



FACILITIES PLANNING, DESIGN & CONSTRUCTION
PROCESS AND BEST PRACTICES

Change Orders



Change Order

- An amendment to a construction contract that changes the scope of work (either addition or reduction) and the contract sum and/or contract time
- Typically issued by the Architect at the direction of the Owner
- For change order to be valid both the Owner and Contractor must both agree on all terms: Scope, Price, and Time
- The Owner, Architect and Contractor should all three sign-off on the proposal.

Typical Causes

- Error in the contract documents
- Omission from the contract documents
- Unforeseeable job site condition such as rock, expansive soil, unrecorded utility lines or similar circumstances
- Change in the requirements of a regulatory agency, such as revisions in building codes, safety or health regulations.
- A change originated by the Owner
- Changes in specified work due to the unavailability of specified materials
- Other

Change Order:

A document (Form CO-11) issued on or after the effective date of the Contract Between Owner and Contractor (Form CO-9) which is agreed to by the Contractor and approved by the Owner, and which authorizes an addition, deletion or revision in the Work, including any adjustment in the Contract Price and/or the Contract Completion Date. The term Change Order shall also include written orders to proceed issued pursuant to Section 38 (a) (3). A Change Order, once signed by all parties, is incorporated into and becomes a part of the Contract.

CO-7 General Conditions of the Construction Contract – 1. Definitions

QUIZ

An owner hires an architect to design a house. The owner instructs the architect to specify gold-plated faucets in all lavatories. When the project is completed, the owner discovers that pewter faucets of the same design as the gold faucets were specified and have been installed instead, and the owner demands that the architect pay for replacement of the faucets.

- The gold faucets are priced at \$1,000 each at the plumbing showroom.*
- The pewter faucet costs \$200 each and cannot be returned to the vendor.*
- The plumber informs the owner that the replacement cost is \$75 for each faucet.*

What is the actual amount that the owner has been damaged for each faucet?

- a. \$0 / faucet – gold faucets are obnoxious and pewter is more appropriate
- b. \$200 / faucet
- c. \$275 / faucet
- d. \$1000 / faucet
- e. \$1075 / faucet
- f. \$1275 / faucet

QUIZ

The school board hires an architect to design a school addition. During construction a number of errors and omissions made by the AE were discovered. The additional cost and required changes were

- \$100,000 – for labor and material to rebuild stairs to meet egress requirements
- \$75,000 – for labor and material to replace insufficient roof trusses
- \$50,000 – to reconstruct openings to meet ADA requirements
- \$50,000 – to purchase and install casework omitted from the drawings and added immediately after bid
- \$25,000 – to reconstruct ramps to meet ADA requirements

\$300,000 - Total cost of the AE's errors and omissions

\$2,500,000 - Bid price to construct the school addition

What is the reasonable financial responsibility of the AE team for their errors and omissions?

- a. \$0 – AEs cannot be held responsible for their errors and omissions
- b. \$125,000
- c. \$150,000
- d. \$175,000
- e. \$300,000 – AEs are professional and should not make mistakes

CHANGE ORDER PROCEDURES



CHANGE ORDER PROCEDURE

1. A. *Where the University desires to modify the requirements of the Contract Documents to add, to delete from, or to alter the sequence or timing of the Work, the University will have the A/E prepare a Request for Proposal (RFP) to the Contractor describing the requested change and asking that the Contractor submit a price proposal for accomplishing said change in the Work.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

1. *Where the University desires to modify the requirements of the Contract Documents to add, to delete from, or to alter the sequence or timing of the Work, the University will have the A/E prepare a Request for Proposal (RFP), Architectural Supplement Instructions (ASI), Construction Change Directive (CCD), Request for Information (RFI) response or Bulletin to the Contractor describing the requested change and asking that the Contractor submit a price proposal for accomplishing said change in the Work. Changes in work can also be directed by a Field Change Order (FCO) directly from the University.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

Higher Education Capital Outlay Manual (2016) – Appendix K Construction Change Order Procedure Guidelines

Architect's Supplemental Instructions (ASI)

- *Form used by the architect to issue additional instructions or interpretations or to make minor changes in the work.*
- *It is intended to assist the architect in performing its obligation as interpreter of the contract documents in accordance with the owner-architect agreement and the general conditions.*
- *(The ASI) should not be used to change the contract sum or contract time.*

The Architect's Handbook of Professional Practice Update 2004. American Institute of Architects

CHANGE ORDER PROCEDURE

- 1. B. Where the A/E determines that a change to the Contract Documents is necessary or desired, the A/E will obtain approval from the Owner to prepare an RFP to the Contractor describing the requested change and asking that the Contractor submit a price proposal for accomplishing said change in the Work.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

2. *Where the A/E determines that a change to the Contract Documents is necessary or desired, the A/E will obtain approval from the Owner to prepare an RFP, ASI, CCD, RFI response, or Bulletin to the Contractor describing the requested change and asking that the Contractor submit a price proposal for accomplishing said change in the Work.*

