Rising to excellence in every pursuit
FARMINGTON MUNICIPAL SCHOOLS

ADMINISTRATIVE OFFICES
3401 E. 30th Street, Suite A
Farmington, NM 87402
district.fms.k12.nm.us

Date April 21, 2026

ITB #2026-01 Piedra Vista HS Shelter/Pavilion

ADDENDUM NO. 2
This addendum supplements the original documentation with additional materials and records from the meeting.

The following items are hereby included:

1) **Sign-In Sheet**
The official sign-in sheet documenting attendance for the meeting is attached and incorporated as part of the record.
2) **Meeting Recording**
A complete recording of the meeting proceedings is included to provide an accurate account of discussions, presentations, and decisions.
3) **Received Questions**
All questions submitted during and following the meeting have been compiled and are attached. These reflect participant inquiries and requests for clarification relevant to the subject matter.
   a) We noticed the plans have 20' bay spacing down the length. Will 25' spacing be acceptable? This would save one (1) building frame & a couple of concrete piers, thus saving on cost. 20' or 25' bays are acceptable
   b) The plans call for 30' clearance from the ground to under the rafter. This will end up being something in the 35' +- range at the eave. Preliminarily, the building had 30' eave rather than 30' clear, please clarify. Proceed with a 30' clear distance.
   c) Wall bracing. The plans do not show anything for wall bracing such as x-bracing or portal frame (wind bent). The x-bracing costs less, however, can become a safety hazard with people walking through those areas. If portal frames are required, this will probably add some cost to the concrete piers. It appears the concrete piers as designed/drawn would not cover for portal frames. Please clarify. The portal frame for lateral resistance is preferred over the x-bracing due to safety concerns. The foundations will be adjusted following receipt of the building layouts and reactions.
   d) Will gutters & downspouts be required? There are none shown on the drawings. Provide the gutters and downspouts as an alternate.
   e) Approved PEMB Suppliers
      Alliance Steel Building System
      B&C Steel
      Butler
      Mueller
      Olympia Steel Buildings
      Star Building
      US Patriot

f) Include number of days to construct in bid submittal.

4) **Geotech Report**

These materials are provided to ensure transparency, completeness of the record, and accessibility of information for all relevant parties.

Issued by:
Farmington Municipal School District

ITB #2026-01 - CONSTRUCTION CONTRACT (PIEDRA VISTA HS SHELTER/PAVILION
PRE-BID MEETING
MONDAY, APRIL 20, 2026 at 2:00 PM

Company	Name	Title	Email	Phone
Farmington Schools	Lisa Ecker	Admin. Asst.	leaker@fms.k12.nm.us	(505) 599-0783
Winters Construction	Rick	PM	rick@winterscon.us	505-320-5232
Farmington Schools	Candice Thompson	Project Manager	cathompson@fms.k12.nm.us	(505) 599-0784
[illegible] MS	[illegible] Estes	CFO	[illegible]@fms.k12.nm.us	505 599 0790
R&S Const	Russell Armenta Jr	Boss/Owner	r.s.construction.com	505-486-5614
SCI	aaron Spellberg	President	aaron@spellbergconstruction.com	505 330-4629
BIC Steel	Ernie Shoup	Sales Rep	EShoup2100@MSN.com	505 330-9692
JAYNES CORPORATION	AARON SINGER	ESTIMATOR	AARON.SINGER@JAYNESCORP.com	970.902.7546
FIELDERS CHOICE	BLAKE SWEHART	VP NM/SW/NATIONAL	bSweinart@fieldershoiceinc.com	505-331-5164
IINaba inc	Patrick Aspaas	Architectural Designer	Paspaas@iinaba.com	505-327-1072
IINABA INC	KAT HOLIDAY	PM	KHOLIDAY@IINABA.COM	505.327.1072
Farmington Schools	Isaac Gamboa	Exec. Director Operations + Athletics	igamboa@fms.k12.nm.us	(505) 324-9840
Farmington Schools	Charles VandenBroeck	Supervisor - Plant Ops	cvandenbroeck@fms.k12.nm.us	(505) 324-9840

04-20 Meeting: Piedra Vista HS Shade Pavillion Invitation to Bid

Date: 2026-04-20 14:01:35

Location: FMS Central Office

Meeting Notes

Project Overview: Shade Structure Construction

- The project is a 100x100-foot shade structure for Farmington Schools.
- It is a simple structure with no electricity, water, or turf underneath.
- The project is open to several pre-manufactured builders, including B&C Steel, US Patriot, Star Building, and others.

Technical Specifications and Clarifications

- The scope includes only the structure itself; no site grading or turf preparation is included in this phase. The only dirt work is for the column holes.
- A height benchmark is established off the foundation of a large underground electrical box, as noted on the civil plans.
- A question was raised about changing the bay spacing from 20 feet to 25 feet to eliminate a frame and two piers. This will be submitted in writing.
- The structure requires a 30-foot clear height below the rafter hinge point, making the total eave height approximately 35 feet to accommodate sports activities.
- It was suggested to use a portal frame or wind bent instead of X-brace cables for safety, though this will increase costs.
- The structure will not have gutters or downspouts.
- Standard panel colors will be used, likely white and blue.

