

CHANGE ORDERS AND LETTERS OF AUTHORIZATION

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OVERVIEW

This chapter provides guidance on the preparation of Change Orders and Letters of Authorization (LOA) documentation and the steps to successfully execute them.

CHANGE ORDERS

NDOT has the right to modify a contract. Change Orders are the contractual methods to make changes and are required for changes to the character of the work, payment, specification and/or working days/completion dates. A Change Order is legally binding and becomes part of the contract. Just as the original plans and specifications define the scope, terms, and conditions of work to be done, the Change Order needs to define the same.

A Change Order is legally binding to the contractor and to NDOT, so it must be prepared with care. The required elements of a Change Order must be clear, concise, and unambiguous. A Change Order must be prepared so that a person not familiar with the modification can readily interpret scope, terms, and conditions of the work.

CHANGE ORDER TYPES

NDOT has 3 Change Order types (General, Administrative and Prior) with 44 Change Order Reason Types (see the Change Order Reason Type list on the next page). Each type/reason covers a specific change to a contract.

General Change Orders include Reason Types 1 through 24. These Change Orders require a Cover Letter, cost justification (if applicable), and other various supporting documentation depending on their type. When extra work is part of the Change Order, a Record of Authorization To Proceed With Extra Work (form 040-002) is also required. These Change Orders must include signatures from the Resident Engineer, Contractor, District Engineer/Assistant District Engineer, Internal Division involved in the change, Chief of Construction, Assistant Chief of Construction, Assistant Director and FHWA (if applicable). DocuSign signature routing templates have been set up for each district and funding source for these Change Order types (refer to the Change Order Execution Workflow section in this chapter for details).

Administrative Change Orders include Reason Types 25 through 29. These Change Orders do NOT require a Cover Letter or a cost justification. They can have various supporting documentation depending on their type (e.g., calculation sheets, correspondence). Change Order Reason Types 25 and 27 must include signatures from the Resident Engineer, District Engineer/Assistant District Engineer, and Assistant Chief of Construction. A DocuSign signature routing template has been set up for the administrative Change Order types 25 and 27 (refer to the Change Order Execution Workflow section in this chapter for details). Change Order types 26, 28 and 29 only require a signature from the Resident Engineer. A DocuSign signature routing template has been set up for the administrative Change Order types 28 - 29 (refer to the Change Order Execution Workflow section in this chapter for details). The Close Out Change Order (Reason Type 26) is created by the Resident Engineer and left in DRAFT status. Construction Admin Services staff review and approve this type of Change Order. Change Order type 30 - HQ Administrative is reserved for Construction Admin Services staff use only.

Types 901 through 924 are Prior Change Orders. These Change Orders require a Cover Letter, cost justification (if applicable), and other various supporting documentation depending on their type. A Prior Change Order allows for payment for items of work, when the overall amount of work is not precisely known. They do require an additional Change Order to be created to finalize the quantity(s) for the work performed. These Change Orders must include signatures from the Resident Engineer, Contractor, District Engineer/Assistant District Engineer, Internal division involved in the change (if applicable), Chief of Construction, Assistant Chief of Construction, Assistant Director and FHWA (if applicable). DocuSign signature routing templates have been set based on the funding source for these Change Order types (refer to the Change Order Execution Workflow section in this chapter for details).

