

Callaway FSER

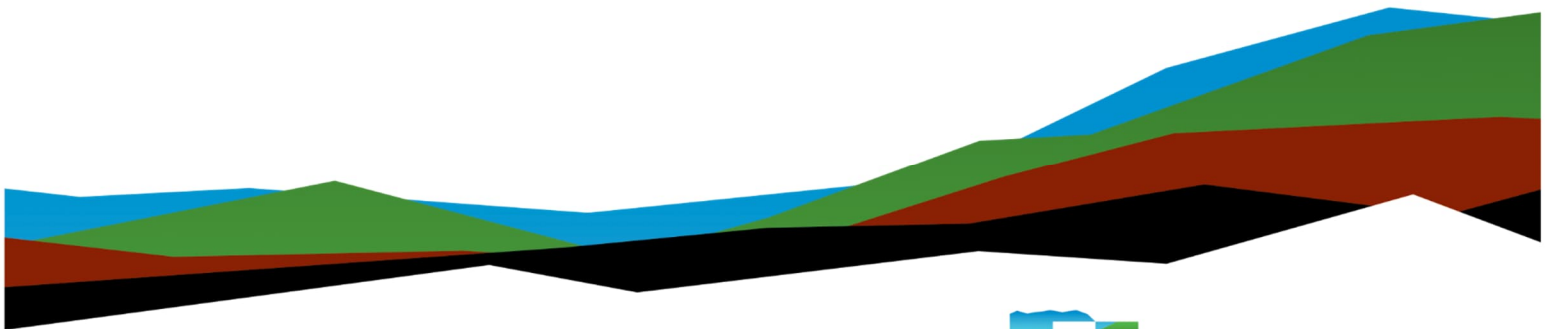
Geotechnical Engineering Report

Callaway, Florida

October 27, 2025 | Terracon Project No. HF255059

Prepared for:

Bay Hospital, Inc.
One Park Plaza
Nashville, Tennessee 37203



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October 27, 2025

Bay Hospital, Inc.
One Park Plaza
Nashville, Tennessee 37203

Attn: Bay Hospital, Inc.
C/O George Huddleston, P.E.
P: 689-219-8901
E: Ghuddleston@catalyst-dg.com

Re: Geotechnical Engineering Report
Callaway FSER
US 98 & E 11th Street
Callaway, Florida
Terracon Project No. HF255059

Dear Mr. Huddleston:

We have completed the scope of Geotechnical Engineering services for the above referenced project in general accordance with Terracon Proposal No. PHF255059 dated August 20, 2025. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of foundations, floor slabs, and pavements for the proposed project.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon

Joshua C.S. Rakestraw, P.E.
Senior Staff Engineer

Dustin Travis Mills, P.E.
Senior Engineer
Florida PE No. 83656

This document has been digitally signed and sealed by Dustin T. Mills, P.E. on the date adjacent to the seal. 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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[Exploration and Testing Procedures](#)

[Site Location and Exploration Plans](#)

[Exploration and Laboratory Results](#)

[Supporting Information](#)

Note: This report was originally delivered in a web-based format. **Blue Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the  Terracon logo will bring you back to this page. For more interactive features, please view your project online at client.terracon.com.

Refer to each individual Attachment for a listing of contents.

Report Summary

Topic ¹	Overview Statement ²
<p>Project Description</p>	<p>The project includes the addition of a free-standing emergency room to a currently undeveloped lot. The site is planned to include associated drive aisles and parking stalls, an approximate 7,200 square foot stormwater management facility, and a generator and dumpster enclosure.</p>
<p>Geotechnical Characterization</p>	<p>The subsurface conditions underlying the site include very loose to very dense sandy soils from the existing ground surface to the deepest boring termination depth of 35 feet. The surficial soils included heavy root mat and organic silt that should be removed. Multiple borings exhibited soft silty to clayey soils with some organic material present at depths between 8 and 20 feet below ground surface (bgs). Groundwater depths in the borings ranged from about 5 to 8 feet below the existing ground surface.</p> <p>Although the deeper organic-laden soils represent a potential long term settlement risk for the proposed development, it is our opinion that this material can remain in place beneath the new pavements and building when supported by shallow foundations with acceptable long-term performance if prepared in accordance with this report. A surcharge load should be placed as early as possible in the construction process to help precompress the deeper organic material prior to initiating vertical construction. A settlement monitoring period of about 6 weeks is recommended to help confirm that settlement of the grading fill has stabilized.</p>
<p>Earthwork</p>	<p>The underlying clean sands can be reused as structural fill if necessary as long as they meet the requirements outlined in the Earthwork Section of this report. The surficial sands that do not include heavy root mat or organic silts should be densified using a drum roller in static mode to avoid excess moisture being drawn up from the shallow groundwater table. We expect imported fill will be required to achieve design grading requirements including acceptable separation between seasonal high groundwater levels and the pavement base.</p>
<p>Shallow Foundations</p>	<p>Shallow foundations are recommended for building support Allowable bearing pressure: 2,500 psf Expected settlements: < 1-inch total, < 3/4-inch differential</p>

Topic ¹	Overview Statement ²
Pavements	<p>With subgrade prepared as noted in Earthwork.</p> <p><u>Asphaltic Concrete Sections:</u></p> <ul style="list-style-type: none"> ■ Light Duty: 1.5" ACC over 6" aggregate base ■ Medium Duty: 2.5" ACC over 8" aggregate base <p><u>Portland Cement Concrete Sections (optional aggregate base):</u></p> <ul style="list-style-type: none"> ■ Light Duty: 4" PCC ■ Medium Duty: 5" PCC ■ Garbage Truck: 6.5" PCC
General Comments	<p>This section contains important information about the limitations of this geotechnical engineering report.</p>

1. If the reader is reviewing this report as a pdf, the topics above can be used to access the appropriate section of the report by simply clicking on the topic itself.
2. This summary is for convenience only. It should be used in conjunction with the entire report for design purposes.

Introduction

This report presents the results of our subsurface exploration and Geotechnical Engineering services provided for the proposed Free Standing Emergency Room (FSER) to be located along US 98 & E 11th Street in Callaway, Florida. The purpose of these services was to provide information and geotechnical engineering recommendations relative to the following:

- Subsurface soil conditions
- Groundwater conditions
- Site preparation and earthwork
- Dewatering considerations
- Foundation design and construction
- Pavement design and construction
- Stormwater parameters

The geotechnical engineering scope of services for this project included the advancement of 12 standard penetration test (SPT) borings, one infiltration test, laboratory testing, engineering analysis, and preparation of this report.

Drawings showing the site and boring locations are shown on the [Site Location](#) and [Exploration Plan](#), respectively. The results of the laboratory testing performed on soil samples obtained from the site during our field exploration are included on the boring logs and as a separate table in the [Exploration Results](#) section.

Project Description

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

- An updated site plan was provided for the establishment of exploration points.

Item	Description
Information Provided	An email request for proposal was provided by you on July 21, 2025. The request included a conceptual plan drawing of the planned layout.

Item	Description
Project Description	The project includes the addition of a free-standing emergency room to a currently undeveloped lot. The site is planned to include associated drive aisles and parking stalls, an approximate 7,200 square foot stormwater management facility, and a generator and dumpster enclosure.
Proposed Structure	Structures associated with the project include an approximate 10,860 square foot building to serve as a new emergency room. It is anticipated that the building will be single story with load bearing walls and soil-supported floor slabs.
Finished Floor Elevation	Not provided.
Maximum Loads	<p>Anticipated structural loads were not provided. In the absence of information provided by the design team, we will use the following loads in estimating settlement based on our experience with similar projects:</p> <ul style="list-style-type: none"> ■ Columns: 75 kips ■ Walls: 3 kips per linear foot (klf) ■ Slabs: 150 pounds per square foot (psf)
Grading/Slopes	<p>The finished floor elevation or grading plans were not provided. Based on the topography, we assume up to approximately 2 feet of earthwork fill will be required to develop final grade, excluding remedial grading requirements.</p> <p>Final slopes are planned with a maximum height of 2 feet and an inclination of 3H: 1V (Horizontal: Vertical) or flatter.</p>
Below-Grade Structures	None Anticipated
Free-Standing Retaining Walls	None Anticipated
Pavements	<p>Paved driveway and parking will be constructed on approximately 1 acre of the parcel.</p> <p>Traffic patterns, vehicle types, and a preferred pavement surfacing have not been identified to us as part of the preliminary information. Both asphalt and concrete surfacing are common in the area for projects of this nature. In our pavement designs, we will assume a 20-year design life and normal vehicle/traffic patterns for this type of development.</p>
Stormwater	Site stormwater runoff is anticipated to be treated on-site in a dry retention facility with a pond bottom no more than about 3 feet below existing site grade.

Terracon should be notified if any of the above information is inconsistent with the planned construction (e.g., maximum loads and limits of grading) as modifications to our recommendations may be necessary.

Site Conditions

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The project is located at US 98 & E 11th Street in Callaway, Florida, on approximately 3.7 acres. See Site Location
Existing Improvements	Heavily wooded with dense underbrush.
Existing Topography	The site is relatively flat with elevations ranging from EL +33 feet to EL +30 feet (NAVD88) across the entire site.

Geotechnical Characterization

Soil Conditions

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of the site. Conditions observed at each exploration point are indicated on the individual logs. The individual logs can be found in the [Exploration Results](#) and the GeoModel can be found in the [Figures](#) attachment of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	Sand	Sand with varying amounts of silt
2	Clayey Sand	Clayey sand with varying amounts of silt
3	Clay	Clay with varying amounts of sand

Model Layer	Layer Name	General Description
4	Organic Silt	Silt with varying amounts of organics

The subsurface was generally characterized by mixed geomodel layers throughout the site. Geomodel layers were not continuous across the site. Generally the upper 2 to 4 feet consisted of some borings with organic silts (model layer 4). Below the surficial organic silts were intermixed sands and clayey sands (model layers 2 and 3) to the termination depth. There were isolated areas of clays at a depth of 18.5 to 23.5 feet. Building borings exhibited very loose to loose soils (regardless of geomodel) grouping at depths between about 8 and 23.5 feet bgs.

Groundwater

The groundwater levels observed during our exploration ranged from a depth of about 5 to 8 feet-bgs. The groundwater observations are illustrated on the [GeoModel](#) and annotated on the boring logs in [Exploration Results](#).

Groundwater level fluctuations may occur due to seasonal variations in the amount of rainfall, runoff, and other factors not evident at the time the borings were performed. Long-term observations in piezometers or observation wells sealed from the influence of surface water are often required to define permanent groundwater levels. Therefore, groundwater levels during construction or at other times in the life of the structure may be different than the levels indicated on the boring logs, and the possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

Geotechnical Overview

The site appears suitable for the proposed construction based upon geotechnical conditions encountered in the exploration, provided that the recommendations provided in this report are implemented in the design and construction phases of this project.

The site is generally underlain by very loose to medium dense sands (Unified Soil Classification of SP, SM, and SC) to the deepest boring termination depth of 25 feet. Throughout the site, we encountered organic material within the soil strata at depths between 8 feet and 23.5 feet in the loose to very loose soils. We suspect these soil layers are a natural deposit resulting from dynamic depositional processes during formation of the gulf coastal shoreline of Florida over millennia since the last ice age. We have considered settlement potential of the deposit due to placement of grading fill and a surcharge load on the site and construction of the shallow foundation supported building and estimate that post construction settlements should be of tolerable magnitude with the

use of the surcharge program. Long term organic decay related compression and settlement of the organic soil layer is not expected to be significant at this site due to the depth of the deposit, relatively low organic content, and its location below the groundwater level which inhibits exposure of the layer to oxygen necessary for support of the organic decay process.

While significant new foundation stresses from the building are unlikely to extend to the depth of the organic soil deposit, placement of grading fill and surcharge load over the comparably large site area will add vertical stress to the potentially compressible silty to clayey layer and cause ground surface settlement. For this reason, we recommend that the required site grading fill and at least a 5-foot surcharge load be placed as early in the construction process as possible and monitored for settlement using three or four protected surface benchmarks established at the finished floor subgrade level within the building footprint to help confirm that settlement has stabilized before advancing vertical construction. The settlement plate devices should consist of wooden, or steel plates installed prior to fill and surcharge load placement with sheathed steel bars extending vertical to above the surcharge load. The elevation of the benchmarks should be determined at least 3 times each week by a registered surveyor and provided to the Geotechnical Engineer for review and to determine if vertical construction can proceed. These measurements should start after settlement plates are established and before fill placement. Proactive protection of the established benchmarks (with survey stakes and high visibility flagging for example) is crucial since disturbance of the monitoring points from construction activity would render the settlement monitoring data useless and likely require extension of the monitoring period. We recommend that penalties for disturbing the benchmarks be established and proactively communicated to site construction personnel so that the importance of protecting these monitoring elements is stressed. We expect that most of the fill related settlement will occur during the fill placement process and that the “hold” period for monitoring settlement will be no more than about two weeks. Construction of other site development features can occur during the building pad settlement monitoring period as long as the activity doesn’t result in disturbance of the monitoring points.

Following preloading of the building footprint with grading fill and surcharge load, the proposed structure can be supported on conventional isolated or continuous spread footings as described in [Shallow Foundations](#). The [Floor Slabs](#) section addresses slab-on-grade support of structure. The groundwater table should be considered during design and construction of the development. Where possible, we recommend a minimum separation of at least 24 inches between the groundwater level and the bottom of the base or subbase layer for slabs and pavements.

Some near surface soils at this site are considered suitable for reuse as structural fill. Soils that include organics should not be used as structural fill. In order to improve the density of loose soils, we recommend densifying the near surface soils with overlapping passes of

a vibratory drum roller. Site preparation recommendations, including subgrade improvement and fill placement, are provided in the [Earthwork](#) section.

Our opinion of pavement section thickness design has been developed based on our understanding of the intended use, assumed traffic, and subgrade preparation recommended herein using methodology contained in ACI and AASHTO publications and adjusted with consideration to local practice. The [Pavements](#) section includes minimum pavement component thickness.

The recommendations contained in this report are based upon the results of field and laboratory testing (presented in the [Exploration Results](#)), engineering analyses, and our current understanding of the proposed project. The [General Comments](#) section provides an understanding of the report limitations.

Earthwork

Earthwork is anticipated to include clearing and grubbing, excavations, and engineered fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations, floor slabs, and pavements.

Site Preparation

General Site Drainage

Site drainage measures should be implemented prior to or concurrent with initial mass grading and may include excavation of perimeter ditches with supplemental lateral ditches extending into the site, as required. The ditches should be constructed and maintained to gravity drain throughout the site preparation process. Failure to protect the subgrade soils and control surface water runoff can significantly impact the earthwork construction schedule and result in unnecessary reworking of the subgrade.

The Contractor should be prepared to cope with shallow groundwater conditions present at this site, see [Groundwater Considerations](#). Pumping equipment may be utilized if the collector ditch system cannot effectively gravity drain water away from the site, especially during the rainy season.

Stripping

Prior to placing fill, existing vegetation, topsoil, and root mats should be removed. Complete stripping of the topsoil and organic layers (Model Layer 4) should be performed in the proposed building and parking/driveway areas.

Surficial Soil Densification (Subgrade Preparation)

Throughout most of the project area, sandy surficial soils (Model Layer 1) are present. Sandy soils typically respond well to mechanical densification using a vibratory drum roller. This densification process, conducted prior to proofroll, will improve the uniformity of the subsurface, increase bearing capacity, and reduce settlement. The exposed sandy subgrade soils within 5 feet of the planned building and pavement areas should be compacted with at least eight overlapping passes of a vibratory drum roller. Selection of an appropriate vibratory roller will be dependent on the depth to groundwater at the time of construction and effectiveness of shallow groundwater control measures established. Use of a larger diameter/weight vibratory roller could result in pumping instability of the ground surface due to generation of excess pore water pressure in the near surface sandy soils. Initial compaction operations may need to be conducted with the roller in static mode until separation from the groundwater level is achieved with additional compacted grading fill. The initial roller passes should be divided into an equal number of passes in perpendicular directions. An initial test strip should be conducted and evaluated by the Geotechnical Engineer. If pumping or instability occurs, the Geotechnical Engineer may require static compaction, an initial bridge lift of clean sand, or other methods at the time of construction. A compaction criterion of about 95 percent of the native soil's maximum dry density (ASTM D1557) should be targeted to a depth of about 12 inches. The effectiveness of the densification will be dependent on the moisture content of the subsoils at the time of construction. Moisture conditioning of the soils will likely be required.

Proofrolling

Following the densification program and prior to any grading fill placement, the exposed subgrade soils should be proofrolled by the contractor and observed by Terracon personnel. Proofrolling may be accomplished using the previously described vibratory drum roller operating in static-only mode. Alternatively, heavy, rubber-tired construction equipment or a tandem-axle dump truck (loaded to a gross weight of at least 20 tons) may be used for this purpose. The proofroll vehicle should systematically traverse the entire project area with multiple overlapping passes. Areas excessively deflecting under the proofroll should be delineated and subsequently addressed by the Geotechnical Engineer. Excessively wet or dry material should either be removed, or moisture conditioned and recompacted.

Fill Material Types

Fill required to achieve design grade should be classified as structural fill and general fill. Structural fill is material used below, or within 10 feet of structures and pavements. General fill is material used to achieve grade outside of these areas.

Reuse of On-Site Soil: Excavated on-site soil is likely to be suitable for reuse as structural or general fill. Material property requirements for on-site soil for use as general fill and structural fill are noted in the table below:

Property	General and Structural Fill
Composition	Free of organic and otherwise deleterious material
Maximum particle size	3 inches
Fines content	Less than 15% Passing No. 200 sieve
Plasticity	Non plastic
GeoModel Layer Expected to be Suitable ¹	1

1. Based on subsurface exploration. Actual material suitability should be determined in the field at time of construction.

