

Job No. 198281

January 28, 2025

Antler Range, LLC
PO Box 38939
Colorado Springs, CO 80937

Re: Wastewater Study
Antlers Range
NE Corner of N Meridian Rd and Ayer Rd
El Paso County, Colorado

Dear Mr. Langdon:

As requested, personnel of RMG – Rocky Mountain Group has performed a preliminary investigation and site reconnaissance at the above referenced address. It is our understanding the parcel included in this study is:

- **EPC Schedule No. 4218000022**, contains 244.38 acres, currently labeled as N. Meridian Rd, and zoned A-35 – Agricultural.

It is our understanding that the parcel is to be subdivided into 84 2.5 acre lots. The subdivision is to be accessed from Ayer Road, east of Meridian Road. Each lot is to be serviced by an individual wastewater treatment system and well. Preliminary grading plans were still in process at the time of this study, but it is our understanding that grading is anticipated to be minor, with construction occurring near the existing grades. The Proposed Lot Layout, Figure 2, outlines the proposed subdivision and the general boundaries of our investigation.

An existing FEMA (Zone A) floodplain is mapped along the northern property boundary, within Black Squirrel Creek. The banks of the creek contain steep potentially unstable slopes. Three broad shallow drainages traverse the site from the south to the north. Two earthen dams are present on the site. Water was not present in the drainages or in the two earthen dams observed at the time of our site visit on December 23, 2024. It is our understanding the earthen dams are to be demolished, and the areas filled in and regraded. There are no structures on the property. This report presents the results of our geologic evaluation and provides our conclusions and recommendations regarding the geologic conditions which could potentially affect the proposed development. The approximate location of the site is shown on the Site Vicinity Map, Figure 1.

This letter is to provide information for the on-site wastewater report per the On-Site Wastewater Treatment Systems (OWTS) Regulations of the El Paso County Board of Health pursuant to Chapter 8.

The following are also excluded from the scope of this report including (but not limited to) foundation recommendations, site grading/surface drainage recommendations, subsurface drainage recommendations, geologic, natural and environmental hazards such as landslides, unstable slopes, seismicity, snow avalanches, water flooding, corrosive soils, erosion, radon, wild fire protection, hazardous waste and natural resources.

Previous Studies and Field Investigation

Reports of previous geotechnical engineering/geologic investigations for this site were available for our review and are listed below:

1. *Soil and Geology Study, Antler Range, El Paso County, Colorado*, prepared by RMG Engineers, dated January 28, 2024.
2. *Soils and Geology Study, Meridian-Ayer Road Development, El Paso County, Colorado*, prepared by Kumar & Associates, Project No. 042-174, June 17, 2004.
3. *Geologic and Soil Report, The Trails Subdivision, El Paso County, Colorado, Project No. 1100*, prepared by MVE, Inc., dated November 28, 1984.

The findings, conclusions and recommendations contained in those reports were considered during the preparation of this report.

SITE CONDITIONS

Personnel of RMG performed a reconnaissance visit on December 23, 2024. The purpose of the reconnaissance visit was to evaluate the site surface characteristics including landscape position, topography, vegetation, natural and cultural features, and current and historic land uses. Seventeen (17) 3.5 to 8-foot deep test pits were performed across the entire site, during our reconnaissance visit. A Test Pit Location Plan is presented in Figure 3.

Topographically, the site consists of undulating to gently rolling hills that generally slope down to the north towards Black Squirrel Creek. The banks of Black Squirrel Creek appeared to have a combination of stable slopes (sandstone exposed) and unstable slopes (sloughing of sands). The bottom of the creek contained a steady flow of water and is heavily eroded in areas. The banks, where sandstone cliffs were not exposed, generally are heavily vegetated with mature vegetation and deciduous trees. Black Squirrel Creek lies within the FEMA floodplain.

Vegetation across the remainder of the site consists of grasses, weeds, yuccas, and trees. Three broad shallow drainages traverse the site from the south to the north. Water was not present in the drainages. Two earthen dams are present on the site. Water was not present in the drainages or in the two earthen dams observed at the time of our site visit on December 23, 2024. It is our understanding the earthen dams are to be demolished, and the areas filled in and regraded. There are no structures on the property. Elevations across the property range between approximately 100 to 150 feet in elevation difference from the southern property boundary to the northern property boundary.

The following conditions were observed with regard to the 244.38-acre parcel:

- A well currently **does not** exist on the existing 244.38-acre site;
- No runoff or irrigation features anticipated to cause deleterious effects to treatment systems on the site were observed;
- A major waterway, Black Squirrel Creek, exists along the northern boundary of the property. The majority of the site lies outside of the designated floodway;
- Slopes greater than 20 percent **do** exist on the site; and
- Significant man-made cuts **do not** exist on the site. Minor man-made cuts are located near the two earthen dams.