CHANGE ORDER REASON TYPE LIST

- 01 - Errors or Omissions
- 02 - Construction Stakeout Errors
- 03 - Utilities Conflicts
- 04 - Traffic Control (Temporary conditions - striping, pavement markings, phasing changes)
- 05 - ITS Changes or Additions (Signals, lighting, permanent signs and electrical)
- 06 - Roadway Changes
- 07 - Fencing / Right of Way (Gates, change of access)
- 08 - Drainage (Pipe extensions, DIs, RCB, anything underground)
- 09 - Structural Items
- 10 - Material and Testing (Alternate pits, if existing pit to materials only, materials, lime treatment, sieve changes, test methods, material spec changes)
- 11 - Safety and Traffic (Permanent conditions - guardrail, barrier rail, guideposts, striping, pavement markings)
- 12 - Specifications Changes (No materials or traffic control phasing)
- 13 - Miscellaneous
- 14 - Flaggers
- 15 - Non-Specification Material Allowed to Remain in Place
- 16 - Claims
- 17 - Dispute Resolution
- 18 - Value Added Work
- 20 - Landscape & Aesthetic Treatments
- 21 - VEP: Value Engineering Proposal
- 22 - Stormwater
- 24 - Environmental
- 25 - Adjusting Incentive / Disincentive (Crew Administrative)
- 26 - Contract Closeout (Crew Administrative) (HQ reviews and processes)
- 27 - Quantity Overrun (Crew Administrative) (This applies to any item major item (\$50,000 or greater) with a quantity change over \$100,000 or 100% of the original bid amount)
- 28 - Reducing Escalation Quantity (Crew Administrative)
- 29 - Category Adjustment (Crew Administrative)
- 30 - HQ Administrative (**HQ Admin ONLY**)
- 901 - Prior - Errors or Omissions on Plans
- 903 - Prior - Utilities Conflicts
- 904 - Prior - Traffic Control (Temporary conditions - striping, pavement markings, phasing changes)
- 905 - Prior - ITS Changes or Additions (Signals, lighting, permanent signs and electrical)
- 906 - Prior - Roadway Changes
- 907 - Prior - Fencing / Right of Way (Gates, change of access)
- 908 - Prior - Drainage (Pipe extensions, DIs, RCB, anything underground)
- 909 - Prior - Structural Items
- 911 - Prior - Safety and Traffic (Permanent conditions - guardrail, barrier rail, guideposts, striping, pavement markings)
- 913 - Prior - Miscellaneous
- 914 - Prior - Flaggers
- 918 - Prior - Value added work
- 920 - Prior - Landscape & Aesthetic Treatments
- 921 - Prior - VEP: Value Engineering Proposal
- 922 - Prior - Stormwater
- 924 - Prior - Environmental

ESSENTIAL ELEMENTS OF CHANGE ORDERS

Change Orders include the following elements (depending on the type):

- Record of Authorization To Proceed With Extra Work, (form 040-002 Rev. 1/22)
- Cover Letter - Description of the work to be performed
- Independent Cost Analysis/Cost of the work
- Method of payment and time to complete the work
- Appropriate signatures

GUIDANCE FOR COMPLETING CHANGE ORDER DOCUMENTATION

RECORD OF AUTHORIZATION TO PROCEED WITH EXTRA WORK FORM

If a Change Order is necessary to add extra work that was not anticipated to a contract, the Resident Engineer or District Engineer will complete a Record of Authorization To Proceed With Extra Work, form 040-002 Rev. 1/22 (Figure 3-1), and submit it to the Chief Construction Engineer. The form is located on the NDOT Website [Construction Forms](#) Area.

- Identify the contract number and the project number.
- Identify the Change Order number that will be assigned to the change order.
- Identify the requester of the Change Order. If request is not coming from a Division Head, make sure the requester has the appropriate commitment authority as per the [Construction Manual](#), Chapter 2 - Contract Administration, page 48.
- Date on form should be the date of the Change Order Request Memo from the Division Head.
- Give a detailed description of the additional work and explain why it is necessary.
- Indicate the estimated change in cost to the contract by checking the appropriate box.
- Indicate whether there will be an increase, a decrease, or no change in Working Days by checking the appropriate box.
- Indicate the method of payment by checking the appropriate box or boxes.
- When the form is completed, print the report to a PDF file, and save to the appropriate Contract Files\Contract\05 CO\5.1 CO No. directory. The file name must contain the contract ID and the Change Order number. Upload the completed form to DocuSign for signatures using the appropriate template. The Resident Engineer, District Engineer, Construction Engineer must sign. If cost is projected to be more than \$250,000.00 the Director's Office must sign as well.

STATE OF NEVADA Sheet 1 of 1
 DEPARTMENT OF TRANSPORTATION
RECORD OF AUTHORIZATION TO PROCEED WITH EXTRA WORK

CONTRACT NO.: 3821 PROJECT NO(S):: 74043
 CHANGE ORDER NO.: 6 REQUESTOR: Rod Schilling, P.E., Chief Traff.Ops. Engineer 1/28/2022
(NAME, TITLE, COMPANY/DIVISION) DATE

NATURE AND REASON FOR PROPOSED REVISION

(Include a description of the additional work and why it is necessary.)