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Higher Education Capital Outlay Manual (2016) – Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

- 1. C. Where the Contractor desires to make a substitution and/or where the Contractor desires to delete a requirement for Work described in the Contract Documents, or where the Contractor determines that the direction provided by the Owner or the A/E constitutes a change in the Work required by the Contract Documents, the Contractor shall prepare a price proposal for same and request that the Owner issue a Change Order.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

3. ~~Where the Contractor desires to make a substitution and/or where the Contractor desires to delete a requirement for Work described in the Contract Documents, or where the Contractor determines that the direction provided by the Owner~~ **University** or the A/E constitutes a change in the Work required by the Contract Documents, the Contractor shall prepare a price proposal for same and request that the ~~Owner~~ **University** issue a Change Order.
4. **Should the Contractor desires to make a substitution, that request shall be in writing to the architect and owner. Upon review and acceptance by both the architect and owner, the Contractor shall prepare a price proposal and request that the University issue a Change Order.**

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines
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CHANGE ORDER PROCEDURE

- 1. D. Where unit prices for Work were requested in the Bid Form and included in the Contract [reference General Conditions Section 38(a)(2)], the Contractor and the A/E will agree upon the actual quantity of the Work performed and multiply by the unit price included in the contract to determine the value of such Work accepted. If the value of such Work is more than or less than the value for such Work included in the Contract Price, a Change Order will be prepared by the A/E to increase/decrease the Contract Price to reflect the Work performed and accepted.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

5. *Where unit prices for Work were requested in the Bid Form and included in the Contract [reference General Conditions Section 38(a)(2)], the Contractor and the A/E will agree upon the actual quantity of the Work performed and multiply by the unit price included in the contract to determine the value of such Work accepted. If the value of such Work is more than or less than the value for such Work included in the Contract Price, a Change Order will be prepared by the A/E to increase/decrease the Contract Price to reflect the Work performed and accepted.*

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CHANGE ORDER PROCEDURE

- 1. E. Where Work or changes in the Work are to be performed under the procedures described in General Conditions Section 38(a)(3), the A/E shall prepare a Change Order describing the Work to be performed and directing the Contractor to keep an accounting of all labor, material and associated costs of performing the Work. The Change Order shall cite General Conditions Section 38(a)(3) as the basis for determining the cost of such Work and shall identify any specific requirements or formats not specified in Section 38(a)(3) which the Contractor will be required to use. One or more subsequent Change Orders will be issued to adjust the Contract Price and/or Time and each shall cite or reference the initial Change Order authorizing such Work to be done using this method for determining price and time compensation.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

6. *Where Work or changes in the Work are to be performed under the procedures described in General Conditions Section 38(a)(3), the A/E shall prepare a Change Order describing the Work to be performed and directing the Contractor to keep an accounting of all labor, material and associated costs of performing the Work. The Change Order shall cite General Conditions Section 38(a)(3) as the basis for determining the cost of such Work and shall identify any specific requirements or formats not specified in Section 38(a)(3) which the Contractor will be required to use. One or more subsequent Change Orders will be issued to adjust the Contract Price and/or Time and each shall cite or reference the initial Change Order authorizing such Work to be done using this method for determining price and time compensation.*

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7. If the work is to progress prior to having a completed HECO-11 form, a FCO must be issued by the University.

~~Construction and Professional Services Manual (2019) – Appendix K Construction Change Order Procedure Guidelines~~

Higher Education Capital Outlay Manual (2016) – Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

2. The Contractor will send his pricing proposal for the Change Order to the A/E and Owner. To facilitate analysis by the Owner and A/E, this estimate shall be prepared using the following forms:

GC-1, General Contractor's Estimate for Change Order

SC-1, Subcontractor's Estimate for Change Order

SS-1, Sub-Subcontractor's Estimate for Change Order

The General Contractor and each affected Subcontractor and Sub-Subcontractor must sign these forms.

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

8. *The Contractor will send his pricing proposal for the Change Order to the A/E and Owner. To facilitate analysis by the Owner and A/E, this estimate shall be prepared using the following forms:*

HECO-GC-1, General Contractor's Estimate for Change Order

HECO-SC-1, Subcontractor's Estimate for Change Order

HECO-SS-1, Sub-Subcontractor's Estimate for Change Order

Back-up shall be provided for all material and equipment charged

The General Contractor and each affected Subcontractor and Sub-Subcontractor must sign these forms.

