CHAPTER 3 - CONTRACT MODIFICATIONS

CONTENTS

FIGURES

CONTRACT MODIFICATIONS

3-1 INTRODUCTION

3-1.1 General

The contract documents for a Federal Lands Highway construction project are intended to contain sufficient information for completing the work. When changes are necessary however, a contract modification (CM) is required.

The authority for the Government to order, recognize, or agree to a CM is contained in the Federal Acquisition Regulation (FAR). (FAR 43.101 defines *contract modification* as any written change in the terms of the contract.) Appropriate clauses from the FAR that are required for a construction contract are incorporated or referenced in the contract. The FAR, together with the Transportation Acquisition Regulation (TAR) contain the regulatory policies and procedures that govern the preparation and issuance of CM's.

Since a CM is a legal change to the Contract and often commits the Government to making additional payments, it must be executed (approved and signed) by a warranted Contracting Officer (CO). Any preparatory work, including discussions with the Contractor, which the Project Engineer performs in connection with a CM, should be under the authority of a warranted CO. The Contractor should also be clearly advised that a warranted CO must ultimately approve any CM.

In Federal contracts, the Government has broad authority to make changes to the contract. The Contractor has the right to an equitable adjustment (for both contract time and money) for changes ordered by the Government, as well as for deviations from the conditions represented in the Contract, whether or not a change is acknowledged. The CM is the contractual mechanism for both making changes and for authorizing an equitable adjustment. When a CM is issued without agreement on the equitable adjustment, that is called a *unilateral* change. When there is agreement by both parties the change is *bilateral*.

If there is a disagreement concerning a CM, the contractor is required to proceed with the work required by the CM as long as the work is within the scope of the Contract. The Contractor may however, dispute (to the courts if necessary), the amount of the equitable adjustment. It is FLH policy to always attempt to negotiate an equitable adjustment before or during the work covered by the CM.

CM's should only be used as necessary to complete a project to serve its intended purpose. All CM's should be within the general scope and terms of the contract.

3-1.2 Ripple or Cumulative Effects

Unilateral CM's contain risk to the Government, especially since the future effects of a modification cannot be readily identified when the CM is prepared. A CM that may seem insignificant when issued could cause a ripple effect that results in a major impact on project cost or the time required for completion. Claims are often the result of a CM that was thought to be insignificant when issued.

The cumulative effects of many small insignificant CM's can also be the basis for delays and claims.

3-1.3 Contract Scope

A unilateral change outside the general scope is a potential breach of contract by the Government and may be deemed nonenforceable.

The Supreme Court has defined general scope as *what should be regarded as fairly and reasonably within the contemplation of the parties when the contract was entered into*.

The *term beyond the general scope* includes work separate and distinct from the original concept of the contract, such as alterations that would require the contractor to make major changes in his methods, equipment, materials, or labor; or require it to have substantially more financial resources or experience than expected by the terms of the original contract.

The following are examples of work that could be considered beyond the general scope of a contract:

- A change of pavement type or the addition, elimination, or change in type of a major structure.

- Changes in plans that would shift a substantial part of the work into top-ographical, geological, or traffic conditions that are markedly different from those within the original, as-bid contract documents.

- Major construction operations necessitated in the repair of extensive damage such as that caused by abnormally severe floods or other catastrophes.

A CM for work outside the original scope of the contract must be a bilateral CM. The contractor's agreement must be obtained for the CM, and a justification for a procurement with other than full and open competition may be required in accordance with FAR Subpart 6.3 and the TAR Subpart 1206.3. Higher approval authorities and other enhanced paperwork requirements may also be necessary.

3-1.4 Lines of Communication

Keeping the next level of supervision fully informed of all developments, disputes, and contract interpretations, is absolutely basic to good contract administration, and the Project Engineer should always keep the COE fully informed. The Division may also require that the cooperating agency (owner agency) of the facility under construction be kept informed of all proposed CM's.

3-1.5 Incorporation of Other Documents

Contract documents relating to the proposed or anticipated change-FAR contract clauses, special contract requirements, plans, and standard specifications-should be carefully read. Care should be taken not to wrongly read information from other documents, reports, manuals (such as this Construction Manual) and recommendations, as being a part of the Contract. If a clause, requirement, item of work, etc., is not clearly referenced or included in the Contract documents, it is not a part of the Contract.

