## 5.0 CONCLUSIONS

Test Lab Project No. 1511.23.1

Page 4

The following conclusions are based on the soil borings and laboratory testing performed:

- 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 A-3/A-2-4 materials (select fill) to depths of ranging between 4 and 50 feet below current grade.
- 2. 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.
- 3. 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.
- 4. Soil material use and/or removal be completed in accordance with FDOT Index 120-001. The following summarizes the generalized use or non-use of the soils that will most likely be encountered during excavation.
  - 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 when utilized in accordance with Index 120-001.
  - The material from Stratum 2 (A-2-4) appears satisfactorily 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.

## 6.0 QUALITY CONTROL SERVICES

Test Lab should be kept involved throughout the duration of excavation of the material to maintain continuity and to verify that our conclusions are properly interpreted and implemented. To achieve this, we should be retained to perform laboratory testing on excavated material (soil or limestone) considered for sale. Test Lab's familiarity with the site and soils encountered, can make us a valuable part of your quality assurance team.

## 7.0 LIMITATIONS OF REPORT

This report has been prepared for the exclusive use of **Superior Construction** and their designers for specific application to the project previously discussed. Our conclusions have been prepared using generally accepted standards of geotechnical engineering and engineering geology practice in the State of Florida. No other warranty is expressed or implied.