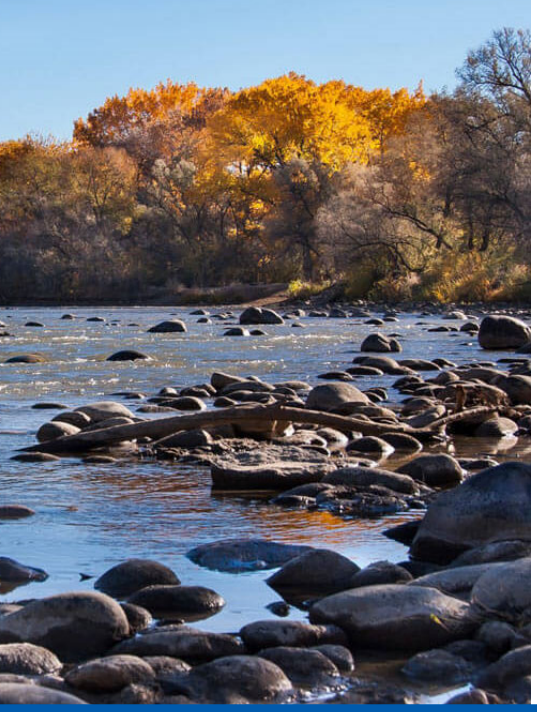
Bidding and Funding Details

- The project award is contingent on approval from the funding source. Funds are available but require final approval.
- The contract will be awarded to the lowest qualified bidder.
- Bidders are requested to include the number of days required for project completion in their submissions.

- Material prices are reportedly starting to increase; bidders should account for this.
- The funding is from a grant, which may involve PSFA (Public School Facilities Authority) approval depending on the final cost.

Site Conditions

- The project site is east of the baseball field, in an area currently used for parking.
- The site is open and not secured; it is recommended that the contractor fence the area.
- A geotechnical report will be sent to bidders. It is known that there is sandstone at an unknown depth.





GEOTECHNICAL ENGINEERING REPORT

LIGHTS AND BLEACHERS
PIEDRA VISTA HIGH SCHOOL
FARMINGTON, NEW MEXICO

Submitted To:
Isaac Gamboa
Farmington Municipal Schools
3401 East 30th Street
Farmington, New Mexico 87401

GEOMAT PROJECT NO. 242-4919
June 26, 2024

GEOMAT INC.

GEOMAT INC.
915 Malta Avenue ◆ Farmington, NM 87401 ◆ Tel (505) 327-7928 ◆ Fax (505) 326-5721

June 26, 2024

Isaac Gamboa
Farmington Municipal Schools
3401 East 30th Street
Farmington, New Mexico 87401

RE: Geotechnical Engineering Report
Piedra Vista Lights and Bleachers
Kirtland, New Mexico
GEOMAT Project No. 242-4919

GEOMAT Inc. (GEOMAT) has completed the geotechnical engineering study for the proposed field lights and bleachers project at Piedra Vista High School in Farmington, New Mexico. The objectives of our study are to provide subsurface information for the design of the bleachers and lights footings/piers and our opinions/recommendations based upon our understanding of the proposed construction and the conditions encountered.

Subsurface conditions at the site were explored on May 3, 2024, by drilling fourteen (14) boreholes at the approximate location shown on the attached Vicinity Plan. Boring B-14 was drilled a second time on June 13, 2024, to advance the boring to shale rock. The borings were advanced using a CME-55 truck-mounted drill rig with continuous-flight, 7.25-inch O.D. hollow-stem augers. The borings were continuously monitored by a staff geologist from our office who examined and classified the subsurface materials encountered, obtained representative samples, observed groundwater conditions and maintained a continuous log of the borings.

Groundwater evaluations were made in the borings at the time of site study. Soils were classified in accordance with the Unified Soil Classification System described in Appendix A. Boring logs were prepared and are presented in the attachments.

SITE CONDITIONS/PROPOSED CONSTRUCTION

The proposed lights and bleachers projects are located at the Piedra Vista High School Soccer and Football in Farmington, New Mexico, respectively. The proposed light's location is an existing grassed area with two soccer fields. The site is bordered by a chain link fence on all sides and is located on the east side of the campus. It is our understanding that nine (9) lights will be located on the fields, three on the west and east sides and three in the middle of the fields.

The lights will be approximately 70 feet in height and will have a precast base, be directly buried below grade, and encased in concrete.

The proposed bleachers will be located west of the existing football field which is located in the northeast corner of the campus. The bleachers will be aluminum framed with steel supports supported on shallow concrete footings or piers.



