

## INDEX

1. Purpose of Subsurface Investigation .....	1
2. Method of Boring and Sampling: .....	2
3. General Findings: .....	3
4. Anticipated Structure: .....	10
5. Lab Tests: .....	11
6. Structural Design Recommendations: .....	11
Site Specific Preparation Recommendations .....	11
Foundation Support .....	13
Floor Support .....	15
Retaining Wall Design .....	16
Slope Recommendations .....	17
7. Paving Recommendations: .....	17
8. Limitations: .....	18



October 4, 2017

Mr. Ben Carter  
Carter Watkins Associates Architects, Inc.  
137 East Washington Street  
Monroe, GA 30655

RE: Subsurface Investigation  
Baldwin County Administration Facility  
Milledgeville, GA  
PGC #2017055

Dear Ben:

Preston Geotechnical Consultants, LLC (PGC) is pleased to submit the following subsurface investigation report. We completed the field portion of this subsurface investigation on Friday September 29, 2017. The following is a report of our findings.

**1. PURPOSE OF SUBSURFACE INVESTIGATION:**

The purpose of this subsurface investigation was to assess the existing site conditions to allow us to provide the necessary recommendations for the site preparation procedures to bring the site to the planned elevation and provide a site which will support the foundations for the proposed structure(s).

**"Certified Woman Owned Small Business"**

4725 Ivey Drive, Macon, Georgia 31206  
Phone 478-474-2941 • Fax 478-471-0202

## 2. METHOD OF BORING AND SAMPLING:

A truck mounted drill, mechanically turning a 5 5/8 -inch, hollow stem auger was used to advance twenty-seven bore holes at locations shown on the enclosed bore hole location sketch. In addition to the location sketch, a boring log of each hole is attached.

Borings B-1 through B-27 were sampled in substantial accordance with "Penetration Test and Split Barrel Sampling of Soils", ASTM D 1586, current edition. The penetration recorded indicates the number of blows required to effect a 12-inch penetration into the undisturbed soil stratum, using a pin guided, 140 pound drive hammer falling 30 inches per blow, driving a split barrel sampler having a 2-inch outside diameter. The depth to the beginning of the test is shown on the boring log. Each penetration test extends 18 inches below the indicated beginning depth. The final 12-inch penetration is reported as the blows per foot or the standard penetration.

The use of the standard penetration test (SPT) along with laboratory tests of the soil removed from the sampler enables us to make an assessment of the ability of the soil to support foundations. These tests can also provide information as to the potential stability of open excavations, the permeability of the soil and other soil index properties.

The borings were backfilled as indicated on the individual boring logs after a final check for the presence and depth of subsurface water was made.

Soil samples obtained from the project site are the property of the client. Unless other arrangements are agreed upon in

writing, Preston Geotechnical Consultants, LLC will hold such samples for no more than 180 calendar days from the date Preston issued the first document that includes the data obtained from these samples. After that date, Preston will dispose of samples that are not contaminated by hazardous substances.

### 3. GENERAL FINDINGS:

The site is located in the Washington Slope District of the Piedmont Province in Baldwin County, Milledgeville, Georgia.

The site (physical address 1601 North Columbia Street) is located north of the intersection of US 441/North Columbia Street and Lakeside Drive in Milledgeville in a relatively open lot. The site was home to the John Milledge Motel from the early 1950's to around 2006. From our study of the topography (both ground reconnaissance and review of old USGS quadrangle maps), it appears that the northernmost corner of the property as well as the southernmost corner previously sloped downward but were likely filled during construction of the motel. At the time of our investigation, the overall site was relatively flat.

Five borings were advanced within each of the four proposed building footprints with seven additional borings scattered throughout the parking areas. Fill soils were encountered in various borings as communicated in the following table.

Boring Number	Depth of Existing Fill (Feet ±)
B-1	None
B-2	5
B-3	3
B-4	None

Table Continued

Boring Number	Depth of Existing Fill (Feet ±)
B-5	5.5
B-6	1
B-7	None
B-8	5
B-9	5
B-10	None
B-11	None
B-12	None
B-13	None
B-14	None
B-15	None
B-16	8
B-17	10
B-18	8
B-19	8
B-20	8
B-21	5
B-22	None
B-23	None
B-24	None
B-25	None
B-26	None
B-27	6

Borings B-1 through B-5 were advanced **within the northwesternmost proposed building**. Borings B-2, B-3, and B-5 (in this northeast area of the footprint) revealed fills ranging from 3 to 5.5 feet consisting of very loose to loose, brown clayey sand and gray/black sandy clay. Original soils beneath the fills were found to include dense to very dense, tan/gray silty sands and fragmented rock along with seams of stiff to very stiff, red/tan plastic clays and tan/gray sandy silts. All three borings were terminated at depths varying from 2 to 19 feet due to auger refusal in rock. Borings B-1 and B-4, near the southwest edge of the proposed building revealed tan/gray to tan/brown, stiff to very stiff sandy silts and dense to very dense silty sands extending through the 20 feet depth of these borings.

Borings B-6 through B-10 were advanced **within the central Administration Building footprint**. Boring B-6, B-8, and B-9 revealed fills ranging from 1 to 5 feet (in this northwestern side of the building footprint) consisting of brown, loose clayey sands and soft to medium consistency sandy silts and sandy clays. Original soils beneath the fills were found to include dense to very dense, tan/gray silty sands and fragmented rock along with seams of medium to very stiff, tan/gray plastic clays. Boring B-6 was terminated in rock at a depth of 13 feet while B-8 and B-9 were terminated in dense silty sands at their planned depths of 25 and 20 feet, respectively. Borings B-7 and B-10, near the eastern edge of the proposed building, revealed medium consistency, tan/gray sandy silts grading into firm to dense silty sands at 5 to 6 feet and extending through the 20 feet depth of each boring.

Boring B-21, advanced **within the northwestern corner of the perimeter parking**, revealed 3 feet of loose, brown silty sandy fill underlain by a layer of medium consistency black/gray sandy

clayey fill. Original soils encountered at 5 feet were found to be very stiff to dense tan/gray silty sand extending through the 10 feet depth of this boring.

Borings B-11 through B-15 were advanced **within the proposed building located near the middle of the east side of the property**. While no fills were discovered in these borings, some borings were found to contain soft to medium consistency silty sands in the upper zones. Specifically, borings B-11, B-12, and B-13 contained soft to medium consistency, tan/gray/red sandy silts through depths varying from 2 to 5 feet grading into stiff sandy silts and firm to dense, tan/gray silty sands extending through the depth of these borings. Boring B-14 and B-15 along the south side of the building footprint revealed stiff, tan/gray sandy silts and dense to very dense silty sands extending through the depth of each boring.

At boring B-22, advanced **near the middle east corner of the perimeter parking**, we encountered 2 feet of soft, tan sandy silt grading into stiff, tan/gray sandy silts and dense silty sands extending though the 10 feet depth of boring.