Imported Fill Materials: Imported fill materials should meet the following material property requirements. Regardless of its source, compacted fill should consist of approved materials that are free of organic matter and debris.

Soil Type ¹	USCS Classification	Acceptable Parameters (for Structural Fill)
Granular	SP, SP-SM	Less than 12% passing No. 200 sieve Non-plastic

1. Structural and general fill should consist of approved materials free of organic matter and debris. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to use on this site. Additional geotechnical consultation should be provided prior to use of uniformly graded gravel on the site.

Fill Placement and Compaction Requirements

Structural and general fill should meet the following compaction requirements.

Item	Structural Fill	General Fill
Maximum Lift Thickness	<ul style="list-style-type: none"> 12 inches or less in loose thickness when heavy, self-propelled compaction equipment is used 4 to 6 inches in loose thickness when lighter hand-guided equipment (e.g., jumping jack or plate compactor) is used 	Same as structural fill
Minimum Compaction Requirements ¹	<ul style="list-style-type: none"> 98% of max. in first 12 inches below foundations and within 1 foot beneath pavement base 95% of max. above foundations, below floor slabs, and more than 1 foot below finished pavement subgrade or foundations 	92% of max.
Water Content Range ^{1,2}	Granular: -3% to +3% of optimum	As required to achieve min. compaction requirements

1. Maximum density and optimum water content as determined by the modified Proctor test (ASTM D1557).
2. Specifically, moisture levels should be achieved and maintained low enough to allow for satisfactory compaction to be achieved without pumping when using suitable vibration compaction equipment.

Utility Trench Backfill

Any soft or unsuitable materials encountered at the bottom of utility trench excavations should be removed and replaced with structural fill or bedding material in accordance with public works specifications for the utility to be supported. This recommendation is particularly applicable to utility work requiring grade control and/or in areas where subsequent grade raising could cause settlement in the subgrade supporting the utility. Trench excavation should not be conducted below a downward 1:1 projection from existing foundations without engineering review of shoring requirements and geotechnical observation during construction.

On-site materials are considered suitable for backfill of utility and pipe trenches from 1 foot above the top of the pipe to the final ground surface, provided the material is free of organic matter and deleterious substances.

Trench backfills should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. Flooding or jetting for placement and compaction of backfill is not recommended.

Grading and Drainage

All grades must provide effective drainage away from the building during and after construction and should be maintained throughout the life of the structure. Water retained next to the building can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential floor slab and/or foundation movements, cracked slabs and walls, and roof leaks. The roof should have gutters/drains with downspouts that discharge onto splash blocks at a distance of at least 10 feet from the building.

Exposed ground should be sloped and maintained at a minimum 5% away from the building for at least 10 feet beyond the perimeter of the building. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After building construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted, as necessary, as part of the structure's maintenance program. Where paving or flatwork abuts the structure, a maintenance program should be established to effectively seal and maintain joints and prevent surface water infiltration.

Earthwork Construction Considerations

Shallow excavations for the proposed structure are anticipated to be accomplished with conventional construction equipment. Upon completion of filling and grading, care should be taken to maintain the subgrade water content prior to construction of grade-supported improvements such as floor slabs and pavements. Construction traffic over the completed subgrades should be avoided. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade desiccates, saturates, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompact prior to floor slab construction.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety or the contractor's activities; such responsibility shall neither be implied nor inferred.

Excavations or other activities resulting in ground disturbance have the potential to affect adjoining properties and structures. Our scope of services does not include review of

available final grading information or consider potential temporary grading performed by the contractor for potential effects such as ground movement beyond the project limits. A preconstruction/ precondition survey should be conducted to document nearby property/infrastructure prior to any site development activity. Excavation or ground disturbance activities adjacent or near property lines should be monitored or instrumented for potential ground movements that could negatively affect adjoining property and/or structures.

Surcharge Loading Placement

Although the deeper organic laden soils represent a potential long term settlement risk for the proposed development, it is our opinion that this material can remain in place beneath the new pavements and building when supported by shallow foundations with acceptable long-term performance. A surcharge load should be placed as early as possible in the construction process to help precompress the deeper organic material prior to initiating vertical construction. A settlement monitoring period of about 1 month is recommended to help confirm that settlement of the grading fill has stabilized. The soil used for the surcharge should be a minimum of 100 pcf density and 5 feet high above proposed grade and finished floor to provide adequate loading.

We recommend that the required site grading fill and surcharge load be monitored for settlement using three or four protected surface benchmarks established at the finished floor subgrade level within the building footprint to help confirm that settlement has stabilized before advancing vertical construction. The settlement plate devices should consist of wooden or steel plates installed prior to fill and surcharge load placement with steel bars extending vertical to above the surcharge load. The elevation of the benchmarks should be determined at least 3 times per week by a registered surveyor and provided to the Geotechnical Engineer for review and to determine if vertical construction can proceed. Proactive protection of the established benchmarks (with survey stakes and high visibility flagging for example) is crucial since disturbance of the monitoring points from construction activity would render the settlement monitoring data useless and likely require extension of the monitoring period. We recommend that penalties for disturbing the benchmarks be established and proactively communicated to site construction personnel so that the importance of protecting these monitoring elements is stressed.

Groundwater Considerations

The Contractor should be prepared to implement a dewatering program for excavations made below existing site grades, such as those for installation of stormwater pipes or other utilities. Based on observations at our soil borings, it is anticipated that groundwater could be encountered in excavations on site, particularly in topographically lower areas of the site. Dewatering procedures used by the contractor will be dependent on a number of factors

such as the areas and depths of excavations, prevalent groundwater conditions, and prevalent weather conditions at the time of construction.

Dewatering procedures employed should be capable of maintaining groundwater levels at least 2 feet below the lowest point of the excavation being dewatered, or as deep as required to achieve the required compaction or suitable subgrade conditions. In addition, the dewatering procedures should be maintained until all construction operations are above the groundwater levels that existed prior to dewatering, or until all structural bearing subgrades are adequately protected.

We expect that installation of deeper drainage pipes and drainage structures may require vacuum-type dewatering systems such as wellpoints or horizontal sock-type vacuum dewatering systems. Groundwater control in shallower excavations (e.g., spread footings) in sandy soils can typically be accomplished by excavating sumps in non-structural bearing areas of the excavation and pumping of the accumulated water from the sumps as needed to maintain a dry excavation.

To facilitate construction operations and aid long term performance of grade supported structures on the project site, additional measures may be necessary to manage the shallow groundwater conditions. Such measures may include, but may not be limited to, the following:

- The use of clean granular backfill materials, such as sands with less than 5% passing the No. 200 mesh sieve or No. 57 gradation crushed washed stone, to facilitate backfill operations near or below groundwater levels.
- The proper scheduling of construction operations to minimize the potential effects of groundwater conditions on excavation and construction operations. Such scheduling should be performed in a manner as to minimize the amount of time for which excavations are allowed to remain open and subgrades exposed, and to expedite the backfill or construction operations as quickly as is practical. Therefore, all materials and equipment required to perform any excavation or construction operations should be available and ready on the site prior to and at the time of the operations.
- The use of thin mats of lean concrete to help protect structural subgrades and to help minimize the effects of perched groundwater conditions on the subgrades. Such “mud mats” can be placed during and immediately following excavation operations, and will allow, with proper care and use, for backfill placement or other construction operations within the excavations at a later time.

Construction Observation and Testing

The earthwork efforts should be observed by the Geotechnical Engineer (or others under their direction). Observation should include documentation of adequate removal of

surficial materials (vegetation, topsoil, and pavements) as well as proofrolling and mitigation of unsuitable areas delineated by the proofroll.

Each lift of compacted fill should be tested, evaluated, and reworked, as necessary, as recommended by the Geotechnical Engineer prior to placement of additional lifts. Each lift of fill should be tested for density and water content at a frequency of at least one test for every 2,500 square feet of compacted fill in the building areas and 5,000 square feet in pavement areas. Where not specified by local ordinance, one density and water content test should be performed for every 75 linear feet of compacted utility trench backfill and a minimum of one test performed for every lift of compacted backfill.

In areas of foundation excavations, the prepared bearing subgrade should be tested for density and water content at a frequency of at least one test for every 100 square feet for footings (at least one per column) and at least one test per 50 feet for continuous strip footings. If unanticipated conditions are encountered, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer’s evaluation of subsurface conditions, including assessing variations and associated design changes.

Shallow Foundations

If the site has been prepared in accordance with the requirements noted in this report including the [Earthwork](#) section, the following design parameters are applicable for shallow foundations.

Design Parameters – Compressive Loads

Item	Description
Allowable Net Bearing Pressure ^{1, 2}	2,500 pounds per square foot
Required Bearing Stratum	Compacted Structural Fill or approved in-situ soil
Minimum Foundation Dimensions	Isolated – 24 inches Continuous – 18 inches
Ultimate Passive Resistance ³ (equivalent fluid pressures)	300 pcf
Sliding Resistance ⁴	0.40 ultimate coefficient of friction
Minimum Embedment below Finished Grade ⁵	18 inches

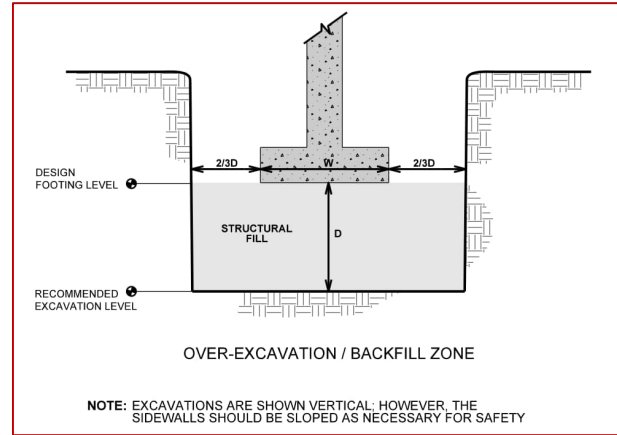
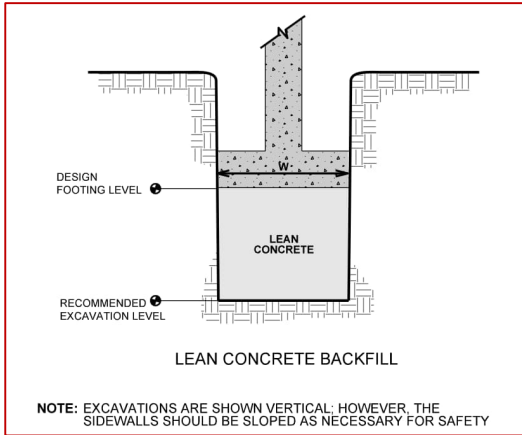
Item	Description
Estimated Total Settlement from Structural Loads ²	Less than about 1 inch
Estimated Differential Settlement ^{2, 6}	About 1/2 of total settlement

1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. Values assume that exterior grades are no steeper than 20% within 10 feet of structure.
2. Values provided are for maximum loads noted in [Project Description](#). Additional geotechnical consultation will be necessary if higher loads are anticipated.
3. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face. Assumes no hydrostatic pressure.
4. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Frictional resistance for granular materials is dependent on the bearing pressure which may vary due to load combinations.
5. Embedment necessary to minimize the effects of seasonal water content variations. For sloping ground, maintain depth below the lowest adjacent exterior grade within 5 horizontal feet of the structure.
6. Differential settlements are noted for equivalent-loaded foundations and bearing elevation as measured over a span of 40 feet.

Foundation Construction Considerations

As noted in [Earthwork](#), the footing excavations should be evaluated under the observation of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations should be removed/reconditioned before foundation concrete is placed.

If unsuitable bearing soils are observed at the base of the planned footing excavation, the excavation should be extended deeper to suitable soils, and the footings could bear directly on these soils at the lower level or on lean concrete backfill placed in the excavations. The lean concrete and structural fill replacement zones are illustrated on the sketches below. Structural fill should consist of granular fill as described in [Earthwork](#).



Floor Slabs

Design parameters for floor slabs assume the requirements for [Earthwork](#) have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the aggregate base beneath the floor slab.

Floor Slab Design Parameters

Item	Description
Floor Slab Support	Floor slabs should be constructed over a uniform and stable subgrade compacted to a depth of at least 12 inches. The subgrade should be constructed as described below: <ul style="list-style-type: none"> ■ On-site sand soil (Model Layer 1) or imported sand meeting the requirements of Granular fill should be placed for the first 12 inches immediately below the slab. ■ An optional 4-inch-thick base course meeting the material specifications of ACI 302 may be used. ■ Subgrade should be compacted to recommendations outlined in Earthwork
Estimated Modulus of Subgrade Reaction ¹	200 pounds per square inch per inch (psi/in) for point loads

1. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in [Earthwork](#), and the floor slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.

With proper compaction and moisture conditioning, native sand subgrades may be capable of supporting foot traffic from less-invasive slab construction methods. However, locally available fine to medium grained sands may be easily disturbed by exposure to construction equipment and excessive foot traffic, which should be minimized to the extent possible. On buildings where mixers, pumps, equipment, and personnel may be repeatedly traversing the prepared subgrade, we recommend placing a 4-inch-thick base course meeting the material specifications of ACI 302.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, when the project includes humidity-controlled areas, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut contraction joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations, refer to the ACI Design Manual. Joints or cracks should be sealed with a waterproof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing or other means.

Floor Slab Construction Considerations

Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of floor slabs, the affected material should be removed, and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should observe the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

Pavements

General Pavement Comments

Pavement designs are provided for the traffic conditions and pavement life conditions as noted in [Project Description](#) and in the following sections of this report. A critical aspect of pavement performance is site preparation. Pavement designs noted in this section must be applied to the site which has been prepared as recommended in the [Earthwork](#) section.

Where possible, we recommend a minimum separation of at least 36 inches between the groundwater level and the bottom of the base or subbase layer for pavements. A grading plan was not provided at the time of this report. If this minimum separation cannot be achieved, please contact us so we may review and revise the following recommendations, as needed.

Pavement Subgrade Parameters

Based on our experience, an estimated subgrade resilient modulus of 9,000 pounds per square inch was used for the subgrade for the asphaltic concrete (AC) pavement designs. A modulus of subgrade reaction of 200 pci was used for the portland cement concrete (PCC) pavement designs. The values were empirically derived based upon our experience with the native subgrade soils and our expectation of the quality of the subgrade as prescribed by the [Site Preparation](#) conditions as outlined in [Earthwork](#). A modulus of rupture of 550 psi was used in design for the concrete (based on correlations with a minimum 28-day compressive strength of 4,000 psi).

Design Traffic

In absence of traffic criteria provided to us by the design team, Terracon has assumed relatively normal commercial/retail traffic patterns for the size of the development. A 20-year design life was assumed in the development of the pavement section thickness. For asphalt pavements the anticipated traffic was converted into flexible AASHTO pavement 18-kip equivalent single axle loads (ESALs) for use in AC pavement thickness design as follows:

Flexible Pavement (AC) Traffic Level	Vehicles per day	Design ESALs (flexible)
Light Duty	■ 500 Passenger Cars/Trucks	7,500
Medium Duty	■ 500 Passenger Cars/Trucks	100,000

■ 5 loaded Sem-tractor Trailers

PCC traffic level designs are based on the traffic categories and truck frequencies listed in ACI 330-21, Commercial Concrete Parking Lots and Site Paving Design and Construction Guide, and are summarized below:

Rigid Pavement (PCC) Traffic Level	ACI Traffic Category	Applicable Trucks per day
Light Duty	(A) Car parking and access lanes	1
Medium Duty	(B) Entrance and truck service lanes	10
Garbage Truck Lane	(E) Garbage or fire truck lane	1

Pavement Section Thicknesses

The following table provides our opinion of minimum thickness for AC sections:

Layer	Asphaltic Concrete Design Thickness (inches)	
	Light Duty ¹	Medium Duty ¹
AC ²	1.5	2.5
Aggregate Base ³	6	8
Prepared Subgrade ⁴	12	12

1. See [Design Traffic](#) for more specifics regarding traffic assumptions.
2. All materials should meet the current Florida Department of Transportation (FDOT) Standard Specifications for Roadway and Bridge Construction.
3. FDOT Specification Sections 200, 204, and 911 or alternative approved by the Geotechnical Engineer.
4. Native soil or structural fill compacted to at least 98% of the material's maximum dry density as determined by ASTM D1557. See [Subgrade Preparation](#).

The following table provides our estimated minimum thickness of PCC pavements.

Portland Cement Concrete Design

Layer	Thickness (inches)		
	Light Duty ¹	Medium Duty	Garbage Truck
PCC ²	4	5	6.5
Aggregate Subbase ³	Optional	Optional	Optional
Prepared Subgrade ⁴	12	12	12

1. See [Design Traffic](#) for more specifics regarding traffic classifications.
2. All materials should meet the current FDOT Standard Specifications for Roadway and Bridge Construction.
3. Optional layer for the purpose of maintaining uniform support during construction. FDOT Specification Section 204, Graded Aggregate Base (GAB), or crushed concrete. Limerock base should not be used beneath PCC pavements.
4. Native soil or structural fill compacted to at least 98% of the material's maximum dry density as determined by ASTM D1557. See [Subgrade Preparation](#).

Subgrade Preparation

Site grading is typically accomplished relatively early in the construction phase. Fills are placed and compacted in a uniform manner. However, as construction proceeds, excavations are made into these areas, rainfall and surface water saturates some areas, heavy traffic from concrete trucks and other delivery vehicles disturbs the subgrade and many surface irregularities are filled in with loose soils to temporarily improve ride comfort. As a result, the pavement subgrades, initially prepared early in the project, should be carefully evaluated as the time for pavement construction approaches.

