ADDENDUM NO: 04

DATE: 09 April 2025

PROJECT NO: 119.002

PROJECT: Hyde Park Elementary School
333 East 300 North
Hyde Park, Utah 84318

OWNER: Cache County School District
Logan, Utah

NAYLOR
WENTWORTH
LUND
ARCHITECTS

THE ITEMS LISTED IN THIS **ADDENDUM** WILL BECOME PART OF THE GENERAL CONTRACT AND WILL BE INCLUDED IN THE APPROPRIATE DRAWING OR SPECIFICATION SECTION AS NOTED UNDER EACH OF THE FOLLOWING ITEMS.

PRE-BID RFI

None

GENERAL

None

SPECIFICATIONS

1. **Specification 31 0000: Added Geotechnical Report**

DRAWINGS

None

ATTACHED ADDENDA

None

END OF ADDENDUM

ACache Corp

Engineering a Firm Foundation

Geotechnical Investigation
for the proposed
New Hyde Park Elementary School
350 E 300 N
Hyde Park, UT

PREPARED FOR:
Cache-Landmark Engineering, Inc.
Care of:
Lance Anderson
95 Golf Course Rd
Logan, UT 84321

PREPARED BY:
ACache Corp.
PROJECT NO.

September 30, 2024

September 30, 2024

Attn. Lance Anderson
Cache-Landmark Engineering, Inc.
95 Golf Course Rd
Logan, UT 84321

Subject: **Geotechnical Investigation for the proposed New Hyde Park Elementary School 350 E 300 N Hyde Park, UT 84318**

ACache Corp. Project No. 1240015

Mr. Anderson,

It is with great pleasure that ACache Corp. presents this report of our findings for the subject site. It contains the results of our findings and an engineering interpretation of the results with respect to the available project characteristics.

We appreciate the opportunity of working with you on this project and look forward to future projects with you. If you have questions regarding this project, or any other, please do not hesitate to contact us at **(435)-760-3103**.

Sincerely,

ACache Corp.

Jay E. Apedaile, P.E. M.S.
President

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APPENDIX

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1.0 GENERAL PROJECT INFORMATION

1.1 Project Authorization

ACache Corp. (ACC) was retained by Lance Anderson of Cache-Landmark Engineering Inc. to provide a Geotechnical Report with design values for the proposed New Hyde Park Elementary School at approximately 350 E 300 N Hyde Park, UT (see **Figures 1 and 2** in the Appendix).

1.2 Project Purpose and Description

The purpose of this study and report was to obtain design level soil information to be used in the planning and design of a proposed new elementary school in Hyde Park, UT. Based on the information provided by Cache-Landmark, Inc. the proposed construction will consist of the development of approximately 9.7 acres for some school buildings, parking lots, playing field, access roads. The main school building is a slab on grade two story structure with high ceiling gymnasiums. Structural loads are anticipated to consist of column loads ranging from 10 to 250 kips, and wall loads ranging from 2.0 to 18 kips per linear foot, for dead plus live loads. Final site grading information was not provided. ACC has assumed that the floor slab of the buildings will be placed at or below the current elevation of the site.

This report and the recommendations herein are based on the available project information. If this information is incorrect, then ACC shall be informed, preferably in writing, so ACC can evaluate the validity of this report.

2.0 SITE AND SUBSURFACE CONDITIONS

2.1 Site Investigation

The site is located in the middle of the block bounded on the north by 450 North, on the south by 300 North, on the east by 400 East and on the west by 225 East in Hyde Park Utah (see **Figures 1 and 2** in the Appendix). The proposed structures and parking lots will be placed in the open field that was there at the time of this report. Test hole locations are estimated and shown on Figure 2 in relation to existing structures.

The general subsurface conditions at the site were investigated by performing 9 Hollow Stem Auger borings, ACache Corp. conducted these borings in 2008 as a preliminary investigation to assess the site, they were conducted to depths ranging from 16.5 feet to as deep as 51.5 feet below site grade. In addition Cone Penetrometer Testing Seismic (CPTS) were conducted to refusal in 2 locations. The approximate location of each explored location is

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shown in **Figure 2** in the Appendix. Logs of the soil explorations are presented in the appendix as Figures 4 through 17.

3.0 FINDINGS

3.1 Site Conditions

At the times of this investigation the site was a grassy field. The surface consisted of eight to twelve inches of topsoil with alfalfa growing and being watered in 2008 and then dried grass in 2024.

3.2 Surface Drainage

Surface runoff would drain off the field from east to west. The soil conditions appear to be adequate in keeping the surface soils from eroding.

3.3 Geology

The site is mapped and appears to consist of surface soils formed from post-Lake Bonneville alluvial-fan deposits consisting of clast supported pebble and cobble gravel, locally bouldery, in a matrix of sand, silt and clay; poorly sorted on the east end of the site and of coarse to fine lacustrine sands and silt related to the Provo and younger shoreline.

3.4 Soil Profile

The soil profile at the site appeared to be somewhat consistent across the proposed building site with some variations. A typical profile encountered consists of TOPSOIL consisting of CLAYEY SAND to 8 to 12 inches below the current grade. Below the Topsoil a dense, GRAVEL and COBBLE layer was observed to approximately 5 feet below grade. Followed by medium dense SAND and GRAVEL to approximately 20 feet, this is underlain by clays and silty clays down to about 45 feet where a medium dense sand with layers of gravely clay was observed to the full depth explored (approximately 52 feet below current grade).

For detailed observations of the sub-soils, the location they were observed, the characteristics observed, and any other pertinent information observed in the field or in the laboratory, see the Logs in the Appendix.

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3.5 Fault and Seismicity

The site is located in a seismically active region. It is approximately 1.5-miles west of a mapped section of the Utah East Cache Fault scarp, as depicted on the Surficial Geologic Map of the East Cache Fault Zone (James McCalpin, 1989). During the life of the project seismic activity caused by active faults in the area have the potential of causing moderate to strong shaking. According to the findings of seismic shear wave analysis our subsurface investigation, and according to the guidelines of the International Building Code (IBC, 2023), the Site Class would be **Site Class D** (ASCE 7, Section 20).

3.6 Ground Water

Ground water was not encountered in the initial investigation in 2008 when standpipes were installed in many of the borings. Additionally, no groundwater was observed in the CPTS's. A detailed evaluation of groundwater fluctuations for the site is beyond the scope of this investigation.

Testing was conducted in the location of the proposed detention area IT-01 on Figure 2 in the appendix. Testing indicated an infiltration rate of 2-in/hr. We recommend using a maximum infiltration rate of **0.8 inch per hour** for design of the retention basin that extends at least 2 feet into the native soils. We also recommend that a representative from our office be obtained to inspect the exposed soils to assure that they adequate for that recommended rate.

3.7 Liquefaction Evaluation

A site-specific liquefaction assessment was conducted using the CPT data obtained in our field exploration. Given the conditions observed at the time of our investigation the native soils have a **low probability** of liquefaction**.**

3.8 Site Subsurface Variations

It is our experience that variations in continuity and nature of subsurface conditions should be anticipated. Due to the nature and depositional characteristics of soils encountered at the site, care should be taken in interpolating or extrapolating subsurface conditions beyond the exploratory locations. Seasonal fluctuations in ground water conditions are likely to occur.

