



**ENTECH**  
ENGINEERING, INC.

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

December 28, 2021

Kurtis Brown c/o TNE, Inc.  
721 South 23<sup>rd</sup> Street  
Colorado Springs, CO 80904

Attn: Kurtis Brown

Re: OWTS – Wastewater Study  
6665 Walker Road  
Parcel No. 51000-00-421  
El Paso County, Colorado

Dear Mr. Brown:

### **GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION**

The site is located in the NW¼ of the SE¼ of Section 18 Township 11 South, Range 65 West of the 6<sup>th</sup> Principal Meridian in El Paso County, Colorado. The site is located approximately 8 miles east the town of Monument, in El Paso County, Colorado. The location of the site is as shown on the Vicinity Map, Figure 1.

A ridge bisects the central portion of the site with gradual slopes to the north and south of the ridge and gradual to moderate slopes along the drainages, seasonal pond, and earthen dam. Minor drainages are located north and south of the ridge and there is a seasonal pond in the south-central portion of the site. Water was not observed in the drainages or pond at the time of this investigation. There is an existing single family residential structure and several auxiliary buildings on Lot 1 as shown on the site plan, Figure, 3. The site boundaries are indicated on the USGS Map, Figure 2. Previous land uses have included agricultural grazing land, vacant land, and residential. The site contains field grasses, weeds, and some planted trees around the existing structure. Site photographs taken November 11, 2021, are included in Appendix A. Test pit excavations were completed on November 23, 2021.

Total acreage involved in the proposed subdivision is 37.5-acres. A total of five lots are proposed with four new rural residential lots. The existing residential structure will remain on Lot 1. The new proposed lot sizes range from 6.0-acres to 6.4-acres, and Lot 1 with the existing house is 12.7-acres. The new lots will be serviced by individual wells and on-site wastewater treatment systems. The Site Plan is presented in Figure 3.

### **SCOPE OF THE REPORT**

The scope of the report will include the following:

- A general geologic analysis utilizing published geologic data. Detailed site-specific mapping will be conducted to obtain general information in respect to major geographic and geologic features, geologic descriptions and their effects on the development of the property with regards to on-site wastewater treatment systems (OWTS).

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## FIELD INVESTIGATION

Our field investigation consisted of the preparation of a geologic map of bedrock features and significant surficial deposits. The Natural Resource Conservation Service (NRCS), previously 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 aerial photo reconnaissance and interpretation. The same mapping procedures have also been utilized to produce the Geology/Engineering Geology Map which identified pertinent geologic conditions affecting development. The field mapping was performed by personnel of Entech Engineering, Inc. on November 11, 2021.

Two test borings and two test pits were drilled on the site to determine general suitability of the soil characteristics for residential construction. The locations of the test borings/pits are indicated on the Site Plan/Test Boring Location Map, Figure 3. The Test Pit 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 included grain-size analysis, ASTM D-422. Results of the laboratory testing are included in Appendix C.

## 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 two soil types on the site. Complete descriptions of the soil types are presented in Appendix D. In general, the soils consist of sandy loam to gravelly loamy sand to sandy clay. The soils are described as follows:

<u>Type</u>	<u>Description</u>
67	Peyton sandy loam, 5 to 9 percent slopes
69	Peyton-Pring complex, 8 to 15 percent slopes

The soils have been described to have moderate to 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, erosion control blankets or waddles. Erosion is of limited concern to this site due to its proximity to the seasonally wet pond. The soils have been described to have moderate erosion hazards (Reference 2).

### Soils

Soils encountered in the test pits consisted of sandy clay overlying sandy clay to sandy clay loam bedrock. Testing on the samples of the limiting layers encountered in the test pits resulted in 26 to 75 percent of the soil size particles passing the No. 200 sieve.

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### Groundwater

Groundwater was not encountered in the test borings which were drilled to depths of 20 feet. Groundwater is not anticipated to affect shallow foundations on the majority of the site. Areas of potentially seasonal shallow groundwater and seasonally wet areas have been mapped on the site, and are discussed in the following section. 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 11½ 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 northeasterly direction (Reference 3). The bedrock underlying the site consists of the Dawson Formation of Tertiary to Cretaceous Age. The Dawson Formation typically consists of coarse-grained arkosic sandstone with interbedded layers of claystone or siltstone.

The geology of the site was evaluated using the *Geologic Map of the Monument Quadrangle* distributed by the Colorado Geologic Survey in 2003 (Reference 4, Figure 5). The Geology Map for the site is presented in Figure 6. Two mappable units were identified on this site which is described as follows:

- Qaf Artificial Fill of Holocene Age:** These are man-made fill deposits associated with erosion berms, earthen dams on-site, and a fill pile of manure.
- Qc/Tkd Colluvium of Quaternary Age overlying Dawson Formation of Tertiary to Cretaceous Age:** The materials consist of colluvial and residual soils overlying the bedrock materials on the 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 and 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 Black Forest 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 Denver 1° x 2° Quadrangle*, distributed by the US Geological Survey in 1981 (Reference 6). The test borings were used in evaluating the site and are included in Appendix B. The Geology Map prepared for the site is presented in Figure 6.

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### Drainage Areas

The site is not mapped within any floodplains according to the FEMA Map No. 08041CO305G, dated December 7, 2018 (Figure 7, Reference 7). Minor areas of potentially seasonal shallow groundwater and seasonally wet areas were observed on the site (Figure 6) and are further discussed below. Several minor drainages are located on the site and a seasonal pond is located in the southern portion of the site.

In these areas, we would anticipate the potential for periodically high subsurface moisture conditions and frost heave potential. These areas lie within low-lying areas and along the head of a minor drainage swales on the site. Water was not observed in any of the drainages or pond at the time of our site investigation. These areas can likely be avoided or properly mitigated by development. The potential exists for high groundwater levels during high moisture periods and should structures encroach on these areas the following precautions should be followed.

### Potentially Seasonal Shallow Groundwater Area – Constraint

The minor drainages have been mapped as potentially seasonal shallow groundwater areas. Additionally, the uphill sides of the erosion berms have the potential for seasonally shallow groundwater. In these areas, we would anticipate the potential for periodically high subsurface moisture conditions, frost heave potential. Construction in any portions of these areas, if required, or immediately adjacent to these areas should follow these precautions.

### Seasonally Wet Area – Constraint

This is an area where water seasonally ponds behind a dam in the southern portion of the site. It is anticipated that these areas will be avoided by structures. There is sufficient area on Lot 3 to allow room for a structure and access. Construction is not recommended in the seasonally wet area.

## **ON-SITE WASTEWATER TREATMENT**

The Natural Resource Conservation Service (Reference 1), previously the Soil Conservation Service (Reference 2) has been mapped with three soil descriptions. 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 moderate to slow percolation rates.