Treatment Areas

Treatment areas at a minimum must achieve the following:

- The treatment areas must be 4 feet above groundwater or bedrock as defined by the Definitions 8.3.4 of the Regulations of the El Paso County Board of Health, Chapter 8, *OWTS Regulations*, effective July 7, 2018;
- Prior to construction of an OWTS, an OWTS design prepared per *the Regulations of the El Paso County Board of Health, Chapter 8, OWTS Regulations* will need to be completed. A scaled site plan and engineered design will also be required prior to obtaining a building permit;
- Comply with any physical setback requirements of Table 7-1 of the El Paso County Department of Health and Environment (EPCDHE);
- Treatment areas are to be located a minimum 100 feet from any well (existing or proposed), including those located on adjacent properties per Table 7-2 per the EPCDHE;
- Treatment areas must also be located a minimum 50 feet from any spring, lake, water course, irrigation ditch, stream or wetland, and 25 feet from dry gulches;
- Other setbacks include the treatment area to be located a minimum 10 feet from property lines, cut banks and fill areas (from the crest);
- The new lots shall be laid out to ensure that the proposed OWTS does not fall within any restricted areas, (e.g. utility easements, right of ways). Based on the test pit observations, the parcel has a minimum of two locations for the OWTS on each lot.

Contamination of surface and subsurface water resources should not occur if the treatment areas are evaluated and installed according to El Paso County Health Department and State Guidelines in conjunction with proper maintenance.

DOCUMENT REVIEW

RMG has reviewed the preliminary site plan. We have identified the soil conditions anticipated to be encountered during construction of the proposed OWTS for the proposed lots. Our review included a review of documented Natural Resource Conservation Service (NRCS) data provided by websoilsurvey.nrcs.usda.gov. The Soil Survey Descriptions are presented below. A review of FEMA Map No. 08041C0340G, effective December 7, 2018 indicates that the proposed treatment areas are not located within an identified floodplain.

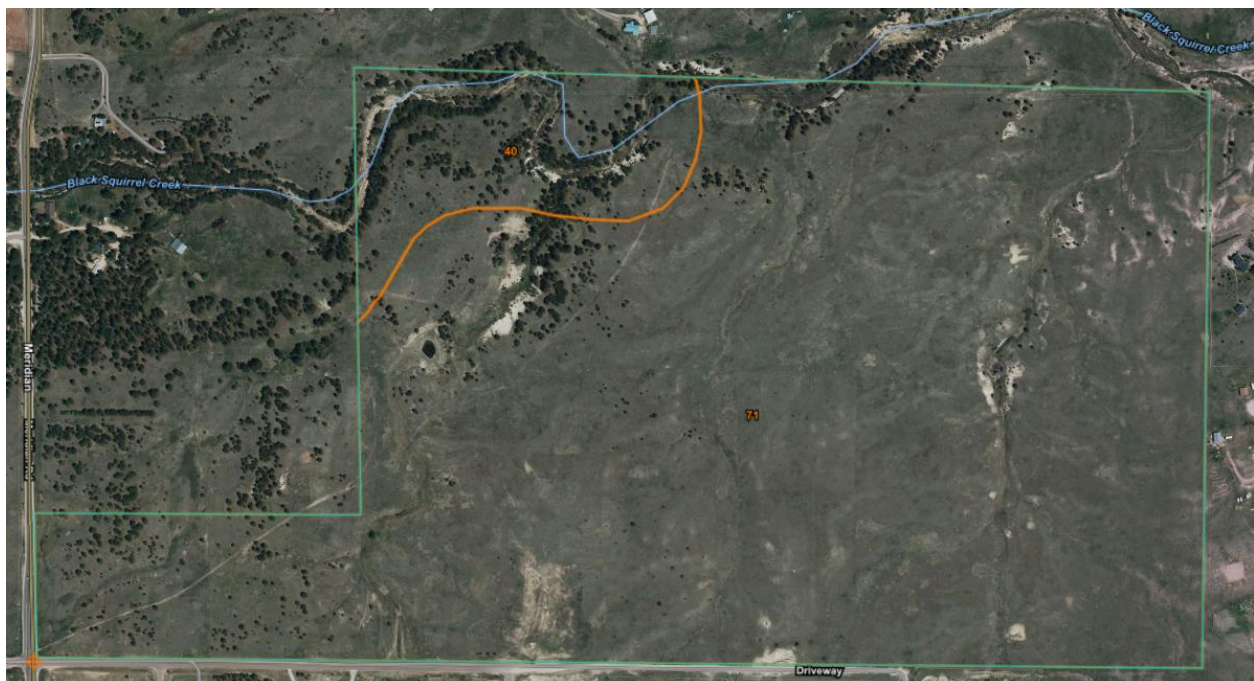
SOIL EVALUATION

Personnel of RMG performed soil evaluations in 17 test pits ranging in depths between 3.5 and 8 feet on December 23, 2024, utilizing the visual and tactile method for the evaluation of the site soils. The test pits were excavated in areas that appeared most likely to be problematic areas for future OWTS. The Explanation of Test Pit Logs and the Test Pit Logs are presented in Figures 3-13. A Septic Suitability map is presented in Figure 14.

The U.S. Soil Conservation Service along with USDA has identified the soils on the property as:

- 41 – Kettle gravelly loamy sand, 8 to 40 percent slopes. The Kettle gravelly loamy sand was mapped by the USDA to be located near the northwest portion of the property. The Properties of the Kettle gravelly loamy sand include, somewhat excessively drained soil, depth of the water table is anticipated to be greater than 6.5 feet, runoff is anticipated to be medium, frequency of flooding and ponding is none, and landforms are depressions.
- 71 – Pring coarse sandy loam, 3 to 8 percent slopes. The Pring coarse sandy loam encompasses the majority of the property. Properties of the Pring coarse sandy loam include, well-drained soil, depth of the water table is anticipated to be more than 80 inches, runoff is anticipated to be low, frequency of flooding is none and ponding is none. Landforms include hills.

