



**ENTECH**  
ENGINEERING, INC.

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**WASTEWATER STUDY  
FALCON ACRES  
CURTIS ROAD AND DAVIS ROAD  
PARCEL NO. 44040-00-014  
EL PASO COUNTY, COLORADO**

Prepared for

**Richard Elliott**  
812 East Monument Street  
Colorado Springs, Colorado 80903

September 14, 2022

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G.  
Geologist



Reviewed by:

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

LLL/jr

Encl.

Entech Job No. 221662  
AAprojects/2022/221662 wws

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## 1.0 SUMMARY

### ***Project Location***

The project lies in the NE ¼ of Section 4, Township 14 South, Range 64 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located at the southwest corner of Curtis Road and Davis Road, approximately 5 miles southeast of Falcon, Colorado.

### ***Project Description***

Total acreage involved in the project is approximately 49 acres. The proposed site development consists of 8 single-family rural residential lots. The development will utilize individual wells and on-site wastewater treatment systems.

### ***Scope of Report***

This report presents the results of our geologic investigation, treatment of engineering geologic hazard study, natural features, and wastewater study for individual sewage treatment systems.

### ***Land Use and Engineering Geology***

This site was found to be suitable for the proposed development. Areas were encountered where the geologic conditions will impose some constraints on development and land use. These include areas of artificial fill, potentially seasonal shallow groundwater areas, loose or collapsible soils, hydrocompaction, and possible expansive soils. Based on the proposed development plan, it appears that these areas will have some impact on the development. These conditions will be discussed in greater detail in the report.

In general, it is our opinion that the development can be achieved if the observed geologic conditions on site are either avoided or properly mitigated. All recommendations are subject to the limitations discussed in the report.

## 2.0 GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION

The site is located in portions of the NE 1/4 Section 4, Township 14 South, Range 64 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located at the southwest corner of Curtis Road and Davis Road, approximately 5 miles southeast of Falcon, Colorado. The approximate location of the site is as shown on the Vicinity Map, Figure 1.

The topography of the site is gently to moderately sloping. The site boundaries are indicated on the USGS Map, Figure 2. Previous land uses have included grazing and pasture land. Previously several trailers and out buildings exist along the northern portion of this site, a fire had occurred and the trailers burned. The out buildings still exist. The site contains primarily low grasses with some trees in the northern portion of the site around the previous trailer locations. Low areas with internal drainage exist on the site. No major drainages were observed on this site. Site Photographs are included in Appendix A. The locations and directions of the photographs are indicated on Figure 3.

Total acreage involved in the proposed development is approximately 49 acres. A total of 8 rural single-family lots are proposed. The area will be serviced by individual wells and sewage treatment systems. The Development Plan is shown on, Figure 3.

The site was previously investigated as part of a Soil, Geology and Wastewater Study was performed for a property east of the project site by Entech Engineering, Inc. revise date, May 13, 2002 (Reference 1), and a Soil, Geology, and Wastewater Study, Entech Job No. 42455, dated July 22, 2005 (Reference 2). Three percolation borings were previously performed on the site to determine general suitability of the site for construction and the use of on-site wastewater treatment systems. These reports were used in evaluating the site.

As part of this investigation, five test borings were drilled on July 26, 2022, and three tactile test pits were excavated on August 5, 2022. The Test Boring and Test Pit Logs are included in Appendix B, the Laboratory Testing Results are included in Appendix C, and a Summary of the Laboratory Testing Results is presented in Tables 1 and 2.

### **3.0 SCOPE OF THE REPORT**

The scope of the report includes the evaluation of the site for individual on-site wastewater treatment systems in accordance with El Paso Land Development Code.

### **4.0 FIELD INVESTIGATION**

Our field investigation on this site consisted of the preparation of a geologic map of any bedrock features and significant surficial deposits. The Soil Conservation Service (SCS) survey was also reviewed to evaluate the site. The position of mappable units within the subject property are shown on the Geologic Map. Our mapping procedures involved both field reconnaissance and measurements and air photo reconnaissance and interpretation. The same mapping procedures have also been utilized to produce the Engineering Geology Map which identified pertinent geologic conditions affecting development. The field reconnaissance was performed by personnel of Entech Engineering, Inc. in the previously studied report and on August 5, 2022.

In addition, three test pits and five test borings were performed on the site to determine the general suitability of the site for the use of individual wastewater treatment systems. The locations of the percolation tests are shown on the Development Plan, Test Boring and Test Pit Location Map, Figure 3. The profile hole logs are presented in Appendix B. Results of this testing will be discussed later in this report.

Laboratory testing was also performed on some of the soils to classify and determine the soils engineering characteristics. Laboratory tests include moisture content, ASTM D-2216 grain-size analysis, ASTM D-422, and Atterberg Limits, ASTM D-4318. Swell tests included both FHA Swell Tests and Swell/Consolidation Tests. Results of the laboratory testing are included in Appendix C. A Summary of Laboratory Test Results is presented in Tables 1 and 2.

### **5.0 SOIL, GEOLOGY AND ENGINEERING GEOLOGY**

#### ***5.1 General Geology***

Physiographically, the site lies in the western portion of the Great Plains Physiographic Province. Approximately 17 miles to the west 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 the southern edge of a large structural feature known as the Denver Basin. Bedrock in the area tends to be very gently dipping in a northerly direction. The rocks in the area of the site are sedimentary in nature, and typically Tertiary to Upper Cretaceous in age. The bedrock underlying the site consists of the Dawson Arkose Formation. Overlying this formation are unconsolidated deposits of man-made fill and eolian sand deposits of the Quaternary Age. The Eolian sands were deposited by wind in the form of low ridges or dunes. The site's stratigraphy will be discussed in more detail in Section 5.3.

### 5.2 Soil Conservation Survey

The Soil Conservation Service has mapped one soil type on the site (Figure 4) (Reference 3). In general, the soils consist of sandy loam and loamy sand. The soils are described as follows:

<u>Type</u>	<u>Description</u>
97	Truckton sandy loam, 3-9%

Complete descriptions of the soil types are presented in Appendix D. The soils have generally been described to have moderate to rapid permeabilities. The main limitation for these soils is frost action potential. Roads and streets may require special designs. Possible hazards with soil erosion are present on the site. The erosion potential can be controlled with vegetation. The majority of the soils have been described to have moderate erosion hazards.

### 5.3 Site Stratigraphy

The Corral Bluffs Quadrangle Geology Map showing the site is presented in Figure 5 (Reference 4). The Geology Map prepared for the site is presented in Figure 6. Two mappable units were identified on this site which are described as follows:

- **Qaf Artificial Fill of Quaternary Age:** These man-made fill deposits are associated with erosion berms observed on this site.
- **Qes Eolian Sand of Quaternary Age:** These are windblown fine grained sands that were deposited by the action of the prevailing winds from the west and northwest. They typically occur as large dune deposits or narrow ridges. The soils are

typically tan to brown and have a uniform gradation. The materials tend to have a high permeability and low density.

The bedrock underlying the site is the Dawson Formation of Tertiary to Cretaceous Age. The Dawson Formation typically consists of arkosic sandstone interbedded with fine sandstone, siltstone and claystone or shale. Typically, it is buff to light brown and light gray in color.

The soils listed above were mapped from the *Geologic Map of the Pueblo 1x2 Quadrangle, South-Central Colorado*, distributed by the USGS in 1978 (Reference 2), the *Geologic Map for the Corral Bluffs Quadrangle* by Paul E. Soister in 1968 (Reference 6, Figure 5) and site-specific mapping of the site. The profile holes drilled by Entech Engineering, Inc. were also used in evaluating the site and are included in Appendix B. The Geology Map prepared for the site is presented in Figure 6.

#### **5.4 Soil Conditions**

The soils encountered in the Test Borings and Test Pits can be grouped into three general soil and rock types. The soils were classified using the Unified Soil Classification System (USCS). The test pit soils were also classified using the USDA Textural Soil Classification.

Soil Type 1 is a silty sand and very clayey sand (SM, SC). The sand soils were encountered in all of the test borings, and in Test Pit Nos. 2 and 3. The sand was encountered at the existing surface and extending to depths of 3 feet to the termination of the test borings (20 feet bgs). These soils were encountered at loose to medium dense to loose states and at dry to moist conditions. Samples tested had 17 to 37 percent of the soil size particles passing the No. 200 Sieve. Atterberg Limits Testing resulted in a liquid limit of No-Value and a plastic index of Non-Plastic. Sulfate testing resulted in less than 0.01 percent soluble sulfate by weight, indicating negligible potential for below grade concrete degradation due to sulfate attack.

Soil Type 2 is a very sandy clay (CL). The clay soils were encountered in Test Boring Nos. 1 and 3, and in Test Pit Nos. 1 and 2. The clays were encountered at the existing ground surface to depths of 3 to 11 feet bgs in the test borings and at the existing ground surface in the test pits, and extended to depths of 6 to 14 feet bgs. The clay was encountered at firm to stiff consistencies and moist conditions. The samples tested had approximately 53 to 75 percent of the soil size particles passing the No. 200 sieve. Atterberg Limits Testing resulted in a liquid limit of 35 and a plastic index of 21. Swell/Consolidation Testing on a sample of the sandy clay resulted in a volume

change of 0.0%, which is in the low expansion range. Sulfate testing resulted in 0.01 percent soluble sulfate by weight, indicating negligible potential for below grade concrete degradation due to sulfate attack.

Soil Type 3 is sandy siltstone and very sandy claystone (ML, CL). The bedrock was encountered in Test Boring Nos. 1 and 3. The bedrock was encountered at depths ranging from 13 to 14 feet bgs and extended to the termination of the borings (20 feet bgs). The bedrock was encountered at hard consistencies and moist conditions. The bedrock had 57 to 96 percent of the soil sized particles passing the No. 200 sieve. Atterberg Limits Testing resulted in liquid limits of 60 to 30 and plastic indexes of 28 to 15. Swell/Consolidation Testing on a sample of the sandy siltstone resulted in a volume change of 1.4%, which is in the low expansion. Sulfate testing resulted in 0.00 to 0.01 percent soluble sulfate by weight, indicating negligible potential for below grade concrete degradation due to sulfate attack.

The Test Borings and Test Pit Logs are presented in Appendix B. Laboratory Test Results are presented in Appendix C. The Laboratory Test Results are summarized in Tables 1 and 2.

## **5.5 Groundwater**

Groundwater or signs of seasonal groundwater were not encountered in the test borings or test pits (Appendix B). Areas of potentially seasonal shallow groundwater have been mapped in low-lying areas on the site and are indicated on the geology map, Figure 6. These areas are discussed in the following section. Fluctuation in groundwater conditions may occur due to variations in rainfall and other factors not readily apparent at this time. Isolated sand layers within the variable soil profile, sometimes only a few feet in thickness and width, can carry water in the subsurface. Additionally, perched water conditions can occur on this site where water can flow through permeable sands overlying less permeable bedrock. Builders and planners should be cognizant of the potential for the occurrence of such subsurface water features during construction on-site and deal with each individual problem as necessary at the time of construction.

### **Potentially Seasonal Shallow Groundwater Area – Constraint**

In these areas, we would anticipate the potential for periodically high subsurface moisture conditions. The areas of internal drainage are mapped as having the potential for seasonal

shallow groundwater on a seasonal basis. These Areas appear to be associated with older blowout features and surrounded by older sand dune ridges. Should construction be necessary in portions of these areas the following precautions should be taken. No areas of the site have been mapped in any floodplain zones, according to Fema Map No. 08041CO785G.