Soils encountered in the tactile test pits predominantly consisted of sandy clay and silty clay overlying silty to clayey sandstone bedrock. The limiting layers encountered in the test pits are the sandy clay loam, the sandy clay, and the sandstone bedrock, which corresponds with USDA Soil Types 3, 4 and 4A, with an LTAR values of 0.35, 0.20, and 0.15 gallons per day per square foot, respectively. Sandstone to claystone bedrock was not encountered in both test pits and test borings.

Signs of seasonally occurring groundwater was observed in Test Pit No. 2 at approximately 2.5 feet. Absorption fields must maintain a minimum of 4 feet above any signs of groundwater, bedrock, or confining layers. Should groundwater or bedrock be encountered within 6 feet of the surface, designed systems will be required. Designed systems are anticipated on all of the lots.

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Areas where conventional systems can be utilized may be determined with additional testing. Additional testing will be required on each lot to determine the site characteristics prior to construction.

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 are anticipated for the majority of the lots, depending on soils encountered. The Septic Suitability Map is presented in Figure 8. Potential house locations, water wells, and two septic sites for the new lots are indicated on Figure 8. 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 Kurtis Brown, 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.

Respectfully Submitted,

ENTECH ENGINEERING, INC.



Logan L. Langford, P.G.  
Geologist

LLL/jhr

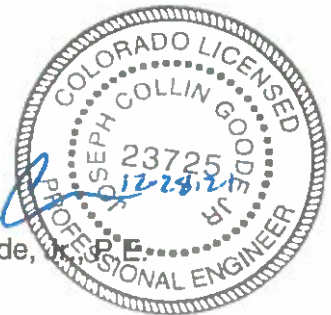
Encl.

Entech Job No. 212979  
AAprojects/2021/212979 wws

Reviewed by:



Joseph C. Goode, P.E.  
President



Kurtis Brown c/o TNE, Inc.  
OWTS – Wastewater Study  
6665 Walker Road  
Parcel No. 51000-00-421  
El Paso County, Colorado

## BIBLIOGRAPHY

1. Natural Resource Conservation Service, September 13, 2019. *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. Bryant, Bruce; McGraw, Laura W.; and Wobus, Reinhard A. 1981. *Geologic Structure Map of the Denver 1° x 2° Quadrangle, North-Central Colorado*. Sheet 2. U.S. Geologic Survey. Map I-1163, Sheet 2.
4. Thorson, Jon P., 2003. *Geologic Map of the Black Forest Quadrangle, El Paso County, Colorado*. Colorado Geological Survey. Open-File Report 03-6.
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. Bryant, Bruce; McGraw, Laura W.; and Wobus, Reinhard A. 1981. *Geologic Map of the Denver 1° x 2° Quadrangle, South-Central Colorado*. U.S. Geologic Survey. Map I-1163.
7. Federal Emergency Management Agency. December 7, 2018. *Flood Insurance Rate Maps for the City of Colorado Springs, Colorado*. Map Number 08041CO305G.
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 Administered by the Colorado State Land Board*. Colorado Geological Survey. Open-File Report 03-07.

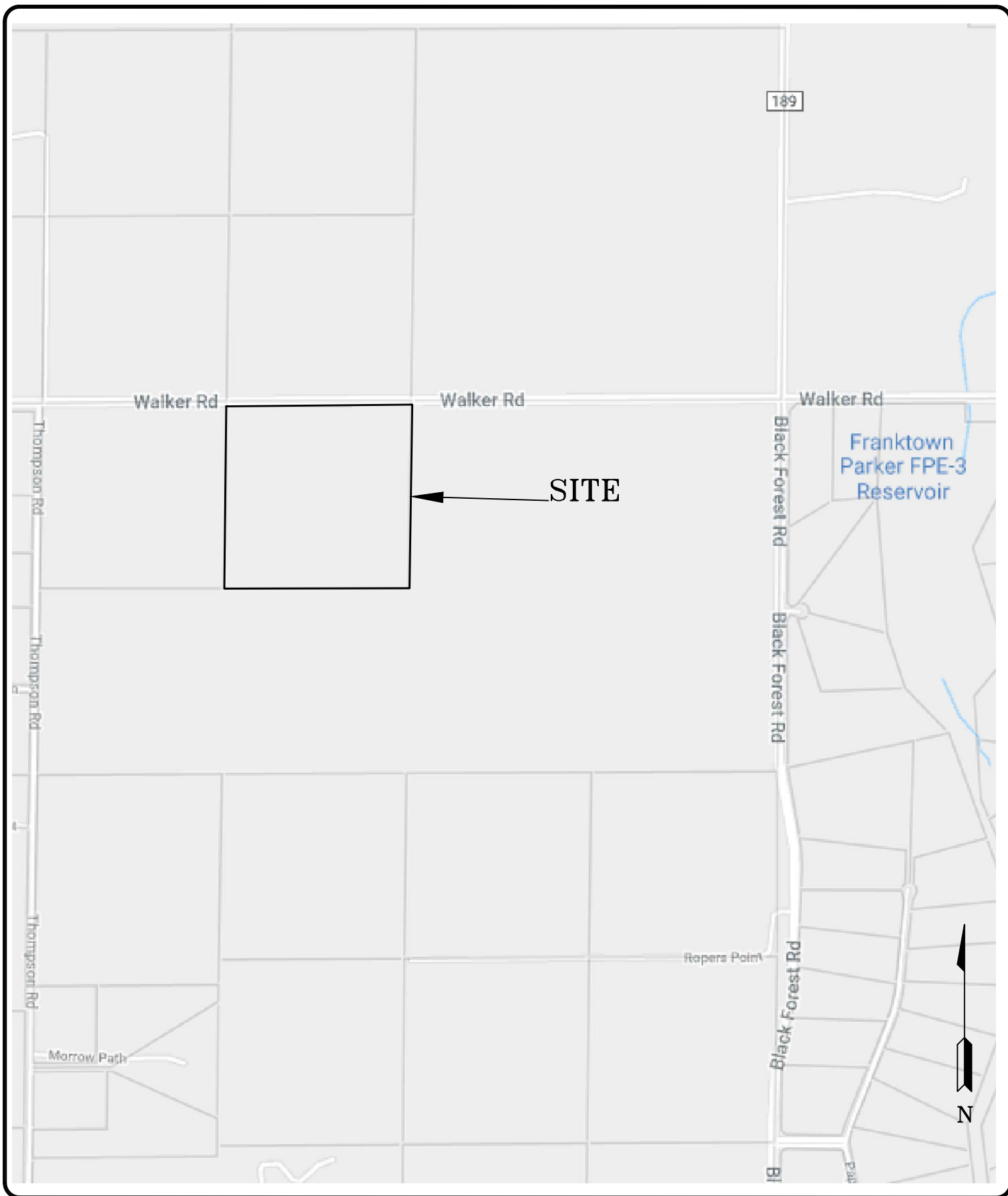
## TABLE

**Table 1: Summary Tactile Test Pit Results**

<b>Test Location No.</b>	<b>Depth to Bedrock (ft.)</b>	<b>Depth to Groundwater Evidence (ft.)</b>	<b>USDA Soil Type</b>	<b>LTAR Value</b>
TP-1	3*	>8	4A*	0.15*
TP-2	3*	2.5*	4A*	0.15*

\*- Conditions that will require an engineered OWTS

## FIGURES



**ENTECH**  
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VICINITY MAP  
6665 WALKER ROAD  
COLORADO SPRINGS  
FOR: KURTIS BROWN  
c/o TNE, INC.