The USDA Soil Survey Map is presented below.



Bedrock was encountered in some of the test pits observed by RMG. Groundwater was not observed in the test pits. However, three of the test pits (TP-4, TP-5, TP-7) had indications of redoximorphic features (*color patterns in soil that are caused by the oxidation and reduction of iron and manganese*), underlying the topsoil. It is our opinion, the upper redoximorphic features

were indicating the surface water has historically filtered through the topsoil and becomes perched atop the underlying sandstone and/or claystone bedrock. This observation coincided with the test pits located within the lower lying areas that appear to have contained standing surface water prior to our site visit, as the top 8 to 12 inches of soil were “frozen”, whereas the remainder of the test pits did not contain frozen soil at the surface.

TP-7 and TP-13 exhibited indications of redoximorphic features near the bottom of the 7 to 8-foot depth of the test pit. This seemed representative of the soil texture changing to a dense cemented clay soil that would retain moisture.

An OWTS is proposed for each lot and should conform to the recommendations of a future OWTS site evaluation, performed in accordance with the applicable health department codes prior to construction. This report may require additional test pits in the vicinity of the proposed treatment field. A minimum separation of 4 feet shall be maintained from groundwater and bedrock to the infiltrative surface.

CONCLUSIONS

In summary, it is our opinion the site is suitable for individual on-site wastewater treatment systems within the cited limitations. There are no foreseeable or stated construction related issues or land use changes proposed at this time.

Soil and groundwater conditions at the site are suitable for individual treatment systems. It should be noted that the LTAR values stated above are for the test pit locations performed for this report only. The LTAR values may change throughout the site. If an LTAR value of less than 0.35 (soil types 3A to 5) or greater than 0.80 (soil type 0 or the Type “R” soils) is encountered at the time of the site specific OWTS evaluation, an "engineered system" will be required.

Additionally, based on the depth of the limiting layers (subsurface water and/or bedrock) encountered in the test pits, the maximum depth of the OWTS components may be limited in some cases, or mound systems (above finished ground surface) may be required. It is anticipated the majority if not all of the OWTS on the subject site will need to be “engineered”.

LIMITATIONS

The information provided in this report is based upon the subsurface conditions observed in the profile pit excavations and accepted engineering procedures. The subsurface conditions encountered in the excavation for the treatment area may vary from those encountered in the test pit excavations. Therefore, depth to limiting or restrictive conditions, bedrock, and groundwater may be different from the results reported in this letter.

An OWTS site evaluation will need to be performed in accordance with the applicable health department codes prior to construction.

I hope this provides the information you have requested. Should you have questions, please feel free to contact our office.

Cordially,

Reviewed by,

RMG – Rocky Mountain Group

RMG – Rocky Mountain Group



Kelli Zigler
Project Geologist

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

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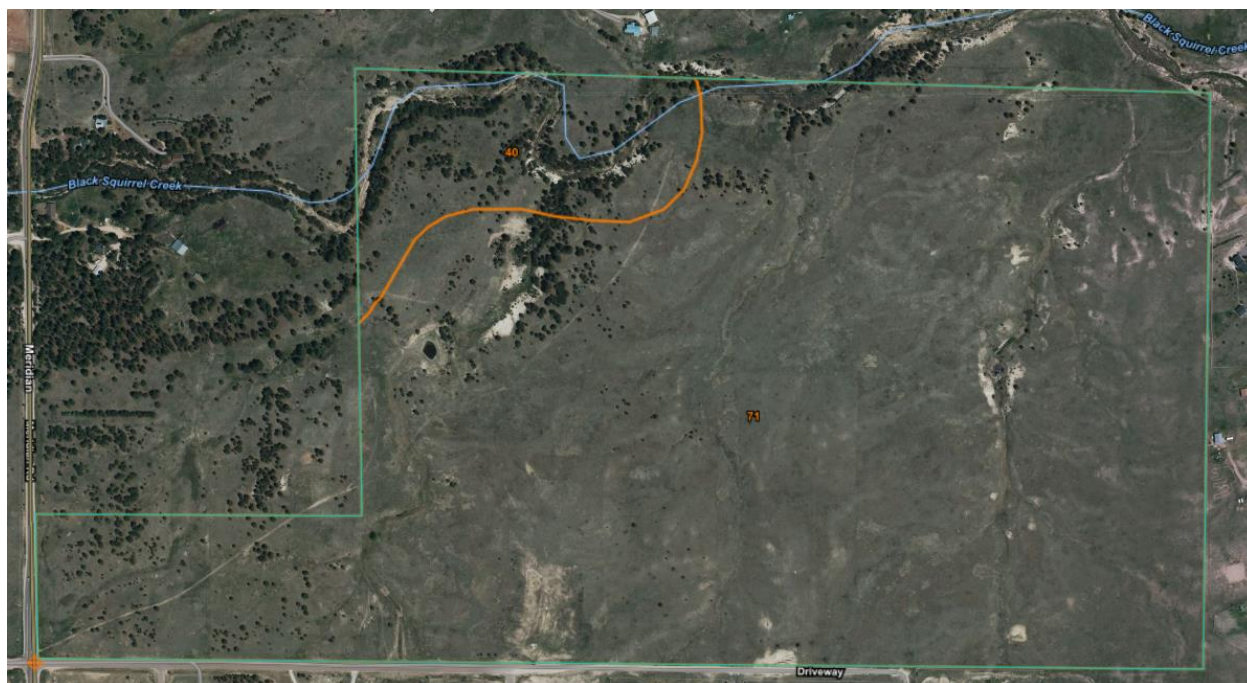
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Reviewed by,

