Section 01450

TESTING LABORATORY SERVICES

1.0 GENERAL

1.01 SECTION INCLUDES

- A Testing Laboratory Services and Contractor responsibilities related to those services.
- B References to Technical Specifications:
 - 1. Section 01350 Submittals
- C Referenced Standards:
 - 1. American Society for Testing and Materials (ASTM)
 - a. ASTM D 3740, "Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction"
 - b. ASTM E 329, "Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction"

1.02 SELECTION AND PAYMENT

- A Owner will select, employ, and pay for services of an independent testing laboratory to perform inspection and testing identified in individual Technical Specifications.
- B Employment of testing laboratory shall not relieve Contractor of obligation to perform work in accordance with requirements of Contract Documents.
- C Owner or designated representative shall schedule and monitor testing as required to provide timely results and to avoid delay to the Work.
- D Contractor shall be responsible for paying for services of commercial testing laboratory, with prior approval of Owner, to perform the following:
 - 1. Pipe diameter deflection tests on all flexible and semi-rigid sanitary sewer collection system pipe installation
 - 2. Laboratory services required to establish mix design proposed for use for Portland cement concrete, asphaltic concrete mixtures and other material mixes requiring control by testing laboratory when required because of change in source of materials or other conditions not caused by Owner.
 - 3. Tests required to establish optimum moisture of earth and base materials and to determine required compactive effort to meet density requirements.
 - 4. Cores to test for thickness.
 - 5. Testing and inspection performed for the Contractor's convenience.
 - 6. Retesting and repetitions of laboratory services when initial tests indicate work does not comply with requirements of Contract Documents.

1.03 LABORATORY REPORTS

A The Engineer will receive 1 copy, the Project Manager will receive 2 copies, and the Contractor will receive 2 copies of Laboratory Reports from the testing laboratory. One of the Contractor's copies shall remain at the Project Site for duration of Project. Test results which indicate non-conformance shall be transmitted immediately via fax from the testing laboratory to the Contractor and Project Manager.

1.04 LIMITS ON TESTING LABORATORY AUTHORITY

- A Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
- B Laboratory may not approve or accept any portion of the Work.
- C Laboratory may not assume any duties of Contractor.
- D Laboratory has no authority to stop the Work.

1.05 CONTRACTOR RESPONSIBILITIES

- A Notify Project Manager and laboratory 24 hours prior to expected time for operations requiring inspection and testing services. Notify Engineer if specification section requires the presence of the Engineer.
- B Cooperate with laboratory personnel in collecting samples to be tested or collected on Project Site.
- C Provide access to the Work and to manufacturer's facilities.
- D Provide samples to laboratory in advance of their intended use to allow thorough examination and testing.
- E Provide incidental labor and facilities for access to the Work to be tested; to obtain and handle samples at the site or at source of products to be tested; and to facilitate tests and inspections including storage and curing of test samples.
- F Arrange with laboratory and pay for:
 - 1. Retesting required for failed tests.
 - 2. Retesting for nonconforming Work.
 - 3. Additional sampling and tests requested by Contractor for his own purposes.

2.0 PRODUCTS - Not Used

$3.0 \qquad E X E C U T I O N$

3.01 CONDUCTING TESTING

A Laboratory sampling and testing shall conform to ASTM D 3740 and ASTM E 329, as well as other test standards specified in individual Technical Specifications.

END OF SECTION