GWI
Ground Water Investigations LLC · 11590 Black Forest Rd. 614 N Suite 15 · Colorado Springs, CO 80908 · (719) 338-1805

To: Clifford J. Nicole T. Telle
12730 Bridle Bit Road
Colorado Springs, CO 80908

Re: Onsite Wastewater Treatment System Evaluation

From: Julia M. Murphy PG
Groundwater Investigations LLC

The following presents the results of the Onsite Wastewater Treatment System (OWTS) evaluation for the proposed two-lot minor subdivision (Figure 1). This report summarizes the data obtained from two Profile Pit Evaluations that were used to assess the suitability of the subsurface soils in the areas of proposed onsite wastewater treatment.

1.0 Site Location

The subdivision site consists of approximately 10.12 acres located in the SE ¼ SE ¼ of Section 10, Township 12 south, Range 66 West of the 6th P.M., El Paso County, Colorado and also described as Lot 4, Bridle Bit Subdivision. The address is 12730 Bridle Bit Road, Colorado Springs, CO 80908. The property is proposed to be divided into two lots: a 5.055 acre lot (Lot 1) and a 5.066 acre lot (Lot 2). There is an existing home with a well and OWTS resides on Lot 2 (Figure 2).

2.0 Soils

The National Resource Conservation Service (NRCS) identified two soil types on the Property.

Type	Description
40	Kettle gravely loamy sand, 3 to 8 % slopes
93	Tomah-Crowfoot complex 8 to 15% slopes

The natural drainage class for the Kettle gravely loamy sand (Type 40) is “well drained” to “somewhat extensively drained” therefore the runoff potential is low (NRCS, 2018). Tomah-Crowfoot complex is well drained having a medium potential for runoff. The soils in this region are all classified as Hydrologic Soils Group B. “Group B soils are described as having a moderate infiltration rate when thoroughly wet. These soils consist primarily of moderately deep or deep, moderately well drained to well drained soils. The texture is fine to course and can transmit water

at a moderate rate. As the surface runoff is slow, there is a low-to-moderate hazard for erosion" (USDA). Exhibit A provides a complete description of the soil types.

3.0 OWTS Field Investigation

3.1 Soils Sampling

The soils investigation on Lot 1 occurred on June 10, 2019 by Parr Engineering and Consulting. Two profile pits locations were selected to evaluate the suitability of the subsurface soil properties for onsite wastewater treatment (Parr 2019, Figure 3). Each profile pit was excavated to a maximum depth of 7.5 feet below ground surface. The soils were visually classified, and samples collected from select intervals and evaluated in accordance with the U.S. Department of Agriculture (USDA) standards for soil properties. The table below summarizes the sampled intervals and the testing results.

Test Pit 1

Depth (ft.)	Sample Interval	12730 Bridle Bit Road, 80908						
		USDA Soil Texture	USDA Soil Structure - Shape	Soil Structure Grade	Redoximorphic Features Present? (Y/N)	Soil Type (from Table 9 in O-14)	% Rock Frag.	Color
		Topsoil						
2		Sandy Clay Loam	Granular	Moderate	No	**Type 3 (LTAR = 0.35)**	<35%	2.5Y 4/3 (Moist)
		Sandy Clay	Blocky	Strong	No	**Type 4 (LTAR = 0.20)**	<35%	10YR 4/2 (Moist)
4		Sandy Loam	Granular	Strong	No	**Type 2 (LTAR = 0.60) Treatment Level 1**	<35%	10YR 4/3 (Moist)
6								
8		**Total Depth= 7'-6"**						

Test Pit 2

Depth (ft.)	Sample Interval	12730 Bridle Bit Road, 80908						
		USDA Soil Texture	USDA Soil Structure - Shape	Soil Structure Grade	Redoximorphic Features Present? (Y/N)	Soil Type (from Table 9 in O-14)	% Rock Frag.	Color
		Topsoil						
2		Sandy Clay Loam	Granular	Moderate	No	**Type 3 (LTAR = 0.35)**	<35%	2.5Y 4/3 (Moist)
		Sandy Clay	Blocky	Strong	No	**Type 4**	<35%	10YR 4/2
4		Sandy Loam	Granular	Strong	No	**Type 2 (LTAR = 0.60)**	<35%	10YR 4/3 (Moist)
6		Sandy Clay Loam	Granular	Moderate	No	**Type 3 (LTAR = 0.35) Treatment Level 1**	<35%	2.5Y 4/2 (Moist)
8		**Total Depth= 7'-6"**						

