

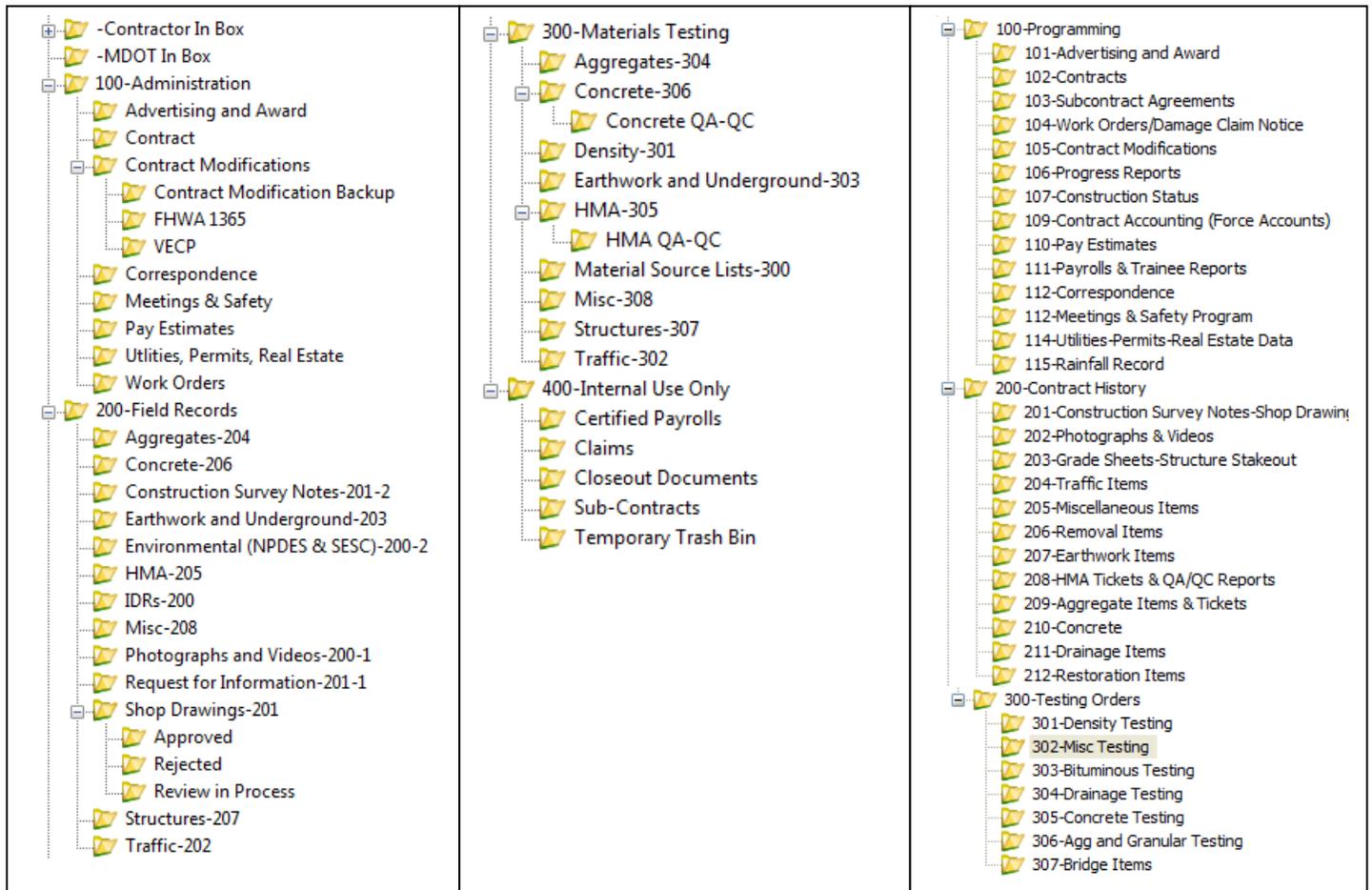
Work Flow Procedure Manual

- Work Flow Spreadsheet
- Standard Naming Conventions
- Link for ProjectWise where info is located

File Structure

E-construction File Structure

Old Paper File Structure



Subfolders

The use of subfolders has been limited to decrease the amount of expanding and collapsing of folders within ProjectWise. Office technicians have the ability to add subfolders to aid with the filing and organizing of documents.

