October 14, 2021

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

MVE, Inc.
1903 Lelaray Street, Suite 200
Colorado Springs, CO 80909

Attn: Chuck Crum

Re: Wastewater Study
Viewpoint Estates Filing No. 2
Highway 94 & Antelope Drive
Tax Schedule Nos. 34100-10-001 & 34100-09-001
El Paso County, Colorado

Dear Mr. Crum:

GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION:

The site is located in the southern portion of Section 10, Township 14 South, Range 63 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located approximately 13 miles east of Colorado Springs, Colorado, east of Peyton Highway and Highway 95 in El Paso County, Colorado. The location of the site is as shown on the Vicinity Map, Figure 1.

The topography of the site is gradually sloping to the south-southeast. Two minor drainage swales are located on portions of Lots 2 and 3, and Lots 6 and 7 within the designated drainage easement. The drainage swales flow in a southerly direction. Water was not observed in the drainages at the time of this investigation. The site boundaries are indicated on the USGS Map, Figure 2. Previous land uses have included agricultural grazing and undeveloped land. The site contains primarily field grasses, weeds, yucca and cacti. Site photographs, taken August 28, 2021, are included in Appendix A.

Total acreage involved in the proposed subdivision is 24.33-acres. Seven residential lots are proposed as part of the replat. The proposed lot sizes range from 2.5 to 4.7-acres. The lots will be serviced by individual on-site wastewater treatment systems and municipal water. 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.

FIELD INVESTIGATION:

This is not a wastewater disposal report. Please upload a report detailing the capacity and demand for the central wastewater provider, similar to the water resources report.

Our fielc e preparation of a geologic map of bedrock features and
significa ral Resource Conservation Service (NRCS) (Reference 2),
previous vice (SCS) survey was also reviewed to evaluate the site
(Referer ole units within the subject site are shown on the Geologic
Map Fig es involved both field reconnaissance and measurements,
and aer nd interpretation. The field mapping was performed by
personn on August 28, 2021.

Two tes test pits were excavated on the site to determine general
suitabilit residential construction and on-site wastewater treatment
systems are indicated on the Site Plan/Test Boring Location Map,
Figure 3 Logs are presented in Appendix B, and Laboratory Testing
results a

SOIL AND GEOLOGIC CONDITIONS:

Soil Survey

The Natural Resource Conservation Service (NRCS) (Reference 2, Figure 4), previously the Soil Conservation Service (Reference 3) has mapped two soil types on the site. Complete descriptions of the soils are presented in Appendix D. In general, the soils consist of loamy sand and sandy loam. The soils are described as follows:

Type	Description
8	Blakeland Loamy Sand, 1 – 9% Slopes
96	Truckton Sandy Loam, 0 – 3% Slopes

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

Soils

One soil type and one bedrock type were encountered in the test borings and test pits on the site. Type 1: silty sand (SM), and Type 2: silty sandstone. Bedrock was encountered at 14 feet in Test Boring No. 1. Bedrock was not encountered in Test Boring No. 2 or the test pits. Each soil and bedrock type were classified in accordance with the Unified Soil Classification System (USCS) using the laboratory testing results and the observations made during drilling.

Soil Type 1 classified as silty sand (SM). The sand was encountered in all of the test borings and test pits at the existing ground surface extending to 14 feet bgs in Test Boring No. 1 and to the termination of Test Boring No. 2 (20 feet), and the test pits (8 feet). Standard Penetration Testing

on the sand resulted in N-values of 12 to greater than 50 bpf indicating medium dense to dense states. The majority of the sands were encountered at medium dense states. Water content and grain size testing resulted in approximately 2 to 6 percent water content with 9 to 34 percent of the soil size particles passing the No. 200 sieve.

Soil Type 2 classified as silty sandstone (SM). The silty sandstone was encountered in Test Boring No. 1 at a depth of 14 feet and extended to termination of the test boring (20 feet bgs). Standard Penetration Testing on the silty sandstone resulted in an N-values of greater than 50 bpf indicating very dense states. Water content and grain size testing resulted in 5 to 8 percent water content and approximately 15 percent of the soil size particles passing the No. 200 sieve.

Soils encountered in the test pits excavated by Entech Engineering, Inc. consisted of sandy loam. Bedrock or signs of groundwater were not encountered in the test pits which were excavated to depths of 8 feet.

Groundwater

Groundwater was not encountered in the test borings, test pits or observed in the drainages at the time of our site investigation. It should be noted that fluctuation in groundwater levels could change due to seasonal variations, changes in land runoff characteristics and future development of nearby areas. 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 during construction.

Drainage Areas/Floodplains

Drainage areas located in the portions of Lots 2 and 3 and Lots 6 and 7, and located within drainage easements/no-build areas. The drainages flow in a southerly direction, and water was not observed in the drainages at the time of this investigation. Portions of the drainage easement area have been mapped as potentially seasonal shallow groundwater areas. These areas are indicated in the Geology/Engineering Geology Map (Figure 6) and are discussed below. These areas are located within the no-build area and will be avoided. The proposed building areas are not affected by these areas.

Geology

Approximately 23 miles west of the site is the southern extent of a major structural feature known as the Rampart Range Fault. This fault marks the boundary between the Great Plains Physiographic Province and the Southern Rocky Mountain Province. The site exists within a large structural feature known as the Denver Basin. Bedrock in the area is typically gently dipping in a northerly direction (Reference 4). Overlying the Dawson Formation are deposits of man-made fill soils and alluvial deposited sands and clays.

The geology of the site was evaluated using the *Geologic Map of Pueblo 1-degree x 2degrees' quadrangle, South-Central Colorado,* by Scott, G.R., et.al. in 1976, (Reference 4). The Geology

Map for the site is presented in Figure 6. One mappable unit was identified on this site which is described as follows:

Qes **Eolian Sands of Quaternary Age:** These are wind-blown sands deposited by the action of prevailing winds. The materials typically consist of silty sands and may contain sandy silt layers.

