

Change Orders/Force Account/Work By Public Forces

Changes to the contract are addressed in Sections 00140.30 through 00140.60 and 00195.20 through 00195.40. Extra Work is also addressed in Section 00196 and payment for work done on a force account basis is addressed in Section 00197. In some situations, work may need to be accomplished by Agency, other public, utility forces, or railroads, even though it is paid with project funds.

If, during the project development process, the Project Manager identifies work that should be performed as part of the project, the Project Manager should initiate action to include a bid item in the project for the work, if the work can be defined and quantified. If the work cannot be defined and quantified, the Project Manager should request that an Additional Anticipated Item be included in the project. Also refer to the Project Authorization section (5) of this Manual.

Whenever the Project Manager orders work to be done under a Contract Change Order or on a force account basis, the Project Manager must assure that the quality of the affected materials is appropriately documented. Refer to the Quality section (12-B) of this Manual.

This section has two general areas of discussion:

1. A discussion of the types of work that change work or add work to projects
2. A discussion of the three change orders used to change or add work to projects, required supporting documentation, and the change order database

Types of Work

1. Changed Work:

A change to the project work can be classed as either insignificant or significant, as addressed in Section 00195.20. Changes do not include any work that is classed as Extra Work, as defined below. Following is a short discussion of each of those terms.

a. Insignificant changes: These are addressed in Section 00195.20(a) and include minor variations in bid quantities that do not change the unit cost of the work to be done. That section also addresses how to administer changes in lump sum items when the contract specifies how to pay for changes to that lump sum item or if an estimated quantity is shown in the contract for a lump sum item. The Project Manager does not need to submit any kind of order to document these insignificant changes. The Project Manager, though, must prepare a source document to document the change to the lump sum pay item and make payment as an Adjustment (6000 series) item on the Pay Estimate, including a reference to the pay item*.

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If a lump sum item does not include an estimated quantity and the work under that item is changed, the Project Manager must make a fair and equitable adjustment (seek input and negotiate with the Contractor) and document it on a Contract Change Order (CCO), form 734-1169. Such process is similar to that for a significant change, as discussed below.

b. Significant changes: These are addressed in Section 00195.20(b) and include any changes to bid item or CCO work that change the unit cost of the work.

If any changes to the work have changed the unit cost of the work, the Project Manager must attempt to negotiate a value for the change in cost and issue a CCO*.

If that is ineffective, the Project Manager must determine a fair and equitable adjustment, either an increase or decrease, for the change in the unit cost and make the adjustment with a CCO. Obviously, the Project Manager should request any information from the Contractor that is needed to calculate the change in the unit cost.

The increase or decrease must be applied to the pay item price for the affected work. Use a CCO to implement the increase or decrease in price.

The Project Manager must justify any price to be paid or assessed on a CCO. Include a copy of that justification on or with the form 734-1882 submitted with the CCO. Remember that Section 00195.20(b) limits the value of any adjustment to the value determined by using rates in Section 00197 (force account).**

The Project Manager should perform an independent cost justification. It is preferred that the cost is justified on a time and materials basis using a force account evaluation and the rates specified in Section 00197, possibly on a Cost Estimate or similar form. For complex items, it may be more appropriate to also use the average bid costs for similar work. Contact the Cost Estimating Group in the Construction Contracting Unit for assistance.

Except in rare situations, the Project Manager must not order changed work to be performed on a force account basis. Contact the Contract Administration Engineer before doing that.

The quantities of some items, such as flagging, pilot car, temporary striping, and stripe removal, are limited to the bid quantity and the quantity of watering is limited to 125% of the bid quantity. Please read the specifications for each of

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those items to determine how to pay for any additional quantity that may need to be done. Also refer to the Quantities section (12-D) of this Manual.

The Project Manager has delegated authority to approve up to \$20,000 on authorized items (work required by the contract) or on minor change orders and up to \$10,000 on claim settlements or major change orders. The Project Manager must obtain the approval of FHWA and others for the major changes as specified in the Delegation of Authority section (3) of this Manual. The Region has delegated authority to approve up to \$100,000 on authorized items or minor changes and up to \$50,000 on claim settlements and major changes. The Construction Section can approve all other changes.

All dollar values of the delegated authorities are absolute values of all items on each change order. There are situations, however, where the value of the change is small but the magnitude or type of the change is significant. In those cases, the Project Manager must secure all approvals before proceeding with the changed work.

2. Extra Work:

Extra Work is defined and addressed in Section 00196. The type of work that can be classed as Extra Work and ordered to be performed on a force account basis is extremely limited by the definition of Extra Work.