Contract Modifications

- Contract Modification Backup
 - Include all pricing and backup information associated to get a contract modification generated.
- FHWA 1365
 - Is located in a different folder due to the workflow.
- Shop Drawings
 - Separate subfolders have been added to avoid confusion.

Material Testing – Concrete and HMA

- Mix Designs
- A separate subfolder has been added for QA/QC documents due to the volume.

Payrolls

- A separate subfolder is recommended for each of the contractors listed on the project.

Naming of Files

A standard naming convention was developed for naming the documents placed into ProjectWise to assist with sorting, organization, and lookup of the documents. Each document name will generally consist of 3 identifiers. Typically the identifiers will be form number or document abbreviation, date, and document descriptor.

The first identifier will always describe what the document is. This is accomplished by using the form number or an acronym as shown below.

- Use Cert for material certification
- Use CP for payrolls
- Use SD for Shop Drawings
- WRI for Wage Rate Interview

The second identifier will be the date and is to be formatted using the year (4 digits), month (2 digits), day (2 digits) each separated using a dash as seen below.

- 2013-01-09

The descriptor will be variable dependent on the document.

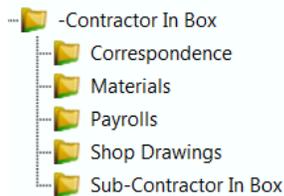
- Use Material Name for Materials
- Use Contract's name for payrolls
- Describe the shop drawings
- Describe the issue for correspondence

Revisions to existing documents already in ProjectWise where the original needs to be kept as reference should be distinguished by using an R or REV. If the document is revised more than once the R should be followed with the revision number.

If initials are to be used, they should be the same as called out in FieldManager.

For more examples reference the document “Standard Naming Convention E-Construction MDOT” in ProjectWise.

Contractor In-Box



The Contractor In-Box will hold any correspondence from the Prime Contractor and subcontractors to MDOT, from correspondence, to certification, to shop drawings, to payrolls. The Contractor In-Box is similar to the current mailbox at each TSC. If the contractor wanted to send MDOT something before he would put a stamp on the envelope and place the document in the mail box. With E-Construction the contractor uploads the document into the corresponding folder, changes the state of the document, and sends an email to MDOT notifying them that there is “mail ready for their action”

The workflow is the same for the following folders:

- Contractor In-Box
- Correspondence
- Materials
- Shop Drawings

This workflow is a standard Pending/Submitted Workflow

State name

- E-Construction-Pending
- E-Construction-Submitted

- The Prime Contractor will place the document in the folder, and the document will initially have a state of “Pending.”
 - While in the state of “Pending” the contractor will be able to modify and delete the document.
- Once the Prime Contractor has finalized the document and they will change the current state from “Pending” to “Submitted.”
 - Once the document is in the state of “Submitted they will no longer be able to write to the document, modify, or delete the document.
 - If the contractor is using the web based version of ProjectWise they will need to generate an email to MDOT notifying them that there are documents pending MDOT action.

The workflow is the same for the following folder:

- Payrolls

This folder is used for the transmittal of all documents associated with Payroll from the contractor to MDOT. For example 1955, certified payrolls, e-validation forms, etc.

This workflow is a *Payroll Submittal*

State name
📁 E-Construction-Payroll Pending
📁 E-Construction-Payroll Pending Prime Contractor Review
📁 E-Construction-Payroll Submitted

If the documentation is coming from a subcontractor to the prime contractor each of the states listed in the workflow are relevant. If the documentation is coming directly from the prime contractor such as the 1955, the prime contractor will change the state have to change the state twice to submit the document to MDOT.

- The Sub-Contractor will place the document into the folder and the document will initially have a state of “Payroll Pending.”
- When the Sub-Contractor is completed with the documents they will change the document from the current state of “Payroll Pending” to “Payroll Pending Prime Contractor Review”.
 - This is equivalent to the Sub-Contractor placing their payroll document in the mail for the Prime Contractor to review and complete the 1955 form, before the Prime Contractor submits the payrolls to MDOT.
 - During the states “Payroll Pending” and “Payroll Prime Contractor Review” MDOT will be able to see that there is a document located in the folder, but they will not be able modify or move the document until the state has been changed to “Payroll Submitted.”
- The Prime Contractor will then review the document and when review is completed they will change the document’s state from “Payroll Pending Prime Contractor Review” to “Submitted”.

