

NTTA Projects	Original Issue Date: 06/05/2008	CON-03
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Title: Construction Contract Change Order (CO) Process		

1.0 PURPOSE:

The purpose of this procedure is to define the process for submitting, reviewing, processing and approving of construction contract change order (CO) requests.

2.0 RESPONSIBILITIES:

- 2.1 NTTA Board of Directors – The NTTA Board shall be responsible for approving construction Change Orders and authorizing work to begin when the monetary values exceeds \$300,000.00 or is greater than 30% of the original contract value. Upon approval, the NTTA Board shall be responsible to forward approved Changes Order to NTTA Contract Management.
 - 2.2 Executive Director (ED) – The ED shall be responsible for making a recommendation to approve construction Change Orders and preparing presentation materials for the NTTA Board of Directors and shall be responsible for approving construction change orders and authorizing work to begin when the monetary value is between \$100,000.00 and \$299,999.99. Upon approval, the ED shall be responsible to forward approved Change Orders to NTTA Contract Management.
 - 2.3 Assistant Executive Director (AED) – The AED shall be responsible for approving construction Change Orders and authorizing work to begin when the monetary value is between \$25,000.00 and \$99,999.99. Upon approval, the AED shall be responsible to forward approved Change Orders to NTTA Contract Management.
 - 2.4 Department Director (DD) – The Department Director shall be responsible for approving construction Change Orders and authorizing work to begin when the monetary value does not exceed \$25,000.00. Upon approval, the DD shall be responsible to forward approved Change Orders to NTTA Contract Management.
 - 2.5 NTTA Contract Management – NTTA Contract Management shall be responsible for reviewing and ensuring business diversity, insurance and related legal requirements are within NTTA guidelines. The contracts manager shall also be responsible to file the original Change Request Form (CON-03-F1, or CON-03-F6, or CON-03-F7) & CA-08-F2 forms.
 - 2.6 Construction Cost Change Control Committee (C5) – C5 shall be responsible for reviewing and recommending approval of the Change Order and submitting the Change Order to Program Support. C5 shall evaluate the root cause statement and determine if additional analysis/study is needed to fully understand the true root cause.
 - 2.7 Project Delivery Construction Manager – The Project Delivery Construction Manager shall be responsible for tracking and assisting in reaching consensus with the prime contractor on the Change Order request. The Project Delivery Construction Manager shall be responsible to review and recommend approval of
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Change Orders. If denied, returns the Change Order to the Construction Manager or Resident Engineer or if a Utility Change Order return to ROW Development Manager.

- 2.8** NTTA Design Manager (DM)–The DM shall be responsible to ensure that NTTA standards and specifications are revised when the C5 Committee determines the root cause of the Change Order to be a standards or specifications related issue.
- 2.9** Corridor Manager/Project Manager–The Corridor Manager/Project Manager shall be responsible for reviewing and recommending approval of the construction Change Orders for their assigned Corridor or Project. If denied, returns the Change Order to the Construction Manager or Resident Engineer or if a Utility Change Order return to ROW Development Manager.
- 2.10** Construction Manager or Resident Engineer – The Construction Manager or Resident Engineer shall be responsible for:
- Evaluating the Change Order request to determine if it is warranted
 - Notifying C5 if the Change Order request is warranted
 - Review funding agreements to determine if FHWA or TxDOT approval is required and forwarding to the agency for approval
 - Determining if the value of the change request is greater than 30% of the original contract value
 - Requests scope, impact analysis and cost proposals from the prime contractor
 - Generating an independent cost estimate, in accordance with CA-08, and the formal Change Order in accordance with this procedure
 - Generating a letter of rejection when the request is denied
 - Authorizing the prime contractor to proceed with the work once the Change Order is approved
 - Generating a Reconciliation Change Order Form (CON-03-F7) to close out a project.
- 2.11** Prime Contractor – The Prime Contractor shall be responsible for:
- Generating and submitting the Change Request to the Construction Manager
 - Submitting a cost proposal and schedule impact to the Construction Manager
 - Proceeding with authorized work once the Change Order is fully executed and is notified of authority to proceed in writing by the Construction Manager
- 2.12** ROW Development Manager – The ROW Development Manager shall be responsible for all Utility Change Orders to modify an approved Agreement for the Adjustment of Utility (AAU):
- Evaluating all Utility Owner Payment and Extra Work requests to determine if a Change Order is warranted and if the work is a betterment or an NTTA expense
 - Notifying the C5 if the Change Order request is warranted and providing C5 estimated cost
 - Determining if the value if the change is greater than 30% of the original contract value
 - Request scope, impact analysis and cost proposals from the prime contractor
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- Generating an independent cost estimate, in accordance with CA-08, and the formal Change Order
- Generating a letter of rejection when the request is denied
- Authorizing the Utility’s contractor to proceed with the work once the Change Order is approved

