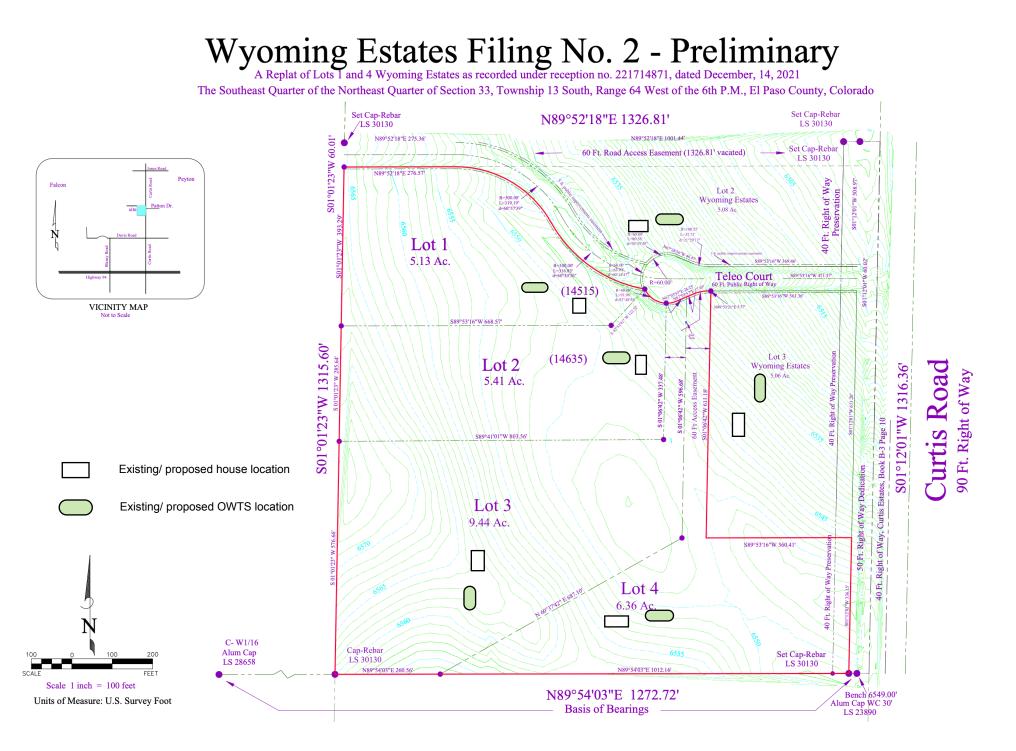
# Wyoming Estates Preliminary Plan

# Filings #1 and #2

# Compilation of Soils, Geology, and OWTS

The following reports have been compiled from engineers evaluating the soils and geology for Wyoming Estates Filing 1 and 2 (a minor subdivision and preliminary plan). The project site was originally 3050 Curtis Rd, a 40 acre site which was approved for a minor subdivision called Wyoming Estates in January 2022. The additional information provided here is the soils tests for Onsite Wastewater Treatment Systems for Filing #2 (Preliminary Plan), which is comprised of the final 2 lots (a re-plat of Filing 1, lot 4). See the map on the following page.

The original soils and geology report from the minor subdivision is included here in the first 45 documents (pages 3-48). That report depicts lot 4, a 21 acre parcel, and provides general soil info for that parcel. The additional soils reports provided here (pages 48-59) are specific to the individual lots being proposed in this Preliminary Plan.



Soils and Geology And Wastewater Treatment System Evaluation For Wyoming Estates 3050 N. Curtis Road

> Final October 5, 2020

Julia M. Murphy MS, PG Professional Geologist



Groundwater Investigations LLC 11590 Black Forest Road Ste 15 Colorado Springs, CO 80908 (719) 338-1805

### **PROJECT DESCRIPTION**

The following presents Soils and Geology for the proposed Wyoming Estates Minor Subdivision (Project Site) located in the SE ¼ of the NE ¼ of Section 33, Township 13 South, Range 64 West of the 6<sup>th</sup> P.M. in the County of El Paso (Figure 1).

The Project Site is comprised 40.01 acres of vacant land to be subdivided into 4 single- family residential RR-5 (Figure 2). The water supply for each lot will be from individual wells and wastewater will be treated by individual non-evaporative septic systems.

### GEOLOGY

The Project Site is located within the Falcon Quadrangle near the southeastern edge of the Denver Basin, a geologic structural depression. This asymmetrical structural basin is shallowdipping toward the northeast. The uppermost/surfical deposits are unconsolidated Quaternary eolian deposits which include Lots 1, 3 and 4 and the western portion of Lot 2; the northeast corner of the Project Site (eastern portion of Lot 2) are older gravels and alluvium (Figure 3). These are underlain in vertical succession, by the Denver, Arapahoe and Laramie Fox Hills Aquifers. Residential Wells in the area can be found completed in the Denver and Arapahoe Aquifers. The base of the Denver Aquifer is about 490 feet below ground surface (bgs) and the Arapahoe Aquifer is from about 515 (top) to 1000 ft bgS (CDSS, SB5).

The Project Site generally slopes to the northeast ranging from 1% to 9%. In the southwest corner, drainage is to the southeast. Figure 4 provides the Project Site Surface Contours.

### SOILS

The National Resource Conservation Service (NRCS) has identified three soil types with a northeast trend on the Property (Figure 5).

Type	Description	Percent Coverage
8	Blakeland Loamy Sand, 1 to 9 percent Slope	46.8
19	Columbine gravelly sandy loam sand, 0 to 3 % slopes	1.8
95	Truckton Sandy Loams,1 to 9 percent Slope	51.4

Attachment 1 provides a complete description of the soils. The soil is classified a "well" to "excessively well" drained. Runoff potential is low with no ponding or flooding which is consistent with historical aerial photos.

### FIELD INVESTIGATIONS

### OTWS

Field investigations at the Project Site consisted of excavating two profile pits at each proposed lot (8 total) to identify onsite wastewater treatment system (OWTS) locations (PARR 2018,), Figure 6. The OWTS profile pits were excavated to a maximum depth of 8.5 feel below the ground surface. Samples were collected from select intervals and evaluated for soil properties. At locations tested on Lots 2, 3 and 4, a conventional, non-engineered onsite wastewater treatment system was determined to be acceptable. At the locations tested within Lot 1, results indicate that an engineered onsite wastewater treatment system is needed. Table 1 summarized the field investigation results. Attachment 3 provides the detained soil engineering reports.

### **Pavement Design**

Two test holes were evaluated for a proposed gravel roadway for pavement design (Raiper, 2019 Figure 7). Soil samples were collected for testing which included sieve analysis and Atterberg limits in addition to determining resistance values (R-values). The results are summarized in Table 2.

TABLE 1	ioils Testing for Onsite Wastewat
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### TABLE 2

Location	Depth (f)	Plasticity Index	*•Paysing ==2(0)	Monsture Content (**)	USCS Soil Classification	Tested R-Value
1191	1.3	NP	26	4.2	SM	76
1194	N 10	6	30	5.1	SC-SM	
TP2	11	NP	17	3.6'	SM	
112	1.5	NP	20	14	SM	

It was reported for the locations tested, "there was a very (low) potential for swell due to the sandy composition of site soils which consist of non-plastic to low plasticity silty sand and silty clayey sand soils with low percentage of particles passing the #200 sieve screen. Therefore, there is no need to provide any additional stabilization or treatments to subgrade soils" (Raiper, 2019)

### GROUNDWATER

Groundwater was not encountered in any of the OWTS test pit and was not evident in the profile test pits a week following excavation. There are no existing wells on the Project Site. Shallow alluvial wells in the area occur in the older gravels and alluviums to the northeast (Soil Type 19 on Figure 5, Qgo Figure 3) which are also on the eastern portion of Lot **3**. USGS reported groundwater levels in a Well labeled as SCO1306433AAA1 and located just north of Lot 3. Groundwater levels were measured consistently over the last 40 years and consistently occurs at an elevation of about 6480 ft amsl (Attachment 2) approximately 20 feet below the northeast corner of Lot **3**. Based on review of the geology, well reports, and surface drainage, this Is likely the location /elevation of the highest water table underlying at the Project Site.

### GEOLOGIC HAZARDS

The Project Site was evaluated for geologic hazards that may impact development. Hazards identified in the El Paso County Land Development Code including: Mining, wildfire, highwater table or polluted water, landfills, fill areas, contamination; airports and major utility facilities, and landslides were not identified on the Project Site. The National Flood Hazard map delineated the Property and surrounding area an "area of Minimal Flood Hazard" (FEMA 2018). The Project Site is not located in a flood plain (Figure 8).

4 Page

Groundwater Investigations LLC 11590 Black Forest Road Suite 15 Colorado Springs CO 80908 (719) 338-1805

### Erosion

The soils at the Project Site are susceptible to erosion. Currently, the property is covered with prairie grass. Construction will enhance erosion potential however the slopes are mild and once the disturbed surface is revegetated, erosion should be low.

### **Expansive Soils**

Expansive soils were not present within the soils samples collected at the 8 profile pits. The spoils were described as having a sandy composition, non-plastic to low plastic sands, silty clayey sandy soil. Due to the potential for variability, additional borings will be necessary prior to foundation excavation and subsequently re-evaluated upon completion of the foundation excavation and prior to the placement of any framework.

### Mineral Resources

The Project Site is not included in the maps of aggregate deposits or known mineral resources. Colorado Geological Mineral Derivative Map indicates a low potential for the Project Site to contain economically viable mineral resources.

### Conclusion

The Project Site is compatible with the proposed development of single-family residential lots. Soils tested on Lot 1 were identified as requiring an engineered individual wastewater treatment system. Hazards are minimal and can be mitigated by standard practices.