4.0 RECOMMENDATIONS

Recommendations have been developed based on the previously described project characteristics and subsurface conditions observed in the field and laboratory, as well as common engineering practice. Prudence and common engineering practices should be followed in conjunction to the recommendations of this report.

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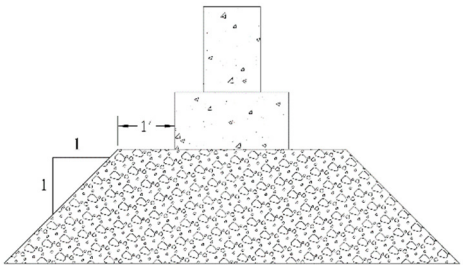
4.1 Site Preparation and Grading

All topsoil, vegetation, construction debris, unsuitable soils, fill, and any other deleterious materials, should be removed from areas of new construction. This material shall not be used as structural fill. After stripping and excavation to the proper subgrade elevation, the exposed subgrade should be proof rolled with a heavily loaded rubber-tired vehicle. Soils that rut, or tend to deflect excessively, should be removed and replaced with properly compacted fill. Proof rolling and removal of pumping material should be witnessed by the geotechnical engineer, or his approved representative. **For best results this should take place during a period of dry weather.** The subgrade soils should be compacted to a minimum of 95 percent Modified Proctor maximum laboratory density (ASTM D 1557) at a moisture content ranging from -2 to +5 percentage point of optimum.

4.2 Foundation Recommendations

Conventional spot and continuous wall foundations may be used for the support of the proposed structure at the subject site. Based on field and laboratory data an **allowable bearing capacity of 3.0 kips/ft^2** may be used **for continuous** wall and **spot** foundation design, provided the following recommendations are observed:

- Foundations shall be placed on native undisturbed or compacted soils or compacted structural fill (conforming to Sections 5.2 and 5.3).
- Onsite soils shall be examined by a qualified geotechnical engineer from this office, to verify that all topsoil, construction debris, soft spots, and any other deleterious materials have been removed prior to the placement of footings or structural fill.
- Structural fill shall be a well-graded granular soil, free of organics, debris, or other deleterious materials as outlined in Section 5.3.
- Structural fill shall be compacted as outlined in Section 5.3.
- Structural fill shall extend as a minimum 1-foot past the edge of the footing, and then for every 1-foot of fill (vertically) placed below the footing, it shall extend a minimum of 1-foot horizontally.



- Continuous footing width shall be maintained at a minimum of 18 inches. If continuous footing width greater than 6 feet is required, then that footing should be evaluated by an engineer from this office.
- Spot footings shall be a minimum of 2 feet in width. If spot footing width greater than 11 feet is required, then that footing should be evaluated by an engineer from this office.
- Exterior footings shall be placed a minimum of 30 inches below final grade, and interior footing shall be placed a minimum of 16 inches below grade for frost protection.

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Allowable bearing pressure may be increased by 1/3 for temporary loads such as wind but not for seismic forces. Foundations designed and constructed in accordance with our recommendations could experience some settlement. If the recommendations provided herein are observed, we estimate settlement should not exceed one inch, with differential settlements on the order of one-half inch. We anticipate approximately 75 percent of initial settlement to take place during construction.

4.3 Lateral Soil Pressures

Lateral soil pressures are dependent on the type of soil present. For the native silty sands and gravel the following lateral soil pressures shall be used for design:

1. An equivalent fluid pressure of 36 pounds per cubic foot (pcf) for the active case. That is when the structure is allowed to yield, that is to say the structure is allowed to move away from the soil. This requires a minimum movement or rotation at the top of the wall of 0.001H, where "H" is the height of the wall (bottom of footing to top of wall).
2. 56 pcf for the at-rest case. That is when the wall is not allowed to yield.
3. 390 pcf for the passive case. That is when the wall exerts pressure on the soil.
4. A coefficient of friction of 0.391 shall be used for the interface between the native sand and gravel and the cast-in-place concrete.

We recommend any slops made with native soils be greater or equal to 1.5 horizontal to 1.0 vertical.

4.4 Drainage

For constructability, adequate surface drainage should be provided at the site to minimize any increase in moisture content of the foundation supporting soils during and after construction. Foundation soils shall be protected from any increase in moisture.

4.5 Floor Slabs

All topsoil and deleterious materials shall be removed. We recommend a minimum of 4 inches of free draining structural fill, free from organic material and debris, be used just below floor slabs as a vapor barrier.

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4.6 Pavements

We expect site traffic to consist primarily of lightweight vehicle and pedestrian traffic. Both flexible and ridged pavement design options are provided below. The following minimum recommended pavement sections are based on an estimated CBR of 10.0%:

Option #1	**Flexible Pavement Design Section Thickness (in)**				
Material	**Pedestrian Traffic**	**Light Traffic**	**Main Drive**	**Dumpster Pad and Approach**	**Road Way**
Asphalt Pavement	**-**	**3**	**3**		**3**
Concrete Pavement	**4**	**-**	**-**	**6 reinforced**	
Road-Base Material	**-**	**4**	**4**	**-**	**4**
Sub base	**6**	**8**	**16**	**8**	**16**
Total Thickness	**10**	**14.5**	**23**	**14**	**23**

To insure a long life of the asphalt, water should be directed quickly off of the asphalt and into a concrete gutter or drain. **The asphalt pavement should be compacted to 96% of the maximum density for the asphalt material.**

Option #2	**Rigid Pavement Design Section Thickness (in)**			
Material	**Pedestrian Traffic**	**Light Traffic**	**Main Drive, Road Ways**	**Dumpster Pad and Approach**
Concrete Pavement	**4**	**5**	**5**	**6 reinforced**
Road-Base Material	**-**	**-**	**-**	**-**
Sub base	**6**	**6**	**8**	**8**
Total Thickness	**10**	**11**	**13**	**14**

The concrete shall have a minimum compressive strength of 3,500 psi. at 28 days. It should also have 5 $\pm$ 1 percent entrained air for durability and workability. A fiber mesh is also recommended to enhance the durability of the concrete. To reduce the potential for cracking, appropriate construction joints are required. Joints shall be designed in accordance with current Portland Cement Association guidelines. Joint shall be sealed to infiltration into pavement joints.

It is further recommended that all topsoil and fill materials are removed prior to the placing of base material, and structural fill. The native soils shall be proof rolled as outlined in Section 4.1. If any areas appear soft, they should be removed and replaced with structural fill. **All structural fill materials overlying native soil should be compacted in accordance with Section 5.2 of this report.**

If grade allows pavement to be placed on native granular (gravels) soils then a sub-base material may not be required. Soils shall be approved by an engineer from this office. All native soils shall be proof rolled with a heavily loaded rubber-tired vehicle. Soils that rut,

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or tend to deflect excessively, should be removed and replaced with properly compacted fill.