After densification, proofrolling, repairing deep subgrade deficiencies, and installation of underground utilities, the entire subgrade should be scarified (ripped) to a depth of at least 12 inches, recompacted, and tested as recommended in [Earthwork](#) to provide a uniform subgrade for pavement construction. If a significant precipitation event occurs after the evaluation or if the surface becomes disturbed (e.g., for excavation and installation of utilities), the subgrade should be reviewed by qualified personnel immediately prior to paving. The pavement subgrade should be in its finished form at the time of the final review.

In areas of Florida with easily disturbed near surface clean sandy soils, a stabilized subgrade course, about 12 inches thick, is often constructed by mixing approved materials with native soils and serves as a working platform to permit the efficient construction of the base material used in AC pavements. The stabilized subgrade is constructed with a target Limerock Bearing Ratio (LBR) of about 40%. Stabilized subgrade has not been

specified as a structural requirement for the pavement sections at this site. However, the contractor may elect to stabilize the subgrade during construction to facilitate rubber tire vehicle traffic and improve resilience of the sandy soils until the pavement section can be constructed.

AC Aggregate Base

Aggregate base for flexible pavements shall comply with Section 200 Rock Base or Section 204 Graded Aggregate Base (GAB) of the FDOT Specifications and general material requirements of Section 911. The base material should be comprised of crushed limestone or rock or recycled concrete aggregate. Aggregate base or pavement materials should not be placed when the surface is wet. Surface drainage should be provided away from the edge of paved areas to minimize lateral moisture transmission into the subgrade.

PCC Subbase (Optional)

Considering the relatively light vehicular traffic, importing an aggregate subbase material for the sole purpose of improving subgrade support (increasing subgrade modulus) is not likely to be economically viable and is not considered necessary for the rigid pavements at this site. However, as described by ACI 330-21, an aggregate subbase layer may be prescribed for the following reasons:

- To provide a stiffer working platform during construction
- To reduce weather delays caused by weakened subgrade conditions
- To reduce susceptibility to pumping of fine-grained subgrade soil from slab joints.

Rigid pavements that are exposed to less than about 200 loaded trucks per day and low speeds are typically not considered susceptible to pumping.

Design and Construction Considerations

Asphaltic concrete pavements are most commonly used in the area for commercial site development. However, rigid concrete pavements are often used in drive through areas, truck lanes, or other areas exposed to turning/maneuvering vehicles. Furthermore, concrete is minimally affected by oil and gas leaks produced by vehicles.

Areas for parking of heavy vehicles, concentrated turn areas, and start/stop maneuvers could require thicker pavement sections. Edge restraints (e.g., concrete curbs or aggregate shoulders) should be planned along curves and areas of maneuvering vehicles.

Where practical, we recommend early-entry cutting of crack-control joints in PCC pavements. Cutting of the concrete in its “green” state typically reduces the potential for micro-cracking of the pavements prior to the crack control joints being formed, compared

to cutting the joints after the concrete has fully set. Micro-cracking of pavements may lead to crack formation in locations other than the sawed joints, and/or reduction of fatigue life of the pavement.

Proper joint spacing will be required to prevent excessive slab curling and shrinkage cracking. Joints should be sealed to prevent entry of foreign material and doweled where necessary for load transfer. PCC pavement details for joint spacing, joint reinforcement, and joint sealing should be prepared in accordance with ACI 330 and ACI 325.

Openings in pavements, such as decorative landscaped areas, are sources for water infiltration into surrounding pavement systems. Water can collect in the islands and migrate into the surrounding subgrade soils thereby degrading support of the pavement. Islands with raised concrete curbs, irrigated foliage, and low permeability near-surface soils are particular areas of concern. The civil design for the pavements with these conditions should include features to restrict or collect and discharge excess water from the islands. Examples of features are edge drains connected to the stormwater collection system, longitudinal subdrains, or other suitable outlets and impermeable barriers preventing lateral migration of water such as a cutoff wall installed to a depth below the pavement structure.

Pavement Drainage

Pavements should be sloped to provide rapid drainage of surface water. Water allowed to pond on or adjacent to the pavements could saturate the subgrade and contribute to premature pavement deterioration. In addition, the pavement subgrade should be graded to provide positive drainage within the granular base section. Appropriate sub-drainage or connection to a suitable daylight outlet should be provided to remove water from the granular subbase.

Pavement Maintenance

The pavement sections represent minimum recommended thicknesses and, as such, periodic upkeep should be anticipated. Preventive maintenance should be planned and provided for through an on-going pavement management program. Maintenance activities are intended to slow the rate of pavement deterioration and to preserve the pavement investment. Pavement care consists of both localized (e.g., crack and joint sealing and patching) and global maintenance (e.g., surface sealing). Additional engineering consultation is recommended to determine the type and extent of a cost-effective program. Even with periodic maintenance, some movements and related cracking may still occur, and repairs may be required.

Pavement performance is affected by its surroundings. In addition to providing preventive maintenance, the civil engineer should consider the following recommendations in the design and layout of pavements:

- Final grade adjacent to paved areas should slope down from the edges at a minimum 2%.
- Subgrade and pavement surfaces should have a minimum 2% slope to promote proper surface drainage.
- Install pavement drainage systems surrounding areas anticipated for frequent wetting.
- Install joint sealant and seal cracks immediately.
- Seal all landscaped areas in or adjacent to pavements to reduce moisture migration to subgrade soils.

Stormwater

We understand a shallow stormwater retention system will be constructed at this site. The stormwater pond bottom is expected to be on the order of about 3 feet below the existing site grades. A stormwater pond may be designed using the subsoil parameters outlined in the following subsection. These parameters are based on a conventional shallow dry retention pond. The Drainage Engineer should use the information provided in the following sections to evaluate the stormwater management facility, including a mounding analysis, with an appropriate factor of safety.

Testing

The field infiltration rate of water was measured using a Modified Phillip-Dunne (MPD) infiltrometer in order to calculate the in-situ hydraulic conductivity of the soils. One test was performed at the location shown on the [Exploration Plan](#), a depth of about 3 feet-bgs. The test report is provided in [Exploration Results](#) and summarized below:

Test Label	Nearby Boring	Depth (feet)	Saturated Hydraulic Conductivity, K_{sat} (in/hr)	USCS Classification
IT-01	SB-01	2	0.172	SM

Design Parameters

To aid in the evaluation of dry retention stormwater treatment and drainage, the table below summarizes recommended design parameters derived from the available data:

Recommended Stormwater Design Parameters	
Item	Value ^{1,2}
Estimated Seasonal High Groundwater Depth	5 feet-bgs
Depth to Estimated Effective Confining Layer	>20 feet-bgs
Estimated Fillable Porosity	20 percent
Estimated Vertical Unsaturated Hydraulic Conductivity	0.2 ft/day
Estimated Vertical and Horizontal Saturated Hydraulic Conductivity	0.3 ft/day

1. Hydraulic conductivity values are based on the permeability tests performed at locations noted and do not include the effects of groundwater mounding or a factor of safety.
2. Recommended maximum value.

The information provided in this table should be used in tandem with the lithology and groundwater conditions presented on the boring log reports at each site. Permeability values are unfactored, and we recommend applying a minimum factor of safety of 2 to these values for the design and recovery analysis of the proposed stormwater ponds. Due to the groundwater level, a groundwater mounding analysis should be performed by the Drainage Engineer.

Terracon requests the opportunity to review the design input parameters for stormwater analyses. Please contact us if there are any questions regarding the stormwater pond design parameters, changes in the location of planned stormwater improvements, or necessity for alternative stormwater treatment measures.

Construction Considerations

Soil densification that often occurs due to heavy construction equipment may reduce the drainage characteristics of the subsoils. Care should be taken to limit the amount of surface compaction and densification that occurs during construction. Low ground pressure tracked equipment should be considered where practical.

General Comments

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during

pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

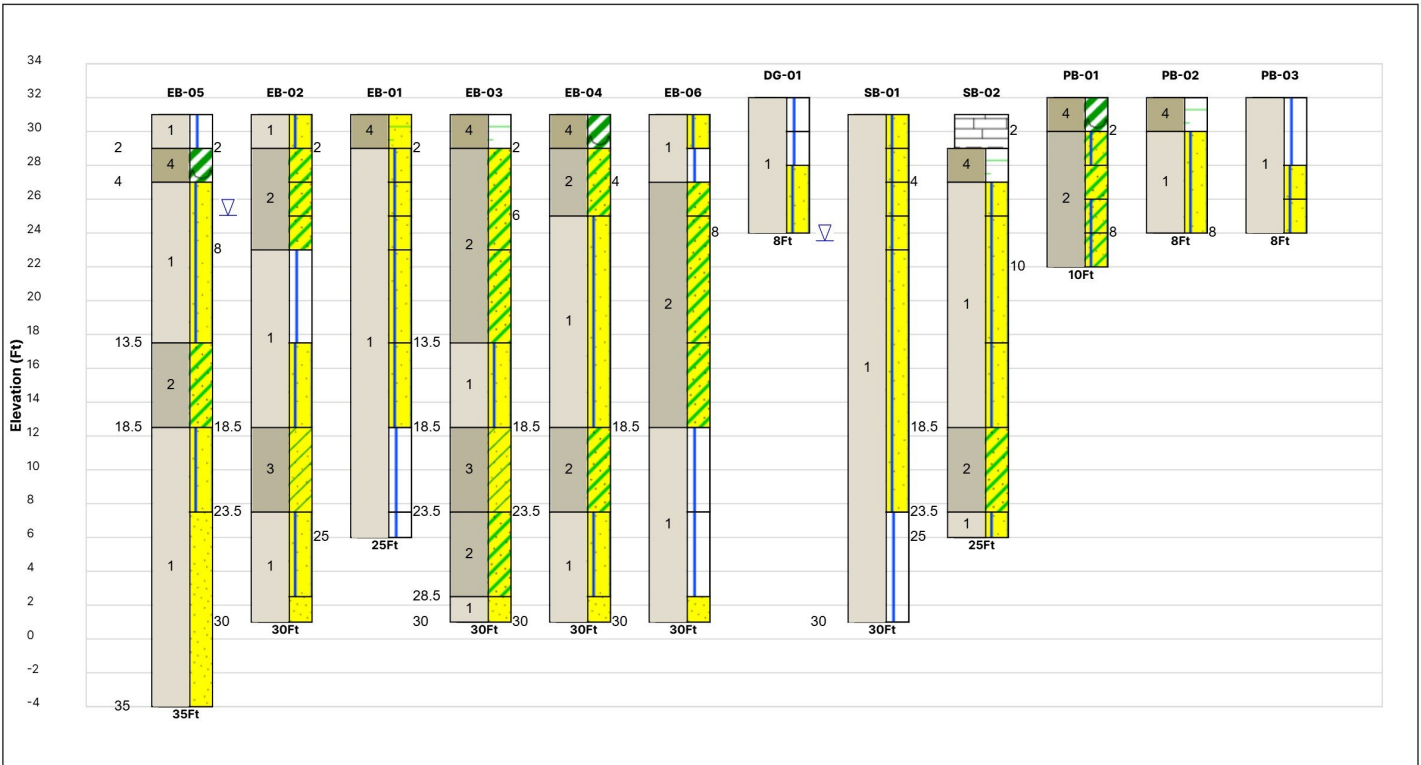
Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly affect excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety and cost estimating including excavation support and dewatering requirements/design are the responsibility of others. Construction and site development have the potential to affect adjacent properties. Such impacts can include damages due to vibration, modification of groundwater/surface water flow during construction, foundation movement due to undermining or subsidence from excavation, as well as noise or air quality concerns. Evaluation of these items on nearby properties are commonly associated with contractor means and methods and are not addressed in this report. The owner and contractor should consider a preconstruction/precondition survey of surrounding development. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

Figures

Contents:

GeoModel

GeoModel



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions

#	Layer Name	General Description
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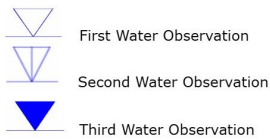
1	Sand	Sand with varying amounts of silt
2	Clayey Sand	Clayey sand with varying amounts of silt
3	Clay	Clay with varying amounts of sand
4	Organic Silt	Silt with varying amounts of organics

Legend

Groundwater levels are temporal. The levels shown are representative of the date and time of our exploration. Significant changes are possible over time.
 Water levels shown are as measured during and/or after drilling. In some cases, boring advancement methods mask the presence/absence of groundwater. See individual logs for details.

Notes:

Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project.
 Numbers adjacent to soil column indicate depth below ground surface.



Attachments

Exploration and Testing Procedures

Field Exploration

Number of Borings	Approximate Boring Depth (feet)	Location
6	25 to 35	Building
3	8 to 10	Pavement
1	8	Dumpster Pad
2	25 to 30	Stormwater

Boring Layout and Elevations: Terracon personnel provided the boring layout using handheld GPS equipment (estimated horizontal accuracy of about ± 20 feet) and referencing existing site features. Approximate ground surface elevations were obtained using Google Earth. If a more precise boring layout is desired, we recommend borings be surveyed.

Subsurface Exploration Procedures: We advanced the borings with a track-mounted rotary drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions) or a mud rotary drilling technique. In the mud rotary procedure, drilling fluid was circulated in the boreholes to stabilize the borehole walls and flush soil cuttings to the surface. Five samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound automatic hammer falling a distance of 30 inches. The number of blows required to advance the sampling spoon is recorded at an interval of 6 inches. The sum of blows in the second and third interval of a normal 18-inch or 24-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. We observed and recorded groundwater levels during drilling and sampling. For safety purposes, all borings were backfilled with auger cuttings after their completion. We also observed the boreholes while drilling and at the completion of drilling for the presence of groundwater. The groundwater levels are shown on the attached boring logs.

Log Recording: The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials observed during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's

interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests. The laboratory testing program included the following types of tests:

- Moisture Content
- Fines Content
- Organic Content

The laboratory testing program included examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we described and classified the soil samples in accordance with the Unified Soil Classification System. The estimated group symbol for the Unified Soil Classification System is shown on the boring log and a brief description of the Unified Soil Classification System is included in the supporting information section of this report. Laboratory test results have been tabulated in the Attachments and presented on the individual Boring Logs.

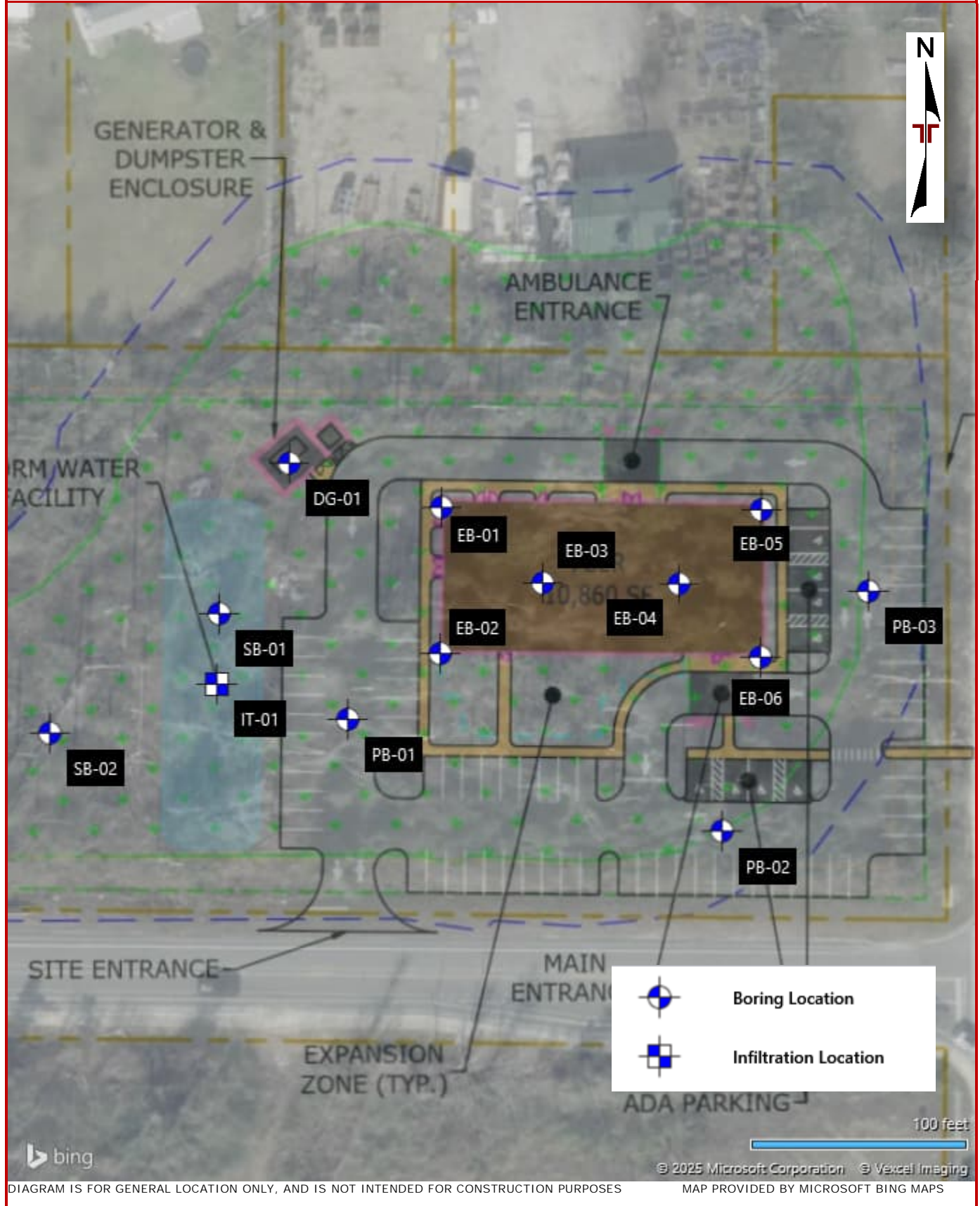
Site Location and Exploration Plans

Contents:

Site Location Plan
Exploration Plan

Note: All attachments are one page unless noted above.

