

March 26, 2013

Superstar Holdings, LLC P.O. Box 87059 Baton Rouge, LA 70879

Exhibit AA. Gateway II Site Preliminary Geotechnical Engineering Report

Preliminary Geotechnical Engineering Report Re:

Proposed Gateway 83 Acres Site

Gateway Drive at Hwy. 30 Geismar, Louisiana

PSI Project No. 0193478-01

Dear Mr. Voorhies:

Professional Service Industries, Inc. is pleased to submit our Preliminary Geotechnical Engineering Report for the above referenced project. This report includes the results of field and laboratory testing, and information regarding the compatibility of this site with industrial development, suitability of soils for building foundations and on site roadways, requirements of soil augmentation for construction of a typical 100,000 sq. ft. industrial manufacturing building and depth of groundwater.

We appreciate the opportunity to perform this Geotechnical Engineering Study and look forward to continuing participation during the design and construction phases of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Sukanta Chakraborty, P.E.

Sulanta Chekraborty

Project Manager

Geotechnical Services

Steven L. Gunter, P.E. Department Manager Geotechnical Services

Reviewed by:

Martin L. Skyrman, P.E.

Principal Consultant

Distribution: Addressee (3)

File (1)

Name: Sukanta Chakraborty, P.E.

Date: March 26, 2013 License No.: 37127

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PRELIMINARY GEOTECHNICAL ENGINEERING REPORT

PROPOSED GATEWAY 83 ACRES SITE GATEWAY DRIVE AT HWY. 30 GEISMAR, LOUISIANA PSI PROJECT NO.: 0193478-01

PREPARED FOR

SUPERSTAR HOLDINGS, LLC P.O. BOX 87059 BATON ROUGE, LA 70879

MARCH 26, 2013

BY
PROFESSIONAL SERVICE INDUSTRIES, INC.
11950 INDUSTRIPLEX BLVD.
BATON ROUGE, LOUISIANA 70809

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PROJECT INFORMATION

Project Authorization

Professional Service Industries, Inc. (PSI) has completed a preliminary geotechnical engineering investigation for the Proposed Gateway 83 Acres Site to be constructed in Geismar, Louisiana. Our services were provided in general accordance with PSI Proposal No. 0193-89140, dated February 20, 2013. Authorization to provide our services was provided by Mr. Paul Voorhies (Manager with Superstar Holdings, LLC) whom signed our Proposal on March 4, 2013.

Project Description

The site for the proposed 83 Acres is located near the southwest intersection of Gateway Drive and Hwy. 30 in Geismar, Louisiana. Potential objectives for this preliminary report are to provide information regarding the compatibility of this site with industrial development, suitability of soils for building foundations and on site roadways, requirements of soil augmentation for construction of a typical 100,000 sq. ft. industrial manufacturing building and depth of groundwater.

This preliminary report shall provide an initial baseline of the site subsurface conditions that will likely be encountered during site development. However, as with any geotechnical investigation, particularly given the size of this project site and relatively limited number of borings performed, variations between borings may and should be expected to exist, and there remains a distinct possibility that other conditions may exist on site that were not encountered within the scope of this exploration.

The opinions and information to be presented in this report are estimates for preliminary consideration only, are based on limited geotechnical exploration, and are not to be used for final design and construction.

Purpose and Scope of Services

The purposes of PSI's geotechnical services are to:

- Drill 3 borings to a terminal depth of 25 feet below existing grade at the designated locations across the site per the client;
- Evaluate subsurface soil conditions and depth-to-water at the project site;
- Perform laboratory tests on soil samples recovered from the project site; and,
- Provide information regarding the compatibility of this site with industrial development, suitability of soils for building foundations and on site roadways, requirements of soil augmentation for construction of a typical 100,000 sq. ft. industrial manufacturing building and depth of groundwater.

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, surface water, groundwater, or air on or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes. Prior to development of this site, an environmental assessment is advisable.

Additionally, PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence or the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when

building materials are impacted by moisture. Client further acknowledges that site conditions are outside of PSI's control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The project site is located near the southwest intersection of Gateway Drive and Hwy. 30 in Geismar, Louisiana (as illustrated on the Site Vicinity Map provided on Figure No. 1 in the Appendix). The site is currently an isolated vacant lot previously used for agricultural purposes. At the time of the field exploration, the ground surface generally appeared topographically level, firm and wet.