Soil analysis results indicate both sites on Lot 1 would require an engineered OWTS due to encountering a sandy clay layer (USDA Type 4) at 3.5 and 3.0 feet bgs with thicknesses of 1.0 and 0.5 foot in Test Pits 1 and 2, respectively. The OWTS report from Parr Engineering are presented as Exhibit B.

3.2 Surface water and Groundwater

The proposed septic locations are outside of a 100-year or 500-Year floodplain. Surface water was not evident during GWIs field investigation. Groundwater was not encountered in either test pit. Dawson aquifer bedrock was encountered at 180 feet bgs during drilling of the well having permit number 116298 located on Lot 2.

4.0 Conclusions

Two test pit sites on Lot 1 were selected for a future OWTS. Based on the presence of soil Type 4 in both test pits at a depth less than 4 feet; a professional engineer will be required to design an Engineered Septic System.

REFERENCES

Federal Emergency Management Agency (FEMA). December 12, 2018. https://www.fema.gov/national-flood-hazard-layer-nfhl; nfhl Viewer

Natural Resource Conservation Service (NRCS), August 21, 2017. Web Soil Survey. United States Department of Agriculture: https://websoilsurvey.nrcs.usda.gov

Parr Engineering and Consulting Inc. June 18, 2018. Subsurface Soil Investigation JN 19.231

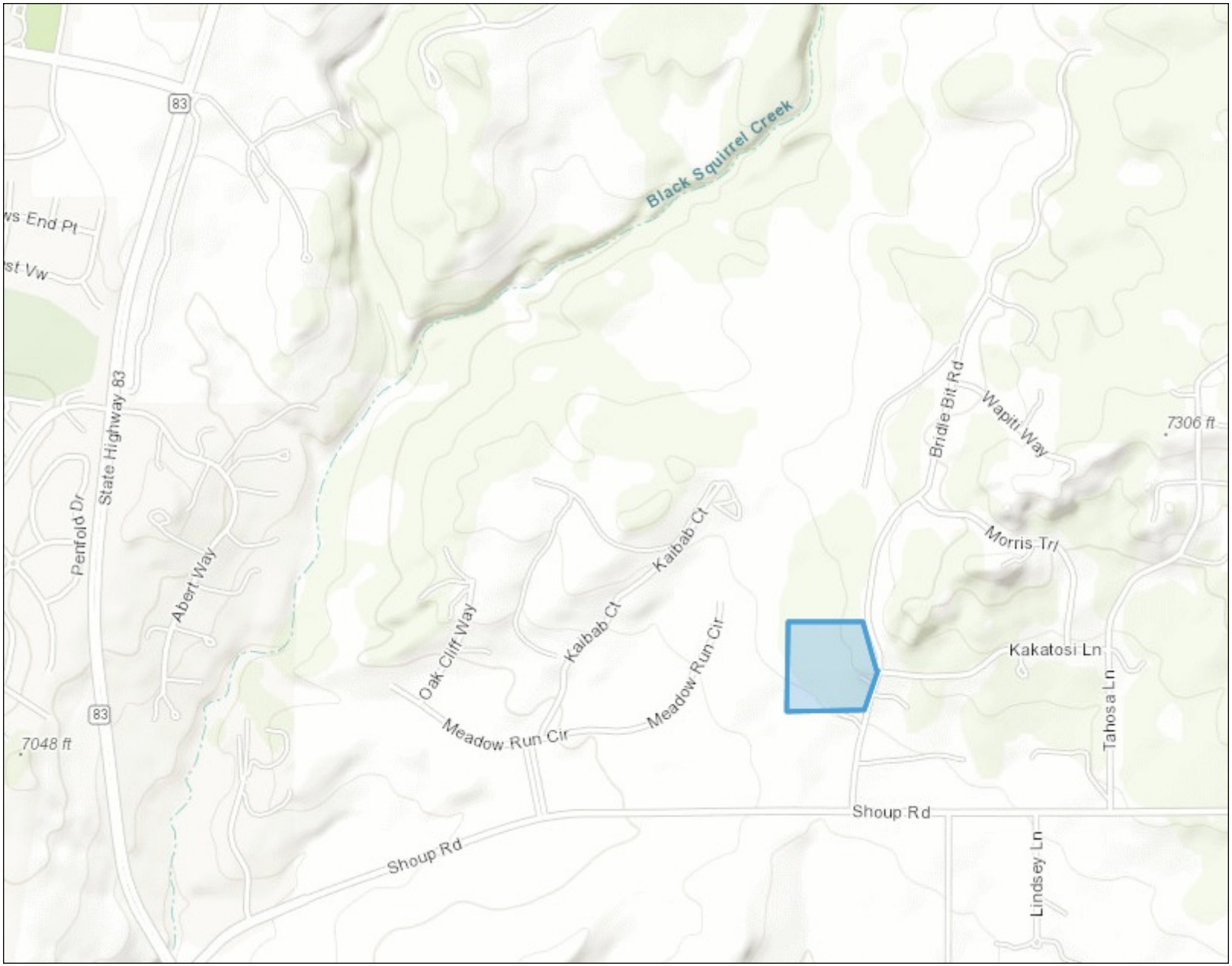
Thorson, Jon P., 2003. *Geologic Map of the Monument Quadrangle, El Paso County, Colorado*. Colorado Geological Survey Open -File Report 02-06.