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Mineral Resources. https://cologeosurvey.maps

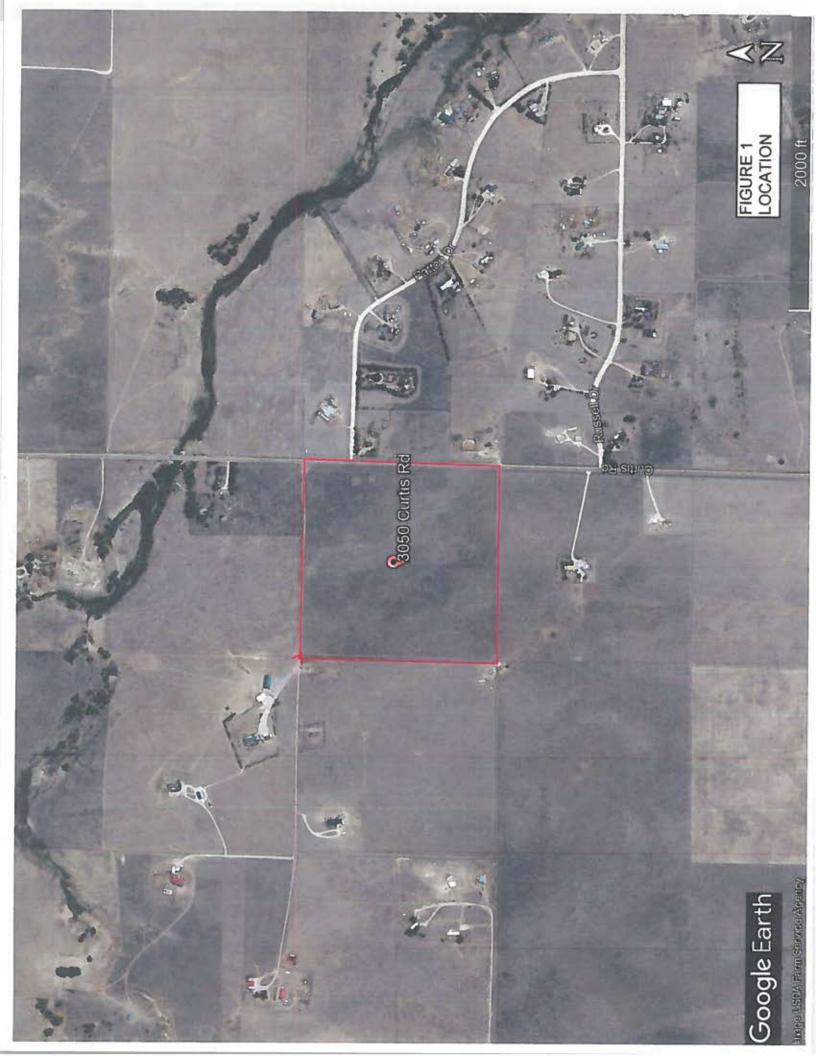
National Resource Conservation Service, https://websoilsurvey.nrcs.usda.gov

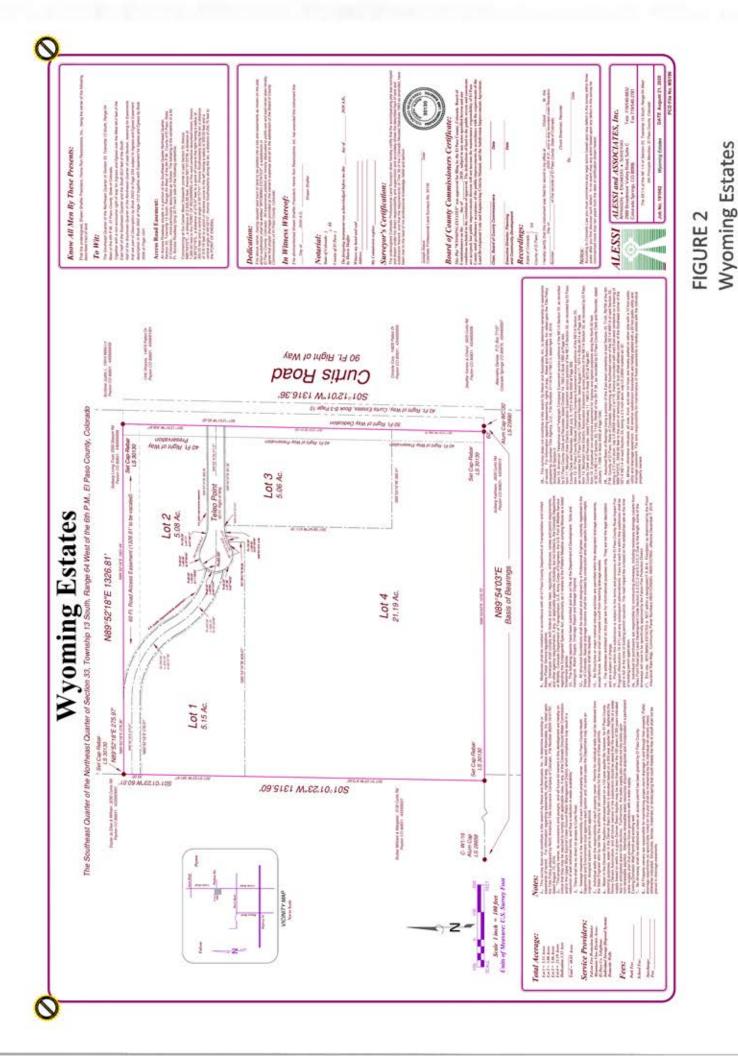
Parr Engineering and Consulting Inc. September 27, 2018. Profile Pits Subdivision JN 18.394, 18.395, 18.396, 18.397

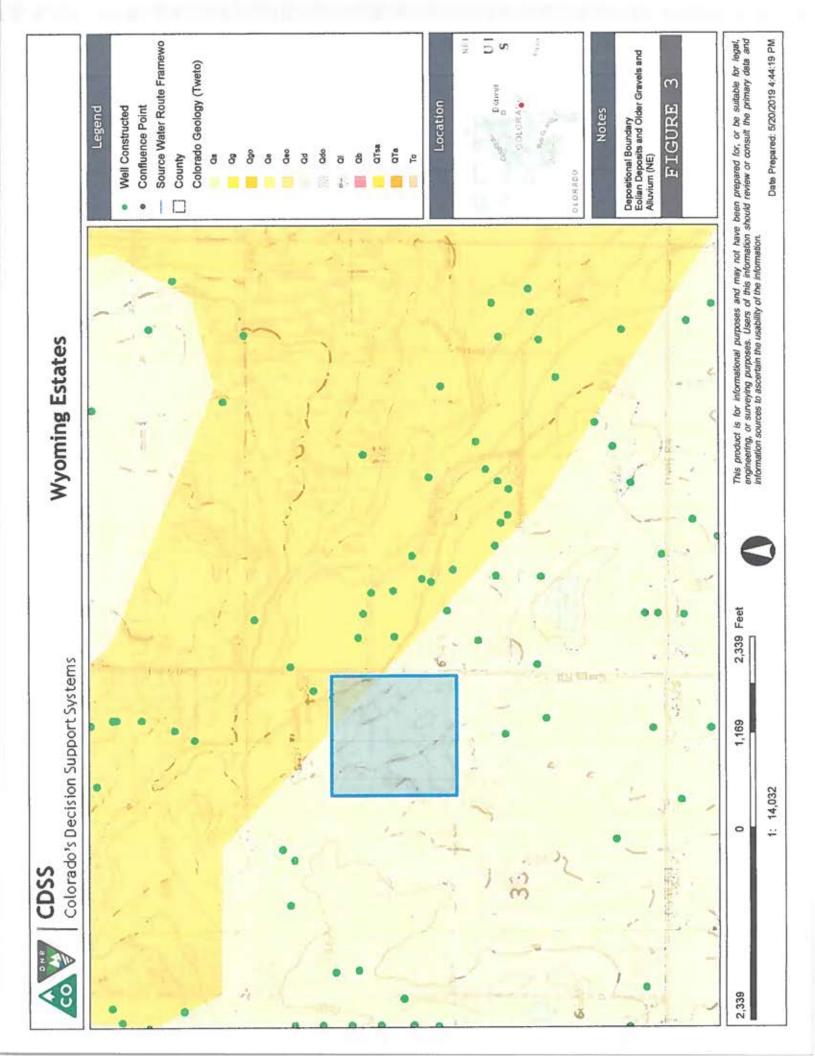
Rapier, Delbert, Protex, Geotechnical Pavement Design, Curtis Road and David Road Job No. 8619, January 9, 2019.

Schwochow, S.D; et al. 1974. Atlas of Sand, Gravel, and Quarry Aggregate Resources, Colorado Front Range Counties. Colorado Geological Survey, Special Publication 5-B.