Sub-Contractor In-Box

This folder is equivalent to the Prime Contractors internal email or mail correspondence with Sub-Contractor. MDOT will not have the ability to view any of the documents in this folder until the Prime Contractor has changed the documents state to “Submitted”.

State name
📁 E-Construction-Sub-Contractor Pending
📁 E-Construction-Pending Prime Contractor Review
📁 E-Construction-Submitted

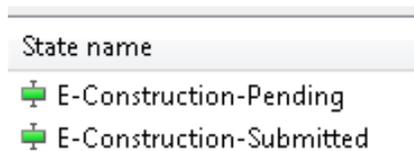
Payroll Submittals

- The Sub-Contractor will place the document in the folder generating a state of “Sub-Contractor Pending”.
- The Sub-Contractor will finalize the document and change the current state from “Sub-Contractor Pending” to “Pending Prime Contractor Review”.
 - This is equivalent to the Sub-Contractor either mailing or emailing the document to the Prime Contractor.

- The Prime Contractor will review and approve the document and change the current state from “Pending Prime Contractor Review” to “Submitted”.
 - This is equivalent to the Prime Contractor either emailing or mailing the document to MDOT for review.
 - MDOT will only be able to see the document once the state has been changed to “Submitted”.

MDOT In-Box

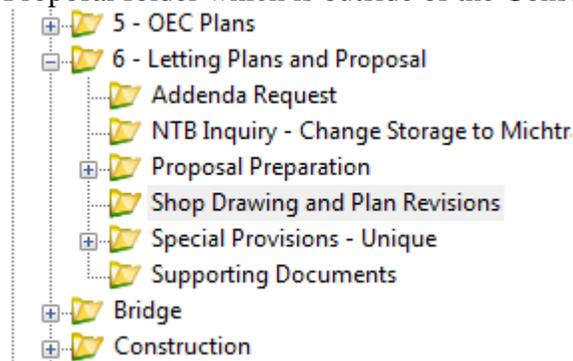
The MDOT In-Box is the location where all inspector documents are placed for the office technician to move and electronically file in the corresponding website.



- The Inspector will place the document in the folder generating a state of “Pending”.
- The Inspector will finalize the document and change the current state from “Pending” to “Submitted”.
 - This is equivalent to handing the completed document to the Office Technician.

Plan Revisions

The plan revision, form # 211 originates between the Construction Engineer (CE) and the Project Manager (PM). The PM coordinates the necessary plan revisions with MDOT Designers or Consultant Designers. This process occurs in the 6 – Letting Plans and Proposal folder which is outside of the Construction folder.



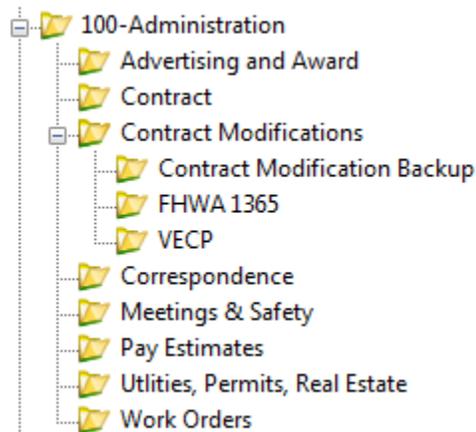
Once the Plan Revision is completed:

- The PM will sign the document and change the state to next.
- The CE will sign the document and change the state to next.
- If required FHWA will sign the document and change the state to next.