3-1.6 Unclear Specifications

A difference of opinion with the Contractor over the meaning of a specification may precipitate a dispute. The Contractor has a right to make a reasonable interpretation of Contract requirements and base its bid on that interpretation. If , during construction, the Project Engineer interprets the contract differently, a dispute may ensue and the Contractor may ultimately be entitled to an equitable adjustment if the Project Engineer's interpretation is later deemed unreasonable considering the specific requirements of the Contract. This is called a *constructive change order* (see Section 3-5). When the contract is ambiguous (or conflicts exist within the specifications) and more than one interpretation is reasonable, the Contractor may still be entitled to an equitable adjustment.

The Contractor has a right to clear direction from the Contract but is also obligated by the contract to bring errors and omissions to the attention of the Government.

The Coordination of Contract Documents in Subsection 104.04 of the FP is intended to be used to resolve conflicting requirements. This Subsection lists the order of precedence of the contract documents beginning with the Contract Clauses (i.e., the FAR and TAR) then the Special Contract Requirements, followed by the Plans, and Standard Specifications. However, the Project Engineer should discuss conflicts with the COE before invoking this clause, since both the Contractor's rights, and the Government's needs may transcend this listing; and therefore it is seldom used to resolve conflicts.

3-1.7 Documentation

Documentation concerning disputed work which relates to, or may result in a CM is essential. Refer to Chapter 2 of this manual for procedural details; however, documentation is emphasized here because its importance cannot be over stated. Photographs, diary entries of discussions, memos to the file or COE, video tape, actual cost records, inspector's reports, etc., are invaluable when later trying to determine the limits of liability.

It is very important to document all costs and time related to questioned, protested, or controversial work done by the Contractor. Normal inspector's reports can be insufficient documentation, unless the costs (labor, equipment, materials) used for the protested work can be segregated from other work. This segregation of costs can be difficult, especially if other work is underway, but it should be done as accurately as possible.

Normal reports should be supplemented with actual cost records, diary entries, photos, file notes, etc. Separating costs during the work phase is much preferred. An attempt to separate costs on completed work is very difficult.

3-1.8 Timely CM Issuance

It is always desirable that a written CM be issued before the work required by the CM is allowed to begin, even if that means the CM is issued while the amount of equitable adjustment is still unresolved. There may be occasions when it is in the Government's interest to allow the work to begin prior to the issuance of the CM. However, the CO with the authority to approve the CM should issue a letter or unilateral CM specifying the work required and establishing a limit on cost. This should be followed as quickly as possible by a definitized (cost agreed to), bilateral CM.

The most common reason that work is allowed to proceed before a written CM is issued, is that Government liability continually grows during a period of delay while the CM is being negotiated and finalized.

The FAR requires an assurance that funds are available before any CM work is started.

3-1.9 The Equitable Adjustment

For purposes of this manual, an equitable adjustment is the settlement with the contractor for the effects of a CM that altered the cost of, or time required for completing the work in a contract. An equitable adjustment usually consists of additional payment to the contractor, but can also involve other revisions of contract provisions, such as the following:

- A deduction in payment (a saving to the Government),
- A change in the contract time or completion date,
- A modification of material or other quality requirements, and
- A revision of restrictions on the method or manner of work.

An equitable adjustment is intended to leave the Contractor (financially and otherwise) where it would have been, but for the event which caused the change or CM. In the end, the determination is often made through compromise, personal judgement based on available information, and other influencing factors, only a part of which consists of hard documented costs.

A claim may result when a mutually agreed equitable adjustment cannot be reached. In some situations, the courts finally determine the amount of the equitable adjustment.

3-2 TYPES OF CM's

FAR 43.103 describes the various types and functions of CM's. The following are summaries on the various types and uses of CM's.

3-2.1 Supplemental Agreement (Bilateral CM)

The supplemental agreement is the preferred CM and most often used on FLH construction projects. This type of CM is issued bilaterally; that is, both the Contractor and the Government sign the document to mutually agree to all conditions of the CM. The equitable adjustment - a change in the contract price, time, and/or some other aspect - is also agreed to.

A contractor's statement of release (similar to that shown in FAR 43.204) should be included in a supplemental agreement. The statement releases the Government from any subsequent claims and confirms that all elements of the modification within the supplemental agreement have been addressed and resolved. The following is an example release statement:

> *By signature below, the Contractor agrees that payment and time adjustments as provided herein release the Government from any and all liability under this Contract for further compensation or adjustments relating to this modification.*

A. Follow-up Supplemental Agreements

A follow-up supplemental agreement is used to make an agreed equitable adjustment resulting from a previously issued change order. This supplemental agreement is required when agreement cannot be initially reached and a unilateral CM (change order) is issued.