The soils listed above were mapped from site-specific mapping, the *Geologic map of the Pueblo 1-degree x 2-degrees' quadrangle, south-central Colorado* published by the U.S. Geologic Survey in 1976 (Reference 4). The test borings and test pits were used in evaluating the site and are included in Appendix B. The Geology Map prepared for the site is presented in Figure 6.

ON-SITE WASTEWATER TREATMENT

The Natural Resource Conservation Service (Reference 2), previously the Soil Conservation Service (Reference 3) has mapped this site with two soil descriptions. The Soil Survey Map (Reference 3) is presented in Figure 4, and the Soil Survey Descriptions (Reference 3) are presented in Appendix E. The soils are described as having moderate to rapid percolation rates.

Soils encountered in the tactile test pits consisted of sandy loam. The limiting layer encountered in the test pits is the clay to sandy clay soils, which corresponds with USDA Soil Type 2 with an LTAR value of 0.50 gallons per day per square foot. Signs of bedrock and seasonally occurring bedrock were not observed in the test pits but are common in this area of study. Absorption fields must be maintained a minimum of 4 feet above any groundwater, groundwater evidence, bedrock, or confining layers. Should groundwater or bedrock be encountered within 6 feet of the surface, designed systems will be required. Conventional systems are anticipated for the majority of the lots in this subdivision.

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 would likely be required for the majority of the lots, some lots may be suitable for conventional systems provided shallow bedrock, restrictive clay soils, groundwater evidence or groundwater are not encountered in the soil treatment areas. The Septic Suitability Map is presented in Figure 8. Possible house locations with water wells, and two septic sites for the lots are indicated on Figure 8. Areas that should be avoided by septic systems are indicated on the septic suitability map.

Individual soil testing is required for proposed construction on each lot prior to construction. Absorption fields must be located a minimum of 100 feet from any well, including those on adjacent properties. Absorption fields must also be located a minimum of 50 feet from any drainages, floodplains or ponded areas and 25 feet from dry gulches.

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Wastewater Study
Viewpoint Estates Filing No. 2
Highway 94 & Antelope Drive
Tax Schedule Nos. 34100-10-001 & 34100-09-001
El Paso County, Colorado

CLOSURE

It should be pointed out that because of the nature of data obtained by random sampling of such variable nonhomogeneous materials as soil and rock, it is important that we be informed of any differences observed between surface and subsurface conditions encountered in construction and those assumed in the body of this report. Any new construction considered on this site will require additional investigation. Construction and design personnel should be made familiar with the contents of this report. Specific construction and foundation recommendations will be provided when investigations are completed at each building site prior to new construction.

This report has been prepared for MVE, Inc., 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

Reviewed by:

COLORADO LICENSED
JOSEPH COLLIN GOODE JR.
23725
10/14/21
PROFESSIONAL ENGINEER

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

LLL/jhr

Encl.

Entech Job No. 212316
AAprojects/2021/212316 wws

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. Scott, G.R., Taylor R.B, Epis, R.C., and Wobus, R.A., 1976. Geologic map of the Pueblo 1-degree x 2-degrees' quadrangle, south-central Colorado. USGS, Map MF-775.

4. Federal Emergency Management Agency. December 7, 2018. *Flood Insurance Rate Maps for the City of Colorado Springs, Colorado.* Map Number 08041CO805G.

5. El Paso County Planning Development. December 1995. *El Paso County Aggregate Resource Evaluation Maps.*

6. 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.

7. 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

Test Pit No.	USDA Soil Type	LTAR Value	Depth to Bedrock (ft.)	Depth to Seasonally Occurring Groundwater (ft.)
1	2	0.6	N/A	N/A
2	2	0.6	N/A	N/A
3	2	0.6	N/A	N/A
4	2	0.6	N/A	N/A

*- Conditions that will require an engineered OWTS

FIGURES

N

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VICINITY MAP
VIEWPOINT ESTATES FILING NO. 2
HWY 94 & ANTELOPE DRIVE
EL PASO COUNTY, CO.
FOR: MVE, INC.

