ENTECH
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WASTEWATER STUDY
FLYING HORSE NORTH – FILING NO. 9
EL PASO COUNTY, COLORADO

Prepared for:

Flying Horse North, LLC
2138 Flying Horse Club Drive
Colorado Springs, Colorado 80921

Attn: Drew Balsick

April 15, 2026

Respectfully Submitted,

ENTECH ENGINEERING, INC.

Logan L. Langford, P.G.
Sr. Geologist

Reviewed by:

COLORADO LICENSED
JOSEPH COLLIN GOODE
23725
PROFESSIONAL ENGINEER

Digitally signed by Joseph C. Goode Jr.
Date: 04/15/26

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

LLL:JCG

Entech Job No. 260456

PCD No.

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1 SUMMARY

Project Location

The project consists of a portion of the E½ of Section 36, Township 11 South, Range 66 West of the 6th Principal Meridian in El Paso County, Colorado. The site is located approximately 3 miles northeast of Colorado Springs, Colorado. The location of the site is as shown in the Vicinity Map, Figure 1.

Project Description

The Flying Horse North, LLC is planning a proposed site development of 32.07-acres which will include single-family rural residential lots, a detention pond, and other associated improvements. A total of 11 (2.5 acre) lots are proposed in Filing No 9. The proposed lots will utilize individual water wells and onsite wastewater treatment systems (OWTS).

Scope of Report

This report presents the results of our geologic evaluation and treatment of engineering geologic hazard study in relation to on-site wastewater treatment systems for the Flying Horse North Filing No. 9.

Land Use and Engineering Geology

This site was found to be suitable for the proposed development. Areas were encountered where the geologic conditions will impose some minor constraints on development and land use. These include areas of potentially expansive soils, potentially seasonal shallow groundwater areas, and the potential for elevated Radon. Based on the proposed development plan, it appears that these areas will have some impact on the development. These conditions will be discussed in greater detail in the report.

In general, it is our opinion that the development can be achieved if the observed geologic conditions on site are either properly mitigated or avoided. All recommendations are subject to the limitations discussed in the report.

2 GENERAL SITE CONDITIONS AND PROJECT DESCRIPTION

The topography of the site is gradual to moderately sloping to the west, and northeast along the Palmer Divide. Minor drainage swales were observed in the western portion of Filing No. 9 on portions of Lots 2 – 6 and detention pond tract. Water was not observed flowing in the minor drainage swales at the time of this investigation, however, these areas have been identified as potential seasonally shallow groundwater areas. The site boundaries are indicated in the USGS Map, Figure 2. Previous land uses have undeveloped grazing and pastureland. The site primarily contains field grasses, weeds, and Ponderosa pines. Site photographs are included in Appendix A.

The Flying Horse North, LLC is planning a proposed site development of 32.07-acres which will include single-family rural residential lots, a detention pond, and other associated improvements. A total of 11 (2.5 acre) lots are proposed in Filing No 9. The proposed lots will utilize individual water wells and onsite wastewater treatment systems (OWTS). A detention pond (Pond A) is proposed the western portion of the site. Grading plans were not available at the time of this investigation, however, site grading is anticipated to be minimal and will primarily be completed for the proposed Balsick Court west of Allen Ranch Road, and the proposed detention pond. The Site and This area and the adjacent area were previously investigated by Entech Engineering, Inc. in the following reports:

This area and the adjacent areas were previously investigated by Entech Engineering, Inc. in the following reports:

- Soil, Geology, Geologic Hazard and Wastewater Study dated February 26, 2015 (Reference 1)
- Soil, Geology, Geologic Hazard and Wastewater Study dated February 22, 2016 (Reference 2)
- Soils and Geology Study and Wastewater Study for Flying Horse North Filing No. 3 dated August 23, 2023 (Reference 3)
- Soils and Geology Study and Wastewater Study for Flying Horse North Filing No. 4 dated September 11, 2024 (Reference 4)
- Soils and Geology Study and Wastewater Study for Flying Horse North Filing No. 5 dated October 2, 2024 (Reference 5)
- Soil and Geology Study, Wastewater Study, Flying Horse North, Development Plan and Preliminary Plan Major Amendment Filing Nos. 6, 7, and 8 dated September 26, 2025 (Reference 6)
- Soil and Geology Study, Wastewater Study, Flying Horse North, Filing No. 6 dated October 3, 2025 (Reference 7)
- Soil and Geology Study, Wastewater Study, Flying Horse North, Filing No. 7 dated November 12, 2025 (Reference 8)

- Soil and Geology Study, Wastewater Study, Flying Horse North, Filing No. 8 dated October 15, 2025 (Reference 9)

3 SCOPE OF THE REPORT

The scope of the report includes a general geologic analysis utilizing published geologic data. Detailed site-specific mapping was conducted to obtain general information in respect to major geographic and geologic features, geologic descriptions, and their effects on the development of the property in accordance with the El Paso Land Development Code.

4 FIELD INVESTIGATION

Our field investigation consisted of the preparation of a geologic map of any bedrock features and significant surficial deposits. The Natural Resource Conservation Service (NRCS), previously the Soil Conservation Service (SCS) survey was also reviewed to evaluate the site. The position of mappable units within the subject property are shown on the Geology/Engineering Geology Map. Our mapping procedures involved both field reconnaissance and measurements and air photo reconnaissance and interpretation. The same mapping procedures have also been utilized to produce the Engineering Geology Map which identified pertinent geologic conditions affecting development. The field mapping was initially performed by personnel of Entech on January 26, 2015. Field mapping has continued to be conducted during our previous site investigations and current investigations of the Flying Horse North Development. The site mapping for Filing No.9 was completed on March 3 and 9, 2026. Site photographs are included in Appendix A.

Four (4) test borings were drilled, and four (4) test pits excavated on the project site to determine the soils classification and engineering characteristics and evaluate the proposed OWTS. The borings were drilled to depths of 20 feet using a truck-mounted, continuous flight auger drilling rig supplied and operated by Entech, and the test pits were excavated to depths ranging from 3.5 to 7 feet. The locations of the test borings, and test pits are indicated in the Site and Exploration Plan, Figure 3. The Test Boring Logs and Laboratory Test Results are included in Appendix B and C. Results of the testing will be discussed later in this report.

Laboratory testing was performed on the soils to classify and determine the soils engineering characteristics. Laboratory tests included moisture content testing, ASTM D2216, grain-size analysis, ASTM D422, and Atterberg Limits, ASTM D4318. Swell testing included Swell/Collapse Tests.

5 SOIL, GEOLOGY, AND ENGINEERING GEOLOGY

5.1 General Geology

The site lies in the western portion of the Great Plains Physiographic Province. Approximately 10 miles to the west is 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 the southeastern edge of a large structural feature known as the Denver Basin. Bedrock in the area tends to be very gently dipping in a northerly direction (Reference 10). The rocks in the area of the site are sedimentary in nature, and typically Tertiary to Cretaceous in age. The bedrock underlying the site consists of the Dawson Arkose Formation. Overlying this formation are unconsolidated deposits of residual, colluvial, and man-placed fill of the Quaternary Age. The residual soils are produced by the in-situ action of weathering of the bedrock on site, colluvial soils exist which are deposited by gravity and sheetwash. The site's stratigraphy will be discussed in more detail in Section 5.3.

5.2 Soil Conservation Survey

The Natural Resource Conservation Service (Reference 8), previously the Soil Conservation Service (Reference 9) has mapped three soil types on the site (Figure 5). In general, they vary from sandy loam to loam with subsoils of clay loam. The soils are described in exhibit 1 below.

Exhibit 1: Soil Survey Descriptions

Type	Description
26	Elbeth sandy loam, 8 – 15% slopes
67	Peyton sandy loam, 5 – 9% slopes

Complete descriptions of the soil types are presented in Appendix D. The soils have generally been described as having moderate to rapid permeabilities. Limitations on development include limited ability to support a load, shrink swell potential, slopes and frost action potential. Possible hazards with soil erosion are present on the site. The erosion potential can be controlled with vegetation. Most of the soils have been described to have moderate erosion hazards.

5.3 Site Stratigraphy

The Geologic Map of the Black Forest Quadrangle showing the site is presented in Figure 5 (Reference 13). The Geology/Engineering Geology Map prepared for the site is presented in Figure 6. One mappable unit was identified on this site which is described as follows:

Qc/Tkd **Colluvium of Quaternary Age overlying Dawson Formation of Tertiary to Cretaceous Age:** The Dawson formation typically consists of arkosic sandstone with interbedded fine-grained sandstone, siltstone and claystone. Overlying this formation is a variable layer of residual soil. The residual soils were derived from the in-situ weathering of the bedrock materials on-site. These soils consisted of silty to clayey sands and sandy clays. Areas of colluvial soils may exist on some of the slopes on site. These materials are derived from the bedrock materials and have been re-deposited by the action of sheetwash and gravity.

The soils listed above were mapped from site-specific mapping, the *Geologic Map of the Black Forest Quadrangle* distributed by the Colorado Geological Survey in 2003 (Reference 14), the *Geologic Map of the Colorado Springs-Castle Rock Area*, distributed by the US Geological Survey in 1979 (Reference 15), and the *Geologic Map of the Denver 1^0 x 2^0 Quadrangle*, distributed by the US Geological Survey in 1981 (Reference 16). The Test Borings and Test Pit Logs used in evaluating the site are included in Appendix B. The Geology Map prepared for the site is presented in Figure 6.

5.4 Soil Conditions

The soils encountered in the test pits drilled on the site can be grouped into two general USDA soil types. The soils were classified using the Unified Soil Classification System (USCS) and the USDA soil texture and structure classification.

Soil Type 2A classified as a gravely sandy loam (SM-SW). The gravelly sandy loam was encountered in TB-1 test pits at depths of 1 feet bgs and extended to a depth of 5 feet bgs.

Soil Type 3 or 3A classified as a gravely sandy clay loam to sandy clay loam with gravel (SC-CL). The sandy clay was encountered in TP-2 and TP-3 at depths of 1 to 2 feet and extended to depths of 2 to 3 feet bgs.

Soil Type 4 or 4A classified as a very sandy to sandy clay (SC-CL). The clay was encountered in below approximately 1 foot of topsoil in the test pits and extended to depths of 2.5 o 8 feet bgs.

Soil Type 3A classified as a highly weathered sandstone (Dawson Formation) or as a gravelly sandy clay loam and sandy clay loam (SW-SM, SC), when classified as a soil. Sandstone was encountered in all of the test pits at depths of 2 to 5 feet in the test pits and extended to the termination of the test pits 3.5 to 7 feet bgs.

The Test Pit Logs and Laboratory Test results as a part of this investigation are included in Appendix B, and Laboratory Test Results are included in Appendix C.

5.5 Groundwater

Groundwater was not encountered in any of the test borings which were drilled to 20 feet. Redoximorphic features were not encountered in the test pits which were excavated to depths of 3.5 to 7 feet. Areas of potentially seasonal shallow groundwater has been mapped along the minor drainage swales and low-lying areas in portions of Lots 2 – 6 and the detention pond tract. These areas are discussed in the following section. Fluctuation in groundwater conditions may occur due to variations in rainfall and other factors including development of the site and surrounding areas.