RMG – Rocky Mountain Group

RMG – Rocky Mountain Group



Kelli Zigler
Project Geologist

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



NOT TO SCALE

Architecture
Structural
Geotechnical



Engineers / Architects

SOUTHERN COLORADO OFFICE
5085 LIST DRIVE, SUITE 200,
COLORADO SPRINGS, CO 80919
(719) 548-0600 ~ WWW.RMGENGINEERS.COM
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

Materials Testing
Forensics
Civil / Planning

SITE VICINITY MAP

ANTLERS RANGE
NE CORNER OF MERIDIAN RD
AND AYERS RD
EL PASO COUNTY, CO
ANTLERS RANGE. LLC

JOB No. 198281

FIG No. 1

DATE 1-28-2025



MERIDIAN RD

APPROXIMATE PROPERTY BOUNDARY

AYER ROAD



NOT TO SCALE

JOB No. 198281

Materials Testing
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Civil / Planning



Architecture
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Engineers / Architects

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5085 LIST DRIVE, SUITE 200,
COLORADO SPRINGS, CO 80919

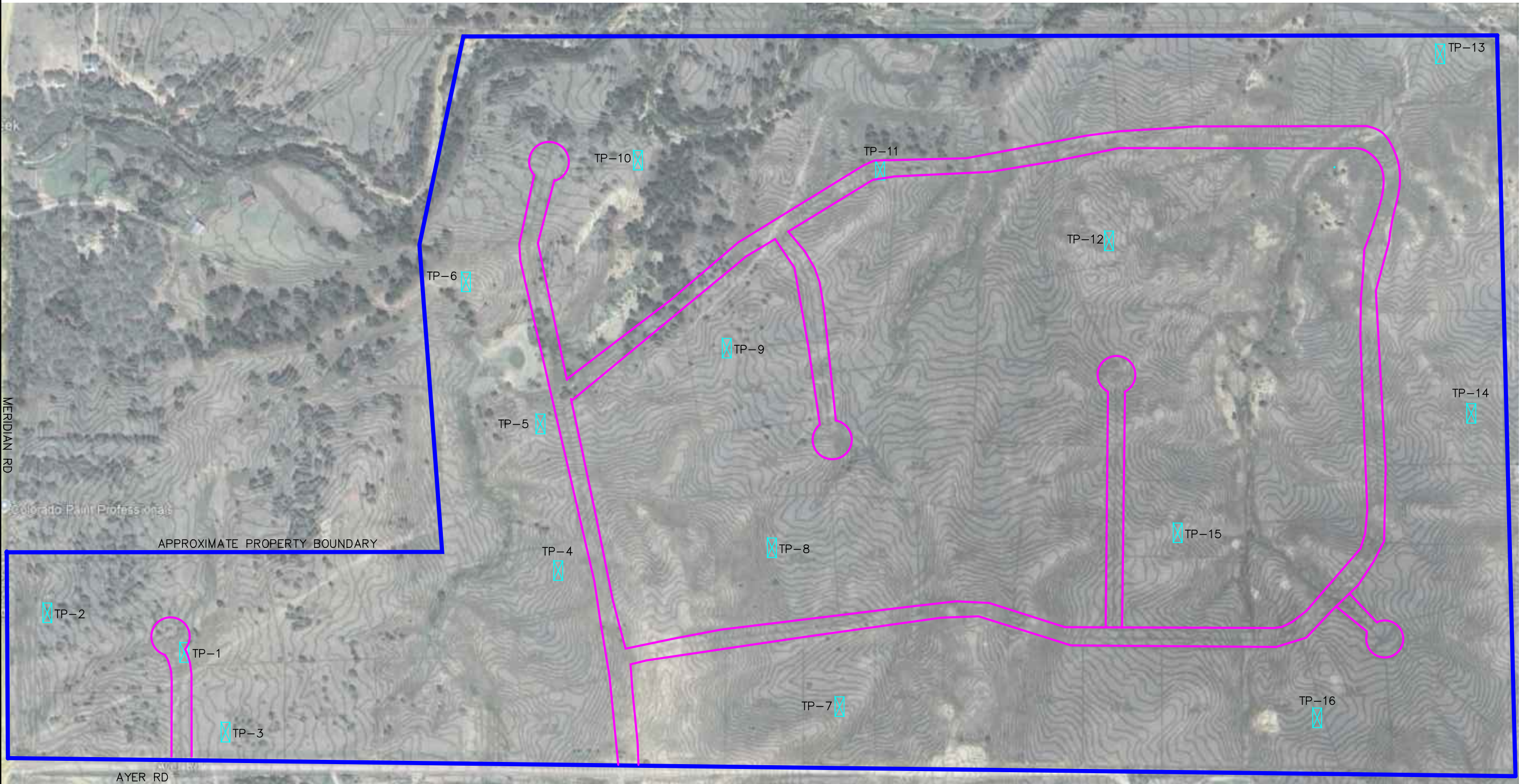
(719) 548-0600 ~ WWW.RMGENGINEERS.COM
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