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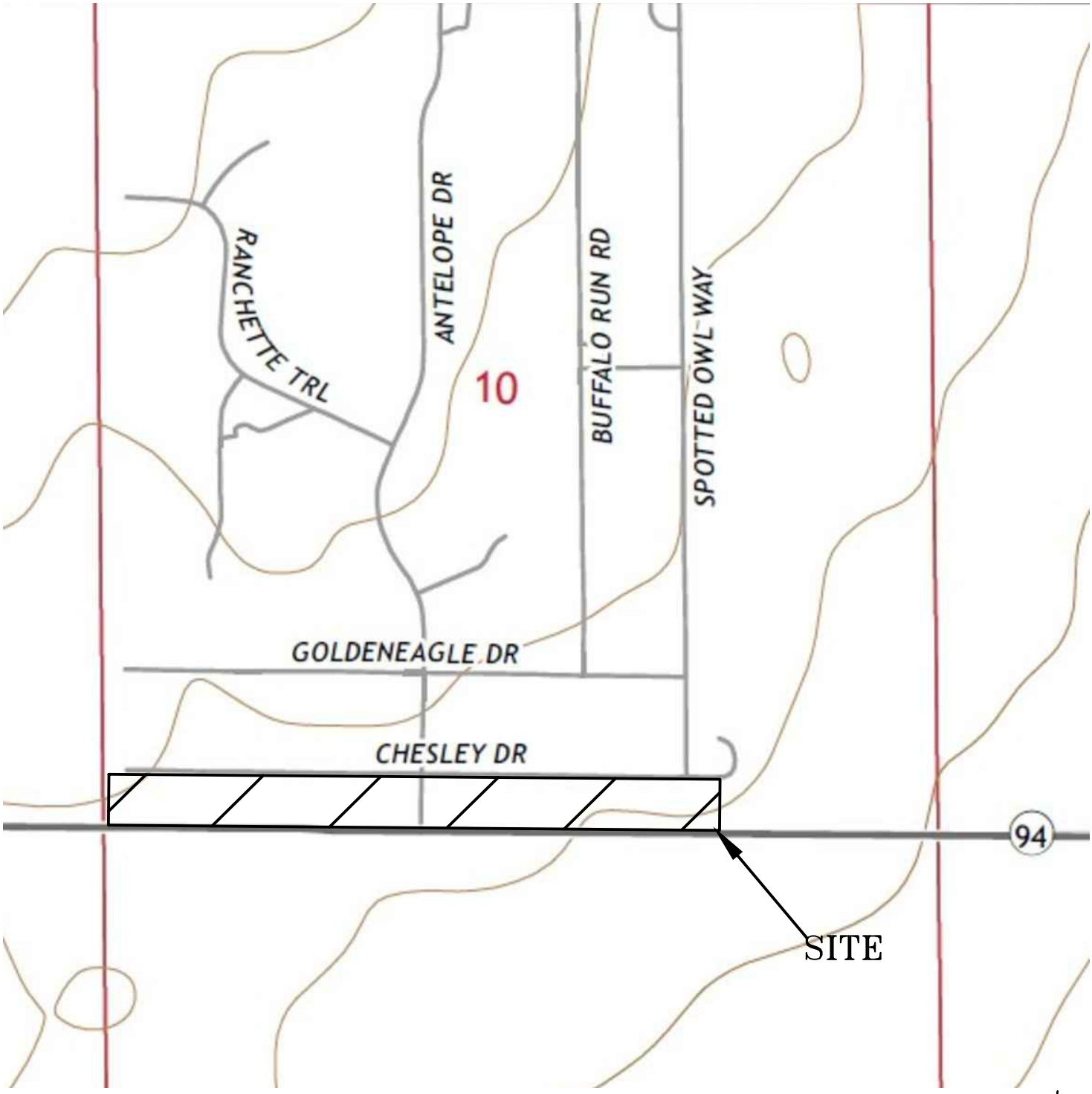
LLL	9/27/21		

JOB NO.: 212316

FIG NO.: 1



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USGS MAP TOPOGRAPHY MAP
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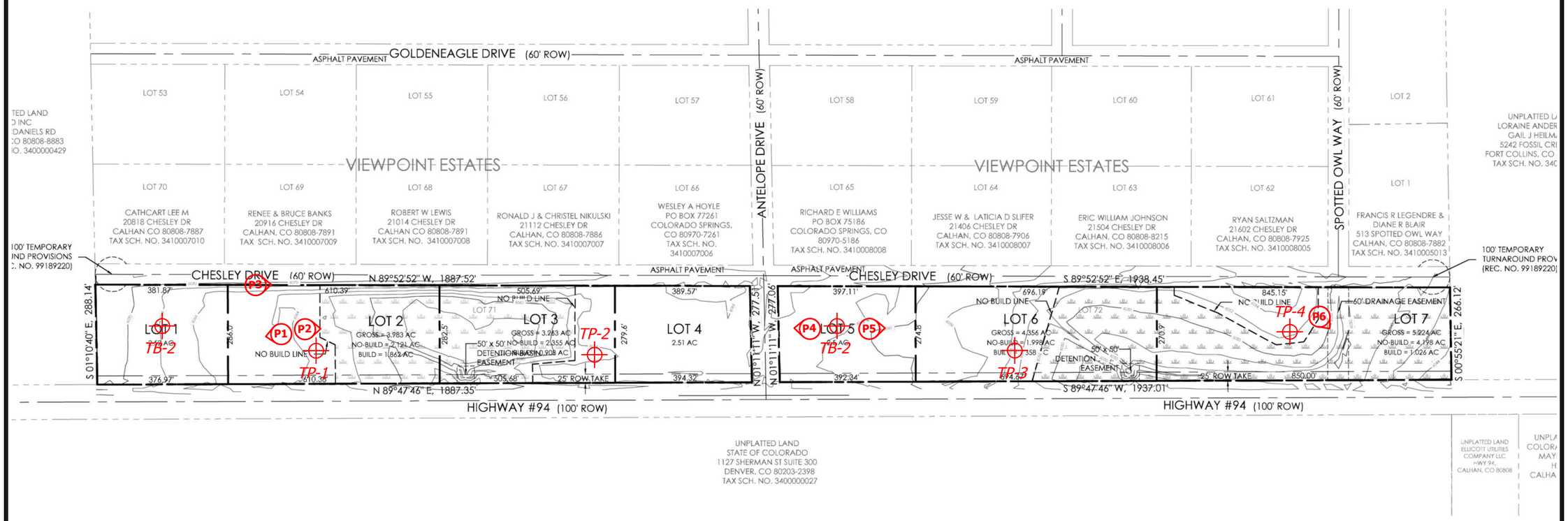
JOB NO.: 212316

FIG NO.: 2

PRELIMINARY PLAN
FOR
VIEWPOINT ESTATES FILING NO. 2
PORTION OF SECTION 10, TOWNSHIP 14 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN
EL PASO COUNTY, COLORADO



PRELIMINARY PLAN

- APPROXIMATE TEST PIT LOCATION
- APPROXIMATE PHOTOGRAPH LOCATION AND DIRECTION

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SITE PLAN/TESTING LOCATION MAP
VIEWPOINT ESTATES FILING NO. 2
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EL PASO COUNTY, CO.
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FIGURE No.	3