Mitigation: In these locations, foundation in areas subject to severe frost heave potential should penetrate to a sufficient depth so as to discourage the formation of ice lenses beneath foundations. At this location and elevation, a foundation depth for frost protection of 30 inches is recommended. In areas where high subsurface moisture conditions are anticipated periodically, a subsurface perimeter drain will be necessary to help prevent the seepage of water into areas located below grade. Typical drain details are presented in Figure 8 through 10. Any grading in these areas should be done in a manner that directs surface flow around construction to avoid areas of ponded water. Areas of organic material will require removal before any filling is done. Specific recommendations should be made after additional investigation of each building site. The groundwater level may be at sufficient depth in some areas as to not to affect construction.

## **6.0 ON-SITE WASTEWATER TREATMENT**

The site was evaluated for individual on-site wastewater treatment systems in accordance with El Paso Land Development Code. Three tactile test pits were performed on the property. The approximate locations of the test pits are indicated on Figure 3, on the Geology/Engineering Geology Map, Figure 6, and on the Septic Suitability Map, Figure 8. A table showing the results of the Tactile Test Pits is presented in Table 2. Test Pit Logs are included in Appendix B.

The Natural Resource Conservation Service (Reference 3), previously the Soil Conservation Service (Reference 4) has mapped the site with one soil descriptions. The Soil Survey Map (Reference 3) is presented in Figure 4, and the Soil Survey Descriptions are presented in Appendix D. The soils are described as having moderate to rapid percolation rates. The Natural Resource Conservation Service (NRCS) has rated the soil suitability with respect to septic tank absorption fields. The soils in the area have been described as not limited due to seepage, bottom layer, and filtering capacity. These areas are typically associated with loose sands. Soils encountered in the tactile test pits consisted of sandy clay, sandy clay loam and sandy loam. Refusal was encountered in Test Pit No. 2 at depths ranging from 6 feet bgs. The limiting layers

encountered in the test pits are the sandy clay loam (USDA Soil Type 3), and sandy clay (USDA Soil Type 4 to 4A) which corresponds to LTAR values ranging from 0.35 to 0.15 gallons per day per square foot. Designed systems will be required where USDA Soil Types greater than 3A, bedrock (refusal) or signs groundwater evidence are encountered at 6 feet bgs or shallower. Designed systems due to restrictive clay soils, shallow bedrock or shallow groundwater may be required on the site. Additional investigation of individual lots may identify areas where suitable for conventional systems could be used.

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 as part of this investigation designed systems will likely be required for the majority of the lots. A Septic Suitability Map is presented in Figure 8. Areas where OWTS sites are not recommended are also indicated on Figure 8. Individual soil testing is required 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.

## **7.0 CLOSURE**

It is our opinion that the existing geologic engineering and geologic conditions will impose some minor constraints on development and construction of the site. The majority of these conditions can be avoided by construction. Others can be mitigated through proper engineering design and construction practices. The proposed development and use is consistent with anticipated geologic and engineering geologic conditions.

It should be pointed out that because of the nature of data obtained by random sampling of such variable and non-homogeneous materials as soil and rock, it is important that we be informed of any differences observed between surface and subsurface conditions encountered in construction and those assumed in the body of this report. Individual investigations for building sites and septic systems will be required prior to construction. Construction and design personnel should be made familiar with the contents of this report. Reporting such discrepancies to Entech Engineering, Inc. soon after they are discovered would be greatly appreciated and could possibly help avoid construction and development problems.

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

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.

## BIBLIOGRAPHY

1. Entech Engineering, Inc. revised May 13, 2002. *Soil, Geology, and Wastewater Study, David Ranch Subdivision, El Paso County, Colorado*. Entech Job No. 32151.
2. Entech Engineering, Inc. July 22, 2005. *Soil, Geology, and Wastewater Study, SW Corner of Davis and Curtis Roads, El Paso County, Colorado*. Entech Job No. 42455.
3. United States Department of Agriculture Soil Conservation Service. June 1981. *Soil Survey of El Paso County Area, Colorado*.
4. United States Department of Agriculture Soil Conservation Service. June 1981. *Soil Survey of El Paso County Area, Colorado*.
5. Scott, Glenn R., Taylor, Richard B., Epis, Rudy C., Wobus, Reinhard A. 1978. *Geologic Map of the Pueblo 1x2 Quadrangle, South-Central Colorado*. U.S. Geological Survey Map I-1022.
6. Soister, Paul E. 1968, *Geologic Map of the Corral Bluffs Quadrangle, El Paso County, Colorado*. GQ-783
7. Federal Emergency Management Agency. December 7, 2018. *Flood Insurance Rate Maps for the City of Colorado Springs, Colorado*. Map Number 08041CO567G.
8. El Paso County Planning Development. December 1995. *El Paso County Aggregate Resource Evaluation Maps*.
9. Schwochow, S. D.; Shroba, R.R. and Wicklein, P.C. 1974. *Atlas of Sand, Gravel, and Quarry Aggregate Resources, Colorado Front Range Counties*. Colorado Geological Survey. Special Publication 5-B.
10. Keller, John W.; TerBest, Harry and Garrison, Rachel E. 2003. *Evaluation of Mineral and Mineral Fuel Potential of El Paso County State Mineral Lands Administration by the Colorado State Land Board*. Colorado Geological Survey. Open File Report 03-07.

## **TABLES**

**TABLE 1**  
**SUMMARY OF LABORATORY TEST RESULTS**

CLIENT RICHARD ELLIOTT  
 PROJECT FALCON ACRES  
 JOB NO. 221662

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	2	10			29.4	NV	NP	<0.01			SM	SAND, SILTY
1	4	2-3			36.9						SM	SAND, SILTY
1	5	5			17.2						SM	SAND, SILTY
2	3	5	11.2	110.2	52.9	35	21	0.01		0.0	CL	CLAY, VERY SANDY
3	1	15	33.1	86.6	95.5	60	28	0.01		1.4	MH	SILTSTONE, SANDY
3	3	20			57.3	30	15	0.00			CL	CLAYSTONE, VERY SANDY

**TABLE 2**  
**SUMMARY OF LABORATORY TEST RESULTS**

CLIENT RICHARD ELLIOTT  
 PROJECT FALCON ACRES  
 JOB NO. 221662

SOIL TYPE	TEST PIT 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-3	4			27.0						SM	SAND, SILTY
1	TP-2	2.5			49.1						SC	SAND, VERY CLAYEY
2	TP-1	1			75.1						CL	CLAY, SANDY

**Table 3: Summary of Waste Water Treatment Conditions**

<b>Test Pit No.</b>	<b>Depth to Refusal (ft.)</b>	<b>LIMITING LAYER</b>	<b>Engineered Design Required (Y/N)</b>
1	>8	4A	Y
2	>8	4A	Y
3	>8	3	N

## FIGURES



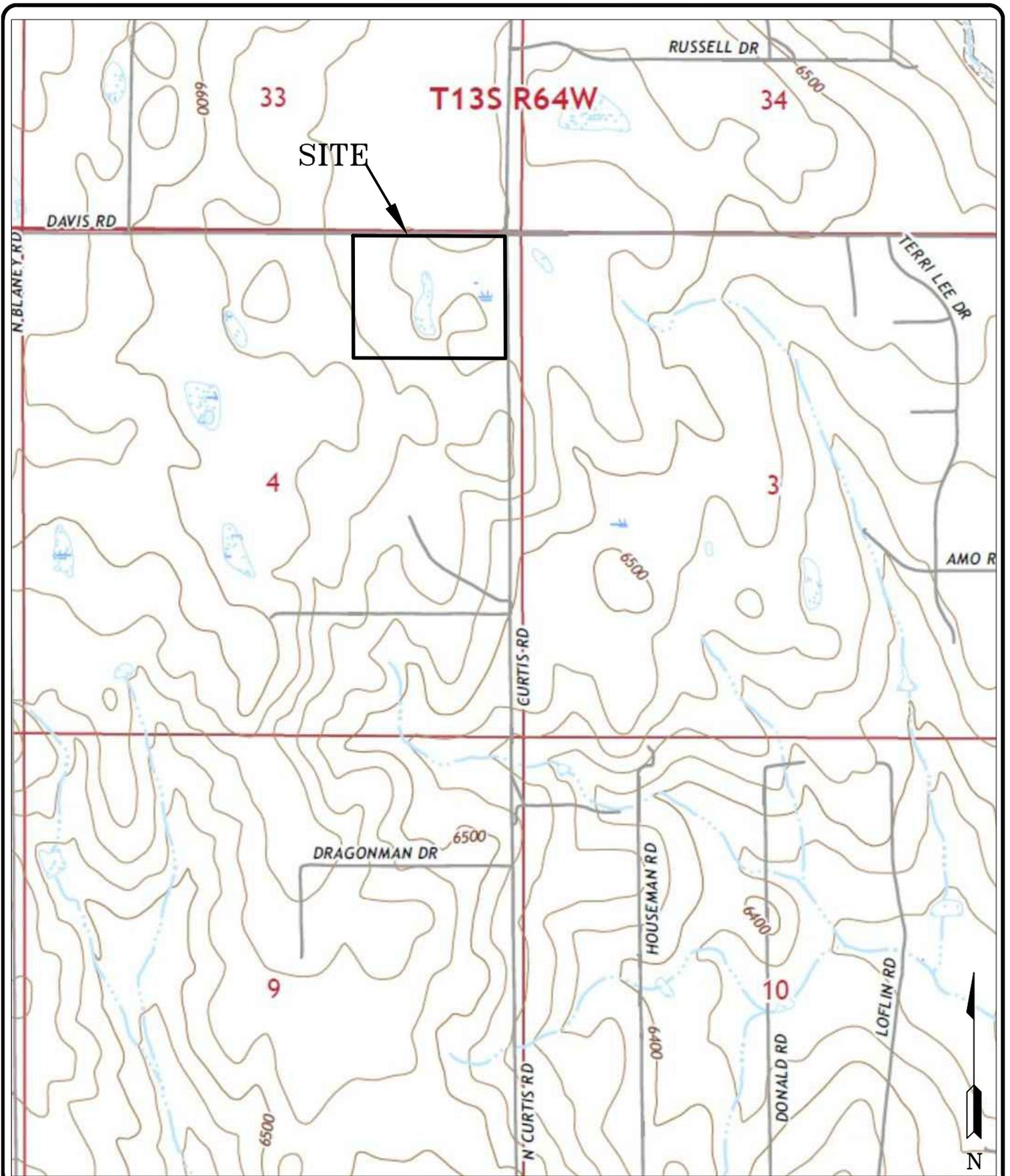
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VICINITY MAP  
FALCON ACRES  
CURTIS ROAD AND DAVIS ROAD  
EL PASO COUNTY, CO.  
FOR: RICHARD ELLIOTT

DRAWN: JHR	DATE: 8/10/22	CHECKED: LLL	DATE:
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JOB NO.:  
**221662**