It should be noted that in the sandy materials on site, some groundwater conditions might be encountered due to the variability in the soil profile. Isolated sand and gravel layers within the soils, sometimes only a few feet in thickness and width, can carry water in the subsurface. Groundwater may also flow on top of the underlying bedrock or clays. Builders and planners should be cognizant of the potential for the occurrence of such subsurface water features during construction on-site and deal with each individual problem as necessary at the time of construction.

Drainage and Floodplain Areas

Filing No. 9 does not lie within any floodplain zones according to the FEMA Map No.08041CO315G, dated December 7, 2018 (Figure 7, Reference 17). The exact locations of floodplain and specific drainage studies are beyond the scope of this report. Additionally, Filing No. 9 has not been included in any mapped wetlands according to National Wetland Inventory (Reference 18). Minor drainage swales were observed in the western portion of Filing No. 9 on portions of Lots 2 – 6 and the detention pond tract. Water was not observed flowing in the minor

drainage swales at the time of this investigation, however, these areas have been identified as potential seasonally shallow groundwater areas and have identified on the Geology/Engineering Geology Map, Figure 6.

Potentially Seasonal Shallow Groundwater Area – Constraint

In these areas, we would anticipate the potential for periodically high subsurface moisture conditions, frost heave potential and highly organic soils. These areas lie within defined drainage swales (dry gulches) which should be avoided by future OWTS.

Shallow Bedrock – Constraint

Bedrock was encountered in two of the test borings at depths of 6 to 17 feet, and weathered bedrock was encountered in the test pits at depths ranging from 2 to 5 feet located within Filing No. 9. Where claystone or sandstone are encountered, excavation/grading may be difficult requiring track-mounted excavators. Bedrock will potentially be encountered in cuts for utility excavations. The potential for seasonally perched groundwater may occur in areas of shallow bedrock and within more permeable layers of the Dawson Formation. Where shallow bedrock is encountered engineered OWTS will be required.

6 ON-SITE WASTEWATER TREATMENT

The site was evaluated for individual on-site wastewater treatment system in accordance with El Paso Land Development Code. The test pits were located in across the site to evaluate the overall suitability of the site. The approximate locations of the Test Pits are indicated on the Septic Suitability Map, Figure 8. Test Pit Logs are included in Appendix B, and Laboratory Test Results in Appendix C.

The Natural Resource Conservation Service (Reference 8), previously the Soil Conservation Service (Reference 4) has been mapped the site with three soil types. The Soil Survey Map (Reference 4) is presented in Figure 4, and the Soil Survey Descriptions are presented in Appendix D. The soils are described as having rapid percolation rates. The majority of the soils have been described with moderate permeabilities.

Soils encountered in the tactile test pits consisted of gravelly sandy clay, loamy sands, gravelly sandy loam, residually weathered bedrock and highly weathered bedrock. Redoximorphic features were not observed in the test pits. The limiting layers encountered in the test pits is the gravelly sandy clay (Soil Types 2A, 3A, 4, or R-1 due to high percentage of rock). The soil types correspond to LTAR values ranging from 0.35 to 0.15 gallons per day per square foot. Additional investigation may identify areas where suitable conventional systems could be used on the site, however, the site will likely require engineered systems.

The On-site Wastewater Systems are to be designed for the residences. The systems will meet County Chapter 8 OWTS criteria and State CDPHE criteria including any required mitigation to accommodate respective leach fields and infrastructure. There are no identified geologic hazards on the site that are prohibitive to future OWTS design at this time.

In summary, it is our opinion that the site is suitable for 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 as part of this investigation designed systems will likely be required for the lots. A Septic Suitability Map is presented in Figure 8. The OWTS sites should not located within any defined drainages. 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.

7 CLOSURE

It is our opinion that the existing geologic engineering and geologic conditions will impose some minor constraints on development and construction of the site. The majority of these conditions can be mitigated through proper engineering design and construction practices. The proposed development and use are consistent with anticipated geologic and engineering geologic conditions.

It should be pointed out that because of the nature of data obtained by random sampling of such variable and non-homogeneous 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. Individual investigations for owts sites will be required prior to construction on each lot. Construction and design personnel should be made familiar with the contents of this report. Reporting such discrepancies to Entech Engineering, Inc. soon after they are discovered would be greatly appreciated and could possibly help avoid construction and development problems.

This report has been prepared for Flying Horse North, LLC 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.

8 REFERENCES

1. Entech Engineering, Inc., February 26, 2015. Soil, Geology, Geologic Hazard, and Wastewater Study, Shamrock Ranch, El Paso County, Colorado. Entech Job No. 141588
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15. Bryant, Bruce; McGrew, Laura W. and Wobus, Reinhard A. 1981. *Geologic Map of the Denver 1º x 2º Quadrangle, North-Central Colorado*. U.S. Geologic Survey. Map 1-1163.
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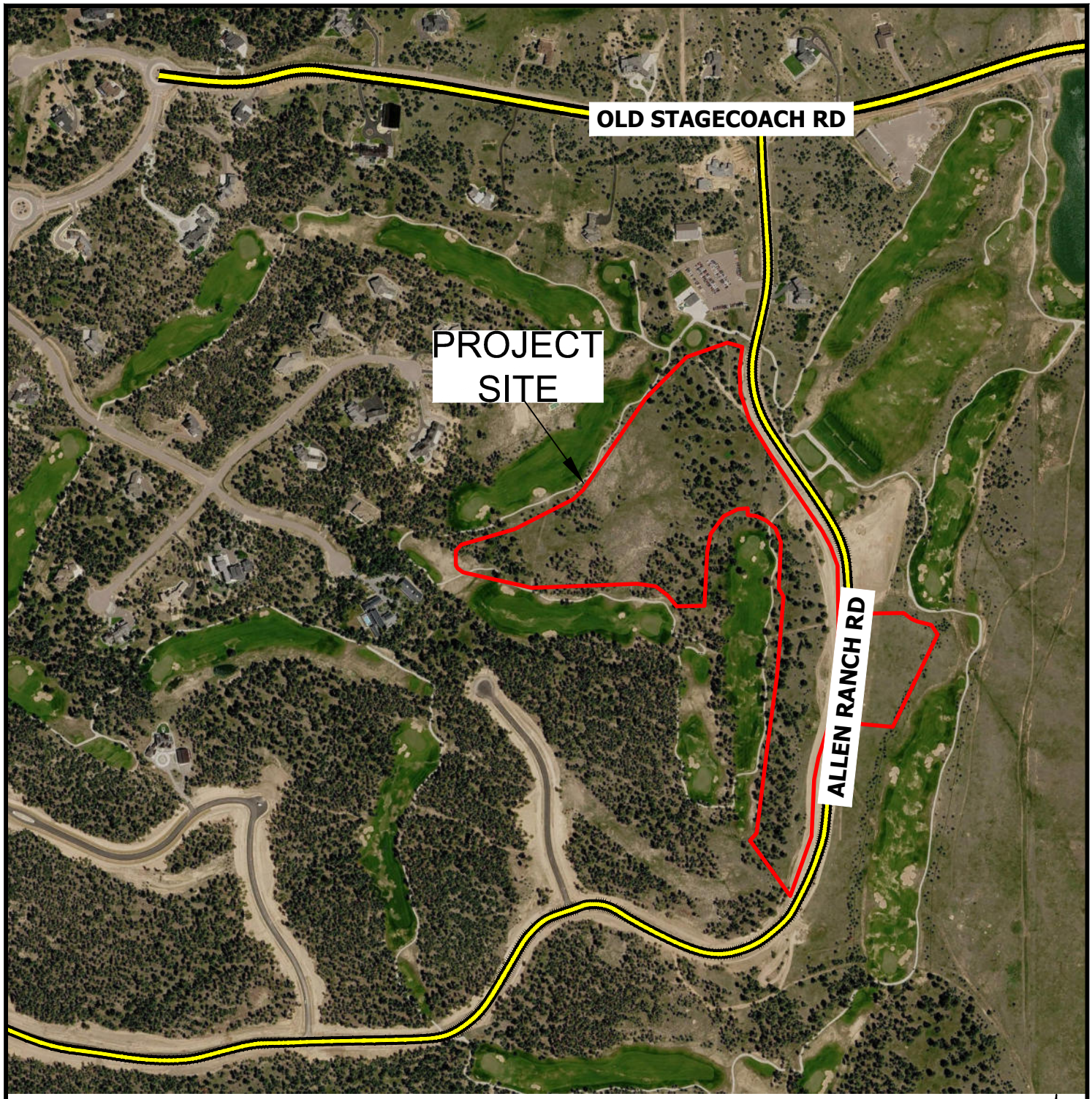
17. Federal Emergency Management Agency. December 7, 2018. *Flood Insurance Rate Maps for the El Paso County, Colorado.* Map Number 08041CO315G.
18. U.S. Fish & Wildlife Service, May 1, 2020. *National Wetlands Inventory*. Department of the Interior, fws.gov/wetlands/data/Mapper.html.

FIGURES



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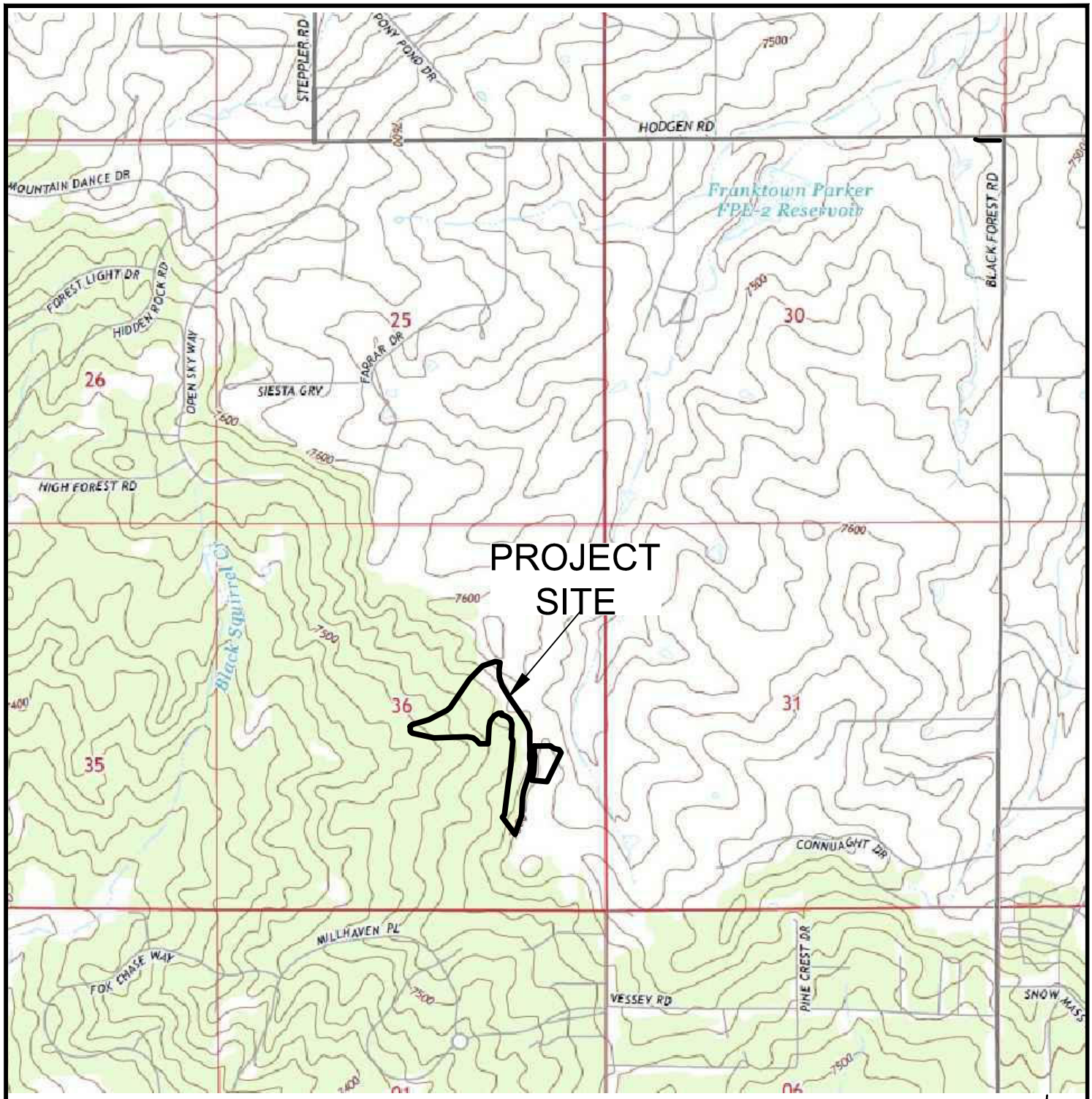
VICINITY MAP

