

CONSTRUCTION PROCEDURES HANDBOOK

SECTION I	SUBSECTION H	DATE
GENERAL INFORMATION	CONSTRUCTION INSPECTION QUALITY ASSURANCE	10/31/2022

The Bureau of Construction Management will perform the following 4 types of reviews:

Quality Construction General Inspection Audit:

The Manager, Bureau of Construction Management or designee, will develop an annual construction inspection program, and submit copies thereof to the FHWA Division Office no later than February. The Manager or designee will also be responsible for preparation of the review schedules and selection of the audit personnel. The procedure for Quality Construction General Inspection Audit is as follows:

- 1) Audit members will familiarize themselves with the applicable Standard Specifications, Special Provisions Special Provisions, Addenda, Construction Procedures Handbook (CPH), Construction Manual, Construction Plans and TCP/Stage Plans. They will pay particular attention to any unusual features and specific changes from established construction practice that may be included in the project.
- 2) The audit personnel will contact the RE of the project to be reviewed no later than the Thursday prior to the week of the review and ascertain the type of work anticipated to be done during that week. The FHWA shall be invited on all federal projects. Uniform checklists will be utilized to perform specific audits.
- 3) Using the Specifications, TCP plans, and the Manual on Uniform Traffic Control Devices as a guide, special attention will be directed to traffic and safety control devices. This will include but not be limited to staging, barricades, signing, lighting, their location, and maintenance of the safety items.
- 4) On the day(s) of the field construction review, the control of the work, the field staff's methods as well as the Contractor's construction methods will be observed to see if the plans and specifications are being followed. Completed work will be inspected for workmanship and appearance. Apparent deficiencies will be noted and the possible causes ascertained, i.e., condition of materials, weather during construction, new or different construction procedures used, and any other pertinent information. Daily inspection reports and other data pertaining to the inspection process will be reviewed. During the review a Truck Weight Inspection will be conducted to determine compliance.
- 5) Audit members will keep accurate notes on the review. A close-out conference will be held upon completion of the review, with Audit personnel and the RE.
- 6) The completed report will be ready within five (5) working days of the review. Included in the report will be appropriate recommendations and comments, if

any, by the RE and/or the FM. Distribution of the final report will be as follows:

Director, Construction and Materials
Program Manager
RCE
FM
PM
RE
RME
FHWA, Area Engineer (on PODI projects)

- 7) If warranted, the RE will prepare a written response within ten (10) working days of receipt of the review report, outlining what actions will be taken as a result of the construction review. This response will be directed to the Manager, Bureau of Construction Management.

Quality Construction Inspection In-Depth

The Manager, Bureau of Construction Management, or designee, will select construction activities and the projects to be inspected and select audit personnel. The selection of activities to be inspected will be coordinated with the annual FHWA Construction Program. The procedure will be as follows:

- 1) The assigned audit personnel will determine the objective of the in-depth inspection and establish a checklist and/or guidelines to provide a consistent and uniform method of gathering information during the inspection.
- 2) All pertinent instructions regarding the activities i.e., the Standard Specifications, Special Provisions, Addenda, Department Policies and Procedures, Construction Procedures Handbook (CPH), and other sources of data will be reviewed by the audit personnel prior to making any inspection.
- 3) The audit personnel will notify the RE at least one (1) week in advance of their intention to include the subject project as part of the yearly in-depth review. During this initial contact, arrangements will be made for the RE to notify the audit personnel when the in-depth item is in progress, to ensure the audit personnel are present. The FHWA will be invited on PODI projects.
- 4) The audit personnel, accompanied by the RE, will observe the activity under construction, inspect that portion that may be completed, and review the office records regarding the activity.
- 5) Upon completion of the project inspection, the RE will be informed of all notes and data taken and will have the opportunity to provide comments regarding the findings. The completed individual project report will be ready within five (5) working days of the review. Included in the report will be appropriate

recommendations and comments, if any, by the RE and/or the FM. A copy will be distributed to the RE, FM, PM and any other unit, including the FHWA, that attended the audit.