Plan Revision Workflow

State name
E-Construction-Pending
E-Construction-Pending Project Manager Signature
E-Construction-Pending Construction Engineer Signature
E-Construction-Pending MDOT Project Office
E-Construction-Pending FHWA Signature
E-Construction-Plan Revision Completed

Administration



Workflow – There are workflows on four folders in the Administration section

- Contract Modification
- FHWA 1365
- Pay Estimates
- Work Orders

Contract Modification

This folder will hold all documents pertaining to a contract modification including:

- The Contract Modification
- FHWA 1365 Pre-Approvals
- Extension of Time Request
 - Form 1979
- MDOT Authorized Signature Form

State name

- 📁 E-Construction-Contract Mod Pending
- 📁 E-Construction-Contract Mod Pending Contractor Signature
- 📁 E-Construction-Contract Mod MDOT Project Office
- 📁 E-Construction-Contract Mod Pending Constr Engineer Signature
- 📁 E-Construction-Contract Mod Pending TSC Manager Signature
- 📁 E-Construction-Contract Mod MDOT Project Office Tier 1
- 📁 E-Construction-Contract Mod Pending FHWA Signature
- 📁 E-Construction-Contract Mod Tier 1 Approved
- 📁 E-Construction-Contract Mod Region Constr Engineer Signature
- 📁 E-Construction-Contract Mod MDOT Project Office Tier 2
- 📁 E-Construction-Contract Mod Tier 2 Approved
- 📁 E-Construction-Contract Mod Pending CFS Bureau Signature
- 📁 E-Construction-Contract Mod MDOT Project Office Tier 3
- 📁 E-Construction-Contract Mod Tier 3 Approved

- The Office Technician will place the document in the Contract Modification folder generating a state of “Contract Mod Pending”
- The Office Technician will change the current state from “Contract Mod Pending” to “Contract Mod Pending Contractor Signature”
 - An email will be created to alert the Contractor
- The Contractor will sign the document and change the current state from “Contract Mod Pending Contractor Signature” to “Contract Mod MDOT Project Office”
 - An email will be created to alert the Project Office
- The Office Technician will then change the documents current state from “Contract Mod MDOT Project Office” to “Contract Mod Pending Construction Engineer Signature”
 - An email will be created alerting the Construction Engineer
- The Construction Engineer will then sign the document and change the current state from “Contract Mod Pending Constr Engineer Signature” to “Contract Mod Pending TSC Manager Signature”
 - An email will be created to alert the TSC Manager
- The TSC Manager will then sign the document and change the current state from “Contract Mod Pending TSC Manager Signature” to “Contract Mod MDOT Project Office Tier 1”
 - An email will be created to alert the Project Office
- The Office Technician will then change the current state from “MDOT Project Office Tier 1” to “Contract Mod Pending FHWA Signature” and then “Contract Mod Tier 1 Approved” based on the oversight requirements of the project as shown below.
 - If the Contract Modification requires only a Tier 1 approval level.
 - For Projects with FHWA Oversight
 - “Contract Mod Pending FHWA Signature”
 - An email will be created to alert the FHWA
 - FHWA will sign the document changing the current state from “Contract Mod Pending FHWA Signature” to “Contract Mod Tier 1 Approved”

- An email will be created to alert the MDOT Project Office
 - MDOT Oversight
 - The Office Technician will bypass the “Contract Mod Pending FHWA Signature” and change the current state to “Contract Mod Tier 1 Approved”
- If the Contract Modification requires Tier 2 approval level
 - The Office Technician will change the state from “Contract Mod Tier 1 Approved” to “Contract Mod Pending Region Constr Eng Signature”
 - An email will be created to alert the Region Construction Engineer
 - The Region Construction Engineer will sign the document changing the current state from “Pending Region Construction Engineer Signature” to “MDOT Project Office Tier 2”
 - An email will be created to alert the Project Office
 - The Office Technician will the review the signatures and approve the document changing the current state from “Contract Mod MDOT Project Office Tier 2” to “Contract Mod Tier 2 Approved”
- If the Contract Modification requires Tier 3 approval level
 - The Office Technician will change the current state from “Contract Mod Tier 2 Approved” to “Contract Mod Pending CFS Bureau Signature”
 - An email will be created to alert the CFS Contract Administrations Engineer.
 - The CFS Bureau will sign the document changing the current state from “Contract Mod Pending CFS Bureau Signature” to “Contract Mod MDOT Project Office Tier 3”
 - An email will be created to alert the Project Office
- The Office Technician will the review the signatures and approve the document changing the current state from “Contract Mod MDOT Project Office Tier 3” to “Contract Mod Tier 3 Approved”

