

# **Change Order Manual**

**Version 1.0 | July 2024** 

**Construction Division** 



#### **Foreword**

This manual establishes uniform procedures and best practices for drafting and reviewing Change Orders within the Tennessee Department of Transportation. It is published for information, guidance, and training of the Department's employees and those in the Road Building Industry to increase the overall consistency of the Change Order process.

This manual does not establish any legal or administrative interpretations of the Department's contracts. If the terms of a contract or specifications and the manual are in conflict, the manual is subordinate to the contract and specifications.

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# **Executive Summary**

A Change Order is defined in the Standard Specifications as "A <u>written agreement</u> entered into by and between the Department and the Contractor, with the written assent of the Surety, covering modifications or alterations beyond the scope of the original Contract, and establishing any necessary new Contract items, any other basis of payment, and any time adjustments for the work affected by the changes. This <u>agreement becomes a part of the Contract</u> when properly executed and approved."

This manual provides an overview of the entire change order process from conception/request through approval. Procedures and recommendations contained in this manual are the result of lessons learned and cover some of the frequently asked questions from field staff and industry partners from past construction projects. The manual may be used as supplementary information to the References listed below, but if there are conflicts, the References govern.

It is understood that each Region may have a slightly different administrative procedure for reviewing and processing change orders; however, Circular Letter 104-03.01 contains a flowchart detailing the minimum steps from start to finish and is a great resource. TDOT Policy 355-01 and Circular Letter 104.03-02 contain details regarding formal approval of change orders.

#### References

- TDOT Standard Specifications, 2015 and 2021 Editions, with Supplemental Specs
- TDOT Policy 355-01
- TDOT Circular Letters 104.03-01, 104.03-02, 104.11-01, 105.07-02, 105.16-01, 108.07-01, 109.03-01, 109.04
- 23 CFR 635 and FHWA CACC Manual

# Why and When a Change Order is Required

#### TDOT Standard Specification 104.02 - Changes in Plans or in Character of Construction

"The Department reserves the right to make changes to the Work at any time including alterations in the Plans, increases or decreases in quantities, Extra Work, or eliminated items. Such changes shall not invalidate the Contract nor release the Surety. The Contractor agrees to perform the Work as altered, the same as if it had been a part of the original Contract.

Under no circumstances shall changes in the Plans or in the character of the Work involve work beyond the termini of the proposed construction except as may be necessary to satisfactorily complete the Project."

Commonly, Change Orders (CO's) are processed to add work or items not included in the original scope of the project and needed to fully perform the construction. This may result from a construction plan revision or a field construction change. 104.02 lists five (5) situations in which a change order may be required:

- A. Differing Site Conditions
- B. Suspensions of Work Ordered by the Engineer
- C. Significant Changes in the Character of Work
- D. Extra Work
- E. Eliminated Items

Other situations that may require a Change Order:

- A. Approved Value Engineering Change Proposals (VECP). The Contractor may initiate a VECP when they propose to make changes to plans or construction materials that will result in a savings to the project. Be wary of VECP proposals that eliminate work and request payment for eliminated work. This is most likely a plans error and not a VECP. Prior to execution of a VECP change order, the VECP shall have been approved in accordance with 104.11. The VECP signature page should be included in support documentation. Standard Specifications section 104.11 and Circular Letter 104.11-01 outlines the full VECP procedure.
- B. Administrative changes to the Contract such as adding or revising contract provisions (i.e., Supplemental Specifications, Special Provisions, permits, etc.). These are often "no cost" or "zero dollar" Change Orders.

### Change Order Categories and Approvals

#### **TDOT Policy 355-01**

Change Orders are categorized according to significance. TDOT Policy 355-01 gives specifics for each Category:

- Category 1
  - Any change to the working time/completion date of the contract in excess of 180 days
  - Any change/addition that alters the total original contract amount by more than \$200,000
  - TDOT Commissioner is final approval
- Category 2
  - Any change to the working time/completion date of the contract of 90-180 days
  - Any change/addition that alters the total original contract amount by \$100,000-\$200,000 or by more than 10% of the original contract
  - Regional Director is final approval (Asst. Chief of Program Delivery for Alternative Delivery contracts)
- Category 3
  - Any change to the working time/completion date of 90 days or less
  - Any change/addition that alters the original contract amount by \$25,000 \$100,000
  - District Manager is final approval (Regional Alt Delivery Manager for Alternative Delivery contracts)
- Category 4
  - Any change/addition that alters the total contract amount by \$25,000 or less
  - Operations Team Lead is final approval (Regional Alt Delivery Manager for Alternative Delivery contracts)

Change Orders that may require additional actions or considerations:

- If the change order involves revising a unit bid price, special provision, contract provision or public interest finding, District/Regional Management should consult with HQ Construction to determine which Category is most applicable (many of these will fall into Category 2).
- VECP's will be processed in the appropriate Change Order category based on the net effect of the VECP. For instance, for a VECP that has a savings of \$150,000 to the contract and a payout to the contractor for \$75,000 (1/2 of the overall savings), the change order will be processed as a Category 3.
- Public Interest Findings (PIF): A public interest finding is required when a change will use publicly owned materials or equipment or when it is more cost-effective for a Public Agency to perform the work, or it is more cost effective to use an emergency contracting method. Circular Letter 104.03-03 gives more guidance.

- If the project does not require a schedule per 108.03, and it is determined that an additional time allowance due to an increase in quantities for a major item of work is due, a formally executed Change Order with signatures will not be required. However, the documentation process in SiteManager/AWP requires a zero dollar, draft Change Order for the Finance Division. See Circular Letter 108.07-01 for administrative procedures.
- When the Department and the Contractor cannot agree on pricing for a change order, the work may be done as a Force Account in accordance with 109.04. Prior approval is required before work begins and should follow the respective level of change (Category). If it becomes necessary to grant additional time due to a force account, a change order shall be processed for the time. Section "Check Contractor Pricing" and the Appendix has more information regarding Force Account approvals.

# **Initiate the Change Order**

Change orders may be initiated by either the Department or the Prime Contractor.

When the contractor believes that one of the conditions covered by 104.02 has occurred, the Contractor may initiate the change order process. Please note that only the Prime Contractor can initiate a change order. Do not negotiate change orders with a subcontractor – TDOT's contract is with the Prime and the Prime must be involved in all discussion and negotiation. Subcontractors may be involved in the process, but all official documentation must come through and from the Prime to TDOT and vice versa.

According to 104.03, "It is the responsibility of the Contractor to provide reasonable written notice when conditions are believed to require a change to the Contract. The Department will only consider requests for changes to the Contract when the Contractor meets the notification procedures specified in this Subsection." Those procedures described in 104.03 contain specific details regarding documentation and timeframes for correspondence between the contract parties. A timely response is critical and should not be overlooked. At a minimum, staff should acknowledge receipt of communication from the Contractor and provide a follow-up date for a full response.

When a change is found to be necessary, a Change Order will be executed to appropriately add Contract time and/or costs in accordance with 108.07, 109.04, 109.05A and 109.06. If the Contractor disagrees with the Engineer's decision or Contract adjustments, the Contractor may pursue a Request for Equitable Adjustment (REA) in accordance with 105.16. Circular Letter 105.16-01 details the REA process.

Department initiated change orders can occur because of administrative issues such as adding or revising special provisions in the Contract Proposal; adding items shown on construction plans but not included in the bid file; updating specifications, circular letters, and/or Qualified Products that become effective immediately; issuing Construction Plan Revisions.

In these cases, the Department will notify the Prime Contractor in writing of the proposed change and then initiate the change order. Most often this notification will be made by regional staff; however, HQ Construction in coordination with the Region, may choose to notify the contractor and initiate a change for items related to the bid file and Contract Proposal

Occasionally, the need for a change order may be discussed verbally in the field, on the phone or perhaps in a preconstruction or project progress meeting. Verbal conversations are acceptable as they often provide advance notice or clarity between the parties. However, verbal communication shall always be followed by written communication in the form of a formal email or letter. In addition, while the parties may verbally agree in principle to the need for a change order, it is always best practice to hold off approval of pricing and final details until written communication has been received and reviewed. All change orders shall have written backup documentation.

SiteManager/AASHTOWare Project (AWP) has a disputes section to track correspondence to ensure the Department has adequate documentation regarding timeliness of correspondence and responses.

# **Gather Backup Documentation and Draft the Change Order**

This Guide will cover the overall process involved in drafting and justifying change orders. The specific steps involved in creating a SiteManager/AWP record and for sending a change order for signatures in Adobe Sign are available in Quick Reference Guides on the HQ Construction webpage and in Circular Letter 104.03-02.

The basic steps for creating a change order include:

- ✓ Receive notice of a potential change or a Change Order Request from the Prime Contractor–create record in SiteManager/AWP Disputes/Claims window.
- ✓ Verify that the specifications/plans/standard drawings/Contract do not already address payment for the item/s in the request (i.e., the requested costs are included in other items, unit prices, or are incidental to other items. Pay particular attention to requests to add work that may be covered under lump sum items such as 201-01 Clearing and Grubbing, 202-01 Removal of Structures and Obstructions, and 712-01 Traffic Control.).
- ✓ Receive Conceptual Approval from appropriate Management level The Resident Engineer will review all Change Orders and coordinate approvals from the District, Region, HQ and FHWA staff.
  - CAT 1 and CAT 2 CO's will need to be reviewed by the District, Region, and HQ (and FHWA if applicable) and executed prior to work. If work must commence prior to execution, then documented "Verbal approval" is required by the Commissioner and Regional Director (and FHWA when applicable).
  - CAT 3 CO's will need to be reviewed by the District and Region.
  - CAT 4 CO's will need to be reviewed by the District.
  - Note: FHWA must be notified on contracts with Risk-Based Involvement. Concurrence must be granted prior to execution of Category 1 and 2 change orders. Notification must be given for Category 3 and 4 change orders. FHWA will be final signature on all categories for Risk-Based involvement contracts.
- ✓ If utility items are involved, follow the Utility Memo dated August 9, 2021 (see Appendix) and Circular Letter 105.07-02, CONSTRUCTION CONTRACTS AND CHANGE ORDERS INVOLVING UTILITIES.
- ✓ Gather Supporting Documentation this may include documents such as contractor letters, contractor pricing, schedules (bar charts, CPM's), TDOT AUP printouts, *The Rental Rate Blue Book for Construction Equipment* printouts, emails between contractors and TDOT, FHWA 1365 approval form, Special Provisions, Plans Revisions, DWR's, etc. Supporting documentation must be attached to all requests for review and to the final CO in SiteManager/AWP and in Adobe Sign. See Appendix for examples of the types of supporting documentation that may be attached.
- ✓ Check and verify contractor pricing and time extension support documentation.

