

Laboratory Certification For

Shakib Dastaggir Construction & Design Company (S-CAD)-KBL

Lab ID: LCP-031

Issue date: Feb 15th, 2018

Expiry date: Aug 14th, 2018

This extension letter confirms an additional 6-month certification for S-CAD Lab, which is located at street # 19, Eistgahe Danish, Hesa 3 of Khair Khana, District 15, Kabul, Afghanistan. This laboratory should now be considered as **certified for a period of 6-months** from the date of this letter. This laboratory should now be considered as certified for use by the US Army Corps of Engineers Transatlantic Afghanistan District (USACE TAA) and other clients, for all tests listed in Table 1 to Table 5, as attached to this letter. This certification will be included with records that are maintained at the ABA and USACE TAA Headquarters in Bagram Airbase, Afghanistan. Retaining the certification will require yearly inspections by the ABA. This certification is also contingent upon the following conditions:

- A. Continued employment of the below individual while without his oversight, the laboratory will require recertification:
 - a. Eng. Ghulam Dastaggir the laboratory manager;
- B. If the calibration certificates of equipments expire or become invalid as per the relevant standard;
- C. If the laboratory is moved to a new location, it will require recertification; and
- D. If the laboratory fails to comply by the approved lab quality management plan, safety standards, and other criteria set forth in the most up-to-date ABA lab certification manual, the lab certification may be suspended.

For verification and good standing of this certification please check our online directory of laboratories at http://aba.af/lcp_directory.php. The inspection and certification process for the S-CAD adhered to procedures outlined by the Materials Testing Center (MTC), which is located at the Geotechnical and Structures Laboratory (GSL), U.S. Army Engineer Research and Development Center (ERDC) in Vicksburg, Mississippi, USA. The MTC is the USACE-authorized agency for certifying laboratories for use in quality control testing for USACE construction projects. To facilitate construction in Afghanistan, the USACE TAA has authorized the ABA to conduct laboratory certifications with strict adherence to MTC protocol. Qualifications of the authors for conducting these certifications include: 12 years of laboratory experience, 12 years of teaching classes on construction materials, and six years of teaching university-level construction classes.

Certified to perform 50 tests, as shown on attached sheets and summarized as:

- Table 1: 10
Table 2: 8
Table 3: 16
Table 4: 11
Table 5: 5

Regards,

Mowdood Popal

President of Afghanistan Builders Association
(ABA)



S-CAD-KBL Certified Laboratory Tests

Table 1. List of Soil Tests

No	Test Method	Test Procedure Title
1	ASTM D 421	Dry Preparation for Particle Size Distribution & Soil Constants
2	ASTM D 422	Standard Test Method for Particle-Size Analysis of Soils
3	ASTM D 854	Specific Gravity of Soils
4	ASTM D 1556	Density & Unit Weight by Sand Cone
5	ASTM D 1557	Compaction Characteristics by Modified Effort
6	ASTM D 1883	California Bearing Ratio (CBR)
7	ASTM D 2216	Water Content
8	ASTM D 4318	Liquid & Plastic Limits & Plasticity Index
9	ASTM D 4944	Standard Test Method for Field Determination of Water (Moisture) Content of Soil by the Calcium Carbide Gas Pressure Tester Method
10	ASTM D 6938	In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Method (Shallow Depth)

Table 2. List of Aggregate (Fine and Course) Tests

No	Test Method	Test Procedure Title
1	ASTM C 29	Unit Weight and Voids in Aggregate
2	ASTM C 117	Material Finer than 75 μm (No. 200) Sieve
3	ASTM C 127	Specific Gravity & Absorption in Coarse Aggregate
4	ASTM C 128	Specific Gravity & Absorption in Fine Aggregate
5	ASTM C 131	Los Angeles Abrasion Resistance on Small-Size Coarse Aggregate
6	ASTM C 136	Sieve Analysis of Aggregates
7	ASTM C 566	Total Moisture Content
8	BS 812 Section 105.1 and Section 105.2	Testing Aggregates. Methods for Determination of Particle Shape Flakiness Index and Elongation Index for Coarse Aggregate.

Table 3. List of Concrete Tests

No	Test Method	Test Procedure Title
1	ASTM C 31	Making and Curing Test Specimens in the Field
2	ASTM C 39	Compressive Strength of Cylindrical Specimens
3	ASTM C 143	Slump
4	ASTM C 172	Standard Practice for Sampling Freshly Mixed Concrete
5	ASTM C 231	Standard Test Methods for Air Content of Freshly Mixed Concrete by the Pressure Method
6	ASTM C 1064	Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete
7	ASTM C 42	Obtaining and Testing Drilled Cores and Sewed Beams of Concrete

No	Test Method	Test Procedure Title
8	ASTM C 78	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)
9	ASTM C 174	Measuring Thickness of Concrete Elements Using Drilled Concrete Cores
10	ASTM C 192	Making and Curing Test Specimens in Laboratory
11	ASTM C 511	Water Storage Tanks
12	ASTM C 617	Capping Cylindrical Specimens
13	ASTM C 642	Standard Test Method for Density, Absorption, and Voids in Hardened Concrete
14	ASTM C 684	Standard Test Method for Making, Accelerated Curing, and Testing Concrete Compression Test Specimens
15	ASTM C 805	Rebound Number of Hardened Concrete
16	ASTM C 1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete

Table 4. List of Bituminous Tests

No	Test Method	Test Procedure Title
1	ASTM D 2172	Quantitative Extraction
2	ASTM D 2726	Bulk Specific Gravity and Density
3	ASTM D 2950	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
4	ASTM D 3203	Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
5	ASTM D 4125	Standard Test Methods for Asphalt Content of Bituminous Mixtures by the Nuclear Method
6	ASTM D 5444	Standard Test Method for Mechanical Size Analysis of Extracted Aggregate
7	ASTM D 979	Sampling Bituminous Paving Mixtures
8	ASTM D 3549	Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens
9	ASTM D 5361	Standard Practice for Sampling Compacted Bituminous Mixtures for Laboratory Testing
10	ASTM D 6926	Preparation of Bituminous Specimens Using Marshall Apparatus
11	ASTM D 6927	Marshall Stability and Flow of Bituminous Mixtures

Table 5. List of Masonry & Cement Tests

No	Test Method	Test Procedure Title
1	ASTM C 140	Standard Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
2	ASTM C 188	Standard Test Method for Density of Hydraulic Cement
3	ASTM C 1019	Standard Test Method for Sampling and Testing Grout
4	ASTM C 1552	Standard Practice for Capping Concrete Masonry Units, Related Units and Masonry Prisms for Compression Testing
5	ASTM C 170	Standard Test Method for Compressive Strength of Dimension Stone