DRAWN:  
JHR

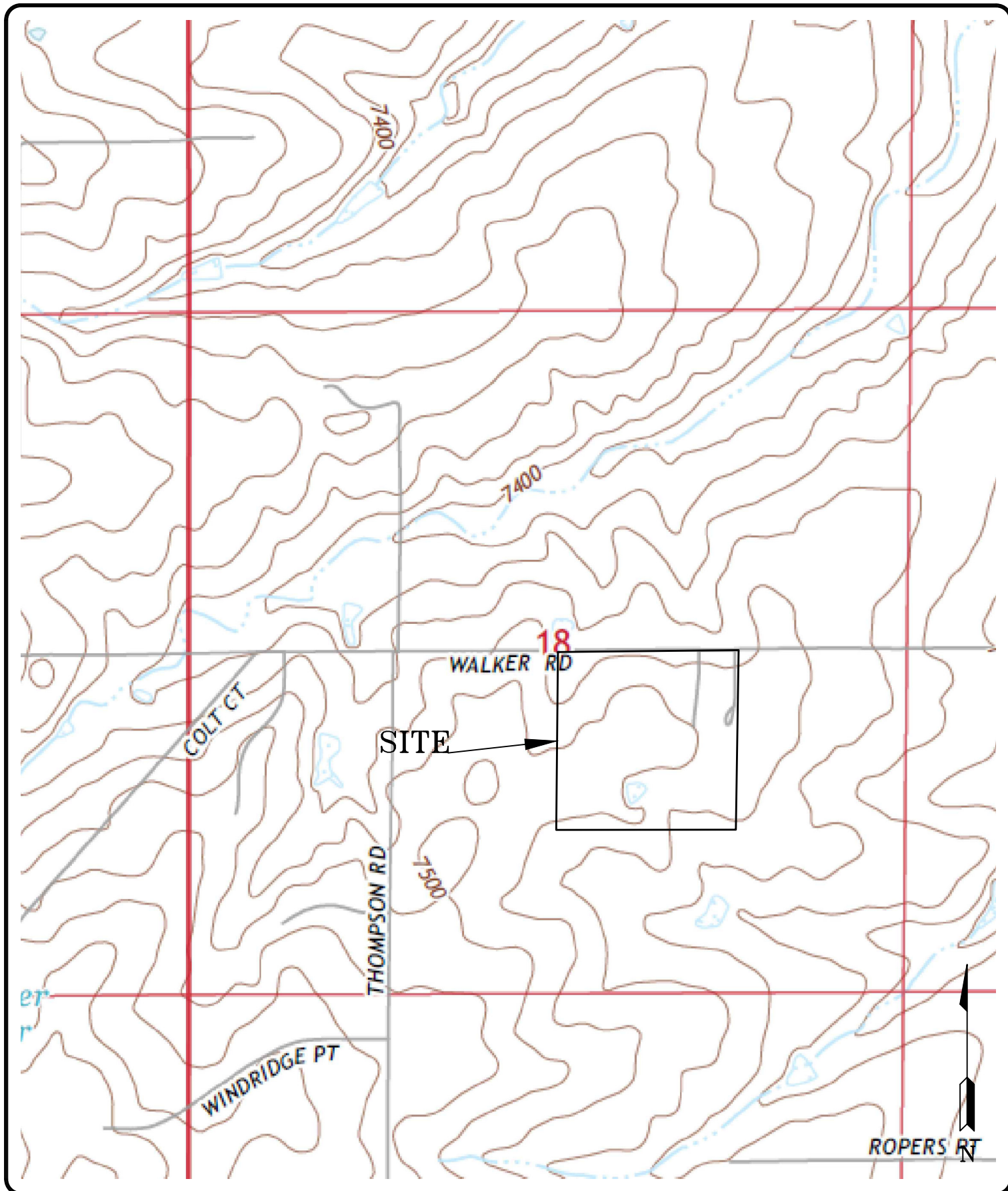
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DATE:

JOB NO.:  
212979

FIG NO.:  
1



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USGS MAP  
6665 WALKER ROAD  
COLORADO SPRINGS  
FOR: KURTIS BROWN  
c/o TNE, INC.

