MAGNUM ENGINEERING INC
GEOTECHNICAL ENGINEERING CONSULTANTS

GEOTECHNICAL ENGINEERING REPORT

FRANKLIN COUNTY EOC
FRANKLIN COUNTY, FLORIDA

PREPARED FOR:

MR. JOSH BAXLEY, P.E.
DEWBERRY ENGINEERS INC.
324 MARINA DRIVE
PORT ST. JOE, FLORIDA 32456

429 FLORIDA AVENUE
LYNN HAVEN, FLORIDA 32444
TELEPHONE (850) 258.0994
Magnum.engineering@yahoo.com

MAGNUM ENGINEERING INC
GEOTECHNICAL ENGINEERING CONSULTANTS

August 13, 2025

Mr. Josh Baxley, P.E.
Dewberry Engineers Inc.
324 Marina Drive
Port St. Joe, Florida 32456

SUBJECT: Franklin County EOC – Geotechnical Services
Franklin County, Florida
Project Number: M125-106-139

Dear Mr. Baxley:

This letter forwards the results of our Geotechnical exploration for the subject development in Apalachicola, Florida. Our exploration consisted of Three (3) 20-feet deep Standard Penetration (SPT) borings in the proposed building footprint, Four (4) 5-feet deep hand auger borings in the proposed roadway and stormwater management area, and One (1) Double Ring Infiltrometer Test (DRI) in the proposed stormwater management area. The subsurface exploration was conducted to provide information needed in the design of an effective pavement and foundation system for the referenced development as well as to provide soil related information to aid in the design of an effective stormwater management area in accordance with ERP and/or local municipal regulations.

Upon completion of our field testing, the samples were brought back to the office for visual inspection, classification, and analysis by our engineering staff.

Project Information

The subject site is located west of County Road 65 roughly 1180 feet north of the intersection with Teresa Avenue in Eastpoint, Florida. At the time of our exploration, the site was undeveloped and wooded. Select clearing was provided by Franklin County to provide access to boring locations with our track mounted drill rig.

We understand that the proposed structure will be a two-story ICF or CMU structure. Associated pavement and stormwater management areas will also be constructed. No Structural or grading information was available at the writing of this report. For engineering purposes, we have assumed wall loads to be less than 5 kips per linear feet. Additionally, we estimate less than 3 feet of fill will be needed to achieve the finished floor elevation.

If any of the above information is incorrect, please inform Magnum Engineering, Inc. so that we can review and update our recommendations, as needed.

Subsurface Conditions

Figure #1 shows the Boring Location Plan and Figure #2 shows the Logs of Borings for Standard Penetration Test borings B-1 through B-3 and hand auger borings HA-1 through HA-4. The test locations were established in the field using the provided site plan with LAT/LONG coordinates and our hand-held GPS unit. Therefore, the borings should be considered only as accurate as the GPS unit (+/-9 feet).

The Standard Penetration Test (SPT) borings were performed in accordance with ASTM D-1586. The borings were advanced using mud-rotary techniques. Split-Spoon samples were obtained using a 2-inch O.D. split spoon sampler every two feet in the top 10 feet of the borings and every 5 feet thereafter until the boring termination depth was reached.

The soil types encountered at the specific boring locations are presented in the form of Logs of Borings, and are attached as Figure 2. The stratifications presented is based on visual examination of the recovered soil samples and the interpretation of field logs by a geotechnical engineer. Included with the profiles are the N-values for the SPT borings. The N-values have been empirically correlated with various soil properties and are considered to be indicative of the relative density of cohesionless soils and the consistency of cohesive soils. Also included with the Logs of Boring are the groundwater levels measured at the time the borings were performed.

Borings

The building borings (B-1 through B-3) generally encountered very loose to dense clean fine sands and slightly silty fine sands, typically increasing in density with depth, from the ground surface to the boring termination depth of 20 feet below existing grade

The auger borings (HA-1 through HA-4) generally encountered slightly silty fine sands from the ground surface to the boring termination depth of 5 feet below existing grade

The above subsurface descriptions are of a generalized nature, provided to highlight the major soil strata encountered. The Logs of Boring should be reviewed for specific subsurface conditions at each boring location. The stratifications shown on the Logs of Boring represent the subsurface conditions at the actual boring locations only, and variations in the subsurface conditions can and may occur between boring locations and should therefore be expected. The stratifications represent the approximate boundary between subsurface materials, and the transitions between strata may be gradual.

