CONSTRUCTION PROCEDURES HANDBOOK

SECTION VII	SUBSECTION A	DATE
CONSTRUCTION COMPLETION	PROJECT COMPLETION AND ACCEPTANCE	10/25/2018

Interim Completion

The Standard Specifications define Interim Completion as a milestone other than "Completion of Work," requiring completion by a specified date or within a specified time."

Interim Completion time requirements are specified in Subsection 108.10 of the Contract's Special Provisions. Interim Completion can be specified as a date or as a number of days. The RE will determine whether or not the Contractor will meet an Interim Completion date 60 days prior to and 10 days prior to the Interim Completion date.

- If it appears the Contractor will fail to meet an Interim Completion date (60 days and 10 days prior to the Interim Completion date), the RE will notify the Contractor, in writing, that they appear to be behind schedule and that the appropriate liquidated damages will be assessed if the Interim Completion date is not met (see DC-155 workbook C9A-1 & C9A-2). However, if an extension of time that would affect the Interim Completion date is under consideration, the RE will discuss the possible time extension with the FM, and determine if the delay notice should be sent to the Contractor. If it is determined that liquidated damages should not be assessed, the RE and the FM must secure the RCE's concurrence to suspend the assessment of liquidated damages pending the issuance of a Change Order. On Federal Contracts with a Project of Division Interest (PODI) category, the Federal Highway Administration (FHWA) Area Engineer must be consulted regarding extensions of time.
- When the Contractor completes a portion of the project that has an Interim Completion date, the Contractor is required to notify the RE in writing. Upon receipt of the Contractor's notice of Interim Completion, the RE will review and inspect that portion of the project.
- If it is determined that the portion of the project is **not** complete, the RE will notify the Contractor in writing within five (5) working days (<u>see DC-155</u> <u>workbook C9B</u>). The RE's letter will inform the Contractor that the requirements for Interim Completion have not been met, and will note what work remains to be completed in order for Interim Completion to be achieved. The Contractor is required to re-notify the RE upon completion

of said work. This process is repeated until the work is determined to be complete.

 If the RE determines that the portion of the work described in the Interim Completion requirement is complete, the RE will notify the Contractor of the actual Interim Completion date (<u>see DC-155 workbook C9C</u>). The date of the Contractor's last notice of Interim Completion is the actual Interim Completion date.

Substantial Completion

The Standard Specifications define Substantial Completion as "When all work is complete, with the exception of landscaping Items listed in <u>811.04</u>, removal of SESC measures, FINAL CLEANUP, and repair of unacceptable work; provided the RE has also determined that:

- The Project is safe and convenient for use by the public.
- Failure to complete work and repairs excepted above will not result in the deterioration of other completed work.
- The value of the remaining landscaping work, removal of SESC measures, repairs, and FINAL CLEANUP is less than 2 percent of the "Total Adjusted Contract Price."

Substantial Completion time requirements are specified in Subsection 108.10 of the Contract's Special Provisions. Substantial Completion can be specified as a date or as a number of days. The RE will determine whether or not the Contractor will the meet Substantial Completion date 60 days prior to and 10 days prior to the Substantial Completion date.

- If it appears the Contractor will fail to meet the Substantial Completion date (60 days and 10 days prior to the Substantial Completion date), the RE will notify the Contractor in writing, that they are behind schedule and that the appropriate liquidated damages will be assessed if the Substantial Completion date is not met (see DC-155 workbook C11A-1 & C11A-2). However, if an extension of time that would affect the Completion date is under consideration, the RE will discuss the possible time extension with the FM, and determine if the delay notice should be sent to the Contractor. If it is determined that liquidated damages. On Federal Contracts with PODI category, the Area Engineer must be consulted regarding extensions of time.
- The RE is to keep list of defective work, which the Contractor has to repair. This list along with a list of uncompleted work should be provided

to the Contractor prior to the Contractor's notice of Substantial Completion (<u>see DC-155 workbook C11B</u>). This list is intended to reduce the number of Contractor notices of Substantial Completion and reduce the Corrective Action inspection list.

