

Job No. 184689

August 7, 2024

Jay Stoner
5655 Bridlespur Ridge Place
Colorado Springs, CO 80918

Re: Addendum to Subsurface Soil Investigation
10245 Otero Ave
Lot 2, Kettle Creek Estates, Filing No. 2
El Paso County, Colorado

Dear Jay Stoner:

On July 22, 2024, RMG – Rocky Mountain Group drilled a test boring at the above referenced address to supplement our previous report entitled *10245 Otero Av, Lot 8, Spring Crest AMD Filing. 2, El Paso County, Colorado*, Job No. 184689, dated November 8, 2021. It is our understanding the proposed location of the residence has been moved. An additional test boring was drilled in the new proposed location to confirm our previous recommendations for foundation design and construction of a spread footing foundation for the proposed walkout basement are valid. Furthermore, RMG has completed an updated Soils, Geology and Wastewater Study (last dated August 7, 2024) that was completed for the proposed subdivision. Once the subdivision is approved, Lot 8 of the Spring Crest AMD, Filing No. 2 is to be rezoned as Lot 2, Kettle Creek Estates, Filing No. 2 and will likely be provided with a new address.

The subsurface materials encountered in the test boring generally consisted of sandy clay extending to approximately 8 feet below the surface. Underlying the sandy clay, clayey sand with gravel extends to 13 feet and overlies clay sandstone. The sandstone extends to 28 feet and overlies sandy claystone that extends to the 35-foot termination depth of the boring. Groundwater was encountered at a depth of 28 feet during drilling. A subsequent water check was performed two days after the date of drilling and water was measured at a depth of 27 feet. A third follow-up water check was performed approximately 12 days after drilling and groundwater was measured at 26 feet. A Test Boring Location Map is presented in Figure 1. An Explanation of Test Boring Log, the Test Boring Log, Summary of Laboratory Test Results, and Swell/Consolidation Test Results are attached herein.

Based upon the subsurface conditions encountered, the recommendations previously presented in our Subsurface Soil Investigation are still considered to be valid.

All findings, conclusions and recommendations presented in the report referenced above and not specifically addressed in this letter remain valid for the currently proposed structure.

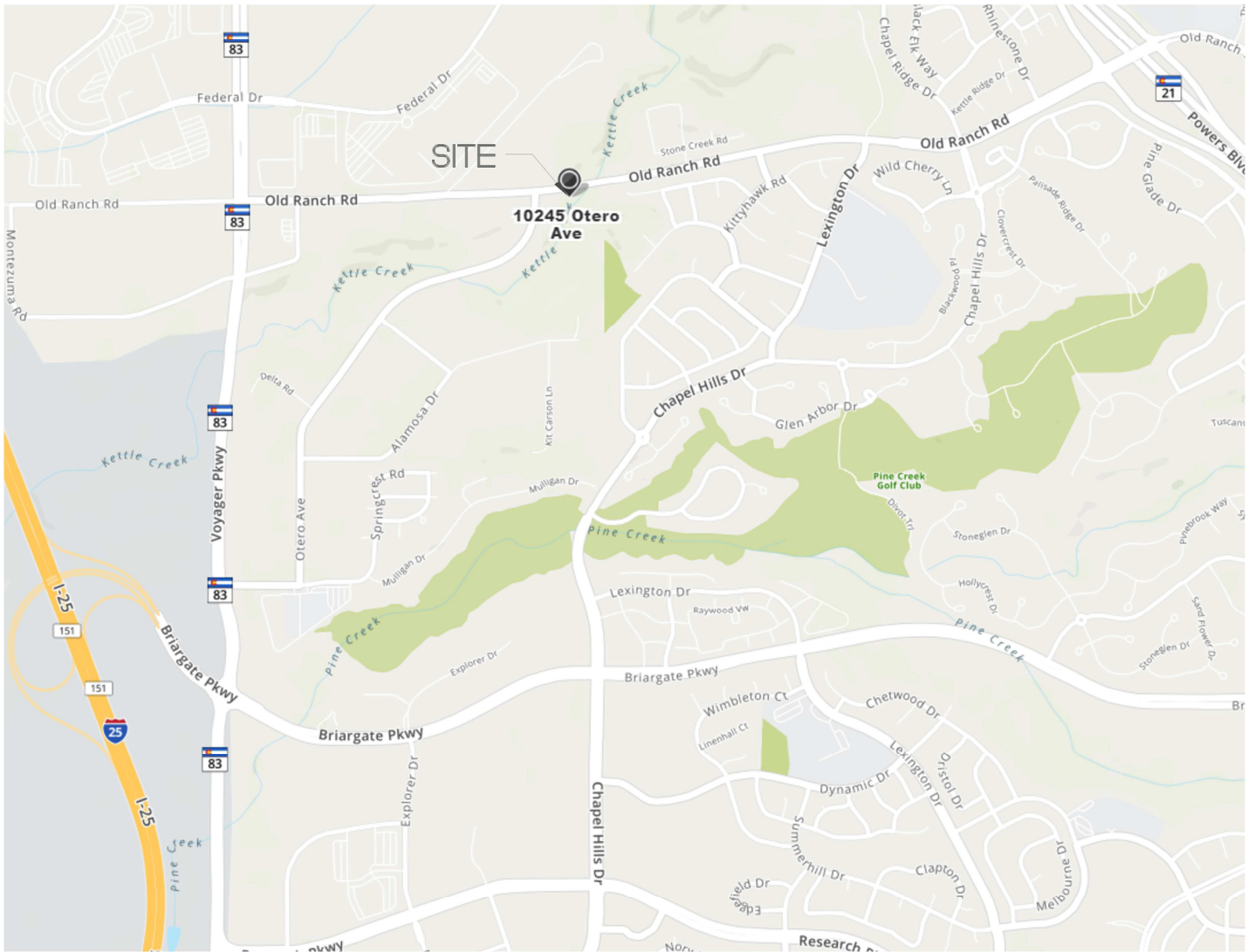
Should you have questions, please do not hesitate to call.