Borings B-16 through B-20 were advanced **within the proposed building footprint at the far southeast corner of the property**. Boring B-27 was located in the **proposed parking near this building**. All of these borings were located in that southernmost corner of the property previously filled to level that corner of the property with the rest of the site. As such, these borings revealed fills ranging from 8 to 10 feet. Borings B-16 and B-10, along the northwest side of the proposed building, revealed a loose surface layer of gray clayey sandy topsoil (3.6 to 6 inches) above fills of medium to stiff, red/tan to tan/brown sandy clay and medium density, tan/gray clayey sand with some

interbedded seams of stiff gray plastic clay. Beneath a surface layer (approximately 1.8 inches) of loose topsoil, borings B-17 and B-20 revealed fills of medium, red/tan sandy clays and medium density clayey sands through 8 to 10 feet. Original soils beneath this dropped to a medium consistency, gray plastic clay grading into a dense to very dense, tan/gray clayey sand from 18 feet through the 20 feet depth of boring. Boring B-18, near the middle of this building footprint revealed 1.8 inches of loose gray topsoil underlain by medium consistency, red sandy clayey and tan/gray clayey sandy fills through 8 feet. From 8 to 13 feet, we found medium consistency gray plastic clay grading into a **very loose and saturated gray clayey sand from 13 to 19 feet.** From 19 to 25 feet we encountered dry very stiff to hard, tan/gray plastic clay extending through the 25 feet depth of boring.

Boring B-27, **in the adjacent parking**, consisted of 6 inches of loose gray topsoil above medium to stiff red/brown to red/gray sandy plastic clay grading into a dense tan/gray clayey sand from 8 feet through the 10 feet depth of boring.

At borings B-23 through B-26, **advanced within the proposed large parking area in the central portion of the site**, we encountered medium to stiff, tan to tan/gray sandy silts and medium/firm to very dense, tan/gray silty sand (with some gravel) extending through the depth of the borings. Boring B-24 through B-26 were terminated at 10 feet in firm to dense silty sand while boring B-23 was terminated at 7 feet due to auger refusal in rock.

Water was encountered only in boring B-18 at a depth of 17 feet below ground surface. No subsurface water was encountered in the remaining borings.

Boring logs showing the soil profile at each bore hole are attached. The logs show changes in soil strata. The depths to changes should be considered to be approximate depths of changes based on the best estimate of the driller.

The soil profile shown on each boring log represents soil conditions at that particular boring. The soils between borings should not necessarily be assumed to be similar to those found in the borings.

The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately represent the strata variations that usually exist between sampling locations.

It is not unusual to find unexpected conditions between test boring locations. Filled in ditches, soft backfill over utilities, rock ledges, trash pits, old fire pits, springs, and expansive clays are just a few of the unexpected conditions that might be discovered during field site preparation.

This site appears to have been occupied by previous structures demolished sometime in the past. It has been our experience that **shallow footings**, cellars, **septic tanks**, utilities, wells and the like may be uncovered during construction.

Any such obstructions should be removed from the zone of construction if they interfere with the construction. All excavations to remove obstructions should be proofrolled and backfilled as described below for structural fill.

With the exception of having obtained utility clearances for drilling operations (call before you dig), Preston Geotechnical Consultants, LLC has obtained no detailed knowledge of the on-site utilities or any other structures beneath the surface of the site.

The following is a tabulation of the depth of the rock encountered:

Boring Number	Depth Rock Encountered (Feet ±)
B-2	15
B-3	19
B-5	12
B-6	13
B-23	7

No subsurface rock was encountered in the remaining borings.

Surface and subsurface rock therefore may be encountered at this site, although any rock encountered in our borings was found at depths greater than 7 feet below ground surface. There is always a question as to whether the "rock" encountered is rippable or must be removed by jackhammer or explosives. The best way to ascertain the quality of the "rock" is to field test it with excavation equipment.

We suggest the following procedures. If the "rock" can be excavated with conventional earth moving equipment such as scrapers, backhoes or dozers, it is unclassified (soil) excavation.

To test the material with a dozer, we suggest the following. Using a D-8 or TD25 class dozer with a single shank ripper, test the material in question by making numerous passes in two directions at 90 degrees from each other. If the shank "smokes" and merely scratches the material, it is blast rock. If the material can be ripped, it is not blast rock.

For testing with a backhoe, we suggest the following procedure. Using a Cat 225 class backhoe with a 24-inch or less bucket, make repeated attempts to dig or break out the material. If the bucket teeth "smoke" and no material can be broken out, it is blast rock.

Shallow CH soils were noted at the site. The following is a tabulation of the depth of these expansive soils.

Boring Number	Depth Range of CH Soils (Feet ±)
B-3	3 - 7.5
B-27	0.5 - 8

#### 4. ANTICIPATED STRUCTURE:

The proposed structures are anticipated to be two-story slab on grade with steel framing and brick exterior. The exact finished floor slab elevation is unknown at this time.

If any of the above proposed scope of work is not correct or has been changed, please let us know so that we can provide additional and/or amended recommendations.

## 5. LAB TESTS:

We secured a bulk soil sample from boring B-15 at a depth of 2.5 feet. A laboratory classification (ASTM D 2487) along with a one-point standard proctor (ASTM D 698) was performed on this sample. We found this soil to be a Silty Sand material (SM), with a maximum dry density of 113.0 pcf and an optimum moisture content of 12.0 percent.

We also performed a laboratory cookout (ASTM D 2216) on the 2.5 foot split spoon sample secured from test boring B-15. These tests are helpful in alerting the grading contractor if the insitu moisture is at or near its optimum moisture content should the on-site soils be needed as structural fill. The following is a summary of our findings.

Optimum Moisture = 12.0 Percent			
Boring Number	Depth Sample Secured (Feet)	Insitu Moisture Percent	+/- Percent of Optimum Moisture
B-15	2.5	11.0	-1

## 6. STRUCTURAL DESIGN RECOMMENDATIONS:

### Site Specific Preparation Recommendations

Remove all organic matter, stumps and other deleterious matter. Predensify the areas to be filled or upon which structures and pavements are to be placed. This is especially important in that loose silty sands and soft sandy silts were present in the upper soils across the majority of the site. Sands tend to respond well to vibratory predensification efforts when undertaken at very near optimum moisture conditions. A vibratory pad foot and/or a smooth drum roller, a loaded dump truck or other rubber tired

equipment should be used for the predensification. Overlapping passes of the vehicle should be made across the site in one direction and then at right angles to the original direction of rolling. We recommend a proofroll be observed by a geotechnical engineer or his representative prior to the placement of any structural fill.

Any yielding, pumping or soft areas should be cut out and replaced with fill compacted as described below.

The proposed fill soil should be limited to soils classified in accordance with ASTM D 2487 as GM, GC, SW, SP, SM, SC, ML, and CL. Soils classified as Pt, OH, OL, CH and MH are not suitable for structural fill.

The area fill should be spread in loose lifts (layers) of not more than eight inches. Each lift should be rolled with a vibratory roller, a sheepsfoot roller or a loaded, rubber-tired dump truck, scraper or loader. Each lift should be compacted to a minimum density of 95 percent of the maximum dry density as determined in accordance with ASTM D 698, current edition.

The fill soil moisture content should be maintained within three percent of the optimum moisture as determined in accordance with ASTM D 698. In the event that the soil is too wet, harrowing, scarifying and aeration should be used to dry the soils to within the required moisture content. If the soil is too dry, a water truck with spreader bar or a spray hose should be used to bring the soil to the proper moisture range. The water should be thoroughly and evenly mixed within the soil prior to compaction. Backfilling of trenches, walls and structures should be done in six inch loose lifts. Each lift should be compacted using a mechanical tamp such as a vibratory or impact type compactor.

In general, sandy soils are best compacted with vibratory type compaction equipment. Clayey soils should be compacted with an impact type or sheepsfoot compactor.

Horizontally, the compacted structural fill should extend at least as far outside the perimeter footings as the fill is in depth below the bottom of the footings.