Notice of Substantial Completion

When the Contractor believes that the Contract has reached Substantial Completion, the Contractor is required to notify the RE in writing. Upon receipt of the Contractor's notice that the project is substantially complete, the RE will review and inspect the project with the FM to determine if the Contractor has reached Substantial Completion.

NOTE: On Federal Contracts with PODI category, the Federal Highway Administration (FHWA) Area Engineer is to be notified of the Contractor's notice of Substantial Completion and invited to the Substantial Completion Inspection in writing by the RE.

- If the RE determines that the project is not substantially complete, the RE will notify the Contractor in writing within five (5) working days of the Contractor's notice of Substantial Completion. (See DC-155 workbook C11C). The RE's letter will note what work remains to be completed in order for the project to be considered substantially complete. The Contractor is required to re-notify the RE in writing upon completion of the work. This process is repeated until the Contractor meets all the requirements of the Substantial Completion in accordance with the Contract.
- When the RE with the concurrence of the FM determines that the project is substantially complete, the RE will prepare a Substantial Completion Memorandum (see DC-155 workbook C11D) recommending that the project be found substantially complete. The memorandum will fix the date of Substantial Completion as the date of the Contractor's last acceptable notice of Substantial Completion. The RE will submit the Substantial Completion Memorandum to the FM and Regional Construction Engineer (RCE) for concurrence. If the RCE concurs, the RCE will sign the memorandum, and return it to the RE. The RE will send the Project Manager (PM) a copy of the approved Substantial Completion Memorandum.
- Following approval of the Substantial Completion Memorandum, the RE will process the next Estimate as a Substantial Completion estimate ensuring that the retainage is reduced from 2 percent to 1 percent.
- The RE is required to maintain the project specific Project Close-out Workbook (Form DC-155) in accordance with CPH Section VII Subsection B.
- The RE must coordinate, receive and review all test results (Air Void, Thickness and Ride Quality) on HMA courses in a timely manner. All negative pay adjustments results on Ride Quality need to be confirmed

and verified with the Manager of Pavement Design Unit. All Removal and Replacement results on Air Voids and Thickness need to be confirmed and verified with the Manager of Bureau of Materials. RE shall notify the Contractor within 3 working days of the final test results on HMA courses.

Corrective Action Inspection

If the RE, with the concurrence of the FM, determines that the Contract appears to meet the requirements of Substantial Completion, The RE schedules the Corrective Action Inspection on behalf of the RCE within the time frame described in CPH section VII-B. The RE will set a date by which invited parties must submit a list of Corrective Action items to the RE. (See DC-155 workbook C17A) This date is to be set to allow interested parties a minimum of ten (10) working days from the receipt of the notification to review and inspect the project. The following parties will be notified:

- Project Manager
- Field Manager
- Regional Construction Engineer
- Regional Director of Operations (for each Region with jurisdiction)
- Regional Maintenance Engineer (for each Region with jurisdiction)
- Regional Electrical Engineer (for each Region with jurisdiction)
- Manager, Traffic Engineering
- Manager, Bridge Maintenance Engineering and Operations(for Bridge Painting contracts only)
- Manager, Bureau of Landscape Architecture and Environmental Solutions (for projects with landscape)
- FHWA Area Engineer (for all federally funded projects)
- **NOTE:** The RE will contact the FHWA Area Engineer to confirm their attendance and determine if the FHWA Area Engineer wants to review the project **with** the RE.
- Supervisor of Sign Shop, Bureau of Maintenance Support (for projects with GO signs)
- Third Party Participating Agencies (e.g. NJTPK, NJHA, Port Authority)
- County or Municipal Engineer(s) with acceptance jurisdiction
- Traffic Operations Center (North and/or South)
- Regional Electrical Supervisor, Operations (for projects with electrical work)
- Manager, Bureau of Structural Design (for projects with structures, including overhead sign structures)
- Manager, Structural Evaluation and Bridge Management (for projects with moveable bridges)

Interested Parties will inspect the project, and will provide the RE with a list of Corrective Action items on or before the date established in the RE's Corrective Action Inspection letter. Interested parties are to provide comments **only** on construction

deficiencies and are not to provide requests for work that is not within the scope of work for the project. All parties must either provide a list of deficiencies or provide a written response that they have no comments. The documentation of no comments is acceptance of the Work.