2.13 Utility – The Utility shall:

- Notify the ROW Development Manager if a Change Order request is being requested
- Submit a cost proposal and schedule impact to the ROW Development Manager
- Proceed with the additional work once the Change Order is fully executed and is notified of authority to proceed in writing by the ROW Development Manager

2.14 Project Delivery Program Support Staff:

- Reviewing Change Orders ensuring all signatures required per CON-03-F1 or CON-03-F6 or CON-03-F7/CA-03-F3/CA-08-F2 are in place
- Distributing Change Orders to NTTA Contract Management, Project Delivery Document Control, and Project Delivery Program Controls
- Transmitting the original Change Order to the Construction Manager or Resident Engineer or ROW Development manager

3.0 SCOPE/APPLICABILITY:

This procedure shall apply to all NTTA corridors and projects.

4.0 REFERENCES:

- [FD-04](#) NTTA Standard Development procedure
- [FD-03](#) NTTA Specification Development procedure
- [FD-11](#) Errors and Omissions procedure
- [CA-08](#) Independent Cost Estimate procedure

5.0 DEFINITIONS & ACRONYMS

6.0 PROCEDURES:

- 6.1 Emergency Change Order Development** – For emergency Change Order requests refer to Section 6: Emergency Procurements, of the NTTA Policy Regarding Procurement of Goods and Services and the Disposition of Property.
- 6.2 TxDOT and FHWA Approval** – All corridors and projects receiving federal funds shall be subject to TxDOT oversight. Change Orders that exceed dollar amounts as defined within the individual TxDOT agreements for each corridor or project shall be forwarded to TxDOT for approval.

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6.3 Change Order Request Development –

- 6.3.1 When it is determined that a Construction Contract Change Order is necessary, the prime contractor shall submit a Change Order Request to the Construction Manager or Resident Engineer (for non-utility construction) or the Utility shall submit a Change Order Request to the ROW Development Manager (for utility construction). *CON-03-F2, CO Field Change Form*, shall be utilized when electronically formatted contract plan drawings are not yet available, or when avoidable delay related impacts to the project would otherwise develop.
- 6.3.2 The Construction Manager or Resident Engineer or ROW Development Manager shall review the change request to determine if it is warranted. If it is not warranted, the Construction Manager or Resident Engineer or ROW Development Manager shall develop and transmit a letter of rejection to the prime contractor or to the Utility. The prime contractor or the Utility shall be afforded an option to appeal upon receiving the rejection letter.
- 6.3.3 If the change request is warranted, the Construction Manager or Resident Engineer or ROW Development Manager shall notify C5 and request that the prime contractor provide a statement of scope, cost proposal based on required scope and an analysis of any potential impacts to the project's critical path or the Utility provide sufficient information so the ROW Development Manager can explain the change request to C5. No sales taxes are to be included in the determination of change order costs. The Construction Manager or Utility Coordinator shall review the cost proposal to ensure no sales taxes are included.
- 6.3.4 The Construction Manager reviews the Corridor/Project funding agreements, determines if TxDOT or FHWA approval is required, and routes the change request to the agency for approval.
- 6.3.5 The Construction Manager or ROW Development Manager shall determine if the change request is greater than 30% of the original contract value and routes the request to the Corridor Manager or Project Manager for preparation and presentation to the NTTA Project Delivery Contracts Manager to place on the agenda for the NTTA Board of Directors approval consideration.
- 6.3.6 When the dollar value of the change request is less than or equal to \$10,000.00, the Construction Manager shall complete form CON-03-F5, Invoice Price Justification and forward the completed form to the Corridor Manager or Project Manager for approval. Utility change requests less than or equal to \$10,000.00 shall not use the CON-03-F5. All Utility change requests will follow the procedures for change requests greater than \$10,000.00. Once approved by the Corridor Manager or Project Manager, the Construction Manager shall forward the form to the Department Director for review and approval. Once signed by all three parties, the Construction Manager shall forward the signed original form to NTTA Contracts Management and shall provide a copy of the signed form to the contractor to serve as authorization to proceed. If denied, the Construction Manager shall develop and transmit a letter of rejection to the prime contractor.