Density tests should be taken throughout the placement of all structural fill. Density tests should also be performed on all at grade areas and/or areas that are brought to grade as a result of a cut section. These areas should be scarified and compacted in accordance with the same criteria.

In this physiographic area, shallow, poorly bedded seams of CH & MH soils may be encountered during grading operations. These soils are not suitable for use as support soils in direct contact with footings, slabs or pavements. These soils may be acceptable for use as fill for grassed areas. If encountered in structural excavations, these class soils should be undercut and isolated from the structure with 18 inches of granular material such as sand or stone.

#### **Foundation Support**

##### **THREE REAR BUILDINGS-NORTH/NORTHEAST SIDE OF PROPERTY**

Based on the results of the subsurface investigation, our laboratory analysis and after completion of the recommended site preparation described above in this report, the proposed three structures may be supported on a conventional shallow foundation system. A net maximum allowable bearing pressure of 2500 pounds per square foot may be used in the design of the shallow foundation system.

To reduce the possibility of shear failure, wall bearing and column footings should be designed with a minimum width of 18 and 24 inches, respectively. For frost protection, exterior wall bearing and column footings should be designed with a minimum embedment depth of 18 inches, while interior footings should be designed with a minimum embedment depth of 12 inches. The embedment depth should be measured from the base of the footing to the lowest adjacent outside grade.

The bottoms of all footing excavations should be mechanically tamped prior to placement of steel and concrete to assure a uniformly dense support for the footings. This is especially important in that in some areas foundations may require individual attention to further densify and stabilize in order to achieve the required bearing. This stabilization may include additional tamping or stabilization with stone base.

All footing excavations should be tested for bearing value prior to the placement of the reinforcement steel and concrete. This is especially important in that shallow, poorly bedded seams of CH & MH soils are common in this area and may be encountered during grading operations. If these expansive soil types are found in the footing excavations, these class soils should be undercut and isolated from the structure with 18 inches of granular material such as sand or stone.

#### BUILDING AT SOUTHEAST CORNER OF SITE

Although the borings at the four corners of the proposed building footprint exhibited similar density soils as those in the remaining borings, we have concerns with the soils found in boring B-18, the center boring. Specifically, a seam of very

loose and saturated clayey sand was encountered from 13 to 19 feet, that with shallow foundations would likely result in excessive differential settlement. We therefore recommend that consideration be given to shifting this structure toward the northwest (away from Lakeside Drive) and instead wrapping the parking around the backside of the proposed building. It may be advantageous to consider additional borings within the shifted building footprint, if this course is followed. From existing quadrangle maps of the site, it appears as if the upgradient end of a drainageway (leading to the outfall for the lake) originally extended into this area before filling of the area. Subsurface water was encountered in only this boring, which may also suggest this may have been the old drainageway. The water encountered at this particular boring is perched above the deeper underlying very stiff to hard plastic clays.

#### **Floor Support**

The building floor slabs may be directly supported on properly predensified residual soils and/or well-compacted suitable structural fill. A four-inch layer of compacted crushed stone should be placed beneath the floor slab to provide a protective cover as well as a uniform working surface.

Expansion and contraction joints should be used to isolate all floor slabs from the load bearing wall and/or isolated columns. This will allow for possible differential movement and diminish the potential of cracking the floor slabs. Provided the slab subgrade is prepared in accordance with our recommendations, a subgrade modulus reaction (K) of 125 pounds per cubic inch (pci) may be used for the slab design.

Based on our experience with similar type of soils and structural loading, we anticipate that all differential and total settlement

will be less than 3/4-inch and 1-inch, respectively. Careful field control will contribute substantially to minimizing potential settlements.

#### Retaining Wall Design

Walls that are allowed to have sufficient movement and not fixed at the top will be subjected to "active" pressures. The following lateral earth pressure parameters are recommended for design.

Earth Pressure Coefficient	Equivalent Fluid Density (pcf)
At-Rest ( $K_0$ ) = 0.50	62
Active ( $K_A$ ) = 0.33	41
Passive ( $K_P$ ) = 3.00	375

These values assume that the wall has horizontal backfill and no surcharge loads such as adjacent structures. Also, the recommended lateral earth pressure coefficients do not consider the development of hydrostatic pressures behind the earth retaining wall structures. Therefore, a positive wall drainage system should be provided to handle any water intrusion. The system may consist of a drainage layer behind the walls with a collection pipe discharging accumulated water away from the wall.

Based on the most cohesive soils encountered in the upper zone of the borings (ML), a moist unit weight of 125 pounds per cubic foot and an allowable coefficient of sliding friction of 0.35 may be used in the design of retaining walls. Based on our experience with similar type soils, an effective internal friction angle of

30 degrees may be utilized for the design of slopes and retaining walls in this area using on-site residual soils.

### **Slope Recommendations**

Slope stability analysis using laboratory shear strength data was beyond the scope of this study. However, based on our experience with similar subsurface conditions and construction, we recommend temporary slopes no steeper than 2.5 (H): 1.0 (V) and permanent slopes no steeper than 3.0 (H): 1.0 (V) for residual soils or structural fill.

Adjacent to buildings, a top of slope set-back of ten feet is recommended. In pavement areas, a minimum top of slope set-back of five feet is acceptable. During construction, temporary slopes should be regularly inspected for signs of movement or unsafe conditions. Soil slopes should be covered for protection from rain, and surface run-off should be diverted away from the slopes. For erosion protection, a protective cover of grass or other vegetation should be established on permanent soil slopes as soon as possible.

### **7. PAVING RECOMMENDATIONS:**

For light duty paving, we suggest that six inches of graded aggregate base be compacted on a prepared subbase. The base course should be compacted to 100 percent of the maximum dry density as determined in accordance with ASTM D 698. The graded aggregate base course material properties should conform to GA D.O.T. specifications.

The surface course should be two inches of type "E" or "F" hot mix asphaltic concrete mixture or the approximate equivalent two

inches of 12.5 mm Superpave or 9.5 mm Superpave hot mix asphaltic concrete mixture conforming to Georgia D.O.T. specifications.

For heavy duty paving we recommend a six inch thick concrete slab 4000 psi/650 psi flex be placed on a prepared subgrade as described for the light duty paving.

If asphalt pavement is considered for the heavy duty paved sections we recommend a minimum of eight inches of graded aggregate base course (GAB) be compacted on a prepared subbase. The base should be compacted to 100 percent of the maximum dry density (ASTM D 698). The surface course should be two inches of type "E" or "F" hot mix asphalt over two inches of B-Binder course or the approximate equivalent two inches of type 12.5 mm Superpave or 9.5 mm Superpave hot mix asphalt over two inches of 19 mm or 25 mm Superpave conforming to Georgia D.O.T. specifications.

#### **8. LIMITATIONS:**

Although these findings are valid only at the locations and to the depths shown, they are useful for alerting the grading contractor to certain specific conditions pertinent to the preparation of the site.

Frequently, the grading contractor has never seen the geotechnical report or recommendations for site preparation. In addition, we see many cases where the specifications and plans do not reflect the recommendations made in the geotechnical report.

We suggest that every effort be made to alert the grading contractor so that he may avoid the problems that arise due to his lack of knowledge of potential site problems.

This report has been prepared for the exclusive use of Carter Watkins Associates Architects Inc. for specific application to the Baldwin County Administration Facility in Milledgeville, Georgia. Preston Geotechnical Consultants, LLC has endeavored to comply with generally accepted geotechnical engineering practice common to the local area. Preston makes no other warranty, expressed or implied.