If an outside agency (e.g. Municipality/County/NJTransit etc.) does not provide Corrective Action items or fail to provide a written response that they have no comments, the following steps are to be followed:

- The RE, with the concurrence of the FM will write a letter, via certified mail, to the agency within five working days following the Corrective Action Inspection (<u>see DC-155 workbook C17C</u>). The letter will note that the agency did not request any corrective action and that this means that the agency has accepted the work as constructed as outlined in the Corrective Action inspection Letter. This letter is to be followed up with a phone conversation.
- If the agency again fails to respond, the RE, with concurrence of the FM, will write a memorandum (<u>see DC-155 workbook C17D</u>) to the PM stating that the agency is unresponsive and that Acceptance will proceed without having an Acceptance Letter from the agency.

The RE will prepare a Memorandum of Record, compiling all identified deficiencies noted by the interested parties. The RE will review the entire list and identify the deficiencies that are design deficiencies. Construction deficiencies are defects caused by the Contractor, either by failing to conform to the Contract (e.g. not in the proper location, having poor workmanship) or by damage caused by the Contractor's operation. Design deficiencies are corrective action items that are not construction deficiencies, but rather a request for additional work. If the RE identifies a corrective action items as a design deficiency, the RE will contact the initiator of the identified corrective action item in question to seek mutual agreement as to the classification of a deficiency as a design deficiency or as a construction deficiency. The RE will prepare a memorandum to the PM listing all design deficiencies and any disputed deficiencies. (See DC-155 workbook C17B) The PM will review the memorandum from the RE and attempt to resolve disputed deficiencies with the initiating party. The PM will decide if any of the design deficiencies should be corrected under the Contract.

For projects initiated by Operations, the PM will review the list of deficiencies and for design deficiencies. The PM will decide if any requests for Extra work should be performed under the Contract. If the initiating unit disputes the decision not to address a request for additional work, the PM will discuss the request with the Executive Director of Operations. The PM will instruct the RE as to which design deficiencies, if any, are to be addressed under the Contract.

For Capital Program Management (CPM) projects, the PM will review the list of deficiencies and for design deficiencies. The PM will decide if any requests for additional work should be performed under the Contract. If the initiating unit disputes the decision not to address a request for Extra work, the PM will discuss the request with the Program Manager. The PM will instruct the RE as to which design deficiencies, if any, are to be addressed under the Contract.

RE provides the list of Corrective Action Items to the Contractor based on the following two scenarios:

• No extra work required:

The RE will provide the Contractor within 7 days from the date of the Corrective Action Inspection the list of Corrective Action items (see DC-155 workbook C17E). The Contractor must complete the corrective action list by the Contract Completion date established in Special Provision Section 108.10. The Contractor is required to notify the RE in writing upon completion of all work items including these corrective work items.

• Extra work required:

If Extra work is required to correct design deficiencies, the RE will notify the FHWA, Operations and all attendees of the Corrective Action Inspection who would normally comment on the Extra work in writing (see <u>DC-155 workbook C17F</u>). All appropriate parties will have the ability to review this Extra work in the subsequent Acceptance Inspection.

RE will negotiate and issue the Change Order, with the concurrence of the PM, for the Extra work with a potential time extension.

The RE will provide the Contractor within 14 days from the date of the Corrective Action Inspection the list of Corrective Action Items, and Extra work items (see DC-155 workbook C17G). The Contractor must complete all work including this Extra work by the Contract Completion date established in Special Provision Section 108.10 or by the Completion date established in the Extra work Change Order. The Contractor is required to notify the RE in writing upon completion of all work including this Extra work items.

As soon as the Corrective Action list/Extra work is established, the RE is to hold the closeout meeting as described in CPH Section VII Subsection C, CLOSEOUT MEETING. The RE will prepare and distribute the meeting minutes. (See DC-155 workbook C17H and C17I).