FIG NO.:  
**1**



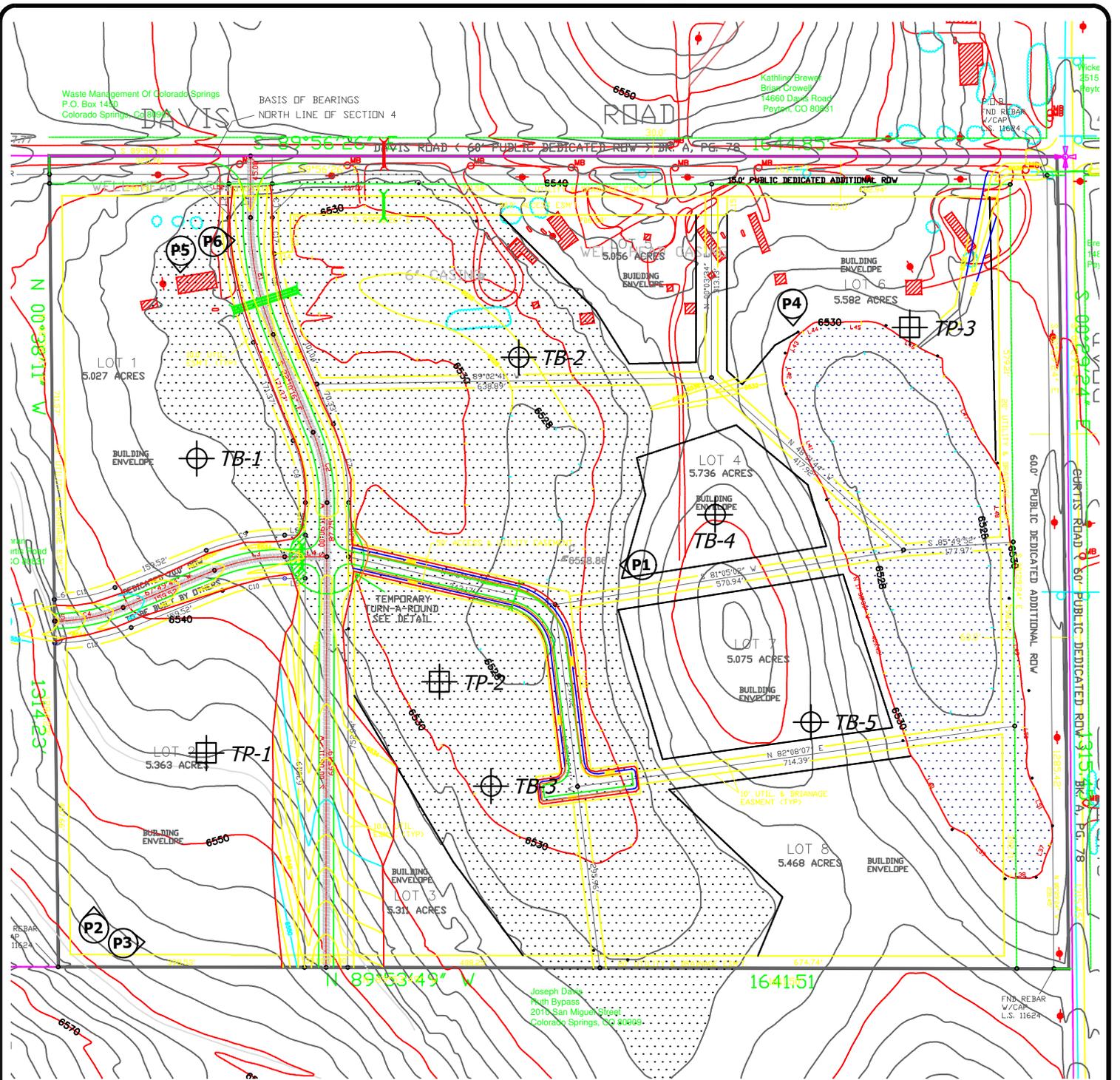
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USGS MAP  
FALCON ACRES  
CURTIS ROAD AND DAVIS ROAD  
EL PASO COUNTY, CO.  
FOR: RICHARD ELLIOTT

DRAWN: JHR	DATE: 8/10/22	CHECKED: LLL	DATE:
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JOB NO.:  
221662

FIG NO.:  
2



-  TB- APPROXIMATE TEST BORING LOCATION AND NUMBER
-  TP- APPROXIMATE TEST PIT LOCATION AND NUMBER
-  P1 - APPROXIMATE PHOTOGRAPH LOCATION AND DIRECTION




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**SITE PLAN/TESTING LOCATION MAP**  
**FALCON ACRES**  
**CURTIS ROAD AND DAVIS ROAD**  
**EL PASO COUNTY, CO.**  
**FOR: RICHARD ELLIOTT**

DRAWN: LLL	DATE: 8/10/22	CHECKED:	DATE:
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JOB NO.:  
**221662**

FIG NO.:  
**3**

SITE

Curtis

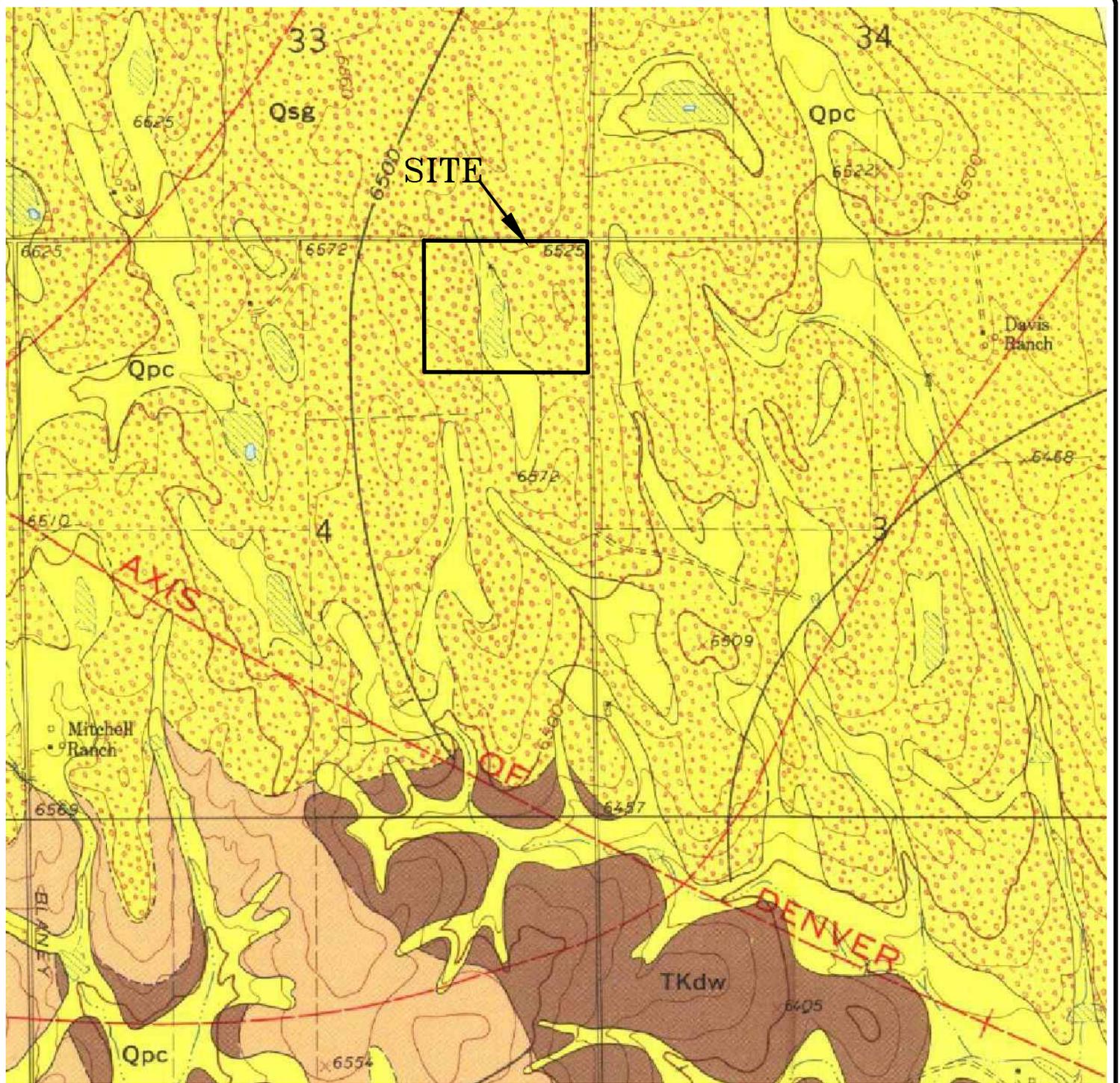


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 COLORADO SPRINGS, CO. 80907 (719) 531-5599

SOIL SURVEY MAP  
 FALCON ACRES  
 CURTIS ROAD AND DAVIS ROAD  
 EL PASO COUNTY, CO.  
 FOR: RICHARD ELLIOTT

DRAWN: JHR	DATE: 8/10/22	CHECKED: LLL	DATE:
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JOB NO.:  
**221662**  
 FIG NO.:  
 4



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CORRAL BLUFFS QUADRANGLE GEOLOGIC MAP  
FALCON ACRES  
NORTH CURTIS ROAD AND DAVIS ROAD  
EL PASO COUNTY, CO.  
FOR: RICHARD ELLIOTT

DRAWN:  
JHR

DATE:  
8/10/22

CHECKED:  
LLL

DATE:

JOB NO.:  
221662

FIG NO.:  
5



SITE



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FEMA FLOODPLAIN MAP  
FALCON ACRES  
CURTIS ROAD AND DAVIS ROAD  
EL PASO COUNTY, CO.  
FOR: RICHARD ELLIOTT

DRAWN:  
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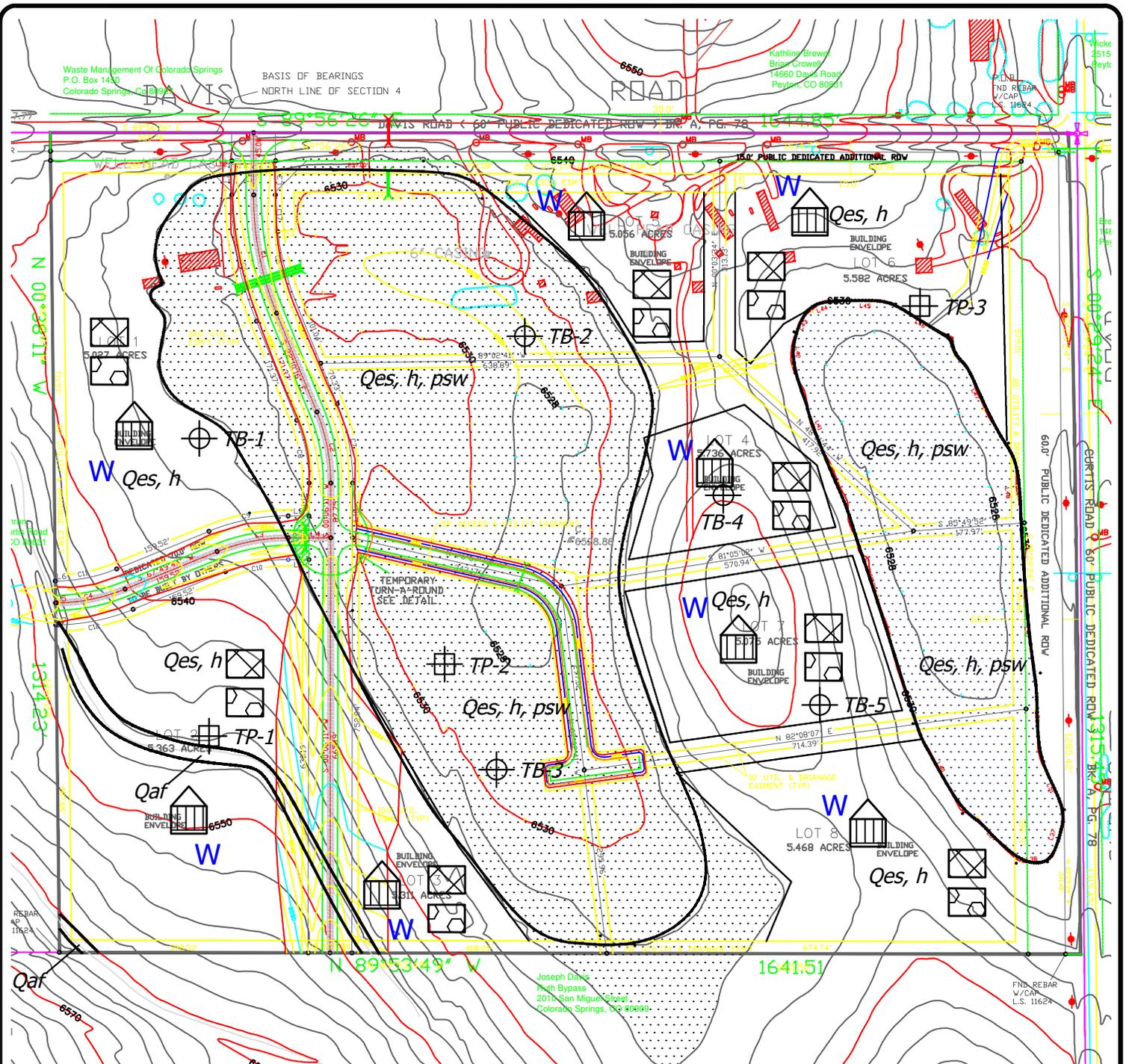
DATE:  
8/10/22