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CHANGE ORDER PROCEDURE

- 3. When a mutually agreed price has been determined, the A/E shall make his written recommendation to the Owner for acceptance by signing the bottom of Form GC-1. A statement as to how any differences were reconciled shall be provided by to the owner by the A/E unless the Owner was an active participant in the price negotiations.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

9. *When a mutually agreed price has been determined, the A/E shall make his written recommendation to the Owner for acceptance by signing the bottom of Form GC-1. A statement as to how any differences were reconciled shall be provided by to the owner by the A/E ~~unless the Owner was an active participant in the price negotiations.~~*

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CHANGE ORDER PROCEDURE

4. *If the Change Order proposal is acceptable, the Owner shall have a Change Order prepared.*
5. *The A/E shall prepare the Change Order form (Form CO-11) and the Change Order Justification (CO-11a) accompanied by a full description of the change, including drawings if applicable, and copies of the estimate sheets used to reach the mutually agreeable price. The A/E will forward Form CO-11 to the Contractor for signature.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

10. *If the Change Order proposal is acceptable, and an FCO has not already been issued, the University will issue a FCO noting the agreed upon price, scope of work and potential schedule delay. The University will also have a Change Order prepared. ~~the Owner shall have a Change Order prepared.~~*
11. *The A/E University shall ~~prepare~~ complete the Change Order form (Form HECO-11a) and the Change Order Justification (CO-11a) accompanied by a full description of the change, including drawings if applicable, and copies of the estimate sheets used to reach the mutually agreeable price. The A/E will forward Form CO-11 to the Contractor for signature.*
12. *The A/E will complete the Change Order Justification (Form HECO-11a) accompanied by a full description of the change, including drawings if applicable, and copies of the estimate sheets used to reach the mutually agreeable price.*

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CHANGE ORDER PROCEDURE

6. Contractor will forward the signed Form CO-11 to the Owner. All backup material must be provided with each copy of the change order.

IMPORTANT: NO CHANGE ORDER WILL BE APPROVED IF THE LABOR, MATERIAL, AND EQUIPMENT ARE NOT ITEMIZED ON THE BREAKDOWN SHEETS (GC 1, SC 1, and SS 1).

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCEDURE

13. The Contractor will sign Form HECO-11 and send forward the signed Form CO-11 to the Owner University. All backup material must be provided with each copy of the change order.

~~IMPORTANT: NO CHANGE ORDER WILL BE APPROVED IF THE LABOR, MATERIAL, AND EQUIPMENT ARE NOT ITEMIZED ON THE BREAKDOWN SHEETS (GC 1, SC 1, and SS 1).~~

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CHANGE ORDER PROCESS

- 7. Change Order approval authorities are described in Chapter 7 of the Construction and Professional Services Manual and Section 38 of the General Conditions.*
- 8. No work on any change order shall be accomplished without the approval of the Owner and, if applicable, the Director, Department of General Services. Any work accomplished prior to the receipt of the fully executed change order is done at the Contractors risk and will be removed at Contractor expense should the change order not be approved. No payment for work covered by a change order shall be invoiced or paid until the fully executed change order has been received.*
- 9. The Owner will distribute approved Change Orders to the A/E and Contractor.*

Construction and Professional Services Manual (2019) - Appendix K Construction Change Order Procedure Guidelines

CHANGE ORDER PROCESS

- ~~7. Change Order approval authorities are described in Chapter 7 of the Construction and Professional Services Manual and Section 38 of the General Conditions.~~
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15. The ~~Owner~~ **University** will distribute approved Change Orders to the A/E and Contractor.

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ERRORS & OMISSIONS



ERRORS AND OMISSIONS

- An **error is an incorrect instruction** in the plans and/or specifications that, if followed by the contractor, will require correction at an additional cost which typically requires a change order.
- An **omission is a lack of instruction** in the plans and/or specifications that , if followed by the contractor, will require correction at an additional cost which typically requires a change order.

Responsibility for the cost of the correction requires consideration of:

- *Betterments*
- *Reasonable Standard of Care*

ERRORS & OMISSIONS: BETTERMENTS

“General principle that one person should not be permitted unjustly to enrich himself at expense of another, but should be required to make restitution . . .for . . .benefits received ...”

Blacks Law

*“If all or a portion of the cost for a particular claim issue involves work or scope that would have been necessary to construct the project regardless of whether the alleged error or omission had occurred, this work, or **betterment**, enriches the owner and is the owner’s obligation.”*

“Betterment is involved in the majority of errors and omissions claims when an architect has made a mistake in the construction documents or has omitted or left something out of the documents that is required to build the building.”

AIArchitect Volume 13 November 3, 2006

QUIZ

An owner hires an architect to design a house. The owner instructs the architect to specify gold-plated faucets in all lavatories. When the project is completed, the owner discovers that pewter faucets of the same design as the gold faucets have been installed instead, and he demands that the architect pay for replacement of the faucets.

- The gold faucets are priced at \$1,000 each at the plumbing showroom.*
- The pewter faucet costs \$200 each and cannot be returned to the vendor.*
- The plumber informs the owner that the replacement cost is \$75 for each faucet.*

What is the actual amount that the owner has been damaged for each faucet?