If the Project Manager is able to negotiate a price for the Extra Work, pay for it on a CCO. If the Project Manager cannot negotiate a price for the Extra Work, the Project Manager must order the work to be performed under an Order For Extra Work To Be Performed On Force Account Basis. Section 00197 addresses payment and administration of that work.

As stated above, the Project Manager should not order changed work to be done on a force account basis, without the approval of the Contract Administration Engineer. Refer to the previous discussion on changed work.*

The Project Manager has delegated authority to approve up to \$20,000 on authorized items or minor changes and up to \$10,000 on major changes (changes include Extra Work). The Project Manager must obtain the approval of FHWA and others for the major changes as specified in the Delegation of Authority section (3) of this Manual. The Region has delegated authority to approve up to \$100,000 on authorized items and minor changes and up to \$50,000 on major changes. The Construction Section has authority to approve all others.

All dollar values of the delegated authorities are the absolute value of all items on each order. There are situations, however, where the value of the Extra Work

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may be small but the magnitude, type, or impact of the work is significant. In those cases, the Project Manager must secure all approvals before proceeding with the Extra work.

3. Force Work (work performed by public forces, utilities, or railroads):
Public forces can only perform work on contracts for one of the following reasons:

- It is an emergency. If it is an emergency, have the work performed in the most expedient manner possible.
- It is more cost effective to have public forces perform the work. The Project Manager must perform a cost effectiveness analysis and include it with the form 734-1882 accompanying the Order for Force Work. It is generally best to have the Contractor perform the work when possible.

Utilities and railroads will generally perform work on their facilities, or hire their own contractor for the work, unless the work is included in the contract as a bid item.

Prepare an Order for Force Work, to allow this type of work to be performed, if the project is to pay the costs of the work.

All Orders for Force Work are classed as Major changes to a project. The Project Manager must obtain approval of the proper authority as defined in the Delegation of Authority section (3) of this Manual. The Project Manager must also obtain the approval of FHWA on non-exempt projects for all Orders for Force Work.

The Project Manager has delegated authority to approve up to \$10,000 for major changes (changes include force work). The Region has delegated authority to approve up to \$50,000 for major changes. The Construction Section has authority to approve all others.

All dollar values of the delegated authorities are the absolute value of all items on each order.

Types of Change Orders

Following is a discussion of general requirements, the three types of change orders, the form to record supporting data for each change order, and the electronic* database to record information about each change order:

1. General Requirements

Complete and include a Work or Change Order Supporting Data, form 734-1882, with each order. See examples in Exhibits B, F, and H. Also refer to the discussion below.*

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If work on a change order will modify any of the design for the project, the Project Manager must consult with and obtain the approval of the designer or Engineer of record for that portion of the work. The Project Manager must list that approval on form 734-1882.

The Project Manager must prepare and submit each change order preferably before the work on the order starts. If work on the order must start before the Project Manager can submit the order, the Project Manager must obtain proper telephone approval to allow the work to start, must give detailed written instructions to the Contractor,* and must prepare and submit the change order soon thereafter. The Project Manager must record the prior approval on the form 734-1882 for the change order.

If work on an order must start before the order is written, the Project Manager must issue a written order to the Contractor or appropriate party stating:

- An accurate, detailed description of the work to be done, including specifications for needed materials and processes
- A description of how payment, under a CCO or EWO,* will be made and information recorded.

If work on an order or any other contract work will cause an overrun of the Project Authorization, the Project Manager must secure proper approval to overrun the Project Authorization or approval of a new Project Authorization before the Project Authorization is exceeded. Secure proper approvals of the Project Authorization before starting work on the change order, if work on the order will cause an overrun of the Project Authorization. Refer to the Project Authorization section (5) of this Manual.

The Construction Section must receive the fully executed change order before payment can be made for work on the change order. If the Contractor does not receive payment as described in the Prompt Payment/Claims Against Contractor's Bond section (26) of this Manual, ODOT may be responsible to pay interest. Such interest is not eligible for FHWA participation.* The Project Manager must also enter information about each* change order into the electronic change order database, as discussed later in this section.

2. Contract Change Order (CCO), form 734-1169

Prepare a CCO (see example in Exhibit A) when you have negotiated a price for changed work or Extra Work, or if you need to make a fair and equitable adjustment for changed work.

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This is like a mini-contract and ODOT must pay the unit price or lump sum price indicated on the CCO for each pay item. Grant additional contract time on the CCO if the work impacts the critical path for the project. Refer to the Contract Time section (13) of this Manual.

Since each CCO is a mini-contract, the CCO must include all information needed to accurately and precisely describe the work to be done and the method of measurement and payment. If revised or new drawings are needed for the CCO work, reference the drawings in the CCO or attach a copy to it. Clearly mark the attachments with the contract and CCO numbers.