CHECKED:

DATE:

JOB NO.:  
221662

FIG NO.:  
7



Waste Management Of Colorado Springs  
P.O. Box 1430  
Colorado Springs, CO 80901

BASIS OF BEARINGS  
NORTH LINE OF SECTION 4

Kathling Brewer  
Brian Crowell  
14660 Davis Road  
Peyton, CO 80901

Joseph Dine  
Patti Bypass  
2010 San Miguel Street  
Colorado Springs, CO 80909

**LEGEND:**

-  - POSSIBLE OWTS LOCATIONS
-  - POSSIBLE OWTS ALTERNATE LOCATIONS
-  - POSSIBLE HOUSE LOCATIONS
- W** \*- WATER WELLS MUST BE A MINIMUM OF 100 FT FROM OWTS ABSORPTION FIELDS
-  - AREAS WHERE OWTS ARE NOT RECOMMENDED




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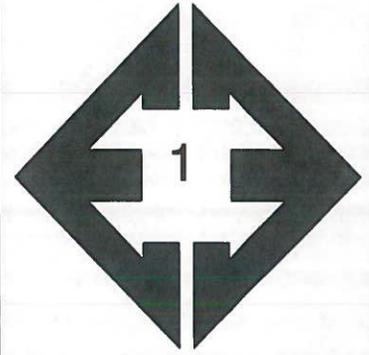
**SEPTIC SUITABILITY MAP**  
**FALCON ACRES**  
**CURTIS ROAD AND DAVIS ROAD**  
**EL PASO COUNTY, CO.**  
**FOR: RICHARD ELLIOTT**

DRAWN: LLL	DATE: 8/10/22	CHECKED:	DATE:
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JOB NO.:  
**221662**

FIG NO.:  
**8**

## **APPENDIX A: Site Photographs**



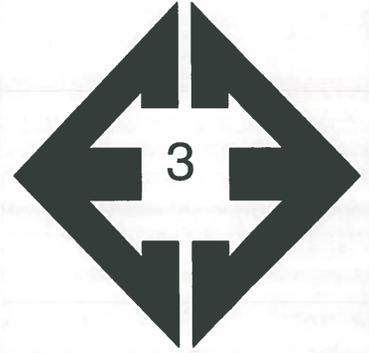
**Looking west from the central portion of the site.**

August 5, 2022



**Looking north from the southwest portion of the site.**

August 5, 2022



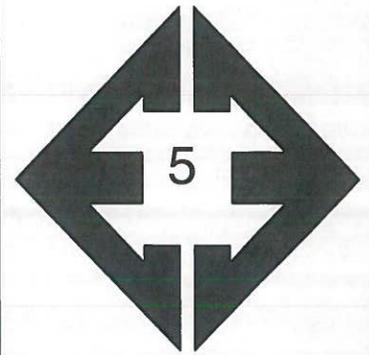
**Looking east from the southwest corner of the site.**

August 5, 2022



**Looking south from the southwest site corner**

August 5, 2022



**Looking south from the northwest portion of the site.**

August 5, 2022



**Looking east from the northwest portion of the site.**

August 5, 2022

## **APPENDIX B: Test Boring and Test Pit Logs**

TEST BORING NO. 1  
 DATE DRILLED 7/26/2022  
 Job # 221662

TEST BORING NO. 2  
 DATE DRILLED 7/26/2022  
 CLIENT RICHARD ELLIOTT  
 LOCATION FALCON ACRES

REMARKS

DRY TO 19', 7/28/22

SAND, SILTY, FINE TO COARSE  
 GRAINED, BROWN TO TAN,  
 MEDIUM DENSE TO LOOSE,  
 MOIST

CLAY, SANDY, TAN

SILTSTONE, SANDY, TAN,  
 HARD, MOIST

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5			19	9.1	1
5			8	6.0	1
10			25	15.4	1
10					2
15			50	27.6	3
20			50	12.9	3
			9"		

REMARKS

DRY TO 19', 7/28/22

SAND, SILTY, FINE TO COARSE  
 GRAINED, BROWN TO TAN,  
 MEDIUM DENSE, MOIST

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5			16	4.2	1
5			13	5.7	1
10			13	7.6	1
15			18	11.1	1
20			12	23.6	1



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**ENGINEERING, INC.**

505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

TEST BORING LOG

DRAWN:

DATE:

CHECKED:

DATE:

JHR

8-5-22

JOB NO.:  
 221662

FIG NO.:  
 B-1

TEST BORING NO. 3  
 DATE DRILLED 7/26/2022  
 Job # 221662

TEST BORING NO. 4  
 DATE DRILLED 7/23/2022  
 CLIENT RICHARD ELLIOTT  
 LOCATION FALCON ACRES

REMARKS

DRY TO 19', 7/28/22

SAND, SILTY, FINE TO COARSE  
 GRAINED, DARK BROWN, DENSE,  
 MOIST  
 CLAY, SANDY, TAN, VERY  
 STIFF, MOIST

SAND, SILTY, FINE TO COARSE  
 GRAINED, TAN, MEDIUM DENSE,  
 MOIST

CLAYSTONE, VERY SANDY,  
 BROWN, HARD, MOIST

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5			48	9.1	1
5			34	8.8	2
10			18	21.3	1
15			50 5"	20.8	3
20			50 4"	14.6	3

REMARKS

DRY TO 20', 7/28/22

SAND, SILTY, FINE TO COARSE  
 GRAINED, TAN, MEDIUM DENSE  
 TO DENSE, MOIST

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5			23	4.2	1
5			21	3.1	1
10			17	5.1	1
15			19	6.8	1
20			38	6.4	1



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 COLORADO SPRINGS, COLORADO 80907

TEST BORING LOG

DRAWN:

DATE:

CHECKED:

DATE:

JHR

8-5-22

JOB NO.:  
 221662

FIG NO.:

B-2

TEST BORING NO. 5  
 DATE DRILLED 7/23/2022  
 Job # 221662

TEST BORING NO.  
 DATE DRILLED  
 CLIENT RICHARD ELLIOTT  
 LOCATION FALCON ACRES

REMARKS

REMARKS

DRY TO 20', 7/28/22

SAND, SILTY, FINE TO COARSE  
 GRAINED, TAN, MEDIUM DENSE  
 TO DENSE, MOIST

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
5			29	1.7	1	5					
			18	2.9	1						
10			15	3.1	1	10					
15			15	3.8	1	15					
20			14	11.6	1	20					



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 COLORADO SPRINGS, COLORADO 80907

TEST BORING LOG

DRAWN:

DATE:

CHECKED:

DATE:

JUR

8.5-22

JOB NO.:  
 221662

FIG. NO.:

B-3

TEST PIT NO. 1  
 DATE EXCAVATED 8/5/2022  
 Job # 221662

TEST PIT NO. 2  
 DATE EXCAVATED 8/5/2022  
 CLIENT RICHARD ELLIOT  
 LOCATION FALCON ACRES

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type	REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil, sandy clay loam, brown, moist	1	[diagonal lines]					Refusal @ 6-feet	1	[diagonal lines]				
sandy clay, fine to medium grained, brown, moist	2-3	[diagonal lines]		ma		4A	sandy clay, fine to medium grained, dark brown, moist	2-3	[diagonal lines]		ma		4A
sandy loam, fine to coarse grained, brown, moist	4-7	[diagonal lines]		ma		4A	sandy clay, fine to medium grained, dark brown, moist	4-5	[diagonal lines]		bl	s	4
	7-8	[dots]		ma		2A		6-7	[diagonal lines]				

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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505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

**TEST PIT LOG**

DRAWN: jhr

DATE: 8/10/22

CHECKED: SHK

DATE: 8-5-22

JOB NO.: 221662

FIG NO.: B-4

TEST PIT NO. 3  
 DATE EXCAVATED 8/5/2022  
 Job # 221662

DATE EXCAVATED 8/5/2022  
 CLIENT RICHARD ELLIOT  
 LOCATION FALCON ACRES

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type	REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil, sandy clay loam, brown, moist	1							1					
sandy clay loam, fine to coarse grained, dark brown, moist	2			gr	m	3		2					
	3							3					
	4			gr	m	3		4					
	5							5					
	6			gr	m	3		6					
	7							7					
	8							8					
	9							9					
	10							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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505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

**TEST PIT LOG**

DRAWN:  
jhr

DATE:  
8/10/22

CHECKED:  
SAR

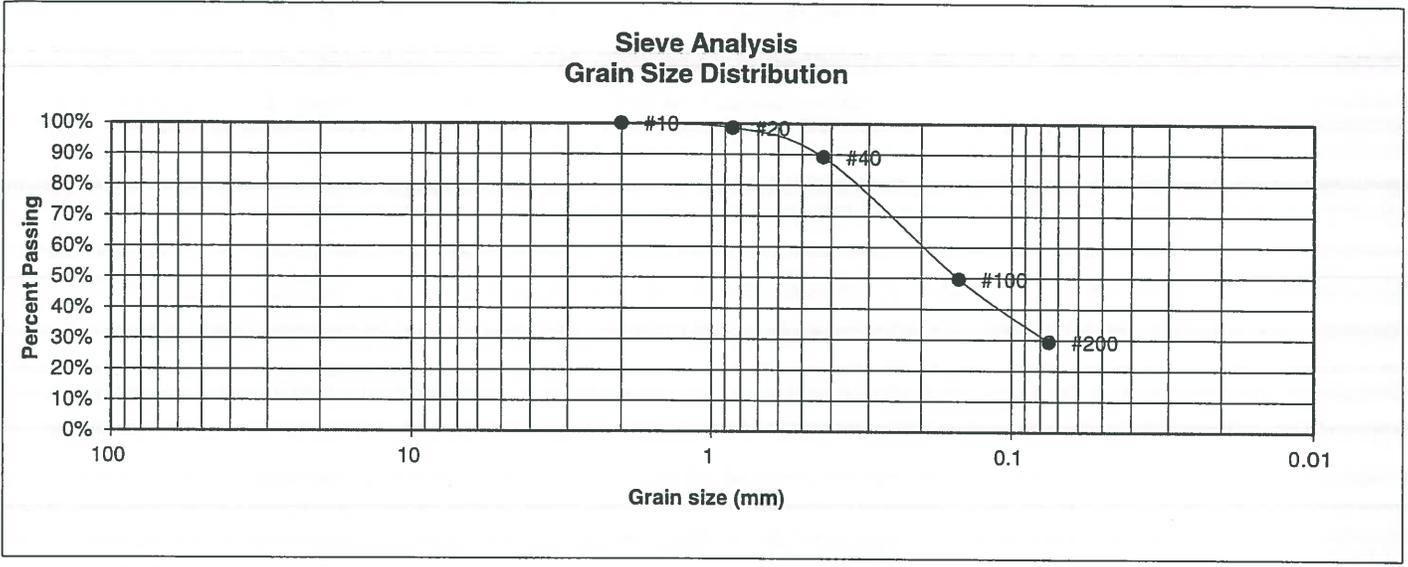
DATE:  
8-5-22

JOB NO.:  
221662

FIG NO.:  
B-5

## **APPENDIX C: Laboratory Test Results**

<u>UNIFIED CLASSIFICATION</u>	SM	<u>CLIENT</u>	RICHARD ELLIOTT
<u>SOIL TYPE #</u>	1	<u>PROJECT</u>	FALCON ACRES
<u>TEST BORING #</u>	2	<u>JOB NO.</u>	221662
<u>DEPTH (FT)</u>	10	<u>TEST BY</u>	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	98.6%
40	89.1%
100	49.7%
200	29.4%