Proposed Location of the Bleachers – View to the East



View of Soccer Field – View to the Northeast

SUBSURFACE CONDITIONS

Soil Conditions:

As presented on the attached boring logs, in general, in borings B-1 through B-4 at the bleachers we encountered surficial silty sand soil ranging in thickness from approximately 2 to 2.5 feet below existing ground surface (bgs) underlain by sandstone and/or shale bedrock to the depths explored of approximately 5.5 feet bgs. The silty sand was generally tan, fine- to coarse- grained and slightly damp. The sandstone was generally fine to medium grained and highly to moderately weathered.

In borings B-5 through B-14, we generally encountered grass/topsoil overlying varying amounts of existing sandy fill overlying sandstone/shale rock to the depths explored. The fill encountered generally lacked the cementation and uniformity associated with native soil deposits. That in conjunction with sites appearance of having been previously graded to construct the fields, led us to characterize this soil unit as fill. The sandstone was generally fine to medium grained and highly to moderately weathered. The shale was generally gray/brown and moderately weathered.

Groundwater Conditions:

Groundwater was not encountered to the depths explored. Groundwater elevations can fluctuate over time depending upon precipitation, irrigation, runoff, and infiltration of surface water. We do not have any information regarding the historical fluctuation of the groundwater level in this vicinity.

OPINIONS/RECOMMENDATIONS

Excavation:

We present the following general comments regarding our opinion of the excavation conditions for the designers' information with the understanding that they are opinions based on our boring data. More accurate information regarding the excavation conditions should be evaluated by contractors or other interested parties from test excavations using the equipment that will be used during construction.

Based on our subsurface evaluation, it appears that excavation of the soils and the upper 1 to 2 feet of the highly weathered portion of the rock may be possible using standard excavation equipment. Excavation below that depth or in strongly cemented areas of rock will likely not be possible using standard excavation equipment and may require heavy-duty equipment and/or specialized techniques. Our notation of the degree of weathering of formational rock is a geological description of the material and is not intended to imply the degree of ease or difficulty of rock excavation.

Bleacher Foundations:

It is recommended that the bleachers be supported on shallow concrete piers/footings bearing on the sandstone/shale rock or engineered fill/compacted soil. If founded on rock, in order to provide lateral stability, the piers/footings should be embedded a minimum of 12 inches into the rock and the concrete should be placed "neat" with the rock. Frost depth is not applicable to footings founded on rock. If founded on engineered fill or compacted native soils, the bottom of footing should be founded a minimum of 24 inches below adjacent grade to provide against frost heave. In order to reduce the potential for differential settlement, we recommend the footings be supported entirely on rock or entirely on soil/fill, but not a combination of the two materials. If supported on soil/fill, a minimum of 12-inches of engineered fill or compacted native soil should be provided beneath the footings. Soils/fill should be compacted to a minimum 95 percent of their maximum dry density as determined by ASTM D698.

Footings support in this manner can be designed for a maximum allowable bearing pressure of 4,000 psf on rock or 2,500 psf on soil/fill. Footing and foundations should be reinforced as necessary to reduce the potential for distress caused by differential foundation movement.

The native sandy soils are suitable for reuse as engineered fill. If imported soils are required, we recommend that they meet the following criteria:

Recommended Engineered Fill Properties	
Sieve Size	Percent Finer by Weight (ASTM C136)
3" Sieve	100
No. 4 Sieve	50 – 100
No. 200 Sieve	50 Max
Plasticity Index	12 Max
Maximum Expansive Potential (%)*	+1.5

* Measured on a sample compacted to approximately 95 percent of the ASTM D1557 maximum dry density at about 3 percent below optimum water content. The sample is confined under a 144-psf surcharge and submerged. Positive value indicates expansion. Negative value indicates compression.

Light Pole Foundations:

For the on-site subsurface conditions, the vertical (downward and uplift) and lateral capacities for the drilled shafts may be derived from side friction and end-bearing for axial loads and from passive soil resistance for lateral and over-turning forces acting on the shaft. The fill and sand soils encountered were generally loose and of low density. As such, we recommend that the foundations be founded a minimum of 10 feet below grade or two (2.0) feet into rock, whichever is deeper. The depth of the borings can be used a reference. For example, a pier at boring B-6 would be a minimum of 10 feet below grade since shale was encountered at 2 feet below grade. A pier at boring B-11 would be founded a minimum of 18 feet below grade since shale was encountered at approximately 16 feet below existing grade.

Based on the conditions encountered in the test borings, we recommend the foundations be designed using the following parameters:

Material*	Internal Friction, ϕ (deg)	Cohesion, C (psf)	Unit Weight (pcf)	Allowable Equivalent End Bearing Pressure (ABP) (psf)**	Allowable Uplift Side Friction (lb/ft)***
Fill	28	0	95	N/A	250(D-3)
Rock (Shale or Sandstone)	34	1,500	115	15,000+1,500*D*C	1,000*D

*See borings for depth.