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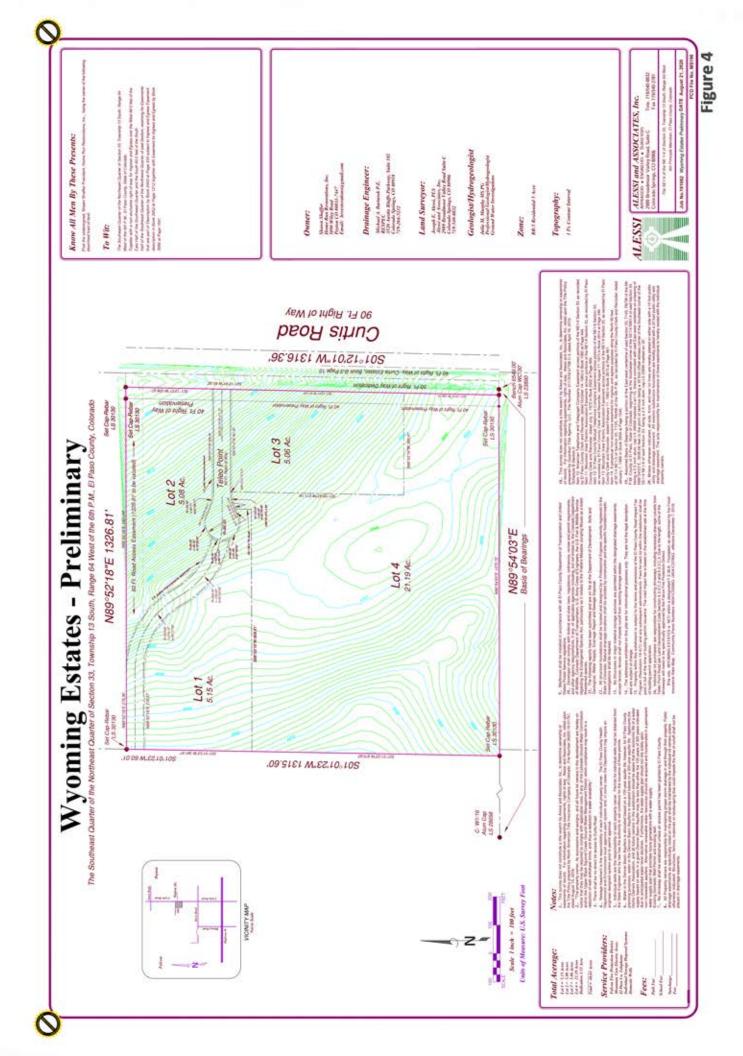
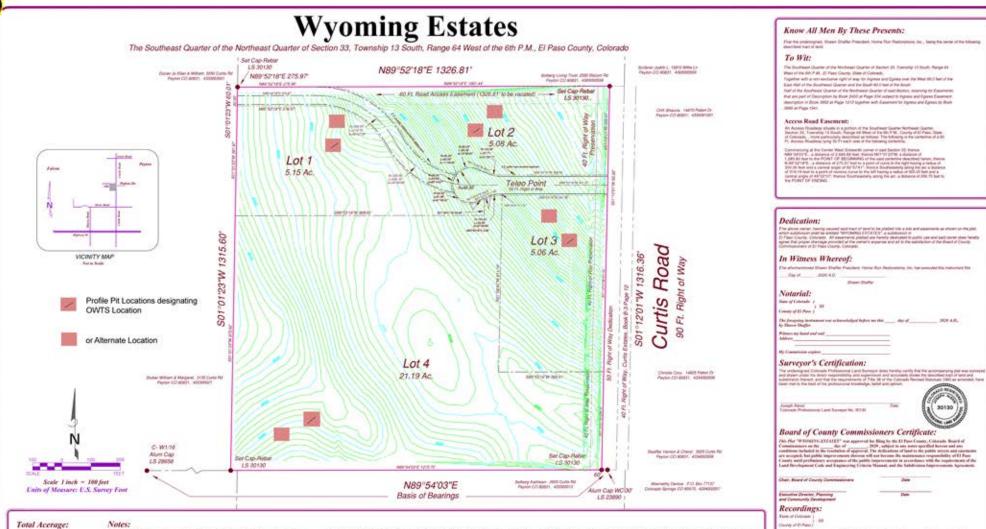




FIGURE 6



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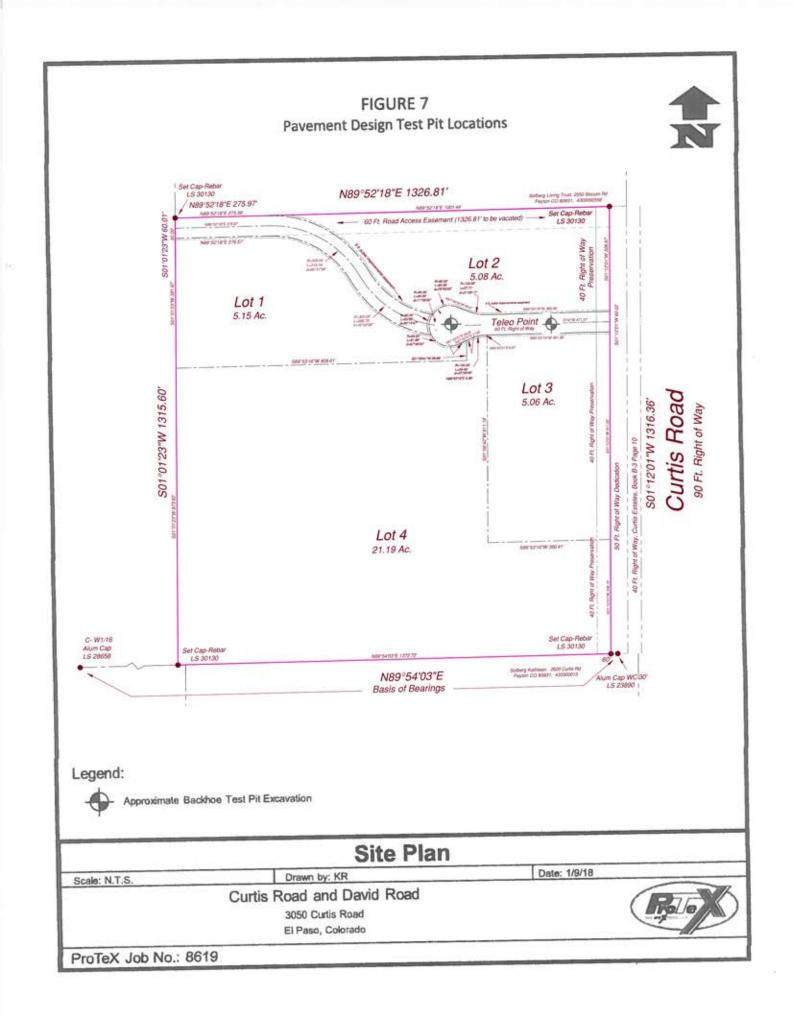
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# National Flood Hazard Layer FIRMette Figure 8



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# **ATTACHMENT 1**

SOILS

2

Soil Map—EI Paso County Area, Colorado (Wyoming Estates)

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	Soil Map Unit Lines	Ð	Wet Spot	Enlargement of mape beyond the scale of mapping can cause
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Ж	Gravel Pit	2	US Routes	Maps from the Web Soil Survey are based on the Web Mercator
-:	Gravelly Spot		Major Roads	projection, which preserves direction and shape but distorts
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0	Miscellaneous Water			soli survey Area. El Paso County Area, Colorado Survey Area Data: Version 16, Sep 10, 2018
0	Perennial Water			Soil map units are labeled (as space allows) for map scales
>	Rock Outcrop			1:50,000 or larger.
+	Saline Spot			Date(s) aerial images were photographed: Jun 7, 2016—Aug 17, 2017
X	Sandy Spot			The orthonhord or other hase man on which the soil lines were
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0	Sinkhole			imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.
А	Slide or Slip			
10	Sodic Spot			

4/1/2019 Page 2 of 3

Web Soil Survey National Cooperative Soil Survey

USDA Natural Resources Conservation Service

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	18.2	46.8%
12	Bresser sandy loam, cool, 3 to 5 percent slopes	0.0	0.0%
19	Columbine gravelly sandy loam, 0 to 3 percent slopes	0.7	1.8%
95	Truckton loamy sand, 1 to 9 percent slopes		51.4%
Totals for Area of Interest		38.9	100.0%

# Map Unit Legend

Map Unit Description: Blakeland loamy sand, 1 to 9 percent slopes-El Paso County Area, Colorado

## El Paso County Area, Colorado

### 8—Blakeland loamy sand, 1 to 9 percent slopes

### Map Unit Setting

National map unit symbol: 369v Elevation: 4,600 to 5,800 feet Mean annual precipitation: 14 to 16 inches Mean annual air temperature: 46 to 48 degrees F Frost-free period: 125 to 145 days Farmland classification: Not prime farmland

### Map Unit Composition

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

### **Description of Blakeland**

### Setting

Landform: Hills, flats Landform position (three-dimensional): Side slope, talf Down-slope shape: Linear Across-slope shape: Linear Parent material: Alluvium derived from sedimentary rock and/or eolian deposits derived from sedimentary rock

### **Typical profile**

A - 0 to 11 inches: loamy sand AC - 11 to 27 inches: loamy sand C - 27 to 60 inches: sand

### **Properties and qualities**

Slope: 1 to 9 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 to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Available water storage in profile: Low (about 4.5 inches)

### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: A Ecological site: Sandy Foothill (R049BY210CO) Hydric soil rating: No Map Unit Description: Blakeland loamy sand, 1 to 9 percent slopes-El Paso County Area, Colorado

**Minor Components** 

Other soils Percent of map unit: Hydric soil rating: No

Pleasant

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

# **Data Source Information**

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



Map Unit Description: Columbine gravelly sandy loam, 0 to 3 percent slopes--El Paso County Area, Colorado

### El Paso County Area, Colorado

### 19-Columbine gravelly sandy loam, 0 to 3 percent slopes

### Map Unit Setting

National map unit symbol: 367p Elevation: 6,500 to 7,300 feet Mean annual precipitation: 14 to 16 inches Mean annual air temperature: 46 to 50 degrees F Frost-free period: 125 to 145 days Farmland classification: Not prime farmland

### Map Unit Composition

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

### Description of Columbine

### Setting

Landform: Flood plains, fan terraces, fans Down-slope shape: Linear Across-slope shape: Linear Parent material: Alluvium