- ✓ Determine the Change Order Reason Code. See Appendix. Notice the correlation between the Specifications and the Reason Codes. It is important to select the most appropriate Reason Code as Change Orders will be provided to Project Management Design Teams to avoid future errors, improvements to processes, and avoid future Change Orders.
- ✓ Write the Change Order Body. It is not necessary to provide the complete history of the change order negotiations in the body of the CO. The narrative in the body of the CO should be the contractual changes that are being agreed upon. The history and justification will be attached to support the CO. Information included in the body of the CO should include the following:
  - Contract information
  - Date the issue was found.
  - Why the Change Order is needed.
  - If a time extension is needed, the number of days with a Time Impact Analysis (TIA) or other documents showing impacts to the critical path/controlling items of work
  - List of the items requested.
  - Estimated quantities with proposed unit prices.
  - Key dates for plan revisions (i.e., date requested, and date received) and the critical sheets affecting the CO in the supporting documentation.
- ✓ Attach supporting documents. The support documentation should be in logical and perhaps chronological order and easy to follow. Use a narrative timeline if the CO is complex, especially if a time extension is included. Numbers and calculations in the support documentation need to match what is in the final CO.
- ✓ Submit Draft for Review as noted above.
- ✓ Make Final Edits based on Review comments.
- ✓ Create Change Order in Site Manager/AWP

Initiate Approval Process in Adobe Sign. Follow approval process in TDOT Policy 355-01. The Resident Engineer or their designee will initiate and monitor the approval process.

# **Check Contractor Pricing**

Avoid lump sums if possible – if not possible, make sure the support documents explain what is included in the LS and verify the costs/labor/production rates/ hours/ etc. are accurate as noted below.

There are various pricing methods listed in 109.04:

#### A. Contract Bid Item Prices - using current bid item prices to justify new item price.

Before agreeing to the original contract price, verify that the character and type of work that was bid is like the work being added. For example, small quantity bid items may be bid very high due to low productivity or anticipating an overrun, and the added work price may need to be lowered to be justified. Similarly, the unit price may be for high production work, but the added work may be slower and more costly, justifying a higher unit price. In either case, consider a detailed cost analysis as noted below.

**Example:** The contractor is asking that item 203-01.29 Rock Excavation be added to the contract items for a stream relocation that was added to the contract per a plan revision. The contract has item 204-04.01 Rock Excavation (Bridges) @ \$50.00 per CY. Due to the similar nature of these items, you could use this as a price justification for 203-01.29 Rock Excavation up to \$50.00 per CY.

**Example:** The contract has an item for Graded Solid Rock (GSR), with a bid quantity of 50 tons and a unit price of \$100/ton. The material is to be placed at the bottom of a slope requiring a track hoe to handle the material twice at low production. It is determined that undercutting is needed due to poor subgrade conditions and 1,000 tons of GSR is needed. Since the character and type of work is much different than as bid (undercutting and placement of GSR is higher production, less complex work), a new unit price for the GSR to be used for the subgrade should be negotiated to reflect this type of work.

#### B. Negotiated Prices, when 109.04A does not apply, there are 4 options:

1. <u>Original Contract bid prices adjusted for increased or decreased material, equipment, or</u> labor costs.

**Example:** The contract was let with bid items for NCHRP 350 Energy Absorbing guardrail end terminals. You are asking the contractor to submit you a new price to switch to MASH compliant terminals. The materials for the NCHRP 350 terminals have not yet been purchased. The MASH end terminals have just hit the market, so you have no bid history. How do you justify the contractor's new price?

**Solution:** The only difference in the unit price for these items would be in the material cost. Therefore, have the contractor submit to you the price quotes from their material supplier for the NCHRP 350 materials and the MASH terminals. Take the difference and add that to the original bid price for the NCHRP 350 terminal, to get your new price justification.

2. Price is within 10% of the TDOT Regional 2-year Average Unit Price.
The TDOT AUP Program may be found at: AUP - Bid Item History - Power BI
(powerbigov.us) The program allows you to input item numbers, location, minimum and maximum quantities, letting dates, contract costs and work type. One should never misrepresent the variables to manipulate the program to give the desired unit price output. When using the program, use the data for all bidders (not just the low bidder) and all quantities. Adjustments for quantities should be used very sparingly and there must be sufficient data to derive an accurate unit price. It is important that the user be

calculations as supporting documentation.

Make sure that there are enough projects/unit prices to get a reflective average unit price for the work. If there are less than 10 bids, carefully review the data and look for wide ranges or discrepancies in the numbers. If there are wide ranges, it may not be a reflective average unit price for the type of work being performed on the contract and a

consistent on the way these options are used. The program will then provide a bid item

history showing the weighted average price. Include the cover page printout and

3. For work in unusual circumstances or with unusual site conditions, use the average bid price for the three lowest bidders in the tabulation of that work. If fewer than three bids are received, this option will not be used. Please consult with HQ Construction prior to justifying prices using this option.

detailed cost analysis may be more applicable.

4. Perform a cost analysis of the Contractor's detailed estimate of labor, equipment, materials, and markups in accordance with 109.04C to determine reasonableness of costs.

In this case, the Contractor will negotiate a Change Order by submitting detailed documentation demonstrating their labor, equipment, and material costs by providing the information outlined in the force account section in 109.04.

- The contractor submits their price breakdowns of labor, equipment, and materials.
- Verify that the production rates and/or time to complete the work are reflective of the work to be performed.
- Confirm the labor rates are consistent with certified payrolls.
- Confirm the Labor Burden rate submitted, do not automatically accept the max 45% without justification or a breakdown. Labor burden shall only include what is allowable per the specifications and documentation should be requested if costs appear to contain items of overhead or are unreasonably high.
  - A basic definition of labor burden is the cost to employ or pay a worker.
     Typical costs include payroll taxes such as FICA (Social Security,
     Medicare), unemployment insurance, workers' comp insurance and
     liability insurance. Costs that may be included in labor burden include
     health insurance, retirement benefits, vacation pay. Costs for cell

phones, lodging, per diem, should be included in overhead and not labor burden.

- Equipment rates must be reasonable. If not, they should be obtained from *The Rental Rate Blue Book for Construction Equipment* using the exact make, model, and year of the equipment to be used. Blue book rates include fuel and operating expenses. District management has access to the online Equipment Watch (Blue Book) for verifying provided information. If the contractor is renting equipment, then use invoices.
  - Equipment should only have one markup not to exceed 15% (i.e., don't add 15% markup then add another 15% Profit & Overhead markup at the end).
- Ensure only equipment needed to perform the work is being included and idle time is considered.
- Ensure pickup trucks are being paid per 109.04C.4 for standby time when not "performing work" and no more than 2 hours at operating cost.
- The contractor must provide a price quote or other documentation, such as vendor invoices, to justify material costs. If material costs are high, request the contractor provide multiple quotes from various suppliers.
- Bond is allowable for negotiated Change Orders and for Force Accounts and will generally add about 1% on the total. If the contractor requests a higher percentage bond (1.5% or higher), request information and their calculations for support.

If you still have doubts regarding the reasonableness of the costs, the Region can ask the TDOT Estimator to provide a letter with a cost breakdown to compare to the Contractor's quote. Staff can ask a city engineer or utility manager/representative to provide cost breakdowns for utility items.

Use other sources such as online estimating programs, online bid tabs from surrounding State DOT's or government agencies, ask Regional Management for other ideas.

Subcontractor prices should also be closely reviewed for reasonableness and be justified. A cost analysis should be requested if deemed unreasonable.

When negotiating prices, remember that the contractor is limited to 15% Profit and Overhead on the subtotal of labor, equipment, and materials. When the Prime submits subcontractor pricing, the Prime is limited to a 5% administrative fee on the subcontractor's price. Check markups to make sure there's no overlap (i.e., a 15% markup is made on materials, then a 15% on the total cost).

Note that If work is performed as a Force Account, per 109.04C, then the force account markups are slightly different than a negotiated Change Order. Force Account allows 20% markup on straight-time labor, no markup on equipment (unless rented/leased and paid by invoice) and 15% on materials.

If, during the review, errors or discrepancies are found and/or negotiations result in updated information, staff can strike through and change prices/items, eliminate items, edit number of days, etc., but must initial and date the changes <u>and</u> have written documentation from the contractor (such as an email) that indicates agreement with the changes. Alternatively, request updated documentation (letter) with the revisions from the Prime Contractor.

After confirming the reasonableness of the costs, <u>TDOT shall document acceptance of the costs</u> with either an email to the Prime Contractor or a note with the cost breakdown that the costs have been reviewed and determined to be reasonable and acceptable.