Please refer to the attached logs of borings (Figure #2) for a more detailed description of the soils encountered in our borings.

Groundwater Conditions

Groundwater was encountered between 2.7 feet and 3.0 feet below existing grade at the time of drilling (July 28, 2025), which was during a period of normal seasonal rainfall. By definition, the normal seasonal high groundwater table elevation is the highest level of the saturated zone in the soil during a year with normal rainfall. The procedure used in estimating the seasonal high groundwater table is based on adjusting the existing groundwater table encountered upward or downward, taking into consideration factors such as antecedent rainfall, redoximorphic features (identifying soil mottling) and vegetative indicators. **Based on the resources and methodology provided, we have estimated the seasonal high groundwater table at each boring location.** Please refer to the table provided below for groundwater data at each boring location.

GROUNDWATER DATA

TEST LOCATION	DEPTH TO EXISTING GROUNDWATER TABLE (ft) Below existing grade	DEPTH TO ESTIMATED SEASONAL HIGH GROUNDWATER TABLE (ft) Below existing grade
B-1	3.0 feet	1.5 feet
B-2	3.0 feet	1.5 feet
B-3	3.0 feet	1.5 feet
HA-1	2.7 feet	1.5 feet
HA-2	3.0 feet	1.5 feet
HA-3	3.0 feet	1.5 feet
HA-4	3.0 feet	1.5 feet

Large fluctuations are possible under severe weather conditions. We recommend that the Contractor verify the actual groundwater levels at the time of construction to determine potential impacts groundwater will have on construction procedures.

CONCLUSIONS AND RECOMMENDATIONS

General

The following geotechnical related design recommendations have been developed on the basis of the previously described project characteristics and subsurface conditions encountered. If there are any changes in these project criteria, including project location on the site, a review should be made by Magnum Engineering to determine if modifications to the recommendations are warranted.

Once final design plans and specifications are available, a general review by Magnum Engineering is recommended as a means to check that the evaluations made in preparation of this report are correct and that earthwork and foundation recommendations are properly interpreted and implemented

Site/Soil Preparation Recommendations

Clearing and Grading

All topsoil and unsuitable materials should be removed to a distance of 5 feet beyond the perimeter of construction. Unsuitable materials include topsoil, concrete, any soft unstable material and miscellaneous (non-soil) fill. Removal of trees and shrubs should include removal of the root system down to finger-sized roots.

Upon completion of the clearing and grading, the top 12-inches of exposed subgrade soils should be compacted to at least 95 percent of the modified Proctor maximum dry density (ASTM D-1557).

Care should be exercised during grading and fill placement operations. The combination of heavy construction equipment traffic and excess surface moisture can cause pumping and deterioration of the near surface soils. The severity of this potential problem depends to a great extent on the weather conditions prevailing during construction. The contractor should exercise discretion when selecting equipment sizes and also make a concerted effort to control surface water while the subgrade soils are exposed. If such problems do arise, the operations in the affected area should be halted and the geotechnical engineer contacted to evaluate the condition.

Engineered Fill

Engineered fill placed beneath floor slabs and footings should be compacted to at least 95 percent of the modified Proctor maximum dry density (ASTM D-1557). In addition, the top foot of the exposed in-place soils should also be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D1557). Engineered fill material should be free of significant organic matter or debris, should not contain clay and have a uniform composition. Preferably, the soil should have less than 15 percent passing a No. 200 sieve.

Compaction should be accomplished by placing the fill in lifts and mechanically compacting each lift to at least the specified dry density. The maximum lift thickness depends upon the soil type, moisture content, specified compaction and compaction equipment available. In general, loose lift thicknesses of about 12 inches should be used for sandy soils when utilizing large equipment and 4 inches when hand operated equipment is used. Compaction of any fill by flooding should not be permitted.

All foundation excavations should be evaluated by the geotechnical engineer or his representative to check that the bearing materials will provide suitable foundation support. If unsuitable materials are encountered, the geotechnical engineer would determine appropriate remedial alternatives.

If possible, all concrete for foundations should be placed within 24 hours from the time the excavation is made. If this is not practical, the foundation excavation should be adequately protected. Soils exposed in the bases of all excavation should be protected against any detrimental change in conditions such as from disturbance and rain. Surface run-off water must be drained away from all excavations and not be allowed to pond.