ANTLER RANGE
NE MERIDIAN RD AND AYERS RD
EL PASO COUNTY, CO
ANTLER RANGE, LLC

ENGINEER: TM
DRAWN BY: KZ
CHECKED BY: TM
ISSUED: 1-28-2025

PROPOSED LOT
LAYOUT

SHEET No.
FIG-2



DENOTES APPROXIMATE LOCATION OF TEST PITS



NOT TO SCALE

JOB No. 198281

Materials Testing
Forensics
Civil / Planning



Engineers / Architects

SOUTHERN COLORADO OFFICE
5085 LIST DRIVE, SUITE 200,
COLORADO SPRINGS, CO 80919

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SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

Architecture
Structural
Geotechnical

ANTLER RANGE
NE MERIDIAN RD AND AYERS RD
EL PASO COUNTY, CO
ANTLER RANGE, LLC











| | |
|-------------|-----------|
| ENGINEER: | TM |
| DRAWN BY: | KZ |
| CHECKED BY: | TM |
| ISSUED: | 1-28-2025 |

TEST PIT
LOCATION PLAN

SHEET No.







FIG-3

SOILS DESCRIPTION

-  CLAY
-  CLAY LOAM
-  SILTY CLAY
-  LOAM
-  > 35% ROCK
-  SANDY CLAY
-  LOAMY SAND
-  SANDY LOAM
-  SILTY CLAY
-  SAND

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).
-  XX 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 (%)

ROCKY MOUNTAIN GROUP

Structural
Forensics



Geotechnical
Materials Testing

Colorado Springs, (Corporate Office)
 5085 List Drive, Suite 200
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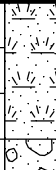
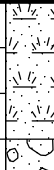




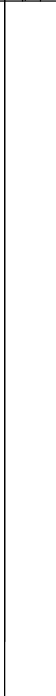
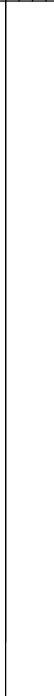
SOUTHERN COLORADO, DENVER METRO, NORTHERN COLORADO

EXPLANATION OF TEST PIT LOGS

JOB No. 198281

FIGURE No. 4

DATE Jan/28/2025

| TEST PIT: 1 DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | TEST PIT: 2 DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|---|------------|---|---------|---------------|-----------------|---|------------|---|---------|---------------|-----------------|
| SOIL TEXTURE: TOPSOIL: SAND SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: 1 | |  | | | | SOIL TEXTURE: TOPSOIL: LOAMY SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1 | |  | | | |
| SOIL TEXTURE: >35% ROCK SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: R | 2.5 |  | | | | SOIL TEXTURE: >35% ROCK SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: R | 2.5 |  | | | |
| SOIL TEXTURE: SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1 | 5.0 |  | | | | SOIL TEXTURE: LOAMY SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1 | 5.0 |  | | | |
| | 7.5 |  | | | | | 7.5 |  | | | |