Field Exploration

The field exploration included mobilization to the site by a PSI drilling crew, drilling of the soil borings, and recovering soil samples. Three (3) soil borings (i.e., Borings B-1 through B-3) were drilled and sampled to a terminal depth of about 25 feet below existing grade at the client provided locations (as illustrated in the Boring Location Plan on Figure No. 2 in the Appendix). The borings were advanced using an All-Terrain-Vehicle (ATV) mounted drill rig equipped with a rotary head and hollow-stem flight augers. Drilling and sampling activities were performed in general accordance with referenced ASTM procedures or other accepted methods. Soil borings were backfilled with soil cuttings upon completion of drilling and groundwater observations.

Undisturbed samples of cohesive soils were generally obtained using three (3) inch diameter thin-wall tube samplers (Shelby tube) in general accordance with the procedures for "Thin-Walled Tube Geotechnical Sampling of Soils" (ASTM D1587). These samples were extruded in the field with a hydraulic ram and were identified according to boring number and depth, wrapped in aluminum foil, placed in polyethylene plastic wrapping to protect against moisture loss and transported to the laboratory in containers to minimize disturbance.

Laboratory Testing

Selected soil samples were tested in the laboratory to determine material properties for our evaluation. Testing included determination of moisture contents, Atterberg limits classification tests, unconsolidated undrained triaxial compression test and unconfined compressive strength tests. The laboratory testing was performed in general accordance with ASTM procedures. Samples not altered by laboratory testing will be retained for sixty (60) days from the date of this report and then be discarded.

Subsurface Conditions

Borings B-1 through B-3 generally disclosed about two (2) inches of topsoil predominantly underlain by stiff to soft fat clay limited lean clay to the boring termination depth of 25 feet below existing grade.

The above subsurface description is generalized in nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the Appendix should be reviewed for specific information at the individual boring locations. These records include soil descriptions, stratifications, penetration resistances, locations of the samples, and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual.

Groundwater Information

The free groundwater table was not encountered in any of the borings during PSI's drilling operations. It should be noted that groundwater level fluctuations may occur due to seasonal and climatic variations, alteration of drainage patterns, land usage and ground cover. We recommend the Contractor determine the actual groundwater levels at the time construction activities begin.

EVALUATION AND DISCUSSIONS

The type and depth of foundation suitable for a given structure primarily depends on several factors including the subsurface conditions, the function of the structure, the loads it may carry, the cost of the foundation and the criteria set by the Design Engineer with respect to vertical and differential movement which the structure can withstand without damage.

Based on the limited number of soil borings, field data and laboratory test results, the proposed site is generally feasible for industrial development. The subsurface soils explored are suitable for building foundations and site roadways. Detailed column loads for a typical 100,000 sq. ft. industrial manufacturing building were not provided at the time of this study; however, the structural column loads are anticipated to be on the order of 60 to 100 kips with wall loads on the order of 3.0 kips per lineal foot.

Foundation systems may include shallow foundations, mat foundations, deep foundations such as driven piles or auger cast-in place piles for this project. Pile foundations are recommended for the support of the heavy structures or settlement sensitive structures. The choice of type of deep foundation should be based on the tolerance criteria for the performance of the structures and economics of construction. Lightly loaded structures can generally be supported on shallow spread footings/grade beam system, or mat foundations. These foundations will be governed by the anticipated load and settlement tolerances.

A geotechnical concern at this site is the presence of near-surface expansive soils. As such, there exists a potential vertical rise (PVR) concern for slab-on-grade foundations, thereby necessitating as much as 5 feet of engineered fill buffer between foundation slabs and existing subgrade. Placement of low plasticity engineered fill is the most conventional method for limiting PVR and should be achieved by undercutting, raising the site grade or a combination of both. Alternatively, on-site soils within planned building pads or roadbeds may be treated with hydrated lime to reduce their plasticity to within the stated limits for engineered fill. Site pavements should be underlain by a minimum 12 inches of engineered fill.

As stated before, the opinions and information to be presented in the report will be estimates for preliminary consideration only, will be based on limited geotechnical exploration, and are not to be used for final design and construction.

Engineered Fill

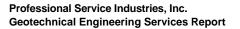
Engineered fill materials should be free of organic or other deleterious materials, have a maximum clay lump size less than three (3) inches and have a liquid limit of less than forty (40) with plasticity index (PI) values between ten (10) and 18 and plot above the "A" line on the Plasticity Chart. If a fine-grained sandy clay soil is used for engineered fill, close moisture content control will be required to achieve the recommended degree of compaction.