### **Typical profile**

A - 0 to 14 inches: gravely sandy loam C - 14 to 60 inches: very gravely loamy sand

### **Properties and qualities**

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 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 2.5 inches)

### Interpretive groups

Land capability classification (Irrigated): 4e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: A Ecological site: Gravelly Foothill (R049BY214CO) Hydric soil rating: No

### **Minor Components**

Fluvaquentic haplaquolis Percent of map unit: Landform: Swales Map Unit Description: Columbine gravelly sandy loam, 0 to 3 percent slopes-El Paso County Area, Colorado

Hydric soil rating: Yes

Pleasant

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

Other solls

Percent of map unit: Hydric soil rating: No

# **Data Source Information**

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



Map Unit Description: Truckton loamy sand, 1 to 9 percent slopes-El Paso County Area, Colorado

### El Paso County Area, Colorado

### 95-Truckton loamy sand, 1 to 9 percent slopes

### Map Unit Setting

National map unit symbol: 36bd Elevation: 6,000 to 7,000 feet Mean annual precipitation: 14 to 16 inches Mean annual air temperature: 46 to 50 degrees F Frost-free period: 125 to 145 days Farmland classification: Not prime farmland

### Map Unit Composition

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

### **Description of Truckton**

### Setting

Landform: Hills, flats Landform position (three-dimensional): Side slope, talf 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 8 inches: loamy sand Bt - 8 to 24 inches: sandy loam C - 24 to 60 inches: coarse sandy loam

### Properties and qualities

Slope: 1 to 9 percent Depth to restrictive feature: More than 80 inches Natural drainage class: Well drained Runoff class: Low Capacity of the most limiting layer to transmit water (Ksat): High (1.98 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 5.4 inches)

### Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 6e Hydrologic Soil Group: A Ecological site: Sandy Foothill (R049BY210CO) Hydric soil rating: No



Map Unit Description: Truckton loamy sand, 1 to 9 percent slopes-El Paso County Area, Colorado

**Minor Components** 

Other solls Percent of map unit: Hydric soil rating: No

Pleasant

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

# **Data Source Information**

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



# ATTACHMENT 2

- 5

# GROUNDWATER LEVEL

.



COLORADO

**Division of Water Resources** 

Department of Natural Resources

### **GROUNDWATER DETAILS**

Well Name:	SC01306433AAA1
Permit Number:	
WDID:	
Data Source:	USGS

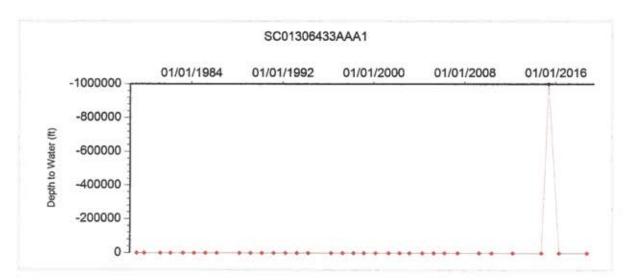
Location Number: SC01306433AAA1 USGS Site ID: 385250104331301 Applicant/Contact:

### **Physical Location**

Dist N/S	Dist E/W	Q10	Q40	Q160	Sec	Township	Range	PM	UTMx	UTMy	Location Accuracy
518 N	76 E		NE	NE	33	13.0 S	64.0 W	S	538682.5	4303607.1	GPS

Division: 2 District: 10		Ten Most Rec	ent Readings	
County:     EL PASO       Designated Basin:     UPPER BLACK SQUIRREL CREEK       Management District:     UPPER BLACK SQUIRREL	Date	Depth to Water Feet Below Land Surface	Elevation of Water (ft)	Change From Previous Measure (ft)
Construction Information	10/02/2018	7.97	6480.61	-1.19
construction monitation	04/21/2016	6.78	6481.80	-1000005.78
Surface Elevation (ft): 6488.58	05/15/2015	-999999.00	1006487.58	1000007.20
Well Depth (ft): 75.00	10/02/2014	8.20	6480.38	0.77
Depth to Base of Grout (ft):	03/27/2012	8.97	6479.61	-1.32
Depth to Top of Perforated Casing (ft):	05/21/2010	7.65	6480.93	-0.31
Depth to Bottom of Perforated Casing (ft):	04/14/2009	7.34	6481.24	0.12
Source Aquifer(s):	05/30/2007	7.46	6481.12	-0.14
Well Measurement Summary	04/05/2006	7.32	6481.26	-0.30
Start Date: 03/14/1979 End Date: 10/02/2018	04/21/2005	7.02	6481.56	0.00

Number of Measurements: 34



4/25/2019

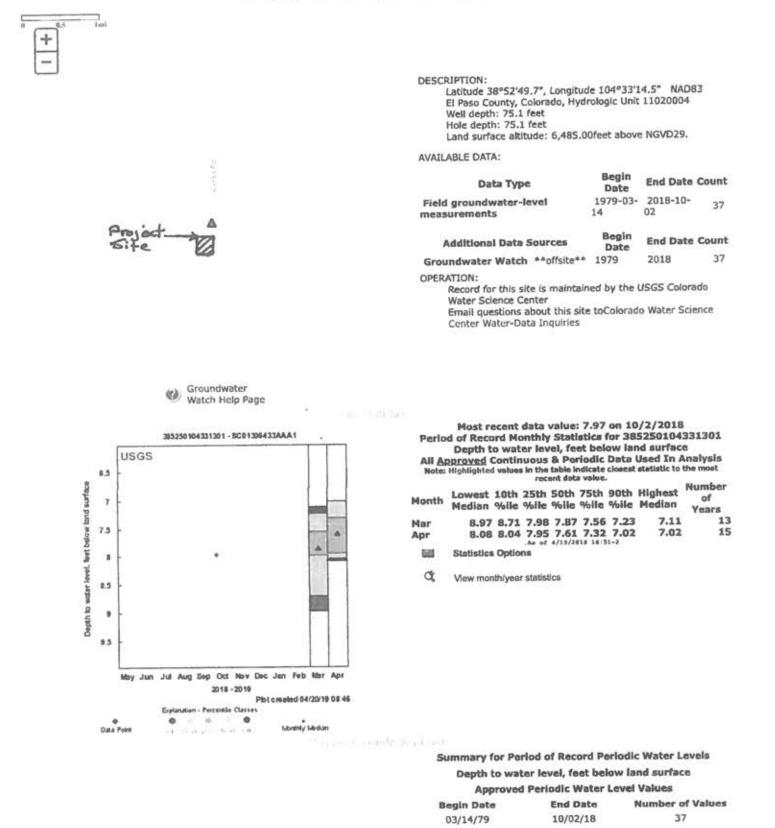


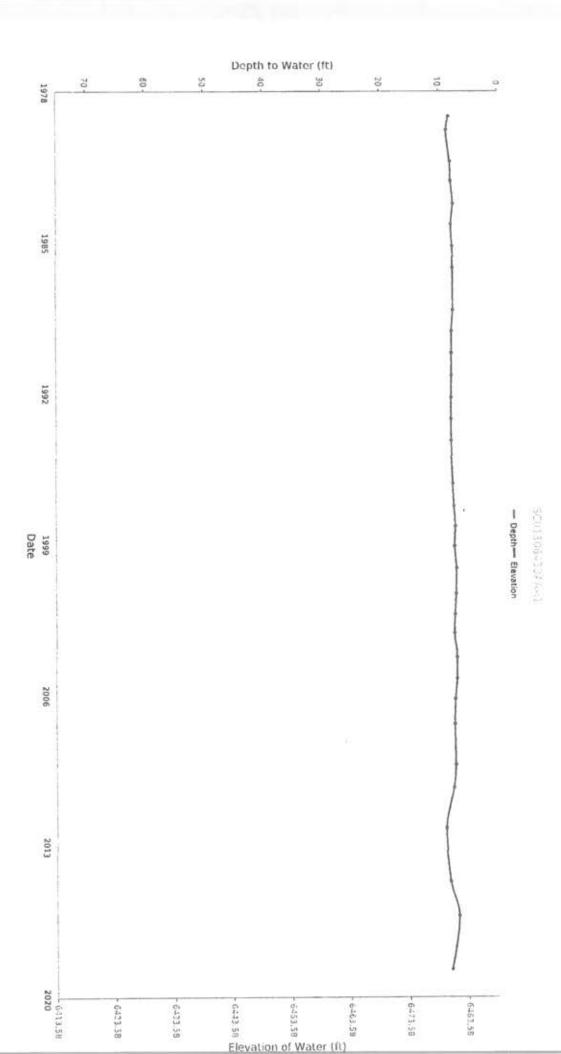
intronal provident Monach

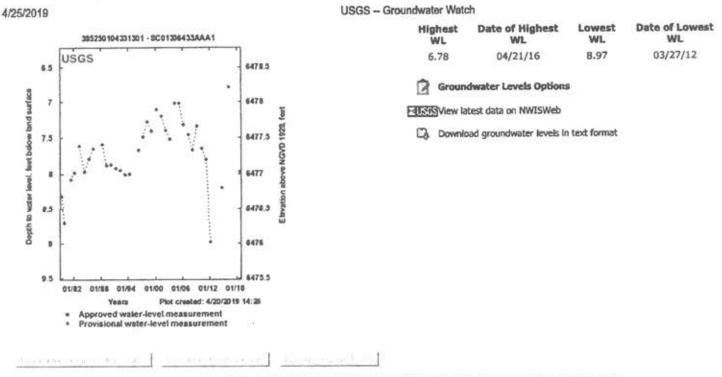
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\*References to non-Department of the Interior (DOI) products do not constitute an endorsement by the DOI.