**C.** Force Account – when the Department and the Contractor cannot agree on pricing using 109.04 A or B, work can be done by Force Account. Per CFR 23 635.120, "Force account procedures shall only be used when strictly necessary, such as when agreement cannot be reached with the contractor on the price of a new work item, or when the extent of work is unknown or is of such character that a price cannot be determined to a reasonable degree of accuracy. The reason or reasons for using force account procedures shall be documented." Obtain approval from District or Regional Management before agreeing to work under Force Account.

- Before beginning work under force account, the Contractor must submit a plan of operation which includes a work schedule, size of crew, an equipment list and anticipated materials list. Carefully review for workers and equipment.
- For each day of work, the Force Account Daily Record (form available in Job Box) must be filled out and agreed upon by TDOT and a Contractor's representative. This record includes space to record the work performed that day, a listing of personnel, equipment and materials used that day.
- At the end of the Force Account work, costs will be combined in a recap, and allowable markups added to obtain the total costs.
- The contractor will be required to submit certified payrolls, invoices (purchase and rental of equipment and materials), *The Rental Rate Blue Book for Construction Equipment* information for equipment used, etc. as backup documentation.
- The intent of a force account is to allow the Department to compensate the contractor for actual costs incurred (plus defined markups) to perform the needed work.

Administratively, there are two ways to address payment of a Force Account:

1. If the Force Account work is expected to be commensurate with values of a Category 1 or Category 2 CO, then prior approval shall be obtained from the Regional Director and/or the Commissioner before work begins.

Staff shall write a letter or memo explaining the need and the estimated cost (and time) of the force account, obtain internal signatures through Adobe Sign from the appropriate TDOT personnel (same signatures as applicable CO category), request TDOT Finance create a Force Account item and override CO approvals in SiteManager. When approved, payment each month will be made under the Force Account item.

When documenting installed work in Site Manager, use the created force account item. Ensure that all the backup documentation necessary to prove the force account costs is saved in CMS.

Since prior approval has been granted a formal CO after the fact will not be required.

2. If the Force Account work is expected to be commensurate with values of a Category 3 or Category 4 CO, it is preferable to follow the same steps as listed above. However, if the work must commence prior to formal approval, and the work is expected to only take a few hours or days (and not span multiple estimate periods) then it is acceptable to obtain conceptual approval from Regional management by either memo or email and then process a standard change order after the work is complete. The force account documents will be supporting documentation for the change order.

# **Verify Information for Contract Time Extensions**

Every project has controlling items of work or a critical path that controls project completion. The contractor is required to submit a plan of operation, a bar chart or a Critical Path Method (CPM) schedule depending on the project duration or contract requirements that details the controlling items or critical path of work.

108.07 – "The Engineer will extend the Contract time or completion date only if an excusable delay, in accordance with 108.07B and 108.07C, affects the critical path of the Work shown on the accepted progress schedule."

All Change Orders shall address time, by stating the number of days being added, or stating that no time is being added, because of the change order. In rare cases, the Change Order may state that time will be addressed in a subsequent Change Order, but these instances should be discussed with HQ Construction prior to including the language.

When adding time to a project, it must be a clearly shown that the controlling items of work or the critical path of the project was delayed at no fault of the contractor; or, if the project does not require a schedule, that changes have affected the completion of the project. See 108.03 for more details regarding project schedules. Some notes when reviewing requests for time extensions:

- Because "Extra work" or "overruns" took yy days to complete does not justify a time
  extension for yy days unless it was critical work. Similarly for utilities, if utilities took an
  additional xx days, not all those days may be eligible for an extension.
- Historically, when time extensions move the completion date into the winter "Seasonal limitations", the completion date will often be further extended into the following spring/summer (i.e., a 30 or 40 day extension becomes a 150 or 180 day extension). Rather than extending the completion date through the winter, staff should work with the contractor to find opportunities to mitigate delays and recover lost time. Milestones can also be added to the CO's, (i.e., all work shall be completed by xxx-date-xxx except for final pavement markings). NOTE: Seasonal limitations (SS 407.09) were removed for all mixes except Thin Lifts and OGFC effective with contracts let in and after February 2024.

- Time extensions for material delays should only occur in unique situations. Completion
  dates are established in consideration of long lead times for most materials.
  Contractors should advise HQ Construction during the weeks leading up to the bid
  letting that there is/may not be enough time in the contract. Contractors may need to
  adjust their schedules to meet the contract completion dates if unexpected material
  delays occur.
- If the controlling items of work or the critical path was delayed, there will be a "history" of the delay, or a "timeline of events" that affected the contractor's ability to work. Include the timeline of events in the supporting documents.
- If the contract requires a CPM or Bar Chart schedule, highlight key areas of emphasis on the schedules to support time extensions (Time Impact Analysis). Tell the story of how the controlling items of work or the critical path was affected and explain how the number of days were derived.
- If the contract does not require a CPM Schedule, and a change to the work affects the completion of the Project, then time may be considered. Time may be added proportionally due to increases in the quantities of major items (101.03) to allow for time to perform the major item of work (see Circular Letter 108-07.01 for administrative procedures).

#### There are three types of delays listed in 108.07:

- 1. Excusable, Non-Compensable Delays these are delays that are not the fault of the Contractor or the Department. These can result from floods, tornadoes, utility delays, materials shortages, etc. (see 108.07 B for a complete listing). These result in contract time extensions to relieve the contractor from assessment of liquidated damages (108.09).
- 2. Excusable, Compensable Delays these are delays that affect the critical path of the Work as a result of changes in the Work in accordance with 104.02. These result in contract time extensions and compensation to the Contractor (109.06).
  - a. Compensable Delay Costs can be very expensive and all requests from the contractor must be carefully reviewed to ensure the contract allows payment. It is essential to ensure both the time extension and costs are justified, particularly any extended field overhead requests. Project Supervisors (Team Leads) should enlist the assistance of their Resident Engineer/District Manager in reviewing all compensable delay costs. (109.06 and 109.07 lists cost categories for compensable delays)
- 3. Concurrent Delays these are separate critical delays that occur at the same time. If an excusable, non-compensable delay occurs at the same time as an excusable, compensable delay, the Contractor is entitled to time but not compensation. When a non-excusable delay is concurrent with an excusable delay, the Contractor is not entitled to time or compensation.

# **Draft the Final Change Order**

Remember a change order is a legal document altering the Contract between the Department and the Contractor – and it should be written professionally, concisely, and able to stand up in court if necessary. There are many ways to write a change order – each person may have a slightly different style; however, there are best practices that everyone can follow. These include:

- ❖ Have a clear subject.
- ❖ Be thorough, but in as few words as possible.
- ❖ Be specific project staff may be familiar with the circumstances of the change, but the change order language should clearly indicate the need for the change so that it is understandable to anyone, even 5-10 years later.
- ❖ Do not mix past, present, and future tense in most cases, write the change order in present tense before the work is performed.
- ❖ Begin the change order with phrases such as:
  - The purpose of this Change Order is to establish unit prices for items of work not covered in the original contract.
  - The purpose of this Change Order is to delete items from the original contract.
  - The purpose of this Change Order is to alter or modify items covered in the original contract.
  - The purpose of this Change Order is to extend contract time.
  - The purpose of this Change Order is to add Special Provision XX to the contract.
  - It is agreed to add items to the original contract documents.
  - It is agreed to add, remove, and adjust items in the original contract documents.
  - It is agreed to add items to the original contract documents and to grant a time extension.
- ❖ Discuss why items will be added, deleted, or adjusted. Include the exact reason for the changes. This will make it clear to reviewers and auditors why the Change Order is required. Write the Change Order as if the audience knows nothing about the project.

**Example**: "Item 740-11.04 Temporary Sediment Tube 20 IN is called for in the plans but was not listed in the original contract bid items.",

**Example**: "Item 790-10.01 Pole 75 FT Class I Wood is added per TDOT plans revision issued on May 28, 2019."

❖ Detail who is requesting the Change Order. It is generally understood that the Contractor requests the Change Order, and no reference is needed. However, if the request comes from another source (TDOT, Utility, Local Government, etc.), then note that in the body.

**Example**: At the request of the Department, 712-08.10 MOBILE MESSAGE SIGN UNIT W/ATTENUATOR is added to warn approaching motorists of slow or stopped traffic resulting from construction activities in compliance with special provision SP712PTQ.

**Example**: Items 705-06.20 Tangent Energy Absorbing Terminal MASH TL-3 and 705-11.21 W Beam GR (Type 2) MASH TL-3 (Powder Coated) are added pursuant to the April 1, 2017, memorandum, MASH Implementation Guidance for TDOT Roadside Safety Hardware

❖ If applicable, explain special instructions to the Contractor. This could be a special provision, standard drawing, manufacturer's recommendations, certification requirements, specific instructions, etc. Special Provisions must be included with the Change Order if applicable.

**Example**: Item 712-08.10 MOBILE MESSAGE SIGN UNIT W/ATTENUATOR is added to protect the queue during lane closures. The addition of this item is necessary to enhance safety for the motoring public by slowing traffic and thus reducing the potential for rear end collisions, as part of the Department's June 2013 initiative to "Protect the Queue". The Mobile Message units must be mounted per the manufacturer's recommendations and meet all requirements and be deployed in compliance with special provision SP712PTQ, as revised October 9, 2017.

❖ If adjusting contract time, explain why. There are many ways to write a time extension, but the final statement should clearly define the total number of days added and the new adjusted completion date. (See bold statement below in Example 1).

