

**OKLAHOMA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISIONS
FOR
CONTRACTOR'S QUALITY CONTROL**

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 1999 Standard Specifications for Highway Construction, English and Metric. Units of measurement are provided in the subsections in both English and Metric equivalents. The units for this project will be those specified in the project plans.

643.01. DESCRIPTION.

Furnish Quality Control of materials and construction in accordance with the Standard Specifications, Plans and Special Provisions. This includes, but is not limited to preparing and following a Quality Control Plan. Obtain samples and perform tests for Quality Control (and acceptance, when directed by the Engineer). Provide inspection, and exercise management control to produce materials and workmanship that conforms to contract requirements. Specific requirements for quality control and acceptance are given in Special Provisions 411-3QA (A. C. Pavements); 414-2QA (P. C. Pavements); 504-4QA (Bridges) and 430-2QA (Smoothness). Unless otherwise noted in the plans, all pavements and bridges (except culverts) will be subject to requirements of any or all of the above Special Provisions which are included in this contract.

643.02. MATERIALS.

Meet materials quality requirements. Separate payment for Quality Control is limited to those materials covered in the Quality Control Special Provisions in this.

643.03. EQUIPMENT.

Provide equipment at own expense, unless otherwise specified. All equipment and supplies shall conform with Engineer standards and applicable Specifications. Certify the calibration of all equipment that is calibrated.

643.04. CONSTRUCTION.

- (a) **General.** Provide quality of all construction covered in the contract. Separate payment for Quality Control is limited to construction covered by the Quality Control Special Provisions in this contract.
- (b) **Quality Control Personnel Qualifications.** All personnel directly involved in sampling and/or testing materials for either control or acceptance purposes shall be certified in the appropriate area(s) by the Oklahoma Highway Construction Materials Technician Certification Board. The Quality Control manager shall possess a four-year degree in engineering or construction management or have six years of acceptable experience. Manager certification for material sampling and testing is not required unless he or she is directly involved in sampling and/or testing materials.
- (c) **Contractor's Quality Control Plan.** Submit a written Quality Control Plan at least one week prior to the pre-work conference. Include the following in the plan:
 - 1. Sources of *principal* materials including names of suppliers and locations.
 - 2. Names and resumes of key Quality Control personnel.
 - 3. Duties, responsibilities, and authorities (to suspend production, alter mixtures, etc.) granted to key Quality Control personnel.

4. Description of testing laboratories, including qualifications, key equipment and locations.
 5. Description of start-up operations.
 6. Detailed testing schedule based on production.
 7. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring the test, feature of work to be tested, and person responsible for each test.
 8. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.
- (d) **Sampling and Testing.** Perform sampling and testing according to the accepted Quality Control plan using personnel certified in appropriate areas and laboratories approved by the Engineer. Keep laboratory facilities clean and maintain all equipment in proper working condition.
- (e) **Inspection.** Provide inspection necessary to ensure compliance with applicable standards and specifications.
- (f) **Records.** Maintain complete testing and inspection records and make them accessible to the Engineer.
1. **Test Results.** Maintain control charts that identify the project number, contract item number, test number, each test parameter, the upper and/or lower specification limit applicable to each test parameter, and the test results. Use the control charts as part of the Quality Control system to document process variability, to identify production and equipment problems, to make necessary corrections, and to identify potential pay factor adjustments.

Post control charts in an accessible location, keep them up-to-date, and make them available to the Engineer upon request. Make corrections to the process when problems are evident, including ceasing production if necessary.

2. **Inspection Results.** For each day of work, prepare an "Inspector's Daily Record of Construction Operations" on an approved form. Include the following certification signed by the person with overall responsibility for the inspection system:

"It is hereby certified that the information contained in this record is accurate, and that all work documented herein complies with the requirements of the contract. Any exceptions to this certification are documented as a part of this record."

Submit the record and certification to the Resident Engineer within two working days of the work being performed. If the record is incomplete, in error, or otherwise misleading, a copy of the record will be returned with corrections noted. When chronic errors or omissions occur, correct the procedures by which the records are produced.

- (g) **Use of Contractor Test Results for Acceptance Purposes.** Abbreviated test procedures are allowed for Contractor use. The Quality Control Plan shall list all abbreviated test procedures, describe all deviations from standard procedures for each, and note their intended purpose. Test results from abbreviated procedures will not be used for any purpose by the Department. All sampling and testing required in the specific Quality Control-Quality Assurance Special Provisions (411-3QA, 414-2QA, 430-2QA and 504-4QA) must meet acceptance testing standards. It is the Engineer's discretion to use or not use any of the Contractor's test results for acceptance purposes.

- (h) **Changes.** Submit, in writing, all proposed changes in key Quality Control personnel, equipment or procedures from those previously approved by the Engineer. Submit written changes at least one week prior to the proposed action.

643.05. METHOD OF MEASUREMENT.

Payment for Contractor's Quality Control will be measured on a lump sum basis. The amount of this lump sum payment is specified as a minimum in the Special Provisions 648-1QA and this amount or more must be included in the Contractor's bid. Increase bids to cover estimated Quality Control expenses, if necessary. Do not reduce the minimum bid amount.

643.06. BASIS OF PAYMENT.

Accepted Contractor's Quality Control measured for payment as prescribed above will be paid for at the Contract unit price for:

CONTRACTOR'S QUALITY CONTROL LUMP SUM

This payment will be full compensation for furnishing all materials, facilities, equipment, labor and incidentals to complete the work.

Subject to acceptable performance, payment for Contractor's Quality Control will be made in accordance with the following schedule:

- 25%** on the next estimate after the Engineer's approval of the Contractor's Quality Control Plan *and other required initial documentation*
- plus 25%** when 50% of the work subject to Quality Control requirements is complete
- plus 25%** when 75% of the work subject to Quality Control requirements is complete
- plus 25%** when all test results and records related to Quality Control work have been furnished to and accepted in writing by the Engineer

As stated above, this payment schedule is based upon acceptable performance. Payment will be reduced for unacceptable portions of the Quality Control work. Serious deficiencies in Quality Control work may result in the project being shut down.