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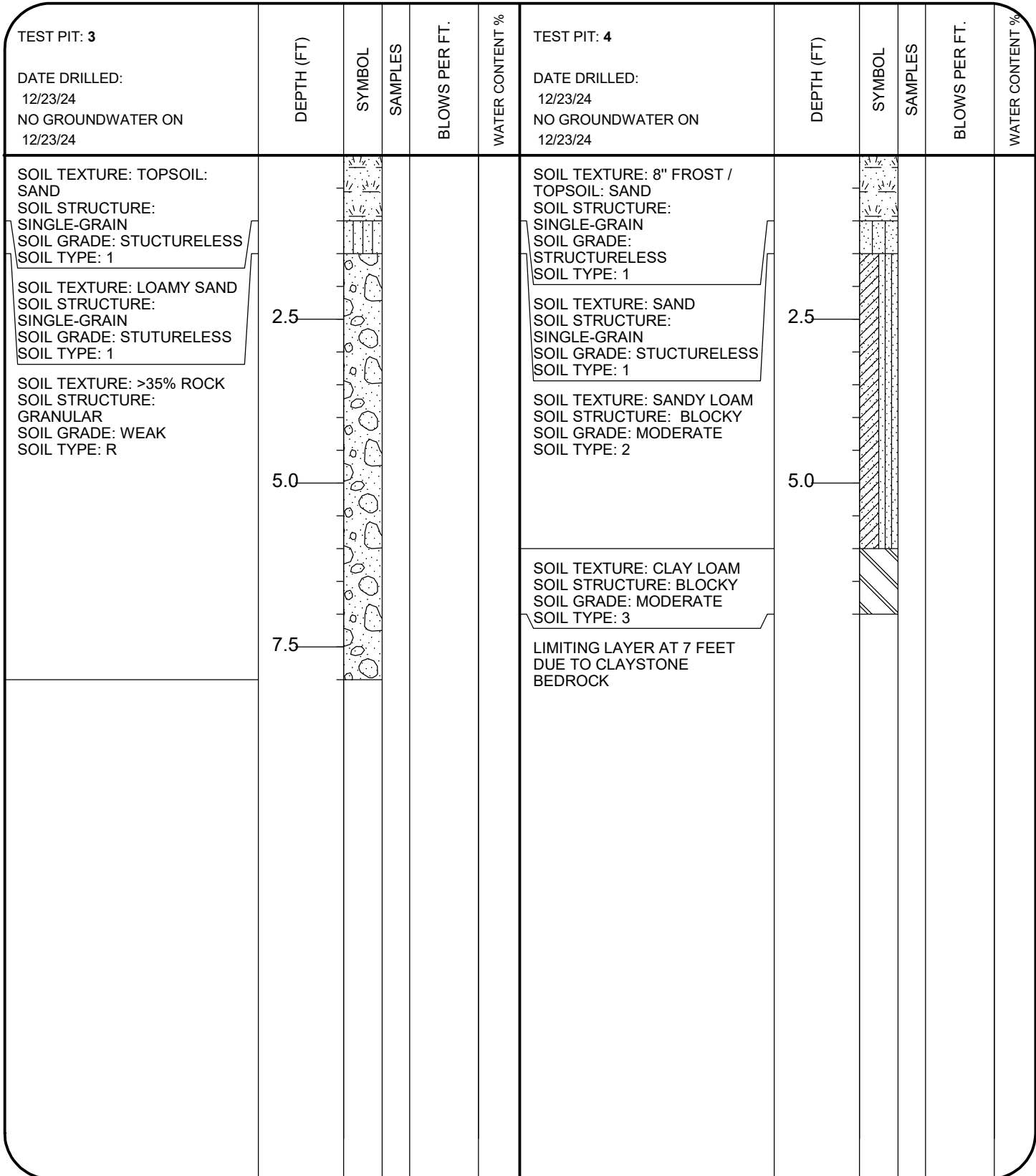
Geotechnical
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TEST PIT LOG

JOB No. 198281

FIGURE No. 5

DATE Jan/28/2025



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TEST PIT LOG

JOB No. 198281

FIGURE No. 6

DATE Jan/28/2025

| TEST PIT: 5 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | TEST PIT: 6 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|---|------------|--------|---------|---------------|-----------------|---|------------|--------|---------|---------------|-----------------|
| DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | | | | | | DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | | | | | |
| SOIL TEXTURE: 10" FROST / TOPSOIL: SANDY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 2 | | | | | | SOIL TEXTURE: 10" FROST / TOPSOIL: SANDY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 2 | | | | | |
| SOIL TEXTURE: LOAMY SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STRUCTURELESS SOIL TYPE: 1 | 2.5 | | | | | SOIL TEXTURE: SANDY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: 3 | 2.5 | | | | |
| SOIL TEXTURE: SANDY CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 4 | 5.0 | | | | | | 5.0 | | | | |
| LIMITING LAYER AT 7 FEET DUE TO HARD SANDSTONE BEDROCK | | | | | | LIMITING LAYER AT 7 FEET DUE TO HARD SANDSTONE BEDROCK | | | | | |

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
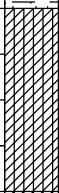
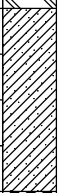
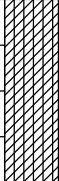

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TEST PIT LOG

JOB No. 198281

FIGURE No. 7

DATE Jan/28/2025

| TEST PIT: 7 DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | TEST PIT: 8 DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|---|------------|---|---------|---------------|-----------------|--|------------|---|---------|---------------|-----------------|
| SOIL TEXTURE: TOPSOIL: SANDY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 2 | |  | | | | SOIL TEXTURE: CLAY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 2 | |  | | | |
| SOIL TEXTURE: SILTY CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 4 | 2.5 |  | | | | SOIL TEXTURE: SANDY CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: STRONG SOIL TYPE: 4 | 2.5 |  | | | |
| SOIL TEXTURE: SANDY CLAY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 3 | 5.0 |  | | | | SOIL TEXTURE: CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: STRONG SOIL TYPE: 4 | |  | | | |
| LIMITING LAYER AT 5 FEET DUE TO HARD SANDSTONE BEDROCK | | | | | | LIMITING LAYER DUE AT 3.5 FEET DUE TO SANDSTONE BEDROCK | | | | | |

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TEST PIT LOG

JOB No. 198281

FIGURE No. 8

DATE Jan/28/2025

| <p>TEST PIT: 9</p> <p>DATE DRILLED: 12/23/24</p> <p>NO GROUNDWATER ON 12/23/24</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | <p>TEST PIT: 10</p> <p>DATE DRILLED: 12/23/24</p> <p>NO GROUNDWATER ON 12/23/24</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|--|------------|--------|---------|---------------|-----------------|---|------------|--------|---------|---------------|-----------------|
| <p>SOIL TEXTURE: SANDY LOAM SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 2</p> <p>SOIL TEXTURE: SANDY CLAY SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: 3</p> <p>SOIL TEXTURE: SANDY LOAM SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 2</p> | 2.5 | | | | | <p>SOIL TEXTURE: SANDY CLAY LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: 3A</p> <p>SOIL TEXTURE: CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 4</p> | 2.5 | | | | |
| <p>LIMITING LAYER AT 4 FEET DUE TO SANDSTONE BEDROCK</p> | 5.0 | | | | | <p>SOIL TEXTURE: LOAMY SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1</p> | 5.0 | | | | |
| | | | | | | | 7.5 | | | | |