**Example 1**: When adding items and time it is generally useful to explain the items first in the body of the change order as they can often be used to justify additional time. "It is agreed to add items to the original contract documents and to grant a time extension. Item 203-01.29 Rock Excavation is added to remove subsurface rock below the proposed lines and grades of the plans. Due to the poor quality of the subsurface rock encountered on this project, it is necessary to lay back a cut slope on a 2:1 gradient at a location where the proposed slope was to be a pre-split rock face. While most of this material can be excavated using item 203-01.03 Road & Drainage Excavation (Additional Material), a portion of this material will be much more labor intensive and require other means to excavate. Therefore, Item 203-01.29, Rock Excavation is added to remove various solid rock outcroppings encountered within the cut slope that will require blasting and hoe ramming to remove. The total estimated quantity of the slope layback is 72,500 CY, which includes approximately 65,500 CY of Road & Drainage Excavation (Additional Material) and 7000 CY of Rock Excavation. The project schedule, as submitted, shows that the grading subcontractor anticipated production rates of 481 CY per calendar day for excavation. Using these rates, the additional yardage would allow for an increase of 151 calendar days. Therefore, additional time in the amount of 151 days will be added to the adjusted contract completion date of December 12, 2016, resulting in a new completion date of "On or before May 12, 2017."

**Example 2**: Non-compensable time extension due to utility issues beyond the control of the contractor.

"The effective date of this contract was February 3, 2014, with a completion date of on or before July 31, 2016. Due to utility relocation conflicts with AT&T, the contractor was not able to gain access to the area at Shipman Creek Road to perform work on the retaining wall, which is part of the critical path to completion of the project. The AT&T telephone line relocation at Shipman Creek Road was completed on December 22, 2014. This allowed the contractor access to the retaining wall area to begin work on this date. According to the project schedule, construction on the retaining wall was slated to begin on August 11, 2014. Using a straight-line schedule progression, the contractor was delayed 134 calendar days by the delay of the AT&T relocations. Therefore, it is agreed to extend the completion date 134 days from "On or before July 31, 2016", to "On or before December 12, 2016."

- End the change order with phrases such as:
  - As a result of this Change Order, contract time shall not be extended.
  - Unit prices listed below include all labor, materials, profit, overhead and incidentals necessary to complete this work.
- \* "Forevermore" Clause In certain circumstances, change orders may settle a dispute (note: a dispute ≠ a claim) to minimize cost and/or time impacts to an active project or cost/time impacts to the motoring public. These generally follow the procedures in 104.02, 104.03, 108.07, 109.04, 109.05A and 109.06 but may still be disputed by the Contractor. However, the dispute may not rise to the level of a Request for Equitable Adjustment or a formal claim. In these circumstances, it is suggested that the following statement be added to the body of the change order:
  - In addition, the Contractor, in consideration of the above requested Change Order, does hereby, for itself, its subcontractors, and any successors or assigns, release and forever discharge the State of Tennessee from any and all manner of claims, demands, damages, causes of action, debts, dues, sums of money, accounts, extended duration or suits that it might now have, or that might subsequently accrue, to it by any reason, of any matter of things whatsoever, growing out of or in any way connected, directly or indirectly, with this Change Order.
- Administrative Change Orders occasionally, TDOT and the Contractor will agree to time and/or compensation through formal mediation or litigation. These are rare and are never executed without consent from TDOT Executive Staff, TDOT Legal, and often the TN Attorney General's office. Usually, these result from negotiations between TDOT Executive Staff and the Contractor's Executive staff or Owner and are used to mitigate impacts to the overall cost of the project. These negotiations occur well after staff have exhausted efforts detailed in 104.02, 104.03, 108.07, 109.04, 109.05A and 109.06.

- ✓ SiteManager Standard Explanations these are available in the change order window so that you do not have to type them in general explanations.
  - ITEM1: The purpose of this Change Order is to establish unit prices for items of work not covered by the original contract.
  - ITEM2: Unit prices listed below include all labor, materials, profit, overhead and incidentals necessary to complete this work.
  - ITEMTIME1: The purpose of this Change Order is to establish unit prices for items of work not covered by the original contract and to extend contract time.
  - ITEMTIME2: Project Documents supporting this time extension are attached as part of this Change Order.
     Unit prices listed below include all labor, materials, profit, overhead and incidentals
  - necessary to complete this work.
    NOTIME: As a result of this Change Order, contract time shall not be extended.
  - TIME1: The purpose of this Change Order is to extend contract time.
  - TIME2: Project Documents supporting this time extension are attached as part of this Change Order.

# **Approve the Change Order**

After review of all supporting documentation and verification of contractor pricing and time extension request information, the Resident Engineer or designee will coordinate the formal approval (signature) process. Follow procedures listed in TDOT Policy 355-01 and Circular Letter 104-03.02 to send to appropriate parties utilizing AdobeSign.

Once the Change Order is fully executed (signed by all parties), the Resident Engineer or designee will save a copy of the Change Order with support documents in the contract folder in CMS (Construction Management System).

# **Appendix**

- Administrative Procedures for Force Accounts
- Utility Memo, dated August 9, 2021
- Types of Change Order Supporting Documentation
- Change Order Reason Codes-2016
- Example Change Orders
  - A. Category 4
  - B. Category 3
  - C. Category 2
  - D. Category 1
  - E. VECP
  - F. Force Account Pre-approval
  - G. Force Account CO
  - H. Termination for Convenience



Force Accounts are used when the Department and the contractor are unable to agree on costs for extra work.

### **Policy**

- Standard Specifications (2021) 104.03 Contract Change Notification
- Standard Specifications (2021) 109-04.C Force Account
- Circular Letter 104.03-01 Contract Change Notification
- Circular Letter 109.04 Documentation and Method of Payment
- TDOT Policy 355-01 Approval of Construction Change Orders and Force Account Work

#### Resources

Document Title	Location
Force Account – Daily Record Form (Excel form)	JobBox > Standard Forms
Force Account Approval Form (BOE)	BOE > SiteManager > SM-Operations > SM-Office

### **Process Outline**

Work performed within	Force Account can be processed as a regular Change Order.				
one estimate period	See separate Change Order procedures for details				
	Force account can be processed as a pre-approved Change Order and the Force Account item added in SiteManager				
	Below are the steps for processing a Force Account Change Order discussed in this guide:				
Work performed over	Create record files				
multiple estimate	Create SiteManager record				
periods	Generate and review the Force Account Approval Report (BOE)				
(focus of this guide)	o Review for accuracy				
	<ul> <li>Make corrections and generate new report as needed</li> </ul>				
	Submit for pre-approval				
	Document and assign costs for Force Account activity				
	Project Close-out				

(Continued next page)



# Create record files

District Team Lead or
designee

Digital documents are saved in the CMS project files

- CMS folders should be created for individual change orders
- Folders should be named the change order number (ex. CO 1)
- CMS allows two options for file locations:
  - Saving all change orders together CMS project folder > Change Orders
  - Saving Force Account Change Orders separate from regular change orders - CMS project folder > Change Orders > Force Accounts

Paper documents should be saved in the project records. There are two options for creating paper files

- Change Order folder created for saving all change order documentation
- Individual Change Order folders recommended on projects with multiple change orders

# Create SiteManager record

Determine Line Item Number

- Items added to the contract through a Change Order are numbered sequentially beginning with Line Item Number 9500
- Navigation: SiteManager Main Panel > Change Orders > Change Order
   Maintenance > Item Summary (the Change Order Items Select screen will open)
  - Sort the Item Nbr column by clicking the column header
  - o New Line Item Number = (Highest item number in the 9500 series) + 1
    - Make sure to scroll through all project numbers to find the highest item number in the 9500 series

Create SiteManager Change Order record

- Navigation: SiteManager Main Panel > Change Order > Change Order
   Maintenance > Change Order (this will open the Change Order Header screen)
  - o From the menu bar at the top of the screen, search for the contract using the Open button
- Header tab
  - o Click the New button in the menu bar at the top of the screen
  - Enter the following data
    - Status: Draft
    - Description: Type "Force Account" and a short description of the work being performed
    - Reason Code: Select appropriate code according to Change Order policy
    - CO Type: Select the type according to Change Order policy
    - Function: Select "Extra Work" Do **NOT** select Force Account

SAVE









District Team Lead

or designee



#### • *Items* tab

- Click the New button in the menu bar at the top of the screen
- o Enter the following data
  - Project Number: Select from drop-down menu
  - Category Nbr: Select from drop-down menu
  - Line Item Nbr: Enter the Line Item Number from "Determine Line Item Number" instructions above
  - Item Code: Type the Item Code or search by right clicking in the box and selecting Search from the pop-up menu
    - Only one item coder per Force Account
    - Available Item Codes are numbered 109-04.20 thru 109-04.29
  - Major Item: Uncheck the box
  - Unit Price: \$1.00
  - Proposal Line Nbr: Same as the Line Item Nbr from above
  - Related Item: Leave blank or select "Not applicable" from the drop-down menu
  - Suppl Desc: Type a short description of the work being performed that is specific to the Force Account (ex. Stream mitigation)
  - CO Item Desc: Type a short description of the item being added (ex. Force account stream mitigation)
  - This Change Order Quantity: 0.001
- o SAVE
- Explanations tab
  - Select "General Change Order Explanations" from the drop-down menu
    - Standard explanations do not apply to Force Account change orders
  - o Type the explanation in the large text box
  - SAVE

#### Calculate Change Order

- Select the Header tab
- Calculate Change Order from the menu options at the top of the screen, select "Services" then "Calculate Change Order", or Ctrl + Shift + C
- SAVE

# District Team Lead or designee



# Generate and review the Force Account Approval form

	Generate the Force Account Approval form     Navigation: BOE > SiteManager > SM-Operations > SM-Office     Select contract number     Click OK
District Team Lead or designee	<ul> <li>Note: The form does not have a signature page. Signatures will be added in Adobe Sign (see Submit for Approval instructions below)</li> <li>Review the generated approval form</li> <li>Make corrections in SiteManager as needed and generate final approval form</li> <li>To export the approval form to PDF</li> </ul>
or designee	<ul> <li>Click the Export button at the top of the approval form tab</li> <li>A screen of export options will open. Make the following choices:         <ul> <li>File Format: PDF</li> <li>Page Range: All Pages</li> <li>Click the Export button</li> <li>Save the approval form in the applicable CMS change order folder (see File Documentation instructions below)</li> </ul> </li> </ul>