During the bid item repair of delamination and spalling in the bridge deck of structure G-1864, the contractor damaged conduit and conductor wire in the northbound lanes near "P" 13+22. It was determined that preformed signal loops were installed just above top mat of reinforcement in the original bridge deck for advanced detection for northbound McCarran for the signal system at 4th St. and McCarran Blvd. These loops were not identified in the contract plans.

After discussion with the City of Reno, Traffic Ops., Structural Design and the Contractor, it was agreed that instead of replacing these loops, a camera detection system should be installed for the detection at this intersection due to the potential for future damage to the bridge deck from spalling and delamination.

Payment will be made by adding a new Lump Sum Extra Work pay item at a negotiated price.

ESTIMATED CHANGE TO CONTRACT: UNDER \$125,000.00 \$125,000.01 - \$250,000.00 \$250,000.01 - \$375,000.00 *
CHECK ONE BOX: *REQUIRES DIRECTOR'S OFFICE SIGNATURE \$375,000.01 - \$500,000.00 * \$500,000.01 AND ABOVE *

ESTIMATED CHANGE TO WORKING DAYS: _____ INCREASE DECREASE NONE
FILL IN AND CHECK ONE BOX: DAYS

METHOD OF PAYMENT: CHECK ALL BOXES THAT APPLY: UNIT BID PRICE(S) FORCE ACCOUNT NEGOTIATED PRICE LUMP SUM

RESIDENT ENGINEER: Andrew Lawrence, P.E., R.E. C905 1/28/2022
OR AUTHORIZED REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED FOR ALL

DISTRICT ENGINEER: _____
OR AUTHORIZED REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED FOR ALL

CONSTRUCTION ENGINEER: _____
OR AUTHORIZED REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED FOR ALL

DIRECTOR'S OFFICE: _____
DEPUTY DIRECTOR - PROJECT DELIVERY OR AUTH. REPRESENTATIVE PRINT NAME & TITLE SIGNATURE DATE *REQUIRED ONLY FOR AMOUNTS OVER \$250,000.00

NDOT 040-002
 Rev. 1/22

Distribution: Construction Division, District, Resident Engineer

Figure 3-1: Record of Authorization To Proceed With Additional Work Form

COVER LETTER

Cover Letters are required except when processing an administrative type Change Order. The following is guidance on composing a Change Order Cover Letter:

- Use Department, District specific letterhead.
- Include the date the letter was composed.
- Address the letter to the Deputy Director-Engineering, ATTN: to the Chief Construction Engineer.
- Include the contract and federal/state project number(s).
- Add the location and project description from the front of the Special Provisions.
- Include the Change Order Reason description and the Reason Type #, e.g., Errors or Omissions - Reason Type 01.
- Clearly explain the change and what it involves for an audience who is seeing it for the first time, e.g., New added work, Specification change Revising the plans, etc. Can a person without any knowledge of the Change Order understand why the change is needed?
- The main body of the letter should address what and where the problem is and what the solution is if any revised plan sheets have been provided or new or revised specifications.
- Identify who (the name of the person, title, and Division, e.g., Design, Materials, Construction, District, etc.) requested the Change Order.
- Identify who (the name of the person, title, and Division, e.g., Design, Materials, Construction, District, etc.) was consulted about the Change Order. Don't refer to conversations/concurrences if the conversations/concurrences didn't take place.
- The letter needs to state whether there is an increase or decrease in cost. If no cost increase, state that as well.
- Discuss how the Change Order will be paid, e.g., existing bid items, new items, the total dollar amount, and what Category it will be paid in.
- The letter needs to state whether additional working days are going to be granted. If the Change Order increases or decreases working days (or milestone dates), a detailed explanation with backup is needed, e.g., schedule impact analysis from the Contractor.
- Third-party agreements should be mentioned if work is being done for a third-party entity and need to be amended if the language does not exist in the agreement to cover the added expense.
- If the project is a Project of Divisional Interest, PODI, the only way a specification change can be made is if it meets one of three criteria. Use the following exact language in the letter:
 - "The Specification, as written, is impossible or impractical to comply with."
 - "A product of equal in all respects to the one specified can be furnished at a savings to the contract."
 - "A product superior to one specified can be furnished at no increase in cost."
- If a Prior Change Order has been executed, the cover letter must address the Prior and any changes not addressed in the Prior that are being covered with the follow-up Change Order.
- The cover letter will be distributed to the DocuSign Distribution list and saved to the Contract Files\05 CO\5.# CO No. directory. The file name must contain the contract ID and the Change Order number.