** ABP is 12,000 psf @ 10 feet or 2 feet into rock plus 1500 psf increase in skin friction for each additional foot below below the minimum depth. Shaft length, D, is referenced as minimum 10 feet or 2 feet into rock, whichever is deeper.

***250 lb/ft of allowable uplift side friction for each foot of depth below 3 feet

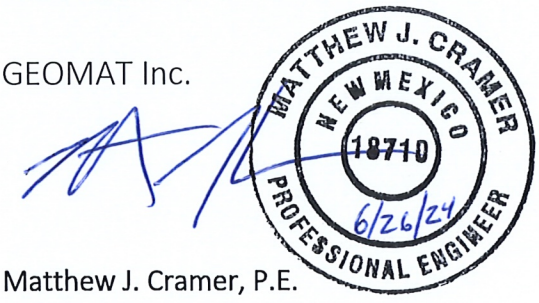
Foundations should be reinforced as necessary to reduce the potential for distress caused by differential foundation movement.

If the subsurface conditions encountered differ significantly from those presented in this report, supplemental recommendations will be required.

We have appreciated being of service to you in the geotechnical engineering phase of this project. If you have any questions concerning this report, please contact us.

Sincerely yours,

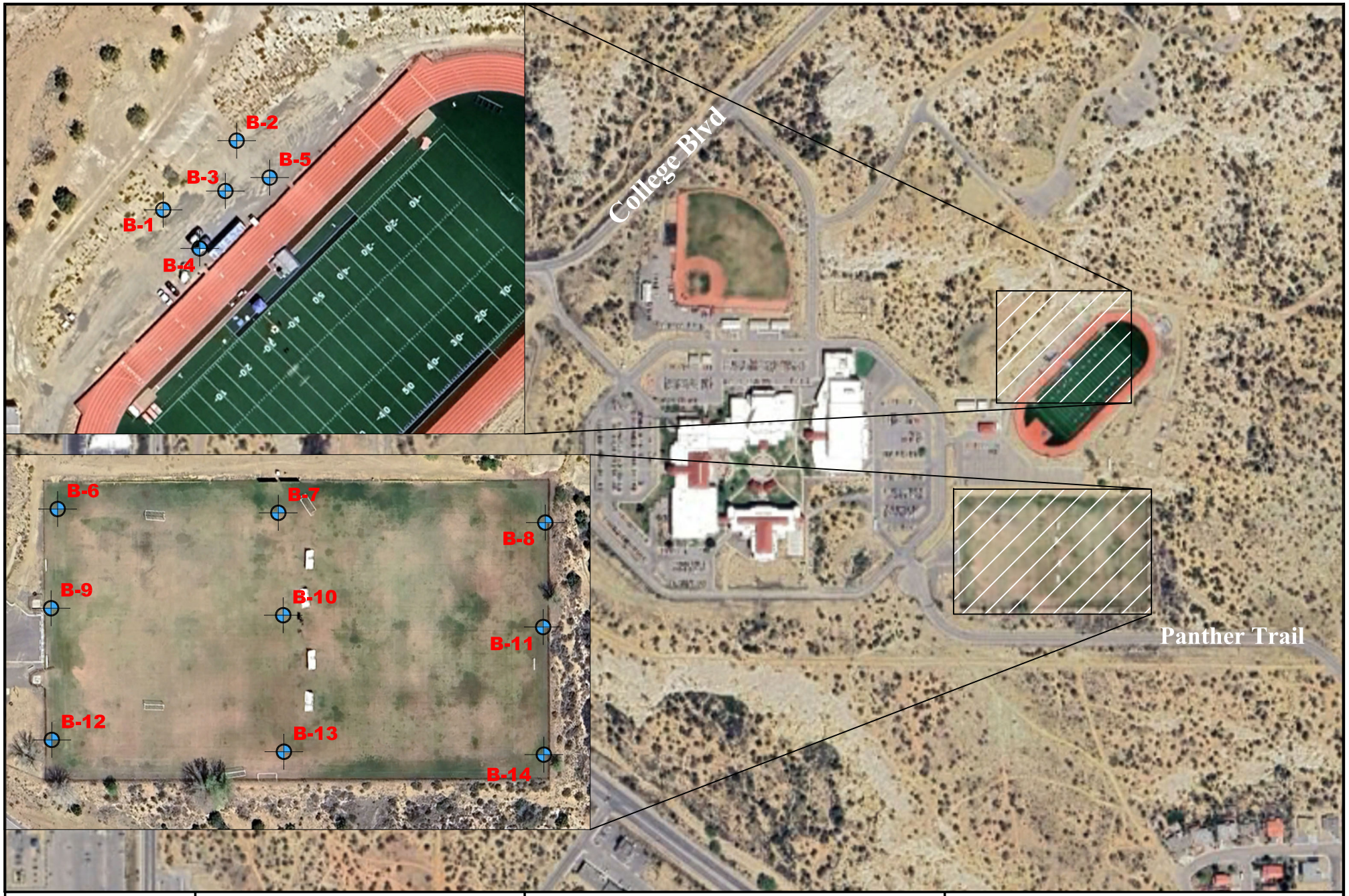
GEOMAT Inc.