Exploration Plan



Exploration and Laboratory Results

Contents:

Boring Logs (12 pages)
Laboratory Testing Summary Table
Infiltration Test Report (17 pages)

Note: All attachments are one page unless noted above.

BORING LOG NO. DG-01

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Water Level Observations	Field Test Results	
1		2.0	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, gray, medium dense		30.0	X	24		1-6-10-10 N = 16	
		4.0	As above, but gray.		28.0	X	24		7-8-12-14 N = 20	
			SILTY SAND (SM) , fine grained, gray, loose to medium dense	5			X	24		9-9-9-8 N = 18
							X	24	▽	6-3-3-2 N = 6
Boring Terminated at 8 Ft										

DRAFT

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Water Level Observations
 ▽ 8 Ft. While Drilling

Advancement Method
 0-8 Ft. Hollow Stem Auger

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/21/2025

Boring Completed
 10/21/2025

BORING LOG NO. EB-01

Surface Elevation:
 31(Ft) +/-

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results
4		2.0	SANDY ORGANIC ELASTIC SILT (OH) , dark gray, very soft		29.0	X	3	1-WoH-1-3 N = 1
1		4.0	SILTY SAND (SM) , fine grained, gray, loose to medium dense		27.0	X	24	1-2-3-4 N = 5
		6.0	organic	5	25.0	X	24	2-6-3-4 N = 9
		8.0	dark gray		23.0	X	24	2-3-4-8 N = 7
		13.5	gray	10		X	24	1-2-1-1 N = 3
		18.5	very loose	15	17.5	X	24	1-WoH-WoH N = 0
		23.5	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, gray, loose	20	12.5	X	18	2-3-4 N = 7
			very dense	7.5	7.5	X	7	7-27-50/6" N = 77
Boring Terminated at 25 Ft								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-10 Ft. Hollow Stem Auger
 10-35 Ft. Mud/Wash Rotary

Hammer Type
 Automatic
Logged By
 M. Castillo
Boring Started
 10/20/2025
Boring Completed
 10/20/2025

BORING LOG NO. EB-02

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results	Water Content (%)	Percent Fines	Organic Content (%)
1		2.0	SILTY SAND (SM) , fine grained, dark brown, organic, very loose, trace roots	29.0	29.0	X		1-WoH-1-2 N = 1			
2		4.0	CLAYEY SAND (SC) , fine grained, brown, loose	27.0	27.0	X	19.9 9	1-2-3-4 N = 5			
		6.0	As above, but brown.	25.0	25.0	X	24	3-5-3-6 N = 8			
		8.0	few roots	23.0	23.0	X	24	3-4-3-3 N = 7			
1		13.5	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, brown, very loose, trace roots	10	17.5	X	23.9 8	-1-WoH-WoH N = 1	28.6	10.5	1.8
		18.5	SILTY SAND (SM) , fine grained, brown, very loose, trace roots	15	15	X	18	WoH N = 0	30.5	18	2.5
3		23.5	SANDY LEAN CLAY (CL) , fine grained sand, dark gray, stiff, few wood pieces	20	12.5	X	17.9 8	1-5-7 N = 12			
1		28.5	SILTY SAND (SM) , fine to medium grained, dense	25	7.5	X	10.9 8	3-14-25 N = 39			
		28.5	POORLY GRADED SAND (SP) , fine to medium grained, dark gray, very dense	2.5	2.5	X	18	10-25-25 N = 50			
			Boring Terminated at 30 Ft								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-30 Ft. Mud/Wash Rotary

Hammer Type
 Automatic
Logged By
 M. Castillo
Boring Started
 10/20/2025
Boring Completed
 10/20/2025

BORING LOG NO. EB-03

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results	Water Content (%)	Percent Fines	Organic Content (%)
4		2.0	ORGANIC SILT (OL) , dark brown, soft		29.0	X	8	1-WoH-2-2 N = 2			
2		8.0	CLAYEY SAND (SC) , fine grained, brown, loose to medium dense, trace roots very loose	5	23.0	X	24	1-2-2-8 N = 4			
						X	24	4-7-8-11 N = 15			
						X	24	2-3-5-2 N = 8			
				10		X	20	1-1-WoH-1 N = 1	21.1	36.2	1.9
		13.5			17.5						
1		18.5	SILTY SAND (SM) , fine grained, gray, very loose	15		X	19.9 9	oH-WoH-Wo N = 0	32.2	15.3	2.5
3		23.5	SANDY LEAN CLAY (CL) , gray, medium stiff, some wood chips	20	12.5	X	18	WoH-2-3 N = 5	56.1	62.8	10.1
2		28.5	CLAYEY SAND (SC) , fine grained, light brown and gray, medium dense	25	7.5	X	18	1-7-11 N = 18			
1			POORLY GRADED SAND (SP) , fine to medium grained, brown, very dense		2.5	X		15-22-26 N = 48			
Boring Terminated at 30 Ft											

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-30 Ft. Mud/Wash Rotary

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/21/2025

Boring Completed
 10/21/2025

BORING LOG NO. EB-04

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results	Water Content (%)	Percent Fines	Organic Content (%)	
4		2.0	ORGANIC ELASTIC SILT (OH) , dark brown, very soft		29.0	X	3	-WoH-WoH- N = 0				
2		6.0	CLAYEY SAND (SC) , fine grained, light gray and brown, loose to medium dense, trace roots	5		X	24	4-3-3-6 N = 6				
1			SILTY SAND (SM) , fine grained, brown, loose, little wood	10		X	20	2-4-5-8 N = 9				
				10		X	24	3-3-5-4 N = 8				
				10		X	24	-WoH-WoH- N = 0	28.4	15.7	2.3	
1				15		X	23.9 8	-WoH-WoH- N = 0	27	15.6	2.2	
				15		X	23.9 8	-WoH-WoH- N = 0	27	15.6	2.2	
2		18.5	CLAYEY SAND (SC) , fine grained, dark gray, loose, trace wood	20	12.5	X	23.9 8	WoH-WoH-3 N = 3	38.8	46.7	8.4	
1			SILTY SAND (SM) , fine to medium grained, gray, very dense	25		X	17.9 9	5-15-28 N = 43				
				25		X	20	7-17-21 N = 38				
Boring Terminated at 30 Ft												

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Hammer Type
 Automatic
Logged By
 M. Castillo
Boring Started
 10/20/2025
Boring Completed
 10/21/2025

BORING LOG NO. EB-05

Surface Elevation:
 31(Ft) +/-

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Water Level Observations	Field Test Results
1		2.0	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, dark gray, very loose		29.0	X	24		1-WoH-1-1 N = 1
4		4.0	ORGANIC ELASTIC SILT (OH) , black, soft		27.0	X	8		WoH-1-1-1 N = 2
1		13.5	SILTY SAND (SM) , fine grained, gray, loose	5		X	8	▽	1-1-3-3 N = 4
						X	8		2-1-2-2 N = 3
				10		X	20		1-1-1-2 N = 2
2		18.5	CLAYEY SAND (SC) , fine grained, gray, very loose	15	17.5	X	18		oH-WoH-Wo N = 0
1		23.5	SILTY SAND (SM) , fine grained, light brown, loose, trace wood	20	12.5	X	20		2-2-3 N = 5
				25	7.5	X	10		16-8-7 N = 15
				30		X	18		4-5-5 N = 10
						X	18		4-5-5 N = 10
Boring Terminated at 35 Ft									

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Water Level Observations
 ▽ 5.5 Ft. While Drilling

Advancement Method
 0-10 Ft. Hollow Stem Auger
 10-35 Ft. Mud/Wash Rotary

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/20/2025

Boring Completed
 10/20/2025

BORING LOG NO. EB-06

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results	Water Content (%)	Percent Fines	Organic Content (%)
1		2.0	SILTY SAND (SM) , fine grained, dark brown, very loose, with roots	29.0	29.0		15	1-WoH-2-3 N = 2			
		4.0	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, brown, medium dense				22	3-3-5-4 N = 8			
2		6.0	CLAYEY SAND (SC) , fine grained, brown, loose to medium dense, trace roots	5	27.0		24	2-3-4-6 N = 7			
		6.0	As above, but brown, trace roots.				24	4-6-14-16 N = 20			
		10.0					23.9	4-3-3-5 N = 6			
		10.0					9				
		13.5	very loose	17.5	17.5		18	0H-WoH-Wo N = 0	27.9	22	2.4
1		18.5	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, gray, medium dense	20	12.5		18	2-3-6 N = 9			
		23.5	brown, trace roots				7.5	7-9-12 N = 21			
		28.5	POORLY GRADED SAND (SP) , fine to medium grained, light gray, dense, trace roots				2.5	13-14-15 N = 29			
Boring Terminated at 30 Ft											

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

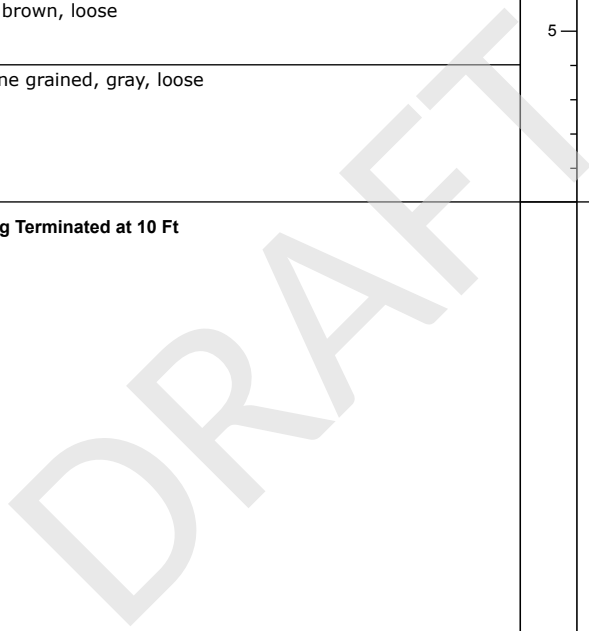
Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-8 Ft. Hollow Stem Auger
 8-30 Ft. Mud/Wash Rotary

Hammer Type
 Automatic
Logged By
 M. Castillo
Boring Started
 10/21/2025
Boring Completed
 10/21/2025

BORING LOG NO. PB-01

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results
4		2.0	ORGANIC ELASTIC SILT (OH) , dark gray, very soft		30.0	X	23.9 8	WoH-WoH-W N = 0
2		4.0	SILTY CLAYEY SAND (SC-SM) , fine grained, gray, loose		28.0	X	20	WoH-3-4-3 N = 7
		6.0	CLAYEY SAND (SC) , fine grained, brown, loose	5	26.0	X	24	1-2-2-1 N = 4
		8.0	SILTY CLAYEY SAND (SC-SM) , fine grained, gray, loose		24.0	X	24	2-2-3-2 N = 5
			As above, but gray.			X	24	2-2-3-2 N = 5
Boring Terminated at 10 Ft								



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Water Level Observations
 Groundwater Not Encountered

Advancement Method
 0-10 Ft. Hollow Stem Auger

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/21/2025

Boring Completed
 10/21/2025

BORING LOG NO. PB-02

Surface Elevation:
 32(Ft) +/-

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results
4		2.0	ORGANIC SILT (OL) , trace sand, dark gray, soft		30.0	X	14	1-1-2-2 N = 3
1			SILTY SAND (SM) , fine grained, gray, loose	5		X	23.9 9	1-2-3-5 N = 5
						X	24	3-4-5-4 N = 9
						X	24	3-4-5-6 N = 9
<p style="font-weight: bold;">Boring Terminated at 8 Ft</p> <div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.1; font-size: 100px; pointer-events: none;">DRAFT</div>								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Water Level Observations
 Groundwater Not Encountered

Advancement Method
 0-8 Ft. Hollow Stem Auger

Hammer Type
 Automatic

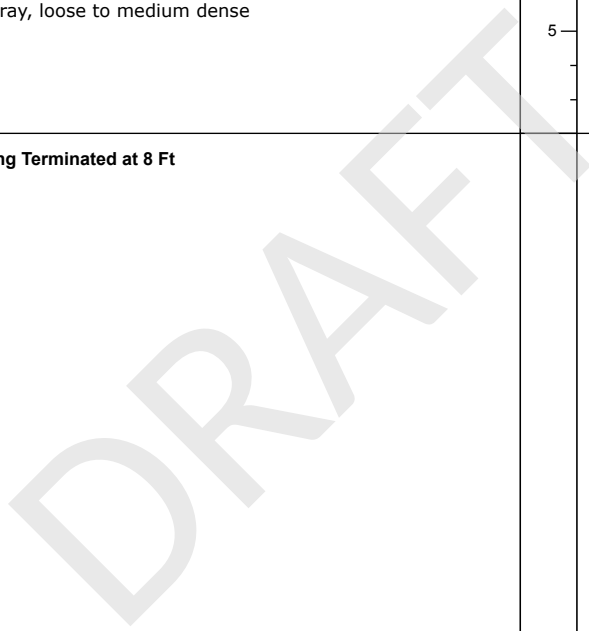
Logged By
 M. Castillo

Boring Started
 10/22/2025

Boring Completed
 10/22/2025

BORING LOG NO. PB-03

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results
1		4.0	POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, dark gray, very loose, trace roots	5	28.0	X	18	2-1-WoH-3 N = 1
							18	2-3-2-3 N = 5
		6.0	SILTY SAND (SM) , fine grained, gray, loose to medium dense		26.0	X	23.9 9	3-3-5-5 N = 8
			As above, but gray.			X	24	3-3-2-2 N = 5
			Boring Terminated at 8 Ft					



See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-8 Ft. Hollow Stem Auger

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/20/2025

Boring Completed
 10/20/2025

BORING LOG NO. SB-01

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results				
1		2.0	SILTY SAND (SM) , fine grained, dark gray, very loose to loose	5	29.0		16	H-WoH-WoH N = 0				
		4.0	As above, but dark gray.									
		6.0	brown									
		8.0	medium dense									
		23.5	very loose									
		23.0									23.9 8	1-1-1-2 N = 2
		15.0									18	1-WoH-1 N = 1
		20.0									18	1-3-6 N = 9
		25.0									14	3-4-6 N = 10
		28.0									10	2-2-3 N = 5
			POORLY GRADED SAND WITH SILT (SP-SM) , fine grained, light gray, loose to medium dense		7.5							
Boring Terminated at 30 Ft												

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-30 Ft. Mud/Wash Rotary

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/21/2025

Boring Completed
 10/21/2025

BORING LOG NO. SB-02

Model Layer	Graphic Log	Lithology Depth (Ft.)	Material Description	Depth (Ft.)	Elevation (Ft.)	Sample Type	Recovery (In.)	Field Test Results
	▽▽▽	2.0	No Recovery		29.0	X	0	H-WoH-WoH N = 0
4	— — —	4.0	ORGANIC SILT (OL) , dark gray, very soft		27.0	X	7	-WoH-WoH- N = 0
1		6.0	SILTY SAND (SM) , fine grained, brown	5	25.0	X	24	VoH-WoH-2- N = 2
		13.5	As above, but brown.	10		X		3-5-6-6 N = 11
		18.5	As above, but gray.	15	17.5	X		1-1-5-5 N = 6
		23.5	CLAYEY SAND (SC) , fine grained, gray, medium dense	20	12.5	X	18	2-3-6 N = 9
1		23.5	SILTY SAND (SM) , fine grained, gray, loose	7.5	7.5	X	12	4-4-5 N = 9
Boring Terminated at 25 Ft								

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (if any).
 See Supporting Information for explanation of symbols and abbreviations.

Notes
 Elevation Reference: Based on Google Earth Pro
 Location Comment: Based on Google Earth Pro
 General Comments: relative densities and consistencies adjusted due to the use of an autohammer

Advancement Method
 0-25 Ft. Mud/Wash Rotary

Hammer Type
 Automatic

Logged By
 M. Castillo

Boring Started
 10/21/2025

Boring Completed
 10/21/2025

Laboratory Testing Summary Table

Boring No.	Depth Range (feet)	Moisture Content (%)	Fines Content (%)	Organic Content (%)	USCS Classification
EB-02	8-10	28.6	10.5	1.8	SC
EB-02	13.5-15	30.5	18	2.5	SM
EB-03	8-10	21.1	36.2	1.9	SC
EB-03	13.5-15	32.2	15.3	2.5	SM
EB-03	18.5-20	56.1	62.8	10.1	CL
EB-04	8-10	28.4	15.7	2.3	SM
EB-04	13.5-15	27.0	15.6	2.2	SM
EB-04	18.5-20	38.8	46.7	8.4	SC
EB-06	13.5-15	27.9	22	2.4	SC

Infiltration Report

Terracon Tallahassee
IT01 - Bay County, FL

K_{sat} best-fit site average: 4.4 mm/hr or 0.172 in/hr

GPS Infiltration Test Site Map



Map Pin #	Test #	Test Name	Date	Ksat (mm/hr)	Ksat (in/hr)	C (mm)	RMS Error of Regression (s)	Normalized RMS
1	1	IT01	10/09/2025 04:51:20	4.4	0.172	-299.7	2.3	0.3%

*** Site Average could not be calculated from only 1 viable test

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

This report summarizes the results of a set of Modified Philip Dunne (MPD) Infiltrometer tests performed at the above referenced site. Terracon Tallahassee personnel performed the field tests. The software used to compute saturated hydraulic conductivity (K_{sat}) and generate this report assumes that the field personnel used infiltrmeters manufactured by Upstream Technologies Inc. and followed the procedures outlined in "Manual – Modified Philip - Dunne Infiltrometer" by Ahmed, Gulliver, and Nieber.