5.0 GENERAL CONSTRUCTION CONSIDERATIONS

The guidelines and recommendations outlined below address the geotechnically related construction considerations for this project.

5.1 Foundation Excavations

All areas that will support foundation loads should be inspected by the geotechnical engineer, or his approved representative, to ensure that all loose, soft, or otherwise undesirable material is removed, and that the structure will bear on satisfactory material. This shall occur prior to the placement of any structural fill or concrete. (We recommend giving this office a few days notice for scheduling.) Any loose or deleterious material should be replaced with well-compacted structural fill as outlined in **Sections 5.2 and 5.3**.

If unsatisfactory material pockets are encountered in the excavation, the undesirable material should be removed, and the elevation re-established by backfilling. This backfilling can be done with a lean concrete, or a well-compacted structural fill as define in **Section 5.3**.

All structural fill supporting footing loads should be compacted to at least 95 percent of the Modified Proctor Maximum Density (ASTM D 1557), provided the foundation is designed as outlined in **Section 4.2**. Compaction tests should be taken on each lift to ensure the required compaction is being achieved.

Foundation excavations shall be protected against any harmful change in condition such as disturbance, rain, and freezing. Surface runoff should be directed away from the excavation and not allowed to pond. Ideally all footing concrete should be poured the same day as the excavation is made. If this is not practical, the foundation excavation should be adequately protected, and foundation placement should take place as soon as possible. For best construction results we recommend that earth work be conducted during the dry months of the year, typically June through September.

Excavation slopes shall maintain a maximum slope of 1.5 horizontal to 1 vertical. It may be possible to have steeper slopes for temporary excavations. This will depend on the conditions location and precautions taken. Contact our office for further consultation. Otherwise, if it is required that slopes are steeper, it is necessary that excavation shoring/bracing be used.

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5.2 Fill Compaction

All fill material should be compacted in accordance to the following criteria based on the Modified Proctor Maximum Laboratory Density (ASTM D 1557):

1. Structural fill, supporting foundations.	95%
2. Structural fill, below floor stabs	94%
3. Backfill of trenches	
a. Below foundations	95%
b. Below floor stabs	94%
c. Below pavements	94%
d. Others	90%
4. Beneath Pavements	95%

Compaction should be accomplished by placing the fill in a maximum of 8-inch loose lifts, and mechanically compacting each lift to the specified minimum density. Field density tests should be performed on each lift as necessary to ensure that compaction is being achieved. As a minimum 33% of all spot footings, and one test for every 50 lineal feet of continuous wall footings shall be tested for each lift.

5.3 Types of Fill

5.3.1 Structural Fill: Sub-base (pit-run)

Well-graded granular soils free of organics, debris, or other deleterious materials are recommended for use as structural fill at this site. We recommend a well-graded sandy gravel material with no less than 5%, and no more than 10% passing the #200 sieve, and no particles greater than 4 inches in maximum dimension. Structural fill shall be compacted at a moisture content ranging from -2 to +6 percentage point of optimum in accordance to the Modified Proctor Maximum Laboratory Density (ASTM D 1557).

5.3.2 Structural Fill: Roadbase

Granular soils free of organics or other deleterious materials and debris. We recommend a sand and fractured gravel material with between 5 and 12 percent passing the #200 sieve, and no particles greater than approximately 1 inch in maximum dimension.

5.3.3 Non-Structural Fill

On-site soils appear to be suitable for non-structural site grading and landscaping fill. All fill material shall be approved by the engineer prior to placement.

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5.4 Quality Control

Our recommendations are based on the assumption that adequate quality control testing and observations will be conducted during construction to verify compliance. This may include but is not necessarily limited to the following:

5.4.1 Field observations

Observations during all phases of construction should occur. Observations such as site preparation, foundation excavation, structural fill placement, and concrete placement.

5.4.2 Fill Compaction

Compaction testing is required for all Structural supporting fill materials. Maximum Dry Density (Proctor-ASTM 1557) tests should be requested by the contractor immediately after delivery of any granular fill materials. The maximum density information should then be used for field density tests on each lift as necessary to ensure that the required compaction is being achieved.

5.4.3 Concrete Quality

We recommend that freshly mixed concrete be tested in accordance with ASTM designations as follows:

- Slump, Temperature, Unit Weight, and Yield testing should be conducted on every delivery truck (ASTM C 138 and C 143).

- Entrained Air testing should also be conducted on every delivery truck for exposed concrete or concrete placed above the frost line (ASTM C 231).

- Test cylinders should be taken a minimum of every 50 cubic yards. Cylinder compressive strength tests should be conducted at 7 and 28 days from the placement date (ASTM C 31).

6.0 LIMITATIONS

The recommendations submitted in this report were based on evaluating the information obtained from the borings and site investigation, and the design details furnished by Cache-Landmark Engineering Inc. for the proposed project. The borehole data reflects the subsurface condition only at the specific location at the time designated on the logs. Soil and ground water conditions may differ from conditions encountered at the actual exploratory location. The nature and extent of any variation may not become evident until construction begins. If variations do appear, it may become necessary to re-evaluate the recommendations of this report after we have observed the variation. If ACache Corp. is

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not notified of changes to the project or variations of the soils, ACache Corp. will not be responsible for the impact of those changes on the project.

The Geotechnical Engineer warrants that the findings, recommendations, specification, or professional advice contained herein, have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

Once the plans and specifications are more complete, the Geotechnical Engineer shall be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At this time, it may be necessary to submit supplementary recommendations. If ACache Corp. is not retained to perform these functions, ACache Corp. will not be responsible for the impact of those conditions on the project. This report has been prepared for the exclusive use of Cache-Landmark Engineering Inc for the specific use of the proposed New Hyde Park Elementary School project in Hyde Park, Utah.

7.0 REFERENCES

ASTM, American Society for Testing and Materials 1997

IBC, International Building Code, 2023 Edition, International Conference of Building Officials, Whittier, CA.

Interior Geological Survey, "Surficial Geologic Map of the East Cache Fault Zone Cache County, Utah, James McCalpin 1989

Seed, H.B., and Idriss, I.M., 1982, "Ground motion and soil liquefaction during earthquakes", Earthquake Engineering Research Institute, Oakland, California, p. 135.

Seed, H.B., and Ibriss, I.M., and Arango, I., 1983, "Evaluation of Liquefaction Potential using field performance data", Journal of Geotechnical Engineering, Vol. 109, No.3, March, 1983, p. 458-483.

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Tokimatsu, K., and Seed, H.B., 1987, "Evaluation of settlements in sand due to earthquake shaking", Journal of Geotechnical Engineering, Vol. 113, No.8, August, 1987, p. 861-878.

Youd, T.L., and Idriss, I.M., 1997, Summary report, proceedings of the NCEER workshop on evaluation resistance of soils, Edited by Youd, T.L., and Ibriss, I.M.: Technical Report NCEER-07-0022, December 31, 1997, p.40.