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




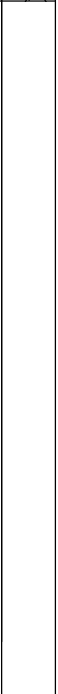
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TEST PIT LOG

JOB No. 198281

FIGURE No. 9

DATE Jan/28/2025

| TEST PIT: 11 DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | TEST PIT: 12 DATE DRILLED: 12/23/24 NO GROUNDWATER ON 12/23/24 | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|---|------------|---|---------|---------------|-----------------|---|------------|---|---------|---------------|-----------------|
| SOIL TEXTURE: LOAM SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 2 | | | | | | SOIL TEXTURE: TOPSOIL: SAND, <35% ROCK SOIL STRUCTURE: STRUCTURELESS SOIL GRADE: WEAK SOIL TYPE: R | | | | | |
| SOIL TEXTURE: SILTY CLAY SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 4 | 2.5 |  | | | | SOIL TEXTURE: >35% ROCK SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: R | 2.5 |  | | | |
| SOIL TEXTURE: >35% ROCK SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: R | 5.0 |  | | | | | 5.0 |  | | | |
| | 7.5 |  | | | | | 7.5 |  | | | |

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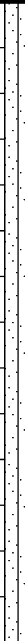
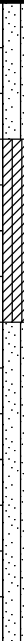



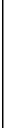

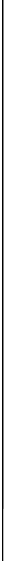
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TEST PIT LOG

JOB No. 198281

FIGURE No. 10

DATE Jan/28/2025

| <p>TEST PIT: 13</p> <p>DATE DRILLED: 12/23/24</p> <p>NO GROUNDWATER ON 12/23/24</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | <p>TEST PIT: 14</p> <p>DATE DRILLED: 12/23/24</p> <p>NO GROUNDWATER ON 12/23/24</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|--|------------|---|---------|---------------|-----------------|---|------------|---|---------|---------------|-----------------|
| <p>SOIL TEXTURE: LOAMY SAND SOIL STRUCTURE: GRANULAR SOIL GRADE: MODERATE SOIL TYPE: 1</p> | 2.5 |  | | | | <p>SOIL TEXTURE: SILTY LOAM WITH ORGANICS SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: 2A</p> | 2.5 |  | | | |
| <p>SOIL TEXTURE: SANDY CLAY LOAM SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 3</p> | 5.0 |  | | | | <p>SOIL TEXTURE: SANDY CLAY LOAM SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 3</p> | 5.0 |  | | | |
| <p>SOIL TEXTURE: SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1</p> | 7.5 |  | | | | <p>SOIL TEXTURE: SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1</p> | 7.5 |  | | | |
| <p>SOIL TEXTURE: SILTY CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: MODERATE SOIL TYPE: 4</p> <p>LIMITING LAYER DUE AT 8 FEET DUE TO INDICATIONS OF POTENTIALLY PERCHED WATER</p> | |  | | | | | |  | | | |

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TEST PIT LOG

JOB No. 198281

FIGURE No. 11

DATE Jan/28/2025

| <p>TEST PIT: 15</p> <p>DATE DRILLED: 12/23/24</p> <p>NO GROUNDWATER ON 12/23/24</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | <p>TEST PIT: 16</p> <p>DATE DRILLED: 12/23/24</p> <p>NO GROUNDWATER ON 12/23/24</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % |
|--|----------------------------------|--|---------|---------------|-----------------|--|----------------------------------|--|---------|---------------|-----------------|
| <p>SOIL TEXTURE: SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1</p> <p>SOIL TEXTURE: SANDY CLAY SOIL STRUCTURE: BLOCKY SOIL GRADE: STRONG SOIL TYPE: 4</p> <p>SOIL TEXTURE: >35% ROCK SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: R</p> | <p>2.5</p> <p>5.0</p> <p>7.5</p> |  | | | | <p>SOIL TEXTURE: TOPSOIL: LOAMY SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1</p> <p>SOIL TEXTURE: SAND SOIL STRUCTURE: SINGLE-GRAIN SOIL GRADE: STUCTURELESS SOIL TYPE: 1</p> | <p>2.5</p> <p>5.0</p> <p>7.5</p> |  | | | |

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TEST PIT LOG

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FIGURE No. 12

DATE Jan/28/2025

| <p>TEST PIT: 17</p> <p>DATE DRILLED: 12/23/25</p> <p>NO GROUNDWATER ON 12/23/25</p> | DEPTH (FT) | SYMBOL | SAMPLES | BLOWS PER FT. | WATER CONTENT % | |
|--|----------------------------------|--|---------|---------------|-----------------|--|
| <p>SOIL TEXTURE: TOPSOIL: 35% ROCK</p> | |  | | | | |
| <p>SOIL TEXTURE: >35% ROCK SOIL STRUCTURE: GRANULAR SOIL GRADE: WEAK SOIL TYPE: R</p> | <p>2.5</p> <p>5.0</p> <p>7.5</p> |  | | | | |
| | | | | | | |