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SOIL SURVEY MAP
VIEWPOINT ESTATES FILING NO. 2
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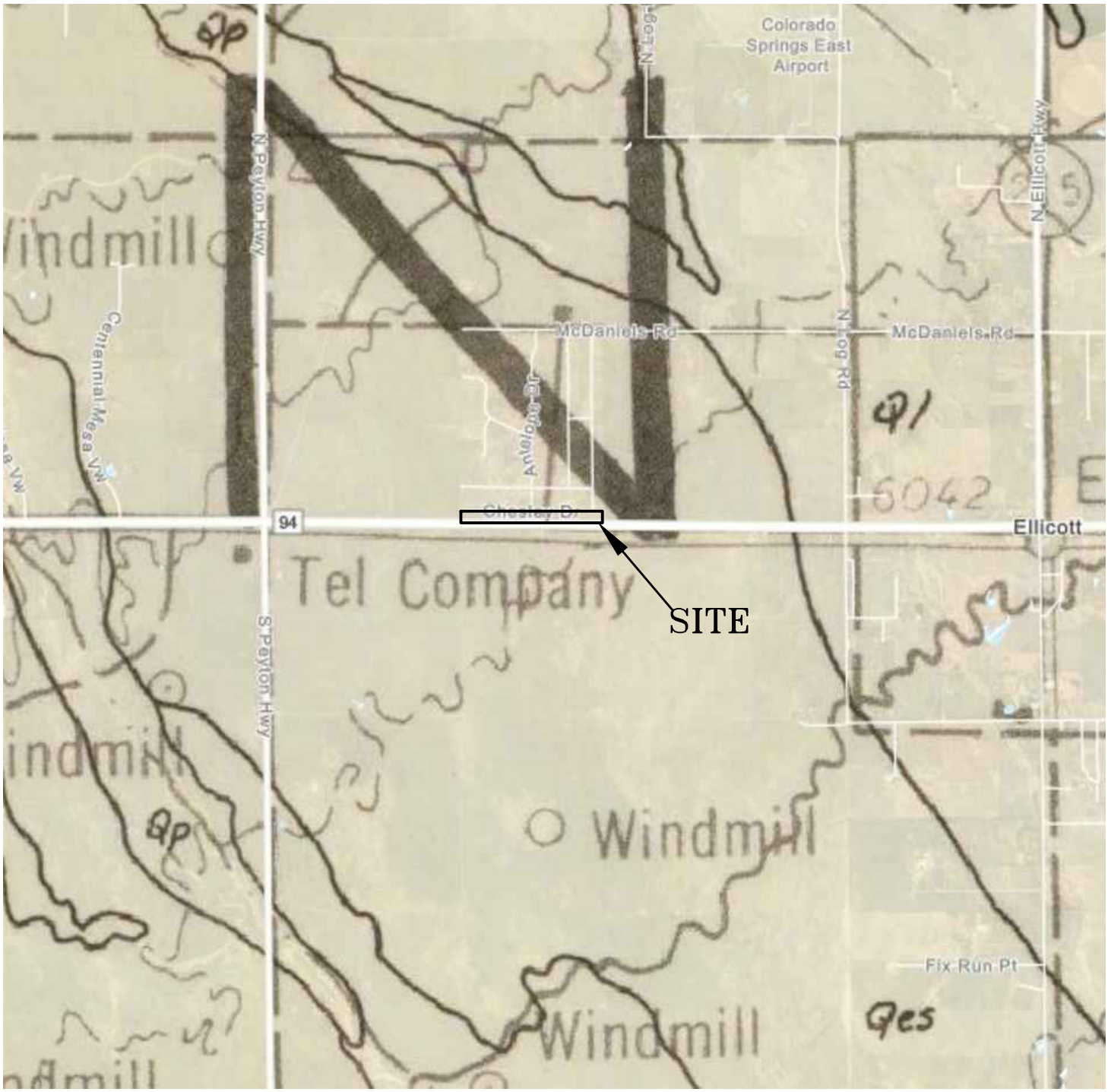
LLL	9/27/21		

JOB NO.: 212316

FIG NO.: 4



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GEOLOGIC MAP OF THE PUEBLO 1° X 2° QUADRANGLE
VIEWPOINT ESTATES FILING NO. 2
HWY 94 & ANTELOPE DRIVE
EL PASO COUNTY, CO.
FOR: MVE, INC.

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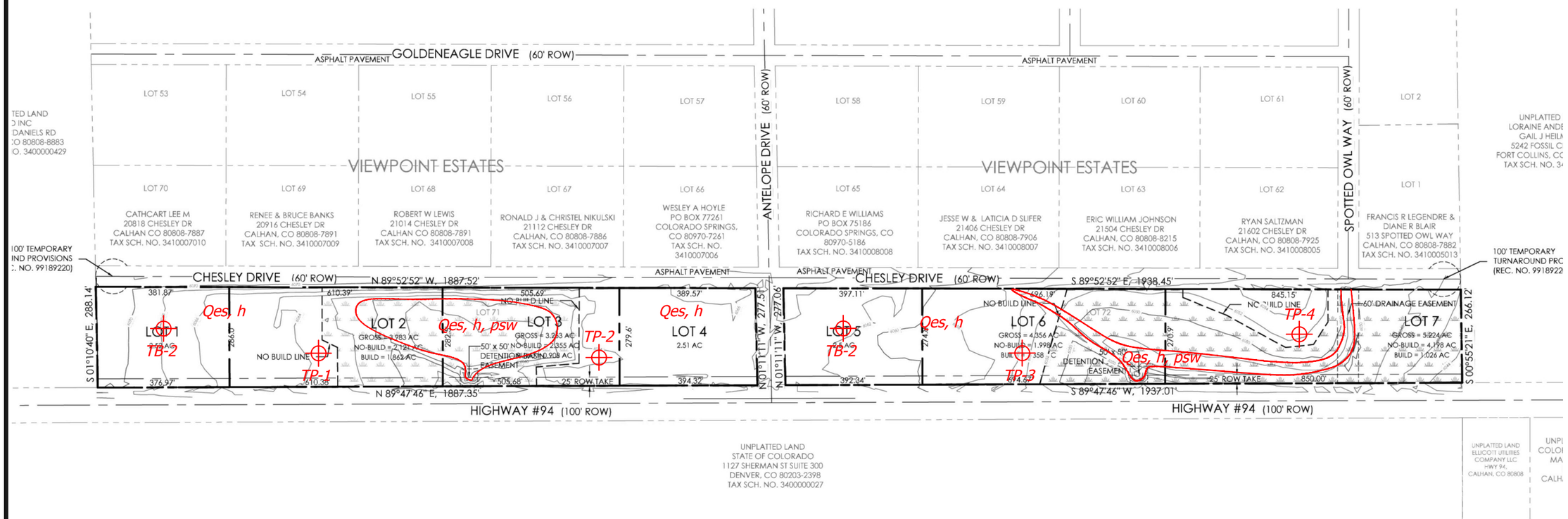
LLL	9/27/21		