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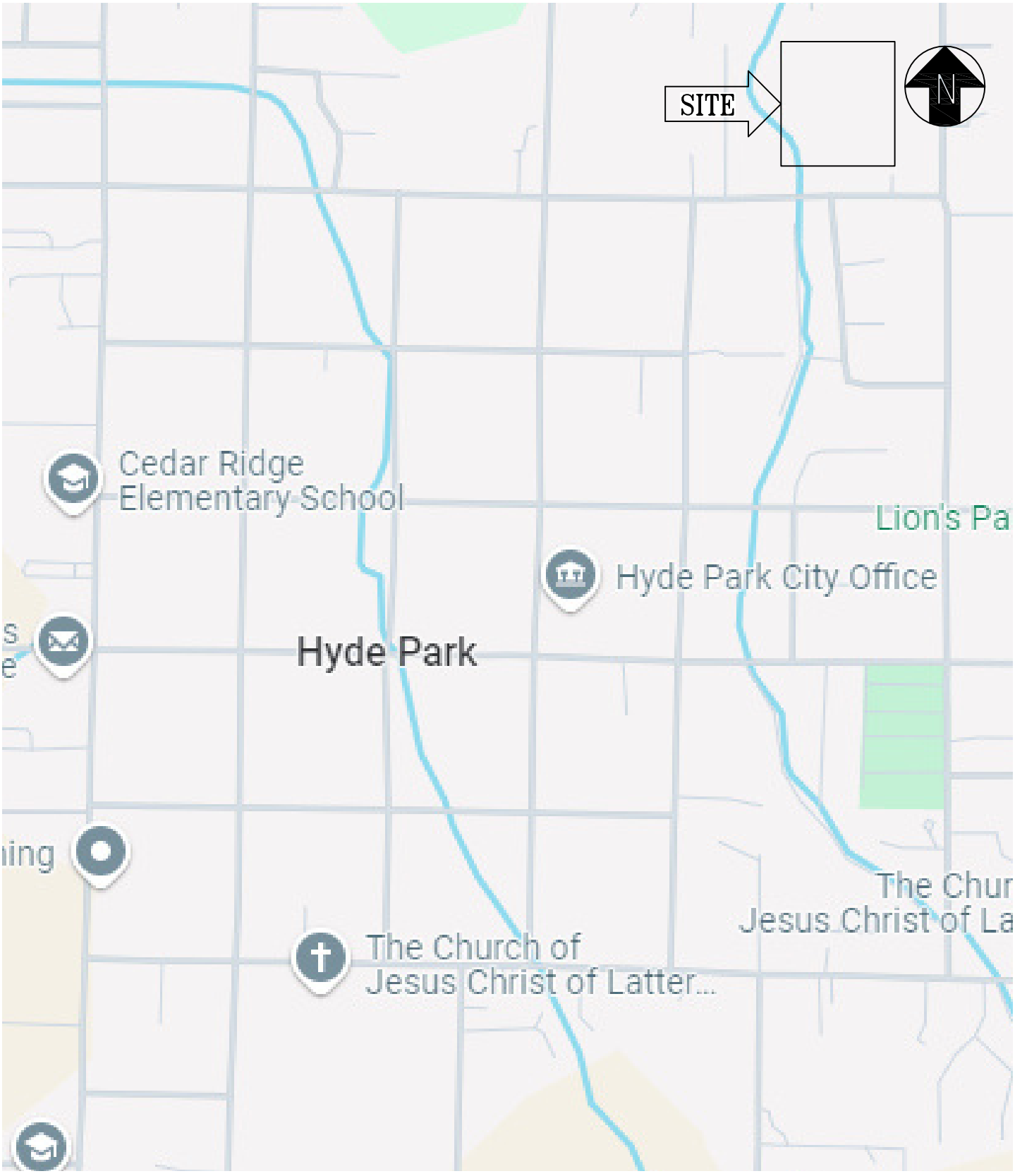
APPENDIX



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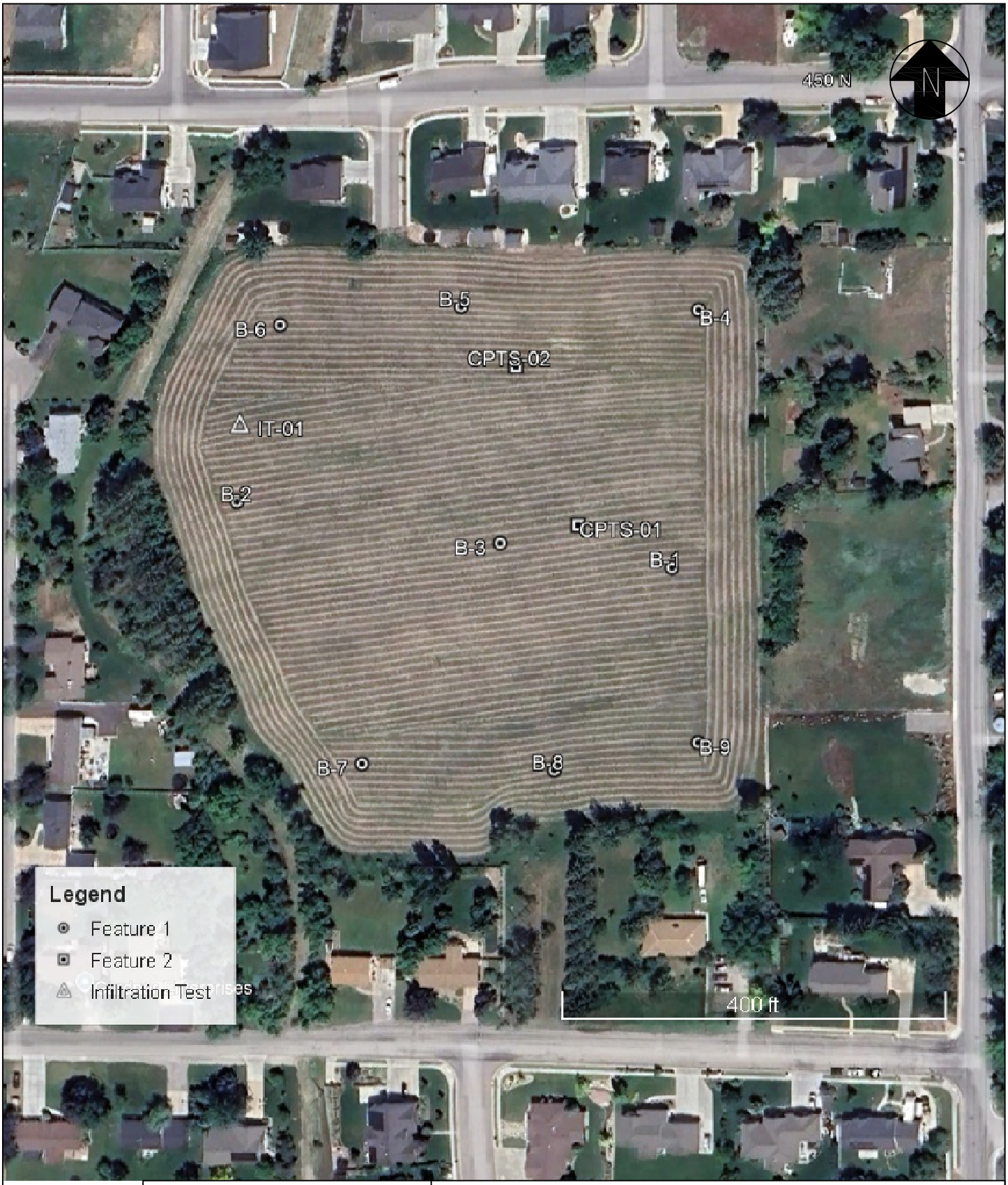
Hyde Park School Site