- a. \$0 / faucet – gold faucets are obnoxious and pewter is more appropriate
- b. \$200 / faucet
- c. \$275 / faucet
- d. \$1000 / faucet
- e. \$1075 / faucet
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ANSWER

An owner hires an architect to design a house. The owner instructs the architect to specify gold-plated faucets in all lavatories. When the project is completed, the owner discovers that pewter faucets of the same design as the gold faucets have been installed instead, and he demands that the architect pay for replacement of the faucets.

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ANSWER

The total damages to the owner for each faucet is \$275

\$200 (cost unusable faucet) + \$75 (labor-replace pewter faucet with gold faucet)

- The owner must rightfully pay the \$1,000 cost of the gold faucet because the original construction costs did not this cost.
- For the Architect to pay the cost of the gold faucet would be to provide the Owner with a betterment at no cost for which the Owner is not entitled.

AE Standard of Care is not Perfection

Construction Industry Institute (CII) Study - 1980s

Industrial projects of average complexity

Correction of design errors and omissions might reasonably be expected to impact the cost of construction for a typical project in the range of 2% to 3%.

National Research Council (NRC) Study - 1994

Federal government projects

Traditional design-bid-build project delivery.

Construction changes due to architectural and engineering errors and omissions should not increase the cost of construction more than 5%.

National Society of Professional Engineers Professional Engineers in Private Practice

Engineering Times February 1999

QUIZ

The school board hires an architect to design a school addition. During construction a number of errors and omissions made by the AE were discovered. The additional cost and required changes were

- \$100,000 – for labor and material to rebuild stairs to meet egress requirements
- \$75,000 – for labor and material to replace insufficient roof trusses
- \$50,000 – to reconstruct openings to meet ADA requirements
- \$50,000 – to purchase and install casework omitted from the drawings and added immediately after bid
- \$25,000 – to reconstruct ramps to meet ADA requirements

\$300,000 - Total cost of the AE's errors and omissions

\$2,500,000 - Bid price to construct the school addition

What is the reasonable financial responsibility of the AE team for their errors and omissions?

- a. \$0 – AEs cannot be held responsible for their errors and omissions
- b. \$125,000
- c. \$150,000
- d. \$175,000
- e. \$300,000 – AEs are professional and should not make mistakes

ANSWER

The school board hires an architect to design a school addition. During construction a number of errors and omissions made by the AE were discovered. The additional cost and required changes were

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ANSWER

The reasonable financial responsibility of the AE team for their errors and omissions is \$125,000.

\$100,000 – for labor and material to rebuild stairs to meet egress requirements

\$75,000 – for labor and material to replace insufficient roof trusses

\$50,000 – to reconstruct openings to meet ADA requirements

\$50,000 – casework omitted from the drawings and added immediately after bid

\$25,000 – to reconstruct ramps to meet ADA requirements

\$300,000 - Total cost of the AE's errors and omissions

(\$50,000) – Casework is a betterment

\$250,000 – Total cost of errors and missions less betterments

(\$125,000) – 5% of Construction Cost (\$2,500,000) – Reasonable Standard of Care

\$125,000 - Reasonable financial responsibility of the AE for errors and omissions

CHANGE ORDER: GENERAL CONDITONS



ADJUSTMENTS TO CONTRACT TIME

Extensions to the Time for Completion or the Contract Completion Date, when granted by Change Order, will be granted only when equitable time adjustment exceeds the Total Float in the activity or path of activities affected by the change provided that the Owner has reasonably provided information necessary to allow for the orderly progression of the Work.

CO-7 General Conditions of the Construction Contract – 19. Schedule of the Work

CHANGE ORDER PROCESS

If the Contractor finds a conflict, error, omission, or other discrepancy in the plans or specifications, he shall notify the Architect/Engineer in writing as soon as possible, but before proceeding with the affected Work.

The Architect/Engineer shall issue a clarification by Field Order to the Contractor stating the correct requirements.

If the Contractor deems the Field Order requires additional Work, he shall notify the A/E of such prior to proceeding with that Work and he shall submit a request for Change Order along with a detailed substantiating cost proposal through the A/E to the Owner within fourteen (14) calendar days.

CO-7 General Conditions of the Construction Contract – 23. Plans and Specifications b.

CONTRACTOR DILIGENCE

If such conflict, error, omission or other discrepancy in plans or specifications was reasonably apparent or with reasonable diligence should have been apparent to the Contractor prior to submitting its bid or Proposal, and the Contractor failed to submit questions to the A/E in the time and manner required by the Instructions to Bidders or Request for Proposal, then any claims shall be deemed waived and the Contractor shall not be entitled to additional compensation or time, or entitled to sue the Owner based on such conflict, error, omission or other discrepancy.

CO-7 General Conditions of the Construction Contract – 23. Plans and Specifications b.

CONTRACTOR NOTIFICATION

If the Contractor performs any Work, or is delayed in performing any Work, where such Work involves a conflict, error, omission, or other discrepancy in the plans and specifications that the Contractor knew about, or with reasonable diligence should have known about, and fails to notify the A/E and Owner as required, the Contractor shall assume full responsibility for such performance or delay and shall bear all costs attributable to correcting any Work requiring correction or to any delay, and such conflict, error, omission, or other discrepancy shall not be the basis for a claim, cause of action or right to sue the Owner.