FLYING HORSE NORTH - FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. 1



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USGS TOPOGRAPHY MAP

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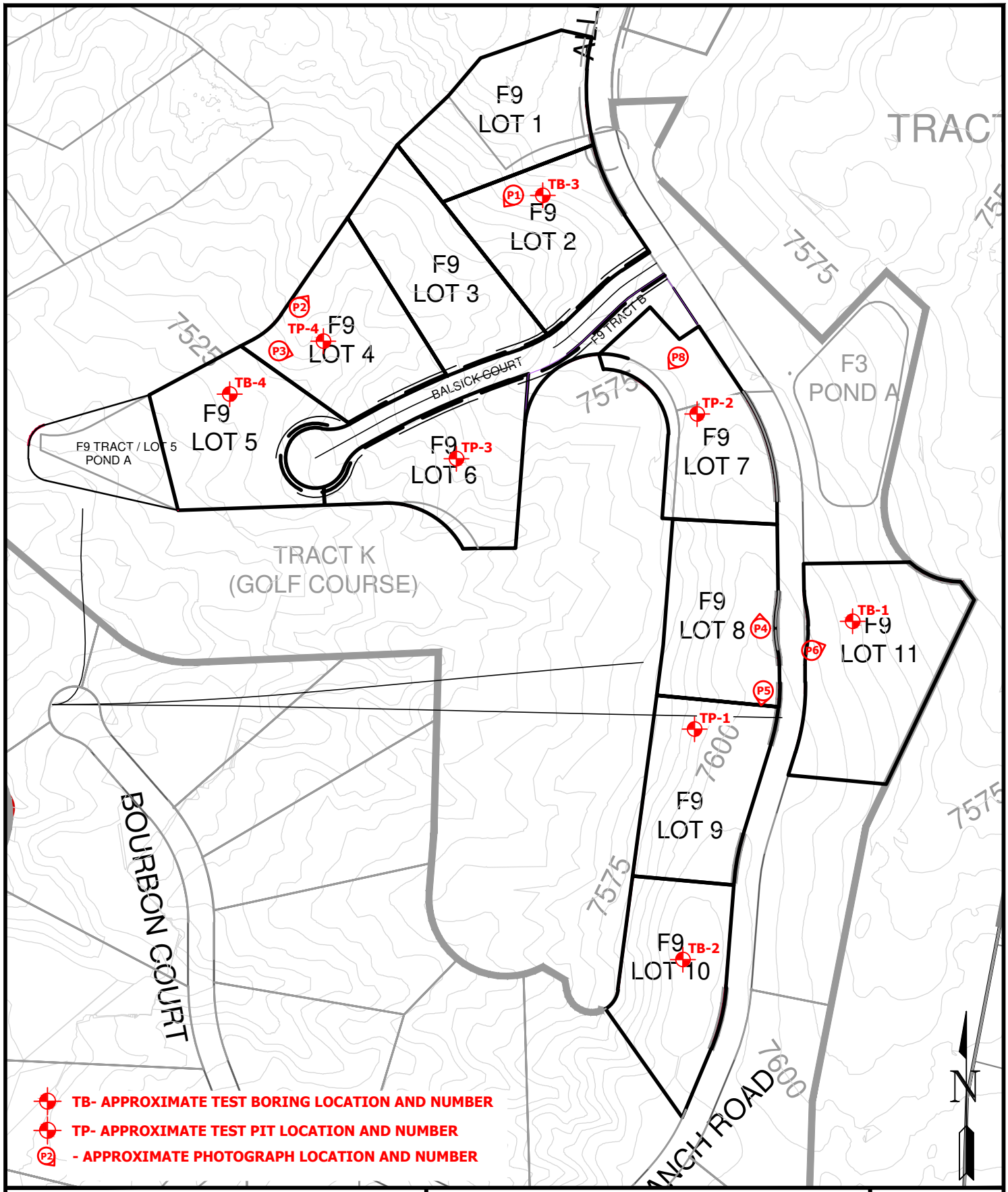
FIG. 2



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SITE & EXPLORATION PLAN

FLYING HORSE NORTH - FILING NO. 9
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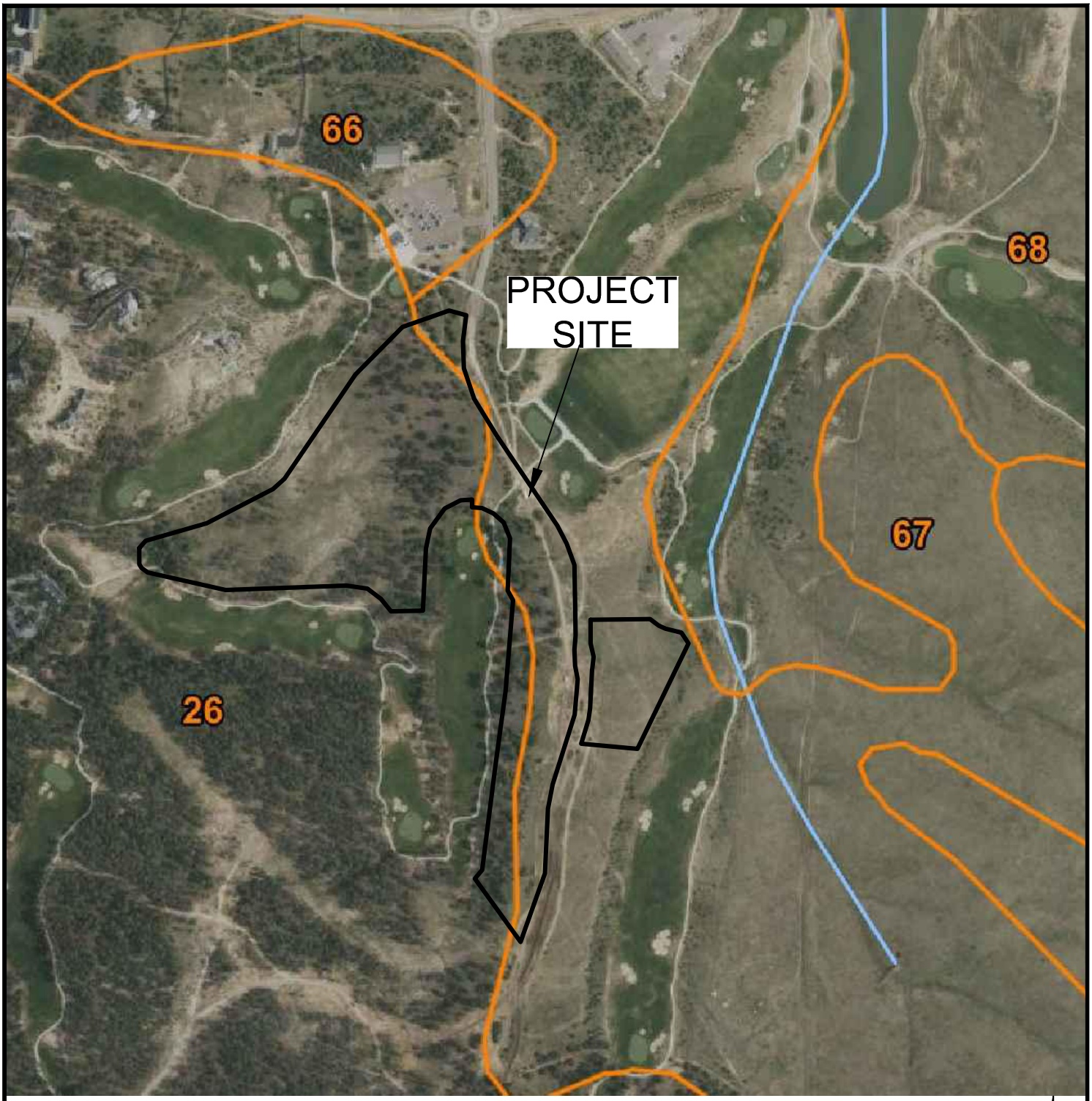
FIG. 3