350 E. 300 N. Hyde Park, UT

TITLE:	Vicinity Map		
SCALE:	No Scale	ENGINEER: J. Apedaile	DRAWN BY: R. Hendrix
DATE:	9/20/2024		
DRAWING NO.	1240015_Figures.dwg		

FIGURE 1



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Hyde Park School Site

350 E. 300 N. Hyde Park, UT

TITLE:	Site Map
SCALE:	No Scale
DATE:	9/20/2024
DRAWING NO.	1240015 Figures.dwg

ENGINEER:	DRAWN BY:
J. Apedaile	R. Hendrix

FIGURE 2

UNIFIED SOIL CLASSIFICATION SYSTEM

FIELD IDENTIFICATION PROCEDURES				GRAPH SYMBOL	LETTER SYMBOL [1]	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS More than half of material is larger than No. 200 sieve size. [2] (The No. 200 sieve size is about the smallest particle visible to the naked eye)	GRAVELS More than half of coarse fraction is larger than No. 4 sieve size. (For visual classifications, the 1/4" size may be used as equivalent to the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes.		GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			Predominantly one size or a range of sizes with some intermediate sizes missing.		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below).		GM	Silty gravels, poorly graded gravel-sand-silt mixtures.
			Plastic fines (for identification procedures see CL below).		GC	Clayey gravels, poorly graded gravel-sand-clay mixtures.
	SANDS More than half of coarse fraction is smaller than No. 4 sieve size. (For visual classifications, the 1/4" size may be used as equivalent to the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	Wide range in grain sizes and substantial amounts of all intermediate particle sizes.		SW	Well graded sands, gravelly sands, little or no fines.
			Predominantly one size or a range of sizes with some intermediate sizes missing.		SP	Poorly graded sands, gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below).		SM	Silty sands, poorly graded sand-silt mixtures.
			Plastic fines (for identification procedures see CL below).		SC	Clayey sands, poorly graded sand-clay mixtures.
FINE GRAINED SOILS More than half of material is smaller than No. 200 sieve size. (The No. 200 sieve size is about the smallest particle visible to the naked eye)	IDENTIFICATION PROCEDURES ON FRACTION SMALLER THAN No. 40 SIEVE SIZE					
		DRY STRENGTH (CRUSHING CHARACTERISTICS)	DILATANCY (REACTION TO SHAKING)	TOUGHNESS (CONSISTENCY NEAR PLASTIC LIMIT)		
	SILTS AND CLAYS Liquid limit less than 50	None to slight	Quick to slow	None	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sand with slight plasticity.
		Medium to high	None to very slow	Medium	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
		Slight to medium	Slow	Slight	OL	Organic silts and organic silt-clays of low plasticity.
	SILTS AND CLAYS Liquid limit greater than 50	Slight to medium	Slow to none	Slight to medium	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
		High to very high	None	High	CH	Inorganic clays of high plasticity, fat clays.
		Medium to high	None to very slow	Slight to medium	OH	Organic clays of medium to high plasticity.
HIGHLY ORGANIC SOILS		Readily identified by color, odor, spongy feel and frequently by fibrous texture.			Pt	Peat and other highly organic soils.

[1] Boundary classifications: –Soils possessing characteristics of two groups are designated by combinations of group symbols. For example GW–GC, well graded gravel–sand mixture with clay binder.
[2] All sieve sizes on this chart are U.S. standard.

GENERAL NOTES

1. In general, Unified Soil Classification Designations presented on the logs were evaluated by visual methods only. There rore, actual designations (based on laboratory testing) may differ.

2. Lines seperating strata on the logs represent approximate boundaries only Actual transitions may be gradual.

3. Logs represent general soil conditions observed at the point of exploration on the date indicated.

4. No warranty is provided as to the continuity of soil conditions between individual sample locations.

LOG KEY SYMBOLS

- Bulk / Bag Sample
- 2.0"Ø O.D. Penetration Split Spoon Sampler
- 2.5"Ø O.D.Penetration Split Spoon Sampler
- 3.0"Ø O.D. Penetration Split Spoon Sampler
- Shelby Tube
- Rock Core
- No Recovory
- Water Level (level after completion)
- Water Level (level where first encountered)

FINE - GRAINED SOIL

CONSISTENCY	SPT (blows/ft)	TORVANE UNDRAINED SHEAR STRENGTH (tsf)	POCKET PENETROMETER UNCONFINED COMPRESSIVE STRENGTH (tsf)	FIELD TEST
Very Soft	<2	<0.125	<0.25	Easily penetrated several inches by Thumb. Squeezes through fingers.
Soft	2 - 4	0.125 - 0.25	0.25 - 0.5	Easily penetrated 1 " by Thumb . Molded by light finger pressure.
Medium Stiff	4 - 8	0.25 - 0.5	0.5 - 1.0	Penetrated over 1/2 " by Thumb with moerate effort. Molded by strong finger pressure.
Stiff	8 - 15	0.5 - 1.0	1.0 - 2.0	Indented about 1/2 " by Thumb but penetrated only with great effort
Very Stiff	15 - 30	1.0 - 2.0	2.0 - 4.0	Readily indented by Thumbnail
Hard	>30	>2.0	>4.0	Indented with difficulty by Thumbnail

COARSE -GRAINDE SOIL

APPERENT DENSITY	SPT (blows/ft)	RELATIVE DENSITY (%)	FIELD TEST
Very Loose	<4	0 - 15	Easily penetrated with 1/2 " reinforcing rod pushed by hand
Loose	4 - 10	15 - 35	Difficult to penetrated with 1/2 " reinforcing rod pushed by hand
Medium Dense	10 - 30	35 - 65	Easily penetrated a foot with 1/2 " reinforcing rod driven with 5-lb hammer
Dense	30 - 50	65 - 85	Difficult to penetrated a foot with 1/2 " reinforcing rod driven with 5-lb hammer
Very Dense	>50	85 - 100	Penetrated only a few inches with 1/2 " reinforcing rod driven with 5-lb hammer

STRATIFICATION

DESCRIPTION	THICKNESS
SEAM	1/16 - 1/2 "
LAYER	1/2 - 12 "

DESCRIPTION	THICKNESS
Occasional	One or less per foot of thickness
Frequent	More than on per foot of thichness