U.S. Department of the Interior | U.S. Geological Survey URL: https://groundwaterwatch.usgs.gov/AWLSites.asp Page Contact Information: Contact the USGS Office of Groundwater Last update: Friday, August 10, 2018 at 08:39

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# **ATTACHMENT 3**

1 ....

SOIL SAMPLES OWTS

# 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

the second se	ATION	lahi	JN: 18.395	
ate:	September 27, 2018	Job:	314. 10.000	10011000
ite	3050 Curtis Road, Lot 1			BON OBERT
ocation:	Peyton, CO 80831			09-27-18
<u>outoni</u>	(Lot number updated 6/7/19)			51410 X
	1			
urpose of	To determine general subsurface soil co	nditions at the site location & to		Bar K Dily
nvestigation:	formulate design criteria for the propose	d On-Site Wastewater Treatment		FSCIENCENCE
	system (OWTS)			COUNAL
	The materials in the various strata of the	soil profile pit were visually		
ield	classified in accordance with the U.S. De	epartment of Agriculture (USDA)		
Procedure:	standards.			
Profile Pit	YES			Profile Pit 1
Perc Test	-		Latitude:	38°52'41.42"N
			Longitude:	104°33'25.06"W
Date: (Profile Eval)	September 18, 2018		Layer	Soil Type & LTAR
Excavator	Homeowner		0 - 1'-0"	Topsoil
Evaluator	R.J & S.D.		1'-0" - 6'-0"	Type 2 (LTAR=0.60)
			6'-0" - 8'-6"	Type 4 (LTAR=0.20)
Depth to Groundw	ater (permanent or seasonal) Pit #1:	Not Reached	-	-
	ater (permanent or seasonal) Pit #2:			
				Profile Pit 2
Depth to Bedrock	- Pit #1:	Not Reached	Latitude:	38°52'41.10"N
Depth to Bedrock	- Pit #2:	Not Reached	Longitude:	104°33'24.94''W
			Layer	Soil Type & LTAR
			0 - 1'-0"	Topsoil
Other Terrain Feat	tures or Soil Conditions: See Attach	ed Site Map	1'-0" - 3'-0"	Type 2 (LTAR=0.60)
			3'-0" - 8'-6"	Type 4 (LTAR=0.20)
Endorsement:	Jared R. Dumke, P.E.		-	
				Location
			Latitude	the second se
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.

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



		rr Engineerir 90 Black Forest		ing, me.	Job Number:			18.39	
	Col	lorado Springs, C	olorado 80908		Date Evaluated:	09/:			
UL	Pho	one: 719-494-040	14		Profile Pit#:				
xcava	tor:		owner	-	Total Depth:			8'-6	
ogged		R.J. 8	& S.D.		STA Slope & Direc	38°52'41.			
Netho			le Pit		Latitude:				
quipm	nent:	Exca	vator		Longitude:		104°.	33'25.06"	
	rval			3050 C	urtis Road, Lot 1, 8	30831			
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	( <del>)</del>			
2		Sandy Loam	Granular	Moderate	No	Type 2 (LTAR = 0.60) Treatment Level 1	<35%	10YR 3/ (Moist)	
8		Clay	Blocky	Strong	No	Type 4 (LTAR = 0.20) Treatment Level 1	<35%	2.5Y 5/4 (Moist)	
		Total Depth=	8'-6"						
10	-	1							
viden	ce of G	roundwater:		Not Reache	d				
lonth (	to Bedr	ock:		Not Reache	d				

# 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

STA SOIL EVALUA					
Date:	September 27, 2018		Job:	JN: 18.396	Adaman
Site	3050 Curtis Road, Lot 2				SPADU LICENSE
Location:	Peyton, CO 80831				8 .09-27-18 ··· · · ·
Location.	(Lot number updated 6/7/	(19)			HE FALLO S
	(Lot number apacite an				54410 m
Purpose of	To determine general subsurfac	ce soil conditions	s at the site location & to		Ban K Ditte
Investigation:	formulate design criteria for the	proposed On-Si	ite Wastewater Treatment		
htter and a second seco	system (OWTS)				CONAL ENGLASS
Field	The materials in the various str	ata of the soil pro	ofile pit were visually		
Field	classified in accordance with th	e U.S. Departme	ent of Agriculture (USDA)		
Procedure:	standards.				
D-SI-DA	VE0				Profile Pit 1
Profile Pit	YES			Latitude:	38°52'40.93"N
Perc Test	-			Longitude:	104°33'18.76''W
				Layer	Soil Type & LTAR
Date: (Profile Eval)	September 18, 2018			0 - 1'-0"	Topsoil
Excavator	Homeowner			1'-0" - 8'-6"	Type 3 (LTAR=0.35)
Evaluator	R.J & S.D.			1-0-8-0	Type 5 (LTAR=0.55)
		D'4 #4	Not Reached		
	ter (permanent or seasonal		Not Reached	L	
Depth to Groundwa	iter (permanent or seasonal	NOT Reached		Profile Pit 2	
	D14 #4		Not Reached	Latitude:	38°52'41.21"N
Depth to Bedrock -			Not Reached	Longitude:	104°33'18.03"W
Depth to Bedrock -	Pit #2:		Not Nederloa	Layer	Soil Type & LTAR
				0 - 1'-0"	Topsoil
	o " o d'' O.	Attached Cit	a Man	1'-0" - 8'-6"	Type 3 (LTAR=0.35)
Other Terrain Featu	ures or Soil Conditions: See	Attached Sit	e map	-	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Jared R. Dumke, P.E.				-
Endorsement:	Jaled R. Dullike, F.L.				
				The second second second	Location
				Latitude	: Longitude:
Perc #1	N/A		Min./In.	-	-
Perc #2	N/A	C. Wester Verster	Min./In.	-	-
Perc #3	N/A		Min./In.	-	-
	Average:	N/A	Min./In.		
Recommendations:	(1) A conventional non-e	ngineered On	-Site Wastewater Treat	ment system (OW	TS) is acceptable for this site.
Recommendations.	(I) A conventional, non-e	ingineered on			
			the second se	and the second se	

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



		<b>P</b> · · ·		·	Profile Pit - Log			
		rr Engineerin		ting, Inc.	Job Number:			18.39
		90 Black Forest I orado Springs, C		1	Date Evaluated:	09/1		
	Pho	one: 719-494-040	4		Profile Pit#:			Pit #
xcavat	or:	Home	owner		Total Depth:			8'-6
ogged	By:	R.J. 8	k S.D.		STA Slope & Direc	ction:	N	25° E @ 4
Method	1:	Profi	le Pit		Latitude:			52'41.10"
quipm	ent:	Exca	vator		Longitude:		104°3	33'24.94"\
	rval			3050 Cu	rrtis Road, Lot 1, 8	80831	W	
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			
-+					1. ( )	Type 2		
2		Sandy Loam	Granular	Moderate	No	(LTAR = 0.60) Treatment Level 1	<35%	10YR 3/ (Moist)
4								
6		Clay	Blocky	Strong	No	Type 4 (LTAR = 0.20) Treatment Level 1	<35%	2.5Y 5/4 (Moist)
		Tatal Dauth	01.61					
		Total Depth=	0-0					
10		1						
		roundwater:		Not Reache				(1)
	to Bedr	ock:		Not Reache	d			

Excavator: Logged By: Method: Equipment	R.J.	Road, Suite 10 Colorado 80908 04 eowner	ting, Inc.	Profile Pit - Log Job Number: Date Evaluated: Profile Pit#:			18.39 09/18/1 Pit #	
Logged By: Method:	Colorado Springs, ( Phone: 719-494-04 Home R.J.	Colorado 80908 04 eowner		Contraction of the local division of the loc			and the second	
.ogged By: Method:	Phone: 719-494-04 Home R.J.	04 eowner		Profile Pit#:			Pit #	
Logged By: Method:	R.J.					Pit #		
Method:	and the second se	8 S D		Total Depth:			8'-6	
	Prot	0. 5.0.		STA Slope & Direc	tion:	N	35° E @ 4	
Equipment		file Pit		Latitude: 38°52'40.93				
	: Exca	avator		Longitude:		104°3	33'18.76"	
	IPA		3050 Cu	urtis Road, Lot 2, 8	30831			
E E		USDA Soil	Soil	Redoximorphic	Soil Type			
E S	USDA Soil	Structure -	Structure	Features	(from Table 9	% Rock	Color	
Depth (ft.)	USDA Soil Texture	Shape	Grade	Present? (Y/N)	in O-14)	Frag.		
		Topsoil						
		1		<u> </u>				
2								
4								
					Type 3		1	
	Sandy Clay	Granular	Strong	No	(LTAR = 0.35) Treatment	<35%	10YR 4/3 (Moist)	
	Loam							
6					Level 1			
8								
	Total Depth	= 8'-6"						
10	1000							
	of Groundwater:		Not Reache					
Depth to B	ledrock:		Not Reache	d				
Additional	Notos							