COST JUSTIFICATION

Adequate cost justification must be provided with Change Orders except when processing an Administrative type Change Order. Cost justifications explain why the price is reasonable or justified. Each cost element needs to be assigned to the appropriate category (AEB). The exception would be Type 27 Overrun and Administrative Type Change Orders. They require a detailed explanation of why the overrun occurred.

The most common methods of cost justification include:

- Reference the historical bid price found in the integrated Project Development (iPD) program. The iPD program is accessed using the [E-Bid-ding log-in](#) link located in the Applications area in SharePoint.
- Similar scope of work on other contracts
- Invoices
- Third Party Quotes from an independent source
- Independent cost analysis (Cost Analysis form) (Figure 3-2)
- The method of payment needs to be identified whether it be force account, agreed lump sum, agreed unit price or individual bid items.

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CHANGE ORDERS AND LETTERS OF AUTHORIZATION

When preparing a Cost Analysis form for a Change Order, the Resident Engineer should follow these guidelines:

- Use prevailing wage rates for labor and the current Labor Surcharge from when the work is being performed.
- Use EquipmentWatch for hourly equipment rates (attach EquipmentWatch report, refer to Chapter 4, Force Account, in this manual for details)
- Use invoice/quote for materials (attach invoice/quote)
- Ensure the correct markup has been applied. Subcontract work is limited to 5% on pass through work the contractor does not complete. Labor, Equipment and Material are up to 20% at the RE's discretion during negotiation with the contractor. Refer to Subsections 104.03, (Scope of Work) Extra Work, and 109.03(d), (Measurement and Payment) Force Account Work (Subcontracted Work), of the Standard Specifications.
- All cost justification files will be saved to the appropriate Contract Files\Contract\05 CO\5.# CO No directory. The file name must contain the contract ID and the Change Order number.

CONTRACT NO.: 3585		STATE OF NEVADA DEPARTMENT OF TRANSPORTATION				DATE: 02/01/2017				
IN REFERENCE TO: Change Order 06 (LOA or CM #)		COST ANALYSIS				SHEET 1 OF 1				
DESCRIPTION OF WORK: Install head wall not included in plans										
CATG NO.: 1										
LABOR				EQUIPMENT				MATERIAL		
Classification	Hours	Pay Rate	Amount	Description	Hours	Rate	Amount	Description	Inv/Quote#	Amount
Operator	8.00	\$ 19.50	\$ 156.00	1995 773B Cat haul truck	8.00	\$ 25.60	\$ 204.80	Joe's Concrete	162201	\$ 470.00
Laborer	8.50	\$ 10.00	\$ 85.00	2017 F-250 Flat bed	2.00	\$ 15.20	\$ 30.40	Home Depot		\$ 200.70
Mason	2.00	\$ 17.00	\$ 34.00	2000 Chevy 3/4 ton pu	8.00	\$ 10.20	\$ 81.60	CMI Material	20160	\$ 4,200.00
Carpenter	8.00	\$ 12.50	\$ 100.00	2001 69b Excavator	8.00	\$ 22.30	\$ 178.40			\$ 0.00
Truck driver	4.00	\$ 22.00	\$ 88.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
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			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
			\$ 0.00				\$ 0.00			\$ 0.00
Total payroll.....			\$ 463.00	Subtotal.....			\$ 495.20	Subtotal.....		\$ 4,870.70
Labor Surcharge @.....		21.39%	\$ 99.04	+ 20.00% on equipment costs.....			\$ 99.04	+ 0.00% on material costs.....		\$ 0.00
Fringe Benefits @.....	\$ 3.00 /hr for	8.50 hrs	\$ 25.50	TOTAL COST OF EQUIPMENT (B)			\$ 594.24	+ 0.00% Sales Tax (if paid).....		\$ 0.00
Fringe Benefits @.....	\$ 4.20 /hr for	10.00 hrs	\$ 42.00					TOTAL COST OF MATERIALS (C)		\$ 4,870.70
Fringe Benefits @.....	\$ 5.60 /hr for	12.00 hrs	\$ 67.20							
Fringe Benefits @.....	\$ 0.00 /hr for	0.00 hrs	\$ 0.00							
Subtotal.....			\$ 696.74					GRAND TOTAL (A+B+C)		\$ 6,301.02
+ 20.00% on all labor costs.....			\$ 139.35					Use Agreed Price		\$ 4,000.00
TOTAL COSTS OF LABOR (A)			\$ 836.08							

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Figure 3-2: Cost Analysis Form

CHANGE ORDER AWP ENTRIES

Details for generating and approving a Change Order are found in Chapter 8, Change Orders, of the [AWP User Guide With Materials](#).