CEMENTATION

DESCRIPTION	DESCRIPTION
Weakely	Crumbles or breaks with handling of slight finger pressure
Moderately	Crumbles or breaks with considerable finger pressure
Strongly	Will not crumbles or breaks with finger pressure

MODIFIERS

DESCRIPTION	%
Trace	<5
Some	5 - 12
With	>12

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible water, usually soil below Water Table

FIGURE 3

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-1	JOB No. : 1240015	DATE : 8/15/2008	SHEET 1 OF 2
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 51.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE; ⊖ RESIDUAL MINIATURE VANE; ⊗ POCKET PENETROMETER; ◑ UNCONFINED COMPRESSION(UU); ⊕ TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
			Surface~12": dark brown topsoil							
			Brown silty gravel w/ cobbles, GM		10					
5										
			5'-21' Brown Silty SAND and GRAVEL, (SM-GM): moist, medium dense to dense, some layering		16					
10										
					61					
15										
					10					
20										
			21'-42' Brown Silty SAND and GRAVEL (GM-SM), intermitten with layers of clay and silt, Clays are moist to wet, gravels are moist to dry, dense sand and gravel, to medium stiff clay.		45					
25										
					34					
30										
					6					
35										

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/15/2008

FIGURE 4

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-1	JOB No. : 1240015	DATE : 8/15/2008	SHEET 2 OF 2
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 51.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (MINIATURE VANE, RESIDUAL MINIATURE VANE, POCKET PENETROMETER, UNCONFINED COMPRESSION(UU), TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
40			21'-42' Brown Silty SAND and GRAVEL (GM-SM), intermitten with layers of clay and silt, Clays are moist to wet, gravels are moist to dry, dense sand and gravel, to medium stiff clay.		39					
45			42'-51.5' Brown silty CLAY (CL-ML), wet, soft, some sand and gravel mostly in layers.		5					
50					5					
			-End at 51.5'-							
55										
60										
65										
70										

REMARKS :
FIELD ENG.: Jay Apedaile

REMARKS : Standpipe installed to 45.3' no water measured 8/20/2008

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/15/2008

FIGURE 5

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-2	JOB No. : 1240015	DATE : 8/15/2008	SHEET 1 OF 1
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 21.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE; ⊖ RESIDUAL MINIATURE VANE; ⊗ POCKET PENETROMETER; ◒ UNCONFINED COMPRESSION(UU); ⊕ TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
			Surface~6": topsoil							
			6"-5' Dark Brown gravely SILT (ML); Medium stiff, moist to dry.		6					
5			5'-8' Brown to gray porly graded GRAVEL (GP); trace cobble, loose, dry.		55					
10			8'-21.5' Brown Silty SAND and GRAVEL, (SM-GM): moist, medium dense to dense, some silt and clay in layers.		11					
15										
20					65					
			-End at 21.5'-							
25										
30										
35										

REMARKS : Standpipe installed at 19.3' no water observed 8/20/2008

REMARKS :

FIELD ENG.: Jay Apedaile

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/15/2008

FIGURE 6

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-3	JOB No. : 1240015	DATE : 8/19/2008	SHEET 1 OF 1
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 36.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %
	Surface~10": topsoil w/ occasional rock					
	10"-5' Brown silty GRAVEL (GM); moist, rocky, cobbles and boulders encountered		52			
5						
10	5'-23' Brown silty SAND and GRAVEL (SM-GM), moist, dense, some layers of well graded cleen sands and gravel, sub rounded, trace cobbles.		37			
15			69			
20			68			
25			6			
30	23'-33' Light Brown SILT and CLAY (ML-CL), medium stiff, trace gravels, trace pinholes, moist.		12			
35	33'-36.5' Brown clayey GRAVEL (GC); with sand, medium dense, moist.		14			
	-End at 36.5'-					

SHEAR STRENGTH, TSF
- MINIATURE VANE
- RESIDUAL MINIATURE VANE
- POCKET PENETROMETER
- UNCONFINED COMPRESSION(UU)
- TORVANE

(OPEN SYMBOLS REPRESENT REMOLDED TESTS.)

1.0 2.0

WET/DRY UNIT WT.,lb/cu.ft.

REMARKS : Standpipe installed to 28.7' no water observed 8/20/2008

REMARKS :

FIELD ENG.: Jay Apedaile

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/19/2008

FIGURE 7

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-4	JOB No. : 1240015	DATE : 8/19/2008	SHEET 1 OF 2
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 41.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %
	Surface~12": brown topsoil					
	12"-5' Brown silty GRAVEL (GM); moist, rocky, cobbles encountered.		90			
5						
10	5'-19' LIght brown SAND and GRAVEL, trace silts and clay (GM-SM), dense, moist to dry, occasional cobble		60/4"			
15			52			
20			3			
25	19'-32.5' Light brown SILT and CLAY (ML-CL); trace gravel and sand in layers, soft to stiff, moist to wet.		2			
30	Heavy cementation at interface between fine soils and course lower soils.		20			
35	32.5'- 41.5' Brown silty SAND (SM), layered with clay and trace gravel, medium dense to stiff, moist.		11			

SHEAR STRENGTH, TSF
- MINIATURE VANE
- RESIDUAL MINIATURE VANE
- POCKET PENETROMETER
- UNCONFINED COMPRESSION(UU)
- TORVANE

(OPEN SYMBOLS REPRESENT REMOLDED TESTS.)

1.0 2.0

WET/DRY UNIT WT.,lb/cu.ft.

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/19/2008

FIGURE 8

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-4	JOB No. : 1240015	DATE : 8/19/2008	SHEET 2 OF 2
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 41.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE; ⊖ RESIDUAL MINIATURE VANE; ⊗ POCKET PENETROMETER; ◑ UNCONFINED COMPRESSION(UU); ⊕ TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
40			32.5'– 41.5' Brown silty SAND (SM), layered with clay and trace gravel, medium dense to stiff, moist.		9					
			–End at 41.5'–							
45										
50										
55										
60										
65										
70										

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/19/2008

FIGURE 9

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-5	JOB No. : 1240015	DATE : 8/19/2008	SHEET 1 OF 1
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 31.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	WET/DRY UNIT WT.,lb/cu.ft.
	Surface~12": dark brown topsoil						
	1'-12' Brown, silty SAND, sandy SILT (SM-ML); layered, trace gravel, trace clay, medium dense to stiff, moist,		10				
5							
			9				
10							
			81				
15							
			22				
20	12'-31.5' Light Brown silty SAND and GRAVEL, (GM-SM), medium dense to dense, layers of silt, clay, and fine sand, trace cobble, moist.						
			27				
25							
			50/4"				
30							
	-End at 31.5'-						
35							

SHEAR STRENGTH, TSF
- MINIATURE VANE
- RESIDUAL MINIATURE VANE
- POCKET PENETROMETER
- UNCONFINED COMPRESSION(UU)
- TORVANE

(OPEN SYMBOLS REPRESENT REMOLDED TESTS.)