Foundations

With the aforementioned soil compaction improvements, the soils should be capable of supporting the proposed structure on shallow foundations. The existing soils and fill soils should be prepared as previously recommended to improve foundation support and reduce total and differential settlements.

Based on the anticipated construction and site preparation requirements recommended herein, it is our opinion that the building can be supported on shallow foundations designed for a net maximum allowable bearing pressure of 2,000 pounds per square foot (psf). The following geotechnical related recommendations should be used for design and construction of the foundations.

- The foundation and floor slab should bear on properly improved existing subgrade or on properly placed and compacted cohesionless (sand) fill.

- The soils to a depth of one foot below the footings and floor slabs and all new fill should be compacted to 95 percent of the soil's Modified Proctor (ASTM D-1557) density.

- Exterior footings should be embedded so that the bottom of the foundation is a minimum of 18 inches below the adjacent compacted grades.

- Strip or wall footings should be a minimum of 16 inches wide and pad or column footings (if applicable) should be a minimum of three feet wide. The minimum footing sizes should be used regardless of whether or not the foundation loads and allowable bearing pressures dictate a smaller size.

- All footings should be constructed in a "dry" fashion.

- Structural elements should be centered on the footings such that the load is transferred evenly unless the footings are proportioned for eccentric loads.

Settlement

The majority of expected settlement should occur during construction as dead loads are imposed. Total settlements of footings are estimated to be less than 1 inch, with differential settlement on the order of 50 percent of the total settlements. Total and differential settlements of these magnitudes are usually considered tolerable for the anticipated construction; however, the tolerance of the proposed structures to the predicted total and differential settlements should be confirmed by the structural engineer.

Floor Slab Recommendations

The subgrade should be covered by an effective vapor barrier to reduce the loss of water from the plastic concrete into the subgrade soils and to reduce the possibility of slab dampness due to moisture.

Pavements

Initially, the pavement areas should be cleared, grubbed, and stripped of topsoil and other deleterious material. Special care should be taken to ensure that all stumps and root systems are removed from beneath the proposed pavement areas.

Prior to placing fill soils, where applicable, the top of the ground surface should be compacted to a minimum soil density of 95% of the Modified Proctor Test (ASTM D1557). Structural fill soils should be placed in maximum 12-inch lifts and compacted to a minimum soil density of 95% of the Modified Proctor Test (ASTM D1557). The top 12 inches of subgrade should be compacted to a minimum soil density of 98% of the Modified Proctor Test (ASTM D1557). The top 12 inches of subgrade should have a minimum LBR value of 40. We recommend that structural fill soils, where planned, have a minimum LBR of 40.

Based on the subsurface conditions encountered in the test borings, we recommend using a graded aggregate base (i.e. limerock or crushed concrete). The base course should be compacted to a minimum soil density of 98% of the Modified Proctor Test (ASTM D1557). We recommend the base course have a minimum LBR of 100.

Without benefit of traffic loads, volumes, and serviceability parameters, a pavement section cannot be designed. However, typical parking lots in the local area generally consist of a minimum of 1½ inches of FDOT Superpave Mix SP-12.5 or SP-9.5 asphaltic concrete and a minimum of 6 inches of base. Moderate duty traffic areas (e.g. main entrance areas) typically have a minimum pavement section consisting of 2 inches of FDOT Superpave Mix SP-12.5 asphaltic concrete and 8 inches of base.

While specific traffic loads and volumes for the project have not been provided, we are providing recommended light-duty and medium-duty pavement sections, which have been successfully utilized for this type of commercial development in the Northwest Florida area.

Light Duty (General roadway and parking areas)

- 1 ½ inches Asphalt Concrete (FDOT Superpave Mix SP-12.5 or SP-9.5)
- 6 inches Crushed Limerock or Graded Aggregate Base (minimum LBR 100)
- 12 inches stabilized subgrade (minimum LBR 40)

Medium Duty (Entrance Lanes)

- 2 inches Asphaltic Concrete (FDOT Superpave Mix SP-12.5)
- 8 inches Crushed Limerock or Graded Aggregate Base (minimum LBR 100)
- 12 inches Stabilized Subgrade (minimum LBR 40)

The above recommended pavement sections represent minimum design thicknesses and, as such, periodic maintenance should be anticipated. Also, these recommended pavement sections should be confirmed or modified by your Civil Engineer, based on actual traffic and the owner's requirements. The pavement section materials and construction should comply with the Florida DOT and local municipality requirements.