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SOIL SURVEY MAP

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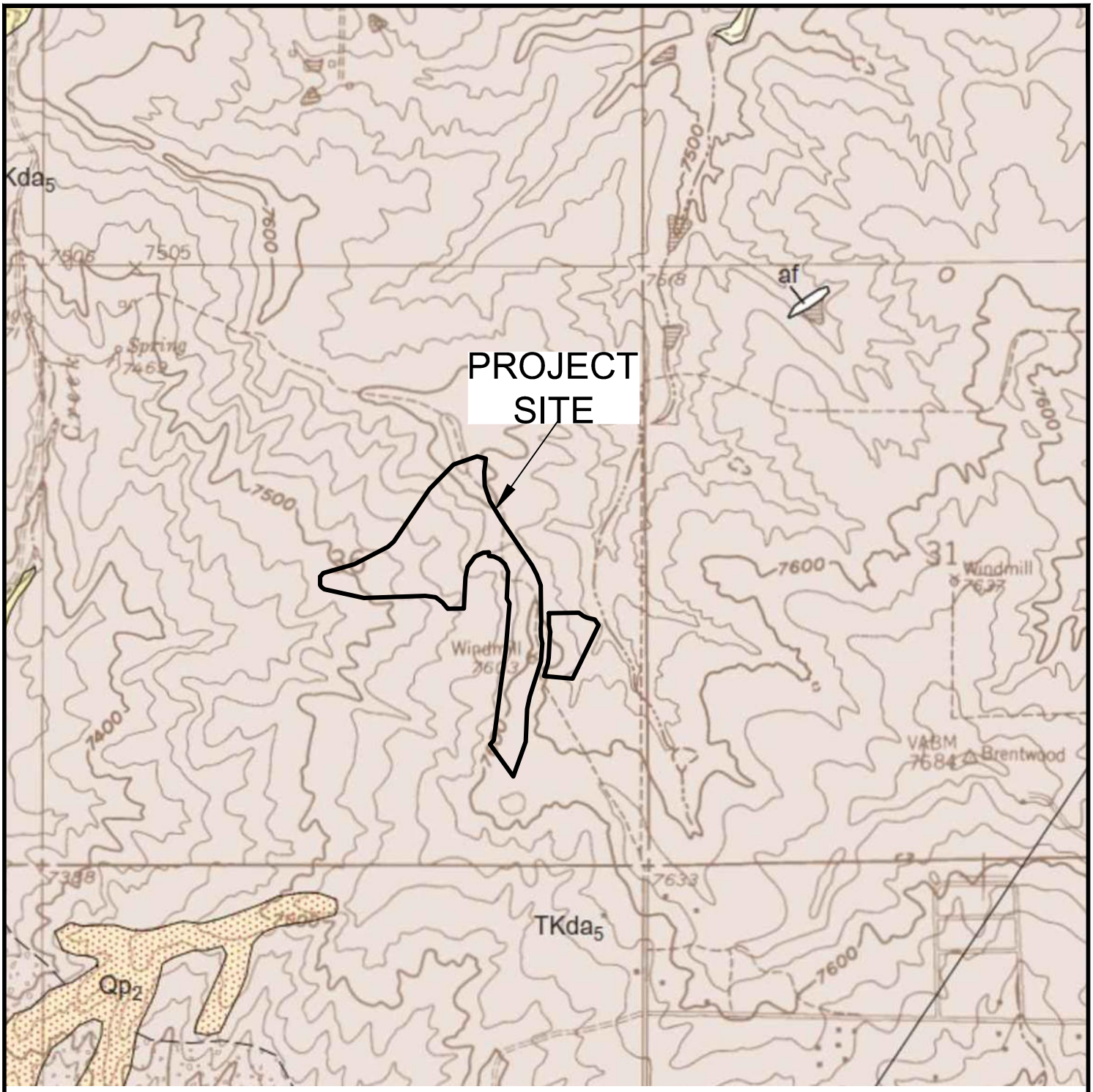
FIG. 4



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GEOLOGIC MAP OF THE BLACK FOREST QUADRANGLE

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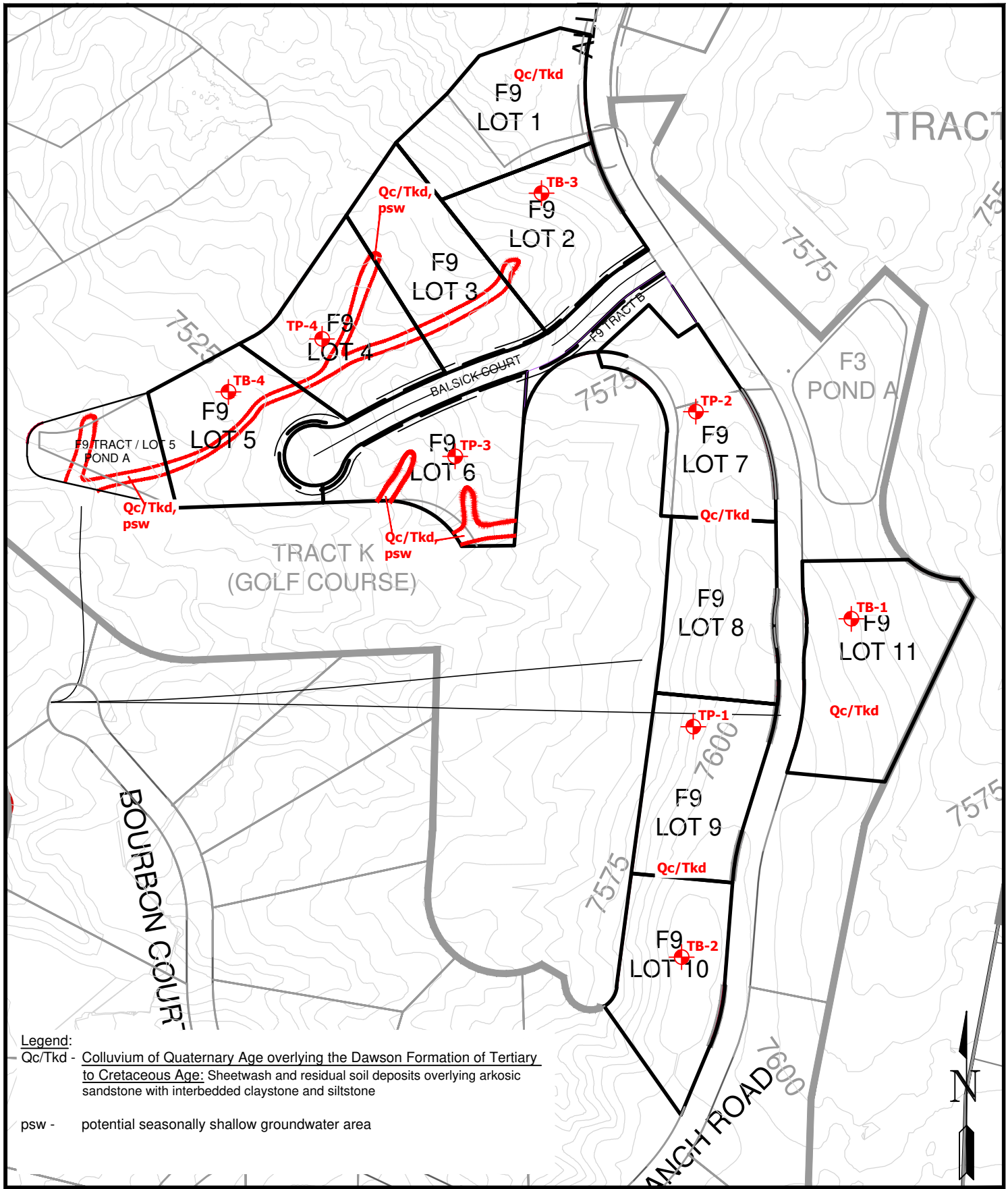
FIG. 5



Legend:

Qc/Tkd - Colluvium of Quaternary Age overlying the Dawson Formation of Tertiary to Cretaceous Age: Sheetwash and residual soil deposits overlying arkosic sandstone with interbedded claystone and siltstone

psw - potential seasonally shallow groundwater area

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GEOLOGY/ENGINEERING GEOLOGY MAP

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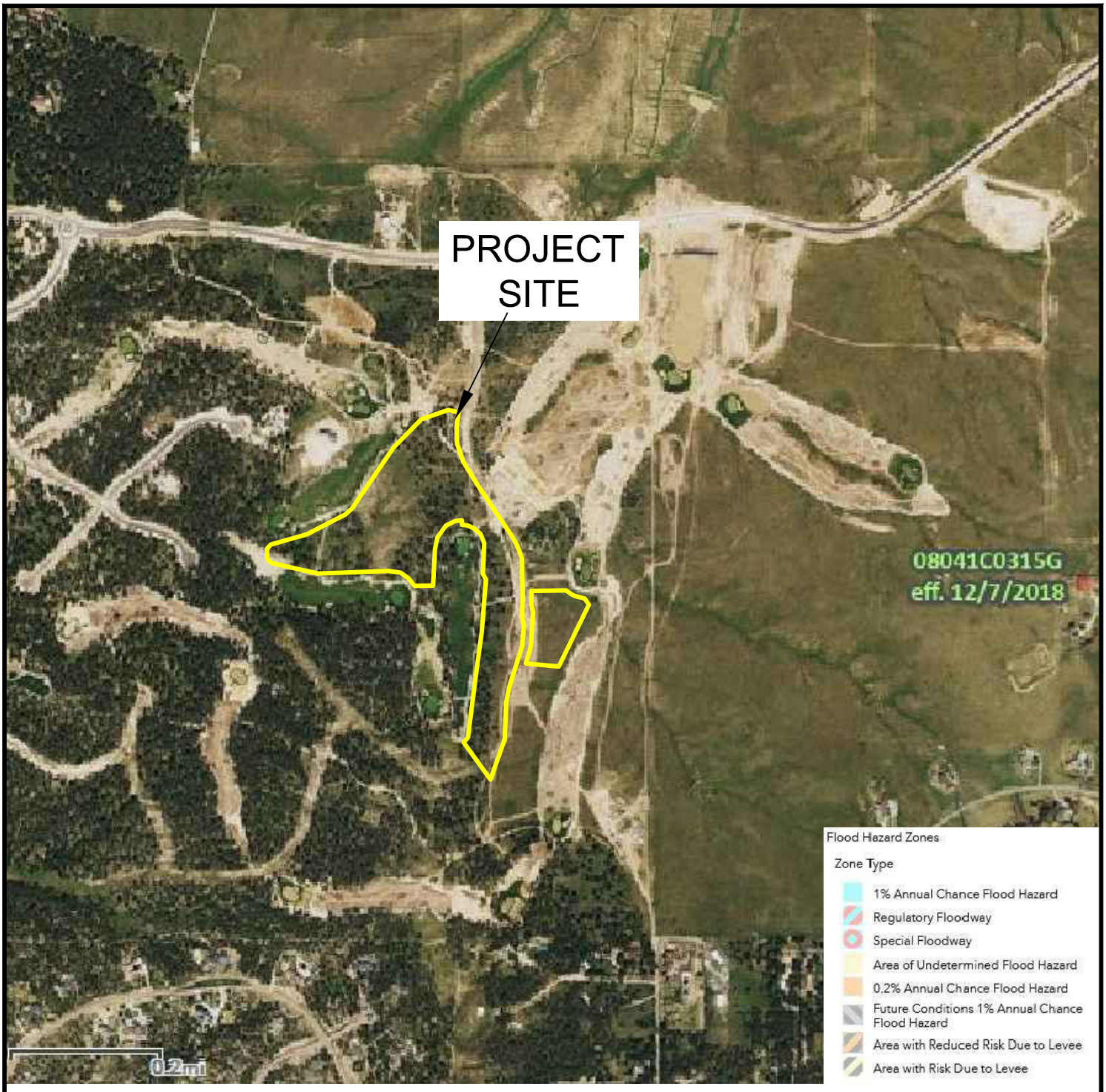
FLYING HORSE NORTH, LLC