DRAWN:  
JHR

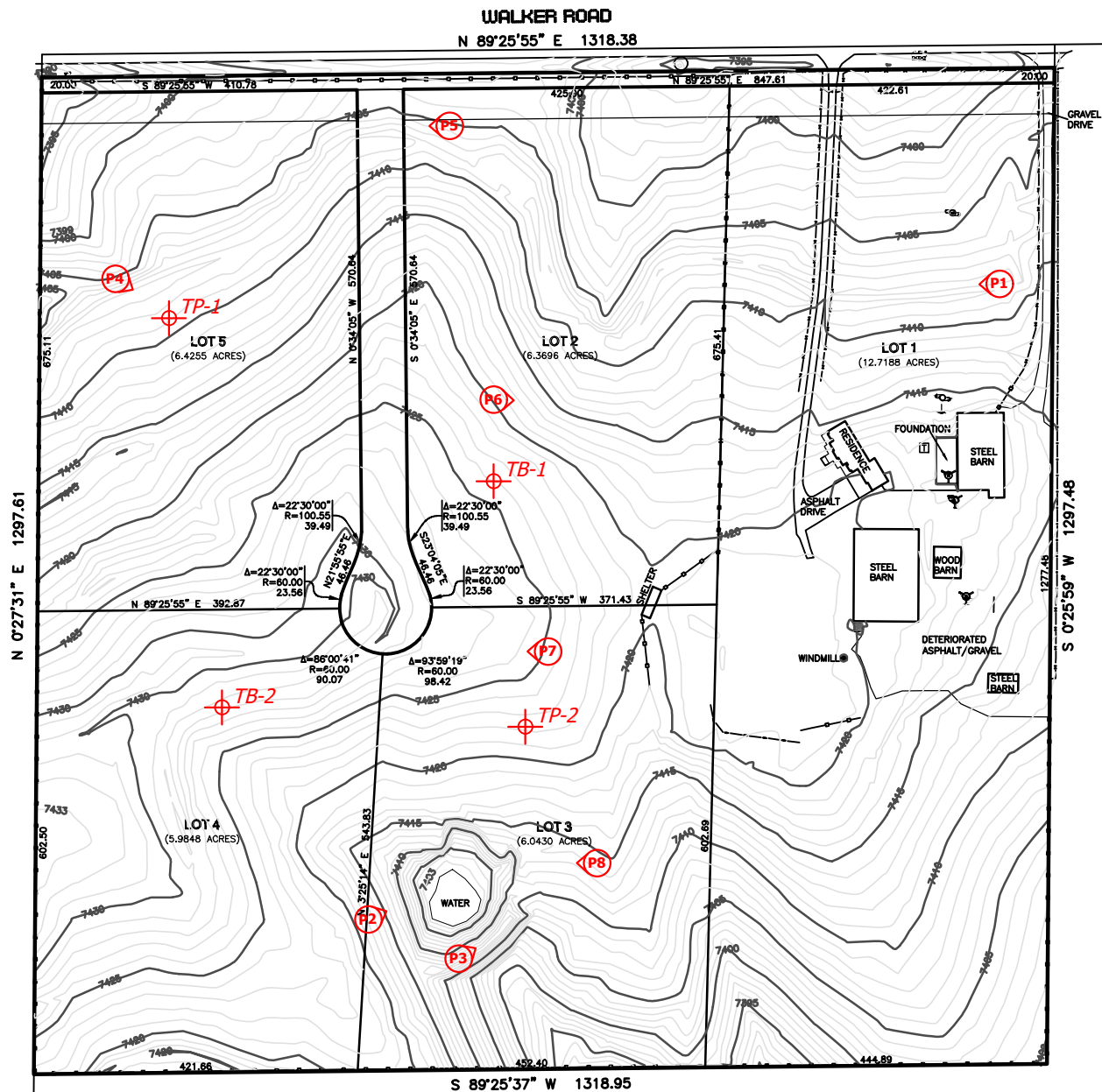
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12/10/21

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JOB NO.:  
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FIG NO.:  
2



**LEGEND:**

-  TP- APPROXIMATE TEST PIT LOCATION AND NUMBER
-  - APPROXIMATE PHOTOGRAPH LOCATION AND NUMBER



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**SITE PLAN/TESTING LOCATION MAP**  
**6665 WALKER ROAD**  
**COLORADO SPRINGS**  
**FOR: KURTIS BROWN**  
**c/o TNE, INC.**

DRAWN:  
**JHR**

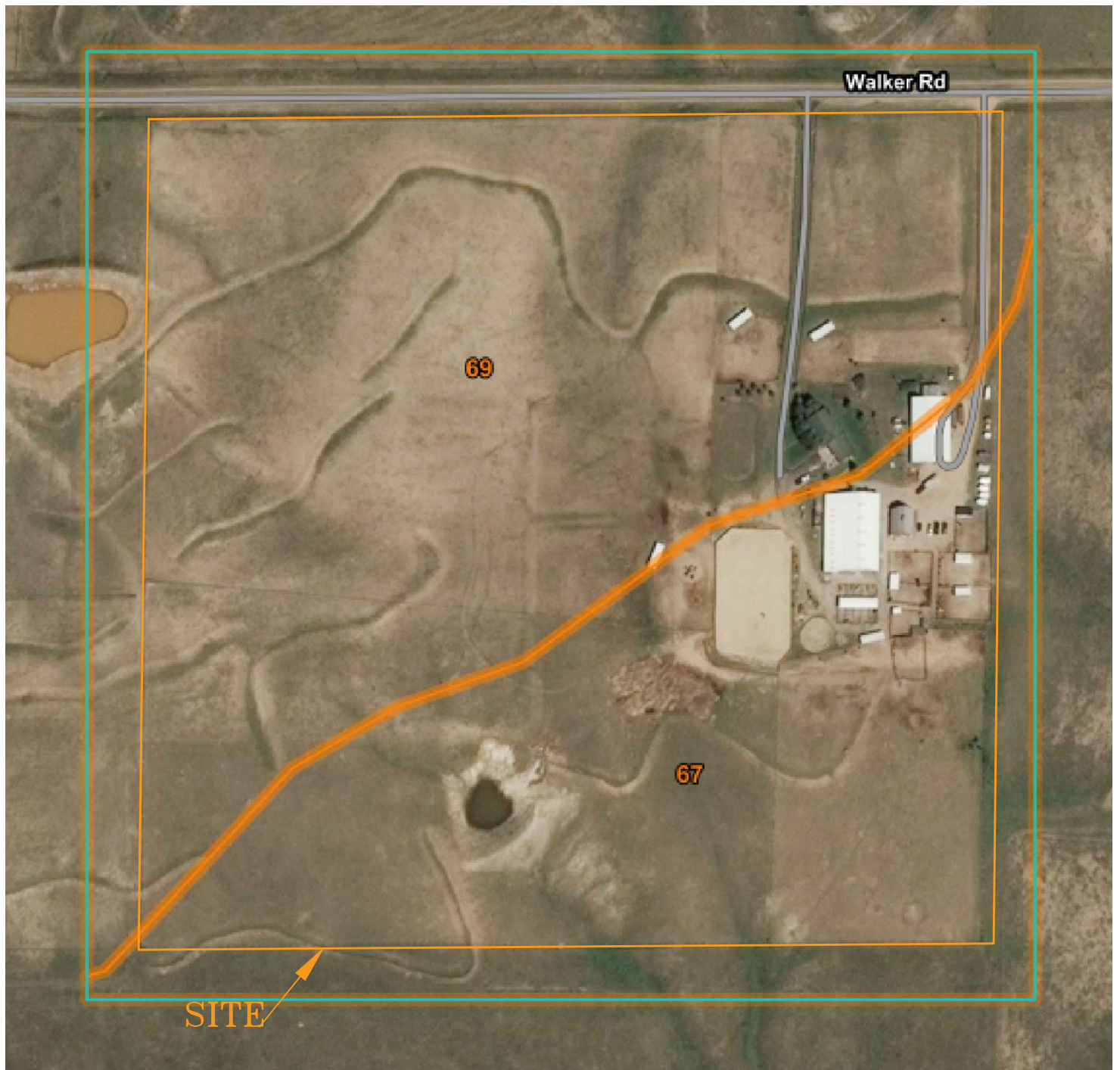
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**12/10/21**

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**212979**

FIG NO.:  
**3**



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SOIL SURVEY MAP  
6665 WALKER ROAD  
COLORADO SPRINGS  
FOR: KURTIS BROWN  
c/o TNE, INC.