B. Supplemental Agreements Pursuant to Other Clauses

Most supplemental agreements result from situations discussed in Section 3-5, Changes Clause (FAR 52.243-4), however the following are examples of agreements pursuant to other clauses:

- a supplemental agreement accepting a contractor's proposal under the Value Engineering Clause (FAR 52.248-3), and
- a supplemental agreement for an agreed time extension under the Suspension of Work Clause (FAR 52.242-14), or the Default Clause (FAR 52.249-10).

3-2.2 Change Order (Unilateral CM)

CM's can be issued unilaterally (i.e., without the contractor's agreement). A follow-up supplemental agreement is normally required.

Unilateral CM's can only be issued if permitted by a FAR clause, the most common of which is the Changes Clause (FAR 52.243-4). Other clauses which permit unilateral CM's include the Suspension of Work Clause (FAR 52.242-14) and the Differing Site Conditions Clause (FAR 52.236-2).

3-2.3 Administrative Change Orders

Some unilateral CM's are made for information or *housekeeping* purposes such as to correct an address or change an account number; or to document changes to the contract that do not impact the right of the Contractor such as to increase funding to cover routine quantity overruns. These kinds of changes are made with administrative change orders.

3-2.4 Credit CM's

A change or differing site condition may occur that decreases the contractor's costs to perform the work. In such cases the Government should initiate a CM to provide an equitable adjustment - usually consisting of a price reduction or credit. The Project Engineer should discuss such situations with the COE.

3-2.5 No-Cost CM's

A CM is necessary if the modification is of any magnitude, even if the price variation is

negligible. A major reason to prepare a no-cost CM is to document the Contractor's agreement. Examples could be a no-cost CM to modify an aggregate gradation, to change the grade of asphalt, or to change the point or method of acceptance, when it is agreed with the Contractor that no change in cost would occur.

If the agreement is not documented, a *no-cost* change can later become a claim.

3-3 APPROVAL AUTHORITY AND DELEGATION

3-3.1 Chief of Contracting Office (COCO)

The Chief of Contracting Office (COCO) is the Federal Lands Highway Program Administrator, Federal Lands Highway Office, Washington, DC.

As defined in FAR 2.101, the COCO has the overall responsibility for managing the contracting activities of Federal Lands, including the appointment of Contracting Officers.

3-3.2. Contracting Officer

The Contracting Officer (CO) is an FLH employee with the authority to enter into, administer, and/or terminate contracts. Many Contracting Officer functions are typically delegated to different Division personnel depending on their nature. However expending additional contract funds or changing a contract are not delegable, and therefore must be authorized by a CO. The COE may be a Contracting Officer with respect to most CM's, but may not be a CO with respect to major contract awards or settling claims.

From FAR 43.102:

> *(a) Only Contracting Officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. Other Government personnel shall not--*
>
> *(1) Execute contract modifications;*
>
> *(2) Act in such a manner as to cause the contractor to believe that they have authority to bind the Government; or*
>
> *(3) Direct or encourage the contractor to perform work that should be the subject of a contract modification.*

From FAR 43.202

> *Change orders shall be issued by the contracting officer except when authority is delegated to an Administrative Contracting Officer.*

And from FAR 2.101

> *The term [CO] includes authorized representatives [delegant] of the contracting officer acting within the limits of their authority as delegated by the Contracting Officer.*

FAR, Subparts 42.2 and 42.3, prescribes the policies and procedures for the CO's assignment of contract administration responsibilities to a delegant, such as the Construction Engineer, Claims Specialist, COE and Project Engineer.

3-3.3 Contracting Officer's Technical Representative (COTR)

The TAR authorizes the FLH to designate a Contracting Officer's Technical Representative to be the onsite contact person for the Contract, to represent the cooperating agency in dealings with the Contractor and to generally verify that the work performed meets the requirements of the Contract. That person is generally the Project Engineer.

In FLH, the Project Engineer is usually a subordinate of a Contracting Officer (the COE) and therefore may be delegated certain functions in assisting the CO in fulfilling his/her functions. An example might be in facilitating the negotiation of a CM. However the Project Engineer, unless he/she is a warranted CO, may not be delegated the authority to sign any document or otherwise commit the Government as a CO.