# Submit for preapproval

Resident Engineer or designee	<ul> <li>Collect Force Account Pre-Approval Documents         <ul> <li>Force Account Approval form created in the previous step</li> </ul> </li> <li>Document presenting the estimated costs of the items subject to the Force Account</li> <li>Email for review         <ul> <li>Attach Force Account Pre-Approval Documents</li> <li>Indicate in the email the Change Order category (1, 2, 3, 4)</li> <li>Email appropriate personnel per CO category</li> </ul> </li> <li>Attach Force Account Pre-Approval Documents to the Adobe Sign Force Account signature page</li> <li>Distribute for signatures</li> </ul>		
Business Development			
HQ Finance	Upon receipt of the approved Force Account Adobe Sign document HQ Finance will:  Change Force Account Change Order to Pending  Override approval rules  Approve Force Account Change Order		
District Operations staff	After HQ Finance changes the Force Account Change Order status, the Force Account item will be available for documentation		



# Document and assign costs for Force Account activity

Contractor	<ul> <li>Submit labor and equipment costs (Blue Book rates) to the District Team Lead</li> <li>Submit supporting invoices / receipts for materials</li> </ul>			
Project Inspector	<ul> <li>Complete the Daily Record of Force Account – blank document available on the Construction JobBox &gt; Standard Forms (form can be completed digitally)</li> <li>Compare daily records of work completed with a contractor's representative</li> </ul>			
District Team Lead or designee	<ul> <li>Collect documentation</li> <li>Compare contractor's cost document to the Blue Book rates</li> <li>Collect supporting documentation of costs from the contractor</li> <li>Collect Daily Report of Force Account from project inspector         <ul> <li>Check report calculations for accuracy</li> <li>Ensure all Daily Record of Force Account forms are signed by a contractor representative</li> <li>Total the amount to be charged to the Force Account item</li> </ul> </li> <li>Assign Force Account costs to estimate</li> <li>Create a DWR at the end of the estimate period         <ul> <li>Assign the total costs from the Daily Report of Force Account to the Force Account item</li> </ul> </li> <li>Item should show as paying the total when the estimate is generated</li> </ul>			

# **Project Close-out**

District Team Lead or designee	<ul> <li>Check that paper files are complete</li> <li>Check that CMS (digital) files are complete</li> </ul>
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# STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

#### **CONSTRUCTION DIVISION**

SUITE 700, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-2414

CLAY BRIGHT

BILL LEE GOVERNOR

#### **MEMORANDUM**

TO: Headquarters Construction, Utility, Finance, and Program Development

and Administration Division Staff Regional Operations and Utility Staff

FROM: Brian Egan, Director of Construction

Jeffery Hoge, Director of Right of Way Jennifer Herstek, Director of Finance

Ronnie Porter, Director of Program Development and Administration

**DATE:** August 9, 2021

**SUBJECT: Construction Contracts and Change Orders Involving Utilities** 

After the award of a construction contract containing "Move In" utilities, the Program Development and Administration Division (Program Operations Office) will review the bid prices and costs of the various utilities and modify the funding based on the awarded bid. Upon completion of this review and funding modification, the Finance Division (Project Analysis Section) will notify the Right of Way Division (Utility Office) if the utility cost is more than the current utility deposit. Changed to \$2.5M in February 2024

If additional funds are owed or the policy cap of \$1.75 Million (TDOT Policy 340-07\*) is exceeded, then an additional deposit will be required for the amount owed.

During construction of a project that includes "Move In" utilities, all Category 1 and Category 2 Construction Change Orders (CO's) that involve adding, revising, or deleting utilities must be analyzed and documented as stated below by the Regional Utility Office with assistance from the Construction District/Project Office. This documentation is necessary to confirm all utility expenses are eligible for TDOT payment and the maximum amount specified in the TDOT Policy has not been exceeded. If it is determined that the utility owner owes money to TDOT, the Regional Utility Office will notify the Headquarters Utility Office so they can inform the utility owner of the money owed. TDOT should request written confirmation/acknowledgement of the money owed from an Authorized Representative of the utility owner. If the additional amount owed from the Utility owner is greater than \$200,000, then a deposit will be required for the additional amount. The Project Analysis Section will invoice the Utility owner for the deposit/money owed. The change order is to be executed regardless of, and independent of, the receipt of any needed deposits.

The following documentation is to be provided by the Regional Utility office with assistance from the Construction District/Project Office and shall be included with the supporting documentation with the Change Order:

- What is eligible for reimbursement from the original "Utility Relocation Contract"\*\*;The original "estimated" utility amount shown in the "Utility Relocation Contract" inc
- The original "estimated" utility amount shown in the "Utility Relocation Contract" including the percentages of "pro-rata share" **and** the actual contract amount (i.e. Awarded total) for all items for the specific utility;
- 3) Statement that the items in the change order do, or do not, include betterment;
- The remaining amount eligible for reimbursement based on the actual contract amount, and amount of Change Order to show the "balance" of eligible expenses or estimated amount owed;
- 5) A revised Modified Utility Estimate System (MUES) Spreadsheet; and
- Documentation that the utility owner has been notified of the additional costs that will be owed to TDOT, and confirmation if received.

A copy of each executed Change Order (Category 1, 2, 3, and 4) and supporting documentation shall be sent to the Program Operations Office and the Project Analysis Section by the Project Office for their records and to properly invoice the utility owner.

As the construction project progresses, the Project Analysis Section will issue invoices (bills) to the utility owner quarterly once the deposit amount has been exceeded and the utility owner owes the Department monies for the utility relocations. Upon completion of the project, the Project Analysis Section will issue a final invoice for amounts owed the Department or reimburse the utility owner for any overpayments made.

# Example 1- See revised examples with \$2.5M cap in Circular Letter 105.07-02

- 1) All water distribution pay items are eligible and 100% were on state rights of way.
- 2) Original *estimate* for the twenty-five (25) 795-xx.yy pay items was \$1,206,855. *Actual* awarded amount for the 25 pay items was \$1,479,685.
- 3) Change Order items x, y and z are for betterment\*\*\*, all other items are revised quantities or added items. Total change order amount is \$325,987.
- 4) The value of work allowed per TDOT policy is \$1,750,000, and therefore the amount remaining for Chapter 86 eligibility is \$270,315 (\$1,750,000 \$1,479,685). Change Order items x, y, and z are Betterment items and the costs for the betterment portion is the responsibility of the utility. Betterment costs are \$125,000. Therefore, the utility company will owe TDOT \$125,000 and the remaining \$200,987 (\$325,987 \$125,000) is eligible for 100% state reimbursement.

#### Example 2-

- 1) All electrical distribution pay items are eligible for reimbursement. It was estimated that 75% of utilities were on state rights of way and 25% were on private easement\*\*\*\*.
- 2) Original *estimate* for the thirty-seven (37) 790-xx.yy pay items was \$2,450,206. *Actual* awarded amount for the 37 pay items was \$2,479,685.
- 3) Change Order items are needed due to a plans revision that revised quantities and added items. The change order amount is \$333,131, split 75/25%, or \$249,848/\$83,283.
- 4) Based on the original *estimate* in the Utility Relocation Contract, TDOT would be responsible for \$612,551 (\$2,450,206 x 0.25). The remainder \$1,837,654 (\$2,450,206 \$612,551) is eligible for Chapter 86 reimbursement. However, since the TDOT policy is \$1,750,000 maximum, the utility made a deposit of \$87,654 for the difference (\$1,837,654 \$1,750,000).

- 5) Based on the *actual* awarded amount of the utility items, the amount TDOT would be responsible for \$619,921 (\$2,479,685 x 0.25). The remainder \$1,859,764 (\$2,479,685 \$619,921) would be eligible for Chapter 86 reimbursement, however, since the TDOT policy is \$1,750,000 maximum, the utility would owe TDOT the difference \$109,764 (\$1,859,764 \$1,750,000). Since a deposit of \$87,654 was already made, the Utility still owes TDOT \$22,110, the difference of \$109,764 and \$87,654.
- 6) Therefore, since the maximum amount of reimbursable costs has been exceeded, the utility owes TDOT the amount of the Change order not represented by private easement (75%), \$249,848, and the deposit difference of \$22,110, for a total amount owed of \$271,958.
- \* TDOT Policy Number 340-07, Utility Relocations from Public Highway Rights-of-Way Under TCA 54-5-804, identifies "Qualified" and "Non-qualified" projects and the limitations for reimbursement. Reimbursement for relocations on public rights of way is capped at \$1.75 Million for each category of utility facilities.
- \*\* From the Standard "TDOT UTILITY RELOCATION CONTRACT" (page 1)

WHEREAS, the Utility has furnished TDOT with an estimate, plans, and specifications showing the cost and manner of relocating these facilities, which estimate is in the amount of \$\_\_\_\_\_\_\_, including the amount of \$\_\_\_\_\_\_\_ for the cost of engineering, which may be inclusive of preliminary engineering authorized on <code>Month Day</code>, <code>Year</code>; including the amount of \$\_\_\_\_\_\_ for the cost of inspection provided by the Utility; including the amount of \$\_\_\_\_\_\_ for the cost of betterment to the Utility's facilities (hereinafter called the "Betterment Cost"), and including the amount of \$\_\_\_\_\_\_ for deposit for the utility work in the State contract, and of which \_\_\_\_\_\_ percent represents the pro-rata share to which the Utility is entitled to reimbursement for relocation of utility facilities located on private utility right-of-way, and \_\_\_\_\_\_ percent represents the pro-rata share for relocation of utility facilities located on public highway right-of-way, reimbursement being for the cost of construction, engineering, and inspection on private utility right-of-way, but excluding inspection on public highway right-of-way, betterment, and the cost over the maximum TDOT reimbursement amount; and

\*\*\* Utility owners are responsible for 100% of betterment costs

\*\*\*\* TDOT is responsible for 100% of all relocation costs for utilities that are on private easement.

