

GEOTECHNICAL EXPLORATION REPORT
LECANTO SOIL BORINGS
CITRUS COUNTY, FLORIDA
TEST LAB PROJECT NO. 1511.23.1

1.0 EXECUTIVE SUMMARY

The following is a summary of the geotechnical field exploration findings and laboratory testing. This summary should not be used for planning and design without reading the entire report, which contains more detailed information regarding the testing performed and our conclusions.

1. Test Lab performed thirty-five (35) Standard Penetration Borings (SPT) to depths of 20 to 55 feet below existing grade. The SPT borings generally encountered very loose to very dense sand (A-3/A-2-4) (select fill) from around existing grade to a depth of about 4 to 50 feet below current grade. In most borings, the sandy soil was generally followed by alternating, intermittent layers of very loose to medium dense silty sand to silty-clayey sand (A-2-4) and very soft to very stiff sandy lean clay to sandy fat clay (A-6/A-7-6). The clay stratum was generally underlain by limestone to the boring completion depths.
2. Due to the drilling methods utilized, the groundwater table was not apparent within the depths explored by borings B-4, B-5, B-10, B-13 through B-16, B-18, B-19 and B-21 through B-34 and was noted with GNA below the respective soil profile. The remaining borings encountered the groundwater table at depths ranging from 6 to 9 feet below existing grade.
3. Test Lab performed laboratory tests on select samples to aid in determining soil characteristics. The laboratory testing included Grain Size Analysis, Atterberg Limits, and Natural Moisture Content. The test results are indicated on **Soil Profile(s) Sheets 2 to 8**.
4. Soil material use and/or removal should be completed in accordance with FDOT index 120-001. Index 120-001 should be referenced for additional specifications.

The material from Stratum 1 (A-3/A-2-4) (soils with less than 12 percent passing the 200 sieve) appears to conform to the properties of select fill and is satisfactory for use in roadway embankment and subgrade when utilized in accordance with Index 120-001.

The material from Stratum 2 (A-2-4) appears satisfactory for the use in the embankment when utilized in accordance with Index 120-001. However, this material is likely to retain excess moisture and may be difficult to dry and compact. It should be used above the water level existing at the time of construction.

The material from Stratum 3 (A-6/A-7-6) is plastic to highly plastic material and is not satisfactory for use in roadway embankment. This material shall be removed in accordance with Index 120-002.

2.0 INTRODUCTION

2.1 GENERAL DISCUSSION

The purpose of the exploration was to evaluate the encountered subsurface conditions to identify depths of select fill for use on Florida Department of Transportation (FDOT) projects, specifically