Double Ring Infiltrometer Test

One (1) Double Ring Infiltrometer test was performed in the field in general accordance with the procedures outlined in ASTM D-3385, ``Infiltration Rate of Soils in Field using Double Ring Infiltrometers''. Testing consisted of initially clearing all surface vegetation and topsoil from within the test area. The Infiltration test was performed approximately 1.0 feet below existing grade at location DRI-1. The outer ring, which is approximately 24 inches in diameter, was then driven to a depth of 6 inches below the exposed ground surface. The inner ring, approximately 12 inches in diameter, was then centrally located within the outer ring and driven to a depth of 2 inches. The two rings were then simultaneously filled with water to a height of 4 inches above the exposed ground surface test soils. The water level was maintained at this height throughout the test period, with the required amount of water added to maintain this level in both rings recorded at time intervals of 5 minutes.

The infiltration rate for the inner ring and the annular space between the rings is determined by dividing (a) the water volume used (within each specific area) during the stabilized flow period of the test, by (b) the specific area and (c) the time interval. Infiltration rates are generally converted to units of inches per hour. The infiltration rate for the inner ring, if different than the infiltration rate of the annular area between the rings, according to ASTM, should be used as the infiltration rate for the soils.

INFILTRATION DATA

LOCATION	ORIENTATION	TEST DEPTH (feet)	SUSTAINED INFILTRATION RATE (in/hr)
DRI-1	$K_{V\ (unsaturated)}$	1.0	13.8* in/hr

***Note: The above infiltration rate has not been factored and is up to the designer to apply an appropriate factor of safety.**

We recommend using a transformation ratio of 1 horizontal to 1 vertical (i.e. the estimated ratio of horizontal to vertical permeability).

ENVIRONMENTAL RESOURCE PERMITTING (ERP) DESIGN PARAMETERS

DESCRIPTION	LOCATION	DESIGN PARAMTER
SUSTAINED INFILTRATION RATE (K_{VU})	DRI-1	13.8 IN/HR*
TEST DEPTH	DRI-1	1.0 feet
FILLABLE POROSITY	DRI-1	30%
DEPTH TO EXISTING GROUNDWATER TABLE	DRI-1	2.7 FT BELOW EXISTING GRADE
DEPTH TO ESTIMATED SEASONAL HIGH GROUNDWATER TABLE	DRI-1	1.5 FT BELOW EXISTING GRADE
DEPTH TO CONFINING LAYER	DRI-1	>10.0 FEET**

***** The above infiltration rate has not been factored and it is up to the designer to apply an appropriate factor of safety.

** Based on boring B-1 through B-3 performed on site.

Warranty and Limitations of Study

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either expressed or implied. Magnum Engineering, Inc. is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

Soil conditions at other locations may differ from those encountered in the test borings, and the passage of time may cause the soils conditions to change from those described in this report.

This report is intended for use by the designers of this project. While we have no objections to it being provided for review by parties to this project, it is not a specification document and is not to be used as a part of the specifications. If desired, we can assist in the development of specifications for this project based upon our exploration.

The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or his representative is therefore considered necessary to verify the subsurface conditions and to check that the soils connected construction phases are properly carried out. If significant variations or changes are in evidence, it may be necessary to reevaluate the recommendations in this report.

Furthermore, if the project characteristics are altered significantly from those discussed in this report, if the project information contained in this report is incorrect or if additional information becomes available, a review must be made by this office to determine if any modifications in the recommendations will be necessary.

We hope this letter provides sufficient information for the present. If you have any questions or comments, please feel free to call.

Sincerely,
MAGNUM ENGINEERING. INC.