FHWA 1365

This folder will hold the pre-contract modification form 1365 to the FHWA



- The Office Technician will place the document in the FHWA folder generating a state of “Pending”
- The Office Technician will finalize the document and change the current state from “Pending” to “1365 MDOT Project Office”
- The Office Technician will then change the current state from “1365 MDOT Project Office” to “1365 Pending Construction Engineer Signature”
 - This will generate an email alerting the Construction Engineer

- The Construction Engineer will sign the document then change the current state from “1365 Pending Construction Engineer Signature” to “1365 Pending FHWA Signature”
 - This will generate an email alerting the FHWA
- The FHWA will sign the document then change the current state from “1365 Pending FHWA Signature” to “1365 Approved”

Pay Estimates

This folder will hold the documents pertaining to the pay estimates including:

- Progress Estimate
- Final Estimate
- Final Estimate Voucher
- Post-Final Construction Estimate
- Stockpile Documents

State name
 e-Construction-Pay Estimate Pending
 e-Construction-Pay Estimate Pending Signature
 e-Construction-Pay Estimate Approved

- The Office Technician will place the document in the folder generating a state of “Pay Estimate Pending”
- The Office Technician will change the state from “Pay Estimate Pending” to “Pay Estimate Pending Signature”
 - An email alert will be generated and should be sent to all people who are required to sign
- All required signatures will be obtained before the Construction Engineer changes the state from “Pay Estimate Pending Signature” to “Pay Estimate Approved”

Work Orders

This folder will hold the documents pertaining to the work orders

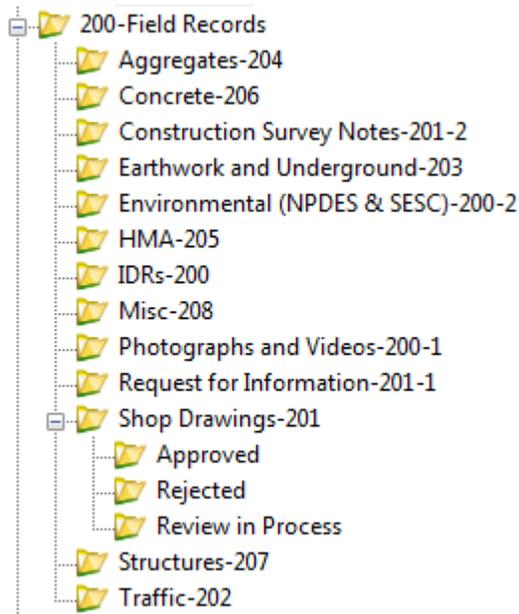
State name
 E-Construction-Work Order Pending
 E-Construction-Work Order Pending Contractor Signature
 E-Construction-Work Order Pending Constr Engineer Signature
 E-Construction-Work Order Approved
 E-Construction-MDOT Project Office

- The Office Technician will place the document in the Work Orders folder generating a state of “Work Order Pending”
- The Office Technician will change the current state from “Work Order Pending” to “Work Order Pending Contractor Signature”
 - This will generate an email to alert the Construction Engineer
- The Construction Engineer will sign the document and change the current state from “Pending Internal Signature” to “Pending External Signature”

- This will generate an email to alert the Contractor
- The Contractor will sign the document and change the current state from “Pending External Signature” to “MDOT Project Office”
 - This will generate an email to alert the Project Office
- The Office Technician will then sign the document changing the current state from “MDOT Project Office” to “Signed”

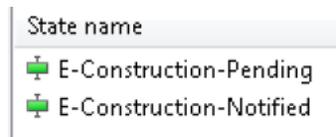
Field Records

The Field Records folder will hold documents pertaining to information gathered from the field including forms, shop drawings, photographs, ect.



Environmental (NPDES and SESC)-200-2

This folder will hold all documents pertaining to soil erosion and sediment control and the NPDES permit



- The Office Technician will move the document from the MDOT In-Box into the NPDES and SESC folder generating a state of “Pending”.
- The Office Technician will then change the current state from “Pending” to “Notified”

Shop Drawings – Review in Process

This folder will contain all documents pertaining to shop drawings including:

- Shop Drawings
- Shop Drawings has the following 3 folders
 - Approved
 - Rejected
 - Review in Process

This is going to be the Review in Process workflow. Need to modify the wording of the manual to list out that OT places the document into the Review in Process folder, and notifies the MDOT PM. The PM sends it around and once all information is obtained they will change the final state, and then move the document into the Approved or the Rejected Folder.