DRAWN:  
JHR

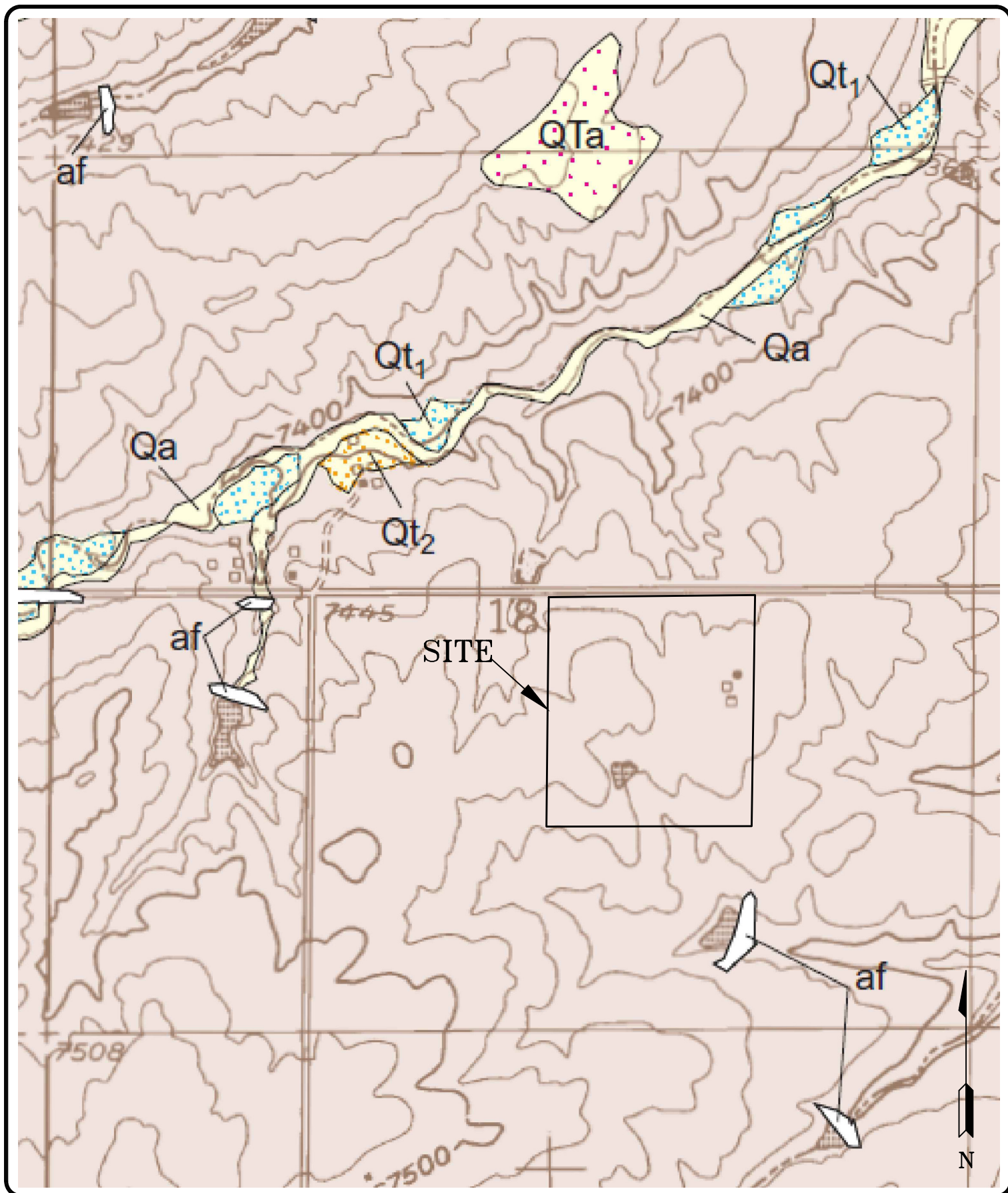
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212979

FIG NO.:  
4



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BLACK FOREST QUADRANGLE GEOLOGIC MAP  
6665 WALKER ROAD  
COLORADO SPRINGS  
FOR: KURTIS BROWN  
c/o TNE, INC.

DRAWN:  
JHR

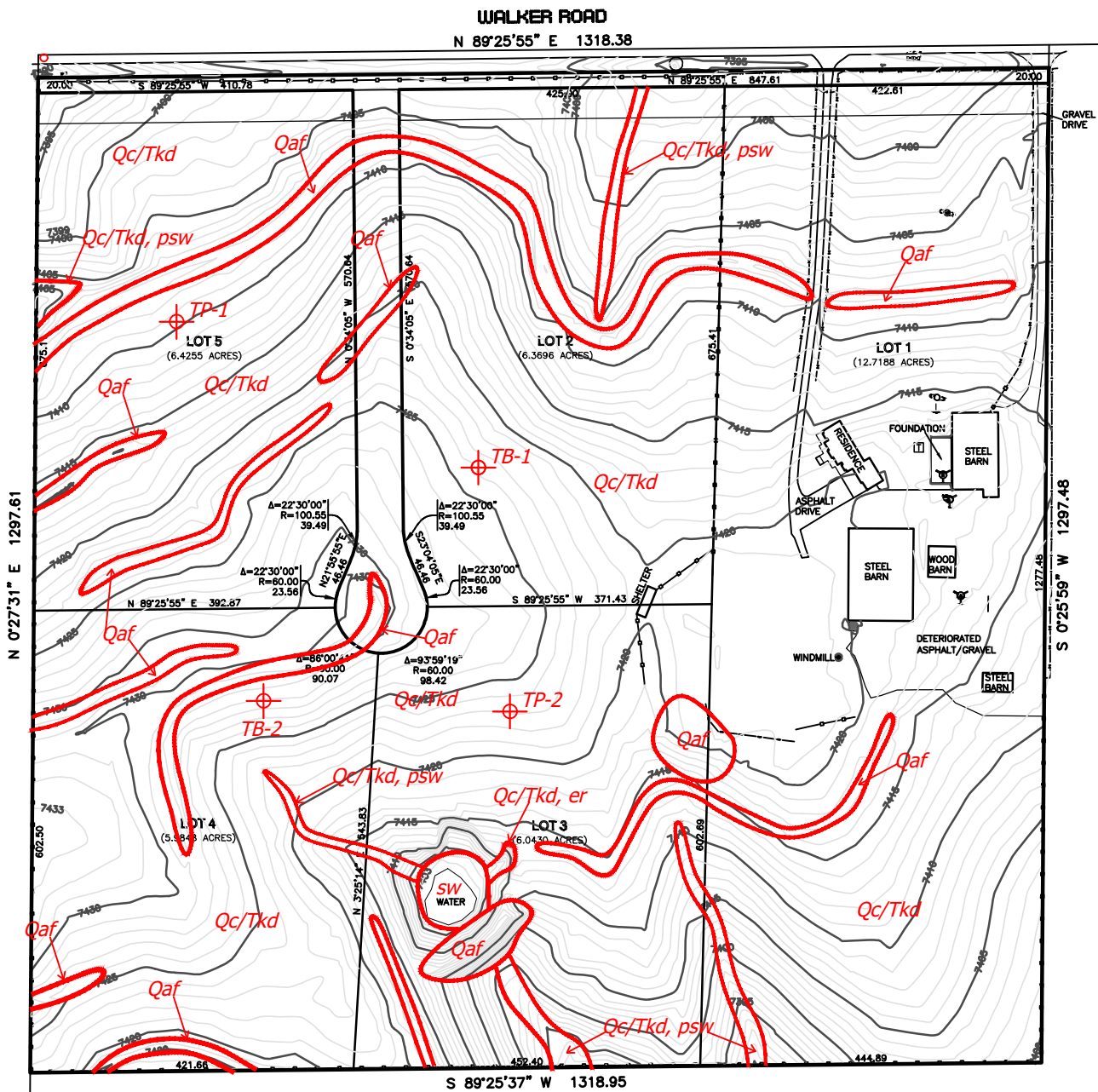
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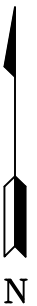
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FIG NO.:  
5