JOB NO.: 212316

FIG NO.: 5

PRELIMINARY PLAN
FOR
VIEWPOINT ESTATES FILING NO. 2
PORTION OF SECTION 10, TOWNSHIP 14 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN
EL PASO COUNTY, COLORADO



PRELIMINARY PLAN

Legend:
Qes - Eolian Sands of Quaternary Age: wind blown sediments

psw - potentially seasonally wet
h - hydrocompactive soil

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ENGINEERING GEOLOGY/GEOLOGY MAP
VIEWPOINT ESTATES FILING NO. 2
HWY 94 & ANTELOPE DRIVE
EL PASO COUNTY, CO.
FOR: MVE, INC.

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DATE	9/27/21
SCALE	AS SHOWN
JOB NO.	212316
FIGURE No.	6

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FEMA FLOODPLAIN MAP
VIEWPOINT ESTATES FILING NO. 2
HWY 94 & ANTELOPE DRIVE
EL PASO COUNTY, CO.
FOR: MVE, INC.

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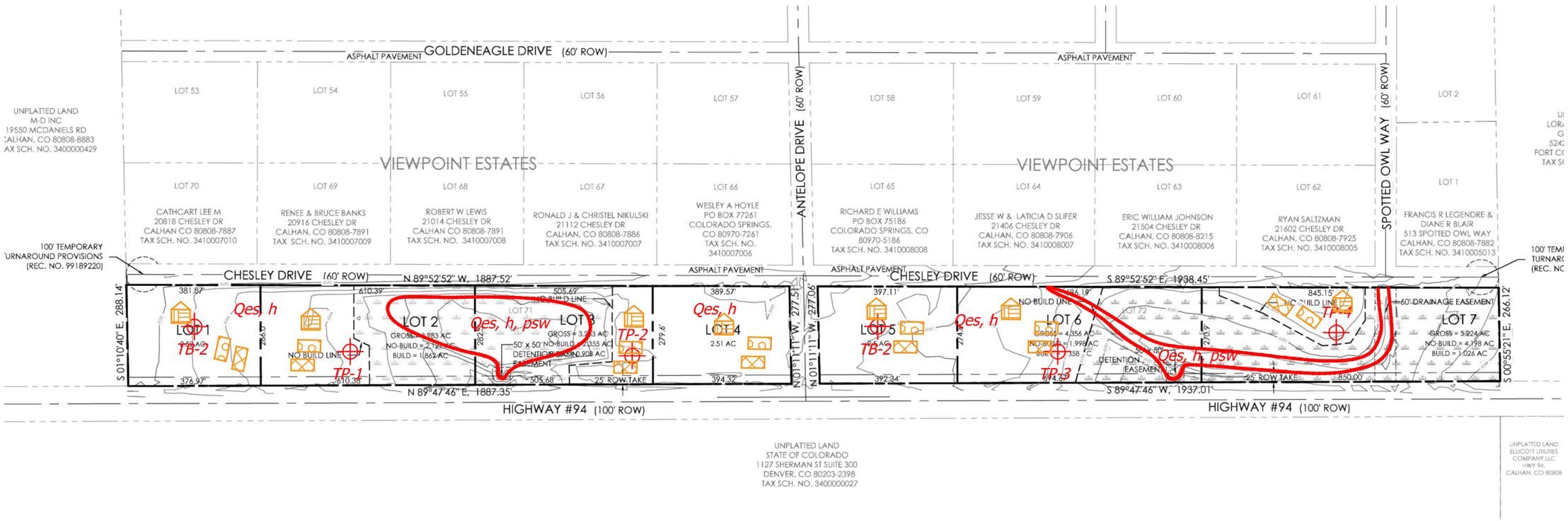
LLL	9/27/21		

JOB NO.: 212316

FIG NO.: 7

PRELIMINARY PLAN
FOR
VIEWPOINT ESTATES FILING NO. 2
PORTION OF SECTION 10, TOWNSHIP 14 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN
EL PASO COUNTY, COLORADO



PRELIMINARY PLAN

LEGEND:

- POSSIBLE OWTS LOCATIONS
- POSSIBLE OWTS ALTERNATE LOCATIONS
- POSSIBLE HOUSE LOCATIONS
- OWTS ARE NOT RECOMMENDED IN AREAS OF POTENTIALLY SEASONAL SHALLOW GROUNDWATER (PSW) OR WITHIN THE NO-BUILD DRAINAGE EASEMENT

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OWTS SUITABILITY MAP
VIEWPOINT ESTATES FILING NO. 2
HWY 94 & ANTELOPE DRIVE
EL PASO COUNTY, CO.
FOR: MVE, INC.