The following is guidance for completing ALL Change Orders:

- The person requesting the Change Order will be identified in the Requestor field .
- The Supp Explanation in the Change Order Explanations area should only include changes to the contract. It should not be a repeat of the cover letter. It should clearly describe the scope of the change and direction to the contractor, including location and limits, specification lan-

guage change (additions or deletions), plan changes including the plan sheets affected. Include the payment method, such as bid prices, Force Account, Agreed Prices or Lump Sum. If the scope of the change has multiple elements, describe each element separately.

- The cost increase/decrease with associated quantities must be included.
- Any specification language change (additions or deletions), plan changes including the plan sheets, stations, locations, and Justification for costs, etc., will be added to the Explanation field in the Change Order item record.
- If additional days are granted, and the contract has lump sum prorated items (traffic control, temporary pollution control, dust control, etc.) and/or items paid by the day (traffic control supervisor, time related overhead, etc.) the Change Order shall increase these items accordingly. Guidance can be provided by the Assistant Construction Engineers as needed.
- The impact of time, or added working days, should be stated on the Change Order. If no working days are added, the Change Order should state so. The explanation of time impact should be addressed on the cover letter, not in the Change Order. An independent analysis to support the time extension must be performed and a copy of the new schedule will be included in the Change Order supporting documentation.
- The last Change Order Explanation record must include the Accord and Satisfaction Clause on all General Change Orders.
- The last Change Order Explanation record must include the Prior Clause on all Prior Change Orders. The following language must be included in the Supp Explanation field:
 - Change Order #__ will be generated to complete and finalize the quantities and associated payment."

OTHER SUPPORTING DOCUMENTS

The following is a list of supporting documentation/correspondence that must accompany the Change Order when the Change Order is submitted to the appropriate Assistant Construction Engineer and Construction Admin Services staff for review (as applicable):

- Record of Authorization To Proceed With Extra Work (form 040-002)
- Email correspondence
- Change Order Request Memo and Construction Division concurrence
- Calculation sheets
- Third Party Agreements
- Independent Cost Analysis
- Late Payroll Determinations
- Affirming Orders
- Failing Test Reports

These files will be saved to the appropriate Contract Files\Contract\05 CO\5.# CO No. directory. The file names must contain the contract ID and the Change Order number.

CHANGE ORDER EXECUTION WORKFLOW

The following is guidance for executing ALL Change Orders.

1. Determine if the contract is an FHWA Project of Divisional Interest (PoDI) project. If so, then complete the [FHWA Pre-Authorization form](#) (FHWA-1365) as necessary for the Change Order and route through DocuSign for approvals. If not, then proceed to step 2.
2. Create the appropriate supporting documentation required for the Change Order (authorization form, cover letter, cost justification, etc.)
3. Create the AWP Change Order. Refer to Chapter 8, Change Orders, Section, Steps To Create a Change Order, of the [AWP User Guide With Materials](#).
4. Send an email to the appropriate Construction Admin Services staff requesting the creation of a SharePoint Change Order review directory.
5. Copy all supporting documentation files to the SharePoint review directory. When all files have been copied, email the appropriate Assistant Construction Chief and the appropriate Construction Admin Services staff letting them know they can start their review.
6. The Construction Division will review the AWP Change Order information and the supporting documentation for the following items and work with the Resident Engineer on necessary revisions.
 - a. Assistant Construction Chief review for the following:
 - i. Request memo from the requesting division with concurrence and guidelines from Construction.
 - ii. Verify that scope, corresponding days and costs, seem reasonable.
 - iii. Completeness of contractual documents to include a clearly defined change.