The analyses and recommendations contained in this report are based on data obtained from subsurface exploration. The methods used indicate subsurface conditions only at the specific locations where samples were obtained, only at the time they were obtained, and only to the depths penetrated. Samples cannot be relied on to accurately reflect the strata variations that usually exist between sampling locations.

The recommendations included in this report are based in part on assumptions about strata variations that may be tested only during earthwork and foundation construction. Accordingly, these recommendations should not be applied in the field unless a qualified geotechnical engineering consultant is retained to perform construction observation and thereby provide a complete professional geotechnical engineering service through the observational method.

Do not apply any of this report's conclusions or recommendations if the nature, design, or location of the facilities is changed. If changes are contemplated, Preston Geotechnical Consultants, LLC must review them to assess their impact on this report's applicability. Also note that Preston is not responsible for any claims, damages, or liability associated with any other party's interpretation of this report's subsurface data or reuse of this report's subsurface data or engineering analyses without the

express written authorization of Preston Geotechnical Consultants, LLC.

Although Preston Geotechnical Consultants, LLC has explored subsurface conditions as part of this program, Preston has not evaluated the site for the potential presence of contaminated soil.

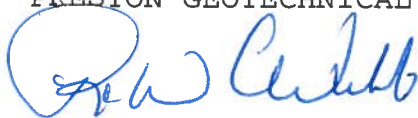
The conclusions and recommendations included in this report are based in part upon the data Preston derived from a limited number of soil or groundwater samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations will not become evident until construction or further investigation.

If variations or other latent conditions become evident, Preston Geotechnical Consultants, LLC will reevaluate this report's conclusions and recommendations.

Please call on us if we can be of further service to you on this project.

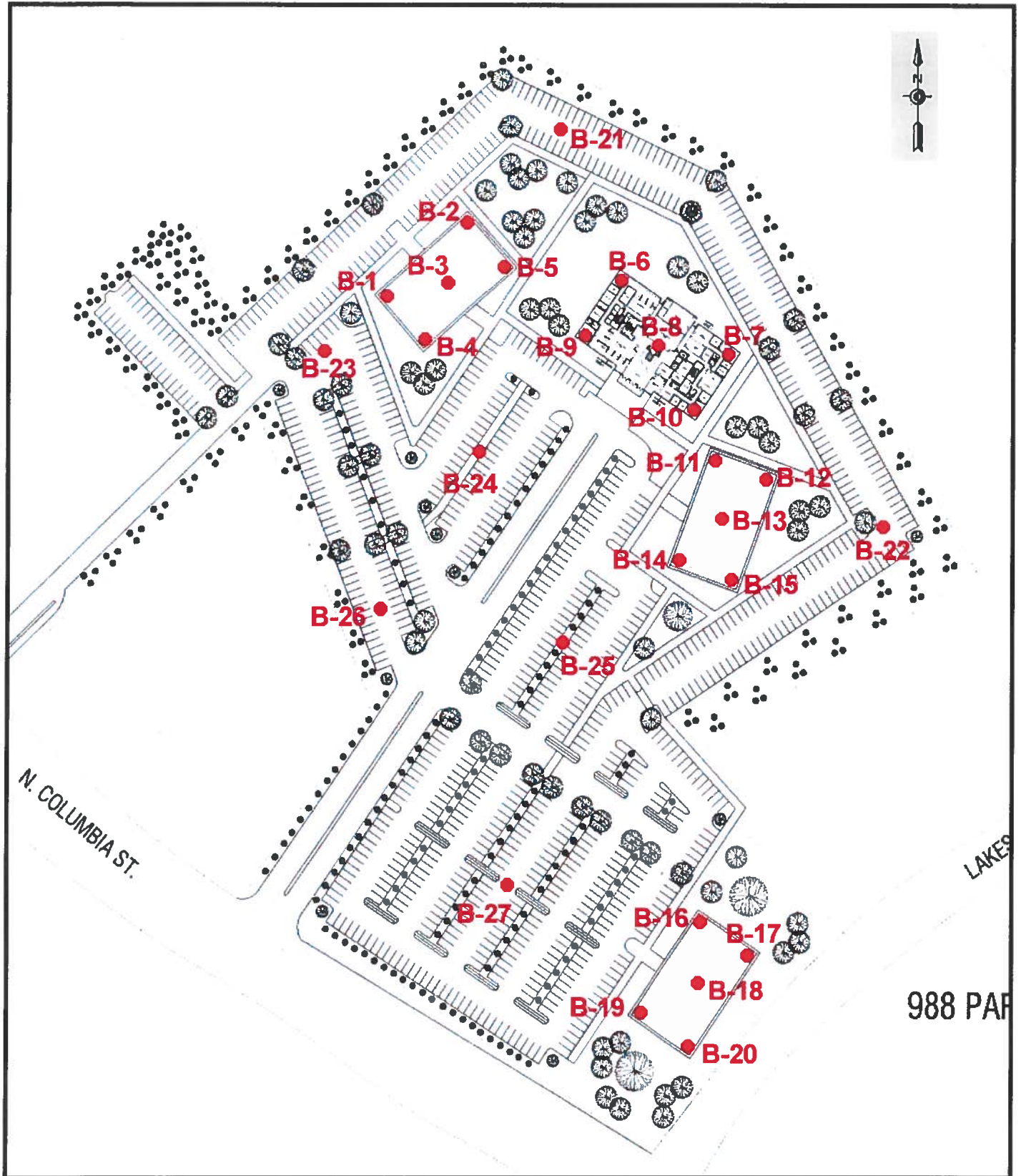
Very truly yours,

PRESTON GEOTECHNICAL CONSULTANTS, LLC



Robin C. Webb, P.E.





**BORE HOLE LOCATION SKETCH**

**PGC NO.: 2017055**

**NOT TO SCALE**



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-1

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES

STANDARD PENETRATION  
BLOWS PER FOOT

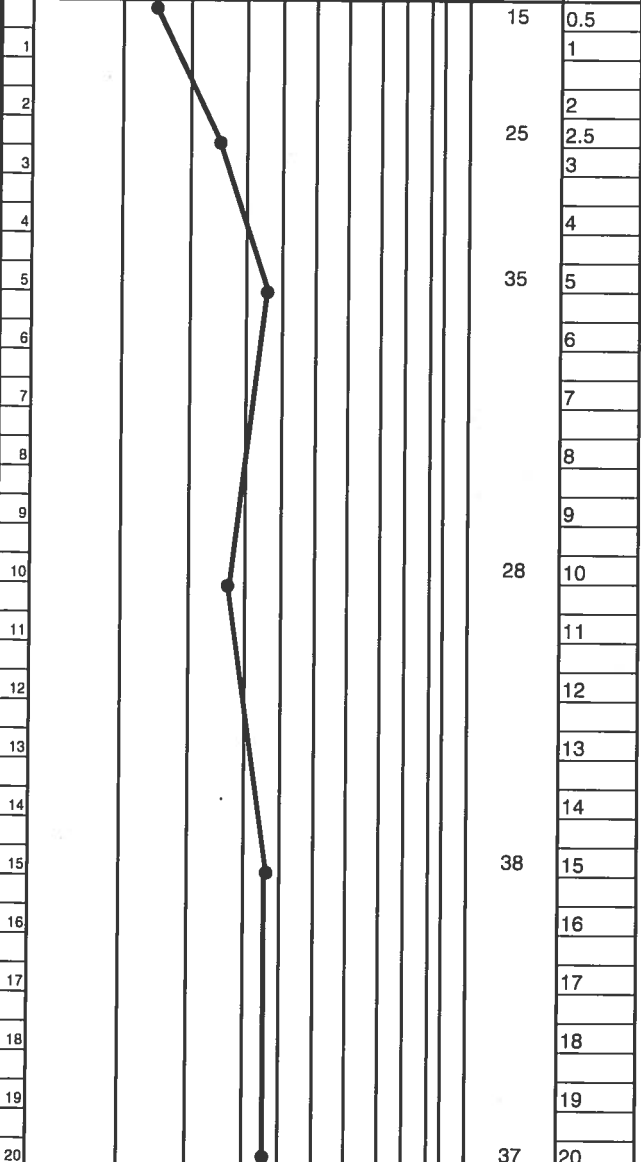
BLOWS  
PER  
FOOT

DEPTH  
(FEET)