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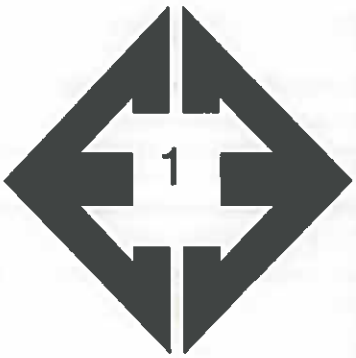
CHECKED	
DATE	9/27/21
SCALE	AS SHOWN
JOB NO.	212316
FIGURE No.	8

APPENDIX A: Photographs



Looking west from the central portion of Lot 2.

August 28, 2021

Looking east from the central portion of Lot 2.

August 28, 2021

Job No. 212316

3

Looking east along Chelsey Drive in the northwestern portion of the site.

August 28, 2021

4

Looking west from the central portion of Lot 5.

August 28, 2021

Job No. 212316

5

Looking east from the central portion of Lot 5.

August 28, 2021

6

Looking southeast towards minor drainage easement in the eastern portion of Lot 7.

August 28, 2021

Job No. 212316

APPENDIX B: Test Pit Logs

TEST PIT NO. 1
DATE EXCAVATED 9/10/2021
Job # 212316

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil, 0-6 inches	1					
	2					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	3		■	gr	m	2
	4					
	5					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	6		■	gr	m	2
	7					
	8					
	9					
	10					

TEST PIT NO. 2
DATE EXCAVATED 9/10/2021
CLIENT MVE, Inc.
LOCATION View Point Estates, Filing 2

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil, 0-6 inches	1					
	2					
	3					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	4		■	gr	m	2
	5					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	6		■	gr	m	2
	7					
	8					
	9					
	10					

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

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

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TEST PIT LOG

DRAWN:	DATE:	CHECKED:	DATE:
jhr	9/22/21	LLL	9/25/21

JOB NO. 212326
FIG NO. B-1

TEST PIT NO. 3
DATE EXCAVATED 9/10/2021
Job # 212316

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil, 0-6 inches	1					
	2					
	3					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	4		■	gr	m	2
	5					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	6		■	gr	m	2
	7					
	8					
	9					
	10					

TEST PIT NO. 4
DATE EXCAVATED 9/10/2021
CLIENT MVE, Inc.
LOCATION View Point Estates, Filing 2

REMARKS	Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	USDA Soil Type
topsoil, 0-6 inches	1					
	2					
	3					
	4					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	5		■	gr	m	2
	6					
	7					
sandy loam, fine to coarse grained, pale to yellowish brown, moist	8		■	gr	m	2
	9					
	10					

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

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

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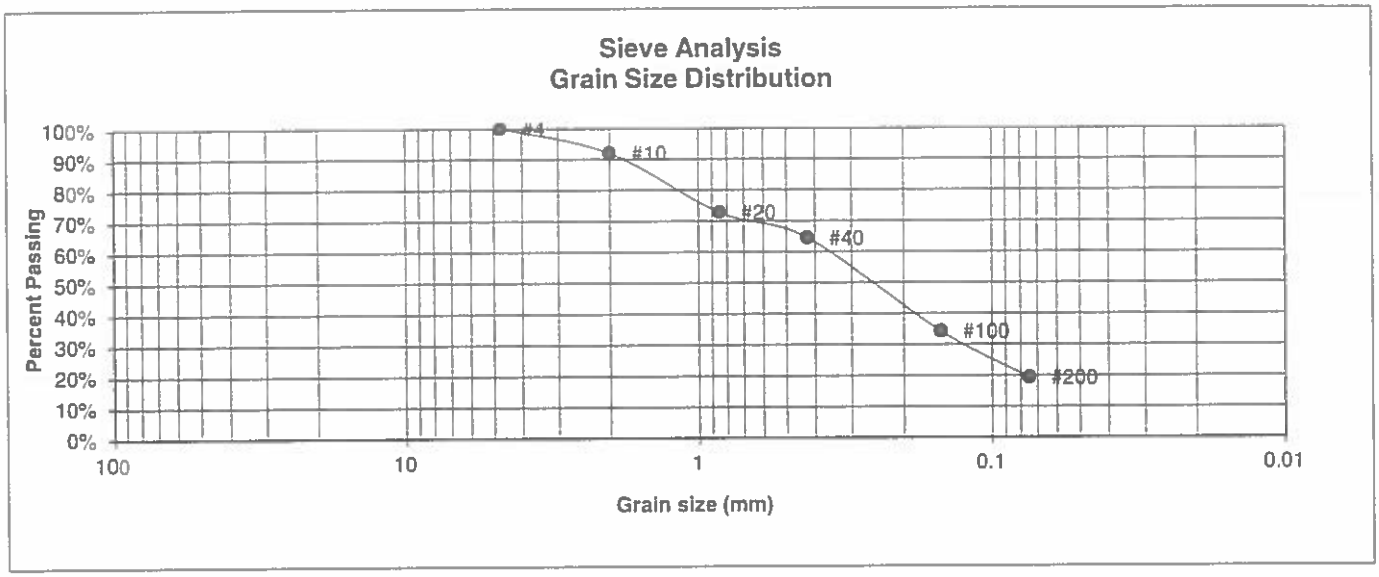
TEST PIT LOG

DRAWN:	DATE	CHECKED:	DATE:
jhr	9/22/21	LLL	9/25/21

JOB NO 212326
FIG NO B-2

APPENDIX C: Laboratory Test Results

BORING NO.	TP-1, LOT 1	UNIFIED CLASSIFICATION	SM	TEST BY	BL
DEPTH(ft)	2.5	AASHTO CLASSIFICATION		JOB NO.	212316
CLIENT	MVE, INC				
PROJECT	HIGHWAY 94 & ANTELOPE DRIVE				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	92.0%
20	72.8%
40	64.5%
100	34.3%
200	19.4%

