**PURPOSE:** To Establish Working Guidelines For The County/LSBP Engineer And Approved Testing Laboratories Performing Sampling And Testing Functions On Projects Administered by The Office Of State Aid Road Construction.

1. **GENERAL:**

   As the size and scope of the State Aid Program increased it became evident that MDOT testing laboratories could no longer meet the testing needs generated by the expanding program in a timely manner. Accordingly, in addition to the already approved labs owned and operated by County/LSBP Engineers, the State Aid Engineer promulgated rules and regulations to provide for private laboratories, approved by State Aid, to perform sampling and testing of materials. Section 65-9-17, Mississippi Code of 1972, provides that, "Upon the awarding of a contract for such State Aid Project, the Board of Supervisors of any County will, by official order of the Board, authorize the State Aid Engineer to set up a project fund for such project from that County's State Aid fund in the State Treasury. The amount of the project fund will cover the estimated cost of the project, including the Contractor's payments and any other costs authorized under this chapter to be paid from State Aid funds".

2. **STATUTORY AUTHORITY:**

   Section 65-9-15, Mississippi Code of 1972, provides that engineering costs incurred on State Aid projects may be paid from State Aid Funds, with the method of payment to be approved by the State Aid Engineer. On January 1, 2005, the State Aid Engineer, under authority of Section 65-9-15, revised the General Rules, Regulations and Procedures governing the performance of State Aid testing functions wherein the County/LSBP Engineer has the option to use MDOT or other State Aid approved laboratory as shown on the most recent list of approved testing laboratories. (Reference State Aid’s web site).

3. **RULES AND REGULATIONS:**

   3.1. **General:** The purpose of these rules and regulations is to establish guidelines and procedures for training and certification of technicians to perform testing functions on State Aid Projects and to provide for compensation therefor.

   The objectives are primarily to reduce the cost of testing and to better correlate and control the construction operations. In addition to these objectives, there is an advantage in having testing expertise which can be available to counties for work on projects other than State Aid.
### 3.2. Training and Certification of Technicians:

The training of testing technicians will be accomplished under the direct supervision of a qualified testing technician or engineer. This training can be in the nature of "on-the-job" training in the laboratory and in the field.

After the training process, each technician will normally be required to perform actual tests at the Central Testing Laboratory in Jackson. Upon a satisfactory performance of these tests, the MDOT Materials Engineer will certify as to each technician's qualifications to do specific testing functions.

It is mandatory that the testing procedures adopted by MDOT be followed since the MDOT Central Laboratory may be required to take "Independent Assurance Samples" on all non-exempt Federal projects.

In addition to the certification of these technicians, the MDOT Materials Engineer will also certify as to whether the laboratory is properly equipped to do the work it proposes to perform prior to being added to the Office of State Aid's list of approved laboratories. (Refer to State Aid’s web site).

In lieu of the MDOT Testing Laboratory, other approved testing organizations may certify technicians and laboratories. See S.O.P. No. SA II-3-27 and S.O.P. No. SA II-3-9 for certification procedures related to concrete and hot mix asphalt respectively.

### 3.3. Defined Qualifications of Testing Personnel:

#### 3.3.1. Testing Engineer:

A Testing Engineer must be a registered professional engineer, trained in testing of materials and familiar with MDOT's procedures and AASHTO testing requirements and with sufficient experience to supervise a testing laboratory.

#### 3.3.2. Assistant Testing Engineer:

An Assistant Testing Engineer must be a graduate engineer from an accredited college of engineering, trained and experienced in testing and familiar with MDOT's procedures and AASHTO testing requirements.

#### 3.3.3. Certified Laboratory Technician:

A certified technician must be a person trained in the field of sampling, testing and reporting of soils, aggregates or other materials normally used in highway construction. He must also be familiar with MDOT's testing procedures and AASHTO testing requirements.
3.4. Responsibilities of County/LSBP Engineer and Approved Laboratories:

3.4.1. The approved testing laboratory performing the tests will be subject to the direction of the County/LSBP Engineer, and the laboratory personnel will be responsible for the sampling, testing and reporting the test results to the County/LSBP Engineer.

3.4.2. Personnel working for the approved laboratory shall be fully certified to sample, test and report the results according to approved procedures.

3.5. Records and Reports To Be Kept:

3.5.1. The County/LSBP Engineer will maintain complete records of material tested. One (1) copy of test reports shall be submitted to State Aid for its project record files and one (1) copy shall be submitted to the Contractor.

3.5.2. The County/LSBP Engineer will maintain a project record test report file for all pretested material received on the project. One (1) copy of the test reports received from a commercial source is to be submitted to State Aid and one (1) copy to the Contractor.

3.5.3. Test report forms for each testing procedure or function performed by the laboratory personnel will be similar to MDOT testing forms and shall be completely filled in with all pertinent information.

3.5.4. For materials requiring specialized equipment for testing and which were not pretested and reported by the manufacturer, the County/LSBP Engineer will submit a sample to the MDOT or other approved testing laboratory for required analyses.

3.6. Payment to County Engineer: Subject to the approval of the Board, the County Engineer (except salaried full-time County Engineers) will be compensated out of the testing fund on the basis of unit prices for the various testing functions performed.
No payment will be made until invoices with the attached test reports on the tested items are received at State Aid and reviewed by the State Aid Testing Engineer.

3.6.1. **No Duplication of Payments will be Made:** As an illustration, if a laboratory technician employed by the County/LSBP Engineer does work other than testing operations (such as inspection work); the time that he devotes to inspection work would be considered a part of the engineering fee. The time sheets of the technician must clearly show a breakdown of time where an employee is assigned both engineering and testing functions.

Reimbursement for full-time salaried County/LSBP engineering personnel will be made on the basis of actual time devoted to testing functions.

4. **IMPLEMENTATION:**

4.1. **Board Action:** Before payment of State Aid Funds for testing is authorized by the State Aid Engineer, the Board of Supervisors and County/LSBP Engineer must execute a Contract Agreement wherein the Board agrees to allow the use of their State Aid funds for this service.

4.2. **County/LSBP Engineer and Approved Testing Laboratory Action:** Before being approved by the State Aid Engineer to perform testing on State Aid Projects, the County/LSBP Engineer or approved testing laboratory, must demonstrate that proper equipment and personnel are available to perform the required testing functions. Equipment and personnel will be certified by the MDOT Central Laboratory.

4.3. **State Aid Action:** Upon receipt of the requirements stated in Subsections 4.1 and 4.2 above, the State Aid Engineer will approve the Contract Agreement.

4.4. **Limitations:** Unless otherwise provided, all "Independent Assurance Sampling and Testing" on Non-Exempt Federal Aid Projects administered by State Aid will be performed by MDOT personnel.

No technician or laboratory will be considered qualified to perform tests until the MDOT Materials Engineer has furnished the State Aid Engineer with a letter certifying to the ability of the technician to perform a certain test.