Matthew J. Cramer, P.E.
President, Principal

Attachments: Vicinity Plan; Boring Log; Testing Drilling Equipment and Procedures; Unified Soil Classification System;

Copies to: Addressee (1) (via E-mail)



Approximate

Not to Scale

VICINITY PLAN

Boring Locations (approximate)

GEOMAT Project No. 242-4919

Date of Exploration: May 3, 2024

PROJECT

Piedra Vista Lights and Bleachers
Farmington, New Mexico

GEOMAT INC.

GEOMAT INC.
915 Malta Ave
Farmington, NM 87401
Tel (505) 327-7928
Fax (505) 326-5721

Boring B-1

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Football Field Bleachers

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
							SM		1	Silty SAND, tan, fine- to coarse-grained, medium dense, slightly damp
									2	
				8-8-5	SS		RK		3	SANDSTONE, tan-white/orange, fine- to coarse-grained, moderately cemented, highly weathered, slightly damp to damp
									4	moderately weathered
				50/3"	SS				5	
									6	Total Depth 5½ feet
									7	
									8	
									9	
									10	

A = Auger Cuttings R = Ring-Lined Barrel Sampler SS = Split Spoon GRAB = Manual Grab Sample D = Disturbed Bulk Sample SH = Shelby Tube Sampler

GEOMAT INC.
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Farmington, NM 87401
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Fax (505) 326-5721

Boring B-2

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Football Field Bleachers

Laboratory Results: Dry Density (pcf)	Laboratory Results: % Passing #200 Sieve	Laboratory Results: Plasticity Index	Laboratory Results: Moisture Content (%)	Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
									0	Silty SAND, tan, fine-to coarse-grained, slightly damp
							SM		1	brown, slightly damp to damp
				5-50/6"	SS		RK		2	SANDSTONE, white/tan, fine- to coarse-grained, weakly cemented, highly weathered, dry to slightly damp
							RK		3	SHALE, brown/gray, moderately weathered, slightly damp
				50/2"	SS		RK		4	SANDSTONE, gray/tan, fine- to coarse-grained, weakly cemented, slightly to moderately weathered, dry to slightly damp
									5	Total Depth 5½ feet
									6	
									7	
									8	
									9	
									10	

A = Auger Cuttings R = Ring-Lined Barrel Sampler SS = Split Spoon GRAB = Manual Grab Sample D = Disturbed Bulk Sample SH = Shelby Tube Sampler

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Fax (505) 326-5721

Boring B-3

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Football Field Bleachers

Laboratory Results: Dry Density (pcf)	Laboratory Results: % Passing #200 Sieve	Laboratory Results: Plasticity Index	Laboratory Results: Moisture Content (%)	Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
							SM		1	Silty SAND, tan, fine- to coarse-grained, slightly damp brown
				11-41-50/4"	SS		RK		2	SANDSTONE, tan, fine-to coarse-grained, weakly cemented, highly weathered, dry to slightly damp
							RK		3	SHALE with sand, gray/brown-tan, moderately weathered, slightly damp
				50/6"	SS		RK		4 5	gray-brown/orange SANDSTONE, tan/brown, fine-to coarse-grained, moderately cemented, slightly to moderately weathered, slightly damp
									6 7 8 9 10	Total Depth 5½ feet

A = Auger Cuttings R = Ring-Lined Barrel Sampler SS = Split Spoon GRAB = Manual Grab Sample D = Disturbed Bulk Sample SH = Shelby Tube Sampler

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GEOMAT INC.
915 Malta Ave
Farmington, NM 87401
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Fax (505) 326-5721

Boring B-4

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Football Field Bleachers

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
							SM		1	Silty SAND, tan/brown, fine- to coarse-grained, slightly damp
									2	brown
				17-50/4"	SS					
									3	SANDSTONE, tan-brown/orange, fine- to coarse-grained, weakly cemented, moderately to highly weathered, slightly damp to damp
							RK		4	
				50/6"	SS				5	
									6	Total Depth 5½ feet
									7	
									8	
									9	
									10	

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Boring B-5

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Football Field Bleachers

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
									1	Silty SAND, tan/brown, fine-to coarse-grained, medium dense, slighly damp
							SM		2	
				30-50/4"	SS				3	
										SANDSTONE, tan/brown, fine-to coarse-grained, weakly cemented, moderately weathered, dry
							RK		4	tan
				50/6"	SS				5	white/tan, moderately cemented, dry to slightly damp
										Total Depth 5½ feet
									6	
									7	
									8	
									9	
									10	

A = Auger Cuttings R = Ring-Lined Barrel Sampler SS = Split Spoon GRAB = Manual Grab Sample D = Disturbed Bulk Sample SH = Shelby Tube Sampler