3-3.4 Division Delegations

Each Division has a written delegations of authority for approving CM's as well as other CO functions. Authority is predicated on the employee having a Contracting Officer Warrant issued by the Chief of the Contracting Office (COCO), who in FLH is the Federal Lands Highway Program Administrator. For

construction the Division Engineer, and the Division Procurement Specialist are delegated the highest levels of CO authority. The Construction Engineer, and the COE each in turn normally are delegated lower levels of CO authority.

The Project Engineer may be delegated support and verification functions, but not functions specifically reserved for CO's. The delegations should state the relevant contractual actions, maximum monetary contractual amounts, and other authorities of the delegant. They also may state any required administrative concurrences, input and consultations from other offices within the Division. The delegations will also typically address how the issue of funds availability is handled, i.e. who has the authority to certify that funds are available, which is essential for any CM which will necessitate additional funding. A summary of delegations relevant to the administration of a given construction contract is provided to the Contractor after award.

3-3.5 Focus on COE

The COE is normally the CO responsible for all routine contract administration functions. All proposed and potential CM's must be discussed with the COE. Keeping the COE informed is necessary because he/she is responsible for the commitment of additional funds. Additionally, he/she may need to discuss the CM with the relevant offices within the Division such as Project Development, Geotechnical, Contract Administration or Materials, and the owner agency. The COE must also obtain, or verify the availability of necessary funding.

The COE will also keep the Construction Engineer informed of all problem CM's; if not directly, then through summaries or trip reports. If a CM is outside the COE's delegated authority, the COE will need to ensure that the CO with authority for the change is kept informed and is comfortable with the CM.

3-3.6 Administrative/Technical Concurrences

Administrative delegations of authority might require consultations or concurrences from appropriate Division offices prior to the issuance of some types of CM's. Written documentation of consultations and concurrences is important, especially telephone or other verbal means, and should include names, dates, and a summary of the discussion. None of these delegations is related to CO authority or who signs the CM.

3-4 INITIATION OF CM's

Regardless of who proposes a modification, the proposed CM should be discussed with the COE prior to any detailed discussions with the Contractor. The Project Engineer should not acknowledge any change, differing site condition, delay, etc., to the Contractor prior to discussing the situation with the COE.

3-4.1 CM's Initiated by FLH

Throughout the construction of a project FLH engineers and technicians often see elements of the work that could perhaps be improved by a modification. CM's can be generated from the project staff's personal preference, past experience, opinion and *engineering judgement* concerning the end product and the methods used by the Contractor.

Although it is not always in the Government's interest, some CM's originate from the viewpoint that while the Contractor is on the site, it is in the Government's interest to do everything possible to improve the project. Most CM's proposed by the project staff are well intended and stem from FLH engineers and technicians wanting to do an excellent job. Some of these modifications are essential and should be pursued with a CM. However the FAR's and FLH policy discourage and put severe limitations on unnecessary modifications. The COE will therefore be very reluctant to approve CM's that are not clearly necessary to deliver a project meeting the needs of the customer.

3-4.2 CM's for Design Changes

Often CM's on construction projects originate because actual field conditions differ from those anticipated during the design. The differing condition or physical feature is usually not apparent until final staking or until the work begins. The required design changes are usually discovered by the project staff, but can also be identified by the Design, Geotechnical, Environmental, Materials, or Bridge offices within the Division. These modifications are often related to existing field conditions such as roadway alignment or soil conditions.

An office in the division or headquarters may also request a change and may therefore provide the necessary data for the CM. It is also appropriate for the COE to request the relevant office provide a modified design or assistance, based on new field data provided from the project site.

Prior to making any modifications, the COE or Project Engineer should check with the source of the original contract requirement, such as the Project Development or Materials office if practical to do so. Proposed safety related modifications such as changes in side slopes, intersections, guardrails, drop-offs, etc., should always be discussed with the COE.

3-4.3 CM's Requested by the Owner Agency

CM's are frequently requested by the cooperating Federal agency that is responsible for the land on which the project is being constructed (such as the National Park Service or U.S. Forest Service) or occasionally by the organization responsible for the maintenance of the highway following construction (referred to as the owner agency in this chapter).

FHWA has inter-agency agreements with the owner agencies concerning the administration of funds for the construction project.

An owner agency may have a designated representative responsible for coordination during the construction of the project. Requests for modifications should be submitted in writing from the owner-agency representative to the Division Engineer or the appropriate office designated to handle owner-agency requests.

