

## CHAPTER 13

### QUALITY ASSURANCE REVIEW

#### 13.1 PURPOSE

The purpose of this chapter is to present guidelines in checking and monitoring the Final Estimates Process from the initial phase of construction through the closeout phase. The State Final Estimates Office's (SFEO) goals are to provide consistency and quality practices statewide.

#### 13.2 GENERAL

This procedure explains what is required by the SFEO to perform an effective Quality Assurance Review (QAR). This review by the SFEO is to periodically monitor quantities, payments, procedures, and guidelines to assist in obtaining an accurate and quality estimate. This QAR will determine how effective Quality Control (QC) is reviewed in the Districts, and Resident Offices. This process will determine if the targets, as defined in the SFEO Process Control System, are being met. Each DFEE will provide their current QC Plan. It is recommended that all DFEOs complete a 30%, 60%, and 90% review within the specified criteria for each project and prepare a report by using *Final Estimates Review Form, Form No.700-050-36*. From this report, performance measures will be established by the SFEO to determine if the Final Estimates Process is in compliance.

#### 13.3 REFERENCES

The following standards are referenced within this procedure and are included in the term "Contract Documents":

Special and Technical Provisions, Plans, Roadway Design Standards, Structures Standards, Traffic Operations Standards, Developmental Specifications, Supplemental Specifications, and Standard Specifications

The following procedures and guidelines are referenced in preparation for QARs:

- (1) Construction Project Administration Manual (CPAM), ([Topic No.700-000-000](#))

- (2) Basis of Estimates Handbook (Metric and English)
- (3) Review and Administration Manual, ([Topic No.700-050-005](#))
- (4) Final Estimates Guide list (FEG)
- (5) Preparation and Documentation Manual, ([Topic No.700-050-010](#))
- (6) Computation Method for Design and Construction & Final Estimates Handbook, ([Topic No.700-050-001](#))

## 13.4 DEFINITIONS

The following words, along with their definitions, are used within this document:

**13.4.1 Quality Assurance Review (QAR):** The process used by the SFEO to monitor and measure compliance with predetermined standards/targets.

**13.4.2 Non-Compliance:** A Non-Satisfactory performance of a critical requirement as determined through the QAR process.

**13.4.3 Critical Requirements:** Activities/steps/tasks that are measurable and verifiable in a construction contract. Their intent is to outline vital requirements and identify problems that could potentially compromise the desired outcome.

**13.4.4 Best Practices:** An activity, step, or task that when completed, produces extraordinary and unique results; a demonstration of excellence.

**13.4.5 Quality Control (QC) Plan:** A monitoring plan that provides the means by which measures/data will be derived. This plan is developed and used by the DFEO/Consultant Construction Engineering Inspection (CCEI) to determine the degree of performance to specified requirements.

## 13.5 STATE FINAL ESTIMATE OFFICE (SFEO)

The SFEO will be responsible for all QARs at the District, CCEI, and Project Levels. The focus of the SFEO is to determine whether the CCEI and In-House project's processes are being conducted in accordance with the procedures and guidelines. Determination of jobs to be reviewed in each District will be the SFEO's responsibility. Asphalt, Concrete, Earthwork, Bridge Quantities and Final "As-Built" Plans will be critical areas of high interest. The SFEO is responsible for determining the frequency of reviews, which will be outlined in the QAR schedule. Items that are to be reviewed by

the SFEO will be the Critical Requirements, along with other related items from the Final Estimates QC Guidelist. Critical Requirements will appear in bold letters in the guidelist. If the State Final Estimate Engineer's (SFEE) review finds constant errors involving the Critical Requirements, then steps must be taken to restructure the Process. At least one QAR will be completed in each district annually. Should problems arise the frequency will be based on need.

### **13.6 DISTRICT**

The DFEO will be responsible for all checking and measurement monitoring within the District. The DFEO will monitor the estimate process and the quality of estimates, on consultant and in-house projects. Requirements such as, completeness, accuracy and useable data will be required on all *Final Estimates Review Forms, (Form No.700-050-36)*, and the effectiveness of the Districts to follow up on recommended actions as stated on the forms. If errors are found while performing the QA review such as: Computation Book entries, Final "As built" Plans not updated, adjustments not recorded, it will be noted appropriately with a copy provided to the Project and Resident Engineer. The Districts will keep records of all reviews in their office files.

### **13.7 FREQUENCY OF REVIEWS**

Each District Office shall have a QC Plan on which evaluations are based and conducted annually. The purpose of the SFEO QAR is to ensure efficient and effective processes in the delivery of desired outcomes.

### **13.8 FINDINGS**

All significant findings will be entered on the *Final Estimates Review Form, (Form No. 700-050-36)*, as to what steps should be taken to improve the Final Estimates Process. Any ratings such as Non-Compliance or Best Practices will be addressed in the report. Significant findings will give the District an idea of what areas and what course of action in the area of training is needed at the Project/CCEI Level. The DFEE will conduct reviews when deemed necessary, until the targets have been reached.

### **13.9 CRITICAL REQUIREMENTS**

Critical Requirements are used at each QAR as indicators of the quality of the overall process. If a review of the Critical Requirements reveals significant concerns, then this would be an indication that further review is warranted. The FEG has the critical requirements defined in bold and UPPERCASE TEXT.

## **13.10 QUALITY CONTROL GUIDELIST**

The guidelist consists of major items that will assist the Project Engineer and Inspectors to identify critical areas that would require monitoring and also, will include the Critical Requirements used for reviews performed by the SFEO and District Offices. This guidelist also provides several check-off/reminders to help the construction staff meet the pay item requirements. The FEG can be viewed on the Construction Website. <http://www11.myflorida.com/construction/CONSTADM/guidelist/finalest/feguidelist.htm>

## **13.11 QUALITY ASSURANCE CLOSE-OUT PROCESS**

### **13.11.1 Informal Close-Out**

The SFEE or Designee should conduct an Informal Close-out with the Resident or CCEI/Project Engineer after each review, to discuss what corrective actions need to be taken to improve the estimate process if any. Non-Compliance along with Best Practices will be addressed by the SFEE. Critical requirements should be the main topic of discussion if there is a problem. The Project Engineer or a representative should be in attendance at these Informal Close-outs.

### **13.11.2 Formal Close-Out**

If a QAR results in significant or major findings, the finding(s) will be addressed at the Formal Close-out with the District Construction Engineer (DCE) and DFEE. Topics of concern for improvement could include requiring additional training for personnel, discussing practices that need improvement, recommending the adoption of better practices, or establishing a process that the Final Estimates Engineers will use to ensure that their staff is prepared properly to finalize each estimate. If findings have statewide significance they should be communicated to all DFEEs.

### **13.11.3 Quality Assurance Report**

A written report will be prepared by the SFEO and sent to the DCE according to [Quality Assurance Procedure Review \(Topic No.260-010-002a\)](#). This report will contain data supported findings based on the Critical Requirements. The DCE and DFEE will receive a copy; all other copies will be distributed to other appropriate persons. Comments and questions concerning the report should be discussed, and a reasonable solution to the items of concerns should be resolved.