1.0 2.0

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/19/2008

FIGURE 10

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-6	JOB No. : 1240015	DATE : 8/20/2008	SHEET 1 OF 1
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 16.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE, ⊖ RESIDUAL MINIATURE VANE, ⊗ POCKET PENETROMETER, ◑ UNCONFINED COMPRESSION(UU), ⊕ TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
			Surface~8": topsoil							
5			8"-16.5' Brown silty SAND and GRAVEL (SM-GM): moist, medium dense, some layering		13					
10					25					
15					19					
			-End at 16.5'-							
20										
25										
30										
35										

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/20/2008

FIGURE 11

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-7	JOB No. : 1240015	DATE : 8/20/2008	SHEET 1 OF 1
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 16.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE, ⊖ RESIDUAL MINIATURE VANE, ⊗ POCKET PENETROMETER, ◑ UNCONFINED COMPRESSION(UU), ⊕ TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
			Surface~12": topsoil							
5			12"-16.5' Brown silty SAND and GRAVEL (SM-GM); layered, trace cobbel, dense, moist.		28					
10					71/6"					
15					37					
			-End at 16.5'-							
20										
25										
30										
35										

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/20/2008

FIGURE 12

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-8	JOB No. : 1240015	DATE : 8/20/2008	SHEET 1 OF 1
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 31.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE; ⊖ RESIDUAL MINIATURE VANE; ⊗ POCKET PENETROMETER; ◒ UNCONFINED COMPRESSION(UU); ⊕ TORVANE; OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0	WET/DRY UNIT WT.,lb/cu.ft.
			Surface~6": topsoil							
5					37					
10			6"-17' Brown silty GRAVEL and SAND (GM-SM); dense, layered, occasional cobble or boulder, trace clays		42					
15					37					
20			17'-27' Brown, sandy SILT and CLAY (ML-CL); layered with gravel, moist, very stiff to dense, moist.		35					
25					13					
30			27'-31.5' Brown, CLAY and SILT (CL-ML); with layers of snad and gravel, stff to medium stiff, moist.		7					
			-End at 31.5'-							
35										

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/20/2008

FIGURE 13

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-9	JOB No. : 1240015	DATE : 8/15/2008	SHEET 1 OF 2
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 41.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %
	Surface~8": topsoil					
5	8"-12' Brown silty GRAVEL and SAND (GM-SM), dense, moist occasional cobble.		51			
10			31			
15	12'-18' Brown SILT and CLAY (ML-CL), layers of fine sand and gravel, stiff, moist.		11			
20			60			
25	18'-41.5' silty GRAVEL and SAND (GM-SM); with clay, layered, moist to wet, dense to very dense.		78			
30			37			
35			80			

SHEAR STRENGTH, TSF
- MINIATURE VANE
- RESIDUAL MINIATURE VANE
- POCKET PENETROMETER
- UNCONFINED COMPRESSION(UU)
- TORVANE

(OPEN SYMBOLS REPRESENT REMOLDED TESTS.)

1.0 2.0

WET/DRY UNIT WT.,lb/cu.ft.

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/20/2008

FIGURE 14

A Cache Corp.
Engineering a Firm Foundation

BORING LOG

Hyde Park School Site

BORING No. : B-9	JOB No. : 1240015	DATE : 8/15/2008	SHEET 2 OF 2
PROJECT : 350 E. 300 N. Hyde Park, UT	SURF. EL. :	BORE DIA. :	DEPTH : 41.5
	WATER EL. :	COORDINATES:	
BORING TYPE : 4-1/4" HSA	CAD FILE : 1240015_Figures.dwg		

DEPTH, Ft.	GRAPHIC LOG	SAMPLE	SOIL DESCRIPTION	% FINER No. 200 SIEVE	BLOWS/Ft.	LIQUID LIMIT	PLASTIC LIMIT	MOISTURE CONTENT, %	SHEAR STRENGTH, TSF (● MINIATURE VANE; ⊖ RESIDUAL MINIATURE VANE; ⊗ POCKET PENETROMETER; ◑ UNCONFINED COMPRESSION(UU); ⊕ TORVANE; (OPEN SYMBOLS REPRESENT REMOLDED TESTS.) 1.0 2.0)	WET/DRY UNIT WT.,lb/cu.ft.
40			18'-41.5' silty GRAVEL and SAND (GM-SM); with clay, layered, moist to wet, dense to very dense.		34					
			-End of hole-							
45										
50										
55										
60										
65										
70										

REMARKS :

FIELD ENG.: Jay Apedaile

REMARKS :