- b. Construction Admin Services staff will review for the following:
 - i. Verify Change Order type and Change Order reason.
 - ii. Review for completeness to ensure document meets FHWA requirements.
 - iii. Review estimate of costs and justification for reasonableness.
 - iv. If reviewing a Change Order with associated Prior Approval, verify that the dollar amount is accurate.
7. Assistant Construction Engineer will notify the Resident Engineer that the review of all packet information is complete and the Change Order is ready for processing.
8. Generate the AWP Change Order report. Refer to Chapter 8, Change Orders, Section, Change Order Report Generation, in the [AWP User Guide With Materials](#). Print the report to a PDF file, and save to the appropriate Contract\Contract Files\05 CO\5.# CO No. directory. The file name must contain the contract ID and the Change Order number.
9. Log on to DocuSign and create a NEW envelope. Upload the Cover Letter (if applicable), AWP Change Order report and plan sheets. Refer to the [How to Send an AWP Change Order in DocuSign using a Template](#) guide for details.
10. Use the appropriate template.
 - a. District 1 DocuSign templates:
 - i. Const Admin - D1, CO, FHWA Funding
 - ii. Const Admin - D1, CO, State Funding
 - b. District 2 DocuSign templates:
 - i. Const Admin - D2, CO, FHWA Funding
 - ii. Const Admin - D2, CO, State Funding
 - c. District 3 DocuSign templates:
 - i. Const Admin - D3, CO, FHWA Funding
 - ii. Const Admin - D3, CO, State Funding
 - d. Shared DocuSign templates:
 - i. Const Admin - D1, D2, D3, CO, Admin Types 25 & 27
 - ii. Const Admin - D1, D2, D3, CO, Admin Types 28 - 35
 - iii. Const Admin - D1, D2, D3, CO, FHWA Prior
 - iv. Const Admin - D1, D2, D3, CO, State Prior

Note: Construction Admin Services staff route the Change Order to the appropriate staff, divisions and FHWA (if appropriate) after the Resident Engineer has signed.

11. Once the Change Order has been routed through all required signers the originator of the DocuSign envelope will receive an email from DocuSign. This email contains attached PDF copy of the signed (executed) Change Order. Save the executed (signed) AWP Change Order PDF file to the appropriate Contract Files\Contract\05 CO\5.# CO No. directory. The file name must contain the contract ID, the Change Order number, and the executed date.

Note: If this Change Order is part of a Prior, make sure to attach the executed Prior PDF file to the associated Change Order as backup documentation.

12. Attach the executed AWP Change Order report and Cover Letter (if appropriate) to the AWP Change Order. Refer to Chapter 8, Change Orders, Section, Approving a Change Order, in the [AWP User Guide With Materials](#).
13. Resident Engineer approves the Change Order. Refer to Chapter 8, Change Orders, Section, Approving a Change Order in the [AWP User Guide With Materials](#).

Important: When adding a NEW category (AEB) through a Change Order, DO NOT approve the Change Order in AWP until a notification from Construction Admin Services is received stating that the new category (AEB) has been funded.

Important: If the Approved Change Order added a new bid item and/or increased an existing bid and the item(s) Current Extended Amount (current quantity x item unit price) is \$50,000 or more then the item(s) MUST be marked as a Major item. Refer to the [AWP User Guide With Materials](#), Chapter 4, Contract Items, Section, Marking a Contract Item As a Major Item, for details.

Note: Contact the Construction Admin Services Section staff or the Assistant Construction Engineer with questions.

CHANGE ORDER EXAMPLES

Refer to [Change Order Examples](#) in the Construction Crew Portal of the Construction Division SharePoint for various examples of completed Change Orders.

LETTERS OF AUTHORIZATION (LOA)

Occasionally minor construction items, not anticipated in the original scope of a contract, must be completed on a project. These minor construction items are incidental construction items, which do not have bid items, and is a means to compensate the contractor for incidental construction items. The Resident Engineer can pay for these incidental construction items with a Letter of Authorization (LOA).

The following are the Resident Engineer's limitations on Letters of Authorization:

- The spending limit per incident is set at \$15,000.
- The cumulative total of incidental construction items cannot exceed the amount programmed for the contract.
- Multiple LOAs cannot be written to cover the same issue, (i.e., the same thing multiple times or multiple LOAs to achieve one goal).