JAMES T. VICKERS, P.E.
Sr. Geotechnical Engineer
Florida Registration # 56813

JAMES T. VICKERS LICENSE No. 56813 STATE OF FLORIDA PROFESSIONAL ENGINEER

James T. Vickers
Digitally signed by James T. Vickers
Date: 2025.08.13 14:11:28 -05'00'

Attachments: Figure #1 – Boring Location Plan
Figure #2 - Logs of Borings
Figure #3 – Double Ring Infiltrometer Test Results

This item has been digitally signed and sealed by James T. Vickers, P.E. on 8/13/2025

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

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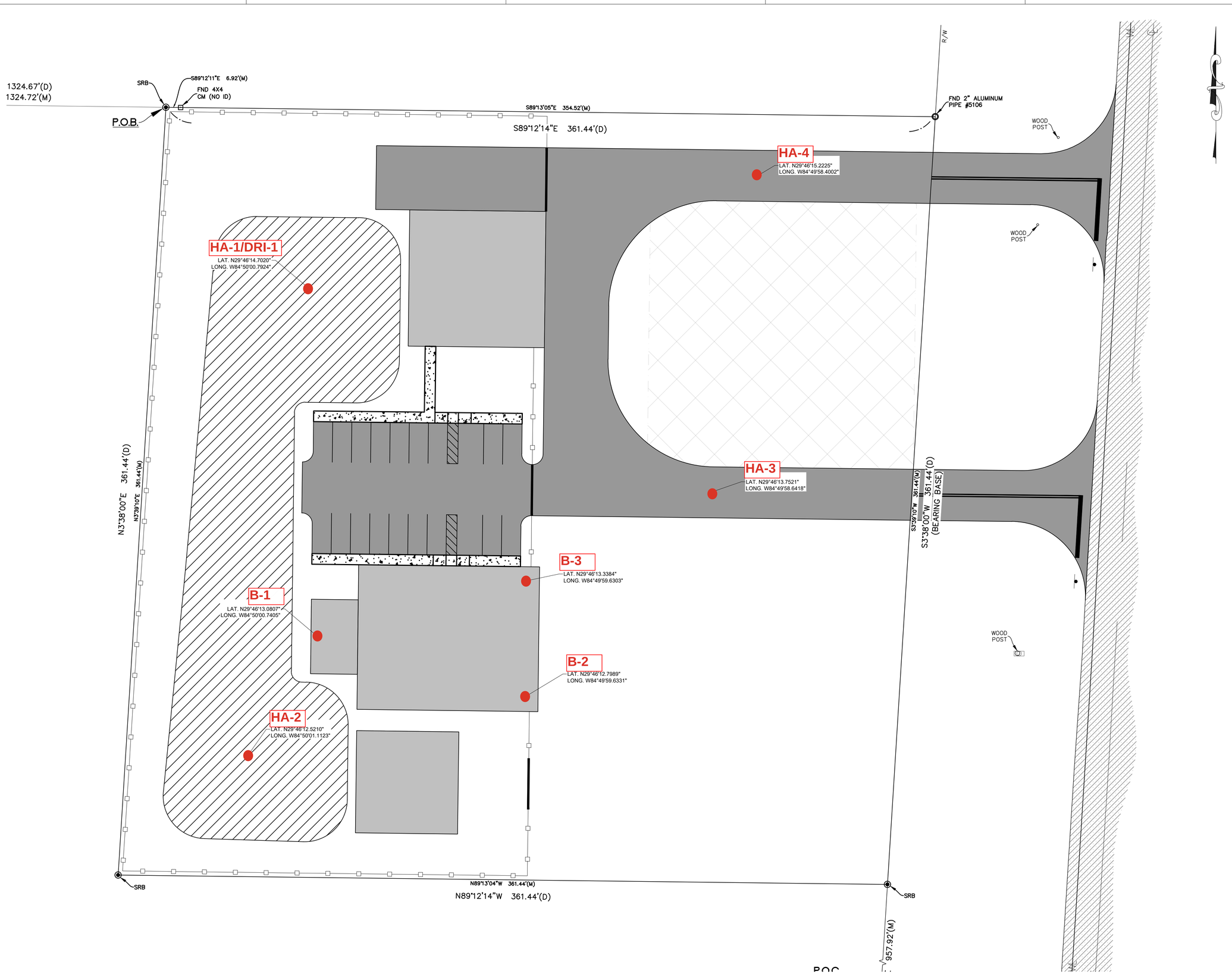
GEOTECHNICAL ENGINEERING CONSULTANTS

BORING LOCATION PLAN

FIGURE # 1



Dewberry

324 Marina Drive
Port St. Joe, FL 32456
850.227.7200

FRANKLIN COUNTY
EMERGENCY OPERATIONS CENTER
EASTPOINT
FRANKLIN COUNTY

SEAL

JOSHUA BRYAN BAXLEY, P.E. 67529
EB 0008794

PRELIMINARY DOCUMENTS
NOT FOR CONSTRUCTION

SCALE

0' 10' 20' 40'
SCALE: 1" = 20'

REVISIONS

NO.	DESCRIPTION	DATE

DRAWN BY	KDG
APPROVED BY	JBB
CHECKED BY	JBB
DATE	MAY 2025

TITLE

BORE EXHIBIT

PROJECT NO. 50186052

EXHIBIT

SHEET NO.