Atterberg Limits
Plastic Limit
Liquid Limit
Plastic Index

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

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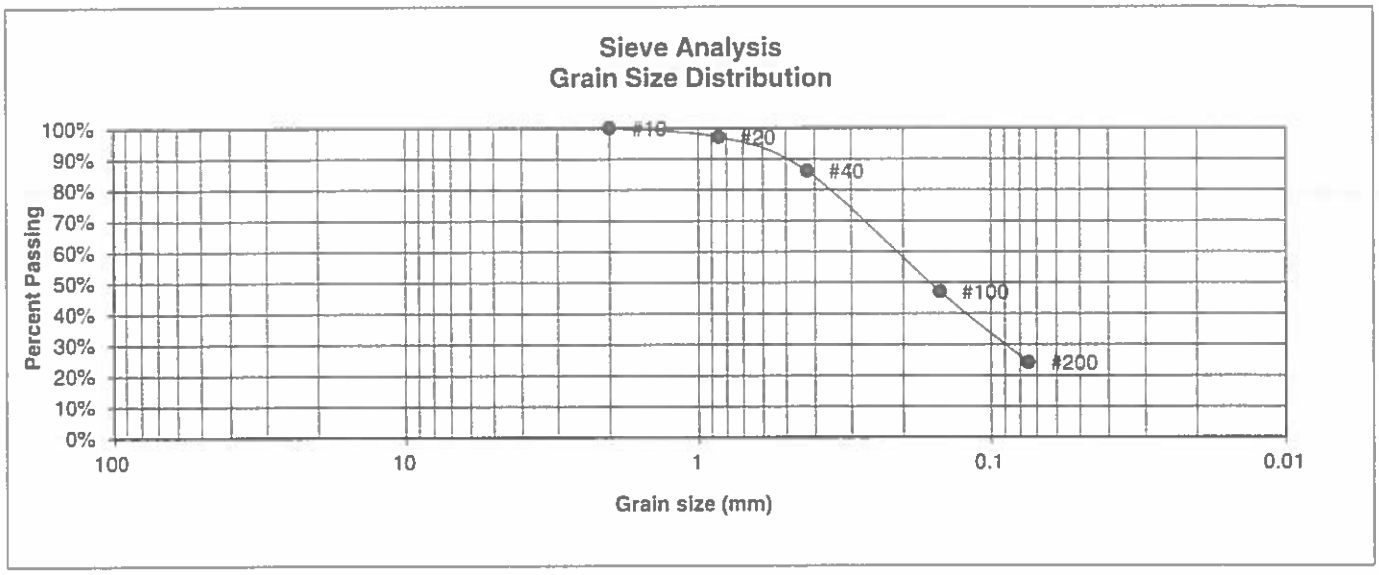
LABORATORY TEST RESULTS

DRAWN:	DATE:	CHECKED:	DATE:
		LLL	9/25/21

JOB NO. 212316

FIG NO. C-1

BORING NO.	TP-2, LOT 2	UNIFIED CLASSIFICATION	SM	TEST BY	BL
DEPTH(ft)	5	AASHTO CLASSIFICATION		JOB NO.	212316
CLIENT	MVE, INC				
PROJECT	HIGHWAY 94 & ANTELOPE DRIVE				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	
10	100.0%
20	97.1%
40	86.1%
100	47.1%
200	24.2%

Atterberg Limits	
Plastic Limit	
Liquid Limit	
Plastic Index	
Swell	
Moisture at start	
Moisture at finish	
Moisture increase	
Initial dry density (pcf)	
Swell (psf)	

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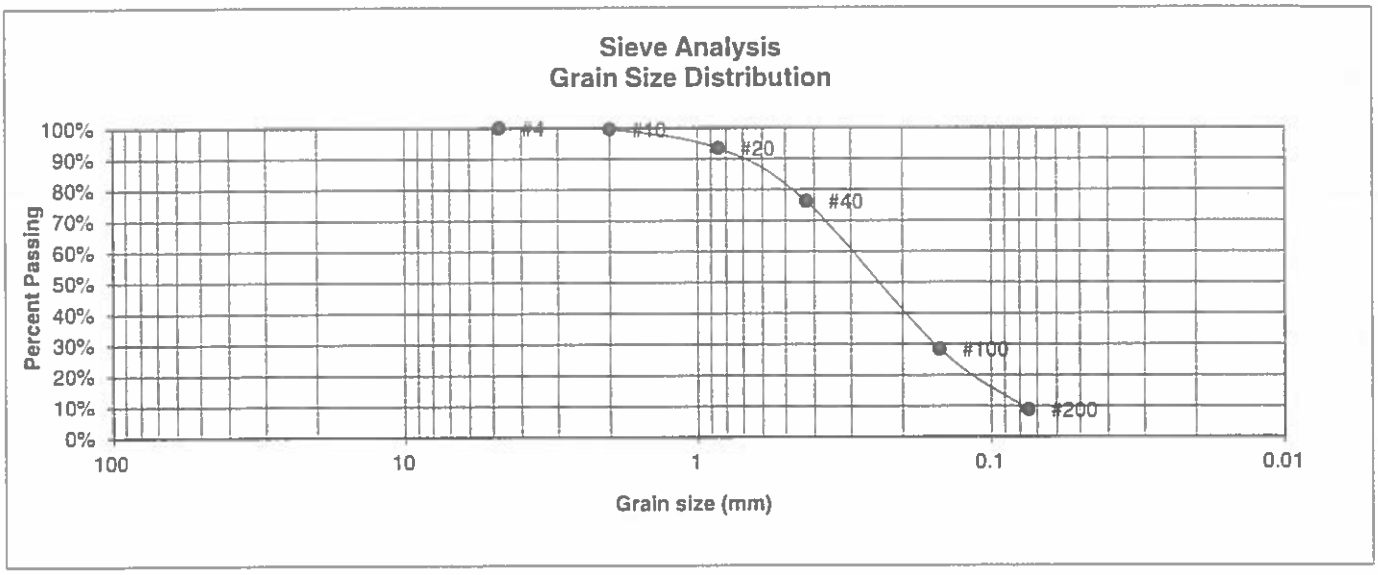
LABORATORY TEST RESULTS