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- 6.3.7 When the dollar value of the change request is greater than \$10,000.00, the Construction Manager or ROW Development Manager shall:
- Generate an independent cost estimate for comparison before reviewing the contractors cost proposal per QMS Procedure CA-08 (Independent Cost Estimate Process)
 - Reach consensus with the prime contractor or Utility concerning cost and design details
 - Generate a formal Change Order utilizing CON-03-F1 or CON-03-F7 or CON-03-F6 (and sign indicating approval)
 - Complete forms CA-08-F2 & CA-03-F2
 - Initiates and maintains a log of the change order using CON-03-F4 (Change Order Log)
 - Submits the formal Change Order with all three forms and supporting documentation to C5 for review 24 to 48 hours before the regularly scheduled C5 meeting. Any item can be presented with no notice, but C5 reserves the right to have time to review the material presented. The Construction Manager may request a special C5 meeting for items needing immediate attention and timely approval before the next regularly scheduled C5 Meeting.
 - Submittal of documents to C5 for review by Construction Manager or Resident Engineer:
 - The Construction Manager or Resident Engineer has the option to send the document to the contractor for signature and bring two (2) original CON-03-F1 or CON-03-F7 with signatures from the contractor and the Construction Manager or Resident Engineer. If C5 requests changes the packet will require revision and be sent back to the contractor for signature on a corrected CON-03-F1 or CON-03-F7.
 - The Construction Manager or Resident Engineer has the other option to bring unsigned review copies to C5 for review and seek C5 concurrence to sign the document packet either as presented or with changes as noted after being signed by the contractor and signed by the Construction Manager or Resident Engineer.
 - Submittal of documents to C5 for review by ROW Development Manager:
 - The ROW Development Manager for Utility Change Orders has the option to send the document to the Utility for signature and bring two (2) original CON-03-F6 document packages with signatures from Utility and the ROW Development Manager. If C5 requests changes the packet will need to be revised and sent back to the Utility for signature on a corrected CON-03-F6.
 - The ROW Development Manager for Utility Change Orders has the other option to bring unsigned review copies to C5 for review and seek C5 concurrence to sign the document packet either as presented or with changes as noted after being signed by the Utility and the ROW Development Manager.
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6.4 Change Order Evaluation -

- 6.4.1 The Construction Cost Change Control Committee (C5) shall evaluate all proposed changes and:
- Evaluate and document the root cause on forms CA-08-F2, CON-03-F4 (The Change Order Log)
 - Determine if additional analysis or detail is required to determine true root cause and forward to the Construction Manager or ROW Development Manager
 - If the root cause is determined to be an issue with an NTTA standard or specification, the NTTA Design Manager shall ensure the applicable standards or specifications are updated according to procedure FD-04 or FD-03.
 - If the root cause is determined to be the result of an error or omission, the Corridor Manager or Project Manager shall update the drawing(s) according to procedure FD-11
 - If the error is greater than \$50,000.00 dollars, process the error or omission in accordance with FD-11.
 - If the Change Order is approved by C5, the C5 chairman shall sign form CON-03-F1, or CON-03-F6, or CON-03-F7, when they are presented for signature, and forward it to Program Support (or Maintenance if a CIP Project) for further processing
 - If the Change Order is denied, the Construction Manager or ROW Development Manager shall develop and transmit a letter of rejection to the prime contractor or Utility

6.5 Change Order Review and Approval -

- 6.5.1 The Project Delivery Construction Manager shall:
- Review and disposition the Change Order
 - Sign form CON-03-F1, or CON-03-F6, or CON-03-F7, if approved
 - If denied, return the Change Order to the Construction Manager or ROW Development Manager who shall develop and transmit a letter of rejection to the prime contractor or Utility
- 6.5.2 The Corridor Manager / Project Manager shall:
- Review and disposition the Change Order
 - Sign form CON-03-F1, or CON-03-F6, or CON-03-F7, if approved
 - If denied, return the Change Order to the Construction Manager or ROW Development Manager who shall develop and transmit a letter of rejection to the prime contractor or Utility
- 6.5.3 The Project Delivery Program Support staff shall:
- Ensure all required signatures have been obtained
 - Prepare and attach CA-03-F3, Executive Transmittal Letter
 - Forward Change Order & CA-03-F3 to the Department Director
- 6.5.4 The Department Director (DD) shall:
- Review and disposition the Change Order
 - If approved, sign forms CON-03-F1, or CON-03-F6, or CON-03-F7, & CA-03-F3 and processes according to signature authority (see Table 1)
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- If denied, shall return the Change Order to the Construction Manager or Utility Coordinator who shall develop and transmit a letter of rejection to the prime contractor