**Legend:**

- Qaf** - Artificial Fill of Holocene Age:  
man made fill deposits associated with erosion berms and earthen dams
- Qc/Tkd** - Colluvium of Quaternary Age Overlying the Dawson Formation of Tertiary to Cretaceous Age:  
Sheetwash and residual soil deposits overlying arkosic sandstone with interbedded siltstone and claystone
- er** - area of erosion
- sw** - seasonal wet area
- psw** - potentially seasonal shallow groundwater area



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**GEOLOGY/ENGINEERING GEOLOGY MAP**  
6665 WALKER ROAD  
COLORADO SPINGS  
FOR: KURTIS BROWN  
c/o TNE, INC.

DRAWN:  
**JHR**

DATE:  
**12/20/21**

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DATE:

JOB NO.:  
**212979**

FIG NO.:  
**6**

SITE

EL PASO  
COUNTY  
080059

08041C0305G  
eff. 12/7/2018



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FLOODPLAIN MAP  
6665 WALKER ROAD  
COLORADO SPRINGS  
FOR: KURTIS BROWN  
FOS: c/o TNE, INC.

DRAWN:  
JHR

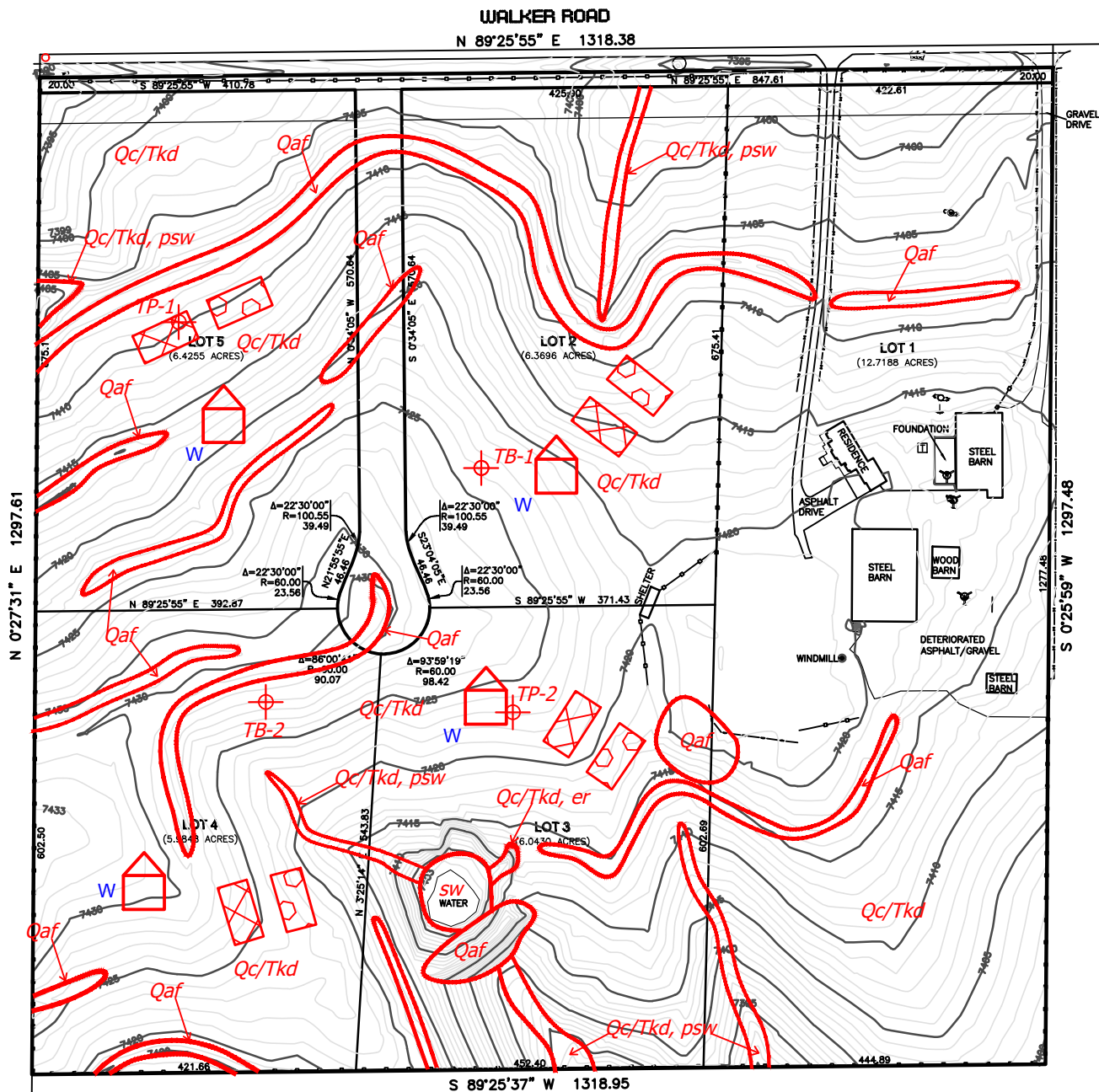
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212979