Atterberg Limits

Plastic Limit NP  
Liquid Limit NV  
Plastic Index NP

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: <i>SHR</i>	DATE: <i>8-5-22</i>
--------	-------	------------------------	------------------------

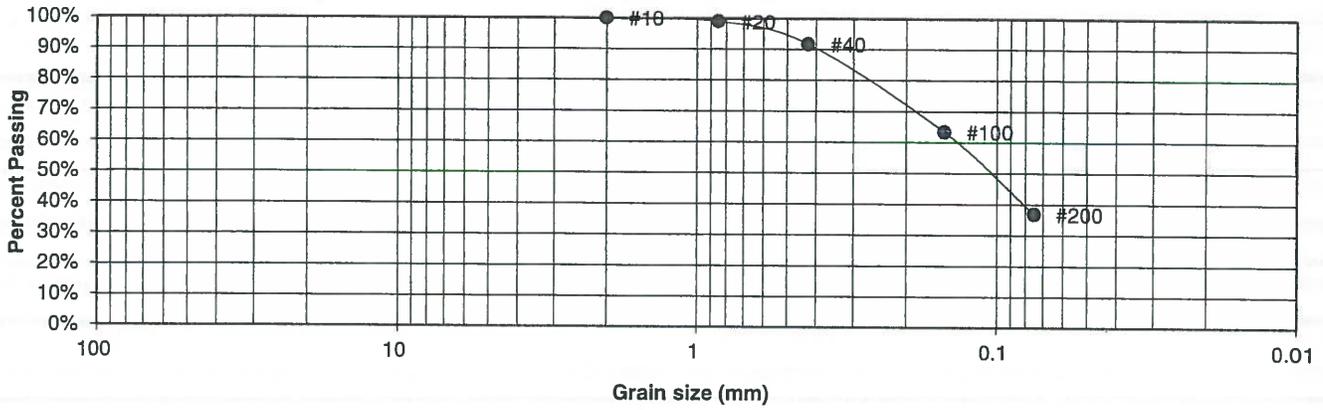
JOB NO.:  
221662

FIG NO.:  
*C-1*

**UNIFIED CLASSIFICATION** SM  
**SOIL TYPE #** 1  
**TEST BORING #** 4  
**DEPTH (FT)** 2-3

**CLIENT** RICHARD ELLIOTT  
**PROJECT** FALCON ACRES  
**JOB NO.** 221662  
**TEST BY** BL

**Sieve Analysis  
Grain Size Distribution**



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	98.9%
40	91.6%
100	63.4%
200	36.9%

**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:

8-5-22

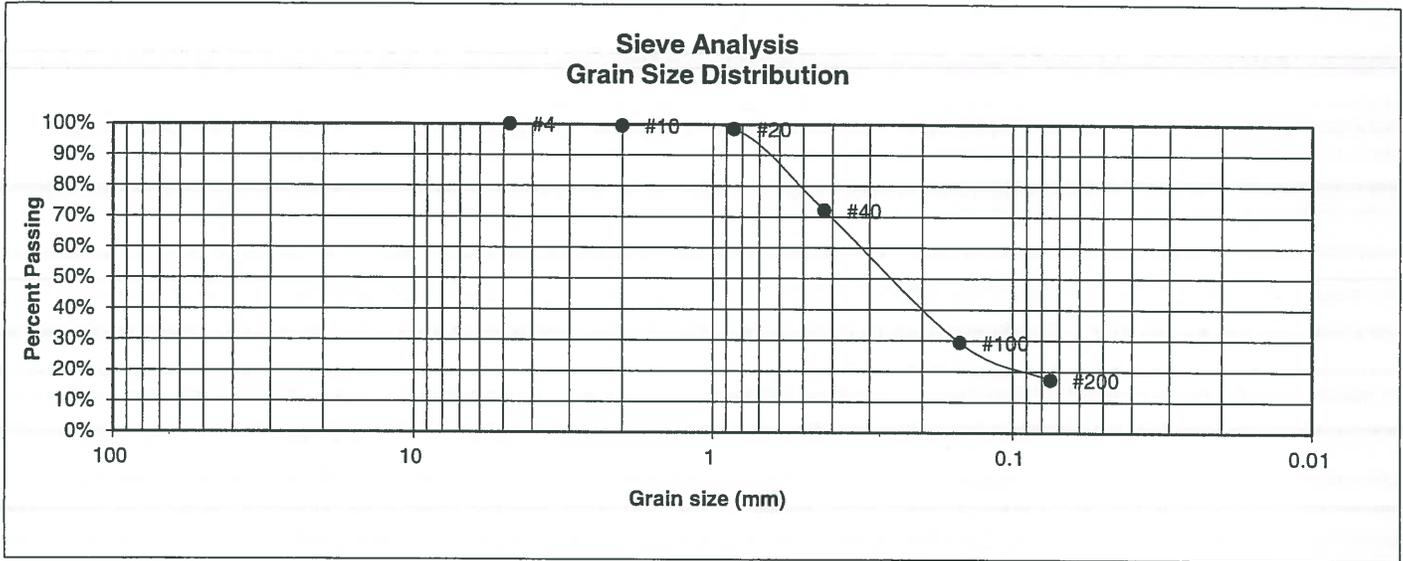
JAR

JOB NO.:  
221662

FIG NO.:

C-2

<u>UNIFIED CLASSIFICATION</u>	SM	<u>CLIENT</u>	RICHARD ELLIOTT
<u>SOIL TYPE #</u>	1	<u>PROJECT</u>	FALCON ACRES
<u>TEST BORING #</u>	5	<u>JOB NO.</u>	221662
<u>DEPTH (FT)</u>	5	<u>TEST BY</u>	BL



<u>U.S. Sieve #</u>	<u>Percent Finer</u>
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.5%
20	98.5%
40	72.1%
100	29.3%
200	17.2%

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**

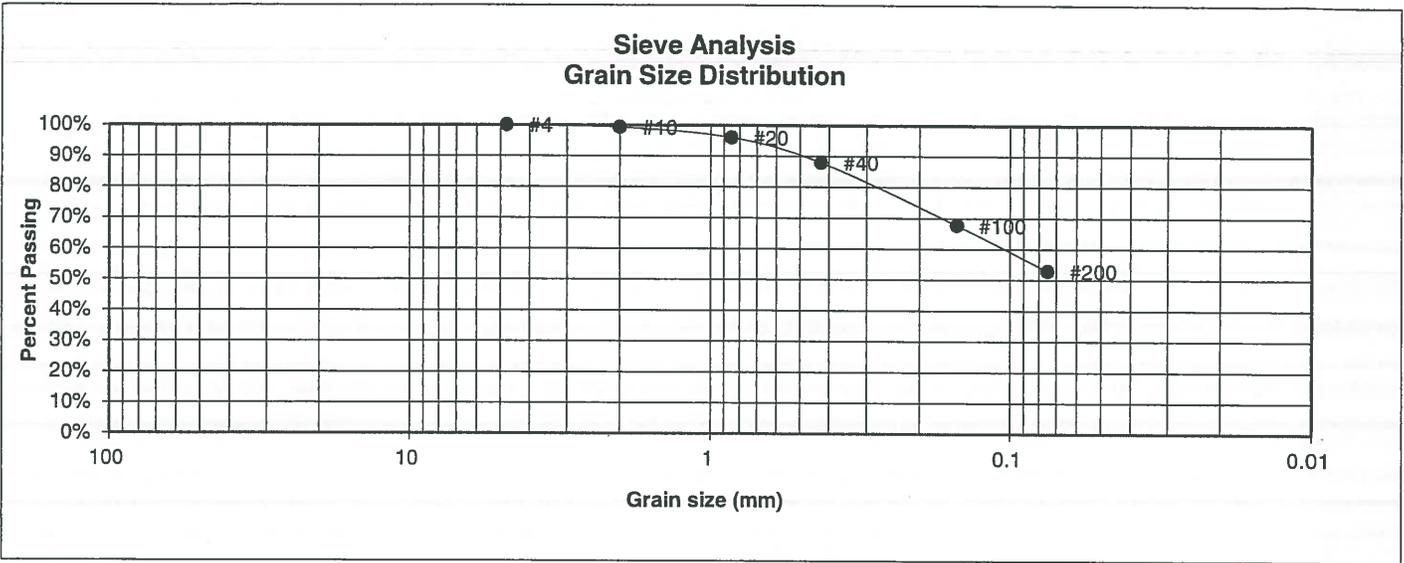
<u>DRAWN:</u>	<u>DATE:</u>	<u>CHECKED:</u> JHR	<u>DATE:</u> 8-5-22
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JOB NO.:  
221662

FIG NO.:

C-3

<u>UNIFIED CLASSIFICATION</u>	CL	<u>CLIENT</u>	RICHARD ELLIOTT
<u>SOIL TYPE #</u>	2	<u>PROJECT</u>	FALCON ACRES
<u>TEST BORING #</u>	3	<u>JOB NO.</u>	221662
<u>DEPTH (FT)</u>	5	<u>TEST BY</u>	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.3%
20	96.0%
40	87.9%
100	67.7%
200	52.9%

<u>Atterberg Limits</u>	
Plastic Limit	14
Liquid Limit	35
Plastic Index	21

<u>Swell</u>	
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

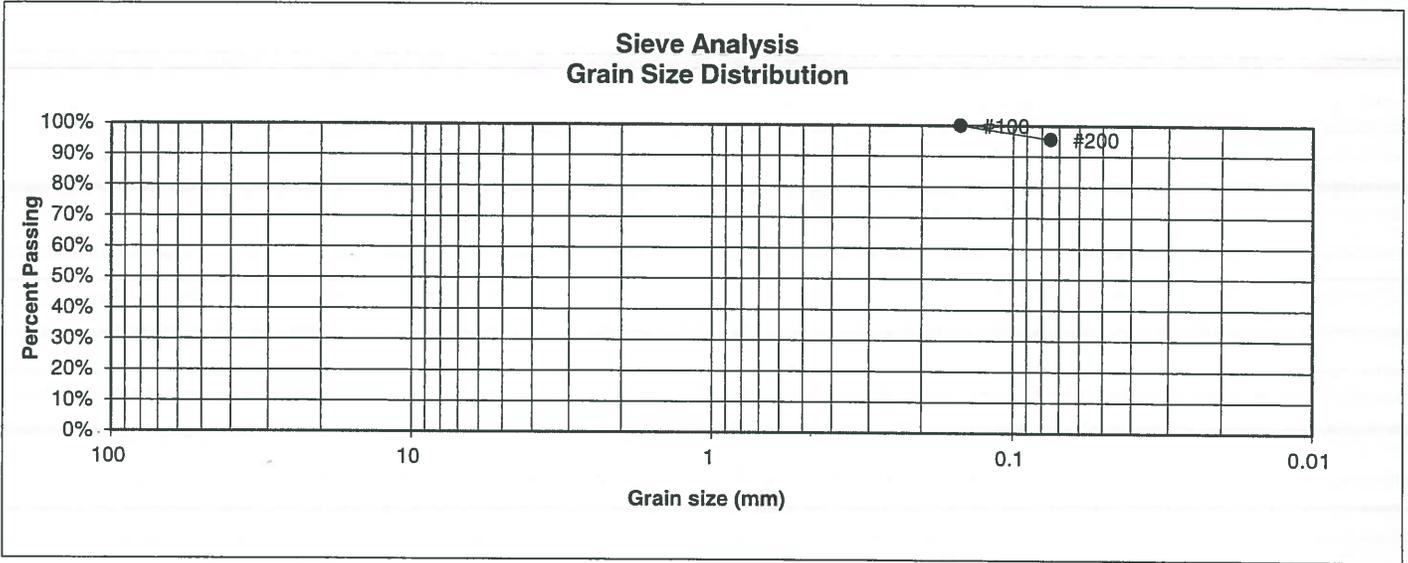
**LABORATORY TEST  
RESULTS**

DRAWN:	DATE:	CHECKED:	DATE:
		<i>SNL</i>	8-5-22

JOB NO.:  
221662

FIG NO.:  
C-4

<u>UNIFIED CLASSIFICATION</u>	MH	<u>CLIENT</u>	RICHARD ELLIOTT
<u>SOIL TYPE #</u>	3	<u>PROJECT</u>	FALCON ACRES
<u>TEST BORING #</u>	1	<u>JOB NO.</u>	221662
<u>DEPTH (FT)</u>	15	<u>TEST BY</u>	BL