WTR DEPTH @ COMPL. : Not encountered

COMPLETION DATE : 8/20/2008

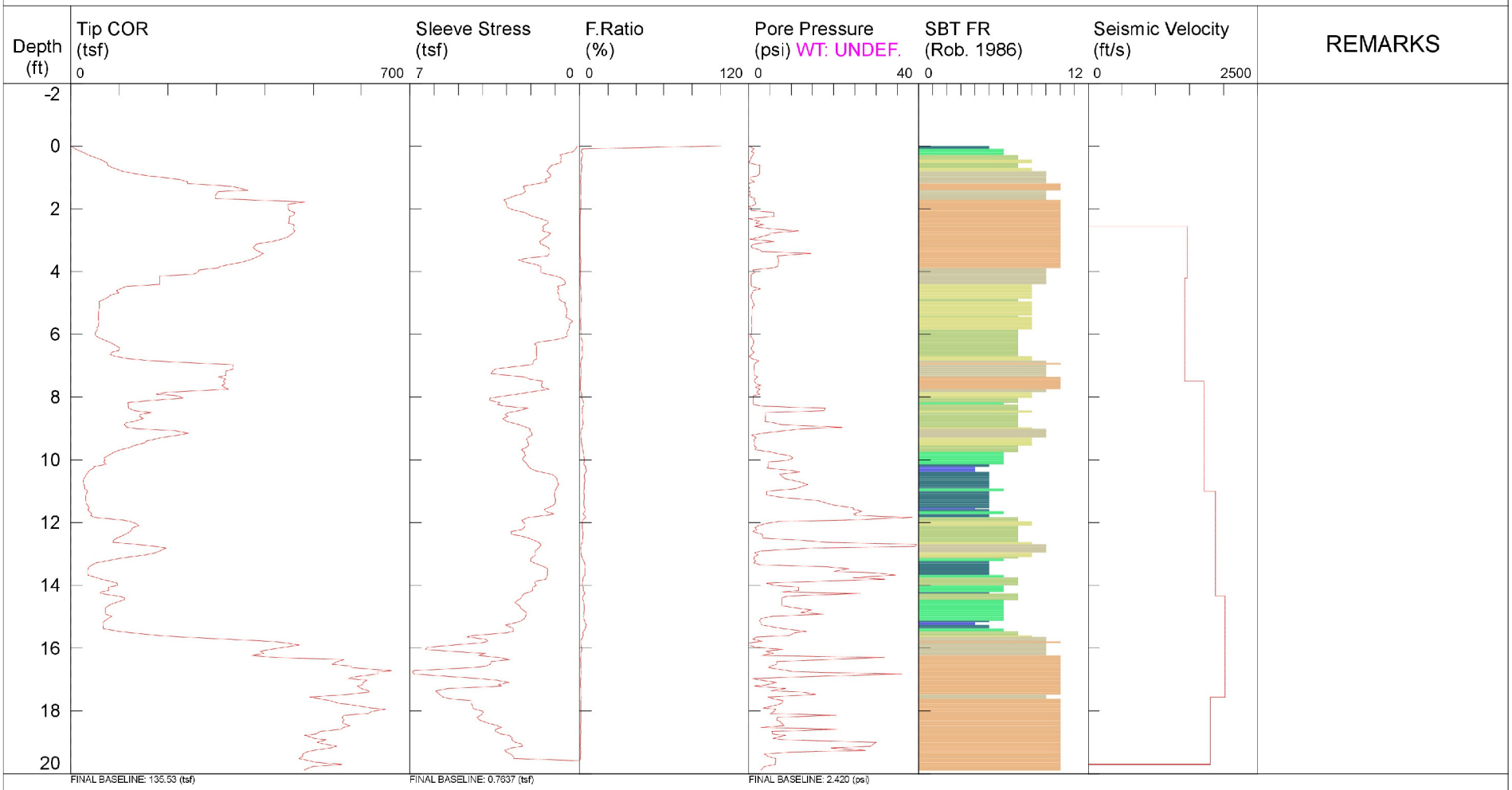
FIGURE 15

SOUNDING

ACache Corp.
Engineering a Firm Foundation

TOTAL DEPTH: 19.899 ft
SITE: CPT-01
SOUNDING
COMPANY: ACache Corp.
FILENAME: CPTS-01.dat

PROBE ID: 4444.190XX
TEST ID: 24-08-29-01
PROJECT: Hyde Park Elementary
LOCATION: Hyde Park City, Utah



NOTES:: Example of notes

1 Sensitive fine grained
2 Organic material
3 Clays
4 Silty clay to clay
5 Clayey silt to silty clay
6 Sandy silt to clayey silt
7 Silty sand to sandy silt
8 sand to silty sand
9 Sand
10 Gravelly sand to sand
11 Very stiff fine grained **
12 Sand to clayey sand **

*SBT: Robertson 1986; **Overconsolidated or Cemented; *SBT/SPT CORRELATION: UBC-1983

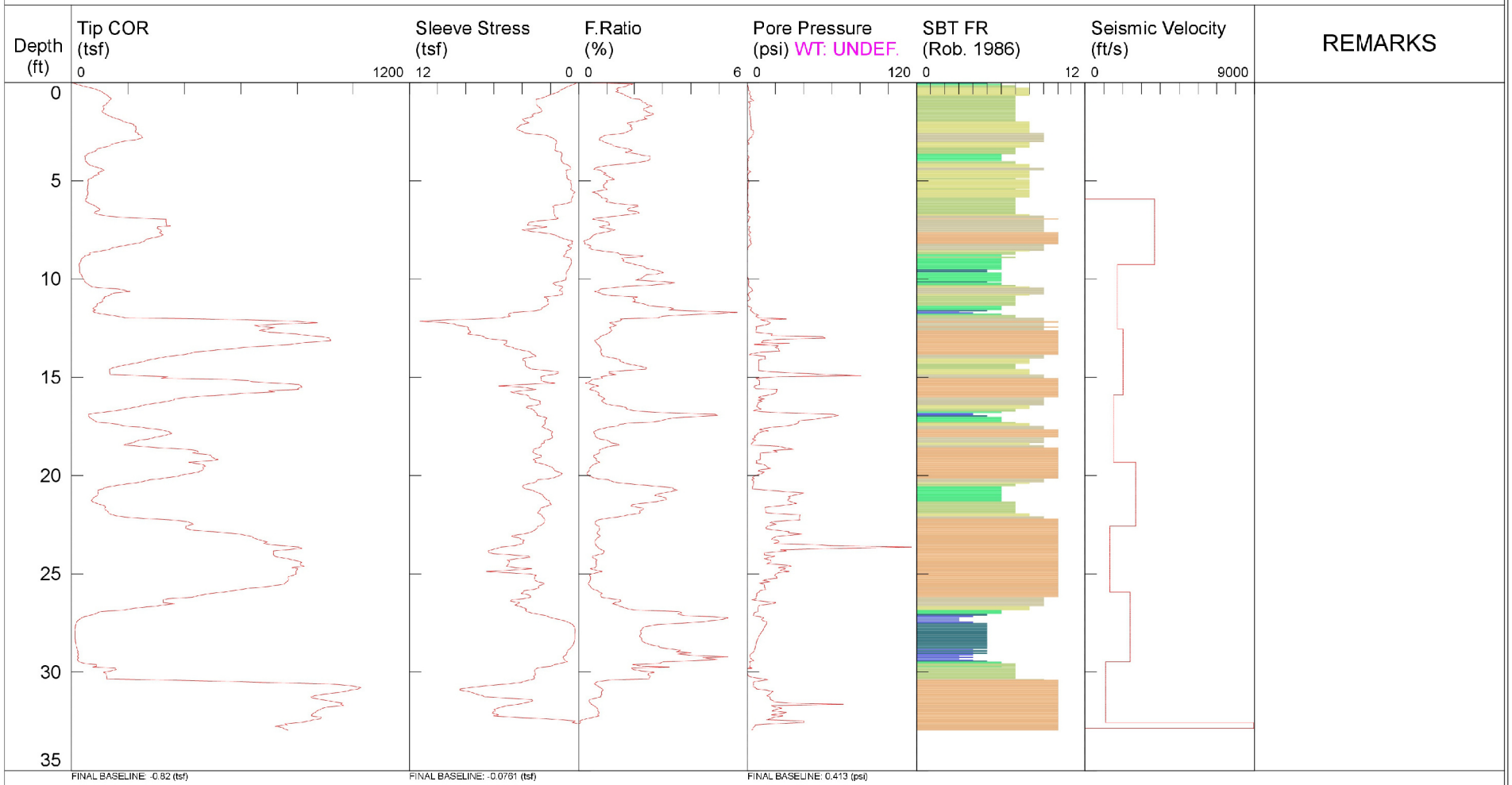
FIGURE 16

SOUNDING

ACache Corp.
Engineering a Firm Foundation

TOTAL DEPTH: 32.944 ft
SITE: CPT-02
SOUNDING
COMPANY: ACache Corp.
FILENAME: CPTS-02.dat

PROBE ID: 4444.190XX
TEST ID: 24-08-29-02
PROJECT: Hyde Park Elementary
LOCATION: Hyde Park City, Utah



NOTES:: Example of notes

1 Sensitive fine grained
2 Organic material
3 Clays
4 Silty clay to clay
5 Clayey silt to silty clay
6 Sandy silt to clayey silt
7 Silty sand to sandy silt
8 sand to silty sand
9 Sand
10 Gravelly sand to sand
11 Very stiff fine grained **
12 Sand to clayey sand **

*SBT: Robertson 1986; **Overconsolidated or Cemented; *SBT/SPT CORRELATION: UBC-1983

FIGURE 17