Fill should be placed in maximum lifts of eight (8) inches of loose materials and should be compacted within the range of one (1) percentage point below to three (3) percentage points above the optimum moisture content value as determined by the Standard Proctor test. If water must be added, it should be uniformly applied and thoroughly mixed into the soil by disking or scarifying. Engineered fill should be compacted to at least 95 percent of the Standard Proctor maximum dry density as determined by ASTM Designation D 698. The edges of any compacted fill above the surrounding surface grade should extend at least five (5) feet beyond the edges of the building and parking areas prior to sloping.

Each lift of compacted soil should be tested and inspected by the soils engineer or his representative prior to placement of subsequent lifts. As a guideline, it is recommended field density tests be taken at a frequency of not less than one (1) test per lift for every 2,500 sq. ft. in the building area and every 5,000 sq.ft. in parking and drive areas.

REPORT LIMITATIONS

The preliminary information submitted in this report is based on the available subsurface data obtained by PSI at the time of our field exploration. PSI warrants that the preliminary findings contained herein have been made in accordance with generally accepted drilling procedures and visual soil classification methods in the local area. No other warranties are implied or expressed. This letter has been prepared for the exclusive use of Superstar Holdings, LLC and their design team for the specific purpose of determining general subsurface information at the site of the referenced project, foundation type and building pad subgrade preparation and is not to be used for final design and construction. Upon authorization through a supplemental services agreement, PSI will perform a final geotechnical study and provide complete and final recommendations.



