

## Section 3.5

### FINAL ESTIMATES QUALITY REVIEWS

#### 3.5.1 Purpose

The purpose of this chapter is to provide guidelines for checking and monitoring the Final Estimates Process from the initial phase of construction through the closeout phase. The goal of the State Final Estimates Office (SFE0) is to provide consistent and quality practices statewide.

#### 3.5.2 Authority

Sections [20.23\(3\)\(a\)](#) and [334.048\(3\)](#), *Florida Statutes (F.S.)*

#### 3.5.3 References

Construction Project Administration Manual (CPAM)

Basis of Estimates Manual

Review and Administration Manual

Final Estimates Guidelist

Final Estimate Status (FES) application– User Guide

#### 3.5.4 General

This procedure explains what is required to perform effective **Quality Assurance Reviews (QAR)**, **Quality Control (QC) Reviews**, and **Process Reviews**.

**QARs** are performed by the Resident Office (RO) to assure compliance with processes and procedures throughout the contract duration.

**QC Reviews** are performed by the District Final Estimates Office (DFEO) to periodically monitor quantities, payments, procedures, and guidelines to assist in obtaining accurate and quality **Final Estimates Documentation**. **QC Reviews** also determine how effective the District's QC Plan is implemented.

**Process Reviews** are performed by the SFE0 to facilitate the Final Estimate process by addressing findings during the progress of the project and by clarifying procedures when necessary.

For each review performed, the reviewer shall print his/her name followed by the applicable reviewer type, the review date, and his/her agency/company name on ***the Final As-Built Signature Sheet***. See ***RAM 4.6*** and ***CPAM 5.12.8(B)(2)*** for more information.

Records of all ***QARs*** will be scanned in the Electronic Document Management System (EDMS). ***QC Review*** information will be entered into the ***Final Estimate Status (FES)*** application . Records of ***Process Reviews*** will be stored on the State Construction SharePoint site.

### **3.5.5 Quality Assurance**

The RO is responsible for the quality of the ***Final Estimates Documentation***. Quality is achieved by checking Contractor certifications, pay quantities, contract and line item adjustments, estimate payments, and supporting backup documentation for accuracy and compliance with policies and procedures throughout the construction contract.

#### **(A) QA Plan**

The RO QA plan should detail how reviews will be performed and the frequency of the reviews. The RO QA Plan will be submitted to the District Final Estimates Manager (DFEM) for review and approval prior to the beginning of construction. The DFEM will review, send for correction, and/or approve the RO QA Plan within 10 days of receipt.

#### **(B) Frequency of QARs**

For Consultant projects, ***QARs*** are required in the Consultant Construction Engineering and Inspection (CEI) Scope of Services to be performed, at minimum, semi-annually, unless otherwise indicated by contract duration and contract items.

For In-House projects, ***QAR*** frequency should, at minimum, mirror the Consultant requirements and be identified in the District QC Plan.

#### **(C) QAR Findings**

A report detailing the findings of each ***QAR*** will be submitted to the DFEM within 30 days of completion.

### 3.5.6 Quality Control

The DFEO is ultimately responsible for all **Final Estimates Documentation** within the District. The DFEO will monitor the estimate process and the quality of estimates on Consultant and In-House projects throughout the District.

#### (A) District QC Plan

The District QC Plan will outline how District **QC Reviews** will be performed and the frequency of the reviews by the District. Each DFEM will submit their current District QC Plan to the SFEO. See [Attachment 3.5-1](#) for a **Sample QC Plan**.

#### (B) Frequency of QC Reviews

A minimum of one **QC Review** shall be completed for projects within each District at the frequency shown on the table below. The DFEOs will complete a **QC Review** at the following construction completion milestones: 30%, 60%, and/or 90%. If only one **QC Review** is conducted, it is recommended that the 60% milestone be given high priority due to the quantity of work completed and contract time remaining from completion of the project. Likewise, no review shall be performed at a construction completion less than 30% due to minimal work completed.

**Minimum Requirements for QC Review Frequencies**

|           | Less than<br>\$2M | \$2M<br>or Greater |
|-----------|-------------------|--------------------|
| QC Review | 15%               | 100%               |

#### (C) QC Review Findings

All Critical Requirements in Compliance and Noncompliance during each **QC Review** shall be entered into the **FES** application's **District QC Tab**. The DFEO will enter all findings from **QC Reviews** along with the corresponding dollar amount. The application will automatically calculate the Overpayment, Underpayment, Net Value, and Absolute Value from the District QC Findings Entries. The **QC Review** shall include findings, such as incomplete Summary of Quantity entries, **Final As-Built Plans** not updated, and adjustments not recorded, with steps to be taken to improve the Final Estimates process, as well as all Outstanding Areas or Best Practices to benefit the processes of the District and/or State. Significant findings will inform the DFEO as to what areas and what course of action is needed at the RO Level, specifically if supplementary training is required. The DFEM will conduct additional reviews when deemed necessary, until satisfactory

performance levels have been reached. Once the **QC Review** information has been input into the **FES** application, the DFEO will notify the Project Administrator (PA) and project staff that the **QC** results are available in the **FES** application for review. For more information, see the [Final Estimate Status – User Guide](#), on the **FES Help Tab**.