JOB NO. 250099

FIG. 6



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FEMA FLOODPLAIN MAP

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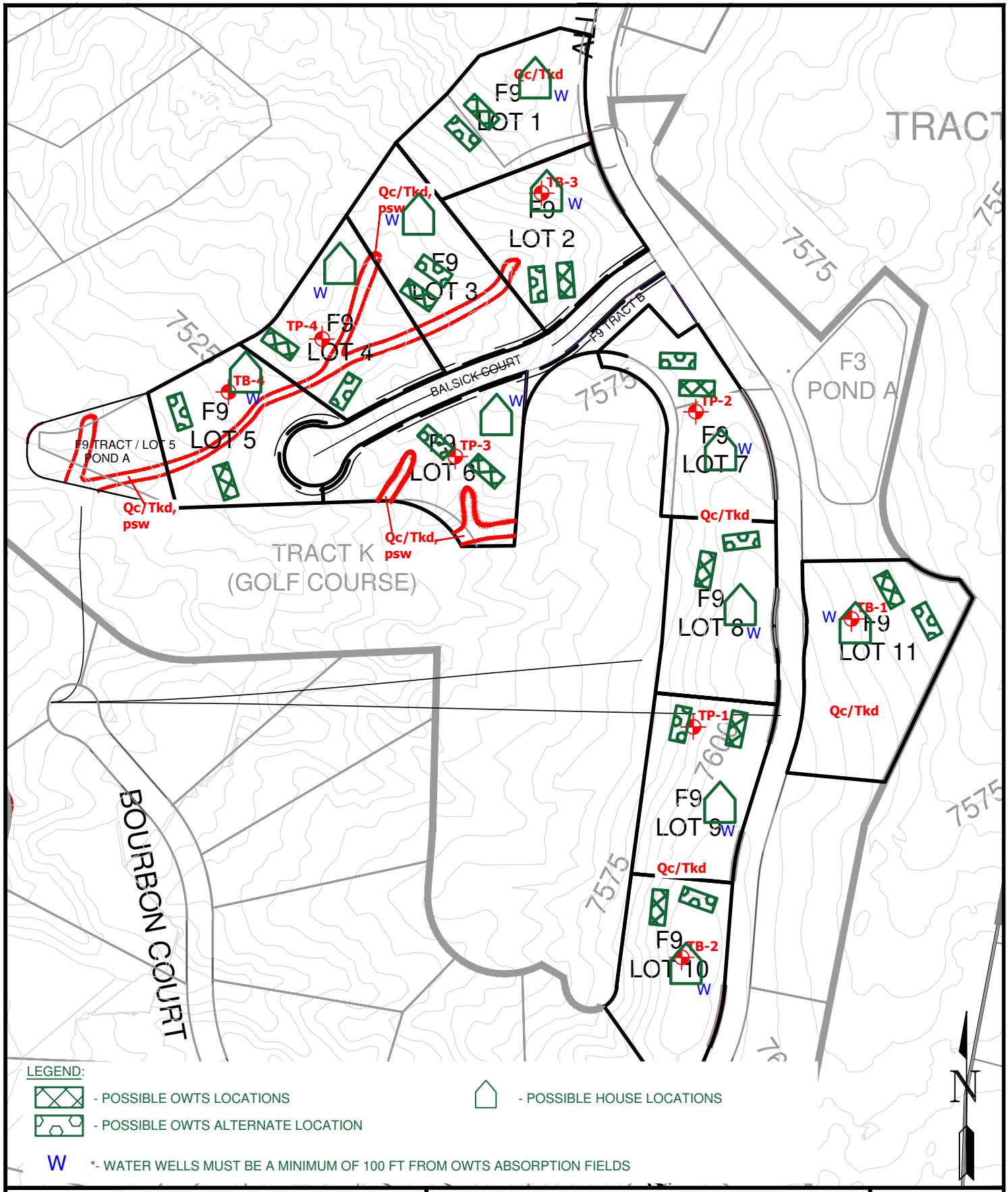
FIG. 7



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OWTS SUITABILITY MAP

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FIG. 8

APPENDIX A: Site Photographs

1

Looking west from the northeastern portion of the site.

March 9, 2026

2

Looking northeast from the western portion of the site.

March 9, 2026

Job No. 260456

3

Looking southeast from the northwest portion of the site.

March 9, 2026

4

Looking north along the western side of Allen Ranch Road.

March 3, 2026

Job No. 260456

5

Looking south along the west side of Allen Ranch Road.

March 3, 2026

6

Looking east from the east side of Allen Ranch Road.

March 9, 2025

Job No. 260456

APPENDIX B: Test Boring and Test Pit Logs

TEST BORING 1
DATE DRILLED 3/18/2026

REMARKS

DRY TO 20', 3/19/26

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			17	5.6	2	CLAY, SANDY, LIGHT BROWN to BROWN, VERY STIFF to STIFF, MOIST
5			18	7.7	2	
10			16	5.9	2	
15			12	9.9	2	
20			16	13.8	2	

TEST BORING 2
DATE DRILLED 3/18/2026

REMARKS

DRY TO 20', 3/19/26

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type	
			26	7.8	2	CLAY, SANDY, LIGHT BROWN to BROWN, VERY STIFF to STIFF, MOIST
5			22	6.8	2	
10			10	7.9	2	
15			18	8.8	2	
20			30	4.1	1	SAND, CLAYEY, TAN, DENSE, MOIST

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TEST BORING LOGS

FLYING HORSE NORTH, FILING NO. 9
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FIG. B-1

TEST BORING 3
DATE DRILLED 3/18/2026

REMARKS

DRY TO 20', 3/19/26

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
CLAY, SANDY, LIGHT BROWN to BROWN, VERY STIFF to STIFF, MOIST			13	5.9	2
5			15	6.2	2
10			14	7.5	2
15			18	8.0	2
SANDSTONE, VERY WEAK, TAN, MODERATELY WEATHERED (SAND, CLAYEY, VERY DENSE, MOIST) 20			50/10"	6.9	3

TEST BORING 4
DATE DRILLED 3/18/2026

REMARKS

DRY TO 20', 3/19/26

Depth (ft)	Symbol	Samples	Blows per foot	Watercontent %	Soil Type
SAND, SILTY, LIGHT BROWN, LOOSE, MOIST			7	3.8	1
5 CLAY, SANDY, TAN, STIFF, MOIST			12	15.3	2
SANDSTONE, VERY WEAK, TAN, MODERATELY WEATHERED (SAND, CLAYEY, VERY DENSE, MOIST) 10			50/2"	10.0	3
15			50/4"	8.5	3
20			50/7"	11.6	3

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TEST BORING LOGS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. B-2

TABLE B-1

DEPTH TO BEDROCK

TEST BORING	DEPTH TO BEDROCK (ft.)
1	>20
2	>20
3	17
4	6

TEST PIT 1
DATE EXCAVATED 3/10/2026

REMARKS

refusal @ 6'

topsoil 0-9", sandy clay, dark brown, moist

sandy clay, fine grained, brown, moist

sandy clay loam, fine to coarse grained, light brown, moist

weathered sandstone, Dawson Formation (sandy clay loam, fine to coarse grained, light brown, moist)

Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	Soil Type
3			gr	m	4
6			ma		3A

TEST PIT 2
DATE EXCAVATED 3/10/2026

REMARKS

refusal @3.5'

topsoil 0-6", sandy clay loam, dark brown, moist

sandy clay loam, fine to medium grained, brown, moist

weathered sandstone, Dawson Formation (sandy clay loam, fine to coarse grained, light brown, moist)

Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	Soil Type
2			gr	w	3A
3			ma		3A

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
structureless - sl

ENTECH ENGINEERING, INC.

TEST PIT LOGS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. B-3

TEST PIT 3
DATE EXCAVATED 3/10/2026

REMARKS

refusal @ 3.5'

Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	Soil Type	
1						topsoil 0-6", sandy clay loam, dark brown, moist
2			ma		3A	sandy clay loam, fine to coasre grained, brown, moist
3			ma		3A	
4						weathered sandstone, Dawson Formation (sandy clay loam, fine to coarse grained, light brown, moist)
5						
6						
7						
8						
9						
10						

TEST PIT 4
DATE EXCAVATED 3/10/2026

REMARKS

Depth (ft)	Symbol	Samples	Soil Structure Shape	Soil Structure Grade	Soil Type	
1						topsoil, sandy clay loam, dark brown, moist
2						
3			gr	w	2A	gravelly, sandy loam, fine to coarse grained, tan, moist
4					R-1	
5						
6			ma		3A	weathered sandstone, Dawson Formation (sandy clay loam, fine to coarse grained, light brown, moist)
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

ENTECH ENGINEERING, INC.

TEST PIT LOGS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

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FIG. B-9

APPENDIX C: Laboratory Test Results

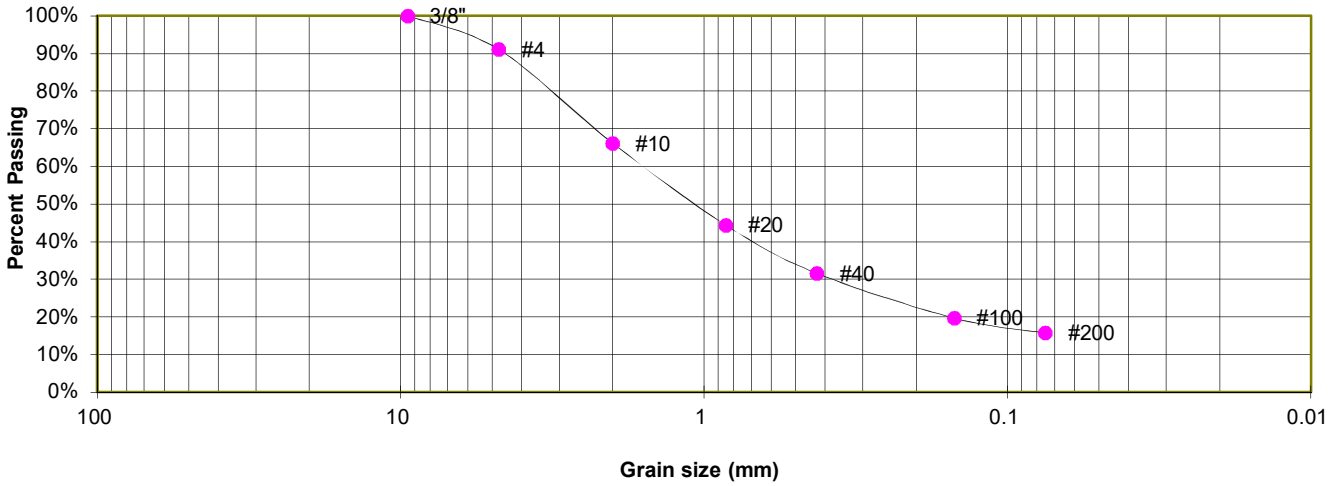
ENTECH ENGINEERING, INC.

TABLE C-1
SUMMARY OF LABORATORY TEST RESULTS

SOIL TYPE	TEST BORING NO.	DEPTH (FT)	WATER (%)	DRY DENSITY (PCF)	PASSING NO. 200 SIEVE (%)	LIQUID LIMIT	PLASTIC LIMIT	PLASTIC INDEX	SULFATE (WT %)	SWELL/ CONSOL (%)	USCS	SOIL DESCRIPTION
1	4	2-3			15.7	NV	NP	NP	<0.01		SM	SAND, SILTY
2	1	2-3			56.2	28	20	8			CL	CLAY, SANDY
2	1	5			60.7	31	22	9			CL	CLAY, SANDY
2	2	15	10.1	113.6	56.6	32	21	11	0.00	-0.3	CL	CLAY, SANDY
2	3	5			60.1						CL	CLAY, SANDY
3	4	10			32.7	35	22	13	<0.01		SC	SANDSTONE (SAND, CLAYEY)

Project: Flying Horse North, Filing No. 9
Client: Flying Horse North Development
Job No: 260458

TEST BORING	4	SOIL DESCRIPTION	SAND, SILTY
DEPTH (FT)	2-3	SOIL TYPE	1



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	91.1%
10	66.1%
20	44.4%
40	31.6%
100	19.7%
200	15.7%

ATTERBERG LIMITS

Plastic Limit	NP
Liquid Limit	NV
Plastic Index	NP

SOIL CLASSIFICATION

USCS CLASSIFICATION: SM

ENTECH ENGINEERING, INC.