CO-7 General Conditions of the Construction Contract – 23. Plans and Specifications b.

SUBMITTALS

If a Submittal indicates a departure from the Contract requirements, the Architect/Engineer may reject the Submittal or, if he deems it to have merit, may recommend it to the Owner, who shall approve or reject it as the Owner, in its sole discretion, sees fit. The departure from the Contract requirements shall be further authorized by a Change Order, if a reduction or increase in the Contract Price is appropriate.

CO-7 General Conditions of the Construction Contract – 24 Submittals i.

CHANGES IN THE WORK

The Owner may at any time, by written order utilizing the Commonwealth of Virginia Change Order Form CO-11 and without notice to the sureties, make changes in the Work which are within the general scope of the Contract, except that no change will be made which will increase the total Contract Price to an amount more than twenty percent (20%) in excess of the original Contract Price without notice to sureties.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

CHANGES IN THE WORK

At the time of the Preconstruction Meeting described in Section 50(b), the Contractor and the Owner shall advise each other in writing of their designees authorized to accept and/or approve changes to the Contract Price and of any limits to each designee's authority. Should any designee or limits of authority change during the time this Contract is in effect, the Contractor or Owner with such a change shall give written notice to the other within seven (7) calendar days, utilizing the procedures set forth in these General Conditions. The Contractor agrees and understands that the authority of the Owner's designee is limited by Virginia Code § 2.2-4309 and any other applicable statute.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

METHODS OF CHANGE IN COST

In making any change, the charge or credit for the change shall be determined by one of the following methods as selected by the Owner:

- (1) Fixed Price*
- (2) Unit Price*
- (3) Cost Reimbursement*

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

Fixed Price

By a mutually agreed fixed amount change to the Contract Price and/or time allowed for completion of the Work. The Change Order shall be substantiated by documentation itemizing the estimated quantities and costs of all labor, materials, and equipment required as well as any mark-up used. The price change shall include the Contractor's reasonable overhead and profit, including overhead for any unreasonable delay arising from or related to the Change Order and/or the change in the Work.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

Unit Price

By using unit prices and calculating the number of net units of Work in each part of the Work which is changed, either as the Work progresses or before Work on the change commences, and by then multiplying the calculated number of units by the applicable unit price set forth in the Contract or multiplying by a mutually agreed unit price if none was provided in the Contract. No additional percentage markup for overhead or profit shall be added to the unit prices.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

Cost Reimbursement

By ordering the Contractor to perform the changed Work on a cost reimbursement basis by issuing two Change Orders citing this Subsection, an initiating Change Order, authorizing the changed Work, and a confirming Change Order approving the additional cost and time for the changed Work.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

METHOD OF CHANGE IN COST: COST REIMBURSEMENT

(When based upon Cost Reimbursement) the initiating Change Order shall:

- (i) Describe the scope or parameters of the change in the Work;*
- (ii) Describe the cost items to be itemized and verified for payment and the method of measuring the quantity of work performed;*
- (iii) Address the impact on the schedule for Substantial Completion;*
- (iv) Order the Contractor to proceed with the change to the Work;*
- (v) Order the Contractor to keep in a form acceptable to the Owner, an accurate, itemized account of the actual cost of the change in the Work, including, but not limited to, the actual costs of labor, materials, equipment, and supplies;*
- (vi) Order the Contractor to annotate a copy of the Project schedule to accurately show the status of the Work at the time this first Change Order is issued, to show the start and finish dates of the changed Work, and the status of the Work when the changed Work is completed; and*
- (vii) State that a confirming Change Order will be issued to incorporate the cost of the ordered change in the Work into the Contract Price and any change in the Contract Time for Completion or Contract Completion Date.*

METHOD OF CHANGE IN COST: COST REIMBURSEMENT

The Contractor shall sign the initiating Change Order acknowledging he has been ordered to proceed with the change in the Work. The Contractor's signature on each initiating Change Order citing this Subsection 38(a)(3) as the method for determining the cost of the Work shall not constitute the Contractor's agreement on the cost or time impact of the ordered Work.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

METHOD OF CHANGE IN COST: COST REIMBURSEMENT

Except as otherwise may be agreed to in writing by the Owner, such costs shall not exceed those prevailing for the trades or crafts (based upon rates established by the US Department of Labor, Bureau of Labor Statistics, or other generally recognized cost data publication), materials, and equipment in the locality of the Project, may include only those items listed as allowable in Subsection 38(e), and shall not include any of the costs listed as not allowable in Subsection 38(f). The Owner shall be permitted, on a daily basis, to verify such records and may require such additional records as are necessary to determine the cost of the change to the Work.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