The following paragraphs describe the individual tests, input values used in the analysis, and methods used to compute the K_{sat} value.

After individual K_{sat} values were calculated, the method used to determine the overall site K_{sat} value ($K_{best-fit}$) is described in "Effective Saturated Hydraulic Conductivity of an Infiltration-Based Stormwater Control Measure" by Weiss and Gulliver 2015, "A relationship to more consistently and accurately predict the best-fit value of saturated hydraulic conductivity used a weighted sum of 0.32 times the arithmetic mean and 0.68 times the geometric mean."

METHOD USED TO COMPUTE K_{sat}

The MPD Infiltrometer software uses the following procedure described in "The Comparison of Infiltration Devices and Modification of the Philip-Dunne Permeameter for the Assessment of Rain Gardens" by Rebecca Nestigen, University of Minnesota, November 2007.

The steps are as follows:

1. For each measurement of head, use the following equation to find the corresponding distance to the sharp wetting front.

$$[H_0 - H(t)]r_1^2 = \frac{\theta_1 - \theta_2}{3} [2[R(t)]^3 + 3[R(t)]^2 L_{max} - L_{max}^3 - 4r_0^3]$$

2. Estimate the change in head with respect to time and the change in wetting front distance with respect to time by using the backward difference for all values of $R(t)$ equal to or greater than the distance

$$\sqrt{r_1^2 + L_{max}^2}$$

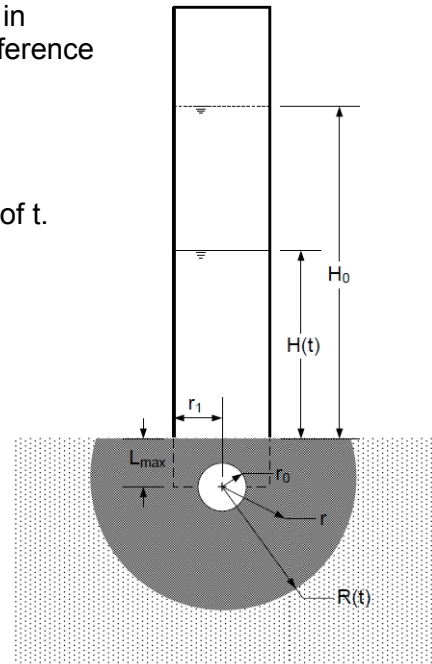
3. Make initial guesses for K and C .

4. Solve the following equations for $\Delta P(t)$ at each incremental value of t .

$$\Delta P(t) = \frac{\pi^2}{8} \left\{ \theta_1 - \theta_0 \frac{[R(t)]^2 + [R(t)]L_{max}}{K} \frac{dr}{dt} - 2r_0^2 \right\} \frac{\ln \left[\frac{R(t)r_0 + L_{max}}{r_0[R(t) + L_{max}]} \right]}{L_{max}}$$

$$\Delta P(t) = C - H(t) - L_{max} + \frac{L_{max}}{K} \frac{dh}{dt}$$

5. Minimize the absolute difference between the two solutions found in Step 4 by adjusting the values of K and C .



Parameters for Equations

Θ_0 = volumetric water content of soil before MPD test

Θ_1 = volumetric water content of soil after MPD test

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01

Date	10/9/2025
Time	4:51 PM
Latitude	30.167941
Longitude	-85.592301
Initial Volumetric Moisture	0.00 %
Final Volumetric Moisture	100.00 %
Cylinder Size	3 Liter

IT01 Results

Map Pin #	1
Test Number	1
Ksat - mm/hr	4.4
Ksat - in/hr	0.172
Capillary Pressure C mm	-299.7
RMS Error of Regression	2.3
Normalized RMS	0.3%