<u>U.S. Sieve #</u>	<u>Percent Finer</u>
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	
20	
40	
100	100.0%
200	95.5%

<u>Atterberg Limits</u>	
Plastic Limit	32
Liquid Limit	60
Plastic Index	28

<u>Swell</u>	
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

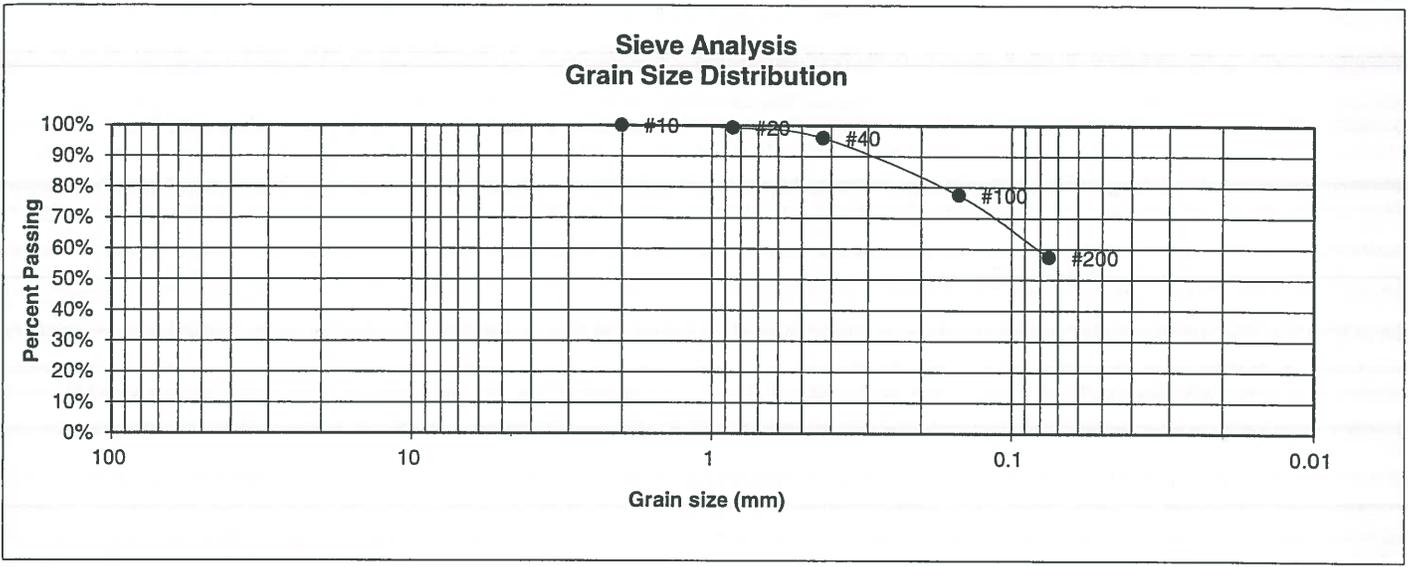
**LABORATORY TEST  
RESULTS**

<u>DRAWN:</u>	<u>DATE:</u>	<u>CHECKED:</u> JHR	<u>DATE:</u> 8-5-22
---------------	--------------	------------------------	------------------------

JOB NO.:  
221662

FIG NO.:  
L-5

<u>UNIFIED CLASSIFICATION</u>	CL	<u>CLIENT</u>	RICHARD ELLIOTT
<u>SOIL TYPE #</u>	3	<u>PROJECT</u>	FALCON ACRES
<u>TEST BORING #</u>	3	<u>JOB NO.</u>	221662
<u>DEPTH (FT)</u>	20	<u>TEST BY</u>	BL



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	99.3%
40	95.9%
100	77.5%
200	57.3%

<u>Atterberg Limits</u>	
Plastic Limit	15
Liquid Limit	30
Plastic Index	15

<u>Swell</u>	
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

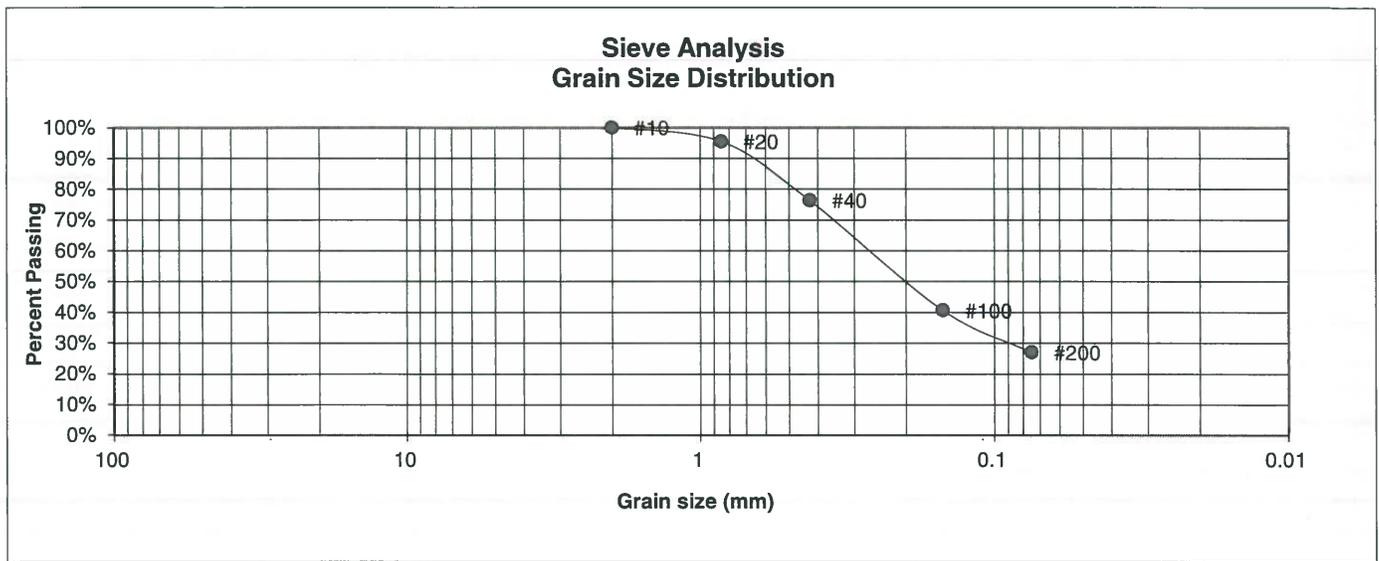
**LABORATORY TEST  
RESULTS**

DRAWN:	DATE:	CHECKED:	DATE:
		JHR	8-5-22

JOB NO.:  
221662

FIG NO.:  
C-6

BORING NO.	TP-3	<u>UNIFIED CLASSIFICATION</u>	SM	<u>TEST BY</u>	BL
DEPTH(ft)	4	<u>AASHTO CLASSIFICATION</u>		<u>JOB NO.</u>	221662
CLIENT	RICHARD ELLIOTT				
PROJECT	FALCON ACRES				



<u>U.S. Sieve #</u>	<u>Percent Finer</u>	<u>Atterberg Limits</u>
3"		Plastic Limit
1 1/2"		Liquid Limit
3/4"		Plastic Index
1/2"		
3/8"		
4		<u>Swell</u>
10	100.0%	Moisture at start
20	95.5%	Moisture at finish
40	76.3%	Moisture increase
100	40.6%	Initial dry density (pcf)
200	27.0%	Swell (psf)



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ENGINEERING, INC.**

505 ELKTON DRIVE  
COLORADO SPRINGS, COLORADO 80907

**LABORATORY TEST  
RESULTS**

DRAWN:

DATE:

CHECKED:

DATE:

JHL

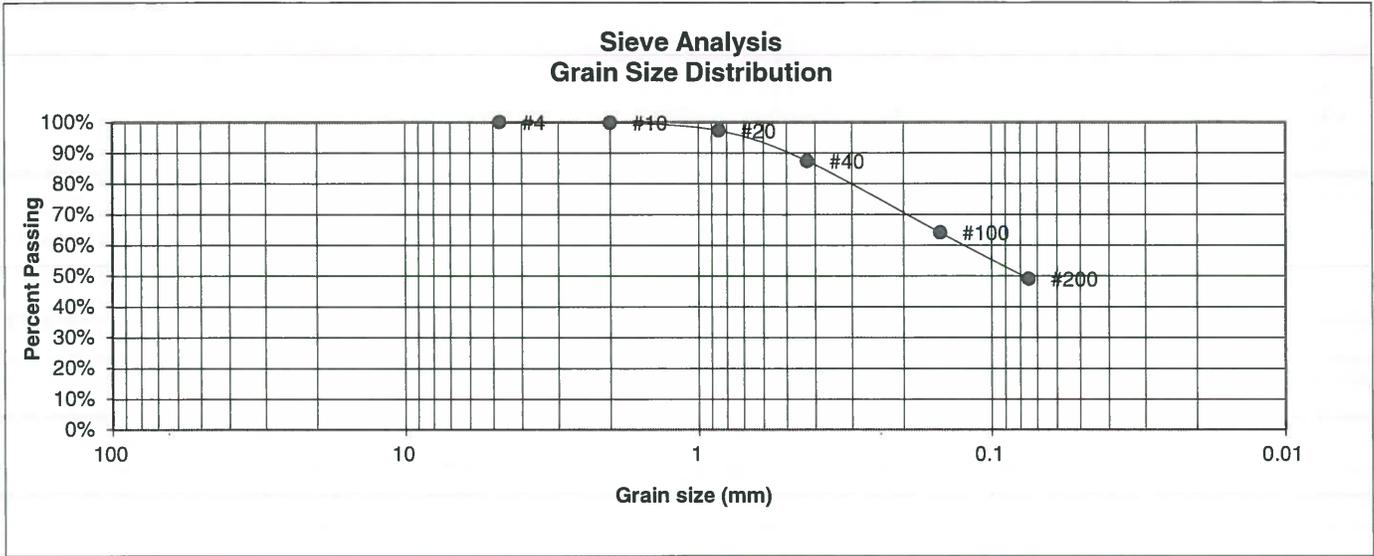
8-5-22

JOB NO.:  
221662

FIG NO.:

C-7

BORING NO.	TP-2	UNIFIED CLASSIFICATION	SC	TEST BY	BL
DEPTH(ft)	2.5	AASHTO CLASSIFICATION		JOB NO.	221662
CLIENT	RICHARD ELLIOTT				
PROJECT	FALCON ACRES				



<u>U.S. Sieve #</u>	<u>Percent Finer</u>	<u>Atterberg Limits</u>
3"		Plastic Limit
1 1/2"		Liquid Limit
3/4"		Plastic Index
1/2"		
3/8"		
4	100.0%	<u>Swell</u>
10	99.9%	Moisture at start
20	97.3%	Moisture at finish
40	87.4%	Moisture increase
100	64.1%	Initial dry density (pcf)
200	49.1%	Swell (psf)



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COLORADO SPRINGS, COLORADO 80907

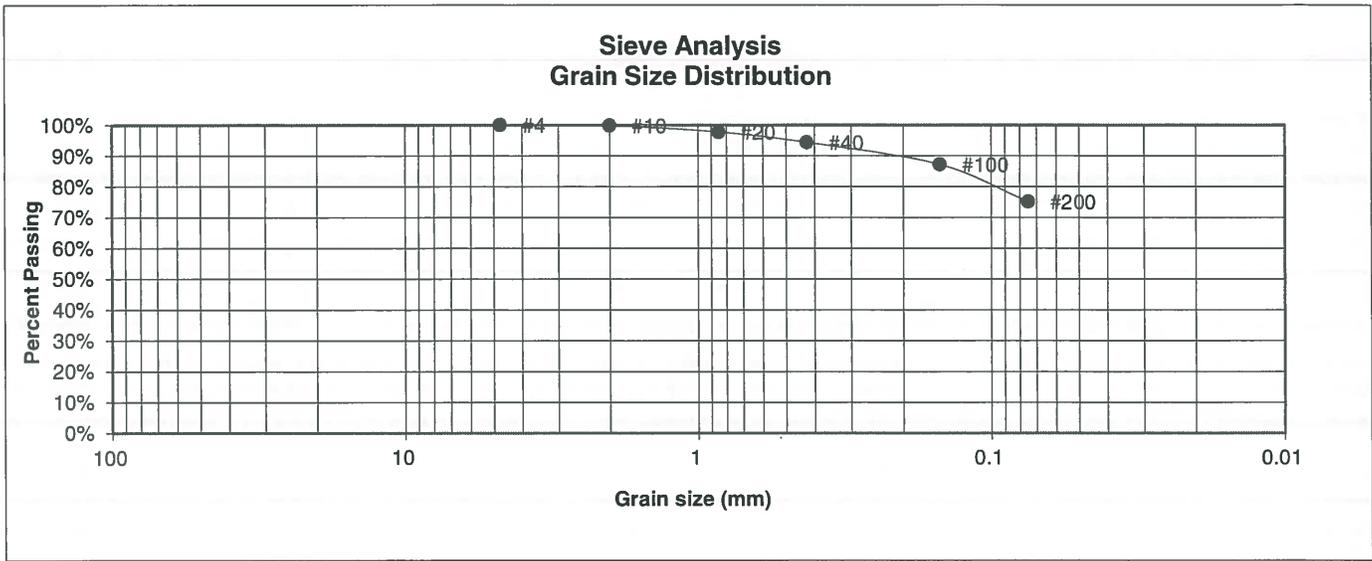
**LABORATORY TEST RESULTS**

DRAWN:	DATE:	CHECKED: <i>JHR</i>	DATE: <i>8-5-22</i>
--------	-------	------------------------	------------------------

JOB NO.:  
221662

FIG NO.:  
*C-8*

BORING NO.	TP-1	<u>UNIFIED CLASSIFICATION</u>	CL	<u>TEST BY</u>	BL
DEPTH(ft)	5	<u>AASHTO CLASSIFICATION</u>		<u>JOB NO.</u>	221662
CLIENT	RICHARD ELLIOTT				
PROJECT	FALCON ACRES				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.8%
20	97.7%
40	94.3%
100	87.2%
200	75.1%

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:  
JHR

DATE:  
8-5-22

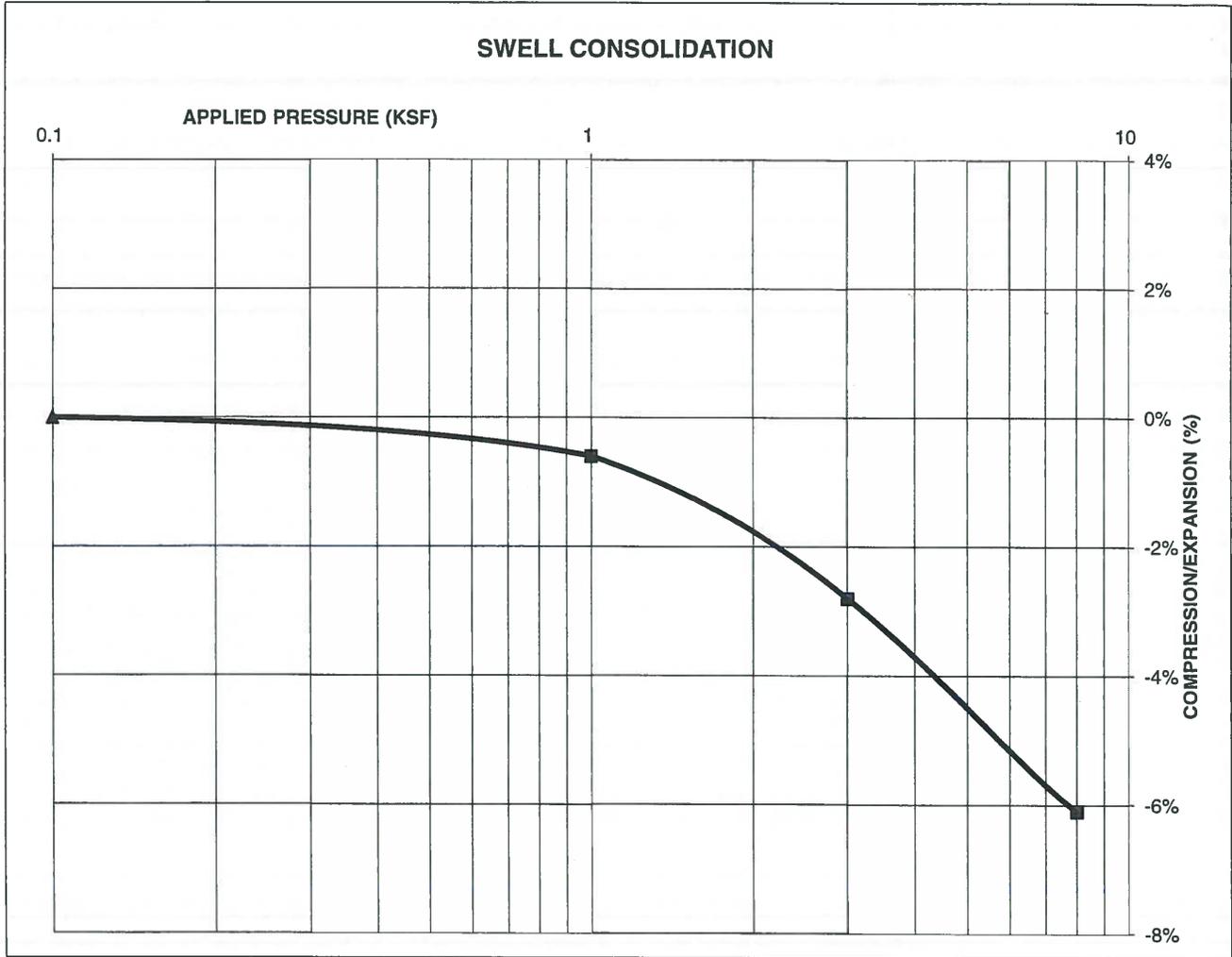
JOB NO.:  
221662

FIG NO.:  
C-9

**CONSOLIDATION TEST RESULTS**

TEST BORING #	3	DEPTH(ft)	5
DESCRIPTION	CL	SOIL TYPE	2
NATURAL UNIT DRY WEIGHT (PCF)			110
NATURAL MOISTURE CONTENT			11.2%
SWELL/CONSOLIDATION (%)			0.0%

JOB NO. 221662  
CLIENT RICHARD ELLIOTT  
PROJECT FALCON ACRES



**ENTECH  
ENGINEERING, INC.**

505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

**SWELL CONSOLIDATION  
TEST RESULTS**

DRAWN:

DATE:

CHECKED:

DATE:

*SAR*

*8-5-22*

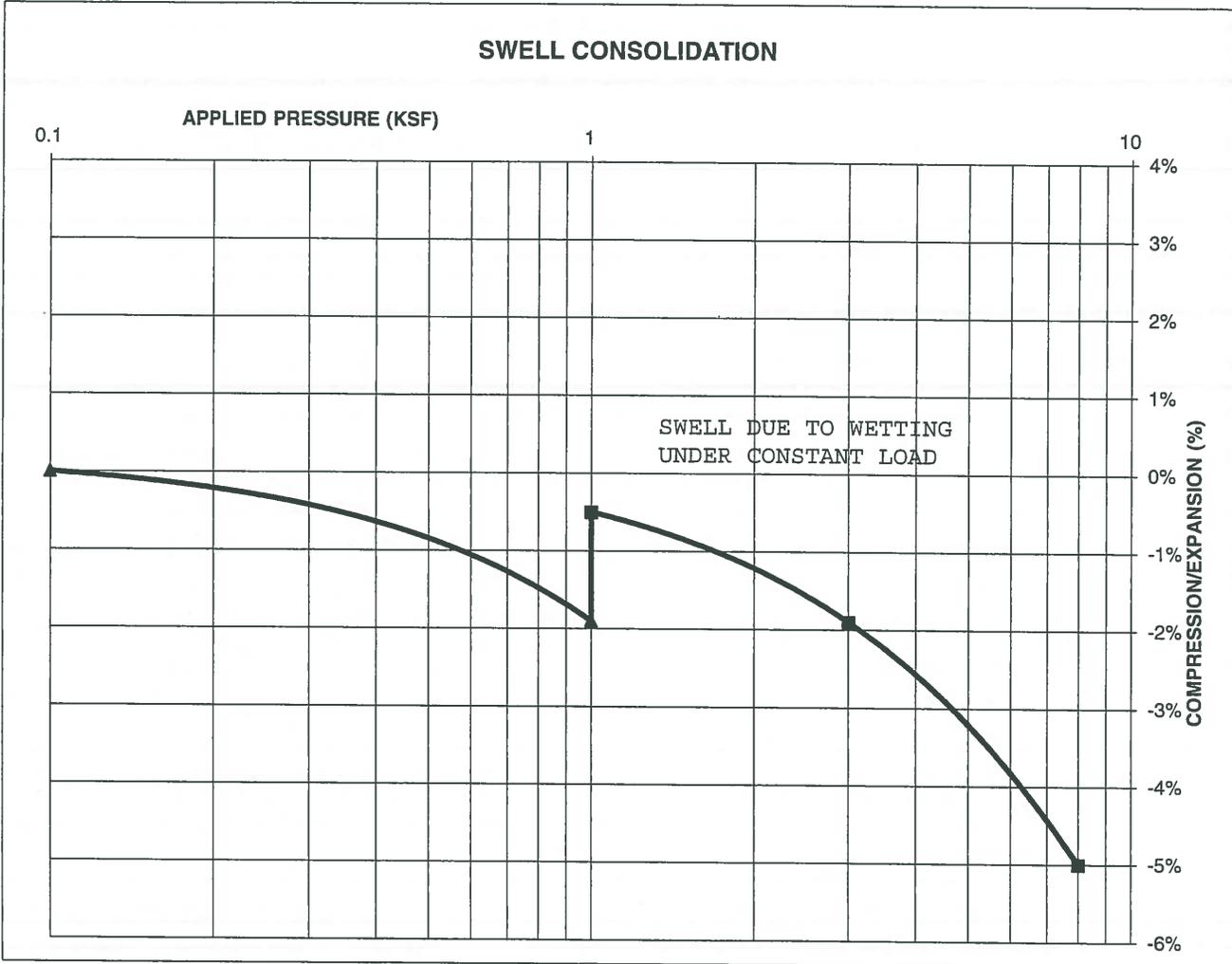
JOB NO.:  
221662

FIG NO.:  
*C-10*

**CONSOLIDATION TEST RESULTS**

TEST BORING #	1	DEPTH(ft)	15
DESCRIPTION	MH	SOIL TYPE	3
NATURAL UNIT DRY WEIGHT (PCF)			87
NATURAL MOISTURE CONTENT			33.1%
SWELL/CONSOLIDATION (%)			1.4%