As stated above,

"A copy of each executed Change Order (Category 1, 2, 3, and 4) and supporting documentation shall be sent to the Program Operations Office and the Project Analysis Section by the Project Office for their records and to properly invoice the utility owner."

Please send copies of the change orders to:

Program Operations Office: John Kahle (John.Kahle@tn.gov) and copy Jeremy Beeman (Jeremy.Beeman@tn.gov) Project Analysis Section: Anna Meacham (Anna.Meacham@tn.gov) and copy Anna Biggs (Anna.Biggs@tn.gov)

# **Change Order Supporting Documentation**

As part of the verification process, supporting documentation is vital and should not be overlooked or minimized. Supporting documentation is used to prove the need for the change and to verify that the proper procedures were followed to legally make changes to an active, competitively bid contract. If an audit finds inadequate supporting documentation or improper justification of a change order, the Department could lose federal funding which is detrimental to TDOT's work program.

Documentation supporting the Change Order shall be included with the Change Order package in Adobe Sign. Supporting documentation may include the following:

- Letters
  - o Recommendation from Supervisor
  - o Concurrence from Engineer
  - o Contractor's request for change
  - Response to Contractor's request
  - FHWA Concurrence (FHWA 1365 approval form) (PoDI/FHWA Oversight /Risk Based Involvement Projects Only)
- Correspondence
  - o Emails, Files, etc.
  - o Plan Grid Task Report
  - o Concurrence/Recommendations from (as applicable):
    - Geotech
    - Survey
    - Design
    - Materials and Tests
    - Bridge Repair
    - Traffic
    - Structures
    - Environmental
    - ROW
    - Utilities
    - Other
- Drawings/Plans/Revisions
  - Plans Revision Request
  - Utility Plans Revision Request
  - o Communication specific to Plans Revisions
  - Plan Sheets
  - Revised Plans Sheets
  - Standard Drawings
  - Field Revisions/Sketches/Drawings/Depictions
  - o Pictures

- o Google Earth Images
- Pricing
  - o AUP
  - Cost Analysis
    - Justifications/Pricing Breakdown
    - Labor
      - List of Personnel
      - Contractor Overhead Rate
    - Material
      - List of Materials
      - Invoices
      - Calculations (yields, converted quantities, calculated quantities)
      - Alternatives (if comparison is necessary)
      - Data Sheets
      - Manufacturer's Recommendations
    - Equipment
      - List of Equipment
      - Bluebook Rates
      - Rental Rates
- Time
  - o Schedules, CPM, Bar Chart
    - TIA's
  - Calculation of Time
  - o Changes to Production Rates
  - o Material Procurement Documentation

Change Order - A written agreement entered into by and between the Department and the Contractor, with the written assent of the Surety, covering modifications or alterations beyond the scope of the original Contract, and establishing any necessary new Contract items, any other basis of payment, and any time adjustments for the work affected by the changes. This Agreement becomes a part of the Contract when properly executed and approved.

2016

# **Change Order Reason Codes**



August 2016



# **Five New Reason Code Classifications**

- 1. Contract Documents: Proposal Contract Book
- 2. Constructability: Design, Environmental, Geotechnical, Materials, Right of Way, Staging, Structural/Retaining Walls, Traffic Control, Utilities
- 3. Scope Change: Administrative, Design, Geotechnical, Structural/Retaining Walls, Traffic Operations
- 4. Changed Field Conditions: Differing Site Conditions, Utilities
- 5. Value Engineering

# **Guidance for Selecting Change Order Reason Codes**

#### 1. Contract Documents: Proposal Contract Book

- ✓ Specification not provided for item of work
- ✓ Incorrect special provision used
- ✓ Items not included in the bid file however shown in the plans
- ✓ Incorrect items in bid file

#### 2. Constructability - Involuntary change, project cannot be built per original plans.

- Constructability: Design
  - ✓ Additional items identified by the field office
  - ✓ Design revision requires additional items
  - ✓ Design modification results in additional work affecting time
- Constructability: Environmental
  - ✓ Additional or revised erosion control measures needed
  - ✓ Handling of hazardous material added to the contract
  - ✓ Permit revision affects project duration
  - ✓ Project species commitment affects project duration
- Constructability: Geotechnical
  - ✓ Base material not suitable for construction of structures
  - ✓ Geotechnical recommendations conflict with other functional plans
  - ✓ Handling of acid producing rock added to the contract
- Constructability: Materials
  - ✓ Materials that are no longer in use or commercially not available (new product is needed).
  - ✓ Material needs to be substituted to accommodate the project
- Constructability: Right of Way
  - ✓ Additional right of way needed
  - ✓ Project revision to stay within right of way limits
- Constructability: Staging
  - ✓ Project phasing is not constructable
- Constructability: Structural/Retaining Walls
  - ✓ Additional items identified by the field office
  - ✓ Structural revision requires additional items
  - ✓ Structural modification results in additional work affecting time
- Constructability: Traffic Control
  - ✓ Adding traffic control appurtenances
  - √ Temporary traffic signals
- Constructability: Utilities
  - ✓ Utility alignment interfering with construction

# **Guidance for Selecting Change Order Reason Codes**

- 3. Scope Change Voluntary change, additional work agreed upon by all parties.
  - Scope Change: Administrative
    - √ Change is made for public interest/safety
    - ✓ Claims resolution
    - ✓ Funded research
  - Scope Change: Design
    - ✓ Aesthetic feature changes
    - ✓ Alterations due to development
    - ✓ Change in project limits
  - Scope Change: Geotechnical
    - ✓ Slope failure
  - Scope Change: Structural/Retaining Walls
    - √ Additional retaining/noise walls
    - ✓ Aesthetic feature changes
    - ✓ Change in hydrology
  - Scope Change: Traffic Operations
    - ✓ ITS devices required or modified
    - ✓ Signal design not consistent with local commitments
- 4. Changed Field Conditions Site changes since the plans were developed.
  - Changed Field Conditions: Differing Site Conditions
    - ✓ As defined by Section 104.02A of current spec book
  - Changed Field Conditions: Utilities
    - ✓ Unadjusted utility "move prior" not complete
    - ✓ Unknown utilities impact the project
- 5. <u>Value Engineering Request to modify the plans, specifications, or other contract</u> requirements that would result in cost savings.

# Supplemental Agreement and/or Request for Construction Change Change Order No. 001

Category 4

Contract Documents: Proposal Book

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Whereas, we Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on <u>01/12/20</u> for the construction by said Contractor of the above designated contract; and *Whereas*, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

The purpose of this Change Order is to establish unit prices for items of work not covered by the original contract.

This project is to construct two small drainage structures on S.R. at L.M. 2.37. The purpose of this change order is to establish unit prices for items of work specified in the plans but not included in the contract.

Item 709-05.09 MACHINED RIP-RAP (CLASS C) is specified in the design plans to be used in between the wingwalls of each drainage structure. However, this item was not included in the contract.

Items 712-05.01 WARNING LIGHTS (TYPE A) and 712-07.03 TEMPORARY BARRICADES (TYPE III) are specified in the traffic control plans and are needed to warn motorists of the existing traffic conditions. However, these items were not included in the contract. Item 716-05.01 PAINTED PAVEMENT MARKING (4" LINE) is included in this change order to allow Site to be reopened to traffic prior to final paving.

As a result of this change order, contract time will not be extended.

Unit prices listed below include all labor, materials, profit, overhead and incidentals necessary to complete this work.

Item Code	Description	Unit	Current/Pending Quantities	Revised Quantities	Qty Over + Qty Under -	Contract Price	Net Amount Due Change
709-05.09	MACHINED RIP-RAP (CLASS C)	Ton	0.000	100.000	100.000	62.00	6,200.00
712-05.01	WARNING LIGHTS (TYPE A)	Each	0.000	4.000	4.000	33.00	132.00
712-07.03	TEMPORARY BARRICADES (TYPE III)	Linear Feet	0.000	40.000	40.000	22.00	880.00
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	Linear Mile	0.000	1.000	1.000	927.77	927.77

# Supplemental Agreement and/or Request for Construction Change Change Order No. 001

Category 4

Contract Documents: Proposal Book

STATE OF TENNESSEE
Department of Transportation
Bureau of Operations
Nashville, TN 37243-0326

Contract No.: CN
Project No.
Reference No.: N/A
County(s):

Bid Contract Amount: \$663,396.00

Current Change Order \$8,139.77
Approved Change Order: \$0.00
Pending Change Orders \$0.00
Total Change Orders to Date \$8,139.77

Now, Therefore, We, Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.

# Supplemental Agreement and/or Request for Construction Change Change Order No. 001

Category 3

Constructability: Materials

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Whereas, we Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on 11/04/20 for the construction by said Contractor of the above designated contract; and Whereas, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

The purpose of this Change Order is to extend contract time.

During construction the contractor notified the Department there was an issue obtaining required material for the High Friction Surface Treatment (HFST) portion of the project due to a material shortage. The Department agreed to extend the completion date until materials could be obtained, installed, and adequate time for successor activities to be installed. On August 26th, 2021 the HFST was completed. The Department agreed to allow fourteen (14) days following the final HFST placement to complete remaining items that were dependent on the HFST. Therefore, it is agreed to extend contract time by forty (40) days, from on or before July 31, 2021 to a new completion date of on or before September 9th, 2021.