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Farmington, NM 87401
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Fax (505) 326-5721

Boring B-6

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
						TS			0	Grass and Topsoil, approx. thickness 3"
						SM			1	Silty SAND, brown/tan, fine- to coarse-grained, slightly damp to damp (FILL)
									2	
				4-19-22	SS		RK		3	SHALE, gray/brown, orange mottling, moderately to highly weathered, slightly damp
									4	
				23-35-50/6"	SS				5	with sand, fine- to medium-grained
									6	
									7	
									8	
									9	SANDSTONE, white/tan, fine-to coarse-grained, weakly cemented, moderately weathered, dry to slightly damp
				50/5"	SS		RK		10	strongly cemented, slightly weathered, slightly damp (bouncing hammer)
									11	
				50/1"	SS				12	auger refusal on sandstone
									13	Total Depth 12½ feet
									14	
									15	
									16	
									17	
									18	
									19	
									20	

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Fax (505) 326-5721

Boring B-7

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results: Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)	Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
							TS			Grass and Topsoil, approx. thickness 3"
									1	Silty SAND, brown/tan, fine- to coarse-grained, medium dense, slightly damp
									2	
				4-4-25	SS		SM		3	brown-tan/orange
									4	
									5	trace sandstone fragments
				24-41-50/3"	SS				6	SANDSTONE, brown-tan/orange, fine-to coarse-grained, moderately cemented, moderately weathered, dry to slightly damp
							RK		7	
									8	SHALE, brown/gray, moderately weathered, slightly damp
							RK		9	
									10	SANDSTONE with gravel, brown/orange, fine- to coarse-grained, slightly to moderately weathered, slightly damp to damp (bouncing hammer)
				24-50/4"	SS				11	
							RK		12	
									13	
									14	SHALE, brown/gray, moderately weathered, (bouncing hammer)
							RK		15	
				24-50/2"	SS				16	Total Depth 15½ feet
									17	
									18	
									19	
									20	

A = Auger Cuttings R = Ring-Lined Barrel Sampler SS = Split Spoon GRAB = Manual Grab Sample D = Disturbed Bulk Sample SH = Shelby Tube Sampler

GEOMAT 242-4919.GPJ GEOMAT.GDT 5/22/24

GEOMAT INC.
915 Malta Ave
Farmington, NM 87401
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Fax (505) 326-5721

Boring B-8

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Bulk, Ring and Split spoon samples
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
						TS			0	Grass and Topsoil, approx. thickness 3"
							SM		1	Silty SAND, brown, fine-to coarse-grained, loose, slightly damp to damp
				5-7	R				2	
									3	
							RK			SANDSTONE, tan, fine-to coarse-grained, weakly cemented, highly weathered, damp
							RK		4	
										SHALE, gray, highly weathered, slightly damp
				12-13-15	SS		RK		5	SANDSTONE, tan, fine-to coarse-grained, moderately cemented, moderately to highly weathered, slightly damp
									6	SHALE, gray, moderately weathered, slightly damp
									7	
									8	
									9	dark brown, damp
				21-28-30	SS		RK		10	gray/brown, trace coal, slightly damp
									11	
									12	
					GRAB				13	
									14	
				50/6"	SS				15	
									16	Total Depth 15½ feet
									17	
									18	
									19	
									20	

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Boring B-9

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
							TS		1	Grass and Topsoil, approx. thickness 3"
							SM		2	Silty SAND, brown/tan/orange, fine- to coarse-grained, slightly damp (FILL)
				9-12-50/5"	SS				3	
									4	SHALE, gray/brown, moderately weathered, slightly damp
				31-50/3"	SS				5	
									6	
							RK		7	
									8	red/brown, slightly to moderately weathered
									9	
				28-50/3"	SS				10	auger refusal on shale
									11	Total Depth 10½ feet
									12	
									13	
									14	
									15	
									16	
									17	
									18	
									19	
									20	

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GEOMAT INC.
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Boring B-10

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
							TS		0	Grass and Topsoil, approx. thickness 3"
									1	Silty SAND, tan/orange/brown, fine- to coarse-grained, loose, slightly damp (FILL)
									2	
				4-4-3	SS		SM		3	
									4	
									5	SHALE, brown/gray, highly weathered, slightly damp
				8-10-13	SS				6	
									7	
									8	
									9	
									10	
				29-50/3"	SS		RK		11	moderately weathered, trace coal fragments
									12	
									13	
									14	
									15	
				21-50/5"	SS				16	
									17	Total Depth 16 feet
									18	
									19	
									20	

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GEOMAT INC.
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Boring B-11