JOB NO. 221662  
 CLIENT RICHARD ELLIOTT  
 PROJECT FALCON ACRES



**ENTECH  
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505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

**SWELL CONSOLIDATION  
 TEST RESULTS**

DRAWN:

DATE:

CHECKED:

DATE:

*JHR*

*8-5-22*

JOB NO.:  
 221662

FIG NO.:  
 C-11



## **APPENDIX D: Soil Survey Descriptions**

## El Paso County Area, Colorado

### 97—Truckton sandy loam, 3 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2x0j2  
*Elevation:* 5,300 to 6,850 feet  
*Mean annual precipitation:* 14 to 19 inches  
*Mean annual air temperature:* 48 to 52 degrees F  
*Frost-free period:* 85 to 155 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Truckton and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Truckton

##### Setting

*Landform:* Interfluves, hillslopes  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Re-worked alluvium derived from arkose

##### Typical profile

*A - 0 to 4 inches:* sandy loam  
*Bt1 - 4 to 12 inches:* sandy loam  
*Bt2 - 12 to 19 inches:* sandy loam  
*C - 19 to 80 inches:* sandy loam

##### Properties and qualities

*Slope:* 3 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 1 percent  
*Maximum salinity:* Nonsaline (0.1 to 1.9 mmhos/cm)  
*Available water supply, 0 to 60 inches:* Moderate (about 6.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 6e  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* A  
*Ecological site:* R049XB210CO - Sandy Foothill  
*Hydric soil rating:* No

## Custom Soil Resource Report

### Minor Components

#### **Blakeland**

*Percent of map unit:* 8 percent

*Landform:* Interfluves, hillslopes

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Side slope, crest

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Ecological site:* R049XB210CO - Sandy Foothill

*Hydric soil rating:* No

#### **Bresser**

*Percent of map unit:* 7 percent

*Landform:* Interfluves, low hills

*Landform position (two-dimensional):* Footslope, toeslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Concave, linear

*Across-slope shape:* Concave, linear

*Ecological site:* R049XB210CO - Sandy Foothill

*Hydric soil rating:* No

## **APPENDIX E: Septic Records**

EL PASO COUNTY HEALTH DEPARTMENT  
COLORADO SPRINGS, COLORADO

SEWAGE DISPOSAL INSPECTION FORM

Lot 7  
P # 1847 P 049

APPROVAL:  
YES  NO

#4404000014

DATE 11/24/82

ENVIRONMENTALIST J. J. Ramis

LOCATION (

14655 Davis Rd. B

OCCUPANT

Person Hunt

LEGAL DESCRIPTION

NE 1/4, E 1/4, E 1/2, NW 1/4, NE 1/4, S 1/4, T14S, R64

TYPE OF CONSTRUCTION

Mobile

NO. OF BEDROOMS

3

SYSTEM INSTALLED BY

Dwayne Lee Pae

COMMERCIAL MFG.

Coaston

SIZE

1250g

TYPE OF MATERIAL

Cement

NO. COMPARTMENTS

2

WIDTH 60"

LENGTH 120"

DEPTH (total) 68"

LIQ. CAP.

1250g

DISPOSAL FIELD: BED OR TRENCH DEPTH

24"

WIDTH 36"

LENGTH 235

SQ. FT.

705

DISTANCE BETWEEN LINES

15'

ROCK 1 1/2' Quarry

DEPTH 12"

UNDER 6"

OVER 2"

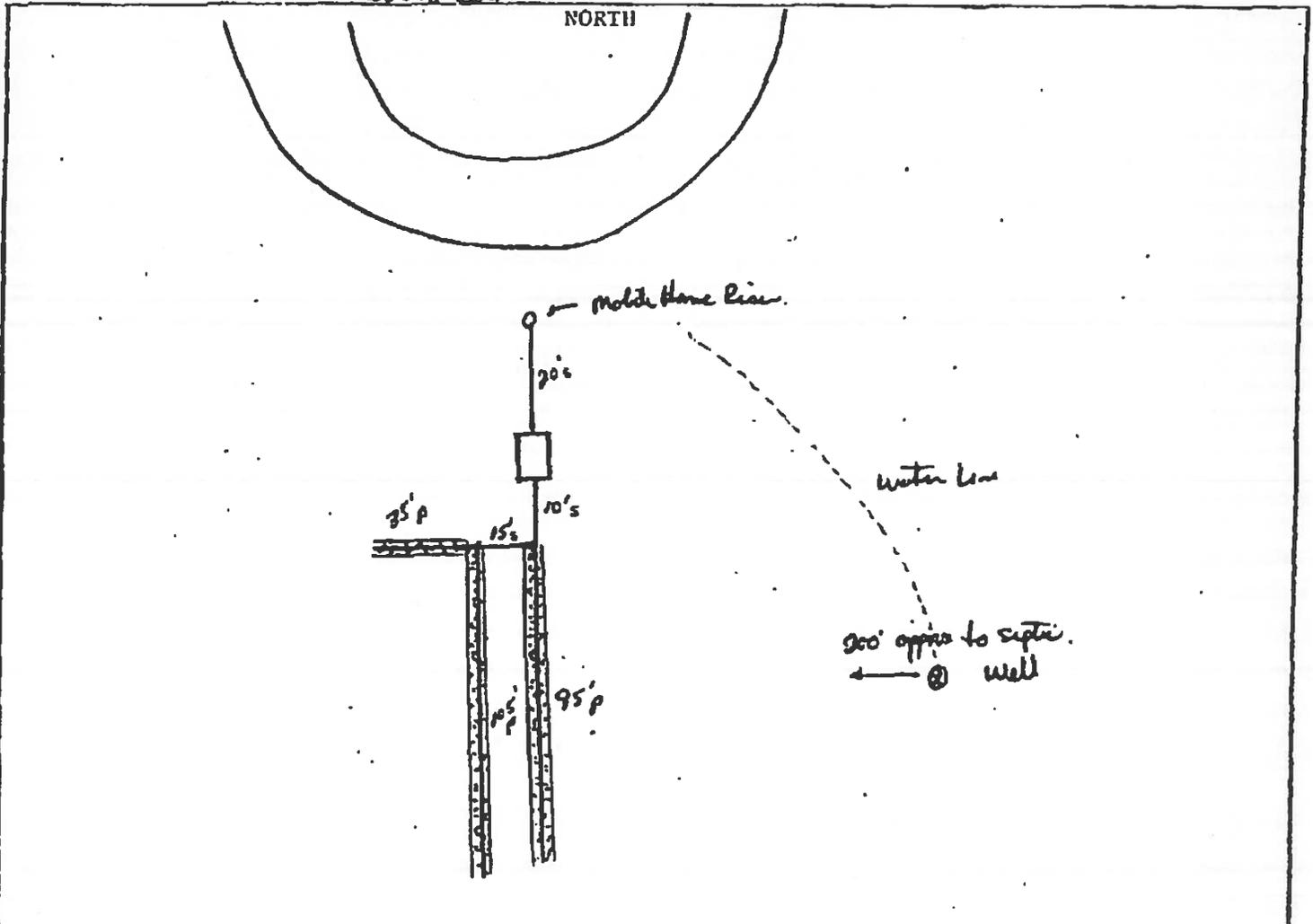
LEACHING PITS (NO.)

LINING MATERIAL

CAPACITY SQ. FT.

Davis Rd.

NORTH



Address 66 50 1847 Permit No. 1847  
 Water Supply 173-1-1 Receipt No. 2814

**EL PASO COUNTY • COUNTY HEALTH DEPARTMENT**  
 501 North Foote Avenue • Colorado Springs, Colorado • 636-0125  
**PERMIT**

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

Issued To Reid Hunt 14655 Dawid Date 11/2/82  
 Address of Property NE 1/4, E 1/4, NW 1/4, NE 1/4, Section 4, T 14, R 64, CO-Phone  
Lot 7 (Permit valid at this address only)

Sewage-Disposal System work to be performed by Dwayne Dee Exc. Phone \_\_\_\_\_

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 six (6) months from date of issue -- whichever occurs first -- (unless work is in progress).

**THIS PERMIT DOES NOT DENOTE APPROVAL OF ZONING OR ABSEGE REQUIREMENTS -**

\$130.00 PERMIT FEE  
APR 11 2 1983 DATE OF EXPIRATION  
 DIRECTOR, CITY-COUNTY HEALTH DEPARTMENT  
 ENVIRONMENTALIST

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

SEPTIC TANK SIZE <u>1250</u> GALLONS	TOTAL ABSORPTION AREA <u>630</u> SQ. FT.
TRENCH SYSTEM	BED SYSTEM
<u>210</u> ft. of trench <u>36</u> inches wide	<u>1</u> ft. x <u>1</u> ft. x <u>1</u> diam. x <u>1</u> w/d
	SEEPAGE PIT SYSTEM

NOTES:

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 times for the purpose of making such inspections as are necessary to determine compliance with requirements of this law.

Date 10/5/82

EL PASO COUNTY HEALTH DEPARTMENT  
501 NORTH FOOTE AVENUE  
COLORADO SPRINGS, COLORADO  
636-0125

Tax Schedule # \_\_\_\_\_

Application for permit to construct, Remodel, or Install a Sewage Disposal System.

Name of Owner Ferris Hunt 14655 Davis Rd Phone \_\_\_\_\_

Address of Property NE 1/4 E 4 E 2 E 2 NW 1/4 NE 1/4 Sub 4, 14, 64

Legal Description of Property 14655 Davis Rd. Lot 7.

Owner's Address (if different) \_\_\_\_\_ Phone \_\_\_\_\_

Systems Contractor Duany Lee Exc Address \_\_\_\_\_

Type of Construction Mobile source and type of water supply well

Size of Lot 40 ac

The construction of the Sewage Disposal System will comply with all applicable Laws, Ordinances, Standards or Resolutions.

HEALTH DEPARTMENT USE ONLY

Permit Number \_\_\_\_\_ Receipt Number \_\_\_\_\_

Number of Bedrooms 3 Tank Capacity 650 gallons Absorption area 630 Sq. Ft.

Remarks 210 linear ft of 36" trench

APPLICATION IS  APPROVED  DENIED

ENVIRONMENTALIST Jeff Karris DATE 10/5 19 82

PLOT PLAN WILL INCLUDE THE FOLLOWING

Plot plan may be drawn on the back of this sheet or on a separate sheet.

- |  |                                       |
|--|---------------------------------------|
| 1. Streams, Lakes, Ponds, Irrigation Ditches and other Water Courses | 6. Location of Proposed Septic System |
| 2. North Direction   | 7. Location of percolation test       |
| 3. Location of Property Line   | 8. Geographical features              |
| 4. Buildings   | 9. Other Information as required      |
| 5. Wells   |                                       |