Readings

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
1	0 s	37.96 cm	26	124 s	37.79 cm	51	249 s	37.56 cm	76	374 s	37.31 cm
2	4 s	37.95 cm	27	129 s	37.78 cm	52	254 s	37.54 cm	77	379 s	37.3 cm
3	9 s	37.95 cm	28	134 s	37.77 cm	53	259 s	37.54 cm	78	384 s	37.29 cm
4	14 s	37.94 cm	29	139 s	37.76 cm	54	264 s	37.53 cm	79	389 s	37.28 cm
5	19 s	37.94 cm	30	144 s	37.75 cm	55	269 s	37.52 cm	80	394 s	37.27 cm
6	24 s	37.93 cm	31	149 s	37.75 cm	56	274 s	37.51 cm	81	399 s	37.26 cm
7	29 s	37.93 cm	32	154 s	37.74 cm	57	279 s	37.49 cm	82	404 s	37.25 cm
8	34 s	37.93 cm	33	159 s	37.73 cm	58	284 s	37.48 cm	83	409 s	37.24 cm
9	39 s	37.92 cm	34	164 s	37.72 cm	59	289 s	37.47 cm	84	414 s	37.23 cm
10	44 s	37.92 cm	35	169 s	37.72 cm	60	294 s	37.47 cm	85	419 s	37.22 cm
11	49 s	37.91 cm	36	174 s	37.71 cm	61	299 s	37.46 cm	86	424 s	37.21 cm
12	54 s	37.9 cm	37	179 s	37.7 cm	62	304 s	37.45 cm	87	429 s	37.2 cm
13	59 s	37.9 cm	38	184 s	37.69 cm	63	309 s	37.44 cm	88	434 s	37.19 cm
14	64 s	37.89 cm	39	189 s	37.68 cm	64	314 s	37.43 cm	89	439 s	37.18 cm
15	69 s	37.88 cm	40	194 s	37.67 cm	65	319 s	37.42 cm	90	444 s	37.18 cm
16	74 s	37.88 cm	41	199 s	37.65 cm	66	324 s	37.41 cm	91	449 s	37.16 cm
17	79 s	37.87 cm	42	204 s	37.64 cm	67	329 s	37.4 cm	92	454 s	37.15 cm
18	84 s	37.87 cm	43	209 s	37.63 cm	68	334 s	37.39 cm	93	459 s	37.14 cm
19	89 s	37.86 cm	44	214 s	37.62 cm	69	339 s	37.38 cm	94	464 s	37.13 cm
20	94 s	37.85 cm	45	219 s	37.61 cm	70	344 s	37.37 cm	95	469 s	37.12 cm
21	99 s	37.84 cm	46	224 s	37.6 cm	71	349 s	37.36 cm	96	474 s	37.11 cm
22	104 s	37.82 cm	47	229 s	37.59 cm	72	354 s	37.35 cm	97	479 s	37.1 cm
23	109 s	37.82 cm	48	234 s	37.58 cm	73	359 s	37.34 cm	98	484 s	37.09 cm
24	114 s	37.81 cm	49	239 s	37.57 cm	74	364 s	37.32 cm	99	489 s	37.08 cm
25	119 s	37.8 cm	50	244 s	37.56 cm	75	369 s	37.32 cm	100	494 s	37.07 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
101	499 s	37.06 cm	133	659 s	36.76 cm	165	819 s	36.46 cm	197	979 s	36.16 cm
102	504 s	37.05 cm	134	664 s	36.75 cm	166	824 s	36.45 cm	198	984 s	36.16 cm
103	509 s	37.05 cm	135	669 s	36.75 cm	167	829 s	36.44 cm	199	989 s	36.15 cm
104	514 s	37.04 cm	136	674 s	36.74 cm	168	834 s	36.43 cm	200	994 s	36.14 cm
105	519 s	37.03 cm	137	679 s	36.73 cm	169	839 s	36.43 cm	201	999 s	36.13 cm
106	524 s	37.02 cm	138	684 s	36.72 cm	170	844 s	36.42 cm	202	1004 s	36.12 cm
107	529 s	37.0 cm	139	689 s	36.71 cm	171	849 s	36.41 cm	203	1009 s	36.11 cm
108	534 s	37.0 cm	140	694 s	36.7 cm	172	854 s	36.4 cm	204	1014 s	36.1 cm
109	539 s	36.99 cm	141	699 s	36.69 cm	173	859 s	36.39 cm	205	1019 s	36.09 cm
110	544 s	36.98 cm	142	704 s	36.67 cm	174	864 s	36.38 cm	206	1024 s	36.09 cm
111	549 s	36.97 cm	143	709 s	36.66 cm	175	869 s	36.37 cm	207	1029 s	36.08 cm
112	554 s	36.96 cm	144	714 s	36.65 cm	176	874 s	36.36 cm	208	1034 s	36.07 cm
113	559 s	36.95 cm	145	719 s	36.65 cm	177	879 s	36.36 cm	209	1039 s	36.06 cm
114	564 s	36.94 cm	146	724 s	36.64 cm	178	884 s	36.34 cm	210	1044 s	36.05 cm
115	569 s	36.93 cm	147	729 s	36.63 cm	179	889 s	36.33 cm	211	1049 s	36.04 cm
116	574 s	36.93 cm	148	734 s	36.62 cm	180	894 s	36.32 cm	212	1054 s	36.03 cm
117	579 s	36.92 cm	149	739 s	36.61 cm	181	899 s	36.31 cm	213	1059 s	36.03 cm
118	584 s	36.91 cm	150	744 s	36.6 cm	182	904 s	36.3 cm	214	1064 s	36.01 cm
119	589 s	36.9 cm	151	749 s	36.59 cm	183	909 s	36.29 cm	215	1069 s	36.0 cm
120	594 s	36.89 cm	152	754 s	36.59 cm	184	914 s	36.28 cm	216	1074 s	35.99 cm
121	599 s	36.88 cm	153	759 s	36.58 cm	185	919 s	36.28 cm	217	1079 s	35.99 cm
122	604 s	36.87 cm	154	764 s	36.57 cm	186	924 s	36.27 cm	218	1084 s	35.98 cm
123	609 s	36.86 cm	155	769 s	36.56 cm	187	929 s	36.26 cm	219	1089 s	35.97 cm
124	614 s	36.85 cm	156	774 s	36.55 cm	188	934 s	36.25 cm	220	1094 s	35.96 cm
125	619 s	36.83 cm	157	779 s	36.54 cm	189	939 s	36.24 cm	221	1099 s	35.95 cm
126	624 s	36.82 cm	158	784 s	36.53 cm	190	944 s	36.23 cm	222	1104 s	35.94 cm
127	629 s	36.82 cm	159	789 s	36.52 cm	191	949 s	36.22 cm	223	1109 s	35.93 cm
128	634 s	36.81 cm	160	794 s	36.52 cm	192	954 s	36.22 cm	224	1114 s	35.92 cm
129	639 s	36.8 cm	161	799 s	36.5 cm	193	959 s	36.21 cm	225	1119 s	35.92 cm
130	644 s	36.79 cm	162	804 s	36.49 cm	194	964 s	36.2 cm	226	1124 s	35.91 cm
131	649 s	36.78 cm	163	809 s	36.48 cm	195	969 s	36.18 cm	227	1129 s	35.9 cm
132	654 s	36.77 cm	164	814 s	36.47 cm	196	974 s	36.17 cm	228	1134 s	35.89 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
229	1139 s	35.88 cm	261	1299 s	35.6 cm	293	1459 s	35.32 cm	325	1619 s	35.05 cm
230	1144 s	35.87 cm	262	1304 s	35.59 cm	294	1464 s	35.31 cm	326	1624 s	35.03 cm
231	1149 s	35.87 cm	263	1309 s	35.58 cm	295	1469 s	35.3 cm	327	1629 s	35.03 cm
232	1154 s	35.85 cm	264	1314 s	35.57 cm	296	1474 s	35.29 cm	328	1634 s	35.02 cm
233	1159 s	35.84 cm	265	1319 s	35.56 cm	297	1479 s	35.28 cm	329	1639 s	35.01 cm
234	1164 s	35.83 cm	266	1324 s	35.56 cm	298	1484 s	35.28 cm	330	1644 s	35.0 cm
235	1169 s	35.82 cm	267	1329 s	35.55 cm	299	1489 s	35.27 cm	331	1649 s	34.99 cm
236	1174 s	35.81 cm	268	1334 s	35.54 cm	300	1494 s	35.26 cm	332	1654 s	34.99 cm
237	1179 s	35.81 cm	269	1339 s	35.52 cm	301	1499 s	35.25 cm	333	1659 s	34.98 cm
238	1184 s	35.8 cm	270	1344 s	35.51 cm	302	1504 s	35.24 cm	334	1664 s	34.97 cm
239	1189 s	35.79 cm	271	1349 s	35.51 cm	303	1509 s	35.24 cm	335	1669 s	34.96 cm
240	1194 s	35.78 cm	272	1354 s	35.5 cm	304	1514 s	35.23 cm	336	1674 s	34.95 cm
241	1199 s	35.77 cm	273	1359 s	35.49 cm	305	1519 s	35.22 cm	337	1679 s	34.95 cm
242	1204 s	35.77 cm	274	1364 s	35.48 cm	306	1524 s	35.21 cm	338	1684 s	34.94 cm
243	1209 s	35.76 cm	275	1369 s	35.47 cm	307	1529 s	35.19 cm	339	1689 s	34.93 cm
244	1214 s	35.75 cm	276	1374 s	35.46 cm	308	1534 s	35.19 cm	340	1694 s	34.92 cm
245	1219 s	35.74 cm	277	1379 s	35.46 cm	309	1539 s	35.18 cm	341	1699 s	34.91 cm
246	1224 s	35.73 cm	278	1384 s	35.45 cm	310	1544 s	35.17 cm	342	1704 s	34.91 cm
247	1229 s	35.72 cm	279	1389 s	35.44 cm	311	1549 s	35.16 cm	343	1709 s	34.9 cm
248	1234 s	35.72 cm	280	1394 s	35.43 cm	312	1554 s	35.15 cm	344	1714 s	34.89 cm
249	1239 s	35.71 cm	281	1399 s	35.43 cm	313	1559 s	35.15 cm	345	1719 s	34.87 cm
250	1244 s	35.69 cm	282	1404 s	35.42 cm	314	1564 s	35.14 cm	346	1724 s	34.87 cm
251	1249 s	35.68 cm	283	1409 s	35.41 cm	315	1569 s	35.13 cm	347	1729 s	34.86 cm
252	1254 s	35.67 cm	284	1414 s	35.4 cm	316	1574 s	35.12 cm	348	1734 s	34.85 cm
253	1259 s	35.66 cm	285	1419 s	35.39 cm	317	1579 s	35.11 cm	349	1739 s	34.84 cm
254	1264 s	35.65 cm	286	1424 s	35.38 cm	318	1584 s	35.11 cm	350	1744 s	34.83 cm
255	1269 s	35.65 cm	287	1429 s	35.38 cm	319	1589 s	35.1 cm	351	1749 s	34.83 cm
256	1274 s	35.64 cm	288	1434 s	35.36 cm	320	1594 s	35.09 cm	352	1754 s	34.82 cm
257	1279 s	35.63 cm	289	1439 s	35.35 cm	321	1599 s	35.08 cm	353	1759 s	34.81 cm
258	1284 s	35.62 cm	290	1444 s	35.34 cm	322	1604 s	35.07 cm	354	1764 s	34.8 cm
259	1289 s	35.61 cm	291	1449 s	35.33 cm	323	1609 s	35.07 cm	355	1769 s	34.8 cm
260	1294 s	35.61 cm	292	1454 s	35.32 cm	324	1614 s	35.06 cm	356	1774 s	34.79 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
357	1779 s	34.78 cm	389	1939 s	34.52 cm	421	2099 s	34.27 cm	453	2259 s	34.01 cm
358	1784 s	34.77 cm	390	1944 s	34.51 cm	422	2104 s	34.26 cm	454	2264 s	34.0 cm
359	1789 s	34.76 cm	391	1949 s	34.5 cm	423	2109 s	34.25 cm	455	2269 s	34.0 cm
360	1794 s	34.76 cm	392	1954 s	34.49 cm	424	2114 s	34.24 cm	456	2274 s	33.99 cm
361	1799 s	34.75 cm	393	1959 s	34.49 cm	425	2119 s	34.24 cm	457	2279 s	33.98 cm
362	1804 s	34.74 cm	394	1964 s	34.48 cm	426	2124 s	34.23 cm	458	2284 s	33.97 cm
363	1809 s	34.73 cm	395	1969 s	34.47 cm	427	2129 s	34.21 cm	459	2289 s	33.97 cm
364	1814 s	34.73 cm	396	1974 s	34.46 cm	428	2134 s	34.2 cm	460	2294 s	33.96 cm
365	1819 s	34.72 cm	397	1979 s	34.46 cm	429	2139 s	34.19 cm	461	2299 s	33.95 cm
366	1824 s	34.7 cm	398	1984 s	34.45 cm	430	2144 s	34.19 cm	462	2304 s	33.95 cm
367	1829 s	34.69 cm	399	1989 s	34.44 cm	431	2149 s	34.18 cm	463	2309 s	33.94 cm
368	1834 s	34.69 cm	400	1994 s	34.43 cm	432	2154 s	34.17 cm	464	2314 s	33.93 cm
369	1839 s	34.68 cm	401	1999 s	34.43 cm	433	2159 s	34.17 cm	465	2319 s	33.92 cm
370	1844 s	34.67 cm	402	2004 s	34.42 cm	434	2164 s	34.16 cm	466	2324 s	33.92 cm
371	1849 s	34.66 cm	403	2009 s	34.41 cm	435	2169 s	34.15 cm	467	2329 s	33.91 cm
372	1854 s	34.65 cm	404	2014 s	34.4 cm	436	2174 s	34.14 cm	468	2334 s	33.9 cm
373	1859 s	34.65 cm	405	2019 s	34.4 cm	437	2179 s	34.14 cm	469	2339 s	33.9 cm
374	1864 s	34.64 cm	406	2024 s	34.39 cm	438	2184 s	34.13 cm	470	2344 s	33.88 cm
375	1869 s	34.63 cm	407	2029 s	34.37 cm	439	2189 s	34.12 cm	471	2349 s	33.87 cm
376	1874 s	34.62 cm	408	2034 s	34.36 cm	440	2194 s	34.11 cm	472	2354 s	33.86 cm
377	1879 s	34.62 cm	409	2039 s	34.35 cm	441	2199 s	34.11 cm	473	2359 s	33.86 cm
378	1884 s	34.61 cm	410	2044 s	34.35 cm	442	2204 s	34.1 cm	474	2364 s	33.85 cm
379	1889 s	34.6 cm	411	2049 s	34.34 cm	443	2209 s	34.09 cm	475	2369 s	33.84 cm
380	1894 s	34.59 cm	412	2054 s	34.33 cm	444	2214 s	34.09 cm	476	2374 s	33.84 cm
381	1899 s	34.59 cm	413	2059 s	34.33 cm	445	2219 s	34.08 cm	477	2379 s	33.83 cm
382	1904 s	34.58 cm	414	2064 s	34.32 cm	446	2224 s	34.07 cm	478	2384 s	33.82 cm
383	1909 s	34.57 cm	415	2069 s	34.31 cm	447	2229 s	34.05 cm	479	2389 s	33.81 cm
384	1914 s	34.56 cm	416	2074 s	34.3 cm	448	2234 s	34.05 cm	480	2394 s	33.81 cm
385	1919 s	34.56 cm	417	2079 s	34.3 cm	449	2239 s	34.04 cm	481	2399 s	33.8 cm
386	1924 s	34.54 cm	418	2084 s	34.29 cm	450	2244 s	34.03 cm	482	2404 s	33.79 cm
387	1929 s	34.53 cm	419	2089 s	34.28 cm	451	2249 s	34.03 cm	483	2409 s	33.78 cm
388	1934 s	34.52 cm	420	2094 s	34.27 cm	452	2254 s	34.02 cm	484	2414 s	33.78 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
485	2419 s	33.77 cm	517	2579 s	33.52 cm	549	2739 s	33.29 cm	581	2899 s	33.05 cm
486	2424 s	33.76 cm	518	2584 s	33.52 cm	550	2744 s	33.28 cm	582	2904 s	33.04 cm
487	2429 s	33.76 cm	519	2589 s	33.51 cm	551	2749 s	33.28 cm	583	2909 s	33.03 cm
488	2434 s	33.75 cm	520	2594 s	33.5 cm	552	2754 s	33.27 cm	584	2914 s	33.03 cm
489	2439 s	33.74 cm	521	2599 s	33.49 cm	553	2759 s	33.26 cm	585	2919 s	33.02 cm
490	2444 s	33.74 cm	522	2604 s	33.49 cm	554	2764 s	33.25 cm	586	2924 s	33.01 cm
491	2449 s	33.72 cm	523	2609 s	33.48 cm	555	2769 s	33.25 cm	587	2929 s	33.01 cm
492	2454 s	33.71 cm	524	2614 s	33.47 cm	556	2774 s	33.23 cm	588	2934 s	33.0 cm
493	2459 s	33.7 cm	525	2619 s	33.47 cm	557	2779 s	33.22 cm	589	2939 s	32.99 cm
494	2464 s	33.7 cm	526	2624 s	33.46 cm	558	2784 s	33.22 cm	590	2944 s	32.99 cm
495	2469 s	33.69 cm	527	2629 s	33.45 cm	559	2789 s	33.21 cm	591	2949 s	32.98 cm
496	2474 s	33.68 cm	528	2634 s	33.45 cm	560	2794 s	33.2 cm	592	2954 s	32.97 cm
497	2479 s	33.67 cm	529	2639 s	33.44 cm	561	2799 s	33.2 cm	593	2959 s	32.97 cm
498	2484 s	33.67 cm	530	2644 s	33.43 cm	562	2804 s	33.19 cm	594	2964 s	32.96 cm
499	2489 s	33.66 cm	531	2649 s	33.43 cm	563	2809 s	33.18 cm	595	2969 s	32.95 cm
500	2494 s	33.65 cm	532	2654 s	33.42 cm	564	2814 s	33.17 cm	596	2974 s	32.95 cm
501	2499 s	33.65 cm	533	2659 s	33.41 cm	565	2819 s	33.17 cm	597	2979 s	32.94 cm
502	2504 s	33.64 cm	534	2664 s	33.39 cm	566	2824 s	33.16 cm	598	2984 s	32.93 cm
503	2509 s	33.63 cm	535	2669 s	33.39 cm	567	2829 s	33.15 cm	599	2989 s	32.93 cm
504	2514 s	33.63 cm	536	2674 s	33.38 cm	568	2834 s	33.15 cm	600	2994 s	32.92 cm
505	2519 s	33.62 cm	537	2679 s	33.37 cm	569	2839 s	33.14 cm	601	2999 s	32.9 cm
506	2524 s	33.61 cm	538	2684 s	33.37 cm	570	2844 s	33.13 cm	602	3004 s	32.9 cm
507	2529 s	33.6 cm	539	2689 s	33.36 cm	571	2849 s	33.13 cm	603	3009 s	32.89 cm
508	2534 s	33.6 cm	540	2694 s	33.35 cm	572	2854 s	33.12 cm	604	3014 s	32.88 cm
509	2539 s	33.59 cm	541	2699 s	33.35 cm	573	2859 s	33.11 cm	605	3019 s	32.88 cm
510	2544 s	33.58 cm	542	2704 s	33.34 cm	574	2864 s	33.11 cm	606	3024 s	32.87 cm
511	2549 s	33.58 cm	543	2709 s	33.33 cm	575	2869 s	33.1 cm	607	3029 s	32.86 cm
512	2554 s	33.56 cm	544	2714 s	33.33 cm	576	2874 s	33.09 cm	608	3034 s	32.86 cm
513	2559 s	33.55 cm	545	2719 s	33.32 cm	577	2879 s	33.09 cm	609	3039 s	32.85 cm
514	2564 s	33.55 cm	546	2724 s	33.31 cm	578	2884 s	33.08 cm	610	3044 s	32.84 cm
515	2569 s	33.54 cm	547	2729 s	33.3 cm	579	2889 s	33.06 cm	611	3049 s	32.84 cm
516	2574 s	33.53 cm	548	2734 s	33.3 cm	580	2894 s	33.05 cm	612	3054 s	32.83 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
613	3059 s	32.82 cm	645	3219 s	32.6 cm	677	3379 s	32.37 cm	709	3539 s	32.15 cm
614	3064 s	32.82 cm	646	3224 s	32.59 cm	678	3384 s	32.36 cm	710	3544 s	32.15 cm
615	3069 s	32.81 cm	647	3229 s	32.57 cm	679	3389 s	32.36 cm	711	3549 s	32.14 cm
616	3074 s	32.8 cm	648	3234 s	32.57 cm	680	3394 s	32.35 cm	712	3554 s	32.13 cm
617	3079 s	32.8 cm	649	3239 s	32.56 cm	681	3399 s	32.34 cm	713	3559 s	32.13 cm
618	3084 s	32.79 cm	650	3244 s	32.55 cm	682	3404 s	32.34 cm	714	3564 s	32.12 cm
619	3089 s	32.78 cm	651	3249 s	32.55 cm	683	3409 s	32.33 cm	715	3569 s	32.11 cm
620	3094 s	32.77 cm	652	3254 s	32.54 cm	684	3414 s	32.32 cm	716	3574 s	32.11 cm
621	3099 s	32.77 cm	653	3259 s	32.54 cm	685	3419 s	32.32 cm	717	3579 s	32.1 cm
622	3104 s	32.76 cm	654	3264 s	32.53 cm	686	3424 s	32.31 cm	718	3584 s	32.08 cm
623	3109 s	32.74 cm	655	3269 s	32.52 cm	687	3429 s	32.3 cm	719	3589 s	32.08 cm
624	3114 s	32.74 cm	656	3274 s	32.52 cm	688	3434 s	32.3 cm	720	3594 s	32.07 cm
625	3119 s	32.73 cm	657	3279 s	32.51 cm	689	3439 s	32.29 cm	721	3599 s	32.07 cm
626	3124 s	32.72 cm	658	3284 s	32.5 cm	690	3444 s	32.28 cm	722	3604 s	32.06 cm
627	3129 s	32.72 cm	659	3289 s	32.5 cm	691	3449 s	32.28 cm	723	3609 s	32.05 cm
628	3134 s	32.71 cm	660	3294 s	32.49 cm	692	3454 s	32.27 cm	724	3614 s	32.05 cm
629	3139 s	32.7 cm	661	3299 s	32.48 cm	693	3459 s	32.27 cm	725	3619 s	32.04 cm
630	3144 s	32.7 cm	662	3304 s	32.48 cm	694	3464 s	32.26 cm	726	3624 s	32.03 cm
631	3149 s	32.69 cm	663	3309 s	32.47 cm	695	3469 s	32.24 cm	727	3629 s	32.03 cm
632	3154 s	32.68 cm	664	3314 s	32.46 cm	696	3474 s	32.23 cm	728	3634 s	32.02 cm
633	3159 s	32.68 cm	665	3319 s	32.46 cm	697	3479 s	32.23 cm	729	3639 s	32.01 cm
634	3164 s	32.67 cm	666	3324 s	32.45 cm	698	3484 s	32.22 cm	730	3644 s	32.01 cm
635	3169 s	32.66 cm	667	3329 s	32.44 cm	699	3489 s	32.22 cm	731	3649 s	32.0 cm
636	3174 s	32.66 cm	668	3334 s	32.44 cm	700	3494 s	32.21 cm	732	3654 s	32.0 cm
637	3179 s	32.65 cm	669	3339 s	32.43 cm	701	3499 s	32.2 cm	733	3659 s	31.99 cm
638	3184 s	32.64 cm	670	3344 s	32.41 cm	702	3504 s	32.2 cm	734	3664 s	31.98 cm
639	3189 s	32.64 cm	671	3349 s	32.41 cm	703	3509 s	32.19 cm	735	3669 s	31.98 cm
640	3194 s	32.63 cm	672	3354 s	32.4 cm	704	3514 s	32.18 cm	736	3674 s	31.97 cm
641	3199 s	32.62 cm	673	3359 s	32.39 cm	705	3519 s	32.18 cm	737	3679 s	31.96 cm
642	3204 s	32.62 cm	674	3364 s	32.39 cm	706	3524 s	32.17 cm	738	3684 s	31.96 cm
643	3209 s	32.61 cm	675	3369 s	32.38 cm	707	3529 s	32.17 cm	739	3689 s	31.95 cm
644	3214 s	32.6 cm	676	3374 s	32.37 cm	708	3534 s	32.16 cm	740	3694 s	31.94 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
741	3699 s	31.94 cm	773	3859 s	31.72 cm	805	4019 s	31.5 cm	837	4179 s	31.29 cm
742	3704 s	31.92 cm	774	3864 s	31.71 cm	806	4024 s	31.5 cm	838	4184 s	31.29 cm
743	3709 s	31.92 cm	775	3869 s	31.7 cm	807	4029 s	31.49 cm	839	4189 s	31.28 cm
744	3714 s	31.91 cm	776	3874 s	31.7 cm	808	4034 s	31.48 cm	840	4194 s	31.26 cm
745	3719 s	31.9 cm	777	3879 s	31.69 cm	809	4039 s	31.48 cm	841	4199 s	31.26 cm
746	3724 s	31.9 cm	778	3884 s	31.68 cm	810	4044 s	31.47 cm	842	4204 s	31.25 cm
747	3729 s	31.89 cm	779	3889 s	31.68 cm	811	4049 s	31.47 cm	843	4209 s	31.25 cm
748	3734 s	31.88 cm	780	3894 s	31.67 cm	812	4054 s	31.46 cm	844	4214 s	31.24 cm
749	3739 s	31.88 cm	781	3899 s	31.67 cm	813	4059 s	31.45 cm	845	4219 s	31.23 cm
750	3744 s	31.87 cm	782	3904 s	31.66 cm	814	4064 s	31.45 cm	846	4224 s	31.23 cm
751	3749 s	31.87 cm	783	3909 s	31.65 cm	815	4069 s	31.43 cm	847	4229 s	31.22 cm
752	3754 s	31.86 cm	784	3914 s	31.65 cm	816	4074 s	31.42 cm	848	4234 s	31.21 cm
753	3759 s	31.85 cm	785	3919 s	31.64 cm	817	4079 s	31.42 cm	849	4239 s	31.21 cm
754	3764 s	31.85 cm	786	3924 s	31.63 cm	818	4084 s	31.41 cm	850	4244 s	31.2 cm
755	3769 s	31.84 cm	787	3929 s	31.63 cm	819	4089 s	31.41 cm	851	4249 s	31.19 cm
756	3774 s	31.83 cm	788	3934 s	31.62 cm	820	4094 s	31.4 cm	852	4254 s	31.19 cm
757	3779 s	31.83 cm	789	3939 s	31.62 cm	821	4099 s	31.39 cm	853	4259 s	31.18 cm
758	3784 s	31.82 cm	790	3944 s	31.61 cm	822	4104 s	31.39 cm	854	4264 s	31.18 cm
759	3789 s	31.81 cm	791	3949 s	31.59 cm	823	4109 s	31.38 cm	855	4269 s	31.17 cm
760	3794 s	31.81 cm	792	3954 s	31.59 cm	824	4114 s	31.38 cm	856	4274 s	31.16 cm
761	3799 s	31.8 cm	793	3959 s	31.58 cm	825	4119 s	31.37 cm	857	4279 s	31.16 cm
762	3804 s	31.79 cm	794	3964 s	31.57 cm	826	4124 s	31.36 cm	858	4284 s	31.15 cm
763	3809 s	31.79 cm	795	3969 s	31.57 cm	827	4129 s	31.36 cm	859	4289 s	31.15 cm
764	3814 s	31.78 cm	796	3974 s	31.56 cm	828	4134 s	31.35 cm	860	4294 s	31.14 cm
765	3819 s	31.78 cm	797	3979 s	31.56 cm	829	4139 s	31.34 cm	861	4299 s	31.13 cm
766	3824 s	31.77 cm	798	3984 s	31.55 cm	830	4144 s	31.34 cm	862	4304 s	31.13 cm
767	3829 s	31.75 cm	799	3989 s	31.54 cm	831	4149 s	31.33 cm	863	4309 s	31.12 cm
768	3834 s	31.75 cm	800	3994 s	31.54 cm	832	4154 s	31.33 cm	864	4314 s	31.1 cm
769	3839 s	31.74 cm	801	3999 s	31.53 cm	833	4159 s	31.32 cm	865	4319 s	31.1 cm
770	3844 s	31.74 cm	802	4004 s	31.52 cm	834	4164 s	31.31 cm	866	4324 s	31.09 cm
771	3849 s	31.73 cm	803	4009 s	31.52 cm	835	4169 s	31.31 cm	867	4329 s	31.09 cm
772	3854 s	31.72 cm	804	4014 s	31.51 cm	836	4174 s	31.3 cm	868	4334 s	31.08 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
869	4339 s	31.07 cm	901	4499 s	30.87 cm	933	4659 s	30.66 cm	965	4819 s	30.46 cm
870	4344 s	31.07 cm	902	4504 s	30.86 cm	934	4664 s	30.66 cm	966	4824 s	30.46 cm
871	4349 s	31.06 cm	903	4509 s	30.85 cm	935	4669 s	30.65 cm	967	4829 s	30.44 cm
872	4354 s	31.06 cm	904	4514 s	30.85 cm	936	4674 s	30.64 cm	968	4834 s	30.43 cm
873	4359 s	31.05 cm	905	4519 s	30.84 cm	937	4679 s	30.64 cm	969	4839 s	30.42 cm
874	4364 s	31.04 cm	906	4524 s	30.84 cm	938	4684 s	30.63 cm	970	4844 s	30.42 cm
875	4369 s	31.04 cm	907	4529 s	30.83 cm	939	4689 s	30.63 cm	971	4849 s	30.42 cm
876	4374 s	31.03 cm	908	4534 s	30.82 cm	940	4694 s	30.61 cm	972	4854 s	30.41 cm
877	4379 s	31.03 cm	909	4539 s	30.82 cm	941	4699 s	30.61 cm	973	4859 s	30.4 cm
878	4384 s	31.02 cm	910	4544 s	30.81 cm	942	4704 s	30.6 cm	974	4864 s	30.4 cm