Project Documents supporting this time extension are attached as part of this change order.

This Change Order includes a Time Extension.

#### NO CHANGE IN CONTRACT BID ITEMS

Bid Contract Amount: \$381,956.85	Current Change Order	\$0.00
	Approved Change Orders	\$0.00
	Pending Change Orders	\$0.00
	Total Change Orders to Date	\$0.00

Now, Therefore, We, COMPANY, Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.

Category 2

Contract Documents: Proposal Book

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Whereas, we CONSTRUCTION INC. with SURETY COMPANY as Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on 03/16/20 for the construction by said Contractor of the above designated contract; and Whereas, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

Railroad coordination was completed just after contract execution. This Change Order adds Special Provision 105C, Special Provisions for Protection of Railway Interest, to cover work to be performed on the Norfolk Southern Railroad right-of-way.

Item 104-03 Additional Work (Insurance for work on NSRR ROW) will compensate the contractor for the specialized insurance coverage required by SP105C.

As a result of this Change Order, contract time shall not be extended.

Item Code	Description	Unit	Current/Pending Quantities	Revised Quantities	Qty Over + Qty Under -	Contract Price	Net Amount Due Change
104-03	ADDITIONAL WORK (DESCRIPTION) Insurance for Work or NSRR ROW	Sum	0.000	1.000	1.000	2,856.00	2,856.00

Bid Contract Amount: \$1,433,442.60

Current Change Order \$2,856.00

Approved Change Orders \$0.00

Pending Change Orders \$0.00

Total Change Orders to Date \$2,856.00

Now, Therefore, We CONSTRUCTION INC., Contractors, and SURETY COMPANY
Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.

Category I
Constructability: Design

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Whereas, we as Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on <u>05/21/20</u> for the construction by said Contractor of the above designated contract; and *Whereas*, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

The purpose of this Change Order is to establish unit prices for items of work not covered by the original contract and to extend contract time.

This emergency slide repair contract consists of four separate slides through a 1.2 mile section on SF in County. In January and February 20 County experienced a substantial amount of rainfall, accumulating over 18 inches of rain over a span of two months. This caused noticeable cracks in the centerline of the roadway in two different locations within the project limits (Slide from station 76+60 to 78+53 and Slide extension from 101+00 to 102+30). The movement in these areas was first noticed in early January 20 continuing to widen to four inches in less than three weeks with the roadway sinking five inches by early March. The District notified TDOT's Geotechnical Engineering Section (GES) about this issue and requested an evaluation of both locations. On January 15th, 20 GES visited the project site and determined that both locations are active slides and need to be repaired. As with the other four slides included in this contract, the suggested repair method was a soil nail wall. The District informed HQ Construction and Maintenance about the slides and subsequent GES recommendations, and it was determined that both slides be repaired and added to the scope of work included in this contract.

In order to track all costs associated with the two additional slides separately from the costs associated with the four slides included in the original contact, project number 04 (PIN is added to this contract. It is agreed that all line item work associated with the repair of the additional slides be done at contract unit prices. Quantities of items 203-01 Road & Drainage Excavation (Unclassified), 307-50.12 Asphalt Conc. Maint. Mix (PG70-22) Grading A (Placed), 709-05.05 Machined Rip-Rap (Class A-3), 740-10-04 Geotextile (Type IV) (Stabilization), 805-05.02 Soil Nail Stabilization and 805-05.03 Reinforced Shotcrete Facing are added to the above project number to reflect the overruns in contract line items due to the additional work. In addition to the overrun of contract line items, it is agreed to add items to the original contract documents. As Phase 1 contract work was complete prior to execution of this contract change order, the soil nail subcontractor demobilized. Therefore, item 104-03.01 Additional Work (Mobilization) is added to provide for the re-mobilization of crews, equipment and materials to the jobsite. Additionally, item 104-03.02 Additional Work (Construction Stakes, Lines and Grades) is added to provide for survey and layout of the additional slides and item 104-03 Additional Work (Traffic Control) is added to compensate the contractor for the traffic control items that will remain on the project site to protect the public until the additional slides are repaired.

After letting, and prior to construction, the utility lines in conflict were temporarily relocated by the utility owner to allow for Phase I traffic shifts, soil nail installation and the construction of the upper geomembrane lined ditch. As part of the final drainage plans, a geomembrane ditch is indicated to be installed on the left (upper) side of the road. This ditch is crucial to the function of the soil nail system as it collects and drains water from the upper side of the road. Due to right-of-way constraints, the only location to permanently relocate the utilities is under this geomembrane ditch. A utility plan revision was issued on February 19, 20 detailing the locations, items and quantities needed to permanently relocate the utilities. Due the nature of this project being an emergency slide repair, utilities could not be contacted and given Chapter 86 eligibility. The Department decided that the best course action is to include the permanent relocation work in the construction contract in order to avoid potential damages to the ditch by the utility companies after construction and any further delays to the project. Therefore, it is agreed to add items 793-13.18 2

Category I

Constructability: Design

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Duct Formation @ 48IN Depth, 793-11.25 Concrete Handhole 4FT X 4FT X 4FT, 793-14.12 1 1/4IN Innerduct with Mule Tape and 793-14.19 4IN SCH 80 Orange Flexpipe to the contract.

Item 805-05.02 Soil Nail Stabilization is major item as defined in Standard Specification 101.03. The initial slide repair design submitted by the contractor included 32,515 L.F. of this item above the estimated contract bid quantity. Pursuant with Circular Letter 108.07-01, Determination of Time Based on Quantity Increases, due to the overrun of this major item; contract time was estimated to be extended by 20 days to a new estimated completion date of December 20, 20 This new estimated completion date was outside the seasonal paving limitations as defined in Standard Specification 407.09 (Pt3), therefore the contract was not estimated to be complete until the Spring of 20 As detailed above, the movement of the additional slides was first noticed in early January 20 before the project was scheduled to be complete. Instructions to perform the additional slide repair work were issued by the Department to the contractor on March 2, 20 Allowing ninety-three (93) days from the original completion date of November 30, 20 until March 2, 20 when the work was added to the contract, seventy (70) days to execute a contract change order and remobilize to the project, and one hundred seventy-three days (173) to complete the repairs of the additional slides, utility work and Phase 2 work; it is agreed that as a result of this change order, in total, contract time shall be extended three hundred and thirty-six (336) calendar days; from on or before November 30, 20 to a new completion date of on or before October 31, 20

In addition, the Contractor, in consideration of the above requested Change Order, does hereby, for itself, its subcontractors, and any successors or assigns, release and forever discharge the State of Tennessee from any and all manner of claims, demands, damages, causes of action, debts, dues, sums of money, accounts, extended duration or suits that it might now have, or that might subsequently accrue, to it by any reason, of any matter of things whatsoever, growing out of or in any way connected, directly or indirectly, with this Change Order

This Change Order includes a Time Extension.

Project Documents supporting this time extension are attached as part of this change order.

Unit prices listed below include all labor, materials, profit, overhead and incidentals necessary to complete this work.

Unit prices ii	nit prices listed below include all labor, materials, profit, overhead and incidentals necessary to complete this work.							
Item Code	Description	Unit	Current/Pending Quantities	Revised Quantities	Qty Over + Qty Under -	Contract Price	Net Amount Due Change	
104-03	ADDITIONAL WORK (DESCRIPTION) Traffic Control	Lump Sum	0.000	1.000	1.000	79,369.50	79,369.50	
104-03.01	ADDITIONAL WORK (DESCRIPTION) Mobilization	Lump Sum	0.000	1.000	1.000	22,732.50	22,732.50	
104-03.02	ADDITIONAL WORK (DESCRIPTION) Construction Stakes Lines and Grades	Lump Sum	0.000	1.000	1.000	13,412.30	13,412.30	

Category I

Constructability: Design

STATE OF TENNESSEE
Department of Transportation
Bureau of Operations
Nashville, TN 37243-0326

Contract No.: CN
Project No.:
Reference No.:
County(s):

203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	Cubic Yard	0.000	1,768.000	1,768.000	44.00	77,792.00
307-50.12	ASPHALT CONC. MAINT. MIX (PG70-22) GRADING A (PLACED)	Ton	0.000	87.000	87.000	87.50	7,612.50
709-05.05	MACHINED RIP-RAP (CLASS A-3)	Ton	0.000	1,265.000	1,265.000	45.00	56,925.00
740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)		0.000	1,186.000	1,186.000	5.00	5,930.00
793-11.20	HANDHOLE 30INX48IN	Each	0.000	9.000	9.000	3,633.00	32,697.00
793-13.18	2 DUCT FORMATION @ 48IN DEPTH	Linear Feet	0.000	6,221.000	6,221.000	32.13	199,880.73
793-14.12	1 1/4IN INNERDUCT With Mule Tape	Linear Feet	0.000	37,326.000	37,326.000	1.85	69,053.10
793-14.19	4IN SCH 80 ORANGE FLEXPIPE	Linear Feet	0.000	12,442.000	12,442.000	8.30	103,268.60
805-05.02	SOIL NAIL STABILIZATION	Linear Feet	0.000	11,690.000	11,690.000	55.00	642,950.00
805-05.03	REINFORCED SHOTCRETE FACING	Square Feet	0.000	3,620.000	3,620.000	85.00	307,700.00

Category I

Constructability: Design

STATE OF TENNESSEE
Department of Transportation
Bureau of Operations
Nashville, TN 37243-0326

Contract No.: CN
Project No.:
Reference No.:
County(s):

Bid Contract Amount: \$16,479,135.45

Current Change Order \$1,619,323.23
Approved Change Order: \$1,078,109.29
Pending Change Orders \$0.00
Total Change Orders to Date \$2,697,432.52

Now, Therefore, We, SURETY COMPANY Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.