USDA Soil Conservation Service June 1981 Soil Survey El Paso County Colorado

CDSS
Colorado's Decision Support Systems

PROPERTY LOCATION

FIGURE 1



Legend

County

Location

Notes

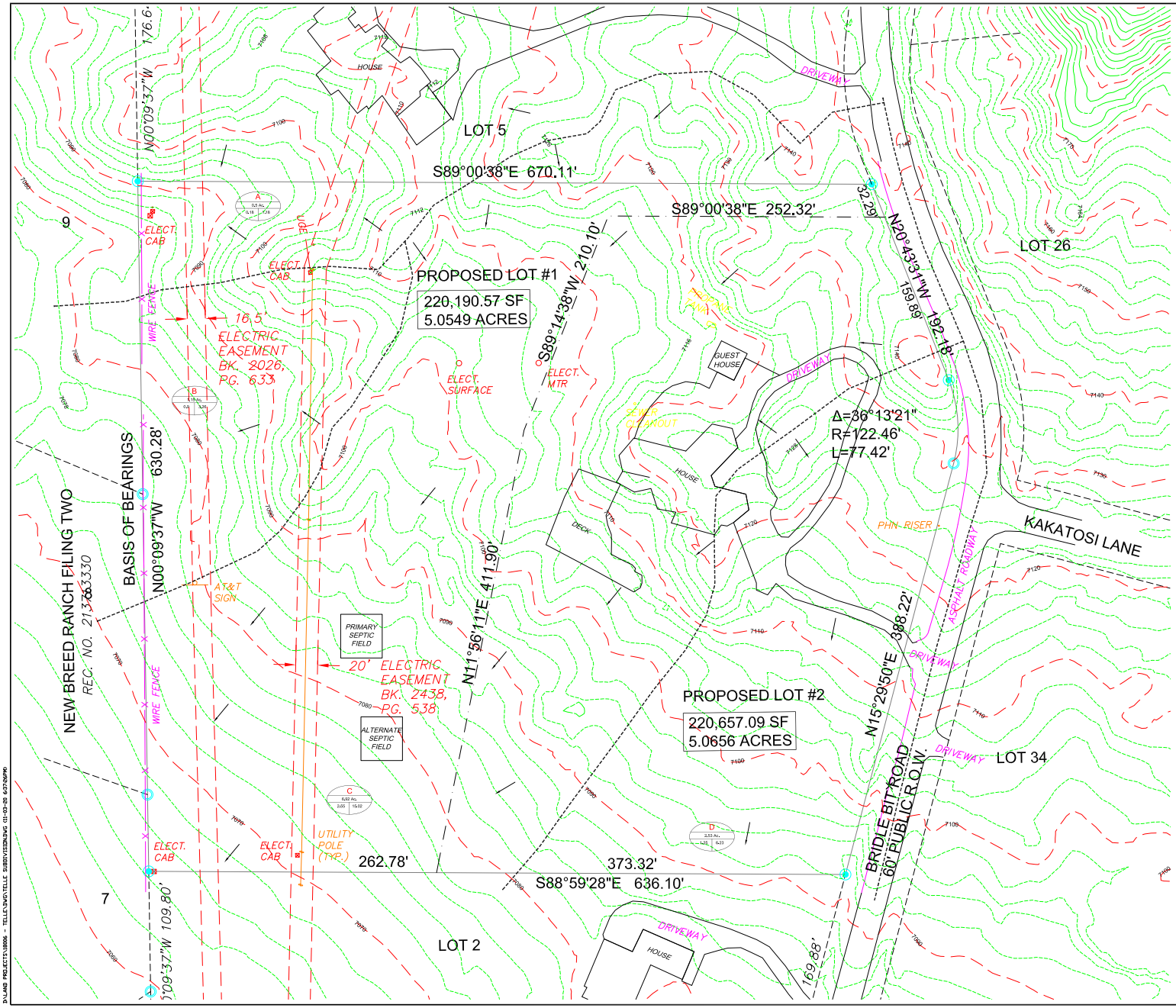
12730 Bridle Bit Road
SE1/4 SE1/4 Sec10 T12S R66W