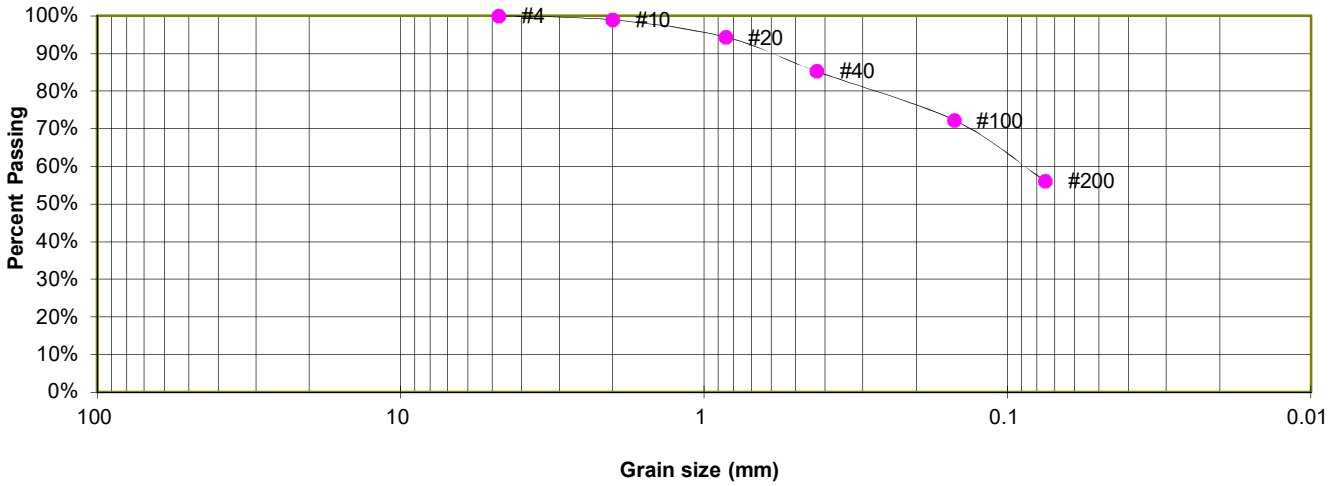
LABORATORY TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-1

TEST BORING	1	SOIL DESCRIPTION	CLAY, SANDY
DEPTH (FT)	2-3	SOIL TYPE	2



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	98.9%
20	94.4%
40	85.3%
100	72.3%
200	56.2%

ATTERBERG LIMITS

Plastic Limit	20
Liquid Limit	28
Plastic Index	8

SOIL CLASSIFICATION

USCS CLASSIFICATION: CL

ENTECH ENGINEERING, INC.

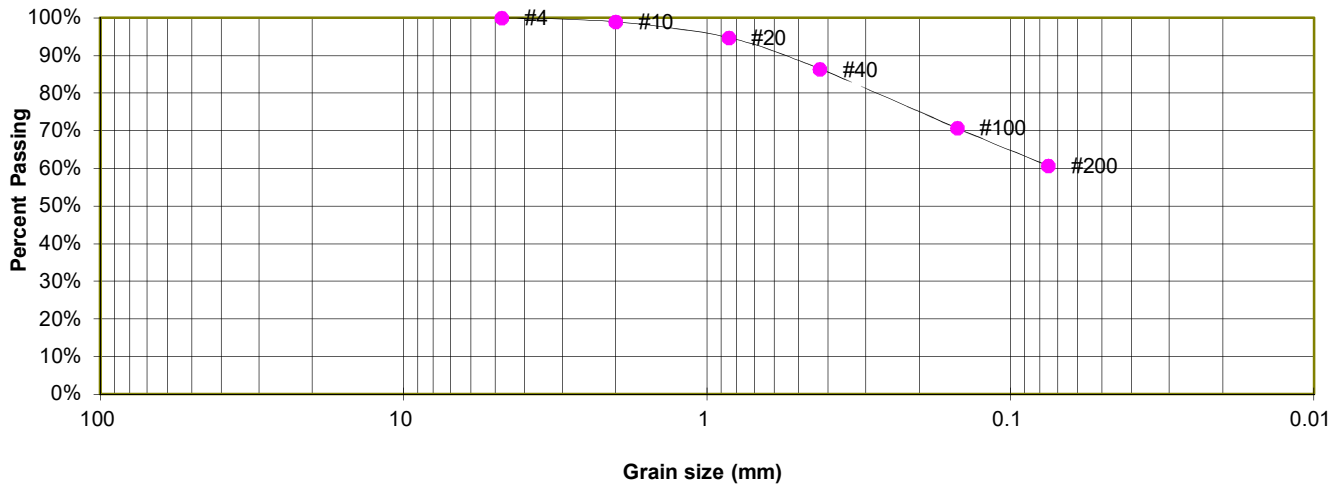
LABORATORY TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-2

TEST BORING	1	SOIL DESCRIPTION	CLAY, SANDY
DEPTH (FT)	5	SOIL TYPE	2



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	98.9%
20	94.8%
40	86.4%
100	70.7%
200	60.7%

ATTERBERG LIMITS

Plastic Limit	22
Liquid Limit	31
Plastic Index	9

SOIL CLASSIFICATION

USCS CLASSIFICATION: CL

ENTECH ENGINEERING, INC.

LABORATORY TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
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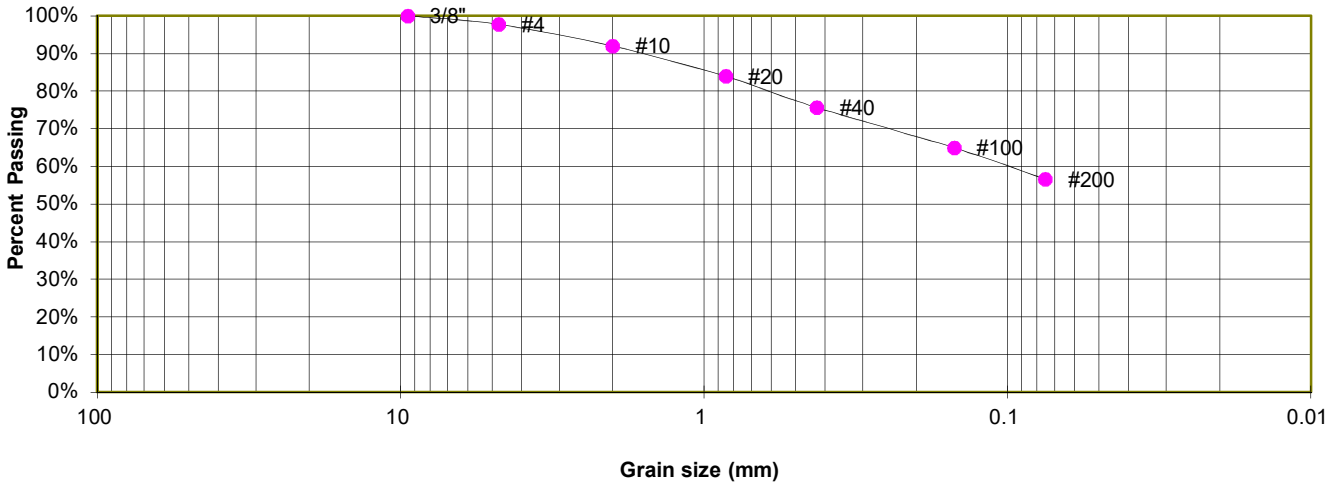
FIG. C-3

TEST BORING	2	SOIL DESCRIPTION	CLAY, SANDY
DEPTH (FT)	15	SOIL TYPE	2



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	97.7%
10	92.0%
20	83.9%
40	75.6%
100	65.0%
200	56.6%

ATTERBERG LIMITS

Plastic Limit	21
Liquid Limit	32
Plastic Index	11

SOIL CLASSIFICATION

USCS CLASSIFICATION: CL

ENTECH ENGINEERING, INC.

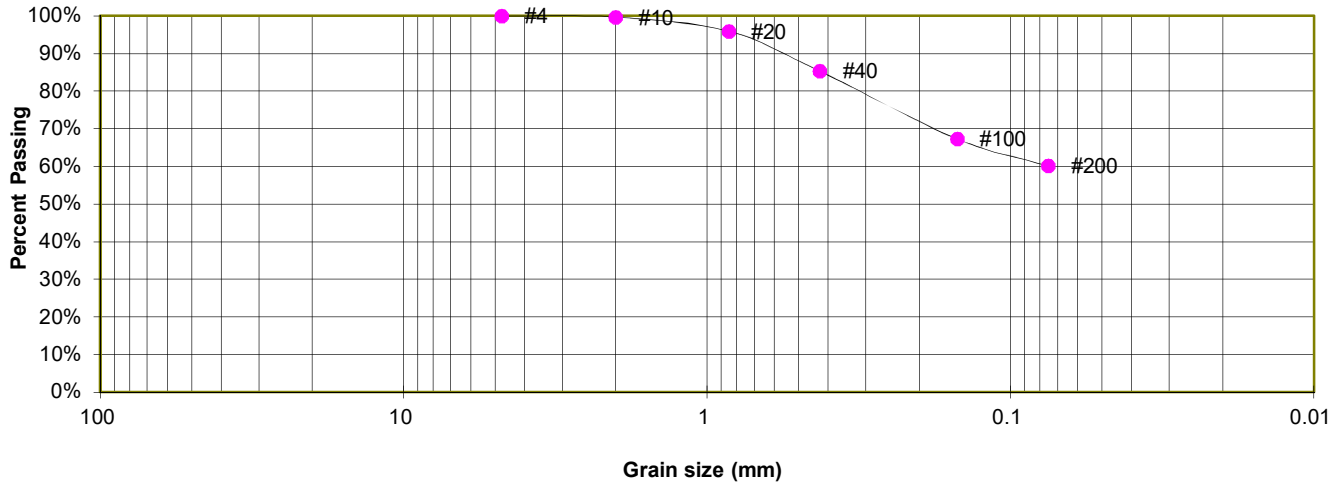
LABORATORY TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-4

TEST BORING	3	SOIL DESCRIPTION	CLAY, SANDY
DEPTH (FT)	5	SOIL TYPE	2



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	99.7%
20	96.0%
40	85.3%
100	67.3%
200	60.1%

SOIL CLASSIFICATION

USCS CLASSIFICATION: CL

ENTECH ENGINEERING, INC.