879	4389 s	31.01 cm	911	4549 s	30.81 cm	943	4709 s	30.59 cm	975	4869 s	30.39 cm
880	4394 s	31.01 cm	912	4554 s	30.8 cm	944	4714 s	30.59 cm	976	4874 s	30.38 cm
881	4399 s	31.0 cm	913	4559 s	30.79 cm	945	4719 s	30.58 cm	977	4879 s	30.38 cm
882	4404 s	30.99 cm	914	4564 s	30.79 cm	946	4724 s	30.57 cm	978	4884 s	30.37 cm
883	4409 s	30.99 cm	915	4569 s	30.77 cm	947	4729 s	30.57 cm	979	4889 s	30.37 cm
884	4414 s	30.98 cm	916	4574 s	30.77 cm	948	4734 s	30.56 cm	980	4894 s	30.36 cm
885	4419 s	30.98 cm	917	4579 s	30.76 cm	949	4739 s	30.56 cm	981	4899 s	30.36 cm
886	4424 s	30.97 cm	918	4584 s	30.75 cm	950	4744 s	30.55 cm	982	4904 s	30.35 cm
887	4429 s	30.96 cm	919	4589 s	30.75 cm	951	4749 s	30.54 cm	983	4909 s	30.34 cm
888	4434 s	30.96 cm	920	4594 s	30.74 cm	952	4754 s	30.54 cm	984	4914 s	30.34 cm
889	4439 s	30.95 cm	921	4599 s	30.74 cm	953	4759 s	30.53 cm	985	4919 s	30.33 cm
890	4444 s	30.95 cm	922	4604 s	30.73 cm	954	4764 s	30.53 cm	986	4924 s	30.33 cm
891	4449 s	30.93 cm	923	4609 s	30.72 cm	955	4769 s	30.52 cm	987	4929 s	30.32 cm
892	4454 s	30.92 cm	924	4614 s	30.72 cm	956	4774 s	30.52 cm	988	4934 s	30.31 cm
893	4459 s	30.92 cm	925	4619 s	30.71 cm	957	4779 s	30.51 cm	989	4939 s	30.31 cm
894	4464 s	30.91 cm	926	4624 s	30.7 cm	958	4784 s	30.5 cm	990	4944 s	30.3 cm
895	4469 s	30.9 cm	927	4629 s	30.7 cm	959	4789 s	30.5 cm	991	4949 s	30.3 cm
896	4474 s	30.9 cm	928	4634 s	30.69 cm	960	4794 s	30.49 cm	992	4954 s	30.28 cm
897	4479 s	30.89 cm	929	4639 s	30.69 cm	961	4799 s	30.48 cm	993	4959 s	30.27 cm
898	4484 s	30.89 cm	930	4644 s	30.68 cm	962	4804 s	30.48 cm	994	4964 s	30.27 cm
899	4489 s	30.88 cm	931	4649 s	30.68 cm	963	4809 s	30.47 cm	995	4969 s	30.26 cm
900	4494 s	30.87 cm	932	4654 s	30.67 cm	964	4814 s	30.47 cm	996	4974 s	30.26 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
997	4979 s	30.25 cm	1029	5139 s	30.05 cm	1061	5299 s	29.86 cm	1093	5459 s	29.66 cm
998	4984 s	30.24 cm	1030	5144 s	30.05 cm	1062	5304 s	29.85 cm	1094	5464 s	29.65 cm
999	4989 s	30.24 cm	1031	5149 s	30.04 cm	1063	5309 s	29.84 cm	1095	5469 s	29.65 cm
1000	4994 s	30.23 cm	1032	5154 s	30.04 cm	1064	5314 s	29.84 cm	1096	5474 s	29.64 cm
1001	4999 s	30.23 cm	1033	5159 s	30.03 cm	1065	5319 s	29.83 cm	1097	5479 s	29.64 cm
1002	5004 s	30.22 cm	1034	5164 s	30.02 cm	1066	5324 s	29.83 cm	1098	5484 s	29.62 cm
1003	5009 s	30.22 cm	1035	5169 s	30.02 cm	1067	5329 s	29.82 cm	1099	5489 s	29.62 cm
1004	5014 s	30.21 cm	1036	5174 s	30.01 cm	1068	5334 s	29.81 cm	1100	5494 s	29.61 cm
1005	5019 s	30.2 cm	1037	5179 s	30.01 cm	1069	5339 s	29.81 cm	1101	5499 s	29.6 cm
1006	5024 s	30.2 cm	1038	5184 s	30.0 cm	1070	5344 s	29.79 cm	1102	5504 s	29.6 cm
1007	5029 s	30.19 cm	1039	5189 s	29.99 cm	1071	5349 s	29.79 cm	1103	5509 s	29.59 cm
1008	5034 s	30.18 cm	1040	5194 s	29.99 cm	1072	5354 s	29.78 cm	1104	5514 s	29.59 cm
1009	5039 s	30.18 cm	1041	5199 s	29.98 cm	1073	5359 s	29.78 cm	1105	5519 s	29.58 cm
1010	5044 s	30.17 cm	1042	5204 s	29.98 cm	1074	5364 s	29.77 cm	1106	5524 s	29.58 cm
1011	5049 s	30.17 cm	1043	5209 s	29.97 cm	1075	5369 s	29.76 cm	1107	5529 s	29.57 cm
1012	5054 s	30.16 cm	1044	5214 s	29.97 cm	1076	5374 s	29.76 cm	1108	5534 s	29.57 cm
1013	5059 s	30.16 cm	1045	5219 s	29.95 cm	1077	5379 s	29.75 cm	1109	5539 s	29.56 cm
1014	5064 s	30.15 cm	1046	5224 s	29.94 cm	1078	5384 s	29.75 cm	1110	5544 s	29.55 cm
1015	5069 s	30.14 cm	1047	5229 s	29.94 cm	1079	5389 s	29.74 cm	1111	5549 s	29.55 cm
1016	5074 s	30.14 cm	1048	5234 s	29.93 cm	1080	5394 s	29.74 cm	1112	5554 s	29.54 cm
1017	5079 s	30.13 cm	1049	5239 s	29.93 cm	1081	5399 s	29.73 cm	1113	5559 s	29.54 cm
1018	5084 s	30.13 cm	1050	5244 s	29.92 cm	1082	5404 s	29.72 cm	1114	5564 s	29.53 cm
1019	5089 s	30.11 cm	1051	5249 s	29.91 cm	1083	5409 s	29.72 cm	1115	5569 s	29.53 cm
1020	5094 s	30.1 cm	1052	5254 s	29.91 cm	1084	5414 s	29.71 cm	1116	5574 s	29.52 cm
1021	5099 s	30.1 cm	1053	5259 s	29.9 cm	1085	5419 s	29.71 cm	1117	5579 s	29.52 cm
1022	5104 s	30.09 cm	1054	5264 s	29.9 cm	1086	5424 s	29.7 cm	1118	5584 s	29.51 cm
1023	5109 s	30.09 cm	1055	5269 s	29.89 cm	1087	5429 s	29.7 cm	1119	5589 s	29.5 cm
1024	5114 s	30.08 cm	1056	5274 s	29.88 cm	1088	5434 s	29.69 cm	1120	5594 s	29.5 cm
1025	5119 s	30.08 cm	1057	5279 s	29.88 cm	1089	5439 s	29.68 cm	1121	5599 s	29.49 cm
1026	5124 s	30.07 cm	1058	5284 s	29.87 cm	1090	5444 s	29.68 cm	1122	5604 s	29.49 cm
1027	5129 s	30.07 cm	1059	5289 s	29.87 cm	1091	5449 s	29.67 cm	1123	5609 s	29.48 cm
1028	5134 s	30.06 cm	1060	5294 s	29.86 cm	1092	5454 s	29.67 cm	1124	5614 s	29.48 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
1125	5619 s	29.46 cm	1157	5779 s	29.27 cm	1189	5939 s	29.08 cm	1221	6099 s	28.89 cm
1126	5624 s	29.45 cm	1158	5784 s	29.26 cm	1190	5944 s	29.07 cm	1222	6104 s	28.88 cm
1127	5629 s	29.45 cm	1159	5789 s	29.26 cm	1191	5949 s	29.07 cm	1223	6109 s	28.88 cm
1128	5634 s	29.44 cm	1160	5794 s	29.25 cm	1192	5954 s	29.06 cm	1224	6114 s	28.87 cm
1129	5639 s	29.44 cm	1161	5799 s	29.25 cm	1193	5959 s	29.05 cm	1225	6119 s	28.87 cm
1130	5644 s	29.43 cm	1162	5804 s	29.24 cm	1194	5964 s	29.05 cm	1226	6124 s	28.86 cm
1131	5649 s	29.43 cm	1163	5809 s	29.24 cm	1195	5969 s	29.04 cm	1227	6129 s	28.85 cm
1132	5654 s	29.42 cm	1164	5814 s	29.23 cm	1196	5974 s	29.04 cm	1228	6134 s	28.85 cm
1133	5659 s	29.42 cm	1165	5819 s	29.22 cm	1197	5979 s	29.03 cm	1229	6139 s	28.84 cm
1134	5664 s	29.41 cm	1166	5824 s	29.22 cm	1198	5984 s	29.03 cm	1230	6144 s	28.84 cm
1135	5669 s	29.41 cm	1167	5829 s	29.21 cm	1199	5989 s	29.02 cm	1231	6149 s	28.83 cm
1136	5674 s	29.4 cm	1168	5834 s	29.21 cm	1200	5994 s	29.01 cm	1232	6154 s	28.82 cm
1137	5679 s	29.39 cm	1169	5839 s	29.2 cm	1201	5999 s	29.01 cm	1233	6159 s	28.82 cm
1138	5684 s	29.39 cm	1170	5844 s	29.2 cm	1202	6004 s	29.0 cm	1234	6164 s	28.8 cm
1139	5689 s	29.38 cm	1171	5849 s	29.19 cm	1203	6009 s	29.0 cm	1235	6169 s	28.8 cm
1140	5694 s	29.38 cm	1172	5854 s	29.18 cm	1204	6014 s	28.99 cm	1236	6174 s	28.79 cm
1141	5699 s	29.37 cm	1173	5859 s	29.18 cm	1205	6019 s	28.99 cm	1237	6179 s	28.79 cm
1142	5704 s	29.36 cm	1174	5864 s	29.17 cm	1206	6024 s	28.97 cm	1238	6184 s	28.78 cm
1143	5709 s	29.36 cm	1175	5869 s	29.17 cm	1207	6029 s	28.96 cm	1239	6189 s	28.78 cm
1144	5714 s	29.35 cm	1176	5874 s	29.16 cm	1208	6034 s	28.96 cm	1240	6194 s	28.77 cm
1145	5719 s	29.35 cm	1177	5879 s	29.16 cm	1209	6039 s	28.95 cm	1241	6199 s	28.77 cm
1146	5724 s	29.34 cm	1178	5884 s	29.15 cm	1210	6044 s	28.95 cm	1242	6204 s	28.76 cm
1147	5729 s	29.34 cm	1179	5889 s	29.15 cm	1211	6049 s	28.94 cm	1243	6209 s	28.76 cm
1148	5734 s	29.33 cm	1180	5894 s	29.13 cm	1212	6054 s	28.94 cm	1244	6214 s	28.75 cm
1149	5739 s	29.33 cm	1181	5899 s	29.13 cm	1213	6059 s	28.93 cm	1245	6219 s	28.74 cm
1150	5744 s	29.32 cm	1182	5904 s	29.12 cm	1214	6064 s	28.93 cm	1246	6224 s	28.74 cm
1151	5749 s	29.3 cm	1183	5909 s	29.11 cm	1215	6069 s	28.92 cm	1247	6229 s	28.73 cm
1152	5754 s	29.3 cm	1184	5914 s	29.11 cm	1216	6074 s	28.91 cm	1248	6234 s	28.73 cm
1153	5759 s	29.29 cm	1185	5919 s	29.1 cm	1217	6079 s	28.91 cm	1249	6239 s	28.72 cm
1154	5764 s	29.29 cm	1186	5924 s	29.09 cm	1218	6084 s	28.9 cm	1250	6244 s	28.72 cm
1155	5769 s	29.28 cm	1187	5929 s	29.09 cm	1219	6089 s	28.9 cm	1251	6249 s	28.71 cm
1156	5774 s	29.28 cm	1188	5934 s	29.08 cm	1220	6094 s	28.89 cm	1252	6254 s	28.71 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
1253	6259 s	28.7 cm	1285	6419 s	28.51 cm	1317	6579 s	28.33 cm	1349	6739 s	28.14 cm
1254	6264 s	28.69 cm	1286	6424 s	28.51 cm	1318	6584 s	28.31 cm	1350	6744 s	28.13 cm
1255	6269 s	28.69 cm	1287	6429 s	28.5 cm	1319	6589 s	28.31 cm	1351	6749 s	28.13 cm
1256	6274 s	28.68 cm	1288	6434 s	28.5 cm	1320	6594 s	28.3 cm	1352	6754 s	28.12 cm
1257	6279 s	28.68 cm	1289	6439 s	28.48 cm	1321	6599 s	28.3 cm	1353	6759 s	28.12 cm
1258	6284 s	28.67 cm	1290	6444 s	28.48 cm	1322	6604 s	28.29 cm	1354	6764 s	28.11 cm
1259	6289 s	28.67 cm	1291	6449 s	28.47 cm	1323	6609 s	28.29 cm	1355	6769 s	28.1 cm
1260	6294 s	28.66 cm	1292	6454 s	28.46 cm	1324	6614 s	28.28 cm	1356	6774 s	28.1 cm
1261	6299 s	28.64 cm	1293	6459 s	28.46 cm	1325	6619 s	28.28 cm	1357	6779 s	28.09 cm
1262	6304 s	28.64 cm	1294	6464 s	28.45 cm	1326	6624 s	28.27 cm	1358	6784 s	28.09 cm
1263	6309 s	28.63 cm	1295	6469 s	28.45 cm	1327	6629 s	28.27 cm	1359	6789 s	28.08 cm
1264	6314 s	28.63 cm	1296	6474 s	28.44 cm	1328	6634 s	28.26 cm	1360	6794 s	28.08 cm
1265	6319 s	28.62 cm	1297	6479 s	28.44 cm	1329	6639 s	28.26 cm	1361	6799 s	28.07 cm
1266	6324 s	28.62 cm	1298	6484 s	28.43 cm	1330	6644 s	28.25 cm	1362	6804 s	28.07 cm
1267	6329 s	28.61 cm	1299	6489 s	28.43 cm	1331	6649 s	28.24 cm	1363	6809 s	28.06 cm
1268	6334 s	28.61 cm	1300	6494 s	28.42 cm	1332	6654 s	28.24 cm	1364	6814 s	28.06 cm
1269	6339 s	28.6 cm	1301	6499 s	28.42 cm	1333	6659 s	28.24 cm	1365	6819 s	28.05 cm
1270	6344 s	28.59 cm	1302	6504 s	28.41 cm	1334	6664 s	28.23 cm	1366	6824 s	28.05 cm
1271	6349 s	28.59 cm	1303	6509 s	28.4 cm	1335	6669 s	28.22 cm	1367	6829 s	28.04 cm
1272	6354 s	28.58 cm	1304	6514 s	28.4 cm	1336	6674 s	28.22 cm	1368	6834 s	28.03 cm
1273	6359 s	28.58 cm	1305	6519 s	28.39 cm	1337	6679 s	28.21 cm	1369	6839 s	28.03 cm
1274	6364 s	28.57 cm	1306	6524 s	28.39 cm	1338	6684 s	28.21 cm	1370	6844 s	28.02 cm
1275	6369 s	28.57 cm	1307	6529 s	28.38 cm	1339	6689 s	28.2 cm	1371	6849 s	28.02 cm
1276	6374 s	28.56 cm	1308	6534 s	28.38 cm	1340	6694 s	28.2 cm	1372	6854 s	28.01 cm
1277	6379 s	28.56 cm	1309	6539 s	28.37 cm	1341	6699 s	28.19 cm	1373	6859 s	28.01 cm
1278	6384 s	28.55 cm	1310	6544 s	28.37 cm	1342	6704 s	28.19 cm	1374	6864 s	28.0 cm
1279	6389 s	28.55 cm	1311	6549 s	28.36 cm	1343	6709 s	28.18 cm	1375	6869 s	28.0 cm
1280	6394 s	28.54 cm	1312	6554 s	28.36 cm	1344	6714 s	28.17 cm	1376	6874 s	27.98 cm
1281	6399 s	28.53 cm	1313	6559 s	28.35 cm	1345	6719 s	28.17 cm	1377	6879 s	27.98 cm
1282	6404 s	28.53 cm	1314	6564 s	28.35 cm	1346	6724 s	28.15 cm	1378	6884 s	27.97 cm
1283	6409 s	28.52 cm	1315	6569 s	28.34 cm	1347	6729 s	28.15 cm	1379	6889 s	27.97 cm
1284	6414 s	28.52 cm	1316	6574 s	28.33 cm	1348	6734 s	28.14 cm	1380	6894 s	27.96 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
1381	6899 s	27.95 cm	1413	7059 s	27.77 cm	1445	7219 s	27.59 cm	1477	7379 s	27.41 cm
1382	6904 s	27.95 cm	1414	7064 s	27.77 cm	1446	7224 s	27.59 cm	1478	7384 s	27.41 cm
1383	6909 s	27.95 cm	1415	7069 s	27.76 cm	1447	7229 s	27.58 cm	1479	7389 s	27.4 cm
1384	6914 s	27.94 cm	1416	7074 s	27.76 cm	1448	7234 s	27.58 cm	1480	7394 s	27.4 cm
1385	6919 s	27.93 cm	1417	7079 s	27.75 cm	1449	7239 s	27.57 cm	1481	7399 s	27.39 cm
1386	6924 s	27.93 cm	1418	7084 s	27.74 cm	1450	7244 s	27.57 cm	1482	7404 s	27.39 cm
1387	6929 s	27.92 cm	1419	7089 s	27.74 cm	1451	7249 s	27.56 cm	1483	7409 s	27.38 cm
1388	6934 s	27.92 cm	1420	7094 s	27.73 cm	1452	7254 s	27.55 cm	1484	7414 s	27.37 cm
1389	6939 s	27.91 cm	1421	7099 s	27.73 cm	1453	7259 s	27.55 cm	1485	7419 s	27.37 cm
1390	6944 s	27.91 cm	1422	7104 s	27.72 cm	1454	7264 s	27.54 cm	1486	7424 s	27.37 cm
1391	6949 s	27.9 cm	1423	7109 s	27.72 cm	1455	7269 s	27.54 cm	1487	7429 s	27.36 cm
1392	6954 s	27.89 cm	1424	7114 s	27.71 cm	1456	7274 s	27.53 cm	1488	7434 s	27.36 cm
1393	6959 s	27.89 cm	1425	7119 s	27.71 cm	1457	7279 s	27.53 cm	1489	7439 s	27.35 cm
1394	6964 s	27.88 cm	1426	7124 s	27.7 cm	1458	7284 s	27.52 cm	1490	7444 s	27.33 cm
1395	6969 s	27.88 cm	1427	7129 s	27.7 cm	1459	7289 s	27.52 cm	1491	7449 s	27.33 cm
1396	6974 s	27.87 cm	1428	7134 s	27.69 cm	1460	7294 s	27.51 cm	1492	7454 s	27.32 cm
1397	6979 s	27.87 cm	1429	7139 s	27.69 cm	1461	7299 s	27.51 cm	1493	7459 s	27.32 cm
1398	6984 s	27.86 cm	1430	7144 s	27.68 cm	1462	7304 s	27.49 cm	1494	7464 s	27.31 cm
1399	6989 s	27.86 cm	1431	7149 s	27.68 cm	1463	7309 s	27.49 cm	1495	7469 s	27.31 cm
1400	6994 s	27.85 cm	1432	7154 s	27.66 cm	1464	7314 s	27.48 cm	1496	7474 s	27.3 cm
1401	6999 s	27.85 cm	1433	7159 s	27.65 cm	1465	7319 s	27.48 cm	1497	7479 s	27.3 cm
1402	7004 s	27.84 cm	1434	7164 s	27.65 cm	1466	7324 s	27.47 cm	1498	7484 s	27.29 cm
1403	7009 s	27.84 cm	1435	7169 s	27.64 cm	1467	7329 s	27.47 cm	1499	7489 s	27.29 cm
1404	7014 s	27.82 cm	1436	7174 s	27.64 cm	1468	7334 s	27.46 cm	1500	7494 s	27.28 cm
1405	7019 s	27.82 cm	1437	7179 s	27.63 cm	1469	7339 s	27.45 cm	1501	7499 s	27.28 cm
1406	7024 s	27.81 cm	1438	7184 s	27.63 cm	1470	7344 s	27.45 cm	1502	7504 s	27.27 cm
1407	7029 s	27.81 cm	1439	7189 s	27.62 cm	1471	7349 s	27.44 cm	1503	7509 s	27.26 cm
1408	7034 s	27.8 cm	1440	7194 s	27.62 cm	1472	7354 s	27.44 cm	1504	7514 s	27.26 cm
1409	7039 s	27.79 cm	1441	7199 s	27.61 cm	1473	7359 s	27.43 cm	1505	7519 s	27.25 cm
1410	7044 s	27.79 cm	1442	7204 s	27.61 cm	1474	7364 s	27.43 cm	1506	7524 s	27.25 cm
1411	7049 s	27.78 cm	1443	7209 s	27.6 cm	1475	7369 s	27.42 cm	1507	7529 s	27.24 cm
1412	7054 s	27.78 cm	1444	7214 s	27.6 cm	1476	7374 s	27.42 cm	1508	7534 s	27.24 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
1509	7539 s	27.23 cm	1541	7699 s	27.06 cm	1573	7859 s	26.89 cm	1605	8019 s	26.72 cm
1510	7544 s	27.23 cm	1542	7704 s	27.06 cm	1574	7864 s	26.88 cm	1606	8024 s	26.71 cm
1511	7549 s	27.22 cm	1543	7709 s	27.05 cm	1575	7869 s	26.88 cm	1607	8029 s	26.7 cm
1512	7554 s	27.22 cm	1544	7714 s	27.04 cm	1576	7874 s	26.87 cm	1608	8034 s	26.7 cm
1513	7559 s	27.21 cm	1545	7719 s	27.04 cm	1577	7879 s	26.87 cm	1609	8039 s	26.69 cm
1514	7564 s	27.21 cm	1546	7724 s	27.04 cm	1578	7884 s	26.86 cm	1610	8044 s	26.69 cm
1515	7569 s	27.2 cm	1547	7729 s	27.03 cm	1579	7889 s	26.86 cm	1611	8049 s	26.69 cm
1516	7574 s	27.2 cm	1548	7734 s	27.03 cm	1580	7894 s	26.84 cm	1612	8054 s	26.67 cm
1517	7579 s	27.19 cm	1549	7739 s	27.02 cm	1581	7899 s	26.84 cm	1613	8059 s	26.66 cm
1518	7584 s	27.19 cm	1550	7744 s	27.02 cm	1582	7904 s	26.83 cm	1614	8064 s	26.66 cm
1519	7589 s	27.19 cm	1551	7749 s	27.0 cm	1583	7909 s	26.83 cm	1615	8069 s	26.65 cm
1520	7594 s	27.17 cm	1552	7754 s	26.99 cm	1584	7914 s	26.82 cm	1616	8074 s	26.65 cm
1521	7599 s	27.16 cm	1553	7759 s	26.99 cm	1585	7919 s	26.82 cm	1617	8079 s	26.64 cm
1522	7604 s	27.16 cm	1554	7764 s	26.98 cm	1586	7924 s	26.81 cm	1618	8084 s	26.64 cm
1523	7609 s	27.15 cm	1555	7769 s	26.98 cm	1587	7929 s	26.81 cm	1619	8089 s	26.63 cm
1524	7614 s	27.15 cm	1556	7774 s	26.98 cm	1588	7934 s	26.8 cm	1620	8094 s	26.63 cm
1525	7619 s	27.14 cm	1557	7779 s	26.97 cm	1589	7939 s	26.8 cm	1621	8099 s	26.62 cm
1526	7624 s	27.14 cm	1558	7784 s	26.97 cm	1590	7944 s	26.79 cm	1622	8104 s	26.62 cm
1527	7629 s	27.13 cm	1559	7789 s	26.96 cm	1591	7949 s	26.79 cm	1623	8109 s	26.61 cm
1528	7634 s	27.13 cm	1560	7794 s	26.95 cm	1592	7954 s	26.78 cm	1624	8114 s	26.61 cm
1529	7639 s	27.12 cm	1561	7799 s	26.95 cm	1593	7959 s	26.78 cm	1625	8119 s	26.6 cm
1530	7644 s	27.12 cm	1562	7804 s	26.94 cm	1594	7964 s	26.77 cm	1626	8124 s	26.6 cm
1531	7649 s	27.11 cm	1563	7809 s	26.94 cm	1595	7969 s	26.77 cm	1627	8129 s	26.59 cm
1532	7654 s	27.11 cm	1564	7814 s	26.93 cm	1596	7974 s	26.76 cm	1628	8134 s	26.59 cm
1533	7659 s	27.1 cm	1565	7819 s	26.93 cm	1597	7979 s	26.75 cm	1629	8139 s	26.58 cm
1534	7664 s	27.1 cm	1566	7824 s	26.92 cm	1598	7984 s	26.75 cm	1630	8144 s	26.58 cm
1535	7669 s	27.09 cm	1567	7829 s	26.92 cm	1599	7989 s	26.75 cm	1631	8149 s	26.57 cm
1536	7674 s	27.09 cm	1568	7834 s	26.91 cm	1600	7994 s	26.74 cm	1632	8154 s	26.57 cm
1537	7679 s	27.08 cm	1569	7839 s	26.91 cm	1601	7999 s	26.73 cm	1633	8159 s	26.56 cm
1538	7684 s	27.08 cm	1570	7844 s	26.9 cm	1602	8004 s	26.73 cm	1634	8164 s	26.56 cm
1539	7689 s	27.07 cm	1571	7849 s	26.9 cm	1603	8009 s	26.72 cm	1635	8169 s	26.55 cm
1540	7694 s	27.07 cm	1572	7854 s	26.89 cm	1604	8014 s	26.72 cm	1636	8174 s	26.55 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head	#	Time	Head	#	Time	Head	#	Time	Head
1637	8179 s	26.54 cm	1669	8339 s	26.37 cm	1701	8499 s	26.2 cm	1733	8659 s	26.05 cm
1638	8184 s	26.54 cm	1670	8344 s	26.37 cm	1702	8504 s	26.18 cm	1734	8664 s	26.04 cm
1639	8189 s	26.53 cm	1671	8349 s	26.35 cm	1703	8509 s	26.18 cm	1735	8669 s	26.04 cm
1640	8194 s	26.53 cm	1672	8354 s	26.34 cm	1704	8514 s	26.17 cm	1736	8674 s	26.02 cm
1641	8199 s	26.51 cm	1673	8359 s	26.34 cm	1705	8519 s	26.17 cm	1737	8679 s	26.02 cm
1642	8204 s	26.51 cm	1674	8364 s	26.33 cm	1706	8524 s	26.16 cm	1738	8684 s	26.01 cm
1643	8209 s	26.5 cm	1675	8369 s	26.33 cm	1707	8529 s	26.16 cm	1739	8689 s	26.01 cm
1644	8214 s	26.5 cm	1676	8374 s	26.32 cm	1708	8534 s	26.15 cm	1740	8694 s	26.0 cm
1645	8219 s	26.49 cm	1677	8379 s	26.32 cm	1709	8539 s	26.15 cm	1741	8699 s	26.0 cm
1646	8224 s	26.49 cm	1678	8384 s	26.32 cm	1710	8544 s	26.15 cm	1742	8704 s	25.99 cm
1647	8229 s	26.48 cm	1679	8389 s	26.31 cm	1711	8549 s	26.15 cm	1743	8709 s	25.99 cm
1648	8234 s	26.47 cm	1680	8394 s	26.3 cm	1712	8554 s	26.14 cm	1744	8714 s	25.98 cm
1649	8239 s	26.47 cm	1681	8399 s	26.3 cm	1713	8559 s	26.15 cm	1745	8719 s	25.98 cm
1650	8244 s	26.47 cm	1682	8404 s	26.29 cm	1714	8564 s	26.14 cm	1746	8724 s	25.97 cm
1651	8249 s	26.46 cm	1683	8409 s	26.29 cm	1715	8569 s	26.14 cm	1747	8729 s	25.97 cm
1652	8254 s	26.46 cm	1684	8414 s	26.28 cm	1716	8574 s	26.13 cm	1748	8734 s	25.96 cm
1653	8259 s	26.45 cm	1685	8419 s	26.28 cm	1717	8579 s	26.13 cm	1749	8739 s	25.96 cm
1654	8264 s	26.45 cm	1686	8424 s	26.27 cm	1718	8584 s	26.12 cm	1750	8744 s	25.95 cm
1655	8269 s	26.44 cm	1687	8429 s	26.27 cm	1719	8589 s	26.12 cm	1751	8749 s	25.95 cm
1656	8274 s	26.43 cm	1688	8434 s	26.26 cm	1720	8594 s	26.11 cm	1752	8754 s	25.94 cm
1657	8279 s	26.43 cm	1689	8439 s	26.26 cm	1721	8599 s	26.11 cm	1753	8759 s	25.94 cm
1658	8284 s	26.43 cm	1690	8444 s	26.25 cm	1722	8604 s	26.1 cm	1754	8764 s	25.93 cm
1659	8289 s	26.42 cm	1691	8449 s	26.25 cm	1723	8609 s	26.1 cm	1755	8769 s	25.93 cm
1660	8294 s	26.41 cm	1692	8454 s	26.24 cm	1724	8614 s	26.09 cm	1756	8774 s	25.92 cm
1661	8299 s	26.41 cm	1693	8459 s	26.24 cm	1725	8619 s	26.08 cm	1757	8779 s	25.92 cm
1662	8304 s	26.4 cm	1694	8464 s	26.23 cm	1726	8624 s	26.08 cm	1758	8784 s	25.91 cm
1663	8309 s	26.4 cm	1695	8469 s	26.23 cm	1727	8629 s	26.07 cm	1759	8789 s	25.91 cm
1664	8314 s	26.39 cm	1696	8474 s	26.22 cm	1728	8634 s	26.07 cm	1760	8794 s	25.9 cm
1665	8319 s	26.39 cm	1697	8479 s	26.22 cm	1729	8639 s	26.06 cm	1761	8799 s	25.9 cm
1666	8324 s	26.38 cm	1698	8484 s	26.21 cm	1730	8644 s	26.06 cm	1762	8804 s	25.89 cm
1667	8329 s	26.38 cm	1699	8489 s	26.21 cm	1731	8649 s	26.06 cm	1763	8809 s	25.89 cm
1668	8334 s	26.37 cm	1700	8494 s	26.2 cm	1732	8654 s	26.05 cm	1764	8814 s	25.88 cm