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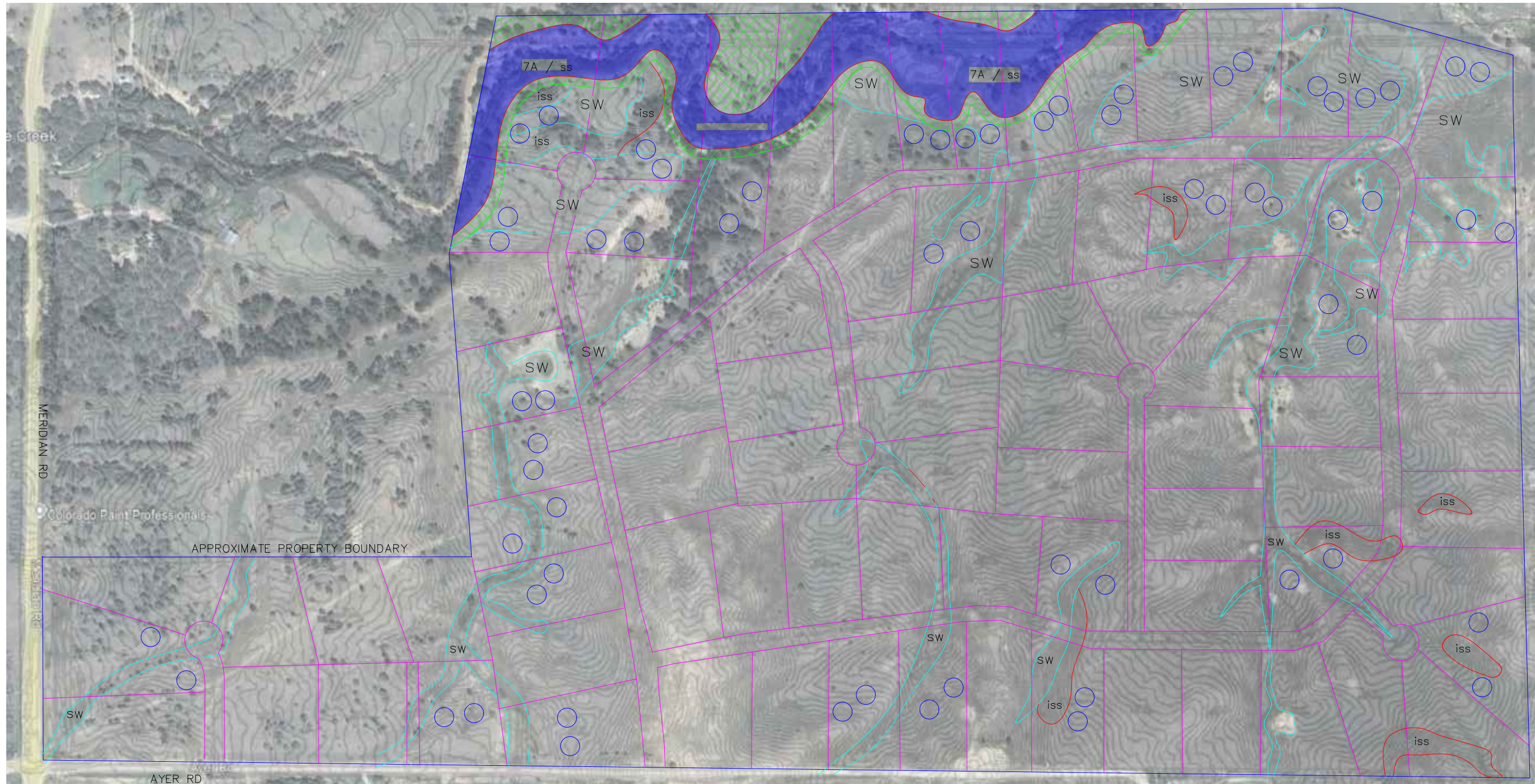
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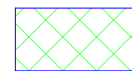
JOB No. 198281

FIGURE No. 13

DATE Jan/28/2025



- *fw* - Regulatory floodway as designated by FEMA. This area is to be designated a "No Build Area" until further investigations are completed.
- *sw* - seasonally wet - areas that may collect surface water during heavy precipitation events
- *iss* - isolated steep slopes that can be regarded as needed during construction of the individual residences



AREA TO BE CONSIDERED A NO BUILD AREA



Proposed locations for the OWTS - only shown on the lots with physical restraints - these lots will require an engineered system. The remaining lots each have two locations for the proposed and alternate OWTS

Note: The chosen OWTS and home location are for illustration only. If the El Paso County Health Department physical setback requirements are met for each lot, steep slopes and the floodway are avoided there are no restrictions on the OWTS placement.



NOT TO SCALE

ANTLER RANGE
NE MERIDIAN RD AND AYERS RD
EL PASO COUNTY, CO
ANTLER RANGE, LLC

ENGINEER: TM
DRAWN BY: KZ
CHECKED BY: TM
ISSUED: 1-28-2025

SEPTIC
SUITABILITY MAP

SHEET No.
FIG-14