2,339 0 1,169 2,339 Feet

1: 14,032

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 5/17/2019 2:41:02 PM



1" = 40'

0 5 10 40 80
Scale in Feet

MAJOR WATER SHEDS
KETTLE CREEK

BASIN SUMMARY TABLE

BASIN	AREA (acres)	Q_5 (cfs)	Q_{100} (cfs)
A	0.50	0.18	1.18
B	1.15	0.90	3.26
C	6.92	2.55	15.02
D	2.53	1.25	6.23

SHEET INDEX
1. SITE PLAN

WHITEHEAD ENGINEERING, LLC
CONSULTING CIVIL ENGINEERS
P.O. Box 1551
COLORADO SPRINGS, CO 80901
PHONE (719) 220-4411

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DESIGN AND DRAWINGS
NOT TO BE REUSED
WITHOUT WRITTEN
PERMISSION OF ENGINEER

SHEET TITLE: DRAINAGE PLAN

PROJECT NAME: TELLE SUBDIVISION
EL PASO COUNTY, COLORADO

BENCHMARK:

ELEVATION = xxxx.xx (NGVD 29)

REVISIONS:

SCALE: 1" = 40'

DATE: 11-03-2020

DRAWN BY: DW

CHECKED BY: DW

SHEET NO: 1 OF 1

DRAWING NAME: Telle Subdivision

VIEW: Site Plan

PROJECT NO: 18006

D:\LAND PROJECTS\18006 - TELLE\DWG\TELLE SUBDIVISION.DWG 11-03-20 6:27:26PM

FIGURE 3
Soil Test Pit Locations

PARR ENGINEERING
& CONSULTING, INC.

Christopher L. Parr, P.E. Principal
11590 Black Forest Road, Suite 10, Colorado Springs, CO 80908
Office: 719-494-0404 Cell: 719-659-1313

Google Site Map

EXHIBIT A

Custom Soil Resource Report
Soil Map

[redacted]

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 16, Sep 10, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 8, 2018—May 26, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
40	Kettle gravelly loamy sand, 3 to 8 percent slopes	8.0	79.8%
93	Tomah-Crowfoot complex, 8 to 15 percent slopes	2.0	20.2%
Totals for Area of Interest		**10.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

El Paso County Area, Colorado

40—Kettle gravelly loamy sand, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 368g
Elevation: 7,000 to 7,700 feet
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Kettle

Setting

Landform: Hills
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy alluvium derived from arkose

Typical profile

E - 0 to 16 inches: gravelly loamy sand
Bt - 16 to 40 inches: gravelly sandy loam
C - 40 to 60 inches: extremely gravelly loamy sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively 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 storage in profile: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit:
Hydric soil rating: No

