System Installer KUNAU
**SEPTIC TANK:**
Commercial ✓; Noncommercial ____, L ____, W ____, WD ____
Construction Material CONCRETE, capacity 1500 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 39, bed ____, trench ✓
sq. ft./section 15.5, reduction allowed 40 %, sq. ft required 998
total sq. ft. installed 1008, depth of installation 12" - 17"
Engineer Design Y or (N), Designing Engineer ____,
Approval letter provided? Y or (N)
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.

**NOTES:** 6" schedule 40 pipe sleeved over 4" SDR 35 sewer piper from building sewer to septic tank inlet. 05/20/99 field is backfilled. Builders have left water running & runoff has eroded & exposed chamber in first trench. Need to divert H2O around field.



Acres 10

**EL PASO COUNTY • DEPARTMENT OF HEALTH AND ENVIRONMENT**

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

Water Supply WELL

Permit _____

## *PERMIT*

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

Receipt No. [illegible]

Issued to JIM AND KAREN MATTEWS Date 11-30-93

Address of Property 8190 FOCO ROAD. W½, S2, SE4, NW4, SEC: 26-12-65 Phone 599-8091

(Permit valid at this address only)

Sewage-Disposal System work to be performed by KUNAU Phone 683-3720

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-***

$245.00
PERMIT FEE (NOT REFUNDABLE)

Steven J Engfer, MD
DIRECTOR, DEPARTMENT OF HEALTH AND ENVIRONMENT

11-30-99
DATE OF EXPIRATION

Janet Christensen 578-3141
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: |
|---|---|---|---|
| 1500 gallons | total square feet 998<br>_____ ft. of trench _____ inches wide<br>_____ ft. of trench _____ inches wide | total square feet _____ | total square feet _____<br>_____ rings or _____ diam.x _____ w/d |

**NOTES:** INSTALL ABSORPTION SYSTEM IN THE AREA OF THE PERCOLATION TEST. ABSORPTION AREA SHALL BE NO DEEPER THAN 18 INCHES BELOW THE EXISTING GROUND SURFACE.

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.

EL PASO COUNTY ENVIRONMENTAL HEALTH SERVICES
301 South Union Boulevard Colorado Springs, CO 80910-3123

# APPLICATION FOR A NEW, REMODEL, REPAIR, OR ADDITION TO AN INDIVIDUAL SEWAGE DISPOSAL SYSTEM

Mark Liriott 495-4705

Owner Jim & KAREN MARTENS Phone 599-8091

Address of Property 8190 Deco Road 80908 Lot Size 12 AC Water Supply WELL

Tax Sch # 52280-00-011 Septic Contractor & Phone #

Legal Description W 1/3 of S2, SE4, NW4, Sec 28-12-65

Type of Building ~~Single Family~~ frame Owner's Mailing Address 4910 Ramblewood 80920

MAXIMUM POTENTIAL BEDROOMS 4

Basement (Y) N Percolation Test Attached (Y) N Garbage Disposal (Y) N Clothes Washer (Y) N

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 and additional tests and reports as may be required by the Department to be made and furnished by a applicant for purposes of evaluating the application, and issuance of the permit is subject to such terms and conditions as deemed necessary to ensure compliance with rules and regulations adopted pursuant to C.R.S. 10-25-101 et. seq. I hereby certify all represented to be true and correct to the best of my knowledge and belief, and are designed to be relied on by the El Paso County Department of Health and Environment 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 and in legal action for perjury as provided by law.

OWNER'S SIGNATURE Jim D Martens Date 11/17/98

## DEPARTMENT OF HEALTH USE ONLY

| 998 ft² | 1500 GALLONS | 11/19/98 |
|---|---|---|
| Absorption Area | Tank Capacity | Date of Site Inspection |

REMARKS:

Install absorption system in the area of the percolation test. Absorption area shall be no deeper than 18 inches below the existing ground surface.

EHS INSPECTOR Janet Christensen Date 11/19/98 APPROVED DENIED

PERMIT # 12908 FEE NO FEE DATE TO EPC PLANNING DEPT 11-19-98

Pd 12-1-98 Check 1100

attached

We require the ORIGINAL of your percolation (PERC) TEST.
The following information must be on your PLOT PLAN.

