THIS MEMO IS EXPIRED

December 1, 1999

MEMORANDUM NO. 36-99

TO: DISTRICT CONSTRUCTION ENGINEERS

DISTRICT FINAL ESTIMATES ENGINEERS

FROM: Greg Xanders, State Construction Engineer

COPIES: Bill Albaugh, Charles Goodman, Tom Aldridge

SUBJECT: DISTRICT FINAL ESTIMATES OFFICE QUALITY CONTROL (QC)

PLAN

A copy of the approved District Final Estimates Office Quality Control (QC) Plan is attached. The plan is designed to have field reviews performed during construction while the final estimates package is compiled. This plan allows for a minimum of 80% of the contract amount to be reviewed in the DFEE Review, as opposed to a full review of all contract items. In this way, we can ensure a majority of contract items are reviewed where the most exposure to risk exists. This plan provides the minimum requirements for statewide use. The districts may add to the plan as they see fit.

The updated Review and Administration Standards for Final Estimates Manual is expected to be released in January 2000 and will include this revision to the process.

Your district Final Estimates Quality Control Plan, beginning in January 2000, shall include the components of this plan as the minimum.

If you have further questions, please contact Tom Aldridge at SC 292-4165.

GX/ac Attachment

District Final Estimates Office Quality Control (QC) Plan

1. Purpose and Scope

This document describes District QC procedures used in a District Final Estimates Office (DFEO) review of a final estimates package, final payment and contract closure. The District Final Estimates Engineer (DFEE) or designee is responsible to ensure that the final estimates package is complete, accurate, clearly observes contract documents and plans, is responsibly supported and timely submitted to the Contractor for offer of final payment. The goal of this approach is to expedite the review process and attain a quality final estimates package that is compiled throughout the life of the contract. These procedures apply to both Class 1 and District Contracts.

2. Reference Documents and Manuals

- **2.1 Job Contract Documents:** The following documents are referenced within this document and are implicitly included in the term **Job Contract**:
 - 1. Special Provisions
 - 2. Technical Special Provisions
 - Plans
 - 4. Road Design, Structures and Traffic Operations Standards
 - 5. Developmental Specifications
 - 6. Supplemental Provisions
 - 7. Standard Specifications
 - 8. Bid Blank
- **2.2 Department of Transportation Documents**: The following procedures and guidelines are referenced in preparation for a review of the final estimates package.
 - (A) Basis of Estimates Handbook (Metric and English versions)
 - (B) Final Estimates Preparation and Documentation Manual
 - (C) Computation Methods for Construction, Final Estimates and Design Manual
 - (D) Final Estimates Engineering Audit and Administrative Manual

3. Definitions

The following definitions are explained for use with this document:

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

Acceptable: An area where critical requirements indicate a process is in compliance with predetermined criteria.

Unacceptable: An area where the critical requirements indicate a process is not in compliance with predetermined criteria.

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

Final Estimates Package: All documents necessary to provide a historical and legal record of the work performed on the project in accordance with the job contract for final payment to the Contractor. Contents are referenced in Final Estimates Engineering Audit and Administrative Manual, Chapter 3, section (2) (b).

Initial Reviewer: performs a thorough check of the final estimates package (preferably done during the life of the project rather than after the fact). The Initial Review must be accomplished by a representative of the DFEO or his designee. The Initial Reviewer cannot author the work being reviewed.

DFEO Overviewer: Uses judgement in reviewing changes made by the Initial Reviewer, as well as reviewing in-depth any other area deemed appropriate as outlined in 5.1.3.

DFEE Review (DFEER): Technical review of selected pay items equaling 80% of the original contract amount as directed by the DFEE.

Significant Finding: Consistent, continual neglect to produce and maintain the final estimates package and documentation.

4. Responsibility

The DFEE has the responsibility and the authority to exercise judgement in deciding which pay items are to be reviewed for a specific contract. The DFEE will work with the Reviewer for each contract to ensure compliance with established procedures.

5. Level of Assessment

5.1 DFEO Level

- 5.1.1 Pre-Review Meeting The DFEE may arrange a pre-review meeting with the assigned CEI staff on how to manage the final estimates package development of all newly awarded contracts. The determination to conduct the meeting will be based on the complexity of the contract and the level of experience of the project staff. An appropriate checklist and/or other material for estimates package development will be provided to the CEI staff at this meeting.
- **5.1.2 Pay Item Review** The DFEE will determine the pay items to be reviewed on each contract. The analysis is done before the first review begins on that specific contract. This determination will be based on the following criteria:
 - (A) DFEER pay item determination as defined above.
 - (B) Plus items listed below:
 - (1) Pay item problem areas
 - (2) Statewide required pay items where these pay items are a major item of work as defined in Subarticle 1-3 of the Standard Specifications:
 - (a) Earthwork
 - (b) Asphalt
 - (c) Concrete
 - (3) All materials penalties and failures.
- **5.1.3 Frequency of Review** Periodic field reviews will be conducted. The following intervals are minimums.
 - The review interval for construction contracts with an original contract amount of less than one million dollars will be one.
 These contracts may be reviewed in the DFEO at the discretion of the DFEE.

- The review interval for construction contracts with an original contract amount of one million dollars to five million dollars is two.
- For construction contracts with an original contract amount of more than five million dollars, the review interval is three.
- The DFEE will determine the review interval for Lump Sum and Design Build Contracts and notify the CEI staff of the interval.

5.1.4 DFEO Overview - Consists of:

- Reviewing and updating the overrun and underrun explanations.
- Reviewing the final contract time file, test reports and failures as well as the Initial Reviewer's changes, field review reports and checklists.
- Reviewing adjustments and Supplemental Agreements to ensure they are included in the final estimate.
- Performing calculations for Fuel and Bituminous Adjustments and Freight Rate Adjustments.
- Preparing the final estimate for submittal to the Contractor and the complimentary paperwork for support of the submittal as described in Chapter 14, Sections 1 and 2 of the Final Estimates Engineering Audit and Administrative Manual.
- Resubmitting final estimate as required.

5.1.5 - Administrative Close out - Consists of:

- Tracking, Receiving and Reviewing Contract Documents Chapter 14, Sections 3, 4, 7 and 9 of the Final Estimates Review and Administration Manual.
- Pursuit of Overpayments Chapter 14, Section 6 of the Final Estimates Review and Administration Manual.
- Contractor's Acceptance Chapter 14, Section 8 of the Final Estimates Review and Administration Manual.
- Pass Process Chapter 14, Section 10 of the Final Estimates Review and Administration Manual.

 Contract Closure - Chapter 14, Section 11 of the Final Estimates Review and Administration Manual.

6. Method of Documentation

After each field review, a written report of discrepancies and observations will be prepared using the **Final Estimates Review Form.** A report will be prepared and distributed to the Project Engineer (PE), Resident Engineer (RE) and DFEE if there are significant findings, both positive and negative. The DFEE will distribute copies of the results of the field reviews to the DCE at his discretion. The PE will correct discrepancies and notify the DFEO representative of the corrective action within the time frame specified in the field review report. A copy of the report and the PE's response will be placed in the DFEO office file. If the PE does not correct major discrepancies within the the time frame specified, the DFEE will notify the PE, the RE and the DFEO representative to eliminate the reoccurrence and resolve the issue. The DFEE will notify the DCE of problems with corrective actions at the DFEE's discretion

7. Forms

- 7.1 Pre-review Checklist or other material
- 7.2 Final Estimates Review Form