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Ring and Split spoon samples
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results: Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)	Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
							TS		0	Grass and Topsoil, approx. thickness 3"
				4-6-4	SS		SM		1–8	Silty SAND, tan, fine- to coarse-grained, loose to medium dense, slightly damp to damp (FILL)
				6-7	R				5–8	medium dense
				3-3-6	SS		SM		8–15	Silty SAND, brown/tan, fine-to coarse-grained, interbedded shale, slightly damp to damp (NATIVE)
				5-13-22	SS				15	
							RK		16	SHALE, brown/gray, moderately weathered, slightly damp
									17	Total Depth 16½ feet

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Boring B-12

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Split spoon sample
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results: Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)	Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
							TS		1	Grass and Topsoil, approx. thickness 3"
									1	Silty SAND, brown/tan/orange, fine-to coarse-grained, loose, slightly damp
									2	
				2-4-4	SS		SM		3	
									4	slightly damp to damp
				5-7-13	SS				5	
									6	SHALE, gray/brown, moderately weathered, slightly damp
									7	
									7	gray/brown
							RK		8	
									9	
				21-50/5"	SS				10	
									11	auger refusal on shale
									12	Total Depth 11½ feet
									13	
									14	
									15	
									16	
									17	
									18	
									19	
									20	

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GEOMAT INC.
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Boring B-13

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Bulk, Ring and Split spoon samples
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results				Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)							
						TS				Grass and Topsoil, approx. thickness 3"
					GRAB				1	Silty SAND, brown/tan/orange, fine-to coarse-grained, loose to medium dense, slightly damp to damp (FILL)
				3-4-3	SS				2	
									3	
									4	
				5-5-5	SS		SM		5	
									6	
									7	
									8	
									9	
				2-4-9	SS				10	
									11	SHALE, gray/brown, moderately to highly weathered, damp to moist
							RK		12	
									13	
									14	
							RK		15	SANDSTONE, brown/tan, fine- to coarse-grained, weakly cemented, highly weathered, slightly damp
				42-50/1"	R				16	
							RK			Shale, gray/brown, slightly weathered, slightly damp (bouncing hammer)
									17	Total Depth 16 feet
									18	
									19	
									20	

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Boring B-14

Project Name: Piedra Vista Lights & Bleachers
Project Number: 242-4919
Client: Farmington Municipal Schools
Site Location: Piedra Vista High School
Rig Type: CME-55
Drilling Method: 7.25" O.D. Hollow Stem Auger
Sampling Method: Ring and Split spoon samples
Hammer Weight: 140 lbs
Hammer Fall: 30 inches

Date Drilled: 5/3/2024
Latitude: Not Determined
Longitude: Not Determined
Elevation: Not Determined
Boring Location: See Site Plan
Groundwater Depth: Not Encountered
Logged By: PM
Remarks: Soccer Field Lights

Laboratory Results: Dry Density (pcf)	% Passing #200 Sieve	Plasticity Index	Moisture Content (%)	Blows per 6"	Sample Type & Length (in)	Symbol	Material Type	Soil Symbol	Depth (ft)	Soil Description
							TS		1	Grass and Topsoil, approx. thickness 3"
				4-4-5	SS				2	Silty SAND, brown/orange/tan, fine-to coarse-grained, loose to medium dense, slightly damp to damp
									3	
				3-4-4	SS				4	
									5	
									6	
									7	
									8	
							SM		9	
				7-10	R				10	
									11	
									12	
									13	damp
									14	
									15	
				2-4-3	SS				16	
									17	
									18	Shale with sand, brown-orange-red, very stiff, slightly damp
									19	
									20	
				28-40-46	SS				21	
							RK		22	
									23	
									24	
									25	
				41-50/2"	R				26	Total Depth 25½ feet
									27	
									28	
									29	
									30	