- 6) Upon completion of the annual Inspection-In-Depth program, notes from all projects, including the RE's comments, will be reviewed and analyzed by the audit personnel. A final report will be produced and forwarded to the Manager, Bureau of Construction Management with findings, conclusions, and recommendations for his review and comments.
- 7) Distribution of the final report will be as follows:
 - Director, Construction & Materials
 - PM
 - FM
 - RCE
 - RME (For Materials related topics)
 - RE (reviewed)
 - Division Administrator, FHWA (if PODI projects are on the report)

NOTE: The final report will be distributed to any unit that participated in the review or any unit that requires their action.

- 8) Upon receipt of the final report, the RCE or designee will prepare a report, if warranted, for submission to the Manager, Bureau of Construction Management with a copy to the Director, Construction & Materials, which will discuss the resolution of inspection-in-depth findings and summarize what actions can be taken in response to the final report recommendations. Copies of the RCE's reports will be summarized and sent to the Division Administrator, FHWA (if PODI projects are on the report) by the Manager, Bureau of Construction Management.

Office Reviews:

Projects will be reviewed after the First Monthly Contractor Payment Estimate. The procedure shall be as follows:

- 1) The audit personnel will contact the RE at least two (2) days in advance of the review. A mutual time will be established and the review will take place at the field office location.
- 2) The audit personnel will determine whether the CPH, Policies and Procedures, Construction Manual, and As-Built Manual are all available and current. The adequacy of the documentation of interim pay quantities, the daily inspection reports and project diaries, and the frequency and methodology of the material testing and sampling will be reviewed to determine compliance with contract specifications. The audit personnel will also check that Insurance Certificates and Declarations are on file and current. If the review indicates substantial discrepancies, a follow-up review may be scheduled.
- 3) The completed report will be ready within five (5) working days of the review and submitted to the Manager, Bureau of Construction Management for his

comments and distribution. Copies will be distributed as follows:

Director, Construction & Materials
RCE
FM
RE
Division Administrator, FHWA
(For PODI projects)

As-Built/Closeout Quality Assurance Audit

The procedure shall be as follows:

- 1) The RE will notify the Manager, Bureau of Construction Management, in writing, when as-builts including as-built plans are ready for final review. This will include the Core Summary Report, the concrete penalty/bonus calculations, Contractor DBE certification and a DC-155 REs Final Status Summary with the project's current status. This notification should anticipate the completion of as-builts by about two (2) weeks to facilitate scheduling.
- 2) If it is determined that an audit should be performed, the audit personnel will call the RE to establish a date for the audit and advise of any other Quality Assurance audits or information surveys being planned while the audit team is at the field office location. The RE will be responsible for informing the Field Manager of the review date.
- 3) The audit personnel will obtain copies of the project specifications, proposal, addenda, latest Estimate, DC-155, DC-104, and CR-268 to serve as the basis for reviewing contract items.
- 4) The audit personnel will select all completed Items of both road and bridge as-built calculations to determine general conformance with the current manual. If the project is reviewed and excessive deficiencies are noted, the audit personnel will make the determination as to what degree the scope of the review is increased to determine accuracy and compliance with accepted practices. The audit personnel will also review all pertinent records in the project files to determine if the DBE/Trainee goals on the project have been achieved.
- 5) Upon completion of the audit, a closeout conference will be held with the RE and, if possible, the FM to discuss the findings and recommendations. If audit personnel determine that a follow-up As-Built Review is necessary, the RE will be informed. Incomplete Items, omissions or errors are to be corrected by the RE and reviewed by the FM. The Bureau of Construction Management may require written verification of these corrections.
- 6) A report of the findings and recommendations, together with comments from the close-out conference, will be prepared within five (5) working days of the audit. Copies will be distributed as follows:

Director, Construction & Materials

RCE

FM

RE

PM

Division Administrator, Federal Highway Administration
(For all Federal-Aid projects)

Yearly Report

A yearly review summation report of recurring deficiencies will be prepared by the Quarterly Assurance Section and will be submitted to the Manager of the Bureau of Construction Management.