6.5.5 The Project Delivery Program Support staff shall:

- Ensure all required signatures have been obtained
- Forward forms CON-03-F1, or CON-03-F6, or CON-03-F7 & CA-03-F3 to NTTA Contract Management

6.5.6 NTTA Contract Management shall:

- Perform a review ensuring business diversity, insurance and related legal requirements are within NTTA guidelines

6.5.7 The Assistant Executive Director (AED) shall:

- Review and disposition the Change Order
- If approved, sign forms CON-03-F1, or CON-03-F6, or CON-03-F7 & CA-03-F3 and processes according to signature authority (see Table 1)
- If denied, shall return the Change Order to the Construction Manager or ROW Development Manager who shall develop and transmit a letter of rejection to the prime contractor or Utility

6.5.8 The Executive Director (ED) shall:

- Review and disposition the Change Order
- If approved, sign forms CON-03-F1, or CON-03-F6, or CON-03-F7 & CA-03-F3 and processes according to signature authority (see Table 1)
- Recommend for approval and prepare the Change Order for NTTA Board presentation and approval
- If the Board approves, signs form CON-03-F1, or CON-03-F6, or CON-03-F7 and forward to NTTA Contract Management
- If denied, shall return the Change Order to the Construction Manager or ROW Development Manager who shall develop and transmit a letter of rejection to the prime contractor or Utility

6.6 Change Order Execution –

6.6.1 NTTA Contract Management shall file all original paperwork and return one original to Project Delivery Program Support.

6.6.2 Project Delivery Program Support shall:

- Transmit the complete original change order with all internal backup documentation to the Construction Manager or Resident Engineer or ROW Development Manager
- Send one complete copy of this documentation to Project Delivery Program Controls
- Send one complete copy to Project Delivery Document Control for upload to project record archives in EPDS.

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- 6.6.3 The Construction Manager or Resident Engineer shall:
- Forward a fully executed copy of the Change Order CON-03-F1 or CON-03-F7 to the Prime Contractor, but shall NOT forward internal NTTA form CA-08-F2 to the Prime Contractor
 - Provide a copy of the fully executed change order package to the Corridor Manager or Project Manager
 - Provide a fully executed copy of the Invoice Price Justification (CON-03-F5) to NTTA Contract Management through Project Delivery Program Support Staff
- 6.6.4 The ROW Development Manager shall:
- Forward a fully executed copy of the Change Order CON-03-F6 to the Utility, but shall NOT forward internal NTTA form CA-08-F2 to the Utility
 - Provide a copy of the fully executed change order package to the Corridor Manager
- 6.6.5 The Prime Contractor shall proceed with the Change Order requirements.

7.0 REGULATORY REQUIREMENTS: N/A

8.0 RELATED BOARD POLICY:

Policy Regarding the Procurement of Goods and Services and the Disposition of Property

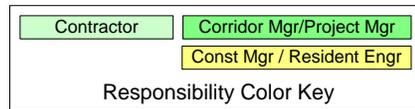
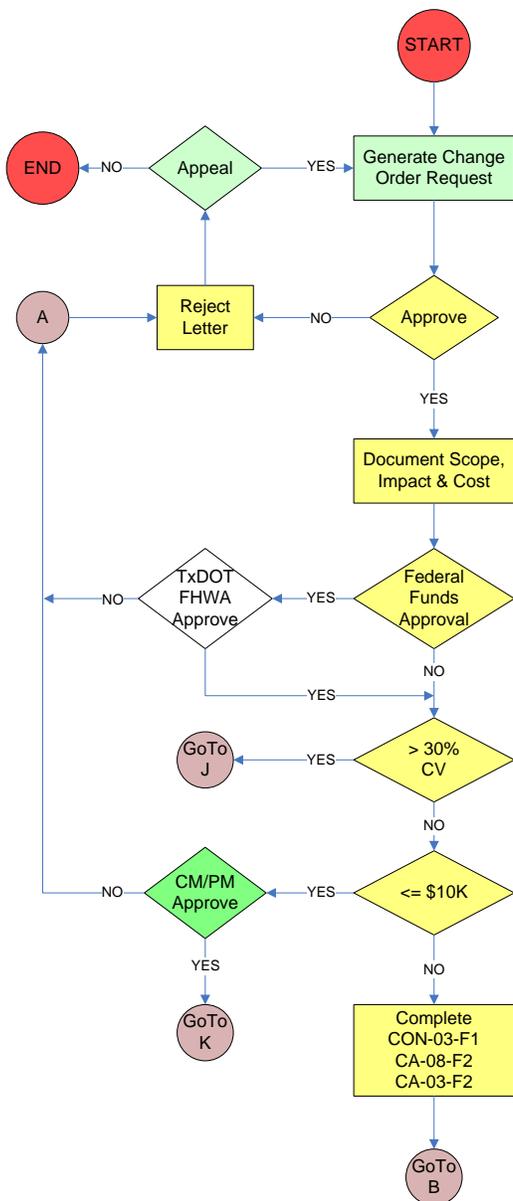
9.0 COMPONENT DOCUMENTS:

- [CON-03-F1](#) Construction Change Order Request Form
 - [CON-03-F2](#) Change Order Field Change Form
 - [CA-08-F2](#) Construction Change Order Independent Cost Estimate Form
 - [CON-03-F4](#) Change Order Log
 - [CON-03-F5](#) Invoice Price Justification Form
 - [CON-03-F6](#) Utility Adjustment Agreement Change Order Form
 - [CON-03-F7](#) Reconciliation Change Order Form
 - [CA-03-F2](#) WA/SA/CO Log (Attachment E)
 - [Transmittal Letter-01-04-2011-Protected](#)
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10.0 FLOWCHART

Construction Change Order Process



Contractor submits change request in writing:
 - Form CON-03-F2 shall be used when electronically revised drawings are not yet available

Construction Manager / Resident Engineer reviews change request and determines if it is warranted
 - If not warranted, letter of rejection is written
 - If approved, go to next step

Construction Manager / Resident Engineer:
 - Requests scope, impact analysis and cost documentation from Contractor
 - Notifies C5 committee via email

Construction Manager / Resident Engineer:
 - Reviews funding agreements to determine if TxDOT and/or FHWA approval is required

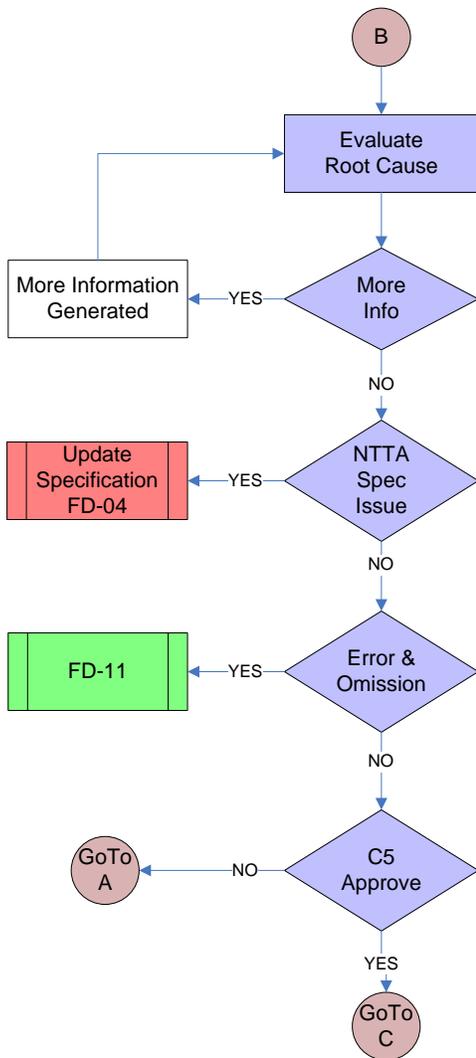
Construction Manager / Resident Engineer approves:
 - If value of the change request is greater than 30% of the original contract value, NTTA Board approval is required

If the **Construction Manager / Resident Engineer** approves:
 - Less than or equal to \$10,000 dollars:
 * Forwards to **Corridor Manager/Project Manager** for approval:
 * If approved, Construction Manager shall forward CON-03-F5 to Department Director for Approval
 * If disapproved, forwards change request to Construction Manager
 * Maintains all documentation relative to change request
 - Greater than \$10,000 dollars, go to next step