Except for a CCO solely for adjusting contract time, the Project Manager should always try to obtain the Contractor's signature on a CCO for changed work. If the Contractor is unwilling to sign and the Project Manager cannot resolve the concern, the Project Manager should write "Unilateral" for the Contractor's signature, include the reason on the accompanying form 734-1882, and process the CCO.

If Extra Work is to be paid under a CCO, the Contractor must sign the CCO or the Project Manager must have the work performed under an EWO.

Include, on form 734-1882 or as an attachment, pertinent information on prior approvals, reason for why the work was necessary, calculation or analysis to justify the cost, and supporting information on any contract time granted on the change order.

The Project Manager may estimate the work cost to justify the value on a Cost Estimate, form 734-1877, (see Exhibit C), and Wage Determination, form 734-1870 (see Exhibit D), or may use other appropriate means to justify the costs. As stated in Section 00195.20(b), the amount paid for the work will not be more than the amount justified on the basis of rates given in Section 00197 (force account).

3. Order For Extra Work To Be Performed On Force Account Basis (EWO), form 734-3208

Prepare an EWO (see example in Exhibit E) when the Project Manager is not able to negotiate a price for Extra Work or when the Extra Work is too undefined to cover on a CCO by agreed price. Do NOT use an EWO for changed work, since changed work can only be paid by a CCO, unless specifically* approved by the Contract Administration Engineer.

Refer to the Extra Work Performed on a Force Account Basis section (12-G) of this Manual about recording information daily for the work, as well as about checking the Contractor's billings for the work.

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4. Order for Force Work (FO) form 734-1105

Prepare a FO (see example in Exhibit G) whenever public forces (other than engineering and contract administration forces), utilities, or railroads will be performing work that will be paid for by the project.

When public forces will perform work on a project and the work is not of an emergency type, the Project Manager must perform a cost effectiveness analysis to justify that it is more cost effective to perform the work with public forces. That analysis must be included with the FO, most likely on form 734-1882. It is generally best to have the Contractor perform the work, whenever possible.

Utilities, railroads, and public forces other than ODOT will submit a billing for their work when their work is done, or periodically for long term projects. The Project Manager must monitor the work in order to verify the billings for the work, when needed, and make payment, as required. Also refer to the Work Done By Utilities and Railroads section (24) of this Manual.

ODOT forces will charge their costs for FO work directly to the project in TEAMS, and the Project Manager must access that system to determine expenditures that must be entered into the Contract Payment system.

Notify Contract Services when FO work is complete. Refer to the Submittal of Final Project Documentation section (37) of this Manual.

5. Work or Change Order Supporting Data, form 734-1882

Prepare and submit this form (see examples in Exhibits B, F, and H) with each of the above three order forms. Information to be shown on this form includes the reasons why the work on the order was needed, as well as budget, prior approval, and other information. Also refer to discussion earlier in this section of this Manual.

The Project Manager must obtain approval of the proper authority, including FHWA when appropriate, before allowing any work to be done on an order. The Project Manager also must assure that the project has adequate funds to perform the work and must secure proper approvals of overrun or increase in the Project Authorization, if needed, before allowing work to start on the order.

If work under an order will affect the design for the project, the Project Manager must consult with and obtain agreement of the designer or Engineer of record for that portion of the project. The Project Manager should list that approval on form 734-1882.

Adequately address, and provide information about, the items listed near the bottom of the form.*

If the information is not included on form 734-1882, be sure to attach a cost justification for each payment item included in a CCO*, cost effectiveness analysis for work by public forces on an FO, and other information that is needed to support the order.

ODOT has not delegated approval authority to local governments or consultants for any of the above orders.

The Project Manager shall obtain the necessary approvals, obtain the signature of the Contractor if needed, and route all orders through Region to the Construction Section. Obtain concurrence of local governments, if needed.

5. Change Order Database

ODOT maintains an electronic* database to record information from change orders. It uses that information to identify recurring problems and improve its project development processes.

The Region must assure that the following information is entered into the change order database for each change order:

- Contract number, type of order, and number of order
- Absolute value of the order
- Reason code (that describes the predominate work on the order) for the order (see Exhibit I and J)
- Who ordered the work? (see Exhibit I)
- Whether a CCO resolves a claim that was submitted as a fully supported, certified claim under Section 00199.30, no matter what level resolved the claim*

The Contract Services Section will enter the above information into the database.**

Interested persons may access the change order information that is in the change order database.

Exhibit I depicts the sample screen used to enter information into the database for each order. It also indicates several ways to print information from the database.

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Exhibit J is a listing of the reasons for changes to be used when recording change orders in the database. If an order includes several items or reasons for the change, choose the reason that applies to the largest part of the order.

Contact the Contract Services Group if you have questions or need assistance.