



TO: All Webbs Enterprises, Inc.
309 Commerce Way
Jupiter, Florida 33458
Mr. Kyle Taylor

November 18, 2025
Project No. 11161

SUBJECT: Geotechnical Engineering Services
Subsurface Soil and Limestone Study
City of Ocala Water Treatment Plant No. 2 Well Relocation
3744 S. Pine Avenue, Ocala, Marion County, Florida

In general accordance with our authorized proposal to you dated 10/9/2025, Mortensen Engineering, Inc. (MEI) has completed the requested geotechnical testing and evaluation services related to the planned installation of a groundwater supply well. Specifically, our work herein is related to evaluating the subsurface soil and limestone conditions at the No. 2 well relocation area. The following summary report presents the results of our study and includes our evaluation of the subsurface soil and limestone conditions encountered at the No. 2 well relocation area.

If you have any questions about this report, please contact us. Thank you for this opportunity to be of service to you.

Sincerely,

MORTENSEN ENGINEERING INC
Florida Certificate of Authorization No. 5678

A handwritten signature in blue ink, appearing to read 'Cary M. Richardson'.

Cary M. Richardson, P.G.
Geotechnical Division Manager
P.G. License No. PG2908

Michael T. Gagne, P.E.
President
P.E. License No. 63006

This item has been electronically signed and sealed by Michael T. Gagne, P.E. on the date shown, using a Digital Signature. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Mainfile/402/11161.rep.docx
Attachments: Plates 1 and 2

Project Description

Based on the information provided to date, we understand the project will involve installation of water supply well for the City of Ocala. Below are project specific parameters based on the information provided.

Project	City of Ocala Water Supply Well Installation
	3744 S. Pine Avenue, Ocala, Marion County, Florida No. 2 Well Relocation
Water Supply Well	24-inch diameter and 250-feet depth (+/-)
	Steel well casing – grouted in-place

Objective of Geotechnical Testing

The geotechnical testing herein permitted MEI to make decisions regarding subsurface soil and limestone conditions at the No. 2 well relocation area. We performed geotechnical testing to:

1. Determine and evaluate the presence, depth range and relative densities of the sandy soil materials, at the test boring location.
2. Determine and evaluate the presence, depth range and consistency of the clayey/silty soil materials, at the test boring location.
3. Determine and evaluate the presence, depth range and consistency of the upper limestone formation, at the test boring location.
4. Check for evidence of the subsurface overburden soil raveling/erosion related to sinkhole activity/limestone solutioning processes, at the test boring location.

Scope of Geotechnical Services

Considering the site plan provided, we provided the following geotechnical engineering services:

1. Performed one Standard Penetration Test (SPT) boring, designated B-1, to a depth of 150 feet (+/-), at the proposed No. 2 well relocation area.
2. Performed a program of laboratory testing on selected soil samples recovered from the test borings.
3. Prepared a geotechnical engineering report, which summarizes the course of the study pursued, the field and laboratory data generated, and the subsurface conditions encountered.

Subsurface Exploration

Our test location was positioned at the survey staked well location and using the site plan and arials provided. Our test location noted on Plate 1 should be considered approximate. Our SPT boring was conducted per ASTM D1586, using a conventional truck mounted drill rig. In the SPT boring, soil sampling using a 1-3/8-inch I.D. split-barrel sampler was performed on 5-foot intervals to the boring termination depth. The number of successive blows required to drive the sampler into the soil constitutes the test result commonly referred to as the N-value. The N-value has been empirically correlated with various soil properties and is indicative of the relative density of cohesionless soils and the consistency of cohesive soils. Our test location was plugged/backfilled (with grout/bentonite/sand) to the land surface upon completion. Soil samples were classified and logged in the field by a geologist. Representative portions of the recovered samples were collected and transported to our office for laboratory testing and review by the project geotechnical engineer.

Laboratory Testing

Soil and limestone samples from the test location were collected and classified in the laboratory (per the *Unified Soil Classification System (USCS)* - physical testing per ASTM D2488). The results of our laboratory testing are included in the drafted soil profile on Plate 2. A legend describing the different soil material types encountered is included on Plate 2.

Site and Subsurface Soil Characterization

The site plan over a recent aerial with our test location is included on Plate 1. The results of our subsurface exploration program, including the stratification profile and some pertinent exploration information are graphically presented on Plate 2. The project geotechnical engineer and/or project geologist based soil stratification on review of recovered soil samples, interpretation of field boring logs, and results of laboratory testing. The stratification lines represent the approximate boundaries between different soil and limestone material types. The actual transition may be gradual. Minor variations not considered important to our engineering evaluations may have been abbreviated or omitted for clarity. Considering the results of our testing, the following subsurface conditions are noteworthy.