Infiltration Report

Terracon Tallahassee

IT01 - Bay County, FL

IT01 Readings continued

#	Time	Head
1765	8819 s	25.88 cm

Supporting Information

Contents:

General Notes

Unified Soil Classification System

Note: All attachments are one page unless noted above.

General Notes

Sampling	Water Level	Field Tests
Auger Cuttings Modified California Ring Sampler Rock Core	Water Initially Encountered Water Level After a Specified Period of Time Water Level After a Specified Period of Time Cave In Encountered	N Standard Penetration Test Resistance (Blows/Ft.) (HP) Hand Penetrometer (T) Torvane (DCP) Dynamic Cone Penetrometer UC Unconfined Compressive Strength (PID) Photo-Ionization Detector (OVA) Organic Vapor Analyzer
Dynamic Cone Penetrometer Modified Dames & Moore Ring Sampler Dual Sampler SPT	Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	
Grab Sample GeoProbe Macro Core or Large Bore No Recovery		
Ring Sampler Shelby Tube Standard Penetration Test		
Split Spoon Texas Cone Penetrometer Vane Shear		

Descriptive Soil Classification

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

Location And Elevation Notes

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

Strength Terms

Relative Density of Coarse-Grained Soils (More than 50% retained on No. 200 sieve.) Density determined by Standard Penetration Resistance		Consistency of Fine-Grained Soils (50% or more passing the No. 200 sieve.) Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance		
Relative Density	Standard Penetration or N-Value (Blows/Ft.)	Consistency	Unconfined Compressive Strength Qu (tsf)	Standard Penetration or N-Value (Blows/Ft.)
Very Loose	0 - 3	Very Soft	less than 0.25	0 - 1
Loose	4 - 9	Soft	0.25 to 0.50	2 - 4
Medium Dense	10 - 29	Medium Stiff	0.50 to 1.00	5 - 8
Dense	30 - 50	Stiff	1.00 to 2.00	9 - 15
Very Dense	> 50	Very Stiff	2.00 to 4.00	16 - 30
		Hard	> 4.00	> 30

Relevance of Exploration and Laboratory Test Results

Exploration/field results and/or laboratory test data contained within this document are intended for application to the project as described in this document. Use of such exploration/field results and/or laboratory test data should not be used independently of this document.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests ^A				Soil Classification	
				Group Symbol	Group Name ^B
Coarse-Grained Soils: More than 50% retained on No. 200 sieve	Gravels: More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels: Less than 5% fines ^C	$Cu \geq 4$ and $1 \leq Cc \leq 3$ ^E	GW	Well-graded gravel ^F
		Gravels with Fines: More than 12% fines ^C	$Cu < 4$ and/or $[Cc < 1 \text{ or } Cc > 3.0]$ ^E	GP	Poorly graded gravel ^F
			Fines classify as ML or MH	GM	Silty gravel ^{F, G, H}
		Sands: 50% or more of coarse fraction passes No. 4 sieve	Clean Sands: Less than 5% fines ^D	Fines classify as CL or CH	GC
	$Cu \geq 6$ and $1 \leq Cc \leq 3$ ^E			SW	Well-graded sand ^I
	Sands with Fines: More than 12% fines ^D		$Cu < 6$ and/or $[Cc < 1 \text{ or } Cc > 3.0]$ ^E	SP	Poorly graded sand ^I
			Fines classify as ML or MH	SM	Silty sand ^{G, H, I}
	Fine-Grained Soils: 50% or more passes the No. 200 sieve	Silt and Clays: Liquid limit less than 50	Inorganic:	$PI > 7$ and plots above "A" line ^J	CL
$PI < 4$ or plots below "A" line ^J				ML	Silt ^{K, L, M}
Organic:			$\frac{LL \text{ oven dried}}{LL \text{ not dried}} < 0.75$	OL	Organic clay ^{K, L, M, N} Organic silt ^{K, L, M, O}
			Silt and Clays: Liquid limit 50 or more	Inorganic:	PI plots on or above "A" line
PI plots below "A" line		MH			Elastic silt ^{K, L, M}
Organic:		$\frac{LL \text{ oven dried}}{LL \text{ not dried}} < 0.75$		OH	Organic clay ^{K, L, M, P} Organic silt ^{K, L, M, Q}
		Highly organic soils:		Primarily organic matter, dark in color, and organic odor	

^A Based on the material passing the 3-inch (75-mm) sieve.

^B If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

^C Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

^D Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.

^E $Cu = D_{60}/D_{10}$ $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$

^F If soil contains $\geq 15\%$ sand, add "with sand" to group name.

^G If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

^H If fines are organic, add "with organic fines" to group name.

^I If soil contains $\geq 15\%$ gravel, add "with gravel" to group name.

^J If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

^K If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

^L If soil contains $\geq 30\%$ plus No. 200 predominantly sand, add "sandy" to group name.

^M If soil contains $\geq 30\%$ plus No. 200, predominantly gravel, add "gravelly" to group name.

^N $PI \geq 4$ and plots on or above "A" line.

^O $PI < 4$ or plots below "A" line.

^P PI plots on or above "A" line.

^Q PI plots below "A" line.