Cordially,

RMG – Rocky Mountain Group

Tony Munger, P.E.
Sr. Geotechnical Project Manager





NOT TO SCALE



ROCKY MOUNTAIN GROUP

Southern Office
 Colorado Springs, CO
 80918
 (719) 548-0600
Central Office:
 Englewood, CO 80112
 (303) 688-9475
Northern Office:
 Greeley / Evans, CO 80620
 (970) 330-1071

SITE VICINITY MAP

LOTS 1 AND 2
 KETTLE CREEK ESTATES,
 FILING NO. 2
 EL PASO COUNTY, CO
 JAY STONER

JOB No. 184689

FIG No. 1

DATE 8-7-2024



GPS COORDINATES:
 TB-1: 38° 58' 46.35" N, 104° 41' 12.38" W
 ACCURACY +/- 20 FEET

 DENOTES APPROXIMATE LOCATION OF TEST BORINGS



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TEST BORING LOCATION PLAN

LOTS 1 AND 2
 KETTLE CREEK ESTATES,
 FILING NO. 2
 EL PASO COUNTY, CO

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FIG No. 2

DATE 8-7-2024

SOILS DESCRIPTION



CLAYEY SAND



CLAYSTONE



SANDSTONE



SANDY CLAY

UNLESS NOTED OTHERWISE, ALL LABORATORY TESTS PRESENTED HEREIN WERE PERFORMED BY:
RMG - ROCKY MOUNTAIN GROUP
5085 LIST DRIVE, SUITE 200
COLORADO SPRINGS, COLORADO

SYMBOLS AND NOTES



XX

STANDARD PENETRATION TEST - MADE BY DRIVING A SPLIT-BARREL SAMPLER INTO THE SOIL BY DROPPING A 140 LB. HAMMER 30", IN GENERAL ACCORDANCE WITH ASTM D-1586. NUMBER INDICATES NUMBER OF HAMMER BLOWS PER FOOT (UNLESS OTHERWISE INDICATED).



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UNDISTURBED CALIFORNIA SAMPLE - MADE BY DRIVING A RING-LINED SAMPLER INTO THE SOIL BY DROPPING A 140 LB. HAMMER 30", IN GENERAL ACCORDANCE WITH ASTM D-3550. NUMBER INDICATES NUMBER OF HAMMER BLOWS PER FOOT (UNLESS OTHERWISE INDICATED).



