

**Georgia Department of Transportation**

**Office of Materials and Testing**

**Standard Operating Procedure (SOP) 23**  
**Testing Management Program**

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**I. General**

This Standard Operating Procedure outlines the basic principles upon which the Testing Management Program operates and the basic responsibilities of all involved in for program to function properly. It is essential that each engineer and technician accept and execute their responsibilities.

**II. Policy**

The [Office of Materials and Testing](#) administers the Testing Management Program with close coordination and cooperation of the District and Area Offices. This will include personnel and equipment utilized within the program. Also, the [Office of Materials and Testing](#) will be responsible for reviewing and making recommendations of all future personnel, budget, and testing frequency changes.

**III. Basic Responsibilities**

The basic responsibilities of all personnel involved in and affected by the Testing Management Program areas follows:

1. The Area Engineer/Manager will notify the Testing Management Operations Supervisor or Field Supervisor at the Branch Laboratory at the beginning of the construction of each project. If construction is not continuous, the Area Engineer/Manager is responsible for notifying the Operations Supervisor each time the project construction resumes. If testing personnel are not on the project at the scheduled times or when testing is needed, the Area Engineer/Manager should notify the Operations Supervisor or Field Supervisor in order that they may immediately locate a Testing Technician and dispatch them to the project.
2. Testing Management personnel may set up permanent testing facilities at strategic locations at Area Offices throughout the District and always requires access to these facilities.
3. Testing Management District Offices will maintain material records for all projects within their assigned area. These records will include the total minimum tests required, tests to date, and whether passing or failing. This system will not replace any information required of the Area Manager in the Construction Manual.
4. District Materials Manager is responsible for all preliminary engineering sample

## Standard Operating Procedure (SOP) 23

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submissions.

5. Responsibility for pre-inspected items is with the the Area Construction Office. Sampling and Testing personnel will sample these materials at random times for product evaluation, at the request of the Area Engineer/Manager, or any items which may arrive on a project without pre-inspection.
6. Area Engineer/Manager personnel are responsible for performing GDT 26 and GDT 27 tests on fresh structural concrete and on any other miscellaneous construction concrete where air and slump tests are required. The Area Engineer/Manager's personnel are also responsible for making and curing cylinders for these items.
7. Testing Management personnel are responsible for concrete plant testing and inspection when a plant is set up for the sole purpose of concrete base or paving. This does not replace any tests required of the Area Engineer/Manager's personnel on the roadway items.
8. When necessary, Testing Management personnel monitor materials used at ready-mix concrete plants at the frequencies outlined in Section 500 of the Sampling, Testing, and Inspection Manual.
9. All aggregate from a qualified source will not require testing at the job site; however, if the material is suspect or visually out of specifications, the material should be rejected, or samples taken and tested by testing personnel.
10. Base plant testing and inspection is the responsibility of Testing Management personnel, when required. This includes the cement checks on projects requiring pre-mix cement stabilization. The Office of Materials and Testing, Standard Operating Procedure No. 29 outlines the responsibilities in the case of soil cement construction.
11. Testing Management Field Supervisor or Testing Management Operations Supervisor is responsible for certifying contractors' testing personnel (Level 1 QCT). Testing Management personnel monitor the sampling, testing and documentation performed by Level 1 QCT to ensure that the Department's requirements for asphaltic concrete testing are being met.
12. Testing Management Field Supervisor or Testing Management Operations Supervisor is responsible for certifying consultant Roadway Testing Technicians (RTT). Testing Management personnel monitor the sampling, testing and documentation performed by RTT to ensure that the Department's requirements for materials testing are being met.
13. Testing Management program includes monitoring contractor acceptance testing and inspection of the Asphaltic Concrete plant as well as all Asphaltic Concrete acceptance testing at the roadway. Certified Contractor Quality Control Technicians (Level 1 or 2) will provide acceptance testing at the asphaltic concrete plant and generate test reports utilizing the Department's software and upload that data to the appropriate Reporting system daily. Roadway inspection is the responsibility of the Area Engineer/Manager's Office which includes the inspection of the material as it is being placed, straight edging, and the designation of lot boundaries.
14. Testing technician will notify the project personnel of all test results. If samples were taken to the Office of Materials and Testing or a District Laboratory, project personnel will be notified of these samples and the pending results. The daily report (DOT 159-5) for Asphaltic Concrete construction

## Standard Operating Procedure (SOP) 23

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shall be uploaded to the appropriate Reporting system by the QCT, reviewed and reported by Testing Management. Testing technicians provides the void results to the Contractor (QCT supervisor) and the Field Supervisor/ATMOS/TMOS within 3 days of the lot closing. Only contract number, mix information, and test data obtained by Testing Management personnel or the Contractor's QCT is filled in by the testing personnel. All payment adjustments will be determined by the Area Engineer/ Manager personnel.

15. Testing Management personnel prepare and upload final test reports for all materials tested. Tests performed in the field will be uploaded within 3 days to the appropriate Reporting system.
16. The District Laboratory is responsible for all routine tests on Asphaltic Concrete, soil, aggregates, Asphaltic Concrete designs, and concrete cylinder breaks for materials sampled in their respective districts. In addition, the District Laboratories will perform required testing on liquid asphalt.

### IV. TESTING RULES AND FUNDAMENTALS

1. Subgrade and GAB 1<sup>st</sup> and 2<sup>nd</sup> lift test, that is not immediately covered after in place testing, is valid for 3 days, if the material is not disturbed (no trucks, equipment, or hard rain). If it is disturbed, it must be retested before covering.
2. Subgrade and GAB test are good for a maximum of 2 Lanes/1500ft or 1 Lanes/3000ft, However, if less than the maximum lanes and footage is setup and ready for compaction, the compaction test is only good for the area completed
3. If an asphalt lot in the adjustment period fails voids and range specifications to receive 100% pay with GDT-59 but meets the voids and range 90% it does not have to be cored for GDT-39 testing.
4. If you have a range penalty, go back and retest with Nuclear Gauge, the highest and lowest sublots before coring. If the range is eliminated by retesting the highest and lowest sublots, use these readings for lot acceptance.
5. Pipe compactions must be performed ½ way up the side of the pipe. There should be at least 1.5ft of area on each side of the pipe. The purpose of this compaction test is to ensure the pipe doesn't roll or move when additional layers are placed on top and create areas for settling.
6. Subgrade under sidewalks and miscellaneous concrete requires 95% compaction.
7. Any compaction test within 100ft of a bridge must meet 100% compaction unless otherwise specified.

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