1	Par	r Engineerir	ng & Consul	ting Inc	Profile Pit - Log	11110-110	40.10× 2	1	
		90 Black Forest			Job Number:			18.396	
	Col	orado Springs, C	olorado 80908		Date Evaluated:	09/18			
J	Pho	ne: 719-494-040	)4		Profile Pit#:	Pit #			
xcava	tor:		owner		Total Depth: 8'-6				
ogged	and the second se		& S.D.		STA Slope & Direc	tion:		35° E @ 4%	
Aetho			ile Pit		Latitude:			52'41.21"N	
quipm	nent:	Exca	vator		Longitude:		104°3	33'18.03"W	
	rval			3050 Cu	urtis Road, Lot 2, 8	80831			
t.) ntei			USDA Soil	Soil	Redoximorphic	Soil Type			
h (f	lel	USDA Soil	Structure -	Structure	Features	(from Table 9	% Rock	Color	
Depth (ft.)	Sample Interval	Texture	Shape	Grade	Present? (Y/N)	in O-14)	Frag.		
	5				Tonsoil				
					Topsoil				
2									
_									
4		Sandy Clay Loam	Granular	Strong	No	Type 3 (LTAR = 0.35) Treatment Level 1	<35%	10YR 4/3 (Moist)	
6								10YR 4/3	
8									
-		Total Depth=	8'-6"			I			
10	an of C	roundwater.		Net Deaths	4				
	to Bedr	roundwater:		Not Reache Not Reache			1		
epui	to beur	OUR.		Not Reache	u				
dditio	onal Not	es:							

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

STA SOIL EVALUA	ATION				
Date:	September 27, 2018		Job:	JN: 18.397	ANDO LICEAN
lite	3050 Curtis Road, Lot 3				BO OBERY SON
ocation:	Peyton, CO 80831				09-27-18
	(Lot number updated 6/7/1	(9)			54410 3
					STIDD AB
Purpose of	To determine general subsurface formulate design criteria for the p	e soil conditions	at the site location & to e Wastewater Treatment		Com K Ling
nvestigation:	system (OWTS)	hoposed on on			SSIONAL ENGE
					Courses
	The materials in the various stra	ta of the soil pro	file pit were visually		
Field	classified in accordance with the	U.S. Departme	nt of Agriculture (USDA)		
Procedure:	standards.				
Profile Pit	YES				Profile Pit 1
Perc Test	-			Latitude:	38°52'37.92"N
010 1000				Longitude:	104°33'17.81''W
Date: (Profile Eval)	September 18, 2018			Layer	Soil Type & LTAR
Excavator	Homeowner			0 - 1'-0"	Topsoil
Evaluator	R.J & S.D.			1'-0" - 2'-6"	Type 3 (LTAR=0.35)
Lydidator				2'-6" - 4'-0"	Type 3 (LTAR=0.35)
Depth to Groundwa	ter (permanent or seasonal)	Pit #1:	Not Reached	4'-0" - 8'-6"	Type 3 (LTAR=0.35)
	ter (permanent or seasonal)		Not Reached		
					Profile Pit 2
Depth to Bedrock -	Pit #1:		Not Reached	Latitude:	38°52'37.81"N
Depth to Bedrock -	Pit #2:		Not Reached	Longitude:	104°33'16.94"W
				Layer	Soil Type & LTAR
				0 - 1'-0"	Topsoil
Other Terrain Featu	res or Soil Conditions: See	Attached Site	Мар	1'-0" - 8'-6"	Type 3 (LTAR=0.35)
Endorsement:	Jared R. Dumke, P.E.			-	and the second
				and the second second	Location
				Latitude	the second se
Perc #1	N/A		Min./In.	-	-
Perc #2	N/A		Min./In.	-	
Perc #3	N/A		Min./In.	-	-
	Average:	N/A	Min./In.		
	Break contraction of the second				
Recommendations:	(1) A conventional, non-er	igineered On-	Site Wastewater Treat	ment system (OW	/TS) is acceptable for this site

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



	to Bed	and the second se		Not Reache					
10 Evider	ce of (	Groundwater:		Not Reache	ed			_	
		Total Depth=	= 8'-6"					I	
8		-				Level 1			
6		- Sandy Clay Loam	Blocky	Moderate	No	(LTAR = 0.35) Treatment	<35%	2.5Y 4/3 (Moist)	
		-				Type 3			
4		Sandy Clay Loam	Blocky	Strong	No	Type 3 (LTAR = 0.35)	<35%	1.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	
2		Sandy Clay Loam	Granular	Moderate	No	Type 3 (LTAR = 0.35)	<35%	1.	
					Topsoil				
Depth (ft.)	Sampl	Texture	Structure - Shape	Grade	Present? (Y/N)	in 0-14)	<35% 2.5Y 3/ (Moist) (Moist)		
(tr.)	Sample Interval	USDA Soil	USDA Soil	Soil Structure	Redoximorphic Features	Soil Type (from Table 9	% Rock	Color	
	val			3050 Cu	irtis Road, Lot 3, 8	80831			
quipm	ent:	Exca	vator	Longitude: 104°33'17.81					
Aethod		Profi	and the second se		Latitude:				
ogged		Homed R.J. &			STA Slope & Direc	tion:	N		
					Total Depth:			8'-	
	Col	orado Springs, Co ne: 719-494-040-	olorado 80908 4		Profile Pit#:			Pit	
	4 115	90 Black Forest F			Job Number: Date Evaluated:		18.39		

		90 Black Forest orado Springs, C			Date Evaluated:			09/18/		
	Pho	one: 719-494-040	4		Profile Pit#:			Pit		
Excavat	tor:	Home	owner		Total Depth:			8'-		
Logged		R.J. 8	& S.D.	•	STA Slope & Direc	tion:	N	35° E @ !		
Metho	d:	Profi	le Pit		Latitude:		38°	52'37.81		
Equipm	nent:	Exca	vator	Longitude: 104°3.				33'16.94'		
	rval			3050 Cu	urtis Road, Lot 3, 8	80831		201200		
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		
	S				Topsoil					
2		]								
		-								
4		- Sandy Clay	Granular	Moderate	No	Type 3 (LTAR = 0.35)	<35%	2.5Y 4/		
		Loam				Treatment Level 1		(Moist)		
6		-								
8										
		Total Depth=	8'-6"							
		]								
10										
		iroundwater:		Not Reache	ALCONT OF A LOCAL DESIGNATION OF A LOCAL DESIGNATIONO DESIGNATIONO DESIGNATICON OF A LOCAL DESIGNATICON OF A LOCAL					
Depth	to Bedr	OCK:		Not Reache	a					
Additic	onal Not	tes:								

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

eptember 27, 2018 50 Curtis Road, Lot 4 eyton, CO 80831 ot number updated 6/7/19)	Job:	JN: 18.394	SORADO LICENSED	
eyton, CO 80831		ŧ	09-27-18	
eyton, CO 80831		ŧ	09-27-18	
7) · · · · · · · · · · · · · · · · · · ·		E	1 .0	
or number updated 6/7/19)		0		
		8	54410 7	
determine general subsurface soil conditions	s at the site location & to	Y	RDE	
mulate design criteria for the proposed On-S	site Wastewater Treatment	(	Provide State	
stem (OWTS)			SIONALEN	
			Allacor	
e materials in the various strata of the soil Dr	rofile pit were visually			
ssified in accordance with the U.S. Departm	ent of Agriculture (USDA)			
andards.				
VES		Contraction of the second	Profile Pit 1	
TES		Latitude:	38°52'31.31"N	
-		Longitude:	104°33'28.35"W	
0		Company of the Owner	Soil Type & LTAR	
		Name and Address of the Owner	Topsoil	
		the second	Type 3 (LTAR=0.35)	
R.J & S.D.			Type 2 (LTAR=0.60)	
(normanont or seasonal) Pit #1.	Not Reached	-		
(permanent of seasonal) in the			Profile Pit 2	
#1.	Not Reached	Latitude:	38°52'30.60"N	
	Not Reached	Longitude:	104°33'27.64"W	
TT Also		Layer	Soil Type & LTAR	
		0 - 1'-0"	Topsoil	
or Soil Conditions: See Attached Si	te Map	1'-0" - 8'-6"	Type 3 (LTAR=0.35	
	4.02.5.7 P. J. T. P. D.	-	· · · · · · · · · · · · · · · · · · ·	
ared R. Dumke, P.E.		-		
		No.	Location	
		Latitude:	: Longitude:	
N/A	and the second se	-	-	
N/A				
		-	-	
Average: N/A	Min./In.			
			TS) is acceptable for this s	
	e materials in the various strata of the soil pressified in accordance with the U.S. Departmendards.           YES           -           September 18, 2018           Homeowner           R.J & S.D.           (permanent or seasonal) Pit #1:           (permanent or seasonal) Pit #2:           #1:           #2:           or Soil Conditions: See Attached Siared R. Dumke, P.E.           N/A           N/A	e materials in the various strata of the soil profile pit were visually issified in accordance with the U.S. Department of Agriculture (USDA) andards. <u>YES</u> - September 18, 2018 Homeowner R.J & S.D. (permanent or seasonal) Pit #1: Not Reached (permanent or seasonal) Pit #2: Not Reached #1: Not Reached #2: Not Reached #2: Not Reached ared R. Dumke, P.E. <u>N/A Min./In.</u> N/A Min./In.	stem (OWTS) e materials in the various strata of the soll profile pit were visually ssified in accordance with the U.S. Department of Agriculture (USDA) andards.           YES       Latitude:	

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



	Dor	r Engineerin	a & Consul	ting Inc	Profile Pit - Log			10.00		
		90 Black Forest R		ing, ne.	Job Number:			18.39		
	Cold	orado Springs, Co	olorado 80908		Date Evaluated:			09/18/1		
	N Pho	ne: 719-494-040-	4		Profile Pit#:			Pit #		
xcavat	or:	Home	owner		Total Depth:			8'-0		
ogged	By:	R.J. &	S.D.		STA Slope & Direc	tion:		S @ 3		
Aethod: Profile Pit					Latitude:	38°52'31.31				
quipm	ent:	Excav	ator		Longitude:		104°3	33'28.35"\		
	val			3050 Cu	ırtis Road, Lot 4, 8	30831				
1 (ft.)	Sample Interval	USDA Soil	USDA Soil	Soil	Redoximorphic Features	Soil Type (from Table 9	% Rock	Color		
Depth (ft.)	Sampl	Texture	Structure - Shape	Structure Grade	Present? (Y/N)	in O-14)	Frag.	Color		
		-			Topsoil					
2		Sandy Clay Loam	Granular	Strong	No	Type 3 (LTAR = 0.35) Treatment Level 1	<35%	10YR 3/3 (Moist)		
6		Sandy Loam	Granular	Moderate	No	Type 2 (LTAR = 0.60) Treatment Level 1	<35%	10YR 5/ (Moist)		
		Total Depth=	8'-0"							
10	ce of G	roundwater:		Not Reache	vd.					
Evidor	100 01 0	rock:		Not Reache	Address of the owner					