FREE WATER TABLE



DEPTH AT WHICH BORING CAVED



BULK DISTURBED BULK SAMPLE



AUG AUGER "CUTTINGS"

4.5

WATER CONTENT (%)

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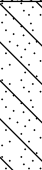



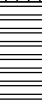

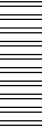





SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

EXPLANATION OF TEST BORING LOGS

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FIGURE No. 3

DATE Jul/30/2024

TEST BORING: 1 DATE DRILLED: 7/22/24 GROUNDWATER @ 27.0' 7/22/24	DEPTH (FT)	SYMBOL	SAMPLES	BLOWS PER FT.	WATER CONTENT %
CLAY, SANDY, tan to reddish brown, very stiff, moist	5			25	16.8
SAND, CLAYEY, with gravel, tan, medium dense, moist	10			23	16.8
SANDSTONE, CLAYEY, with gravel, brown to gray, hard to very hard, moist to wet	15			50/6"	19.7
	20			50/3"	11.3
	25			50/7"	16.5
	30			50/6"	16.6
	35			50/10"	21.2

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TEST BORING LOG

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FIGURE No. 4

DATE Jul/30/2024

Test Boring No.	Depth	Water Content (%)	Dry Density (pcf)	Liquid Limit	Plasticity Index	% Retained No.4 Sieve	% Passing No. 200 Sieve	Load at Saturation (psf)	% Swell/ Collapse	USCS Classification
1	4.0	16.8								
1	9.0	16.8	107.0	58	34	0.9	37.1	1,000	3.9	SC
1	14.0	19.7	91.1	47	17	1.3	37.6	1,000	- 1.7	SM
1	19.0	11.3								
1	24.0	16.5								
1	29.0	16.6								
1	34.0	21.2		46	13					

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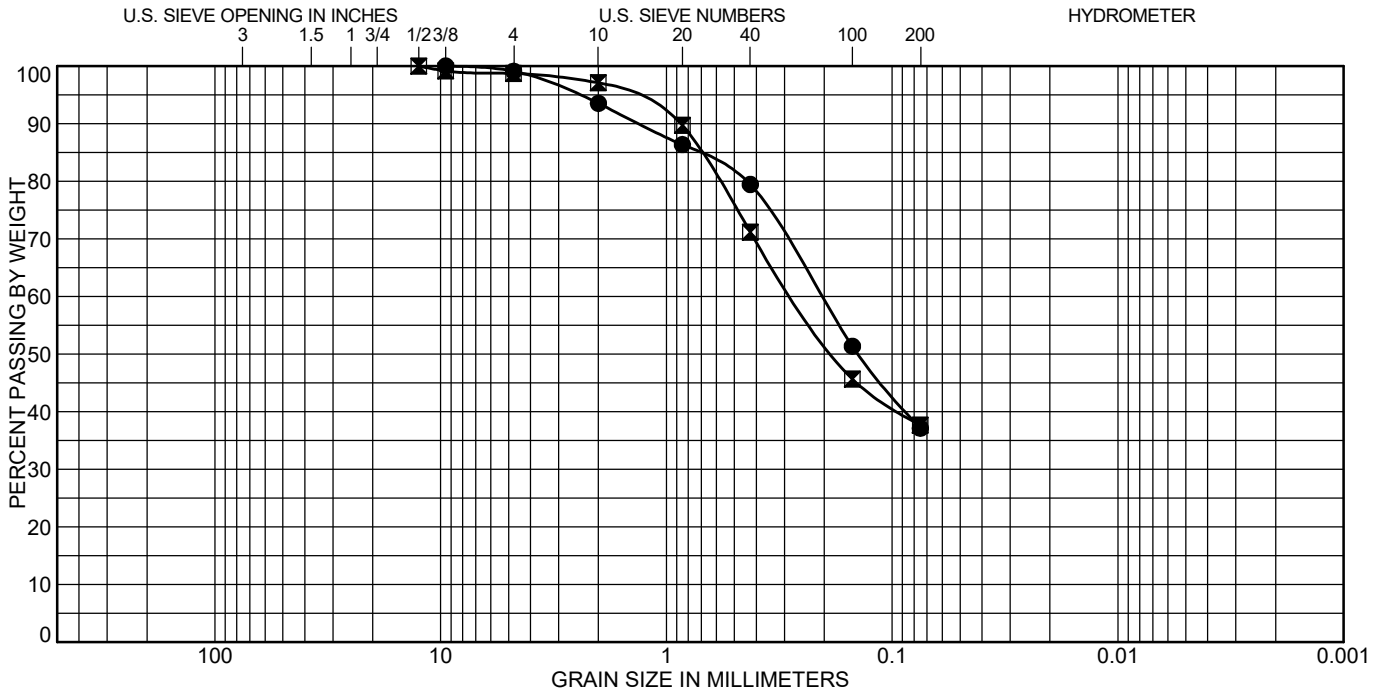
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SUMMARY OF LABORATORY TEST RESULTS