Category 2 Value Engineering

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Whereas, we CONSTRUCTION with With SINSURANCE COMPANY, as Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on <u>07/29/2020</u>, for the construction by said Contractor of the above designated contract; and Whereas, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

The purpose of this Change Order is to address a Value Engineering Change Proposal (VECP) and to establish unit prices for items of work not covered in the original contract documents.

The contractor agrees that the submitted price is to be full compensation for all labor, equipment, materials, and incidentals that are necessary to complete work on this VECP.

A VECP is proposed to redesign the subterranean crossing under Interstate and Ramps. This relocation was initially designed as a 24IN Jack and Bore casing. The subcontractor performing the work was unable to complete this jack and bore due to poor subsurface conditions below the fill for the interstate and ramps. These conditions were unforeseen at the time of bid. Old reinforced concrete foundations and rock fill made this process impossible to complete. The contractor has met with and agreed that a large directional bore would work for their facilities and would simplify construction in an area with many subterranean obstacles. In addition to simplifying the bore process, this method also allows the elimination of a precast manhole.

It is agreed to add and adjust the following items: 104-03.20 ADDITIONAL WORK (20IN DIRECTIONAL BORE W/ 6X4IN FLEX SLEEVE CONDUIT) is added and the quantities of 793-13.32 6 DUCT FORMATION @ 36IN DEPTH, 793-14.03 MH PRECAST 6'H X 12'L X 7'H, and 793-16.10 CASING – UNCONSOLIDATED are adjusted to reflect the changes in the VECP.

In accordance with Standard Specification 104.11, the Department will make a single payment to the contractor representing fifty percent (50%) of the actual net savings when the work in the VECP and this change order is completed and all items are considered. The net savings is estimated to be \$202,939.00; therefore, it is agreed to add item 104-02.01 VALUE ENGINEERING CHANGE to the original contract to provide for the 50% payment to the contractor.

As a result of this Change Order, contract time shall not be extended.

The contractor agrees that the 2015 Tennessee Department of Transportation's Standard Specifications for Road and Bridge Construction as well as all current special provisions and plans notes will be adhered to at all times.

Item Code	Description	Unit	Current/Pending Quantities	Revised Quantities	Qty Over + Qty Under -	Contract Price	Net Amount Due Change
104-02.01	VALUE ENGINEERING CHANGE	Dollar	0.000	101,469.500	101,469.500	1.00	101,469.50

Category 2 Value Engineering

STATE OF TENNESSEE
Department of Transportation
Bureau of Operations
Nashville, TN 37243-0326

Contract No.: CN.:
Project No.:
Reference No.:
County(s):

104-03.20	ADDITIONAL WORK (DESCRIPTION) 20IN DIRECTIONAL BORE WITH 6X4IN FLEX SLEEVE CONDUIT	Linear Feet	0.000	3,600.000	3,600.000	102.01	367,236.00
793-13.32	6 DUCT FORMATION @ 36IN DEPTH	Linear Feet	1,300.000	750.000	-550.000	86.50	-47,575.00
793-14.03	MH PRECAST 6-FT W X 12-FT L X 7-FT H	Each	3.000	2.000	-1.000	22,100.00	-22,100.00
793-16.10	BORE/JACK 24IN CASING - UNCONSOLIDATED	Linear Feet	400.000	-150.000	-550.000	910.00	-500,500.00

Bid Contract Amount: \$31,994,789.60

Current Change Order: \$101,469.50

Approved Change Order: \$32,387.52

Pending Change Orders \$0.00
Total Change Orders to Date -\$69,081.98

Now, Therefore, We, Contractors, and

**INSURANCE COMPANY**, Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.

### SIGNATURE PAGE FORCE ACCOUNT APPROVAL

Contract No.: CN Change Order No. 019
Category 3

RECOMMENDED FOR APPROVAL:			
DISTRICT SUPERVISOR	DATE	FHWA/CERTIFICATION ACCEPTANCE	DATE
APPROVED BY:			
DISTRICT OPERATION ENGINEER	DATE		

### **Force Account Approval**

Change Order No. 019

STATE OF TENNESSEE Department of Transportation Bureau of Operations Nashville, TN 37243-0326 Contract No.: CN
Project No.:
Reference No.:
County(s):

Contractor: Construction Company

Force Account Item Code: 109-04.20

Force Account Item Code Description: FORCE ACCOUNT

#### Explanation:

This force account work is necessary for the relocation of the lelecommunications line from pole 11. The work will take place from STA. 131+50 to STA. 132+50. A handhole will be installed and a split duct casing will be used to keep the existing line in service. The work will be done using the open cut method. The estimated cost of this work is \$37,000.

Category 3

Constructability: Utilities

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Whereas, we COMPANY, INC. with MUTUAL INSURANCE COMPANY, as Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on 01/02/20 for the construction by said Contractor of the above designated contract; and Whereas, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

The purpose of this Change Order is to establish unit prices for items of work not covered by the original contract.

The original plans for the gravity sewer line show a jack and bore to get across. Creek and the existing road around Station 200. The contractor was able to jack and bore underneath the existing road but once they began to start on the work to get underneath the creek it was discovered that the jack and bore could not continue due to shallow grades. It was decided to continue with the 12" ductile iron pipe and 24" casing by the open cut method. The original plans did not provide enough casing pipe for the jack and bore crossing. The casing needed to extend into the stream bank far enough to prevent bank collapse and keep the creek from running into the open cut. The open cut casing required concrete cover to prevent scour. The excavation of the stream was difficult due to rock underneath the stream bed. The crossing resulted in a temporary stream diversion that was not anticipated in the original contract. The work included in this change order is the stream diversion to allow for the open cut of the existing stream, the excavation and installation required for the crossing, and the backfill and concrete encasement of the crossing.

As a result of this Change Order, contract time shall not be extended.

Unit prices listed below include all labor, materials, profit, overhead and incidentals necessary to complete this work.

Item Code	Description	Unit	Current/Pending Quantities	Revised Quantities	Qty Over + Qty Under -	Contract Price	Net Amount Due Change
797-40.25	ADDITIONAL WORK Open Cut Creek Crossing MH17-17A	Lump Sum	0.000	1.000	1.000	83,458.05	83,458.05

 Bid Contract Amount: \$93,100,903.71
 Current Change Order
 \$83,458.05

 Approved Change Order:
 \$1,391,223.45

Pending Change Orders \$0.00
Total Change Orders to Date \$1,474,681.50

Now, Therefore, We COMPANY, INC., Contractors, and MUTUAL

**INSURANCE COMPANY**, Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.

Category 3

Constructability: Environmental

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

Contract No.: CN

Project No.: Reference No.: NA

County(s): Contract No.: CN

Project No.: CN

Reference No.: NA

County(s): Contract No.: CN

Project No.: CN

Reference No.: NA

Whereas, we CONSTRUCTION, INC. with GREAT MIDWEST INSURANCE COMPANY, as Surety, entered into a contract with the STATE OF TENNESSEE, Department of Transportation, Bureau of Operations, on 11/02/20 for the construction by said Contractor of the above designated contract; and Whereas, certain items of construction encountered, are not covered by the original contract, we desire to submit the following additional items of construction to be performed by the Contractor and paid by the State at the prices scheduled therefore below:

Contract CN was for the construction of a new building in County.

On May 3, 2022, the Department elected to terminate this contract for convenience in accordance with Section 108.10C of the TDOT Standard Specifications due to outstanding issues in obtaining a permit from the Tennessee Department of Environment and Conservation to connect the new maintenance building to the existing septic system on site. The Contractor subsequently submitted a request for payment for expenses incurred prior to termination as allowed by Section 108.10C. Item 109-05.01, ELIMINATED OR ALTERED ITEM, will be added to pay for the invoice cost of the building that was delivered and is in storage at the Jackson County Maintenance site. Item 717-01, MOBILIZATION, will reimburse the contractor for mobilizing and demobilizing equipment and materials to the site and for bond expenses.

In addition, the Contractor, in consideration of the above requested Change Order, does hereby, for itself, its subcontractors, and any successors or assigns, release and forever discharge the State of Tennessee from any and all manner of claims, demands, damages, causes of action, debts, dues, sums of money, accounts, extended duration or suits that it might now have, or that might subsequently accrue, to it by any reason, of any matter of things whatsoever, growing out of or in any way connected, directly or indirectly, with this Change Order.

As a result of this Change Order, contract time shall not be extended.

Item Code	Description	Unit	Current/Pending Quantities	Revised Quantities	Qty Over + Qty Under -	Contract Price	Net Amount Due Change
109-05.01	ELIMINATED OR ALTERED ITEM Building	Dollar	0.000	92,000.000	92,000.000	1.00	92,000.00
717-01	MOBILIZATION	Lump Sum	0.000	1.000	1.000	13,195.00	13,195.00

Bid Contract Amount: \$611,990.00

Current Change Order \$105,195.00

Approved Change Orders \$0.00

Pending Change Orders \$0.00

Total Change Orders to Date \$105,195.00

Category 3

Constructability: Environmental

STATE OF TENNESSEE

Department of Transportation

Bureau of Operations

Nashville, TN 37243-0326

County(s):

Now, Therefore, We, CONSTRUCTION, INC., Contractors, and GREAT MIDWEST INSURANCE COMPANY, Surety, hereby agree to the Supplemental Agreement consisting of the above mentioned items and prices, and agree that this Supplemental Agreement is hereby made a part of the original contract and will be performed by this Contractor in accordance with specifications thereof, and that the original contract remain in full force and effect, except insofar as specifically modified by this Supplemental Agreement.