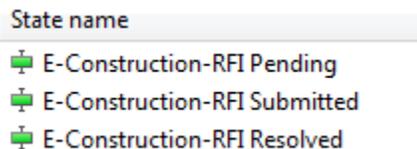


- The Office Technician will move the submitted documents from the Contractor In-Box to the Shop Drawings folder generating a state of “Shop Drawings Pending”
- The Office Technician will then change the current state from “Shop Drawing Pending” to “Shop Drawing Ready for Review”
 - This will generate an email to notify the corresponding MDOT Project Manager the document is available.
- The MDOT Project Manager will review the shop drawings and change the state from “Shop Drawing Ready for Review” to “Shop Drawing Review In Process”

The MDOT Project Manager will have to determine who all needs to review the shop drawing, and will fill out the corresponding form detailing what units inside of MDOT need to review the shop drawing. This is the form that Ruth is currently working at. The MDOT PM will be able to determine what units in MDOT need to review the shop drawing, based on the Bridge Field Services Advisory BFS 2013-02 March 28, 2013

- Then shop drawings will have two options:
 - If the documents are found to be inadequate, then the state will be changed
 - This will generate an email to all parties involved with the project
 - If the documents are found to be adequate, then the state will be changed twice first from “Shop Drawing Review in Process” to “Shop Drawing Rejected” then to “Shop Drawing Approved”
 - This will generate an email to all parties involved will the project.

Request for Information-200-1



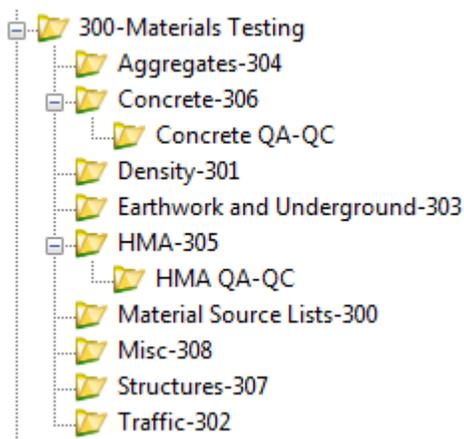
- The Office Technician will respond to the inquiry changing the current state from “RFI Inquiry Submitted” to “RFI Inquiry Responded”

Field Services

Material Testing

The Material Testing folder will be the location where all of the submitted test results and certifications will go including:

- Aggregate
- Concrete
- Density
- Drainage
- HMA
- Material Source Lists
- Misc Testing
- Restoration
- Structure (Steel, ect.)
- Traffic



Concrete

This folder will hold all of the documents pertaining to the concrete testing. There is no workflow on this folder.

This folder will have a sub folder where the quality assurance and the contractor's quality control tests are stored. This subfolder contains the following workflow:

State name
✚ E-Construction-Pending
✚ E-Construction-Concrete Pending Break Test
✚ E-Construction-Concrete Tested Pending QC doc or 3 day
✚ E-Construction-Concrete Ready for Contractor

- The Office Technician will move the documents from the MDOT In-Box into the Concrete QA-QC sub folder generating a state of "Pending".

- The Office Technician will then change the current state from “Pending” to “Concrete Pending Break Test” and notify the Lab Technician.
- The Lab Technician will test the concrete and add the test information to the documents. They will change the state from “Concrete Pending Break Test” to “Concrete Tested Pending QC doc or 3 day” and notify the Office Technician.
- The Office Technician will verify the QC tests and change the current state from “Concrete Tested Pending QC doc or 3 day” to “Concrete Ready for Contractor” and notify the Project Engineer.
- Naming of the concrete documentation was reviewed and thought the following naming will be easier to follow: It was thought that the QA and QC information could be placed in the same folder then, and to help separate out multiple contractors or items of work when it comes time to do the PWL.