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 FIGURE No. 5
 PAGE 1 OF 1
 DATE Jul/30/2024



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Test Boring	Depth (ft)	Classification	LL	PL	PI
● 1	9.0	CLAYEY SAND(SC)	58	24	34
☒ 1	14.0	SILTY SAND(SM)	47	30	17

Test Boring	Depth (ft)	%Gravel	%Sand	%Silt	%Clay
● 1	9.0	0.9	62.0	37.1	
☒ 1	14.0	1.3	61.1	37.6	

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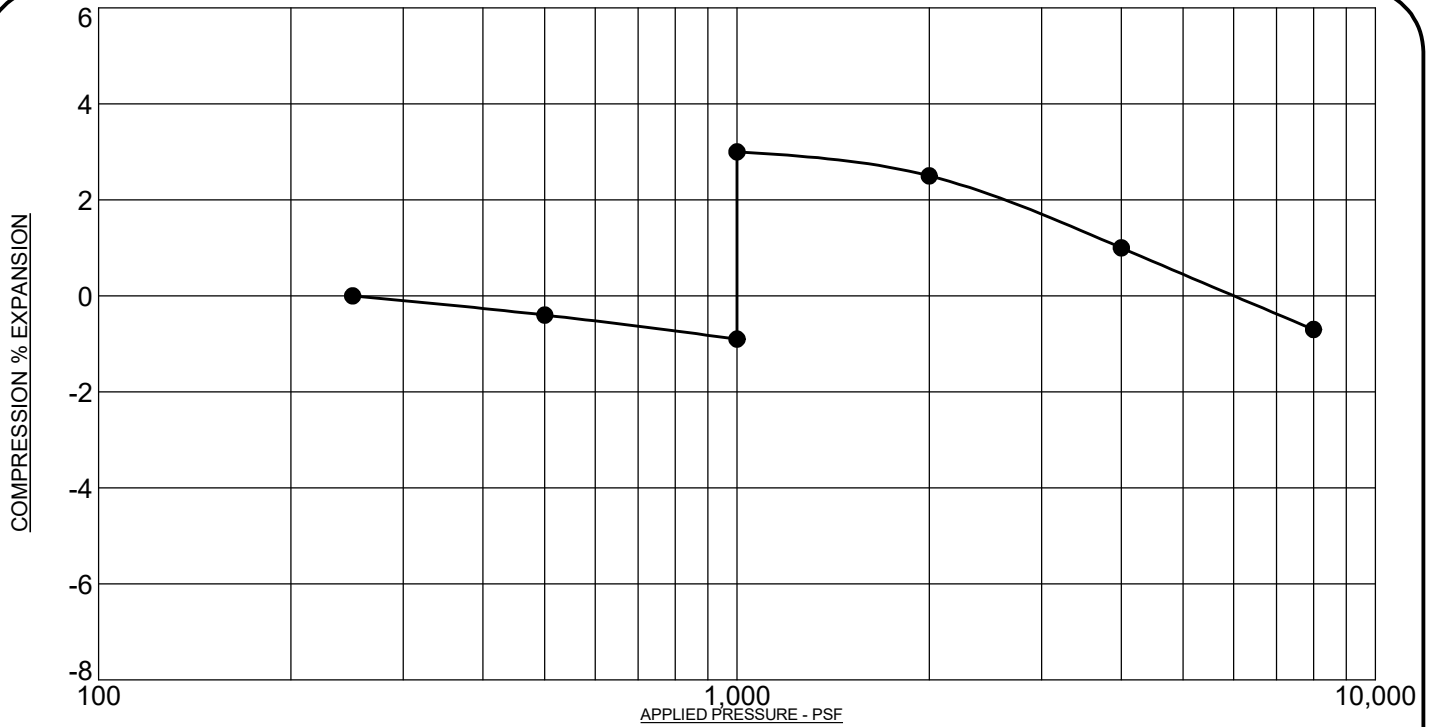
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SOIL CLASSIFICATION DATA