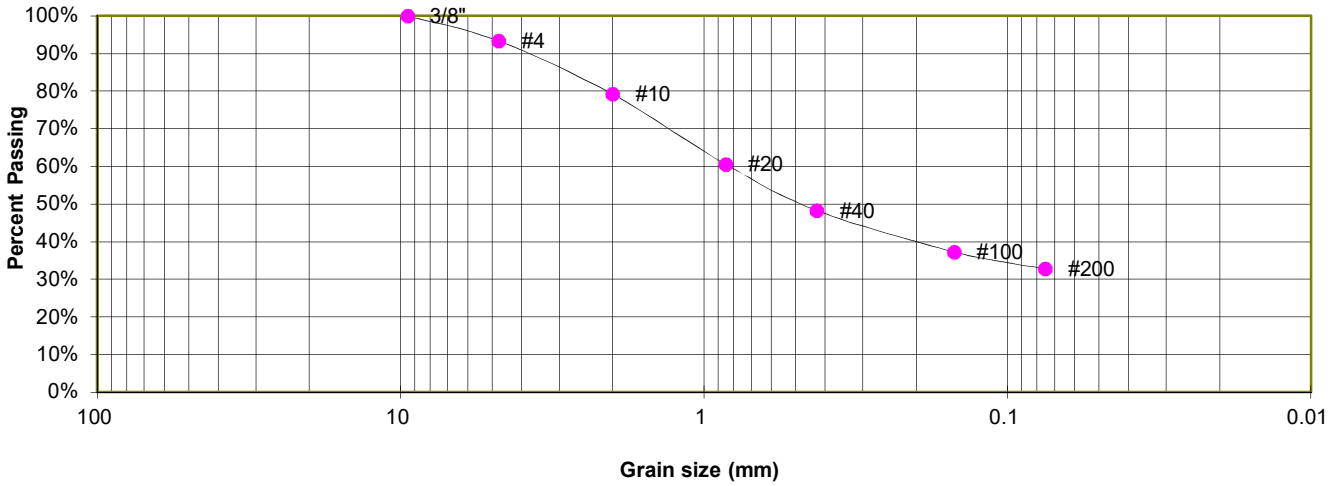
LABORATORY TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-5

TEST BORING	4	SOIL DESCRIPTION	SANDSTONE (SAND, CLAYEY)
DEPTH (FT)	10	SOIL TYPE	3



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	93.3%
10	79.2%
20	60.6%
40	48.3%
100	37.3%
200	32.7%

ATTERBERG LIMITS

Plastic Limit	22
Liquid Limit	35
Plastic Index	13

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC

ENTECH ENGINEERING, INC.

LABORATORY TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-6

TEST BORING	2	SOIL DESCRIPTION	CLAY, SANDY
DEPTH (FT)	15	SOIL TYPE	2

SWELL/COLLAPSE TEST RESULTS

NATURAL UNIT DRY WEIGHT (PCF): 114
NATURAL MOISTURE CONTENT: 10.1%
SWELL/COLLAPSE (%): -0.3%

ENTECH ENGINEERING, INC.

SWELL TEST RESULTS

FLYING HORSE NORTH, FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

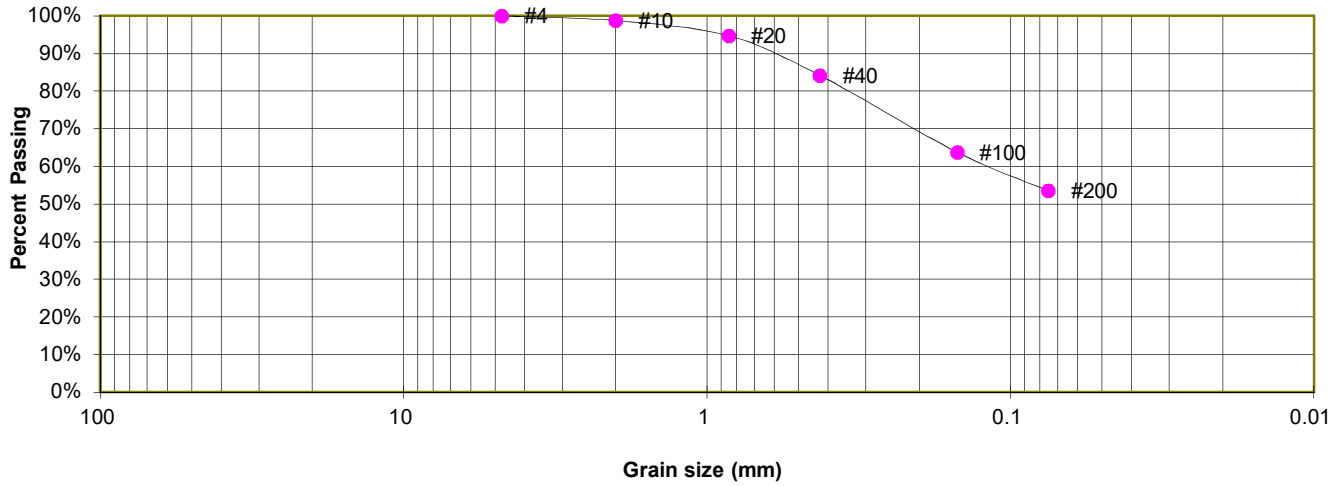
FIG. C-7

ENTECH ENGINEERING, INC.

TABLE C-2
SUMMARY OF LABORATORY TEST RESULTS

TEST BORING NO.	DEPTH (FT)	PASSING NO. 200 SIEVE (%)	USDA	USCS	SOIL DESCRIPTION
TP-1	3	53.5	4	CL	CLAY, SANDY
TP-1	5.5	35.8	3A	SC	SAND, CLAYEY
TP-2	2	41.1	3A	SC	SAND, CLAYEY
TP-2	3	42.0	3A	SC	SAND, CLAYEY
TP-3	2	47.5	3A	SC	SAND, CLAYEY
TP-4	3	9.2	2A	SW-SM	SAND, WITH SILT
TP-4	6	7.7	2A	SW-SM	SAND, WITH SILT

TEST BORING	TP-1	SOIL DESCRIPTION	CLAY, SANDY
DEPTH (FT)	3		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	98.8%
20	94.7%
40	84.2%
100	63.8%
200	53.5%

SOIL CLASSIFICATION

USCS CLASSIFICATION: CL

ENTECH ENGINEERING, INC.

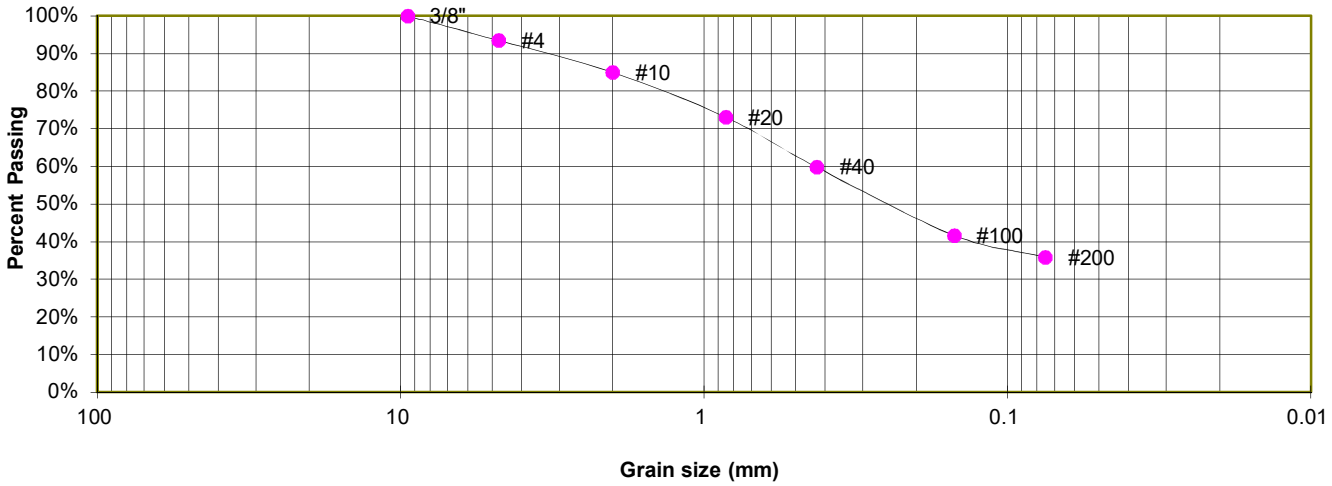
LABORATORY TEST RESULTS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-8

TEST BORING	TP-1	SOIL DESCRIPTION	SAND, CLAYEY
DEPTH (FT)	5.5		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	93.5%
10	85.0%
20	73.1%
40	59.8%
100	41.7%
200	35.8%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC

ENTECH ENGINEERING, INC.

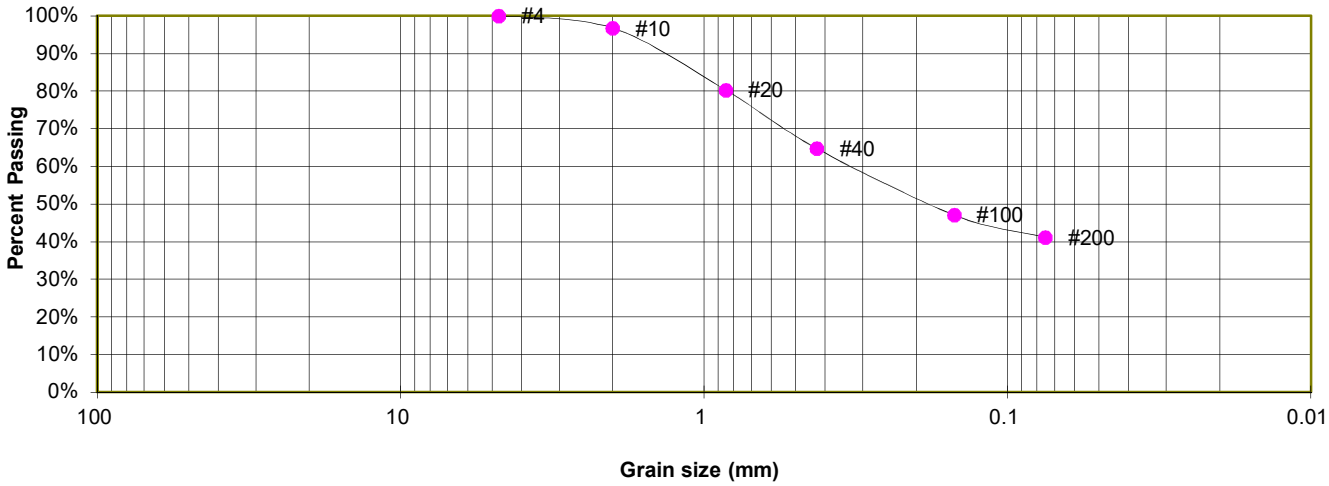
LABORATORY TEST RESULTS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-9

TEST BORING	TP-2	SOIL DESCRIPTION	SAND, CLAYEY
DEPTH (FT)	2		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	96.8%
20	80.3%
40	64.8%
100	47.1%
200	41.1%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC

ENTECH ENGINEERING, INC.