**Form 700-050-36, Final Estimates Field Review Form** can still be used by the DFEO for field notes during the review and any site source documentation, as needed. To avoid duplication, the **Final Estimates Field Review Form** (when used) is not required to be inputted into EDMS.

### **3.5.7 Process Review**

The SFEO is responsible for all quality reviews at the District and RO (In-House and Consultant CEI) levels. The purpose of the SFEO **Process Review** is to ensure efficient and effective delivery of the final estimates process and to determine whether the CCEI and In-House project processes are being conducted in accordance with the procedures and guidelines, as well as determine if any changes to the current procedures and guidelines are required. 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** are critical areas of high interest.

#### **(A) Frequency of Process Reviews**

At least one **Process Review** will be completed in each District annually. Depending on **Process Review** results, the frequency may be increased based on need.

#### **(B) Process Review Findings**

##### **(1) Process Review Close-Out Process**

##### **(a) Informal Close-Out**

The State Final Estimates Engineer (SFEE) or Designee(s) will conduct an Informal Close-out meeting with the Resident Engineer and/or Project Administrator after each individual Contract reviewed, to discuss any findings and what corrective actions, if any, need to be taken to improve the estimate process. Non-Compliance along with Best Practices will be addressed in the Informal Close-out. If there is a problem, critical requirements should be the main topic of discussion.

### (b) Formal Close-Out

The SFEE or Designee(s) will conduct a Formal Close-out meeting with the District Construction Engineer (DCE) and the DFEM to discuss any significant or major findings from all Contracts reviewed. Topics identified for discussion or improvement include: additional training for personnel, practice improvements, or process improvements to ensure staff has resources to properly finalize each estimate. If **Process Review** findings have statewide significance, they will be communicated to all DFEMs.

#### (2) Process Review Report

A **Process Review Report** will be prepared by the SFEO and submitted to the following:

- Chief Engineer
- Director of Construction
- District Secretary
- Director of Transportation Operations
- DCE
- DFEM
- FHWA

The **Process Review Report** will contain data supported findings and recommendations. The District will submit a written response to the SFEE within 30 days after receipt of the **Process Review Report** addressing any findings, including a reasonable solution to the areas identified for improvement. Any comments and questions concerning the **Process Review Report** should be discussed with the SFEE or Designee(s) prior to submitting the written response to the SFEE.

### 3.5.8 Final Estimates Guidelist

The SFEO is responsible for publishing the **FE Guidelist**, which provides a list of major items to help the Construction project staff meet Final Estimate requirements. It also includes the Critical Requirements used for **Process Reviews**, **QC Reviews**, and **QARs**. The **FE Guidelist** is found on the Construction Website at:

<http://www.fdot.gov/construction/CONSTADM/Guidelist/FinalEst/FE%20Guidelist.docx>

### 3.5.9 List of Attachments Following this Section

[Attachment No. 3.5-1](#).....Sample QC Plan

## **Attachment 3.5-1 Sample QC Plan**

### **Purpose and Scope**

This document describes Quality Control (QC) procedures used in review of the final estimates process (QC Reviews) prior to submittal of a Final Estimates Documentation. The Resident Office (RO) or designee is responsible for ensuring the Final Estimates Documentation is complete, accurate, clearly observes Contract Documents and Contract Plans, is responsibly supported, and is timely submitted to the District Final Estimates Office (DFEO) after the offer letter is sent to the Contractor. The goal of this approach is to expedite the review process and attain a quality Final Estimates Documentation that is compiled throughout the life of the contract.

### **Reference Documents and Manuals**

- (A) Contract Documents: The following documents are referenced within this document and are implicitly included in the term Contract:
- (1) Special Provisions
  - (2) Technical Special Provisions
  - (3) Contract Plans
  - (4) Design Standards
  - (5) Developmental Specifications
  - (6) Supplemental Specifications
  - (7) Standard Specifications
- (B) Department of Transportation Documents: The following procedures and guidelines are referenced in preparation for a review of the Final Estimates Documentation.
- (1) Construction Project Administration Manual (CPAM)
  - (2) Review and Administration Manual (RAM)
  - (3) Final Estimates Guidelist
  - (4) Basis of Estimates Manual

## Definitions

The following explanations define the intended use of the terms within and in conjunction with this document:

**Acceptable:** An area where evaluation of critical requirements indicates a process is in compliance with predetermined criteria.

**Adequacy:** The existence of sufficient coverage to support all tasks and functions at the prescribed level of competency as described in the reference manuals.

**Critical Requirement:** An essential and measurable activity in a Department process without which the process cannot be carried out.

**Overview:** Uses judgment in reviewing changes made by the Initial Reviewer, as well as in reviewing in-depth any other area deemed appropriate as outlined in Level of Assessment below.