ESSENTIAL ELEMENTS OF AN LOA

The Letter of Authorization must contain the following information:


- Contract number and project number
- Letter of Authorization number (numbered consecutively beginning with 1)
- Date of authorization
- Reason for work
- Description of work
- Cost of work
 - Cost justification for work:
 - The Resident Engineer prepares an independent cost analysis of the contractor's cost estimate and compares the two. Any significant differences are resolved with the contractor. Refer to the Cost Justification Section in this chapter for additional information on preparing a cost analysis.
 - Include the cumulative total of incidental funds used on project, expressed as a dollar amount and cumulative amount of incidental funds used compared to incidental funds budgeted, expressed as a percentage.
- Signature of contractor and Resident Engineer.

LOA EXECUTION WORKFLOW

1. Complete LOA and all supporting documentation (e.g., Independent Cost Analysis, invoices).
2. Send to HQ Construction Admin Section, requesting a review.
3. Log on to DocuSign and create a NEW envelope. Upload the LOA and supporting documents. Route to the Resident Engineer and Contractor for signature.
4. Once the LOA has been routed through all required signers, the originator of the DocuSign envelope will receive an email from DocuSign. This email contains attached PDF files of the signed (executed) LOA and supporting documents. Save the LOA and all supporting documents in the appropriate Contract Files\Contract\07 Estimates\7.# LOA) directory.
5. The Resident Engineer sends copies of signed LOA and supporting documents to the District and Construction Division.
6. Create a DWR in AWP, Posting to item 7360040 - Incidental Construction, for the amount authorized in the LOA.

LOA AND SUPPORTING DOCUMENTATION EXAMPLE

The following is an example of an LOA and supporting documentation (Figure 3-12 through Figure 3-14):

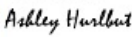
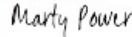
 STEVE SISOLAK, Governor	STATE OF NEVADA DEPARTMENT OF TRANSPORTATION District II 310 Galletti Way Sparks, Nevada 89431 775-888-7899 May 15, 2019	Kristina Swallow, P.E., Director
	Granite Construction 1900 Glendale Ave Sparks, NV 89431 Attention: Marty Powers, Project Manager	Contract No. 3745 Project No. NHP-050-2(016) Letter of Authorization 02 Hydraulic Facility Sediment Removal

Reference is made to Contract No. 3745, Project No. NHP-050-2(016), On US 50, Lyon County, from Roy's Road to the Junction with US 95A.

This Letter of Authorization is being written to address the compensation due to Granite Construction, for the work performed to remove sediment in and around the double reinforced concrete box hydraulic facility that crosses US 50 located at "X2" 1545+46. Granite Construction rain gage recorded a precipitation total of 1.04 inches on Wednesday, February 13, 2019 and 0.58 inch on Thursday, February 14, 2019. The total storm event precipitation depth was 1.62 inches over the 48 hour period. Based on National Oceanic and Atmospheric Administration (NOAA) precipitation frequency estimates the 24 hour duration equates to a 2 year storm and the 48 hour total equates to a 10 year storm. Proper BMP's, consisting of two rows of sediment logs located at the inlet, were installed prior to the storm event in an effort to minimize storm water runoff resulting in sediment deposits. In addition to the precipitation totals onsite, there was significant storm water run-on that was generated offsite. Due to the severity of this storm and the addition of offsite run-on, a significant amount of sediment overwhelmed the BMP's and was deposited in the double reinforced concrete box which filled the majority of the hydraulic facility resulting in it being nonfunctional. Granite Construction contracted Badger Daylighting Corporation to assist with storm cleanup. The work consisted of the cleaning of the double reinforced concrete box and the removal of sediment 20 feet past both the inlet and outlet.

Payment will be made under Bid Item 736 0040 INCIDENTAL CONSTRUCTION (LS) in the amount of \$14,166.88 on AEB 04, as shown on the attached Cost Analysis sheet, and should be considered full compensation for the work.

Please signify your concurrence to perform this work at the lump sum unit price in the amount of \$14,166.88 by signing below. No additional working days shall be allotted for the performance of this concurrent work.

