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## **APPENDIX C**

### **Laboratory Tests**

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Moisture Content (ASTM D2216) and Unit Weight (ASTM D2937) determinations were performed on selected soil samples as an aid in the classification and evaluation of soil properties. The test results are presented on the Logs of Borings at the appropriate sample depths.

Five Atterberg Limits tests (ASTM D4318) were performed on selected soil samples to evaluate the liquid and plastic limits to aid in soil classifications. The test results are summarized on the Logs of Borings at the appropriate sample depths. Graphic presentation of the test results is provided on Plate C-1.

Four Unconsolidated Undrained Triaxial Compression tests (ASTM D2850) were performed on selected soil samples to evaluate the undrained shear strength of the in-situ soils. The approximate in-situ effective overburden pressure was used as the applied confining pressure for the relatively “undisturbed” soil sample. The test results and the stress-strain curves are presented on Plates C-2 through C-5.

Two sets of Corrosivity tests, including pH (ASTM G51), Minimum Resistivity (ASTM G57), Chloride Content (EPA 300.0), and Sulfate Content (EPA 300.0), were performed by our office and TestAmerica Laboratories, Inc. on selected soil samples obtained from our field exploration. The test results are summarized on Plate C-6.

Eleven laboratory Resistance (R) Value tests (ASTM D2844) were performed on selected bulk samples of the near-surface soils to evaluate the pavement support characteristics of the soils. The test results are presented on Plates C-7 through C-17.