Completion

The Standard Specifications define Completion as: "When all of the following have occurred":

- The Work has been satisfactorily completed in all respects according to the Contract (this includes extra work contained in the Change Order discussed above in 7b).
- The Project is ready for use by the Department as required by the Contract.
- The Contractor has satisfactorily executed and delivered to the RE all documents, certificates, and proofs of compliance required by the Contract including the Notice of Completion."

Completion time requirements are specified in Subsection 108.10 of the Contract's Special Provisions. Completion can be specified as a date or as a number of days. The RE will determine whether or not the Contractor will meet the Completion date 60 days prior to and 10 days prior to the Completion date.

If it appears the Contractor will fail to meet the Completion date (60 days and 10 days prior to the Completion date), the RE will notify the Contractor in writing, that they are behind schedule and that the appropriate liquidated damages will be assessed if the Completion date is not met (see DC-155 workbook C63A-1 & C63A-2). However, if an extension of time that would affect the Completion date is under consideration, the RE will discuss the possible time extension with the FM, and determine if the delay notice should be sent to the Contractor. If it is determined that liquidated damages should not be assessed, the RE and the FM must secure the RCE's concurrence to suspend the assessment of liquidated damages. On Federal Contracts with PODI category, the FHWA, Area Engineer must be consulted regarding extensions of time.

Notice of Completion

When the Contractor believes that the Contract has reached Completion, the Contractor is required to notify the RE in writing. The letter (Notice of Completion) is to specify the name of the project and state that all work of the Contract has been completed. Upon receipt of the Contractor's notice of completion, the RE will review and inspect the project to evaluate the Contractor's notice of Completion. In order for the Contract to meet the requirements of Completion and be ready for Acceptance Inspection, **all** work must be completed. This includes:

- Plantings (excluding the requirements for PLANT ESTABLISHMENT PERIOD beyond Completion as specified in 811.03.02 of the project Specifications).
- b) Turf work including TURF REPAIR STRIP, FERTILIZING AND SEEDING TYPE ____, WILDFLOWER SEEDING, SODDING.
- FINAL CLEANUP

- Corrective action/repairs of any unacceptable work
- Submission of all documents required (including Materials Certifications and delivery tickets)
- Transportation Systems Management (formerly ITS) testing completed at all levels with documentation

If the RE determines that the Contract does not meet the requirements of Completion, the RE will notify the Contractor in writing within seven (7) days of the Contractor's first notice of Completion, and within three (3) days of each subsequent notice of Completion. The RE's letter will note what work remains to be completed in order for the project to be considered complete (see DC-155 workbook C63B). The Contractor is required to re-notify the RE when that work is finished.

The RCE may waive the assessment of liquidated damages for delays in the submission of documents, which could not have been completed by the Contract completion date (Force account records, waste disposal manifests etc.). The RCE will document all justifications of this waiver. On Federal Contracts with PODI category, the FHWA Area Engineer must be consulted regarding the waiver of liquidated damages.

Acceptance Inspection

If no Extra work or Corrective Action work was identified during the Corrective Action Inspection, the Corrective Action Inspection is deemed to be the Acceptance Inspection. The RE will prepare a memorandum of record (<u>see DC-155 workbook C63C</u>) The RE will send a copy of this memorandum to the RCE, FM and PM.

On all Federal Contracts with PODI category, if the FHWA Area Engineer noted any corrective action work on their Final Report, the RE will write a letter to the FHWA certifying that any identified deficiencies were corrected. (<u>see DC-155 workbook C63D</u>)

The FHWA may visit the project site and review the corrective action comments they provided. The FHWA should notify the RE in writing within 14 days of receiving the REs letter certifying the deficiencies were corrected that the noted deficiencies were indeed corrected. If the RE does not receive the letter from the FHWA within 14 days, the RE will call/email the FHWA to confirm the status of the FHWA corrective action comments.