METHOD OF CHANGE IN COST: COST REIMBURSEMENT

Within fourteen (14) days after the conclusion of such ordered Work, the Contractor and the Owner shall reach agreement on

- (i) a cost for the ordered Work, based on the records kept and the Contractor's allowance for overhead and profit determined in accordance with the provisions set forth in Subsections 38(d), (e), and (f) below; and*
- (ii) (ii) the change in the Contract Time for Completion or Contract Completion Date, if necessary, as a result of the ordered Work. Such costs and time shall be incorporated into a confirming Change Order which references the initiating Change Order.*

If agreement on the cost and time of the changed Work cannot be reached within the fourteen (14) days allotted, the Contractor may submit a claim for the disputed cost or time as provided for in Section 47.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

CHANGES IN THE WORK

The Contractor shall review any Owner requested or directed change and shall respond in writing within fourteen (14) calendar days after receipt of the proposed change (or such other reasonable time as the Owner may direct), stating the effect of the proposed change upon his Work, including any increase or decrease in the Contract time and price. The Contractor shall furnish to the Owner an itemized breakdown of the quantities and prices used in computing the proposed change in Contract Price.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work

CHANGES IN THE WORK

The Owner shall review the Contractor's proposal and respond to the Contractor within thirty (30) days of receipt. If a change to the Contract Price and Time for Completion or Contract Completion Date are agreed upon, both parties shall sign the Change Order. If the Contract Price and Time for Completion or Contract Completion Date are not agreed upon, the Owner may direct the Contractor to proceed under Subsection 38(a)(3), above. Change Orders shall be effective when signed by both parties, unless approval by the Governor or his designee is required, in which event the Change Order shall be effective when signed by the Governor or his designee.

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work b.

Overhead and profit for both additive and deductive changes in the Work (other than changes covered by unit prices) shall be paid by applying the specified percentage markups only on the net cost of the changed Work (i.e. difference in cost between original and changed Work excluding overhead and profit). Said percentages for overhead and profit shall reasonably approximate the Contractor's overhead and profit, but shall not exceed the percentages for each category

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work d.

(1) If a Subcontractor does all or part of the changed Work, the Subcontractor's mark-up for overhead and profit on the Work it performs shall be a maximum of fifteen percent (15%). The Contractor's mark-up for overhead and profit on the Subcontractor's price shall be a maximum of ten percent (10%).

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work d.

- (2) If the Contractor does all or part of the changed Work, its markup for overhead and profit on the changed Work it performs shall be a maximum of fifteen percent (15%).*
- (3) If a Sub-subcontractor at any tier does all or part of the changed Work, the Sub-subcontractor's markup on that Work shall be a maximum of fifteen percent (15%). The markup for overhead and profit on a sub-subcontractor's Work by the Contractor and all intervening tiers of Subcontractors shall not exceed a total of ten percent (10%).*

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work d.

(4) Where Work is deleted from the Contract prior to commencement of that Work without substitution of other similar Work, one hundred percent (100%) of the Contract Price attributable to that Work shall be deducted from the Contract Price.

However, in the event that material Submittals have been approved and orders placed for said materials, a lesser amount, but in no case less than eighty percent (80%) of the Contract Price attributable to that Work, shall be deducted from the Contract Price. The credit to the Owner for reduced premiums on labor and material bonds and performance bonds shall in all cases be one hundred percent (100%).

CO-7 General Conditions of the Construction Contract – 38. Changes in the Work d.

CHANGE ORDER FORMS



HECO=11 PART 1

	<u>Code</u>	<u>Description</u>
Agency:	0	0
Project:	0	0
Sub-Project:	0	

to: 0

Under your contract dated January 0, 1900 for work at

0

#

the Contract Price, in accordance with the Contract Documents, the sum of _____ #N/A

#VALUE!

#

#

(Failure to include a change for time shall waive any change to the time allowed by the Contract for completion of the Work unless the parties mutually agree in writing to postpone a determination of the change to time resulting from the Change Order. Such determination may not be postponed more than 45 days from the approval of this Change Order by the agency.)

CONTRACT COST SUMMARY

(inclusive of this Change Order)

Original Contract Amount	\$0.00
Cumulative Change Orders	#N/A
Revised Contract Amount	#N/A

CONTRACT SCHEDULE SUMMARY

(inclusive of this Change Order)

Original Contract Completion Date:	January 0, 1900
Cumulative Schedule Extension:	#N/A
Revised Contract Completion Date:	#N/A

CHANGE AUTHORIZATION

Issued By:

Authorized A/E Representative	Date
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Accepted By:

Authorized Contractor Representative	Date
--------------------------------------	------

Recommended By:

Authorized Agency Representative	Date
----------------------------------	------

Approved By:

Authorized Agency Representative	Date
----------------------------------	------

Prior approval by the Governor or his designee is required for each Change Order which causes an increase in the Contract Price if the resulting cumulative sum of all Change Orders exceeds **25% of the original Contract Amount** or **\$50,000, whichever is greater**.