BORING LOG

DESCRIPTION

0 10 20 40 60 80 100



TAN-GRAY, FINE SANDY SILT (ML)

TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)

BORING TERMINATED



# PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-2

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-26-17

COMPLETED: 09-26-17

BORING METHOD: ASTM D 1586

## SAMPLES

STANDARD PENETRATION  
BLOWS PER FOOT

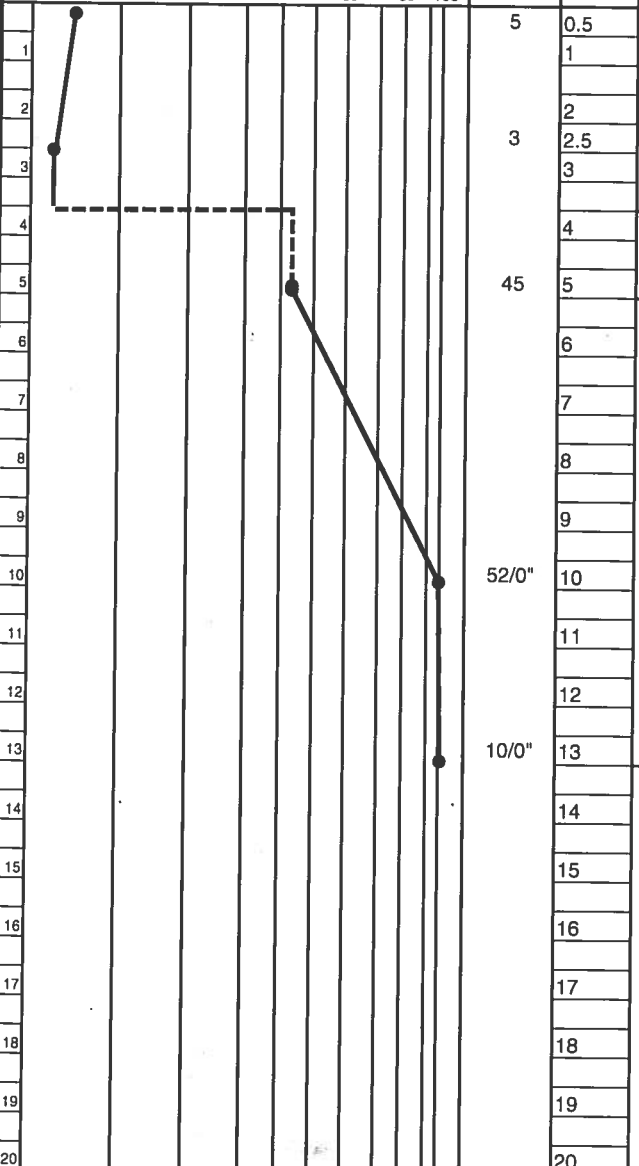
BLOWS  
PER  
FOOT

DEPTH  
(FEET)

## BORING LOG

### DESCRIPTION

0 10 20 40 60 80 100



BROWN-TAN, CLAYEY FINE TO MEDIUM SAND (SC) (FILL)

GRAY-BLACK, FINE TO MEDIUM SANDY CLAY (CL) (FILL)

TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM) (ORIGINAL)

BORING TERMINATED DUE TO AUGER REFUSAL IN ROCK





PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-4

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION					DESCRIPTION	
BLOWS PER FOOT									
0	10	20	40	60	80	100			
1							11	0.3	3.6" BLACK, FINE TO MEDIUM SANDY TOPSOIL
2							27	2.5	TAN-BROWN, FINE SANDY SILT (ML)
3									
4									
5							22	5	TAN-GRAY, FINE SANDY SILT (ML)
6									
7									
8									
9									
10							33	10	
11									
12									
13									
14									
15							34	15	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
16									
17									
18									
19									
20							55	20	

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-5

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-26-17

COMPLETED: 09-26-17

BORING METHOD: ASTM D 1586

SAMPLES		BLOWS PER FOOT	DEPTH (FEET)	BORING LOG					
STANDARD BLOWS PER FOOT	PENETRATION			DESCRIPTION					
0	10	20	40	60	80	100			
1							6	0.5	BROWN, CLAYEY FINE TO MEDIUM SAND (SC) (FILL)
2							7	1	
3								2	
4								2.5	
5							36	3	GRAY-BLACK, FINE TO MEDIUM SANDY CLAY (CL) (FILL)
6								4	
7								5	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM) (ORIGINAL)
8								6	
9								7	
10							10/0"	8	FRAGMENTED ROCK
11								9	
12								10	
13								11	
14								12	BORING TERMINATED DUE TO AUGER REFUSAL IN ROCK
15								13	
16								14	
17								15	
18								16	
19								17	
								18	
								19	
20								20	





PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-7

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-25-17

COMPLETED: 09-25-17

BORING METHOD: ASTM D 1586

SAMPLES		BLOWS PER FOOT	DEPTH (FEET)	BORING LOG
STANDARD PENETRATION BLOWS PER FOOT				DESCRIPTION
0 10 20 40 60 80 100				
1		5	0.5	TAN-GRAY, FINE SANDY SILT (ML)
2			1	
3		6	2.5	
4			3	
5		15	4	
6			5	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
7			6	
8			7	
9			8	
10		44	9	
11			10	
12			11	
13			12	
14			13	
15		22	14	
16			15	
17			16	
18			17	
19			18	
20		22	19	
			20	

BORING TERMINATED



# PRESTON TESTING & ENGINEERING, INC.

PT&E No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-8

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-25-17

COMPLETED: 09-25-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION					DESCRIPTION	
BLOWS PER FOOT									
0	10	20	40	60	80	100			
1							3	0.5	BROWN, FINE SANDY SILT (ML) (FILL)
2							5	2.5	
3							6	5	
4							9	10	
5							53	15	
6								16	GRAY, FINE TO MEDIUM SANDY CLAY (CL) (ORIGINAL)
7								17	
8								18	
9								19	TAN-GRAY, PLASTIC CLAY (CH) (DAMP)
10								20	
11								21	
12								22	
13								23	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM) (DRY)
14								24	
15								25	
16								26	
17								27	
18								28	
19								29	
20							38	30	



# PRESTON TESTING & ENGINEERING, INC.

PT&E No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-8

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-25-17

COMPLETED: 09-25-17

BORING METHOD: ASTM D 1586

## SAMPLES

STANDARD PENETRATION  
BLOWS PER FOOT

BLOWS  
PER  
FOOT

DEPTH  
(FEET)

## BORING LOG

## DESCRIPTION

0 10 20 40 60 80 100

38

21

22

23

24

49

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM) (DRY)