10		Groundwater:		Not Reach	ad	Ciller			
		Total Depth	= 8'-6"						
8		-							
		-						10YR 3/2 (Moist)	
6		- Sandy Clay - Loam -	Granular	Strong	No	(LTAR = 0.35) Treatment Level 1	<35%		
4						Type 3			
2									
					Topsoil	1			
Depth (ft.)	Samp	Texture	Shape	Grade	Present? (Y/N)	in O-14)	Frag.		
(ft.)	Sample Interval	USDA Soil	USDA Soil Structure -	Soil Structure	Redoximorphic Features	Soil Type (from Table 9	% Rock	Color	
	val			3050 Cu	urtis Road, Lot 4, 8	30831			
quipm		Exca	vator		Longitude:		104°3	3'27.64"	
ogged Aethod		R.J. 8 Profi	and the second design of the s		Latitude:			52'30.60	
xcavat		Home		68	Total Depth: STA Slope & Direc	tion:		s@3	
J	Pho	ne: 719-494-040	+		Profile Pit#: Pit #				
	Cold	orado Springs, Co	olorado 80908	1	Date Evaluated:			09/18/1 Pit #	
	1159	00 Black Forest F	g & Consult toad, Suite 10		Job Number:	18.3			



### NSULTING, LLC

 P.O. Box 26137, Colorado Springs, CO 80936

 p. 719.251.5291
 267.261.3

 e. daniel@jdmengineers.com
 jared@jd

267.261.1825 jared@jdmengineers.com

Property Address:	Lot 4, Wyoming Estates	Date:	April 13, 2023	
	Colorado Springs, CO 80831	Job #:	23-052	E
Endorsement:	Jared R. Dumke, P.E.			80
	•			8

Purpose of Investigation: To determine the subsurface suitably for an Onsite Wastewater Treatment System (OWTS) as well as outline design criteria for a future Soil Treatment Area (STA) through both visual and tactile evaluations of the onsite subsurface soil. The onsite evaluation and associated soil testing were conducted in compliance with the El Paso County Board of Health OWTS Regulations



Profile Pit Summary						
Profile Pit #1						
Lat:	38°52'36.78"N					
Long: 104°33'23.44						
0 - 0'-6"	Topsoil					
0'-6" - 2'-0"	Soil Type 2					
2'-0" - 6'-0"	Soil Type 4					
6'-0" - 8'-0"	Soil Type 2					
-	-					
Profile Pit #2						
Lat: 38°52'37.06"N						
Long:	104°33'23.81"W					
0 - 0'-6"	Topsoil					
0'-6" - 2'-6"	Soil Type 2					
2'-6" - 5'-0"	Soil Type 4					
5'-0" - 7'-0"	Soil Type 2					
-	-					
Existing W	ell (If applicable)					
Lat:	-					
Long:	-					

Profi	le Pit #1	Profi	le Pit #2			
	Topsoil		Topsoil			
1'-0"		1'-0"				
	Soil Type 2		Soil Type 2			
2'-0"		2'-0"	Soil Type 2			
3'-0"		3'-0"				
4'-0"	Soil Type 4	4'-0"	Soil Type 4			
	Son Type 4					
5'-0"		5'-0"				
6'-0"		6'-0"	Soil Type 2			
			Son Type 2			
7'-0"	Soil Type 2	7'-0"				
	Son Type 2					
8'-0"		8'-0"				
9'-0"		9'-0"				

#### **Recommendations:**

An Engineered On-Site Wastewater Treatment System (OWTS) will be required for this site due to: (a) Soil Type 4 identified in the treatment zone of Profile Pit #1 & Profile Pit #2. Soil Type 4 (LTAR = 0.20, Treatment Level 1) will be the most restrictive soil in the treatment zone of the soil treatment area.

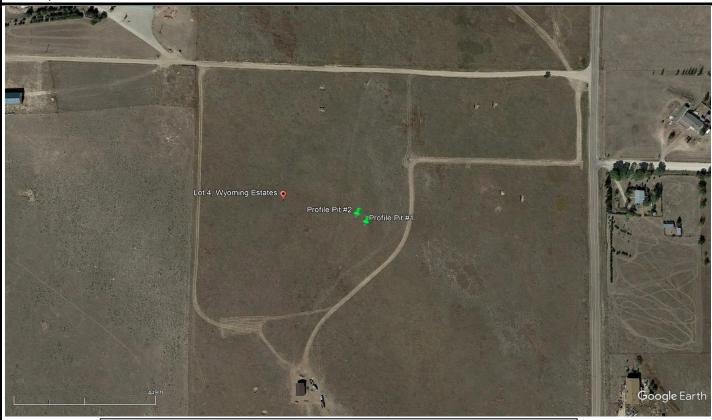


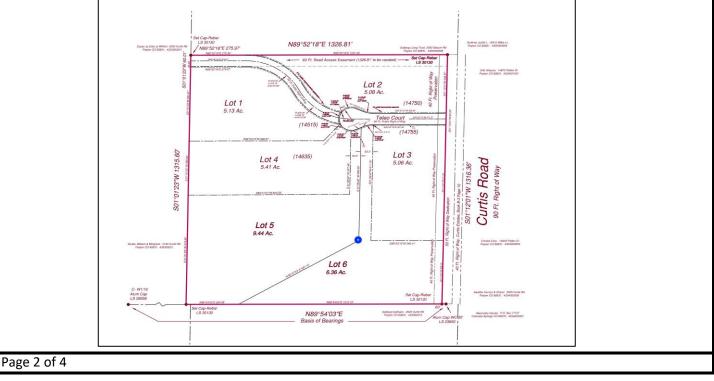
P.O. Box 26137, Colorado Springs, CO 80936 p. 719.251.5291 267.261.1

e. daniel@jdmengineers.com

267.261.1825 jared@jdmengineers.com

Site Map:





JDM	CONSULTING, LLC
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 P.O. Box 26137, Colorado Springs, CO 80936

 p. 719.251.5291
 267.261.1

 e. daniel@jdmengineers.com
 jared@jdm

267.261.1825 jared@jdmengineers.com

Job Number	:		23-052 Test Pita			Pit #1			
Date of Eval	uation:	Ар	ril 10, 2023 Total De	epth:			8'-0"		
Evaluator:			D.Mizicko STA Slop	pe and Direc	ction:		S 45° W @ ±2%		
Excavator:		Home Run R	estorations Latitude		38°52'36.78"				
Equipment:		Mir	i Excavator Longitud			104°33'23.44"W			
			Lot 4, Wyoming	Estates, 80	831				
Depth Below Grade	Sample Depth	USDA Soil texture	USDA Soil Structure - Type	USDA Structure		Soil Type	Redoximorphic Features Present (Y/N)		
0 - 0'-6"				Topsoil					
0'-6" - 2'-0"	1'-0"	Sandy Loam	Granular	Moderate		Soil Type 2	No		
2'-0" - 6'-0"	4'-0"	Silty Clay	Blocky	Strong		Soil Type 4	No		
6'-0" - 8'-0"	7'-0"	Sandy Loam	Granular	Moder	rate	Soil Type 2	No		
-	-	-	-	-		-	-		
Total Depth	=	8'-0"		1	Comme	ents:	I		
Groundwate						Pits were excavated p	prior to our site visit		
Bedrock End		· NO							
		-	(S) Present?	No	ł				
Is Dawson Arkose (DA) or Cemented Sands (CS) Present? No Is the material fractured and/or Jointed No									
		entation class?		140	ł				
		or Cemented Sand a li	miting layor?	-	ł				
		ck Content) Encounte		- No	ł				
Page 3 of 4				NO					
rage 3 01 4									

JDM CONSULTING, LLC	
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 P.O. Box 26137, Colorado Springs, CO 80936

 p. 719.251.5291
 267.261.1

 e. daniel@jdmengineers.com
 jared@jdmengide

267.261.1825 jared@jdmengineers.com

Job Number			23-052 Test Pit	Pit #		
Date of Eval	uation:	Ар	ril 10, 2023 Total D			7'-0"
Evaluator:			D.Mizicko STA Slo	•		S 45° W @ ±2%
Excavator:			estorations Latitud		38°52'37.06"N	
Equipment:		Mir	ii Excavator Longitu	de:		104°33'23.81"W
			Lot 4, Wyoming	g Estates, 80831		
Depth Below Grade	Sample Depth	USDA Soil texture	USDA Soil Structure - Type	USDA Soil Structure Grade	Soil Type	Redoximorphic Features Present (Y/N)
0 - 0'-6"				Topsoil		
0'-6" - 2'-6"	-	Sandy Loam	Granular	Moderate	Soil Type 2	No
2'-6" - 5'-0"	-	Silty Clay	Blocky	Strong	Soil Type 4	No
5'-0" - 7'-0"	-	Sandy Loam	Granular	Moderate	Soil Type 2	No
-	-	-	-	-	-	-
Total Depth	=	7'-0"		Comme	ents:	
						prior to our site visit.
Bedrock End		. No		-		
		or Cemented Sands (	CS) Present?	No		
		d and/or Jointed	,	No		
		entation class?				
		or Cemented Sand a li	miting laver?			
		ck Content) Encounte		No		
Page 4 of 4						
1 age + 01 4						