#N/A

Recommended By:

Authorized Agency Representative	Date
----------------------------------	------

Approved By:

Authorized Agency Representative	Date
----------------------------------	------

HECO-11 PART 2

HECO-11
Part 2

A red asterisk (*) is a warning that either the "Initiated By" or the "Reason for Change" fields have not been completed correctly.
Both of these fields must be filled-in !

<u>Project Code</u>	<u>Change Order Number</u>	<u>Change Order Date</u>
	0	#N/A

#N/A #N/A

Change Order Total (sum of the details listed below) = \$ -

#N/A

#N/A

Reference Number	Description / Comments	Initiated By	Reason Code	Amount
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Reason for Change

(this entry updates the "Reason Code" column)

- 1- Error in the contract documents
- 2- Omission from the contract documents
- 3- Unforeseeable job site condition or similar circumstances
- 4- Change in the requirements of a regulatory agency
- 5- A change originated by the University
- 6- Changes in work due to the availability of specified materials
- 7- Other. Describe below the Work Description.

HECO 11 PART 1

CHANGE ORDER JUSTIFICATION (Architect / Engineer's Justification)		HECO-11a Part 1
av. 02/19)		
Project Code	Change Order Number 0	Change Order Date #N/A
<u>E's DESCRIPTION OF WORK INVOLVED</u>		
<u>E's EXPLANATION OF WHY WORK IS REQUIRED</u>		
<u>E's RECOMMENDATION</u>		
Select One	Architect / Engineer	Date

HECO 11- PART 2

CHANGE ORDER JUSTIFICATION (Agency's Justification)		HECO-11a Part 2
(Rev. 02/19)		
Project Code	Change Order Number 0	Change Order Date #N/A
<u>ADDITIONAL CONTINGENCY REQUIRED ?</u>		
Construction Contingency Amount Shown on Last Approved HECO-2/CO-8:		
Cumulative Amount Of All Change Orders To-Date, Inclusive Of This Change Order:		#N/A
#N/A		#N/A
Remarks:		
<u>COST SHARING FOR DESIGN ERRORS AND OMISSIONS</u>		
Is this change order required in whole, or in part, because of a design error or omission?		No
If "Yes", outline the proposed cost sharing, if any, by the responsible design professional:		
<u>ADDITIONAL SUPPORT FOR CHANGES IN AGENCY REQUIREMENTS</u>		
1) When was the change in requirements (function, mission) known?		
2) If known before construction bidding, why were the needed changes excluded from the bid package?		
3) What quantitative impact would the lack of this change have on the mission or service provided by the agency?		
4) Why can the work not be packaged and bid separately?		
By: _____ Date _____		
Agency Representative		