FIG NO.:  
7

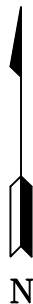


**LEGEND:**

- POSSIBLE OWTS LOCATIONS
- POSSIBLE OWTS ALTERNATE LOCATIONS

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

\* OWTS ABSORPTION FIELDS ARE NOT SUITABLE IN SEASONALLY WET OR POTENTIALLY SEASONAL WET AREAS



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**SEPTIC SUITABILITY MAP**  
**6665 WALKER ROAD**  
**COLORADO SPRINGS**  
**FOR: KURTIS BROWN**  
**c/o TNE, INC.**

DRAWN:  
**JHR**

DATE:  
**12/20/21**

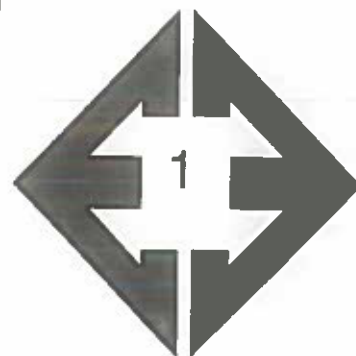
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**212979**

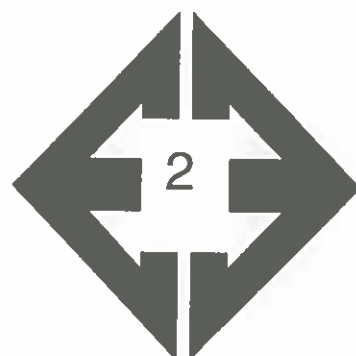
FIG NO.:  
**8**

## **APPENDIX A: Photographs**



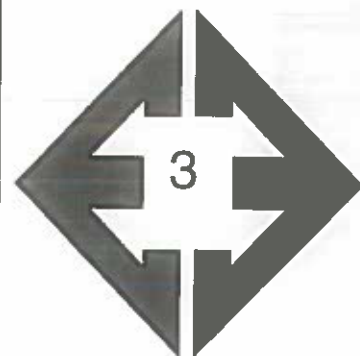
**Looking west from the  
northeastern portion of  
the site.**

November 11, 2021



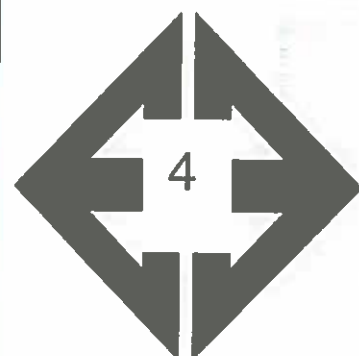
**Looking north at dry  
pond in south-central  
portion of the site.**

November 11, 2021



Looking along crest of  
earthen dam in the  
southern portion of the  
site.

November 11, 2021



Looking southeast  
from Test Pit No. 1 in  
the northwest corner  
of the site.

November 11, 2021



**Looking west from  
center of northern side  
of the site.**

November 11, 2021



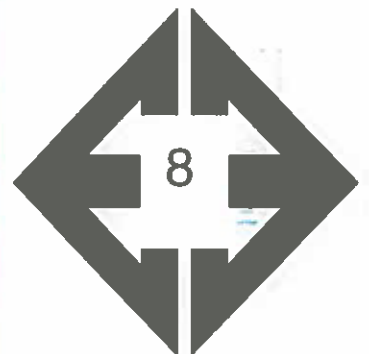
**Looking northeast  
from central portion of  
site.**

November 11, 2021



Looking west from  
central portion of the  
site.

November 11, 2021















Looking west from  
east side pond in the  
southern portion of the  
site.

November 11, 2021

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

TEST PIT NO. 1  
DATE EXCAVATED 11/23/2021  
Job # 212979

TEST PIT NO. 2  
DATE EXCAVATED 11/23/2021  
CLIENT Kurtis Brown  
LOCATION 6665 Walker Road

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
Refusal @ 6-feet topsoil, 0-6 inches							Redoxomorphic Features Encountered @ 2.5-feet topsoil, 0-10 inches						
	1							1					
	2			ma		4A	sandy clay, fine to medium grained, brown, moist	2			gr	m	4
sandy clay, fine to medium grained, brown, moist	3						sandy clay, fine to coarse grained, light brown, moist	3			ma		4A
	4					3A	clayey sandstone, fine to coarse grained, light brown, moist	4			ma		4A
silty sandstone, fine to coarse grained, light brown, moist	5			ma				5					
	6							6					
	7						*signs of seasonally occurring groundwater at 2.5ft	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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COLORADO SPRINGS, COLORADO 80907

TEST PIT LOG

DRAWN:  
jhr

DATE:  
5/26/21

CHECKED:  
LL

DATE:  
12/8/21

JOB NO.:  
212979

FIG NO.:  
B-1

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

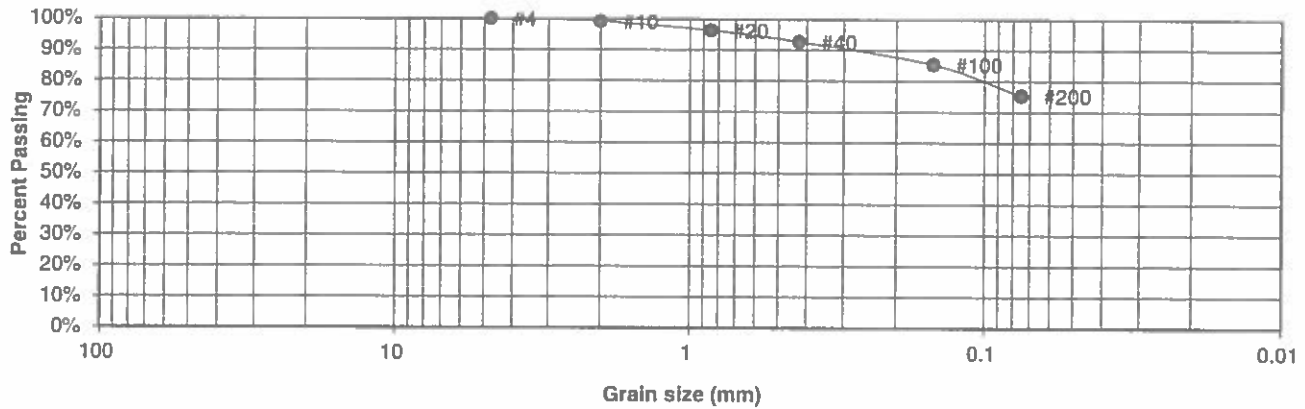
BORING NO. TP-1  
 DEPTH(ft) 2  
 CLIENT KURITS BROWN  
 PROJECT 6665 WALKER ROAD