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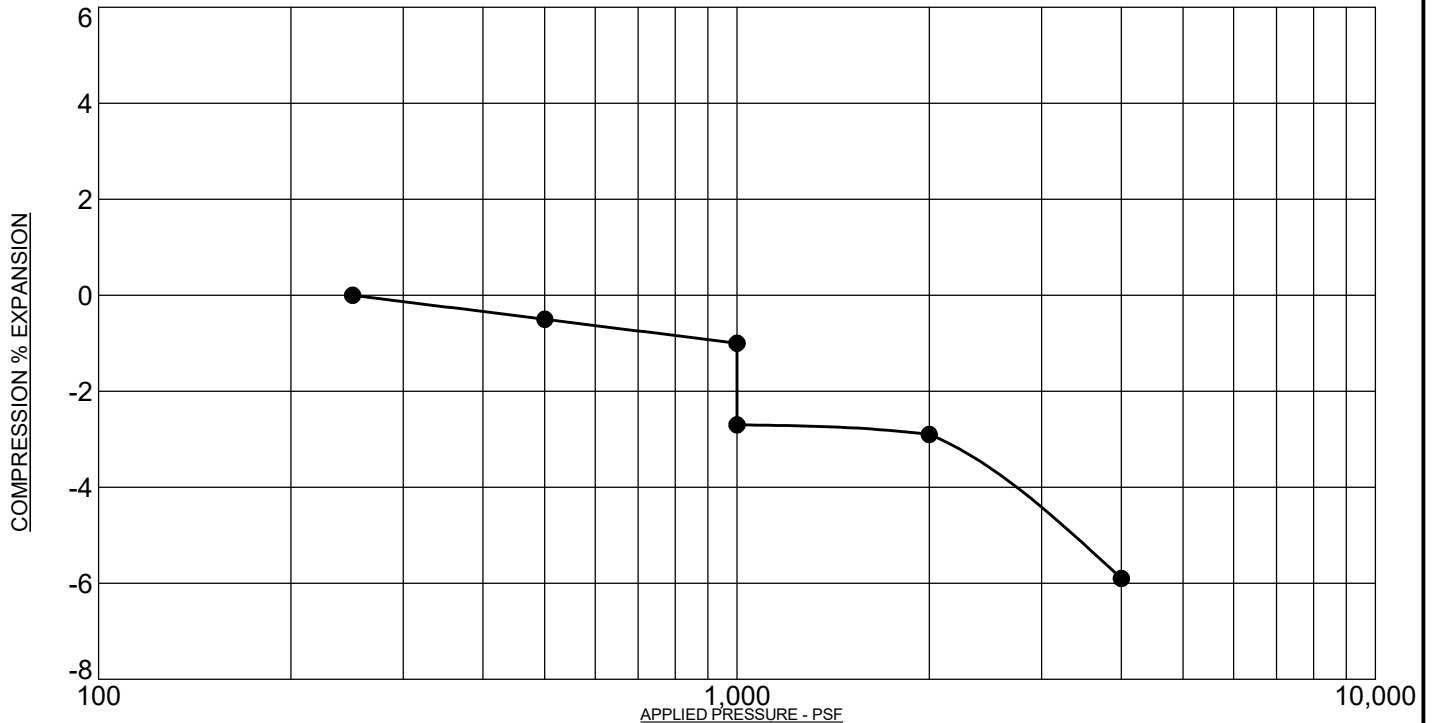
FIGURE No. 6

DATE Jul/30/2024



PROJECT: 10245 Otero Ave, El Paso County, Colorado
 SAMPLE DESCRIPTION: SAND, CLAYEY
 NOTE: SAMPLE WAS INUNDATED WITH WATER AT 1,000 PSF

SAMPLE LOCATION: 1 @ 9 FT
 NATURAL DRY UNIT WEIGHT: 107.0 PCF
 NATURAL MOISTURE CONTENT: 16.8%
 PERCENT SWELL/COMPRESSION: 3.9



PROJECT: 10245 Otero Ave, El Paso County, Colorado
 SAMPLE DESCRIPTION: SANDSTONE, CLAYEY
 NOTE: SAMPLE WAS INUNDATED WITH WATER AT 1,000 PSF

SAMPLE LOCATION: 1 @ 14 FT
 NATURAL DRY UNIT WEIGHT: 91.1 PCF
 NATURAL MOISTURE CONTENT: 19.7%
 PERCENT SWELL/COMPRESSION: -1.7

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SWELL/CONSOLIDATION TEST RESULTS

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FIGURE No. 7

DATE Jul/30/2024