267.261.1825 jared@jdmengineers.com

Property Address:	Lot 6, Wyoming Estates	Date:	April 21, 2023	
	Colorado Springs, CO 80831	Job #:	23-053	E.
Endorsement:	Jared R. Dumke, P.E.			Beall
				5

Purpose of Investigation: To determine the subsurface suitably for an Onsite Wastewater Treatment System (OWTS) as well as outline design criteria for a future Soil Treatment Area (STA) through both visual and tactile evaluations of the onsite subsurface soil. The onsite evaluation and associated soil testing were conducted in compliance with the El Paso County Board of Health OWTS Regulations

Profile Pit Summary		Profile Pit #1		Profile	Pit #2	Profile Pit #3	
Pro	Profile Pit #1		Topsoil		Topsoil		Topsoil
Lat:	38°52'30.52"N	1'-0"		1'-0"		1'-0"	
Long:	104°33'21.28"W						Coil Turno 2
0 - 0'-6"	Topsoil	2'-0"		2'-0"	Soil Type 2	2'-0"	Soil Type 2
0'-6" - 8'-0"	Soil Type 2				Son Type 2		
Pro	ofile Pit #2	3'-0"		3'-0"		3'-0"	
Lat:	38°52'30.12"N						
Long:	104°33'21.62"W	4'-0"	Soil Type	4'-0"		4'-0"	Soil Type 2
0 - 0'-6"	Topsoil		2		Soil Type 4		
0'-6" - 3'-6"	Soil Type 2	5'-0"	2	5'-0"	Soli Type 4	5'-0"	
3'-6" - 5'-6"	Soil Type 4						
5'-6" - 8'-0"	Soil Type 2	6'-0"		6'-0"		6'-0"	
Pro	ofile Pit #3						
Lat:	38°52'31.01"N	7'-0"		7'-0"	Soil Type 2	7'-0"	
Long:	104°33'20.70"W						
0 - 0'-6"	Topsoil	8'-0"		8'-0"		8'-0"	
0'-6" - 2'-6"	Soil Type 2						
2'-6" - 8'-0"	Soil Type 2	9'-0"		9'-0"		9'-0"	
Existing Well (If applicable)							
Lat:	-						
Long:	-						

Recommendations:

A Conventional On-Site Wastewater Treatment System (OWTS) is acceptable for this site (single family residence) provided the following requirements can be met: The Soil Treatment Area may not be located in the area of Profile Pit #2. If these install requirements cannot be met, an Engineered On-Site Wastewater Treatment System may be required. Provided the preceding requirements can be met, Soil Type 2 (LTAR = 0.60, Treatment Level 1) will be the most restrictive soil in the treatment zone of the soil treatment area.



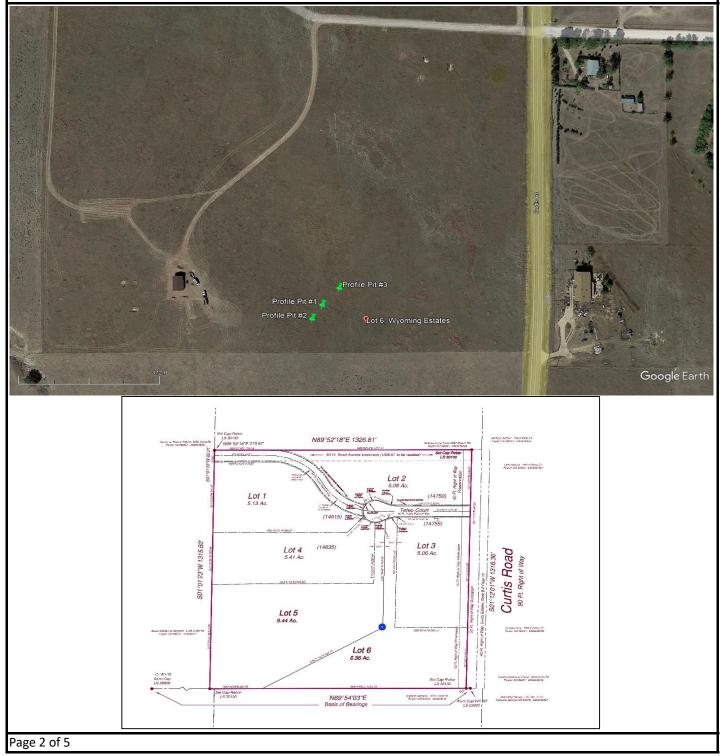
 P.O. Box 26137, Colorado Springs, CO 80936

 p. 719.251.5291
 267.261.3

 e. daniel@jdmengineers.com
 jared@jd

267.261.1825 jared@jdmengineers.com

#### Site Map:



JDM CONSULTING, LLC										
P.O. Box 26137, Colorado Springs, CO 80936 p. 719.251.5291 267.261.1825 e. daniel@jdmengineers.com jared@jdmengineers.com										
Job Number	:		23-053 Test Pit#	ŧ		Pit #1				
Date of Eval	uation:	Ар	ril 10, 2023 Total De	epth:		8'-0"				
Evaluator:			D.Mizicko STA Slop	be and Direction:		N 30° E @ ±5%				
Excavator:		Home Run R	estorations Latitude	:		38°52'30.52"N				
Equipment:		Mir	ni Excavator Longitud	de:		104°33'21.28"W				
Lot 6, Wyoming Estates, 80831										
Depth Below Grade	Sample Depth	USDA Soil texture	USDA Soil USDA Soil Structure - Type Structure Grad		Soil Type	Redoximorphic Features Present (Y/N)				
0 - 0'-6"										
0'-6" - 8'-0"	4'-0"	Sandy Loam	Granular	Moderate	Soil Type 2	No				
-	-	-	-	-	-	-				
-	-	-	-	-	-	-				
-	-	-	-	-	-	-				
Total Depth	=	8'-0"		Comme	ents:					
Groundwate										
Bedrock Enc		No								
		or Cemented Sands (C	CS) Present?	No						
		and/or Jointed	,	No						
		ntation class?								
		r Cemented Sand a lin	niting layer?							

No

Type "R" Soils (High Rock Content) Encountered?

Page 3 of 5

	J	DM	CONS	P.O. Box 2 p. 719.25	6137, Colorado Sprin	gs, CO 80936 267.261.1825 jared@jdmengineers.com		
Job Number	:		23-053	Test Pit#	ŧ		Pit #2	
Date of Eval	uation:	Ар	ril 10, 2023		-		8'-0"	
Evaluator:					be and Direction:		N 30° E @ ±5%	
Excavator:		Home Run R					38°52'30.12"N	
Equipment:		Mir	i Excavator	Longitud	de:		104°33'21.62"W	
Lot 6, Wyoming Estates, 80831								
Depth Below Grade	Sample Depth	USDA Soil texture	USDA Soil Structure - Type		USDA Soil Structure Grad	le Soil Type	Redoximorphic Features Present (Y/N)	
0 - 0'-6"					Topsoil			
0'-6" - 3'-6"	-	Sandy Loam	Granular		Moderate	Soil Type 2	No	
3'-6" - 5'-6"	4'-0"	Silty Clay	Blocky		Strong	Soil Type 4	No	
5'-6" - 8'-0"	-	Sandy Loam	Granular		Moderate	Soil Type 2	No	
-	-	-	-		-	-	-	
Total Depth	=	8'-0"			Com	iments:		
Groundwate		e No			-			
Bedrock End	ountered?	No			-			
ls Dawson A	rkose (DA) (	or Cemented Sands (C	S) Present?	I	No			
		d and/or Jointed			No			
<u> </u>	•							

No

If Yes, what is the cementation class?

Page 4 of 5

Is the Dawson Arkose or Cemented Sand a limiting layer?

Type "R" Soils (High Rock Content) Encountered?

	J	DM	CONS	P.O. Box 2 p. 719.25	26137, Colorado Springs,	CO 80936 267.261.1825 jared@jdmengineers.com				
Job Number	:		23-053	Test Pit#	ŧ		Pit #2			
Date of Eval	uation:	Ар	ril 19, 2023	Total De	epth:		8'-0"			
Evaluator:			D.Mizicko	STA Slop	be and Direction:		N 30° E @ ±5%			
Excavator:		Home Run R					38°52'31.01"N			
Equipment:		Mir	ni Excavator	Longitud	de:		104°33'20.70"W			
Lot 6, Wyoming Estates, 80831										
Depth Below Grade	Sample Depth	USDA Soil texture	USDA Soil Structure - Type		USDA Soil Structure Grade	Soil Type	Redoximorphic Features Present (Y/N)			
0 - 0'-6"	0 - 0'-6" Topsoil									
0'-6" - 2'-6"	2'-0"	Sandy Loam	Granular		Strong	Soil Type 2	No			
2'-6" - 8'-0"	4'-0"	Sandy Loam	Granular		Strong	Soil Type 2	No			
-	-	-	-		-	-	-			
-	-	-	-		-	-	-			
Total Depth	=	8'-0"			Comme	ents:				
Groundwate		? <b>No</b>			-					
Bedrock Enc	ountered?	No			-					
ls Dawson A	rkose (DA) (	or Cemented Sands (C	S) Present?	I	No					
		d and/or Jointed			No					
	• • •									

No

If Yes, what is the cementation class?

Page 5 of 5

Is the Dawson Arkose or Cemented Sand a limiting layer?

Type "R" Soils (High Rock Content) Encountered?