**Final Estimates Documentation:** All documents necessary to provide a historical and legal record of the work performed on the project in accordance with the contract for final payment to the Contractor.

**Initial Reviewer:** Performs a thorough check of the Final Estimates Documentation.

**Significant Finding:** A monetary or procedural error showing neglect in producing and/or maintaining the necessary Final Estimates Documentation.

**Unacceptable:** An area where evaluation of the critical requirements indicates a process is not in compliance with predetermined criteria.

## Level of Assessment

### (A) DFEO Level

- (1) Final Estimate Kick-off Meeting - The DFEO will conduct a meeting with the assigned CEI staff on how to develop and manage the Final Estimates Documentation for all newly awarded contracts. An appropriate checklist and/or other material for the development of estimates documentation will be provided to the CEI staff at this meeting. The determination to conduct the meeting will be based on the complexity of the contract and the level of experience of the project staff and/or at the request of the RO staff per CPAM 2.2.

- (2) Optional: District Final Estimates Meeting - The DFEO will conduct a (quarterly or semi-annual) meeting with all final estimates personnel (In-house and Consultant) to distribute information and updates, as well as provide a forum for training and feedback, in an effort to continually improve the final estimates process.
- (3) Frequency of Review - The following intervals are minimums.
- (a) There will be (Number of Reviews) review(s) for conventional contracts with an original contract amount of less than (Dollar Amount).
- (b) There will be (Number of Reviews) review(s) for conventional contracts with an original contract amount of (Dollar Amount) to (Dollar Amount).
- (c) There will be (Number of Reviews) review(s) for conventional contracts with an original contract amount exceeding (Dollar Amount).
- (d) The reviews above will be performed as follows:
- If one (1) review is to be performed on a contract, the review will be performed at no less than 60% of project completion.
  - If two (2) reviews are to be performed on a contract, the reviews will be conducted at 60% and 90% of project completion.
  - If three (3) reviews are to be performed on a contract, the reviews will be conducted at 30%, 60%, and 90% of project completion.
- (e) Option 1: A minimum of (Number of Reviews) review(s) will be performed for Lump Sum and Design Build Contracts.
- Option 2: Lump Sum and Design Build contracts will also meet the criteria specified above.



- (4) Pay Item Review - The DFEM has the authority to exercise judgment in deciding which pay items are to be reviewed for a specific contract. This determination will be based on the following criteria:
    - (a) Size and complexity of project
    - (b) Pay item problem areas
    - (c) Statewide required pay items where these pay items are a major item of work as defined in Article 1-3 of the Standard Specifications:
      - Earthwork
      - Asphalt
      - Concrete
    - (d) Experience of project staff
  - (5) Final As-Built Plans Review
    - (a) Ensure all reviewers are identified on the As-Built Signature Sheet
  - (6) Review all material penalties and failures are included in the monthly estimates.
  - (7) Review contract and line item adjustments, work orders, and Supplemental Agreements to ensure they are included in the monthly estimates.
  - (8) Review of the overrun and underrun explanations.
  - (9) Review the contract time documentation.
  - (10) Review the Offer Letter and final estimate prior to submittal to the Contractor.
- (B) In-house Resident Office (RO) Level**
- (1) Final Estimate Preparation – The RO will review the appropriate Contract Documents, manuals, procedures, and checklists.

- (a) Incomplete calculations or backup, as well as errors are resolved with the assistance of the Engineer of Record.
  - (b) Missing pay items are flagged and addressed on an early supplemental agreement.
  - (c) Removal items are measured prior to removal and earthwork verification is completed.
- (2) Frequency of Review - The following intervals are minimums.
- (a) Reviews will be conducted semi-annually
  - (a) For short duration contracts, an initial review will be conducted within the first two (2) months of the start of construction
  - (b) On asphalt contracts, an initial review will be conducted after the Contractor as completed ten (10) full work days of mainline asphalt paving operations or 25% of the asphalt pay item amount (whichever is less)
  - (c) A final review will be conducted prior to submittal of the Offer Letter to the Contractor and Final Estimates Documentation to the DFEO
- (3) Documentation of Review
- (a) Within 30 days of review completion, the RO will submit a report to the DFEM with findings and corrective measures.
- (4) Final As-Built Plans Review
- (a) Ensure all reviewers are identified on the As-Built Signature Sheet
- (5) Estimate and Pay Item Review
- (a) Method of Measurement
  - (b) Basis of Payment
  - (c) Applicable Field Record and/or back up documentation

- (d) Contract Adjustments (list is not all inclusive)
  - Incentive/Disincentive
  - Retainage
  - Damage Recovery/Lane Rental
  - Liquidated Damages
- (e) Line Item Adjustments (list is not all inclusive)
  - Fuel
  - Bituminous
  - Composite Pay Factor (CPF)
  - Thickness
- (f) Overrun and underrun explanations
- (6) Contract Time Documentation Review
- (7) Contract Changes Review (list is not all inclusive)
  - (a) Work Orders
  - (b) Supplemental Agreements
  - (c) Time Extensions
- (8) Offer Letter Review