

ATTACHMENT #5

R209 – SPECIFIC REQUIREMENTS FOR HARRIS COUNTY/HOUSTON, TEXAS: GEOTECHNICAL ENGINEERING TESTING LABORATORY ACCREDITATION PROGRAM

January 22, 2009

This document describes the accreditation requirements applicable to the A2LA Geotechnical Field of testing which is designed to meet the needs of users looking for competent geotechnical testing services. Internationally accepted accreditation criteria and standards developed by ASTM committees form the basis for accrediting laboratories under this field. One of the major objectives of A2LA is to provide regulators responsible for approving geotechnical laboratories and other users of accredited laboratories with an effective alternative for evaluating and recognizing competent laboratories. A2LA is committed to working with federal, state and commercial organizations to realize this objective.

The scope of this program is suited specifically for laboratories users in **Harris County and Houston**, Texas. Users in other States or parts of the U.S.A. may seek to include a different mix of required tests and this will be so noted on the scope of accreditation for laboratories which seek accreditation to meet the needs of that user.

The scope of this field includes the following materials areas: soils, soil-cement, rock, peat materials and geotextiles. Applications for accreditation may be made for several tests in each area. Additional areas may be added upon request.

The requirements of this program are not applicable to the Putting Green Materials Testing Program.

GENERAL CRITERIA

The general criteria for accreditation are contained in ISO/IEC 17025:2005, “General requirements for the competence of testing and calibration laboratories”, as referenced in Part A of the A2LA green booklet entitled, R101 - General Requirements: Accreditation of ISO/IEC 17025 Laboratories.

SPECIFIC CRITERIA

Specific criteria are an elaboration on or interpretation of the general criteria plus those requirements of accreditation applicable to a certain field of testing, testing technology, type of test, or specific test. Geotechnical testing laboratories seeking accreditation for mobile or field testing must also meet the additional criteria outlined in R104 – General Requirements: Accreditation of Site Testing and Site Calibration Laboratories. In order to be accredited in this field, a testing laboratory must comply with the latest version of the following standard:

ASTM D3740 Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction,

and must be competent to perform the following geotechnical tests:

ASTM D421	Dry Preparation of Soil Samples for Particle Size Analysis and Determination of Soil Constants
ASTM D422	Particle Size Analysis of Soils
ASTM D698	Laboratory Compaction Characteristics of Soil Using Standard Effort
ASTM D854	Specific Gravity of Soils
ASTM D1140	Amount of Material in Soils Finer than No. 200 Sieve
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D2166	Unconfined Compressive Strength of Cohesive Soil
ASTM D2216	Water (Moisture) Content of Soil and Rock
ASTM D2217	Wet Preparation of Soil Samples for Particle Size Analysis and Determination of Soil Constants

ASTM D2435	One-Dimensional Consolidation Properties of Soils.
ASTM D2487	Classification of Soils for Engineering Purposes
ASTM D2850	Unconsolidated, Undrained Strength of Cohesive Soils in Triaxial Compression
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4546	One-dimensional Swell/Settlement Potential of Cohesive Soils

Additional geotechnical tests can be added to its scope as desired. Laboratories performing but a few of these methods may be accredited under the Construction Materials field of testing for those methods.

Those organizations which provide geotechnical engineering inspection services may also be accredited as inspection bodies, under the A2LA Inspection Body Accreditation Program.

PROFICIENCY TESTING

Testing laboratories accredited under this field are required to participate in at least one relevant and available proficiency testing program administered by other organizations acceptable to A2LA. One acceptable program is the Soils Proficiency Sample Program of the AASHTO Reference Materials Program. In order for a laboratory to maintain accreditation for the following test method standards [ASTM D422 (AASHTO T88), ASTM D427, ASTM D698 (AASHTO T99), ASTM D854 (AASHTO T100), ASTM D2844 (AASHTO T190), and ASTM D4318 (AASHTO T89 & T90), it must participate in all rounds offered per year for each test.

If a laboratory's results are deemed outliers or unacceptable (ratings of "0," "1," or "2" for the above programs), then the laboratory shall promptly investigate and determine the cause(s) for such unacceptable results, correct any problems identified, and report to A2LA the outcome of such investigations.

Remedial Actions: If a rating of "0" is received on any sample, the laboratory must request another sample for the proficiency testing provider and demonstrate acceptable performance. Failure to successfully analyze the sample in this "remedial" sample will result in immediate revocation of the testing concerned from the laboratory's Scope of Accreditation. Accreditation will be reinstated only upon demonstration of acceptable performance on a future proficiency testing sample.

DOCUMENT REVISION HISTORY

Date	Description
June 29, 2001	General Criteria updated to reference ISO/IEC 17025. Section on inspection services updated to reference A2LA Inspection Body Program. Document Revision History section added. No other changes made.
September 13, 2005	Updated to reference ISO 17025:2005
June 14, 2007	Updated unacceptable (ratings of "0" or "1" for the above programs) to (ratings of "0," "1," or "2" for the above programs)
January 22, 2009	Added Harris County and Houston in 2 nd Paragraph.

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