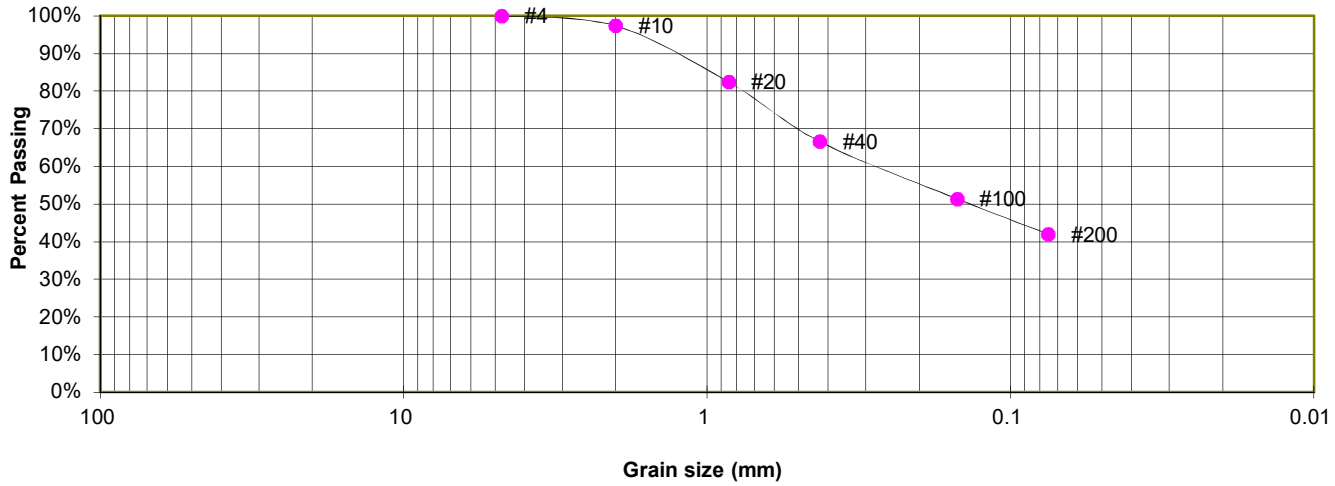
LABORATORY TEST RESULTS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

JOB NO. 260456

FIG. C-10

TEST BORING	TP-2	SOIL DESCRIPTION	SAND, CLAYEY
DEPTH (FT)	3		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	97.4%
20	82.4%
40	66.6%
100	51.4%
200	42.0%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC

ENTECH ENGINEERING, INC.

LABORATORY TEST RESULTS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

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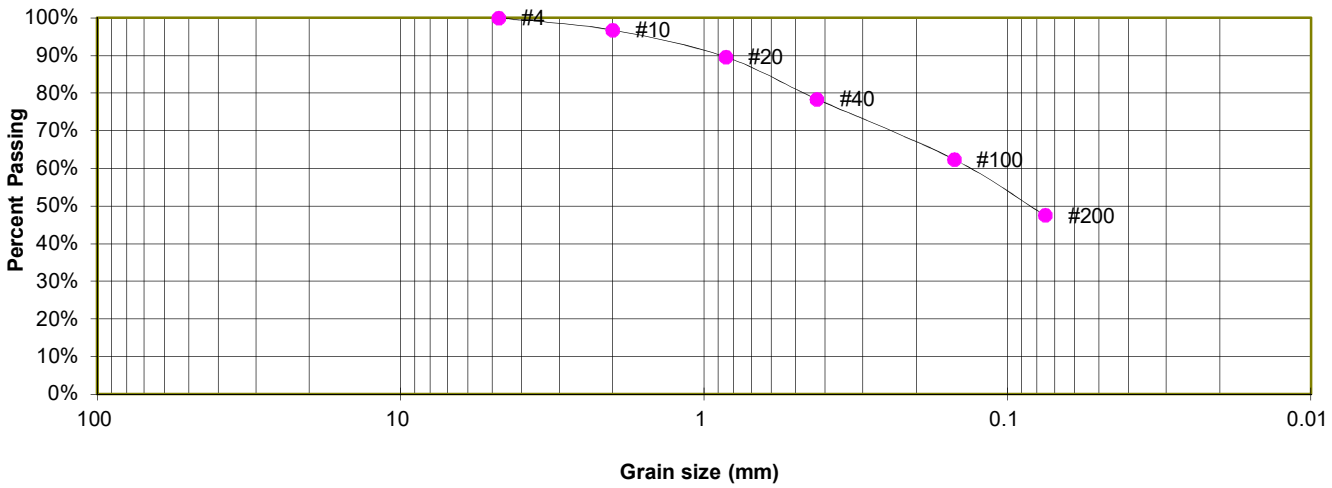
FIG. C-11

TEST BORING	TP-3	SOIL DESCRIPTION	SAND, CLAYEY
DEPTH (FT)	2		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	
4	100.0%
10	96.8%
20	89.6%
40	78.4%
100	62.4%
200	47.5%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SC

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LABORATORY TEST RESULTS

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FLYING HORSE NORTH, LLC

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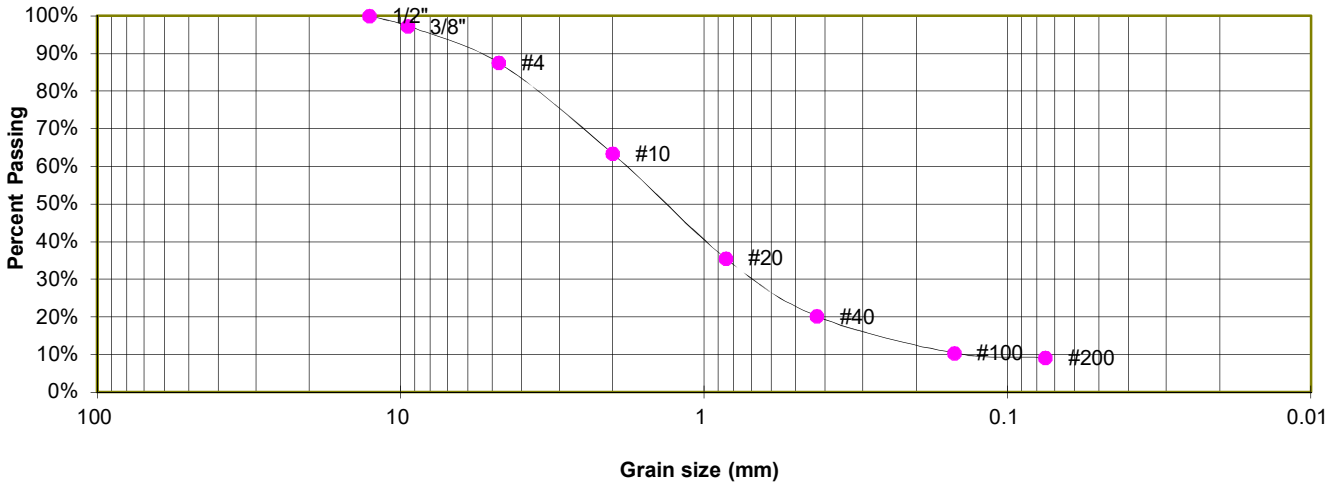
FIG. C-12

TEST BORING	TP-4	SOIL DESCRIPTION	SAND, WITH SILT
DEPTH (FT)	3		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	100.0%
3/8"	97.3%
4	87.5%
10	63.4%
20	35.6%
40	20.2%
100	10.4%
200	9.2%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SW-SM

ENTECH ENGINEERING, INC.

LABORATORY TEST RESULTS

FLYING HORSE NORTH FILING NO. 9
FLYING HORSE NORTH, LLC

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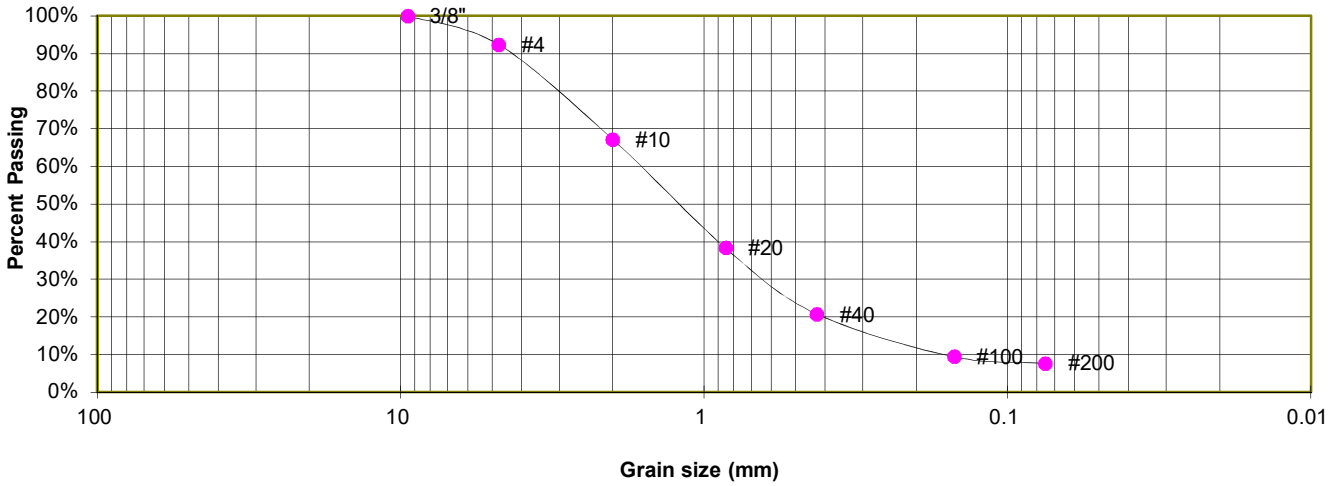
FIG. C-13

TEST BORING	TP-4	SOIL DESCRIPTION	SAND, WITH SILT
DEPTH (FT)	6		



GRAIN SIZE ANALYSIS

U.S. Sieve #	Percent Finer
3"	
1 1/2"	
3/4"	
1/2"	
3/8"	100.0%
4	92.4%
10	67.2%
20	38.3%
40	20.7%
100	9.4%
200	7.7%

SOIL CLASSIFICATION

USCS CLASSIFICATION: SW-SM

ENTECH ENGINEERING, INC.

LABORATORY TEST RESULTS

FLYING HORSE NORTH FILING NO. 9
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FIG. C-14

APPENDIX D: USDA Soil Survey Descriptions

El Paso County Area, Colorado

26—Elbeth sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 367y
Landscape: Uplands
Elevation: 7,300 to 7,600 feet
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Elbeth

Setting

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

Typical profile

A - 0 to 3 inches: sandy loam
E - 3 to 23 inches: loamy sand
Bt - 23 to 68 inches: sandy clay loam
C - 68 to 74 inches: sandy clay loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F048AY908CO - Mixed Conifer
Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 10 percent
Hydric soil rating: No

Pleasant

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 23, Aug 29, 2025

El Paso County Area, Colorado

67—Peyton sandy loam, 5 to 9 percent slopes

Map Unit Setting

National map unit symbol: 369d
Landscape: Uplands
Elevation: 6,800 to 7,600 feet
Mean annual air temperature: 43 to 45 degrees F
Frost-free period: 115 to 125 days
Farmland classification: Not prime farmland

Map Unit Composition

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

Description of Peyton

Setting

Landscape: Uplands
Landform: Hills
Landform position (three-dimensional): Side slope
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 12 inches: sandy loam
Bt - 12 to 25 inches: sandy clay loam
BC - 25 to 35 inches: sandy loam
C - 35 to 60 inches: sandy loam

Properties and qualities

Slope: 5 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B

Ecological site: R049XY216CO - Sandy Divide
Hydric soil rating: No

Minor Components

Other soils
Percent of map unit: 10 percent
Hydric soil rating: No

Pleasant
Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 23, Aug 29, 2025