DRAWN:	DATE	CHECKED:	DATE
		LLL	9/25/21

JOB NO. 212316

FIG NO. C-2

BORING NO.	TP-3, LOT 1	UNIFIED CLASSIFICATION	SM-SW	TEST BY	BL
DEPTH(ft)	3	AASHTO CLASSIFICATION		JOB NO.	212316
CLIENT	MVE, INC				
PROJECT	HIGHWAY 94 & ANTELOPE DRIVE				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.6%
20	93.4%
40	76.2%
100	28.4%
200	8.8%

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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COLORADO SPRINGS, COLORADO 80907

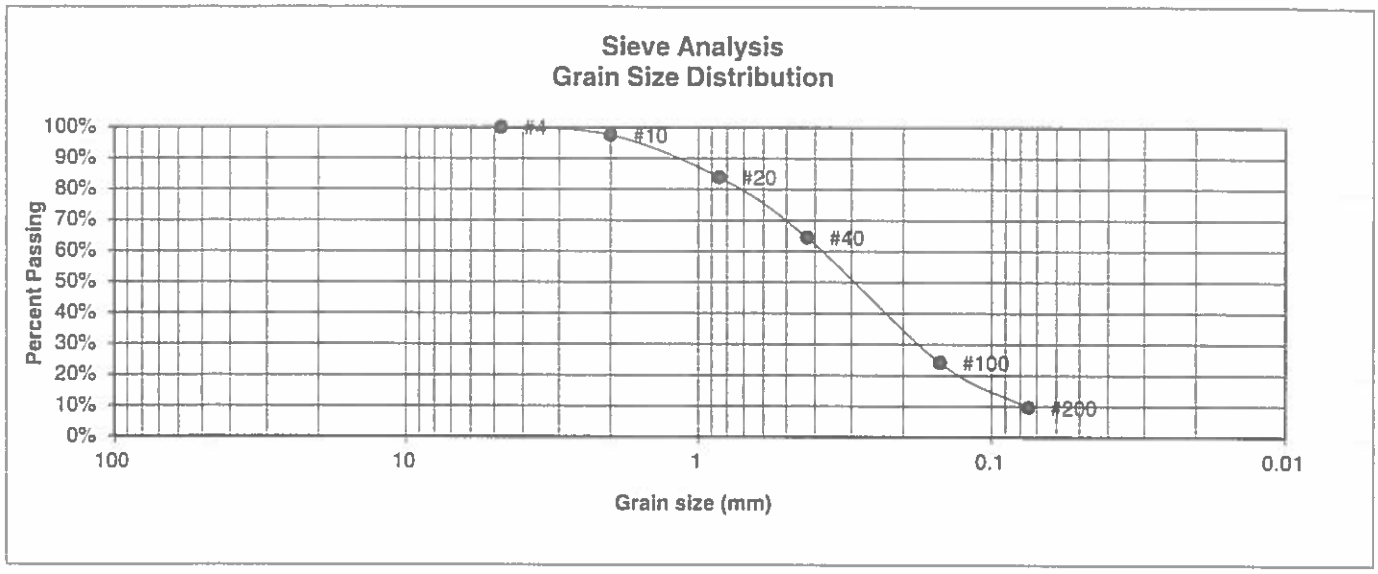
LABORATORY TEST RESULTS

DRAWN	DATE	CHECKED	DATE
		LCL	9/25/21

JOB NO 212316

FIG NO. C-3

BORING NO.	TP-4, LOT 2	UNIFIED CLASSIFICATION	SM-SW	TEST BY	BL
DEPTH(ft)	4	AASHTO CLASSIFICATION		JOB NO.	212316
CLIENT	MVE, INC				
PROJECT	HIGHWAY 94 & ANTELOPE DRIVE				



U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	97.6%
20	84.0%
40	64.5%
100	24.1%
200	9.6%

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 LL	DATE 9/15/21

JOB NO. 212316
FIG NO. C-4

APPENDIX D: Soil Survey Descriptions

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: 98 percent
Minor components: 2 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
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 content: 5 percent
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Minor Components

Pleasant

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Other soils

Percent of map unit: 1 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 18, Jun 5, 2020

El Paso County Area, Colorado

96—Truckton sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2yvrd
Elevation: 5,400 to 7,000 feet
Mean annual precipitation: 14 to 23 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 90 to 155 days
Farmland classification: Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60

Map Unit Composition

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

Description of Truckton

Setting

Landform: Interfluves, fan remnants
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Wind re-worked alluvium derived from arkose

Typical profile

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

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Minor Components

Blakeland
Percent of map unit: 5 percent
Landform: Hills, interfluves
Landform position (two-dimensional): Shoulder, backslope, summit
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Bresser
Percent of map unit: 5 percent
Landform: Interfluves, terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R049XB210CO - Sandy Foothill
Hydric soil rating: No

Urban land
Percent of map unit: 2 percent
Hydric soil rating: No

Pleasant, frequently ponded
Percent of map unit: 2 percent
Landform: Closed depressions
Down-slope shape: Concave, linear
Across-slope shape: Concave
Ecological site: R067BY010CO - Closed Upland Depression
Hydric soil rating: Yes

Ellicott, occasionally flooded
Percent of map unit: 1 percent
Landform: Flood plains, drainageways
Down-slope shape: Linear
Across-slope shape: Linear, concave
Ecological site: R067BY031CO - Sandy Bottomland
Hydric soil rating: No

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 18, Jun 5, 2020