Approved:	Concur:
DocuSigned by:  <hr/> Ashley Hurlbut, P.E. Resident Engineer	DocuSigned by:  <hr/> Marty Powers Project Manager
05/16/2019 <hr/> Date	05/16/2019 <hr/> Date

Increased Cost for this Letter of Authorization: \$14,166.88
 Cumulative Amount of Letters of Authorization to Date: \$15,476.40
 Incidental Construction Bid Amount: \$150,000.00
 Cumulative Amount Used Compared to Budgeted Amount to Date: 10.32%

ASH:ssst

Figure 3-3: Example of an LOA

CONTRACT NO.: 3745 DATE: 2/26/19 to 3/1/19
 IN REFERENCE TO: LOA 02 SHEET 2 OF 7
(LOA #) COST ANALYSIS
 DESCRIPTION OF WORK: Remove sediment from existing double reinforced concrete box that crosses US 50 at "X2" 1545+46 (AEB 04)

LABOR				EQUIPMENT				INVOICE			
Classification	Hours	Pay Rate	Amount	Description	Hours	Rate	Amount	Description	Invoice #	Amount	
Foreman Operator	4.00	\$ 37.26	\$ 149.04	CAT 328 Excavator	4.00	\$ 142.59	\$ 570.36	2/26/19 Badger Daylighting	00917474	\$ 3,473.25	
								2/27/19 Badger Daylighting	00989954	\$ 2,778.60	
								2/28/19 Badger Daylighting	00989960	\$ 2,778.60	
								3/1/19 Badger Daylighting	00989990	\$ 3,473.25	
Total payroll			\$ 149.04	Subtotal	\$ 570.36			Subtotal	\$ 12,503.70		
Labor Surcharge @ 21.34%			\$ 31.81	+ 20 % on equipment costs	\$ 114.07			+ 5% on invoice costs	\$ 625.19		
Fringe Benefits @ 25.50 /hr			\$ 102.00	TOTAL COST OF EQUIPMENT	(B) \$ 684.43			Sales Tax (if paid)	\$		
Fringe Benefits @ /hr				TOTAL COST OF INVOICES	(C) \$			GRAND TOTAL (A+B+C)		\$ 14,166.08	
Fringe Benefits @ /hr											
Fringe Benefits @ /hr											
Subtotal			\$ 282.85								
+ 25 % on all labor costs			\$ 70.71								
TOTAL COSTS OF LABOR (A)			\$ 353.56								

Figure 3-4: Example of an LOA Cost Analysis Form

TKT00989954



Badger Daylighting Corp
 75 Remittance Drive Suite 3185
 Chicago, Illinois, United States, 60675-3185
 Ph: (877) 3BADGER Fax: (877) 741-3134
 Email: AR Dept

Contract No. 3745
 LOA 02
 Sheet 4 of 7

Billed To: GRANITE CONSTRUCTION-SPARKS
 1900 GLENDALE AVE
 SPARKS NV 89431

Job Number J00587355
Ticket Date: 02/27/2019
Paper Ticket #:

Job Location US50 LY 19.90 to LY 29.44
Company: Badger Daylighting Corp Select Truck
Job Name/#: US50 CULVERT - Hydrovac
Area RENO NV CORP

PO: 846169
Project Name/AFE:
Customer Rep: MARTY POWERS
Customer Rep #: 775-233-5025
Industry GOVERNMENT PROPERTY - FED

Ticket Items

Item	Unit # / Personnel	Quantity	U of M	Rate	Amount
HYDROVAC 2 MAN CREW - HOURLY - 01 STANDARD RATE	1236, HYDROVAC	8.00	HR	330.00	2,640.00
FUEL RECOVERY FEE %	1236, HYDROVAC	2,640.00	PCNT	5.25%	138.80
TIME-41-TRAVEL TO SITE	RAYAS CERVANTES, RAFAE	0.00	HR	0.00	0.00
TIME-41-TRAVEL TO SITE	DAVIS, RODNEY	0.00	HR	0.00	0.00
TIME-41-TRAVEL TO SITE	VASCO, DANIEL	0.00	HR	0.00	0.00
TIME-01-OPERATOR 1-DAY SHIFT	VASCO, DANIEL	0.00	HR	0.00	0.00
TIME-01-OPERATOR 1-DAY SHIFT	RAYAS CERVANTES, RAFAE	0.00	HR	0.00	0.00
TIME-01-OPERATOR 1-DAY SHIFT	DAVIS, RODNEY	0.00	HR	0.00	0.00

From LSD
 To LSD

Total 2,778.60

Approved By:

Taxes included if applicable.

Work Order #1

Figure 3-5: Example of an LOA Cost Justification Invoice

Refer to the [Construction Administrative Services Document Resources](#) area for an LOA template.