MDOT Quality Assurance documentation form 1999 is given to the Material Technicians when cylinders are made and delivered

1999 MDOT Quality Assurance Breaks

QA Conc Date Subcontractor

QA Conc 2013-04-12 Eastlund

Contractor Quality Control Documentation - break results

QC Conc Breaks Date Subcontractor

QC Conc Breaks 2013-04-12 Eastlund

Contractor Quality Control Documentation – field testing results

QC Conc Field Date Subcontractor

QC Conc Field 2013-04-12 Eastlund

Density

Notification Only

State name
 E-Construction-Pending
 E-Construction-Notified

- The Office Technician will move the document from the MDOT In-Box into the Density folder generating a state of “Pending”.
- The Office Technician will then change the current state from “Pending” to “Notified”

Material Source List

State name

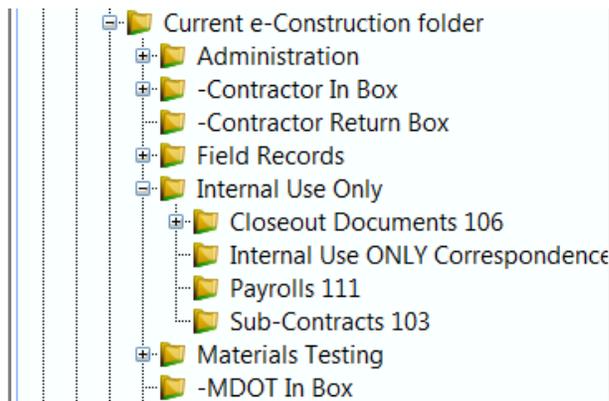
- E-Construction-Pending
- E-Construction-Pending Internal Review
- E-Construction-Submittals Review Complete

- The Office Technician will move the document from the MDOT In-Box into the Material Source List folder generating a state of “Pending”.
- The Office Technician will then change the current state from “Pending” to “Pending Internal Review”.
- The Office Technician will approve the document, then change the current state from “Pending Internal Review” to “Submittals Review Complete”

Internal Use Only

The Internal Use Only will hold the documents for MDOT that cannot be publically seen including:

- Closeout Documents
- Internal Use Correspondence
- Payroll
- Sub-Contracts



Closeout Documents

Payroll

- This folder will hold two types of documents
 - Certified Payroll
 - Form 1952, 1954, 1955
 - Wage Rate Interview
 - Form 1156

State name

- 🚧 E-Construction-Payroll Pending
- 🚧 E-Construction-Payroll Deficient
- 🚧 E-Construction-Payroll Approved
- 🚧 E-Construction-Payroll WRI Pending Signature
- 🚧 E-Construction-Payroll WRI with Signature

- Certified Payroll
 - The Prime Contractor will place the document in the Contractor In Box / Payrolls folder generating a state of “Submitted”
 - MDOT will review the document and will have two options
 - If the payroll is found to be deficient then the document will change the current state from “Pending” to “Deficient”.
 - Once a payroll’s state is “Deficient” it will stay in that state and the Prime Contractor will need to resubmit their payroll for that period.
 - If the payroll is approved then the state will change from its current state “Pending” to “Deficient” to “Approved”.
 - Due to the linear process of Project Wise Work flows the Office Technician will need to change the documents state twice to approve it.
- Wage Rate Interview (WRI)
 - The Office Technician will move the WRI from the MDOT In-Box to the Payroll folder generating a state of “Pending”.
 - If payrolls have been submitted to check the WRI against then the Office Technician will change the current state from “Pending” to “Deficient” to “Approved” to “WRI Pending Signature”.
 - Due to the linear process of Project Wise Work flows the Office Technician will need to change the documents state three times before the WRI can be approved.
 - MDOT will review and sign the WRI changing the current state from “WRI Pending Signature” to “WRI with Signature”.

Sub-Contracts

Need to set up a work flow for pending and submitted to Lansing. Can be an automatic person every time, in Lansing, CE needs to stamp the document.

Miscellaneous

Approved Rejected Workflow

Signature required

Securities

securities sections of who have Securities

Each TSC

Construction Brighton TSC

Lists everyone in TSC

Construction OT Brighton TSC

Only to delete documents

Contractor can read everything except for the Internal and the MDOT InBox