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-9

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-26-17

COMPLETED: 09-26-17

BORING METHOD: ASTM D 1586

SAMPLES

STANDARD PENETRATION  
BLOWS PER FOOT

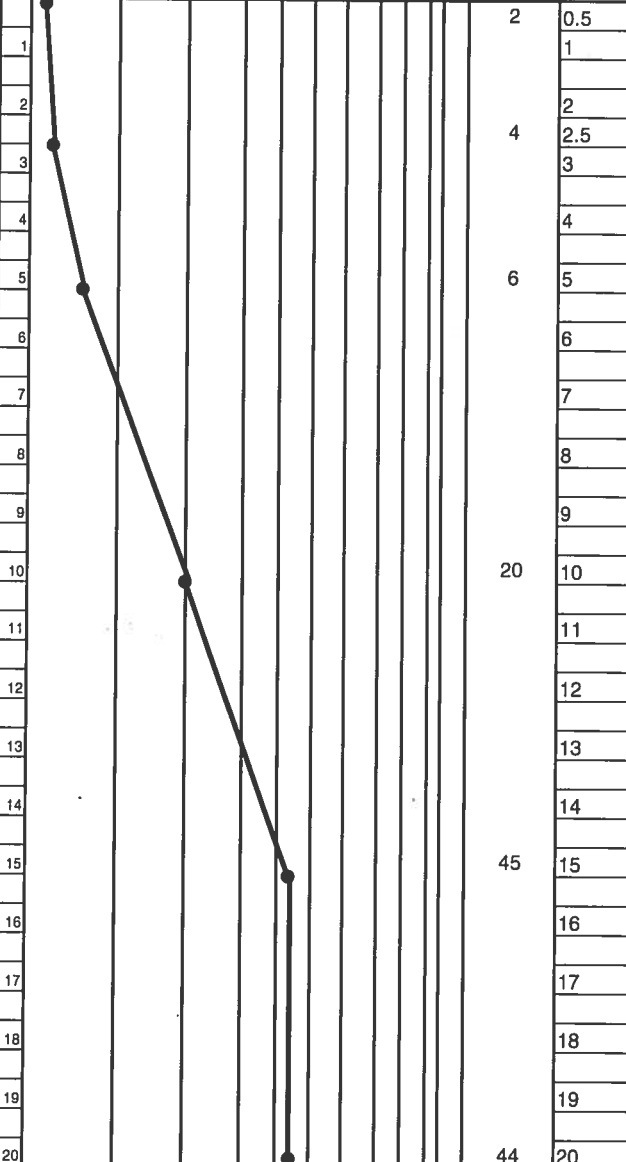
BLOWS  
PER  
FOOT

DEPTH  
(FEET)

BORING LOG

DESCRIPTION

0 10 20 40 60 80 100



BROWN, FINE SANDY SILT (ML) (FILL)

BLACK, FINE TO MEDIUM SANDY CLAY (CL) (FILL)

GRAY, FINE TO MEDIUM SANDY CLAY (ORIGINAL)

TAN-GRAY, PLASTIC CLAY (CH) (DAMP)

TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM) (DRY)

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-10

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-29-17

COMPLETED: 09-29-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG
STANDARD PENETRATION BLOWS PER FOOT									DESCRIPTION
0	10	20	40	60	80	100			
1							5	0.5	TAN-GRAY, FINE SANDY SILT (ML)
2								1	
3							5	2.5	
4								3	
5							14	5	
6								6	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
7								7	
8								8	
9								9	
10							26	10	
11								11	
12								12	
13								13	
14								14	
15							35	15	
16								16	
17								17	
18								18	
19								19	
20							22	20	

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-11

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-25-17

COMPLETED: 09-25-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION						DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
1							5	0.5	TAN-GRAY, FINE SANDY SILT (ML)	
2							6	1		
3							6	2		
4								2.5		
5								3		
6								4	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)	
7							15	5		
8								6		
9								7		
10							44	10		
11								11	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)	
12								12		
13								13		
14								14		
15							27	15		
16								16		
17								17		
18								18		
19								19		
20							27	20		

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-12

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-25-17

COMPLETED: 09-25-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION						DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
1							3	0.5	TAN-GRAY, FINE SANDY SILT (ML)	
2							10	2.5		
3							39	5		
4								6	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)	
5								7		
6								8		
7								9		
8								10		
9								11		
10							45	12		
11								13		
12								14		
13								15		
14								16		
15							40	17		
16								18		
17								19		
18								20		
19										
20							33			

BORING TERMINATED



# PRESTON TESTING & ENGINEERING, INC.

PT&E No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. **B-13**

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-19-17

COMPLETED: 09-19-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG		
STANDARD			PENETRATION					DESCRIPTION		
BLOWS PER FOOT										
0	10	20	40	60	80	100				
							7	0.5	TAN-RED-GRAY, FINE SANDY SILT (ML)	
1								1		
2							9	2		
3								2.5		
4								3		
5							13	4		
6								5		
7								6	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)	
8								7		
9								8		
10							27	9		
11								10		
12								11		
13								12		
14								13		
15							38	14		
16								15		
17								16		
18								17		
19								18		
20							35	19		
								20		



# PRESTON TESTING & ENGINEERING, INC.

PT&E No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. **B-13**

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-19-17

COMPLETED: 09-19-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD      PENETRATION BLOWS PER FOOT								DESCRIPTION	
0	10	20	40	60	80	100			
21							35	21	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
22								22	
23								23	
24								24	
25							54	25	
26								26	BORING TERMINATED
27								27	
28								28	
29								29	
30								30	
31								31	
32								32	
33								33	
34								34	
35								35	
36								36	
37								37	
38								38	
39								39	
40								40	



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-14

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-19-17

COMPLETED: 09-19-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD PENETRATION BLOWS PER FOOT								DESCRIPTION	
0	10	20	40	60	80	100			
1							11	0.5	TAN-GRAY, FINE SANDY SILT (ML)
2							13	2.5	
3							10	5	
4							48	10	
5								11	
6								12	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
7								13	
8								14	
9								15	
10								16	
11								17	
12								18	
13								19	
14								20	
15									
16									
17									
18									
19									
20									

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-15

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-19-17

COMPLETED: 09-19-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD PENETRATION BLOWS PER FOOT								DESCRIPTION	
0	10	20	40	60	80	100			
1							18	0.5	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
2							27	2	
3							29	5	
4								6	
5								7	
6								8	
7								9	
8							60	10	
9								11	
10								12	
11								13	
12								14	
13								15	
14							50	16	
15								17	
16								18	
17								19	
18								20	
19							77		
20									

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-16

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-18-17

COMPLETED: 09-18-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION						DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
1							7	0.3	3.6" CLAYEY FINE SANDY TOPSOIL (FILL)	
2								1	RED-TAN, FINE TO MEDIUM SANDY CLAY (CL) (FILL)	
3							13	2.5		
4								2		
5							14	5	TAN-GRAY, CLAYEY FINE TO MEDIUM SAND (SC) (FILL)	
6								3		
7								4		
8								5		
9								6		
10							12	10		
11								11	GRAY, PLASTIC CLAY (CH) (ORIGINAL) (DAMP)	
12								12		
13								13		
14								14		
15							38	15		
16								16		
17								17	TAN-GRAY, CLAYEY FINE TO COARSE SAND (SC)	
18								18		
19								19		
20							56	20		