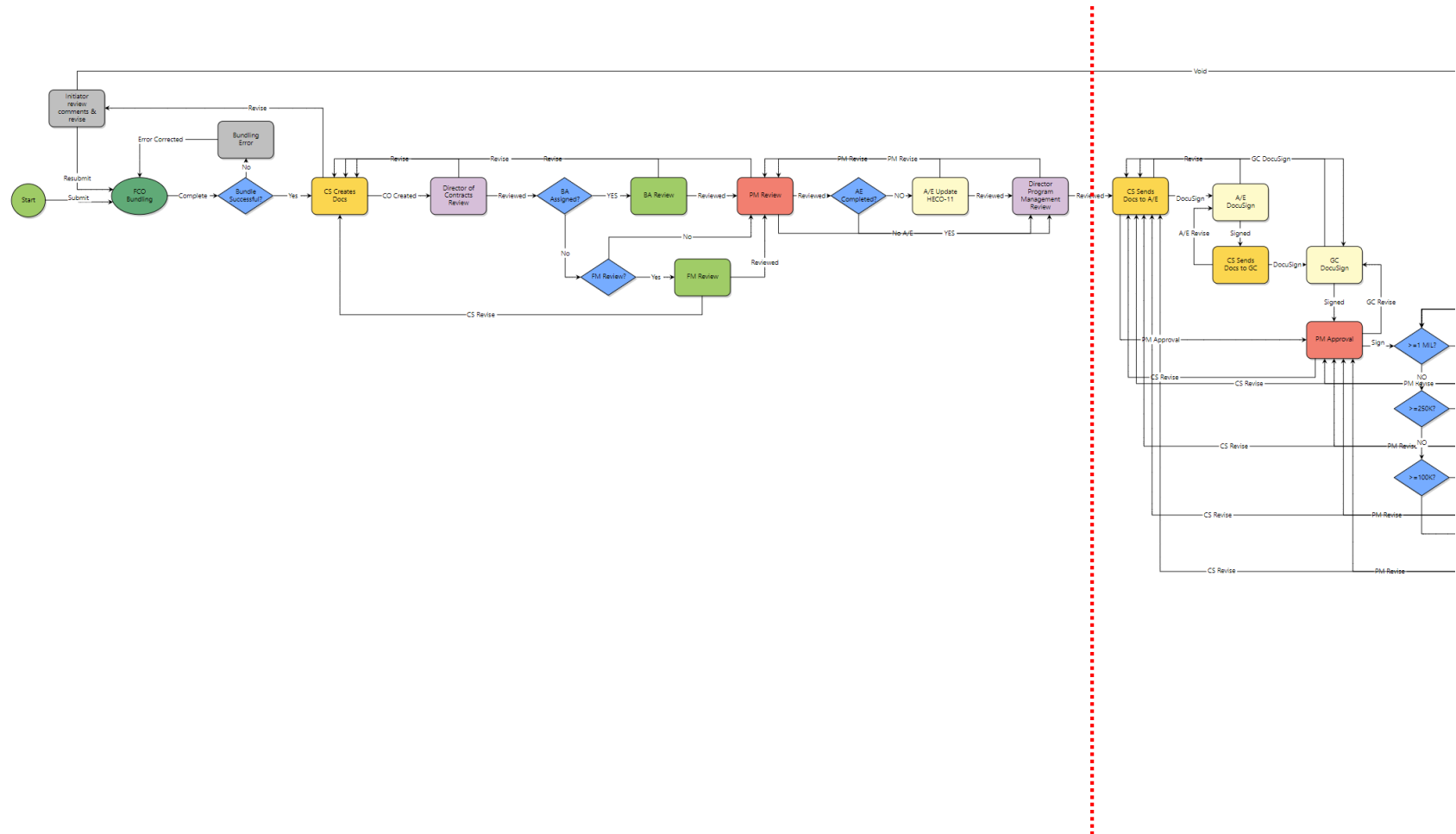
If "No" identify

- If Correction resulted in a Betterment
- Current % Status for all Errors and Omissions to date

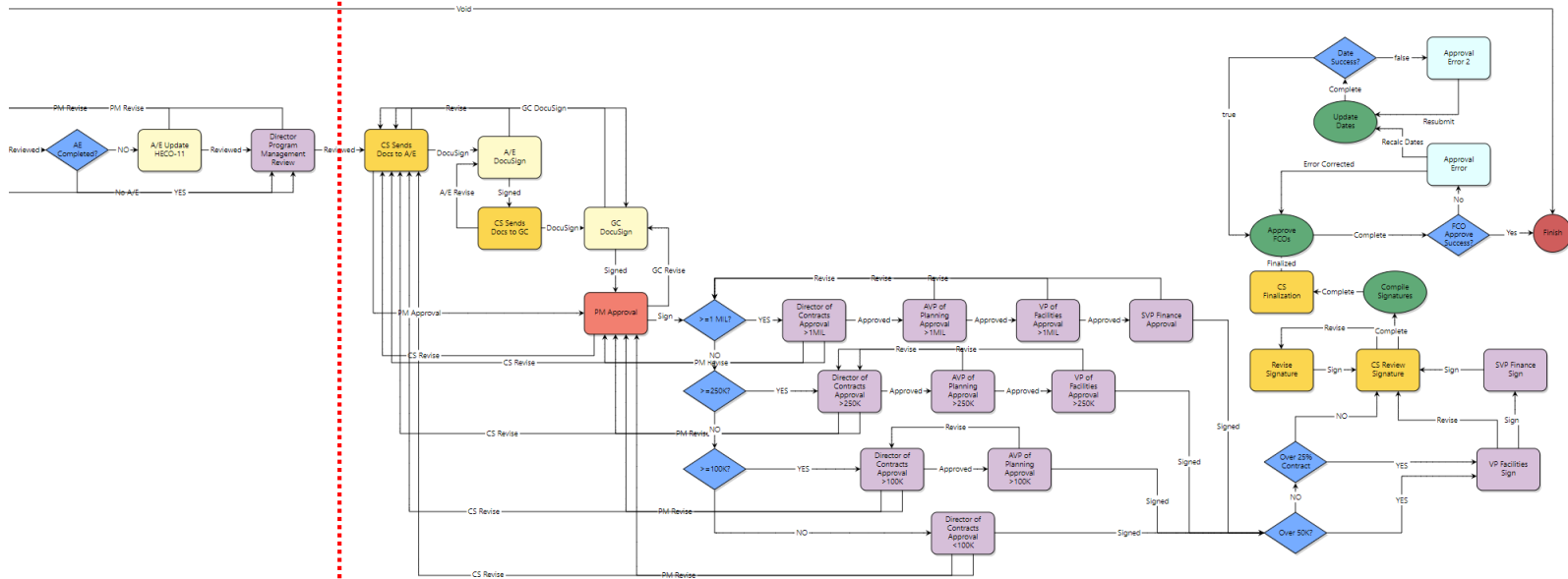
E-BUILDER WORKFLOW



CHANGE ORDER E-BUILDER WORKFLOW



CHANGE ORDER E-BUILDER WORKFLOW



THANK YOU