Pleasant

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

93—Tomah-Crowfoot complex, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 36bb
Elevation: 7,300 to 7,600 feet
Farmland classification: Not prime farmland

Map Unit Composition

Tomah and similar soils: 50 percent
Crowfoot and similar soils: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tomah

Setting

Landform: Alluvial fans, hills
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from arkose and/or residuum weathered from arkose

Typical profile

A - 0 to 10 inches: loamy sand
E - 10 to 22 inches: coarse sand
C - 48 to 60 inches: coarse sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Sandy Divide (R049BY216CO)
Hydric soil rating: No

Description of Crowfoot

Setting

Landform: Hills, alluvial fans

Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 12 inches: loamy sand
E - 12 to 23 inches: sand
Bt - 23 to 36 inches: sandy clay loam
C - 36 to 60 inches: coarse sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: Sandy Divide (R049BY216CO)
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit:
Hydric soil rating: No

Pleasant

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

EXHIBIT B

PARR ENGINEERING & CONSULTING, INC.

Christopher L. Parr, P.E. Principal
11590 Black Forest Road, Suite 10, Colorado Springs, CO 80908
Office: 719-494-0404 Cell: 719-659-1313

PROFILE PIT EVALUATION

Date: June 18, 2019 **Job:** JN: 19.231

COLORADO LICENSED DANIEL JOSEPH MIZICKO 52484 06-18-19 PROFESSIONAL ENGINEER

Site Location: 12730 Bridle Bit Road, Colorado Springs, CO 80908

Purpose of Investigation: To determine general subsurface soil conditions at the site location & to formulate design criteria for the proposed On-Site Wastewater Treatment system (OWTS)

Field Procedure: The materials in the various strata of the soil profile pit were visually classified in accordance with the U.S. Department of Agriculture (USDA) standards.

Profile Pit	Yes
Perc Test	-

Date: (Profile Eval) June 10, 2019
Excavator Peak Excavating
Evaluator R.Jaquet

Depth to Groundwater (permanent or seasonal) Pit #1: Not Reached
Depth to Groundwater (permanent or seasonal) Pit #2: Not Reached

Depth to Bedrock - Pit #1: Not Reached
Depth to Bedrock - Pit #2: Not Reached

Other Terrain Features or Soil Conditions: See Attached Site Map

Endorsement: Daniel J. Mizicko P.E.

Profile Pit 1	
Latitude:	**39° 0'56.15"N**
Longitude:	**104°45'39.54"W**
Layer	Soil Type & LTAR
0 - 1'-0"	Topsoil
1'-0" - 2'-6"	**Type 3 (LTAR = 0.35)**
2'-6" - 3'-6"	**Type 4 (LTAR = 0.20)**
3'-6" - 7'-6"	**Type 2 (LTAR = 0.60)**

Profile Pit 2	
Latitude:	**39° 0'55.82"N**
Longitude:	**104°45'39.42"W**
Layer	Soil Type & LTAR
0 - 1'-0"	Topsoil
1'-0" - 2'-6"	**Type 3 (LTAR = 0.35)**
2'-6" - 3'-0"	**Type 4 (LTAR = 0.20)**
3'-0" - 5'-0"	**Type 2 (LTAR = 0.60)**
3'-0" - 5'-0"	**Type 3 (LTAR = 0.35)**

			Location	
			Latitude:	**Longitude:**
Perc #1	N/A	Min./In.	-	-
Perc #2	N/A	Min./In.	-	-
Perc #3	N/A	Min./In.	-	-
	Average: N/A	Min./In.		

PARR ENGINEERING
& CONSULTING, INC.

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Google Site Map

Parr Engineering & Consulting, Inc.
11590 Black Forest Road, Suite 10
Colorado Springs, Colorado 80908
Phone: 719-494-0404

Profile Pit - Log

Job Number:	19.231
Date Evaluated:	06/10/19
Profile Pit#:	TP #1

Excavator:	Peak Excavating	Total Depth:	7'-0"
Logged By:	T.Peachey	STA Slope & Direction:	S 75° W @ 2-3%
Method:	Profile Pit	Latitude:	39° 0'56.15"N
Equipment:	Excavator	Longitude:	104°45'39.54"W