UNIFIED CLASSIFICATION  
 AASHTO CLASSIFICATION

CL

TEST BY BL  
 JOB NO. 212979

### Sieve Analysis Grain Size Distribution



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.2%
20	96.3%
40	92.7%
100	85.4%
200	75.3%

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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**ENGINEERING, INC.**

505 ELKTON DRIVE  
 COLORADO SPRINGS, COLORADO 80907

### LABORATORY TEST RESULTS

DRAWN:

DATE:

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DATE:

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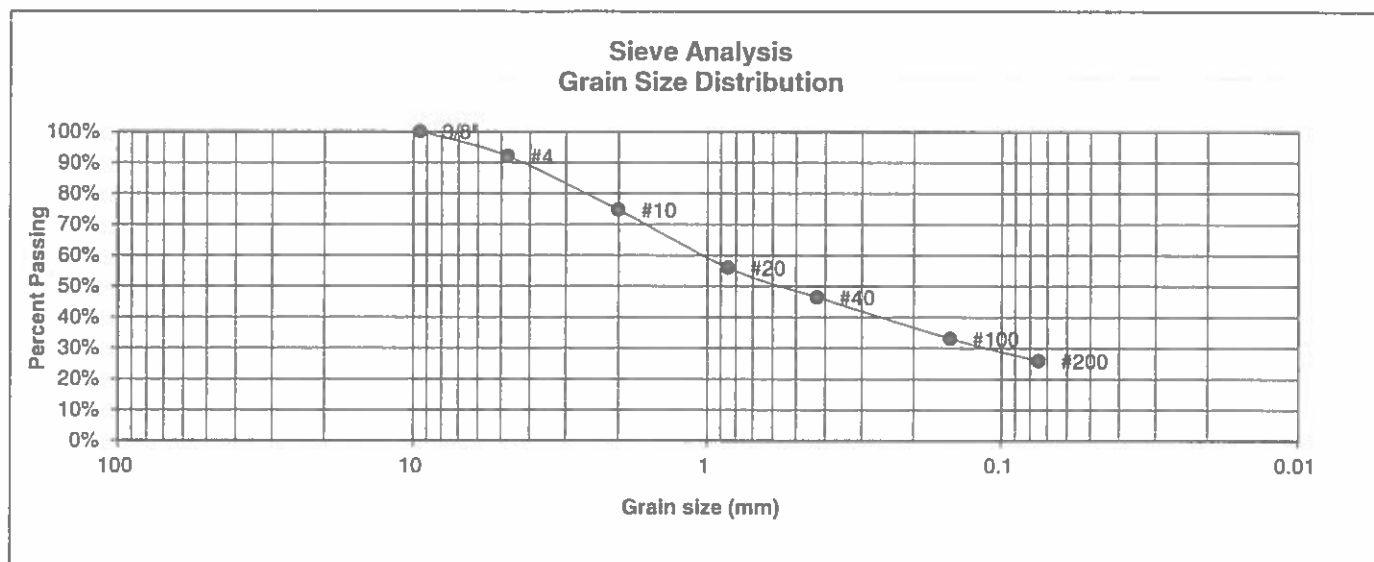
12/8/21

JOB NO:  
212979

FIG NO:

C-1

BORING NO.	TP-2	UNIFIED CLASSIFICATION	SC	TEST BY	BL
DEPTH(ft)	2-3	AASHTO CLASSIFICATION		JOB NO.	212979
CLIENT	KURITS BROWN				
PROJECT	6665 WALKER ROAD				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	92.0%
10	74.7%
20	56.0%
40	46.5%
100	33.1%
200	26.0%

Atterberg  
Limits  
Plastic Limit  
Liquid Limit  
Plastic Index

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



**ENTECH**  
ENGINEERING, INC.

505 ELKTON DRIVE  
COLORADO SPRINGS, COLORADO 80907

### LABORATORY TEST RESULTS

DRAWN:

DATE:

CHECKED:

DATE:

L L L

12/8/21

JOB NO.:  
212979

FIG NO.:

C-2

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

## El Paso County Area, Colorado

### 67—Peyton sandy loam, 5 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 369d  
*Elevation:* 6,800 to 7,600 feet  
*Mean annual air temperature:* 43 to 45 degrees F  
*Frost-free period:* 115 to 125 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Peyton and similar soils:* 85 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Peyton

##### Setting

*Landform:* Hills  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Arkosic alluvium derived from sedimentary rock and/or arkosic residuum weathered from sedimentary rock

##### Typical profile

*A - 0 to 12 inches:* sandy loam  
*Bt - 12 to 25 inches:* sandy clay loam  
*BC - 25 to 35 inches:* sandy loam  
*C - 35 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 5 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Moderate (about 7.3 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* R049XY216CO - Sandy Divide  
*Hydric soil rating:* No

#### Minor Components

##### Pleasant

*Percent of map unit:*  
*Landform:* Depressions  
*Hydric soil rating:* Yes

**Other soils**

*Percent of map unit:*

*Hydric soil rating:* No

**69—Peyton-Pring complex, 8 to 15 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 369g

*Elevation:* 6,800 to 7,600 feet

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Peyton and similar soils:* 40 percent

*Pring and similar soils:* 30 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Peyton**

**Setting**

*Landform:* Hills

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

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Arkosic alluvium derived from sedimentary rock and/or arkosic residuum weathered from sedimentary rock

**Typical profile**

*A - 0 to 12 inches:* sandy loam

*Bt - 12 to 25 inches:* sandy clay loam

*BC - 25 to 35 inches:* sandy clay loam

*C - 35 to 60 inches:* sandy loam

**Properties and qualities**

*Slope:* 8 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.60 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Moderate (about 7.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* B

*Ecological site:* R049XY216CO - Sandy Divide

*Hydric soil rating:* No

**Description of Pring**

**Setting**

*Landform:* Hills

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

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Arkosic alluvium derived from sedimentary rock

**Typical profile**

*A - 0 to 14 inches:* coarse sandy loam

*C - 14 to 60 inches:* gravelly sandy loam

**Properties and qualities**

*Slope:* 8 to 15 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

*Available water supply, 0 to 60 inches:* Low (about 6.0 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* B

*Ecological site:* R048AY222CO - Loamy Park

*Hydric soil rating:* No

**Minor Components**

**Pleasant**

*Percent of map unit:*

*Landform:* Depressions

*Hydric soil rating:* Yes

**Other soils**

*Percent of map unit:*

*Hydric soil rating:* No