

## Section 5.9

# INSPECTION-IN-DEPTH

### 5.9.1 PURPOSE

To describe the activities for Department personnel related to the Inspection-In-Depth (IID) program and to establish a procedure for conducting the program.

### 5.9.2 AUTHORITY

*FEDERAL-AID POLICY GUIDE* (FAPG), 23CFR, Subchapter G - Engineering and Traffic Operations, Part 637 - Construction Inspection and Approval, Subpart B - Quality Assurance Procedures for Construction, Section 637.209.  
Sections 334.044(2), 334.044(10) (a) and 334.048 Florida Statutes

### 5.9.3 SCOPE

Primary Offices affected by this procedure include State Materials Office (SMO), State Construction Office (SCO) District Construction Offices (DCOs), Resident Construction Offices (RCOs), and District Materials Offices (DMOs).

### 5.9.4 GENERAL

The IID process determines the degree of compliance with standards for materials, equipment, workmanship, and construction control processes. IID is a tool to inform supervisory and managerial personnel of weak areas. Inspection is measured by sampling, testing and review of project records. When used for Independent Assurance (IA) evaluations, perform inspections in accordance with the Materials Manual Chapter 5.5. When the IID process is used to evaluate IA personnel, their equipment and workmanship, a Qualification Performance Report (QPR) will be completed. Copies will be sent to the technician and the District Materials Engineer (DME).

IID inspections include the review of records and observation of activities involved in the Quality Assurance Program (QAP). The QAP encompasses all personnel and procedures involved in the Quality Control (QC) Program, Acceptance Program, and IA Program.

DMEs and District Construction Engineers (DCEs) are responsible for the implementation of the QAP. The DME or DCE is responsible for ensuring that

deficiencies are corrected and for ensuring follow-up and re-inspection as required. The Director, State Materials Office (SMO) is responsible for monitoring the effectiveness of the QAP and IID.

IID reports are numbered according to the type of work inspected, the report number, and the year issued in that order separated by hyphens. Reports are numbered consecutively. The work types are:

- A. Bituminous Construction - BC
- B. Earthwork Operations - EO
- C. Laboratory Inspection - LI
- D. Mineral Aggregate - MA
- E. Portland Cement Concrete Construction - PC
- F. Prestressed Operations - PO
- G. Precast Products – PP

**Example:** BC-001-1998

### 5.9.5 INSPECTION SCHEDULING

Send written inspection notification at least ten (10) working days before the inspection. Address the notification to the affected personnel or laboratory. Include the intended beginning date, type of inspection, intended unit(s) or geographical location(s) to be inspected, and any other information deemed useful.

The Director, SMO may authorize unannounced or special purpose inspections upon direction from the Secretary of Transportation, Assistant Secretary for Engineering and Operations, State Highway Engineer, Operations Support Director, District Secretary, upon request of the DME or DCE, or where they deem necessary to safeguard the Department. These inspections do not require prior notification, however, as much advance notice as possible will be given as individual situations dictate.

To assure availability, IA evaluations will be scheduled jointly with the IA inspectors. A written notification as described in 5.1.6.1 is not required.

If a scheduled inspection needs to be cancelled or rescheduled, notify the affected personnel by phone. Follow up with written confirmation.

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## **5.9.6 INSPECTION TEAM**

The IID teams operate out of the SMO under the direction of the Director, SMO or the DMOs under the direction of the DME.

## **5.9.7 INSPECTIONS**

The on-site inspection consists of a visit by one or more inspectors to provide the Department with relevant information concerning the effectiveness of the QAP. The inspector assesses the knowledge and technical competency of the staff by interview and observing acceptance and IA activities being performed. The inspector examines critical aspects of the equipment, facilities, calibrations, test procedures, sample handling and control, data preparation and reporting, record keeping and construction practices.

Early in the inspection, the IID team contacts the responsible person in charge to inform him of the inspection closeout and reporting procedures, and to contact others who might be involved in the inspection.

At the conclusion of the inspection, or if necessary by mutual agreement when a substantial portion of the inspection is completed, a closeout meeting will be held at a convenient location. This meeting should include the IID team, affected personnel, IA personnel, and a representative of the DCE and DME, as appropriate.

At the closeout, the IID team reviews and discusses all identified deficiencies and notes. The IID team also discusses improvement opportunities and recommendations.

## **5.9.8 CORRECTING DEFICIENCIES**

Affected personnel shall take corrective action immediately on identified deficiencies. If a deficiency involves project specific processes under control of the DCE, the RE or DCE evaluates deficiencies, which cannot be corrected immediately, but could be detrimental to the quality of the project. The RE or DCE determines whether or not construction should be suspended until corrective action can be initiated. If a difference of opinion exists concerning the adequacy of the proposed corrective action, the DCE makes the final determination, either directly or after consultation with the Director, State Construction Office.

If a deficiency involves a facility under control of the SMO or DMOs, the DME decides whether or not the process must be suspended until corrective action can be initiated. The Director, SMO is the final authority in deciding if the corrective

action is adequate and/or determining if the process should be suspended.

## 5.9.9 REPORTING

### 5.9.9.1 Draft Reports

The IID team issues a draft report no later than ten (10) working days after completion of the inspection, if a response is required. The draft report lists all deficiencies. Describe any immediate corrective action required to prevent recurrence of a deficiency, together with the deficiency. Cite the written authority for deficiencies for which there is non-compliance. The affected offices review the report for accuracy and clarity. If there is a disagreement in context or statement of fact regarding the inspection finding, such differences will be resolved via telephone or in person. If an agreement is reached between the inspection team and the person questioning the draft, include the wording acceptable to both parties in the final report. The response to the draft will address the agreed upon wording. If no agreement can be reached, the original draft version will prevail and any difference of opinion will be stated in the response.

Give a summary of the deficiencies requiring response at the end of the draft report.

If no deficiencies were found or all deficiencies were corrected during the inspection, a draft report is not required. A draft report is not required for IA evaluations.

### 5.9.9.2 Response

Within fifteen (15) working days from date of the draft report, forward a response to the Director, SMO or DME, attention appropriate IID team. If more than 15 working days are needed for response, contact the inspection team leader for an extension. Consultant laboratories firms respond through their DME or DCE. The DME/DCE then submits the response, with comments as necessary, to the Director, SMO. Address the probable cause of the deficiency and the corrective action that has been or will be taken to prevent recurrence in the response. Include both the reply and any comments by the DME and DCE in the final report. Make corrective action responses addressing a need for specification changes or changes in current Department practices through established procedures. Recommendations may be included in the response. Deficiencies corrected during the

inspection do not require a written response. Responses to notes are optional.

### 5.9.9.3 IID Report

The IID report will be issued by the Director, SMO or the DME no later than twenty-five (25) working days after the date of the draft report, or no later than the end of the extension if granted. Address only findings of conditions as they exist compared to what they should be as stated in documented authority. Send the report to the appropriate DMO and/or SMO, and the FHWA as required.

When the IID process is used to evaluate IA personnel, their equipment and workmanship, the QPR, in accordance with the Materials Manual Chapter 5.5, will constitute the final report. Resolve any deficiencies addressed in the QPR in accordance with the Materials Manual Chapter 5.5.

## 5.9.10 TRAINING

There is no training mandated for the implementation of this procedure.

## 5.9.11 FORMS

No forms are required for implementation of this procedure.