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-17

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-18-17

COMPLETED: 09-18-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD PENETRATION BLOWS PER FOOT								DESCRIPTION	
0	10	20	40	60	80	100			
							6	0.15	1.8" GRAY, CLAYEY FINE SANDY TOPSOIL (FILL)
1								1	
2							14	2	RED-TAN, FINE TO MEDIUM SANDY CLAY (CL) (FILL)
3								2.5	
4								3	
5							12	4	
6								5	
7								6	TAN-GRAY, CLAYEY FINE TO MEDIUM SAND (SM) (FILL)
8								7	
9								8	
10							7	9	
11								10	
12								11	
13								12	
14								13	
15							9	14	GRAY, PLASTIC CLAY (CH) (ORIGINAL) (DAMP)
16								15	
17								16	
18								17	
19								18	
20							40	19	TAN-GRAY, CLAYEY FINE TO COARSE SAND (SC)
								20	



# PRESTON TESTING & ENGINEERING, INC.

PT&E No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. **B-18**

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: 17.0' @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-18-17

COMPLETED: 09-18-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD		PENETRATION							DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
							9	0.15	1.8" GRAY, CLAYEY FINE SANDY TOPSOIL (FILL)	
1								1		
2							19	2	RED-TAN, FINE TO MEDIUM SANDY CLAY (CL) (FILL)	
3								2.5		
4								3		
5							13	4		
6								5	TAN-GRAY, CLAYEY FINE TO MEDIUM SAND (SC) (FILL)	
7								6		
8								7		
9								8		
10							6	9		
11								10	GRAY, PLASTIC CLAY (CH) (ORIGINAL) (DAMP)	
12								11		
13								12		
14								13		
15							1/18"	14		
16								15	GRAY, CLAYEY FINE TO MEDIUM SAND (SC) (SATURATED)	
17								16		
18								17	WATER LEVEL @ TIME OF BORING	
19								18		
20							19	19	TAN-GRAY, PLASTIC CLAY (CH) (DRY)	
								20		



# PRESTON TESTING & ENGINEERING, INC.

PT&E No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. **B-18**

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: 17.0' @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-18-17

COMPLETED: 09-18-17

BORING METHOD: ASTM D 1586

SAMPLES						BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION					DESCRIPTION	
BLOWS PER FOOT									
0	10	20	40	60	80	100			
21							19	21	TAN-GRAY, PLASTIC CLAY (CH) DRY)
22								22	
23								23	
24								24	
25							55	25	
26								26	BORING TERMINATED
27								27	
28								28	
29								29	
30								30	
31								31	
32								32	
33								33	
34								34	
35								35	
36								36	
37								37	
38								38	
39								39	
40								40	



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-19

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-19-17

COMPLETED: 09-19-17

BORING METHOD: ASTM D 1586

SAMPLES		BLOWS PER FOOT	DEPTH (FEET)	BORING LOG					
STANDARD	PENETRATION			DESCRIPTION					
BLOWS PER FOOT									
0	10	20	40	60	80	100			
							8	0.5	GRAY, CLAYEY FINE TO MEDIUM SANDY TOPSOIL (FILL)
1								1	
2							12	2	
3								2.5	
4								3	
5							11	4	RED-BROWN, FINE TO MEDIUM SANDY CLAY (CL) (FILL)
6								5	
7								6	
8								7	
9								8	
10							45	9	
11								10	
12								11	
13								12	
14								13	
15							47	14	TAN-GRAY, CLAYEY FINE TO MEDIUM SAND (SC) (ORIGINAL)
16								15	
17								16	
18								17	
19								18	
20							35	19	
								20	

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-20

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-18-17

COMPLETED: 09-18-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD		PENETRATION							DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
1							10	0.15	1.8" GRAY, CLAYEY FINE SANDY TOPSOIL (FILL)	
2							17	2.5	RED-TAN, FINE TO MEDIUM SANDY CLAY (CL) (FILL)	
3							19	5	TAN-GRAY, CLAYEY FINE TO MEDIUM SAND (SC) (FILL)	
4								6	GRAY, PLASTIC CLAY (CH) (ORIGINAL) (DAMP)	
5							6	15	TAN-GRAY, CLAYEY FINE TO COARSE SAND (SC)	
6							56	20		

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-21

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD PENETRATION BLOWS PER FOOT									DESCRIPTION	
0	10	20	40	60	80	100				
1							5	0.5	BROWN, SILTY FINE TO MEDIUM SAND (SM) (FILL)	
2							6	2.5		
3	27	5	BLACK-GRAY, FINE SANDY CLAY (CL) (FILL)							
4		6								
5		7								
6		8	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM) (ORIGINAL)							
7		9								
8		10								
9		11	BORING TERMINATED							
10		12								
11		13								
12		14								
13		15								
14		16								
15		17								
16		18								
17		19								
18		20								
19										
20										



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-22

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION						DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
1							3	0.5	TAN, FINE SANDY SILT (ML)	
2							1			
3							14	2	TAN-GRAY, FINE SANDY SILT (ML)	
4							2.5			
5							36	3		
6							4			
7								5	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)	
8							6			
9								7		
10							8			
11							34	9	BORING TERMINATED	
12							10			
13								11		
14							12			
15								13		
16							14			
17								15		
18							16			
19								17		
20							18			
								19		
							20			

BORING TERMINATED DUE TO AUGER REFUSAL IN ROCK



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-24

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG
STANDARD PENETRATION BLOWS PER FOOT									DESCRIPTION
0	10	20	40	60	80	100			
1							15	0.5	TAN, FINE SANDY SILT (ML)
2							22	2.5	
3							27	5	
4								6	TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)
5								7	
6								8	
7								9	
8								10	
9							35	10	BORING TERMINATED
10								11	
11								12	
12								13	
13								14	
14								15	
15								16	
16								17	
17								18	
18								19	
19								20	



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-25

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES

STANDARD PENETRATION  
BLOWS PER FOOT

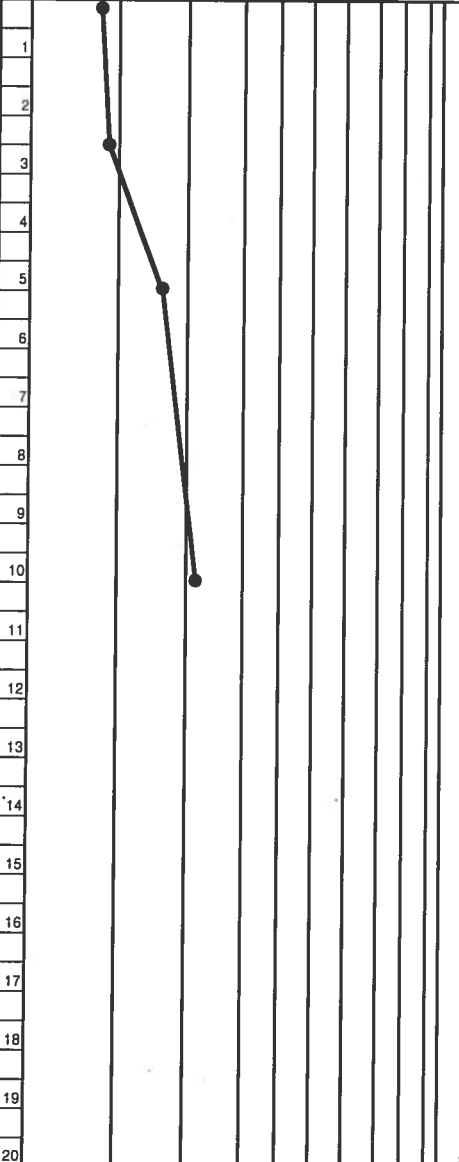
BLOWS  
PER  
FOOT

DEPTH  
(FEET)