Gateway 83 Acres Site -Preliminary Study, Geismar PSI Project No. 0193478-01

APPENDIX

SITE VICINITY MAP



GEOTECHNICAL ENGINEERING SERVICES
PROPOSED GATEWAY 83 ACRES SITE
GEISMAR, LOUISIANA

DATE: 03/2013

DRAWN: WV

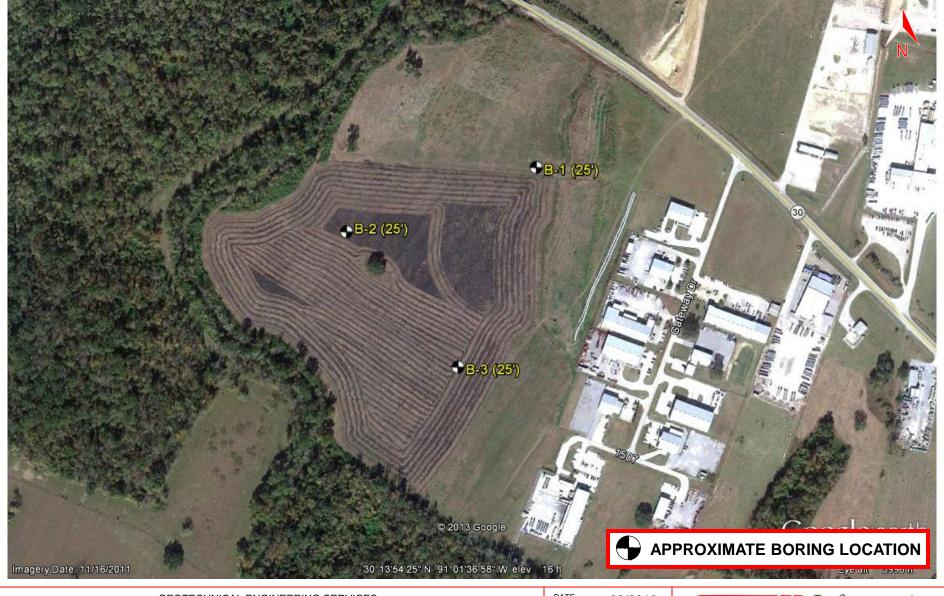
CHKD: SC

Information
To Build On
Engineering • Consulting • Testing

FIGURE 1

PSI PROJECT NO.: 0193478-01

BORING LOCATION PLAN



GEOTECHNICAL ENGINEERING SERVICES
PROPOSED GATEWAY 83 ACRES SITE
GEISMAR, LOUISIANA

DATE: 03/2013

DRAWN: WV

CHKD: SC



FIGURE 2

RE 2 PSI PROJECT NO.: 0193478-01

LOG OF BORING B-1

PROPOSED GATEWAY 83 ACRES SITE GEISMAR, LOUISIANA

PSI Project No.: 0193478-1 TYPE OF BORING: HOLLOW STEM AUGER

| TYPE | E OF E | BURIN | G: | HOLLOW STEM AUGER | | | | | | | P31 P | rojeci | 110 (| 71934 | 70-1 | | | | | | | |
|------------------|--|-------------|----------|---|--------------|----------------------------|--------|------------------|---------------------|-------------------------|--|-----------------------|---------------|-------|------------------------------|-------------|------------|-----|--|-------|--------------|------|
| ļ. | ᇩ | BOL | 3 LEVELS | SVELS | WELS VELS | /ELS | VELS | /ELS | ÆLS | VELS | LATITUDE: N 30° 13' 58.9" O LONGITUDE: W 91° 1' 32.9" | l.: | G VE | | | > | (%) (%) | TER | | UNDR. | AINED EAR | IGHT |
| ОЕРТН, FT. | SOIL TYPE | USCS SYMBOL | | LATITUDE: N 30° 13' 58.9" LONGITUDE: W 91° 1' 32.9" BORING LOCATION PLAN: APPENDIX SHEET NO. 2 SOIL DESCRIPTION | N-BLOWS/FT. | % PASSING No. 200 SIEVE | LIQUID | PLASTIC LIMIT | PLASTICITY INDEX | MOISTURE CONTENT (%) | HAND PENTROMETER (tons/ft²) | TORVANE (tons/ft²) | STRE (kips | NGTH | DRY UNIT WEIGHT (lbs/ft³) | | | | | | | |
| DEP | SOI | SCS | ATE | NA O | N-BL(| % P/ No. 20 | | PL | PLAS | CONT | ENTA (3) | ΔĐ | UC | UU | ∑ ND E | | | | | | | |
| | | | | | | | PL | PI | | Ш | | 00 | 00 | DF | | | | | | | | |
| | | CH | | [2-INCH TOPSOIL Firm, brown fat CLAY w/ ferrous nodules, ferrous | | | 96 | 29 | 67 | 45 | 1.00 | | | | | | | | | | | |
| | | | | stains, grass and roots | | | | | | | | | | | | | | | | | | |
| | | | | -becoming stiff, gray w/ ferrous nodules and ferrous | | | | | | 35 | 1.50 | | | | 86 | | | | | | | |
| 5- | | | | stains | | | | | | 38 | 1.50 | | | | | | | | | | | |
| Ľ | | | | -becoming slickensided | | | | | | | 1.00 | | | | | | | | | | | |
| | | | | -becoming sickensided | | | 81 | 25 | 56 | 40 | 1.25 | | 0.26 | | 82 | | | | | | | |
| | | | | -becoming firm | | | | | | 44 | 1.00 | | | | | | | | | | | |
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| | | | | -becoming slickensided w/ ferrous nodules, organic stains and calcareous nodules | | | | | | 46 | 1.00 | | | | | | | | | | | |
| - -15 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| | | | | -becoming stiff w/ ferrous nodules, calcareous nodules | | | | | | | | | | | | | | | | | | |
| | | | | and organic stains | | | | | | 50 | 1.50 | | | | | | | | | | | |
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| | | CL | | Stiff, gray lean CLAY w/ silt, ferrous nodules and | | | | | | | 4 | | | | | | | | | | | |
| -25- | | | | organic stains | | | | | | 32 | 1.50 | | | | | | | | | | | |
| <u> </u> | - | | | Boring terminated at 25 feet. | | | | | | | | | | | | | | | | | | |
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| -50- | | . D.C.C. | \Box | 05.5-4 | | | | | 0 (FT) | NOT 5 | Nocini | | | | | | | | | | | |
| DEP | DEPTH OF BORING: 25 feet GROUNDWATER DURING DRILLING (FT): NOT ENCOUNTERED | | | | | | | | | | | | | | | | | | | | | |

DEPTH OF BORING: 25 feet DATE DRILLED: 3/8/13

NOTES: The stratification lines represent approximate boundaries.