12730 Bridle Bit Road, 80908

Depth (ft.)	Sample Interval	USDA Soil Texture	USDA Soil Structure - Shape	Soil Structure Grade	Redoximorphic Features Present? (Y/N)	Soil Type (from Table 9 in O-14)	% Rock Frag.	Color
		Topsoil						
2		Sandy Clay Loam	Granular	Moderate	No	**Type 3 (LTAR = 0.35)**	<35%	2.5Y 4/3 (Moist)
		Sandy Clay	Blocky	Strong	No	**Type 4 (LTAR = 0.20)**	<35%	10YR 4/2 (Moist)
4		Sandy Loam	Granular	Strong	No	**Type 2 (LTAR = 0.60) Treatment Level 1**	<35%	10YR 4/3 (Moist)
6								
8		**Total Depth= 7'-6"**						
10								

Evidence of Groundwater:	**Not Reached**
Depth to Bedrock:	**Not Reached**

Parr Engineering & Consulting, Inc.
11590 Black Forest Road, Suite 10
Colorado Springs, Colorado 80908
Phone: 719-494-0404

Profile Pit - Log	
Job Number:	19.231
Date Evaluated:	06/10/19
Profile Pit#:	TP 2

Excavator:	Peak Excavating	Total Depth:	7'-6"
Logged By:	T.Peachey	STA Slope & Direction:	S 30° W @ 2-3%
Method:	Profile Pit	Latitude:	39° 0'55.82"N
Equipment:	Excavator	Longitude:	104°45'39.42"W

12730 Bridle Bit Road, 80908

Depth (ft.)	Sample Interval	USDA Soil Texture	USDA Soil Structure - Shape	Soil Structure Grade	Redoximorphic Features Present? (Y/N)	Soil Type (from Table 9 in O-14)	% Rock Frag.	Color
		Topsoil						
2		Sandy Clay Loam	Granular	Moderate	No	**Type 3 (LTAR = 0.35)**	<35%	2.5Y 4/3 (Moist)
		Sandy Clay	Blocky	Strong	No	**Type 4**	<35%	10YR 4/2
4		Sandy Loam	Granular	Strong	No	**Type 2 (LTAR = 0.60)**	<35%	10YR 4/3 (Moist)
6		Sandy Clay Loam	Granular	Moderate	No	**Type 3 (LTAR = 0.35) Treatment Level 1**	<35%	2.5Y 4/2 (Moist)
8		**Total Depth= 7'-6"**						
10								

Evidence of Groundwater:	**Not Reached**
Depth to Bedrock:	**Not Reached**

PARR ENGINEERING
& CONSULTING, INC.

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PROFILE PIT EVALUATION REPORT - General Notes, Regulations & Limitations

General Notes:

This report presents the data obtained pertaining to a Profile Pit Evaluation conducted at the locations indicated on the included Site Map. The purpose of this investigation was to evaluate subsurface soil-profile(s) in the area of the proposed Soil Treatment Area (STA) and to establish design criteria for an On-Site Wastewater Treatment system (OWTS).

Board of Health Regulations & Regulation No. 43 - Engineered Systems:

At proposed soil treatment area locations where any of the following conditions are present, the system shall be designed by a professional engineer and approved by the Health Department:

1. For soil types 3A, 4, 4A, 5, R-0, R-1 and R-2, and Treatment Levels TL2, TL2N, TL3, and TL3N as specified in Tables 10-1 and 10-1A of this regulation;

2.The maximum seasonal ground water surface is less that four feet below the bottom of the proposed absorption system.

3. A restrictive layer exists less that four feet below the bottom of the proposed absorption system

4. The ground slope is in excess of thirty percent

5. Pressure distribution is used.

Limitations:

The data presented in this report is specific to the locations of the Profile Pit locations evaluated. It must be understood and accepted that subsurface conditions can, and often do vary across any given area. These variations may not become evident until the time of system installation. If the subsurface conditions are discovered to vary anywhere across the system footprint, Parr Engineering AND the Design Engineer must be notified immediately for further evaluation. If another individual or party relies on this report, they shall indemnify and hold Parr Engineering & Consulting, Inc. harmless for any damages, losses, or expenses that may incur as a result of its use, except as allowed by law.