BORING LOG

DESCRIPTION

0 10 20 40 60 80 100



8

0.5

9

2.5

16

5

22

10

TAN-GRAY, FINE SANDY SILT (ML)

TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)

BORING TERMINATED



PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-26

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-27-17

COMPLETED: 09-27-17

BORING METHOD: ASTM D 1586

SAMPLES

STANDARD PENETRATION  
BLOWS PER FOOT

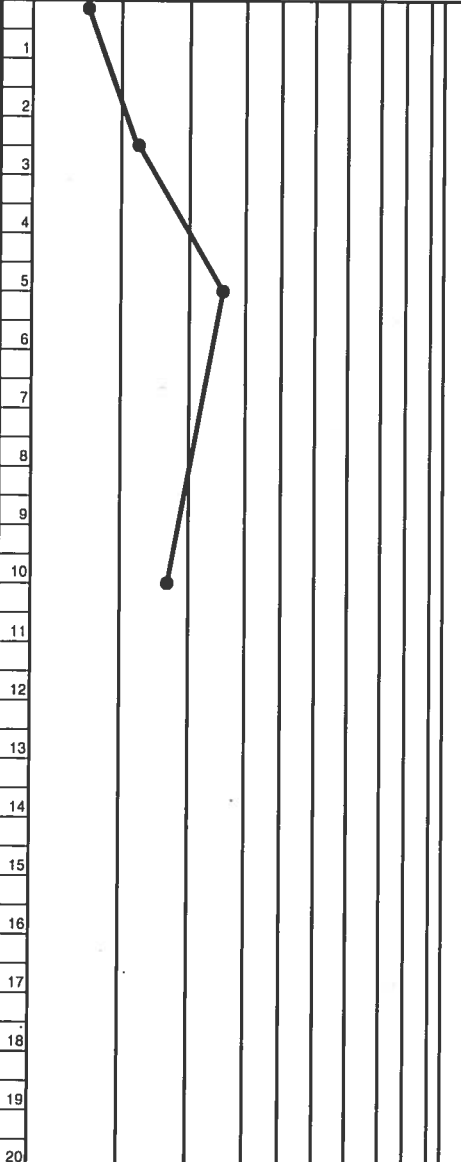
BLOWS  
PER  
FOOT

DEPTH  
(FEET)

BORING LOG

DESCRIPTION

0 10 20 40 60 80 100



6

0.5

12

2.5

27

5

17

10

TAN-GRAY, FINE SANDY SILT (ML)

TAN-GRAY, SILTY FINE TO MEDIUM SAND (SM)

BORING TERMINATED



# PRESTON GEOTECHNICAL CONSULTANTS, LLC

PGC No. 2017055

CLIENT: CARTER WATKINS ASSOCIATES ARCHITECTS INC.

BORING NO. B-27

PROJECT NAME: BALDWIN COUNTY ADMINISTRATION FACILITY, MILLEDGEVILLE, GA

BORING LOCATION: SEE BORE HOLE LOCATION SKETCH

DATUM: EXISTING GRADE

HAMMER WT. 140 lbs

HAMMER DROP: 30 inches

HOLE DIA: 6 inches

SUBSURFACE WATER DEPTH: NONE OBSERVED @ TIME OF BORING; BACKFILLED @ TIME OF BORING

SURFACE ELEV.: N/A

DATE STARTED: 09-19-17

COMPLETED: 09-19-17

BORING METHOD: ASTM D 1586

SAMPLES							BLOWS PER FOOT	DEPTH (FEET)	BORING LOG	
STANDARD			PENETRATION						DESCRIPTION	
BLOWS PER FOOT										
0	10	20	40	60	80	100				
1							5	0.5	GRAY, CLAYEY FINE TO MEDIUM SANDY TOPSOIL (FILL)	
2								1		
3							7	2.5		
4								3	RED-BROWN, FINE SANDY PLASTIC CLAY (CH) (FILL)	
5								4		
6							10	5		
7								6		
8								7	RED-GRAY, PLASTIC CLAY (CH) (ORIGINAL) (DAMP)	
9								8		
10							30	9	TAN-GRAY, CLAYEY FINE SAND (SC) (DRY)	
11								10	BORING TERMINATED	
12								11		
13								12		
14								13		
15								14		
16								15		
17								16		
18								17		
19								18		
20								19		
								20		



**FAMILY OF CURVES METHOD FOR DETERMINING  
MAXIMUM DENSITY OF SOILS  
ASTM D 698**

CLIENT: Carter Watkins Associates

DATE: October 4, 2017

PROJECT: Baldwin County Administration Facility

PGC NO.: 2017055

SAMPLE DESCRIPTION: Tan-gray, silty fine to medium sand

MAXIMUM DRY DENSITY FROM FAMILY OF CURVES: 113.0 pcf

OPTIMUM MOISTURE CONTENT FROM FAMILY OF CURVES: 12.0 %

DATE SAMPLED: September 19, 2017

SAMPLED FROM: Boring B-15 @ 2.5'

---

**ONE POINT PROCTOR RESULTS**

WET DENSITY: 125.9 pcf

MOISTURE CONTENT: 11.9 %

FAMILY OF CURVES USED: B

***"Woman Owned Small Business"***

4725 Ivey Drive Suite • Macon, Georgia 31206

Phone 478-474-2941 • Fax 478-471-0202

[www.prestontesting.com](http://www.prestontesting.com)



## SOIL CLASSIFICATION

**Client:** Carter Watkins Associates

**Date:** October 4, 2017

**Project:** Baldwin County Administration Facility

**PGC No.:** 2017055

**Date Sampled:** September 19, 2017

**Sampled From:** Boring B-15 @ 2.5'

(ASTM D 4318)		
Liquid Limit 44	Plastic Limit 28	Plastic Index 16
ASTM D 1140		
Percent Finer Than No. 200 Sieve 49.2		
ASTM D 2487		
Soil Classification Group Symbol SM	Soil Description Silty Sand	

Remarks:

***"Woman Owned Small Business"***

4725 Ivey Drive Suite • Macon, Georgia 31206

Phone 478-474-2941 • Fax 478-471-0202

[www.prestontesting.com](http://www.prestontesting.com)

## DEFINITION OF TERMS

U.D. - Undisturbed sample (ASTM D 1587, Shelby Tube)  
SPT - Standard Penetration Test (ASTM D 1586, Split Spoon)  
L.L. - Liquid Limit (ASTM D 4318)  
P.L. - Plastic Limit (ASTM D 4318)  
P.I. - Plasticity Index (ASTM D 4318)  
ATOB - At Time of Boring

## CLAYS AND SILTS

<u>Consistency</u>	<u>SPT (Blows per foot)</u>
Very soft	Less than 2
Soft (L.L.)	2 - 4
Medium	4 - 8
Stiff	8 - 15
Very Stiff (P.L.)	15 - 30
Hard	Over

## SANDS

<u>Relative density</u>	<u>SPT (Blows per foot)</u>
Very loose	0 - 4
Loose	4 - 10
Medium or firm	10 - 30
Dense	30 - 50
Very dense	Over 50

## SOIL FRACTIONS

<u>Term</u>	<u>Size Range</u>
Cobbles	Above 3"
Gravel	Coarse 3" to 3/4"
Fine	3/4" to No. 4 Sieve
Sand Coarse	No. 4 to No. 10
Medium	No. 10 to No. 40
Fine	No. 40 to No. 200
Fines Clay-Silt	Below No. 200 sieve
Gravel - Naturally occurring aggregates	
Crushed Stone - Man-made aggregates such as crushed granite	