LOG OF BORING B-2

PROPOSED GATEWAY 83 ACRES SITE GEISMAR, LOUISIANA

PSI Project No.: 0193478-1 TYPE OF BORING: HOLLOW STEM AUGER

| TYP | E OF B | ORIN | G: | HOLLOW STEM AUGER | | | | | | | P31 P | rojeci | NO.: (| 71934 | / 8- I | |
|------------------|-----------------------|------|-----|---|--------------------------------|-------------|----------------------------|------------|---------|---------------------|-----------------------------------|--------------------|-------------|----------|------------------------------|------|
| | | OL | ST | LATITUDE: N 30° 13' 55.8" LONGITUDE: W 91° 1' 43.6" BORING LOCATION PLAN: APPENDIX SHEET NO. 2 SOIL DESCRIPTION | | ш | | | | | i.e. | | | AINED | энт | |
| ОЕРТН, FT. | SOIL TYPE | MB | | | ပ္သူ LONGITUDE: W 91° 1' 43.6" | N-BLOWS/FT. | % PASSING No. 200 SIEVE | ۵. | ్ల. | PLASTICITY INDEX | MOISTURE CONTENT (%) | () | 빌(| SHE | EAR NGTH | VEIG |
| ĮΨ | <u>-</u> | S | 2 | BORING LOCATION PLAN: APPENDIX SHEET NO. 2 | , § | SS) | LIQUID | AST IMI | F.H | | ANE OM ns/ft | N/F | | s/ft²) | IT W | |
| Ü | 5 | SS | 恒 | | . BLO | 6 PA | == | PLASTIC | S≥ | l g k | FRE | TORVANE (tons/ft²) | | \vdash | NS € | |
| | SOIL TYPE USCS SYMBOL | | ۸Ą | SOIL DESCRIPTION | _ ż | × × | | | | | HAND PENTROMETER (tons/ft²) | ' | UC | UU | DRY UNIT WEIGHT (lbs/ft³) | |
| <u> </u> | | | - | 2-INCH TOPSOIL | / | | LL | PL | PI | | - | ₩ | | | | |
| | | СН | | Firm, tan and gray fat CLAY w/ ferrous nodules, |] | | 72 | 23 | 49 | 33 | 1.00 | | | | | |
| | | CL | | ferrous stains, grass, roots and silt | / | | | | | 34 | 1.00 | | | | | |
| | | | | Firm, tan and gray lean CLAY w/ silt, ferrous nodules, ferrous stains and roots | | | | | | 34 | 1.00 | | | | | |
| 5 | | | | lerrous stains and roots | | | 41 | 18 | 23 | 34 | 1.00 | | 0.21 | | 88 | |
| | | | | -becoming stiff, gray w/ ferrous nodules and ferrous | | | | | | | | | | | | |
| | | | | stains | | | | | | 38 | 1.50 | | | | | |
| | | СН | | Stiff, gray fat CLAY w/ ferrous nodules, ferrous | | | | | | 41 | 1.50 | | 0.24 | | 75 | |
| -10- | | | | stains, organic stains and calcareous nodules | | | | | | 41 | 1.50 | | 0.24 | | 75 | |
| L., | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | -becoming slickensided | | | | | | | | | | | | |
| 15 | | | | | | | | | | 44 | 2.00 | | | | | |
| -15- | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| - | | | | -becoming firm, slickensided w/ organics and | | | | | | | | | | | | |
| | | | | calcareous nodules | | | | | | 46 | 1.00 | | | | | |
| -20- | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | hasaming stiff slickensided w/ forreus nadules | | | | | | | | | | | | |
| | | | | -becoming stiff, slickensided w/ ferrous nodules, ferrous stains and organics | | | | | | 43 | 1.25 | | | | | |
| -25- | | | | Boring terminated at 25 feet. | | | | | | | | | | | | |
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| -50- | | | | | | | | | | | | | | igsqcup | | |
| | TH OF | BORI | NG: | 25 feet GRO | DUNDWA | ATER DI | JRING [| ORILLIN | G (FT): | NOT E | NCOUN | ITERED |) | | | |
| | | | | | | | | | | | | | | | | |

DEPTH OF BORING: 25 feet DATE DRILLED: 3/8/13

NOTES: The stratification lines represent approximate boundaries.