June 19, 2025 (13:28:26 EST)
Y:\CIVIL PROJECTS\50186052 FRANKLIN CO EMERGENCY OPERATIONS CENTER\CIVIL3D\FOLDER_PROPOSED\50186052 FRANKLIN CO EMERGENCY OPERATIONS CENTER.DWG BORE EXHIBIT BY: BROCHER

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LOGS OF BORINGS

FIGURE # 2

Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER B-01

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Standard Penetration Test (SPT)
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 3.0 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES _____
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0		Gray Slightly Silty Fine SAND (SP-SM)	SS 1		1-1-1-2 (2)							
		Gray/Tan Slightly Silty Fine SAND (SP-SM) ▽	SS 2		2-2-1-2 (3)							
5		Gray Fine SAND (SP)	SS 3		3-4-7-9 (11)							
			SS 4		5-8-11-13 (19)							
		Gray/Tan Slightly Silty Fine SAND (SP-SM)	SS 5		7-10-12-15 (22)							
10												
		Brown Slightly Silty Fine SAND (SP-SM)	SS 6		9-12-15 (27)							
15												
		Dark Gray Slightly Silty Fine SAND (SP-SM)	SS 7		15-18-23 (41)							
20		Boring Termination Depth at 20.0 feet.										

Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER B-02

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Standard Penetration Test (SPT)
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 3.0 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES _____
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0		Gray Slightly Silty Fine SAND (SP-SM)	SS 1		1-1-3-3 (4)							
		Gray/Tan Slightly Silty Fine SAND (SP-SM) ▽	SS 2		4-5-5-5 (10)							
5		Gray Slightly Silty Fine SAND (SP-SM)	SS 3		4-5-7-8 (12)							
		Gray Fine SAND (SP)	SS 4		4-5-9-11 (14)							
		Gray/Brown Slightly Silty Fine SAND (SP-SM)	SS 5		10-12-9-9 (21)							
10												
		Brown Slightly Silty Fine SAND (SP-SM)	SS 6		9-12-14 (26)							
15												
			SS 7		19-17-15 (32)							
20		Boring Termination Depth at 20.0 feet.										

Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER B-03

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Standard Penetration Test (SPT)
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 3.0 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0		Gray/Brown Slightly Silty Fine SAND (SP-SM)	SS 1		1-2-3-5 (5)							
		Gray Slightly Silty Fine SAND (SP-SM) ▽	SS 2		4-5-7-8 (12)							
5			SS 3		5-7-9-11 (16)							
		Gray/Tan Fine SAND (SP)	SS 4		6-8-11-13 (19)							
		Dark Gray/Brown Slightly Silty Fine SAND (SP-SM)	SS 5		5-7-11-13 (18)							
10												
		Brown Slightly Silty Fine SAND (SP-SM)	SS 6		12-14-17 (31)							
15												
			SS 7		20-25-31 (56)							
20		Boring Termination Depth at 20.0 feet.										

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Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER HA-01

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Hand Auger Boring
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 2.7 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Gray Slightly Silty Fine SAND (SP-SM)										
2.5		Gray/Brown Slightly Silty Fine SAND (SP-SM) ▽	AU									
5.0		Boring Termination Depth at 5.0 feet.										

GEOTECH BH COLUMNS FRANKLIN EOC 2025.GPJ GINT STD US LAB.GDT 7/30/25

Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER HA-02

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Hand Auger Boring
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 3.0 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Gray Slightly Silty Fine SAND (SP-SM)										
2.5		Gray/Brown Slightly Silty Fine SAND (SP-SM) ▽	AU									
5.0		Boring Termination Depth at 5.0 feet.										

GEOTECH BH COLUMNS FRANKLIN EOC 2025.GPJ GINT STD US LAB.GDT 7/30/25

Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER HA-03

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Hand Auger Boring
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 3.0 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Gray Slightly Silty Fine SAND (SP-SM)										
2.5		Gray/Brown Slightly Silty Fine SAND (SP-SM) ▽	AU									
5.0		Boring Termination Depth at 5.0 feet.										