Subsurface Soil and Limestone Conditions

1. Fine sands to slightly silty sands (Stratum 3) were encountered to a depth of 3.5 feet (+/-).
2. Sandy clay to clay materials (Stratum 7), firm to stiff in consistency with sand seams (A) were encountered below the upper sandy soils and extended to a depth of 9.5 feet (+/-).
3. Limestone materials (Stratum 8), very soft in consistency with periodic clayey sand seams (C – 12 to 15 feet deep +/-) were encountered to a depth 28.5 feet (+/-).
4. A seam/zone of chert with very hard drilling conditions (VH) was encountered from 30 to 32.5 feet deep (+/-).
5. Limestone materials (Stratum 8), very soft to soft in consistency and drilling conditions (S) with periodic clayey sand seams (C – 42 to 45 feet deep +/-) were encountered to a depth 50 feet (+/-).
6. Sandy clay to clay materials (Stratum 7), very soft to soft in consistency with sand seams (A), limestone fragment/seams (D) and zones of weight or rod (WR) and weight of hammer (WH), were encountered to a depth of 66.5 feet (+/-).
7. Limestone materials (Stratum 8), typically medium to hard in consistency with periodic seams/zones of soft drilling conditions (S) were encountered to our completion depth of 150 feet (+/-).
8. No significant evidence of soil erosion/raveling (sinkhole activity) was noted at our test boring location, to the depth performed. No significant voids within the limestone materials was encountered at our test boring location.

Limitations of Report

The discussions and evaluations submitted in this report are based solely upon the location and type of construction, whatever information was presented or acquired from the site owner (or representative), and the limited subsurface data obtained from the limited amount of test borings (3-inch diameter) performed at the approximate locations (and time) indicated. The discussions and evaluations herein do not reflect any variations or differing subsurface conditions, which may occur or be present (left undetected), between test boring locations, or in areas not currently accessible to testing. Because some (or all) of the study area was previously impacted by various site activities at various times, unusual and significant variations in the subsurface conditions are possible between test boring locations, which could alter the provided discussions and evaluations, and the level or cost of any corrective actions if appropriate.

The test borings attempt to reflect or represent (to the extent possible) the current condition or integrity of the shallow and deeper overburden soil and limestone conditions just at the time of our fieldwork. Future subsurface conditions may or may not be represented by the test boring results herein, as the process of overburden soil erosion/raveling related to limestone solutioning/sinkhole activity could cause minor to significant adverse change in the subsurface conditions not represented by available test boring results. If any subsurface variations (from the data provided in this report or prior reports) become evident during subsequent geotechnical field-testing in the future, a re-evaluation of the discussions and evaluations contained in this report will be necessary.

This report and the work and opinions herein, are exclusively and solely for the use and benefit of the client. No other entities, individuals or companies have the privilege to rely on this work product and opinions provided herein. In no event and under no circumstances shall MEI have any duty or obligation, or liability to any third party. The work, opinions, and report herein were performed/prepared in accordance with generally accepted geotechnical engineering principles and practices, consistent with the community of geotechnical consultants performing similar type work, with the limitations noted herein. MEI used that degree of normal care and skill ordinarily exercised under similar circumstances by members of its profession. No warranties or representations are expressed or implied. All statements made herein by MEI are opinions based solely upon reasonable engineering judgment, using solely the data and information available.

EXISTING GROUND TO MATCH DRIVEWAY ELEVATIONS
& TO ALLOW FOR NATURAL FLOW (AS NECESSARY).
CLEAR AND GRUB FOR ACCESS AND DRILLING AS
NEEDED.

INSTALL WELL PER WELL
CONSTRUCTION DETAIL (WELL NO. 12)
N = 1750268.669
E = 616681.044



1"=50'

0' 50' 100'

LEGEND

Approximate SPT boring location

INSTALL WELL PER WELL
CONSTRUCTION DETAIL (WELL NO. 11)
N = 1749835.487
E = 616938.570

B-1



GEOTECHNICAL ENGINEERING SERVICES
CITY OF OCALA WATER TREATMENT PLANT
NO. 2 WELL RELOCATION
MARION COUNTY, FLORIDA

BORING LOCATION PLAN

CREATED BY: DNH
CHECKED BY: PWV

DATE: NOV 2025
PROJECT NO: 11161

PLATE 1



- The test results herein are representative of the subsurface conditions only at the noted approximate boring location, only for the noted depth, and only on the date tested. Local variations characteristic of the subsurface materials of the region should be anticipated at different times and may be encountered. The test results herein are preliminary and based on the soil profiles and other field test data herein are based on the driller's logs and visual review of selected soil samples in the laboratory. The delineations between different soil material types shown herein should be considered approximate. The generalized soil descriptions herein represent our interpretation of the subsurface soil conditions at the noted boring locations only on the dates drilled.

The groundwater level data shown hereon alongside the soil boring profiles represent short-term (not necessarily stabilized) groundwater levels, measured in the boreholes or in an offset borehole on the date drilled, unless otherwise noted. Fluctuations in the shallow groundwater level from the levels shown hereon will occur and should be anticipated throughout the year; local variations from the levels shown hereon should also be anticipated.