Construction Manager / Resident Engineer:
 - Generates independent cost estimate
 - Reaches consensus with Contractor
 - Initiates and signs formal Change Order using CON-03-F1/F6
 - Completes CA-08-F2 & CA-03-F2
 - Initiates and maintains log of all Change Orders using CON-03-F4

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Construction Change Order Process



C5 Committee:

- Evaluate root cause and documents on CON-03-F1/F6 and CON-03-F4
- If returned with additional root cause information from the Construction Manager, information is reviewed again for completeness

C5 Committee:

- Determines if root cause requires more detail and/or information and forwards to Construction Manager

C5 Committee:

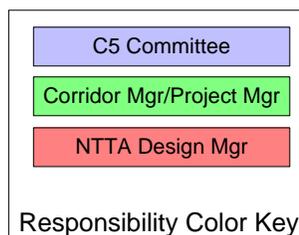
- Determines if root cause is due to NTTA standard plans or standard specifications
- Communicates to **NTTA Design Manager** to update NTTA documents

C5 Committee:

- Determines if root cause is due to an error or omission in design documentation
- Communicates to Corridor Manager to update design documentation
- Communicates to NTTA Project Delivery AED if an "error is greater than \$50K dollars,

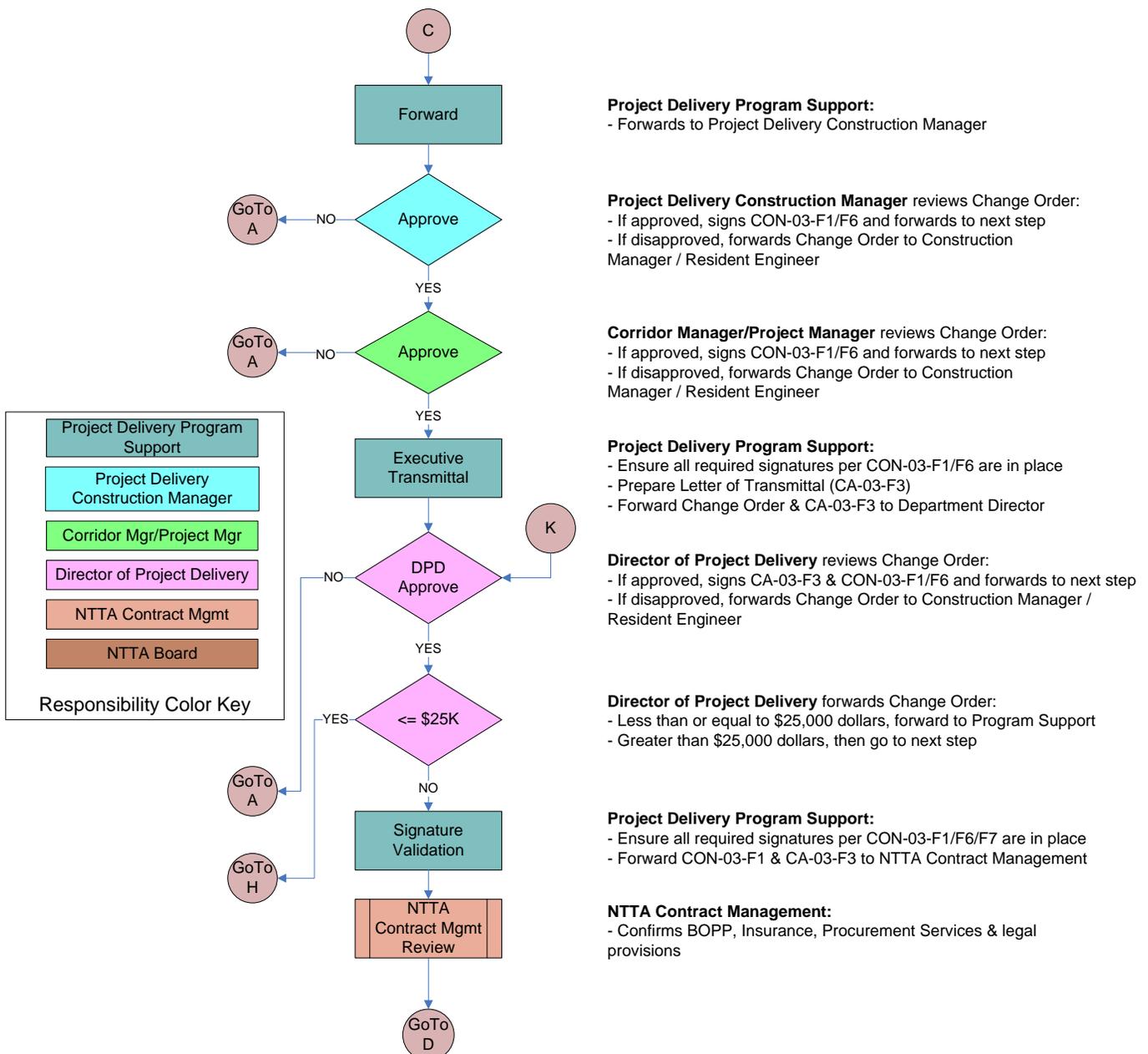
C5 Committee:

- If approved, C5 chairman signs CON-03-F1/F6
- Forwards Change Order to Program Support or Maintenance
- If disapproved, forwards Change Order to Construction Manager



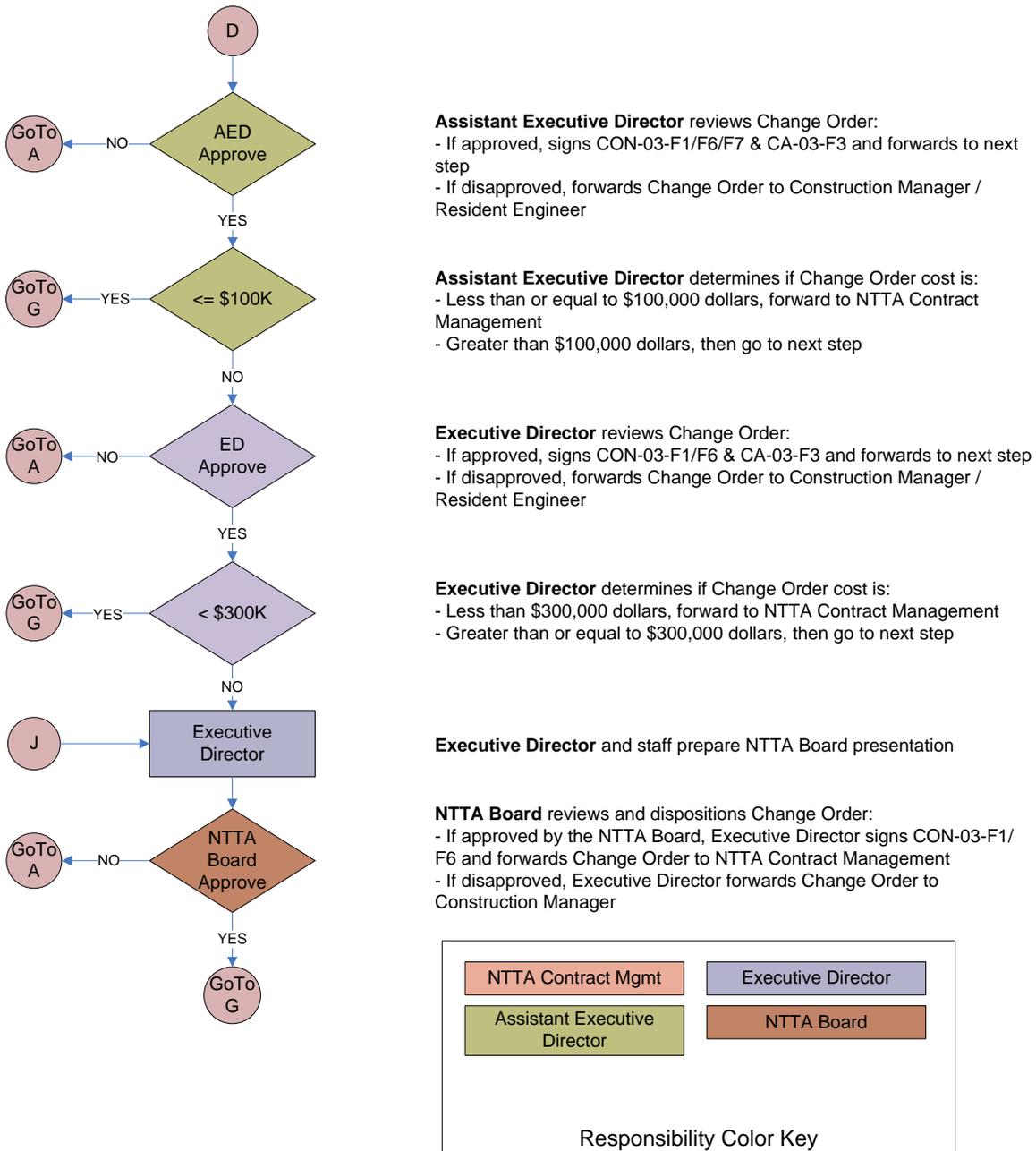
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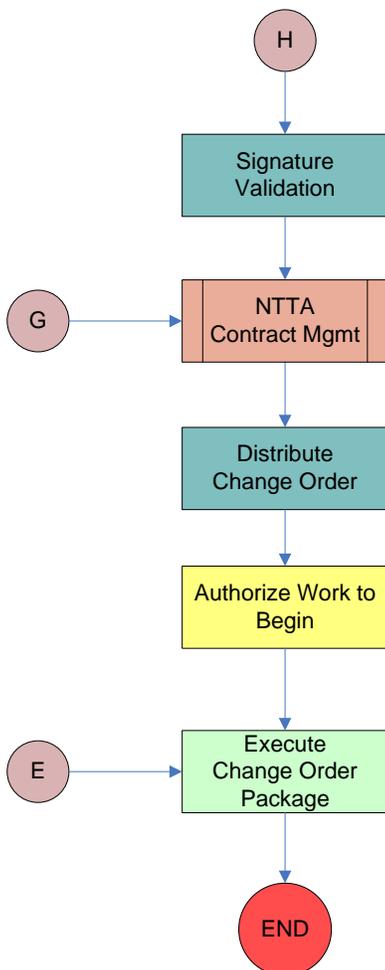
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Project Delivery Program Support:

- Ensure all signatures required per CON-03-F1/F6/F7 & CA-03-F3 are in place
- Forwards to NTTA Contract Management

NTTA Contracts Management:

- Files original CON-03-F1/F6 and returns other copy to Program Support
- Files CA-03-F3

Project Delivery Program Support:

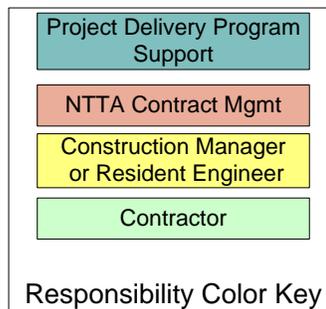
- Transmits original Change Order to Construction Manager / Resident Engineer
- Sends one complete copy to Project Delivery Program Controls
- Sends one complete copy to Project Delivery Document Control

Construction Manager / Resident Engineer:

- Forwards a fully executed copy to the Contractor
- Sends a copy to the Corridor Manager / Project Manager
- Sends a copy to NTTA Contract Management

Contractor:

- Proceeds with the Change Order work request



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11.0 REVISION HISTORY

Revision	Revised by	Date Issued	DRN#	Reason for Revision
0	John Woelfel	06/05/2008		Original Issue
1	John Woelfel	09/18/2008		Revised Responsibilities, added role of Program Support staff, added requirement to transmit complete CO package throughout process, and changed order of approvals.
2	Peter Claypool	05/08/2009	10001	<ul style="list-style-type: none"> • Major rewrite for clarity • Added CON-03-F5 Invoice Justification Form • Added CON-03-F6 Utility Adj Agreement Form • Added requirement for no sales tax • Added flowchart
3	David Kastendick/ Kim Hernandez	11/20/2009	10052	Remove CON-03-F3. Replace with CA-08-F2. Obsolete CON-03-F3. Remove all references to CON-03-F3 from CON-03, and replace with CA-08-F2. Remove guiding principles. Add para 2.13 "Utility Coordinator responsibilities". Add CA-08-F2 to para 2.14. Add to References: FD-03, NTTA Specification Development procedure and CA-08, Independent Cost Estimate procedure. Section 6.0 Procedures: Add responsibilities for Utility Coordinator. 6.3.6 Add "Utility change requests less than or equal to \$10,000.00 shall not use the CON-03-F5. All Utility change requests will follow the procedures for change requests greater than \$10,000.00. Add CA-08-F2 to 9.0 Component Documents
4	David Kastendick	05/06/2011	10301	Revised titles to match current NTTA employees. Split CON-03-F1 into CON-03-F7 (Original Release) version to satisfy recent NTTA Finance Department request, but process is really unchanged, just same data presented concisely. Clarified Change Order procedure to match current actual process.