GEOTECH BH COLUMNS FRANKLIN EOC 2025.GPJ GINT STD US LAB.GDT 7/30/25

Magnum Engineering, Inc.
429 Florida Avenue
Lynn Haven, Florida 32444
Telephone: 8502658332

BORING NUMBER HA-04

CLIENT Dewberry Engineers Inc
PROJECT NAME Franklin EOC
PROJECT NUMBER M125-106-139
PROJECT LOCATION Eastpoint, Florida
DATE STARTED 7/28/25 **COMPLETED** 7/28/25
GROUND ELEVATION _____ **HOLE SIZE** _____
DRILLING CONTRACTOR GeoDrill Tech, LLC
GROUND WATER LEVELS:
DRILLING METHOD Hand Auger Boring
▽ **DEPTH TO GROUNDWATER AT TIME OF DRILLING** 3.0 ft
LOGGED BY J. Governale **CHECKED BY** J. Vickers
ESTIMATED SEASONAL HIGH GWT ---
NOTES _____
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	ATTERBERG LIMITS: LIQUID LIMIT	ATTERBERG LIMITS: PLASTIC LIMIT	ATTERBERG LIMITS: PLASTICITY INDEX	FINES CONTENT (%)
0.0		Gray/Brown Slightly Silty Fine SAND (SP-SM)										
2.5		Gray Slightly Silty Fine SAND (SP-SM) ▽	AU									
5.0		Boring Termination Depth at 5.0 feet.										

MAGNUM ENGINEERING INC
GEOTECHNICAL ENGINEERING CONSULTANTS

DOUBLE RING INFILTROMETER FIELD TEST RESULTS

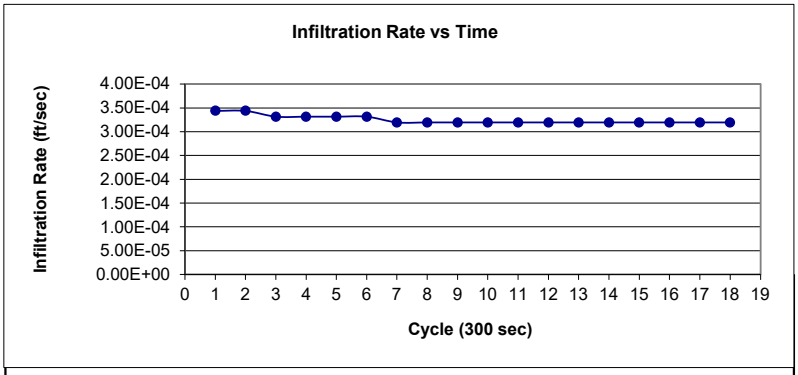
FIGURE # 3

MAGNUM ENGINEERING INC
GEOTECHNICAL ENGINEERING CONSULTANTS

Double-Ring Field Infiltration Test

Test Location:	DRI-1		
Project Name:	Franklin EOC		
Project Location:	Eastpoint, Florida		
Test Depth:	1.0 ft		
Depth to GWT:	2.7 ft		
Inner Ring Diameter:	12 in	0.3048 m	
Outer Ring Diameter:	24 in	0.6096 m	
Pre-Saturation	30 min		
Area Outer Ring:	3.1416 ft^2	0.00202683 m^2	
Area Inner Ring:	0.7854 ft^2	0.00050671 m^2	
Net Outer Ring Area:	2.3562 ft^2	0.00152013 m^2	

	Inner Ring		
Cycle	ElapTime (sec)	Vol Used (in^3)	Infiltration Rate (ft/sec)
1	300	140	3.44E-04
2	300	140	3.44E-04
3	300	135	3.32E-04
4	300	135	3.32E-04
5	300	135	3.32E-04
6	300	135	3.32E-04
7	300	130	3.19E-04
8	300	130	3.19E-04
9	300	130	3.19E-04
10	300	130	3.19E-04
11	300	130	3.19E-04
12	300	130	3.19E-04
13	300	130	3.19E-04
14	300	130	3.19E-04
15	300	130	3.19E-04
16	300	130	3.19E-04
17	300	130	3.19E-04
18	300	130	3.19E-04
Results	Sustained Rate	132	3.25E-04



Infiltration Rate: **9.73E-03 cm/sec** **13.8 in/hr**