If the RE, with the concurrence of the FM, determines that the Contract appears to meet the requirements of Completion, the RE will set a date with the parties which made comments at the Corrective Action inspection and will perform an Acceptance Inspection. This date is to be set to allow interested parties a minimum of ten (10) working days from the receipt of the notification to review and inspect the project. If extra work was added to the Contract based on the Corrective Action inspection, parties associated with that work must be invited to the Acceptance Inspection even if they had no comments at the Corrective Action Inspection. RE schedules the

Acceptance Inspection on behalf of the RCE within the time frame described in CPH section VII-B, and notifies the Region Office. (<u>See DC-155 workbook C63E or DC-155</u> workbook C63F as appropriate)

If no corrective work, items get identified from the Acceptance Inspection, project's **<u>actual</u>** Completion date is the Contractor's <u>**first**</u> Notice of Completion.

If any corrective work items are identified from the Acceptance Inspection, the RE notifies the Contractor within Two (2) days after the Inspection. Contractor completes these work items, and renotifies the RE. The RE follows up with the respective party regarding this outstanding work, and arranges for them to reinspect the work in question with Five (5) days. When no further outstanding corrective work items remain from these subsequent inspections, project's <u>actual</u> Completion date is the Contractor's <u>last</u> Notice of Completion.

Department's Acceptance

Preparation of Department's Acceptance Package (DAP)

The RE notifies the Region Office to initiate the Certificate of Completion (Form DC-20) by the submission of the Request to Initiate DC-20 (see DC-155 workbook C93). This request includes all important dates (Contract, Adjusted and Actual completion dates) including the calculation of liquidated damages for the project, lane occupancy charges and notation of unresolved claims and litigation. The memo will be accompanied by supporting evidence documenting the acceptance or failure to respond, by the various interested parties.

The Region Office will prepare and send the Form DC-20 to RE via E-mail. (<u>See Sample</u>)

The RE will review the contents, and forward four originals signed copies to the RCE.

The Region Office will check the status of project's CE budget in FMIS. If it is in suspense, the Region Office will prepare a written justification (to be provided by the RE/FM) for the overrun to the PM requesting the PM to complete a Fund Adjustment Form to clear the suspense. The PM will prepare the Fund Adjustment Form (<u>see Sample E</u>), get appropriate signatures, and send the form to Accounting. The PM will provide the RCE a copy of the fully signed Fund Adjustment Form.

The Region Office will assemble the DAP, and forward it to the Director of Construction and Materials. The DAP includes the following:

- Status Memorandum: The Region Office will prepare Status Memorandum (<u>see Sample B</u>) on behalf of the Project manager.
- Form DC-20 (2 original copies) (see Sample A)

- Form AD-12 (1 Pink, 5 Yellow) (see Sample C): The Region Office prepares this AD-12 for 'Acceptance and Final Payment' using the Department's most current template in accordance with the Policy No. 401. Show liquidated damages for Interim Completion, Substantial Completion, Completion and Lane Occupancy Charges on the AD-12. Do not include Lane Occupancy charges (or any other deduction) on the AD-12 if they were assessed thru a Contract Pay Item (108003M NS LANE OCCUPANCY CHARGES) thru Site Manager. Include specification references for liquidated damages and lane occupancy charges as appropriate.
- Fund Adjustment form (<u>see Sample E</u>) (if applicable)

NOTE: The RE and Region Office shall continue the preparation and execution of the DAP regardless of the status of any or all unresolved Contractual Notices (Form DC-<u>161s</u>) as specified in Subsection 104.03.04 of the project Specifications. A separate AD-12 will be prepared and processed for any or all outstanding claims settled after the execution of the DAP. This action can be prepared and processed by the NJDOT Claims Unit or by the Region Office.

The Director's Office will prepare a Routing Slip Form AD-37 (<u>see Sample D</u>), and will process the DAP in accordance with Policy 401.

The RE will process a Final Estimate in Site Manager, ensuring that the retainage is reduced from 1 percent to 0 percent, as soon as the Final Change Order is funded and approved by the Accounting. The RE shall process the final Change Order and final estimate concurrently while the Region Office processes the execution of the DAP. Final Estimate can be processed by the RE prior to the execution of the DAP.

The Region Office will approve the final estimate in Site Manager upon receipt of a copy of the fully executed Department Action Form AD-12 of the DAP.