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UNIFIED SOIL CLASSIFICATION SYSTEM					CONSISTENCY OR RELATIVE DENSITY CRITERIA					
Major Divisions			Group Symbols	Typical Names	**Standard Penetration Test** Density of Granular Soils			**Ring-Lined Sampler** Density of Granular Soils		
					Penetration Resistance, N (blows/ft.)	Relative Density		Penetration Resistance, N (blows/ft.)	Relative Density	
Coarse-Grained Soils More than 50% retained on No. 200 sieve	**Gravels** 50% or more of coarse fraction retained on No. 4 sieve	Clean Gravels	GW	Well-graded gravels and gravel-sand mixtures, little or no fines						
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines						
		Gravels with Fines	GM	Silty gravels, gravel-sand-silt mixtures	0-4	Very Loose		0-11	Very Loose	
			GC	Clayey gravels, gravel-sand-clay mixtures	5-10	Loose		12-26	Loose	
	Sands More than 50% of coarse fraction passes No. 4 sieve	Clean Sands	SW	Well-graded sands and gravelly sands, little or no fines	11-30	Medium Dense		27-74	Medium Dense	
			SP	Poorly graded sands and gravelly sands, little or no fines	31-50	Dense		75-120	Dense	
		Sands with Fines	SM	Silty sands, sand-silt mixtures	>50	Very Dense		>120	Very Dense	
			SC	Clayey sands, sand-clay mixtures	Standard Penetration Test Density of Fine-Grained Soils			Ring-Lined Sampler Density of Fine-Grained Soils		
Fine-Grained Soils 50% or more passes No. 200 sieve	**Silts and Clays** Liquid Limit 50 or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands	Penetration Resistance, N (blows/ft.)	Consistency	Unconfined Compressive Strength (Tons/ft2)	Penetration Resistance, N (blows/ft.)	Consistency	Unconfined Compressive Strength (Tons/ft2)
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	<2	Very Soft	<0.25	<3	Very Soft	<0.25
			OL	Organic silts and organic silty clays of low plasticity	2-4	Soft	0.25-0.50	3-6	Soft	0.25-0.50
	Silts and Clays Liquid Limit greater than 50		MH	Inorganic silts, micaceous or diatomaceous free sands or silts, elastic silts	5-8	Medium Stiff	0.50-1.00	7-12	Medium Stiff	0.50-1.00
			CH	Inorganic clays of high plasticity, fat clays	9-15	Stiff	1.00-2.00	13-25	Stiff	1.00-2.00
			OH	Organic clays of medium to high plasticity	16-30	Very Stiff	2.00-4.00	26-65	Very Stiff	2.00-4.00
Highly Organic Soils			PT	Peat, mucic & other highly organic soils	>30	Hard	>4.0	>65	Hard	>4.0

U.S. Standard Sieve Sizes

>12"	12"	3"	3/4"	#4	#10	#40	#200	
Boulders	Cobbles	Gravel		Sand				Silt or Clay
		coarse	fine	coarse	medium	fine		

MOISTURE CONDITIONS	
Dry	Absence of moist, dusty, dry to the touch
Slightly Damp	Below optimum moisture content for compaction
Moist	Near optimum moisture content, will moisten the hand
Very Moist	Above optimum moisture content
Wet	Visible free water, below water table

MATERIAL QUANTITY	
trace	0-5%
few	5-10%
little	10-25%
some	25-45%
mostly	50-100%

OTHER SYMBOLS

R Ring Sample
S SPT Sample
B Bulk Sample
▼ Ground Water

BASIC LOG FORMAT:

SOILS - Group name, Group symbol, color, consistency or relative density, grain size, moisture. Additional comments: odor, presence of roots, mica, gypsum, coarse particles, etc.
ROCK - Name, color, planing, porosity, moisture, weathering, relative strength, additional comments.

EXAMPLES:

SILTY SAND w/trace silt (SM-SP), Brown, loose to med. Dense, fine to medium grained, damp

BASALT, gray/black, irregular planes, porous, slightly damp, slightly weathered, medium strong (R3)

UNIFIED SOIL CLASSIFICATION SYSTEM

TEST DRILLING EQUIPMENT & PROCEDURES

Description of Subsurface Exploration Methods

Drilling Equipment – Truck-mounted drill rigs powered with gasoline or diesel engines are used in advancing test borings. Drilling through soil or softer rock is performed with hollow-stem auger or continuous flight auger. Carbide insert teeth are normally used on bits to penetrate soft rock or very strongly cemented soils which require blasting or very heavy equipment for excavation. Where refusal is experienced in auger drilling, the holes are sometimes advanced with tricone gear bits and NX rods using water or air as a drilling fluid.

Coring Equipment – Portable electric core drills are used when recovery of asphalt or concrete cores is necessary. The core drill is equipped with either a 4" or 6" diameter diamond core barrel. Water is generally used as a drilling fluid to facilitate cooling and removal of cuttings from the annulus.

Sampling Procedures - Dynamically driven tube samples are usually obtained at selected intervals in the borings by the ASTM D1586 test procedure. In most cases, 2" outside diameter, 1 3/8" inside diameter, samplers are used to obtain the standard penetration resistance. "Undisturbed" samples of firmer soils are often obtained with 3" outside diameter samplers lined with 2.42" inside diameter brass rings. The driving energy is generally recorded as the number of blows of a 140-pound, 30-inch free fall drop hammer required to advance the samplers in 6-inch increments. These values are expressed in blows per foot on the boring logs. However, in stratified soils, driving resistance is sometimes recorded in 2- or 3-inch increments so that soil changes and the presence of scattered gravel or cemented layers can be readily detected and the realistic penetration values obtained for consideration in design. "Undisturbed" sampling of softer soils is sometimes performed with thin-walled Shelby tubes (ASTM D1587). Tube samples are labeled and placed in watertight containers to maintain field moisture contents for testing. When necessary for testing, larger bulk samples are taken from auger cuttings. Where samples of rock are required, they are obtained by NX diamond core drilling (ASTM D2113).

Boring Records - Drilling operations are directed by our field engineer or geologist who examines soil recovery and prepares boring logs. Soils are visually classified in accordance with the Unified Soil Classification System (ASTM D2487), with appropriate group symbols being shown on the logs.