LOG OF BORING B-3

PROPOSED GATEWAY 83 ACRES SITE GEISMAR, LOUISIANA

PSI Project No.: 0193478-1 TYPE OF BORING: HOLLOW STEM AUGER

| TYPE OF | BORIN | G: | HOLLOW STEM AUGER | | | | | | | PSLP | roject | No.: (| 01934 | 78-1 | |
|-------------------------|--|------------|---|---|-------------|----------------------------|----------|------------------|---------------------|-------------------------|-----------------------------------|-----------------------|-------|--------------------------------|---------------------------|
| DEPTH, FT. SOIL TYPE | USCS SYMBOL | TER LEVELS | ER LEVELS | LATITUDE: N 30° 13' 49.2" LONGITUDE: W 91° 1' 37.3" BORING LOCATION PLAN: APPENDIX SHEET NO. 2 SOIL DESCRIPTION | N-BLOWS/FT. | % PASSING No. 200 SIEVE | LIQUID | PLASTIC LIMIT | PLASTICITY INDEX | MOISTURE CONTENT (%) | HAND PENTROMETER (tons/ft²) | TORVANE (tons/ft²) | SHE | AINED EAR NGTH s/ft²) | DRY UNIT WEIGHT (lbs/ft³) |
| | SC S | | SOIL DESCRIPTION | - Z | % o. | LL | PL PI | | ŽŌ | PEN | Ĕ | UC | υυ | DRY L | |
| 7777 | , T. | H | 2-INCH TOPSOIL | | | | | | | | | _ | | | |
| | CL | | Stiff, tan and brown lean CLAY w/ silt, ferrous nodules, ferrous stains, grass and roots -becoming soft, brown w/ silt, ferrous nodules and | | | 43 37 | 18 19 | 25 18 | 26 28 | 1.75 | 0.18 | | 0.28 | 98 | |
| _5 | CH | | refrous stains Firm, tan and gray fat CLAY w/ silt partings, ferrous | | | | | | 46 | 0.75 | | | | | |
| | | | nodules, ferrous stains, organic stains and organics | | | | | | 39 | 1.00 | | | | | |
| -10- | | | -becoming gray, slickensided w/ ferrous nodules, ferrous stains and silt partings | | | 64 | 22 | 42 | 47 | 0.75 | | 0.16 | | 75 | |
| -15- | | | -becoming brown w/ ferrous nodules, ferrous stains and silt partings | | | | | | 47 | 0.75 | | 0.09 | | 77 | |
| -20- | | | -becoming gray w/ ferrous nodules, ferrous stains and organic stains | | | | | | 47 | 1.00 | | | | | |
| -25 | | | -becoming stiff | | | | | | 47 | 1.25 | | | | | |
| -30- | | | Boring terminated at 25 feet. | | | | | | | | | | | | |
| -40- | | | | | | | | | | | | | | | |
| -50 DEPTH C | PF BOR | NG: | 25 feet GROU | JNDWA | TER DU | JRING D | DRILLIN | G (FT): | NOT E | NCOUN | TERED | | | | |

DATE DRILLED: 3/8/13 NOTES: The stratification lines represent approximate boundaries.





Information PROFESSIONAL SERVICE INDUSTRIES, INC. 11950 INDUSTRIPE EX BLVD

11950 INDUSTRIPLEX BLVD. BATON ROUGE, LOUISIANA Telephone: (225) 293-8378

Fax: (225) 650-2978

CLIENT CSRS, INC.

PROJECT NAME PROPOSED GATEWAY 83 ACRES SITE

PROJECT LOCATION GEISMAR, LOUISIANA

PROJECT NUMBER 0193478-1

LITHOLOGIC SYMBOLS (Unified Soil Classification System)



CH: Fat Clay (CH)



CL: Lean Clay (CL)



TOPSOIL: Topsoil

CONSISTENCY OF COHESIVE SOILS

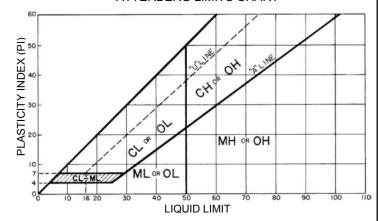
KEY TO SYMBOLS

| CONSISTENCY | UNCONFINED COMPRESSIVE STRENGTH IN TONS/FT ² |
|-------------|--|
| VERY SOFT | 0.0 TO 0.25 |
| SOFT | 0.25 TO 0.50 |
| FIRM | 0.50 TO 1.0 |
| STIFF | 1.0 TO 2.0 |
| VERY STIFF | 2.0 TO 4.0 |
| HARD | >4.0 OR 4.0+ |

RELATIVE DENSITY OF GRANULAR SOILS

| CONSISTENCY | N-VALUE IN BLOWS/FOOT |
|--------------|-----------------------|
| VERY LOOSE | 0-4 |
| LOOSE | 4-9 |
| MEDIUM DENSE | 10-29 |
| DENSE | 30-49 |
| VERY DENSE | >50 OR 50+ |

ATTERBERG LIMITS CHART



SAMPLER SYMBOLS



Shelby Tube

ABBREVIATIONS

NP - NON PLASTIC

UC - UNCONFINED COMPRESSION

UU - UNCONSOLIDATED UNDRAINED TRIAXIAL

TV - TORVANE

W/ - WITH

Water Level at Time of Drilling, or as Shown

▼ Water Level at End of Drilling, or as Shown

Water Level After 24 Hours, or as Shown