Property lines
Proposed septic system site
Well(s)
Building(s)
Water line
Subsoil drain(s)

Property dimensions
Designated alternate septic system site
Adjacent property well(s)
Proposed building(s)
Cistern

If any of these are within 100 feet of your proposed septic system include on your plot plan

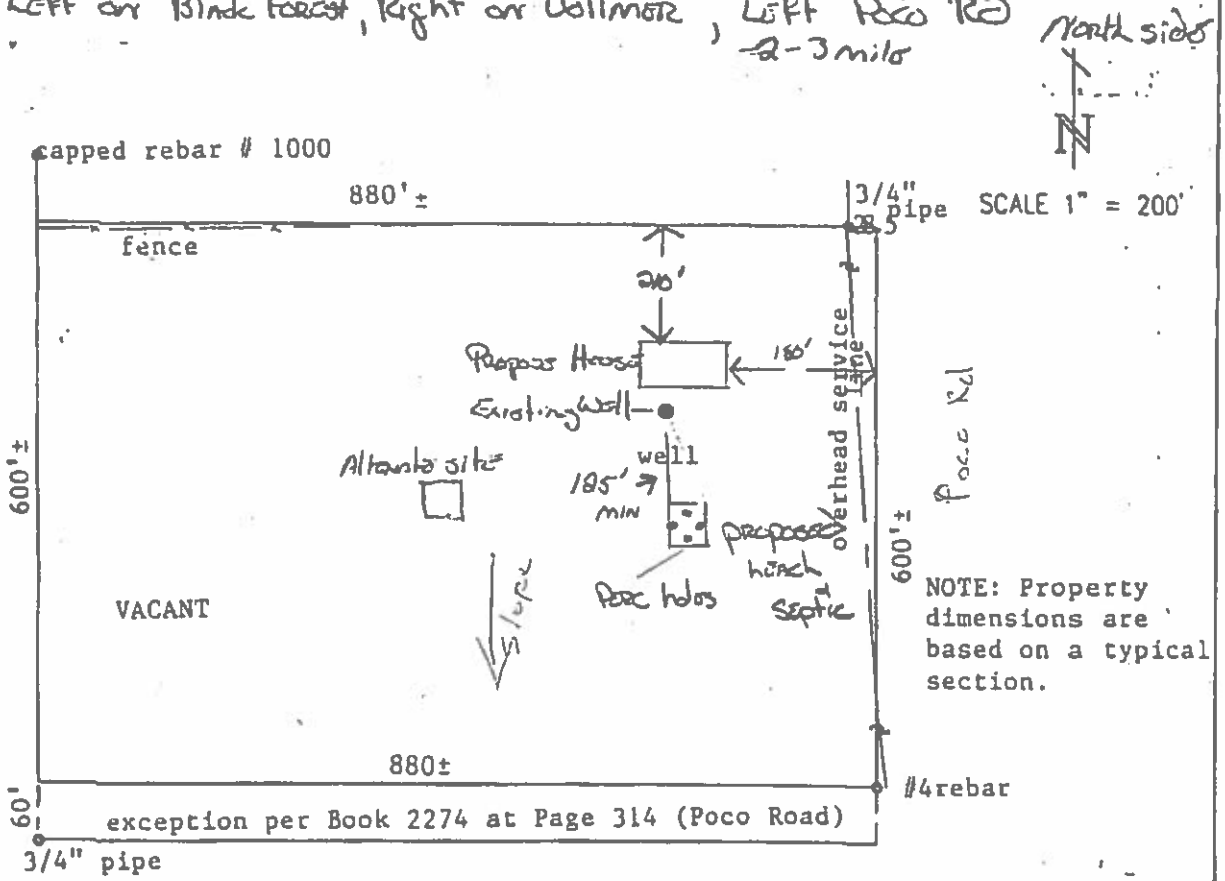
Spring(s)
Pond(s)
Dry Gulch(s)

Lake(s)
Stream(s)
Natural drainage course(s)

PROPERTY AND PERC HOLES MUST BE CLEARLY MARKED OR POSTED

GIVE COMPLETE DIRECTIONS TO THE PROPERTY FROM A MAIN HIGHWAY

Woodmen Left on Black Forest, Right on Vollmer, Left Poco Rd 2-3 mile




**LEGAL DESCRIPTION**

The West two-thirds (2/3) of the South half of the Southeast Quarter of the Northwest Quarter of Section 28 in Township 12 South Range 65 West of the 6th P.M., except the South 60 feet thereof conveyed to El Paso County for road purposes by Deed recorded in Book 2274 at Page 314, El Paso County, Colorado.