When owner-agency requests are made directly to the Project Engineer, he or she should maintain a cordial and professional relationship with owner-agency personnel; the Project Engineer should consult the COE in regards to the requests.

Owner-agency requests should be evaluated technically, administratively, and contractually. The technical evaluation should address any

impact on the work, any extension of the completion date, cost, availability of funds, and potential claims.

3-4.4 CM's Requested by the Contractor

Modifications that require a CM may also be requested or proposed in writing by the Contractor. Contractor-requested CM's fall into one of the following six categories:

A. Substitution of alternate equipment, materials or processes specifically required by the contract.

FAR 52.236-5(a) states the following:

> *The contractor may at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in the contract.*

Proposals or requests from the Contractor for the use of materials or construction methods other than specified in the contract should be carefully evaluated. The Project Engineer, with support from the COE and appropriate division office staff, should evaluate the request and decide if the substitution should be approved. The evaluation should consider the following:

- The effect of the CM on the progress or completion of the work.
- Owner-agency concurrence, especially if the appearance of the completed work and/or maintenance costs may be affected.
- Designers intent. Is there a particular or *not obvious* reason for the original requirement?
- Cost. If a substantial savings is involved, the proposal should be processed under the Value Engineering clause (FAR 52.248-3).
- Risk of future maintenance and/or operating problems.

B. A Contractor initiated Value Engineering Change Proposal (VECP).

(See FAR Clause 52.248-3.) VECP's are formally submitted by the contractor to decrease the cost of a project, or the time required to complete it. The VECP must not:

- impair any essential functions or characteristics (such as life, reliability, economy of operations and ease of maintenance); or
- modify necessary standardized features (such as signing, lane width and safety features).

It is the policy of FLH to encourage VECP's. Project personnel should encourage and support VECP's and expedite their review and approval process. A CM for the acceptance of a VECP would normally be a supplemental agreement. However, FAR 52.248(e)(3) allows the CO to accept a VECP, in whole or in part, and to order the contractor to proceed with the VECP, even though an agreement on the price reduction has not been reached. This seldom happens because the risk of being accused of bad faith would obviously be substantial if the Government unilaterally imposed a change on the Contractor which was the Contractor's idea in the first place.

C. A price adjustment for acceptance of work or material which does not conform to the contract requirements.

(See FAR Clause 52.246-12.) The category does not include work accepted at a pay factor less than 1.00 in accordance with an acceptance plan specified in the Contract. Otherwise, the Contractor should be required to acknowledge the nonconforming material or work in writing, prior to, or as a part of, its acceptance by a CM.

D. A differing site condition or constructive change which has not been acknowledged by the Government.

(See FAR Clauses 52.236-2 and 52.243-4, and Sections 3-5 and 3-6 in this chapter.)

E. A proposal for an equitable adjustment to a unilateral change order.

(See FAR Clause 52.236-4 and Section 3-6 of this chapter.)

F. A request for an extension of contract time.

This type of CM is usually done in conjunction with D.or E., above, but it can also be done under the Suspension of Work Clause (FAR 52.242-14) or paragraph (b) of the Default Clause (FAR 52.249-10). (See section 3-8 in this chapter for further discussion on contract time.)

3-4.5 Claim Settlement by CM

From FAR 33.204

> *It is the Government's policy to try to resolve all contractual issues by mutual agreement at the CO level.*

A prudent effort should be made to achieve an early settlement of a dispute at the Project Engineer/COE level, prior to the Contractor's submission of a formal claim to the senior CO. Claims are settled by a supplemental agreement (bilateral CM) with similar support data and preparation as for any CM.

3-5 THE CHANGES CLAUSE

The Changes Clause (FAR Clause 52.243-4) allows for modifications to the Contract. This clause is one of the most important in a construction contract and serves as an *umbrella* authority under which the vast majority of CM's are executed.

3-5.1 Authority for Change

Paragraph (a) of the Changes Clause establishes the authority for the CO to make modifications to work within the general scope of the Contract. The CM must be in writing and must be designated as being a change order. The Changes Clause does not allow the CO to change to the following:

- Contract clauses which are matters of regulation and not related to the physical work, such as FAR Clauses; or

- Work outside the general scope of the contract.

The four broad categories of changes stated within paragraph (a) of the Changes Clause cover most aspects of a project. The clause allows for the extension of contract time due to the change, and paragraph (a)(4) allows for the directed acceleration of the work; but the clause does not deal with other types of delays or suspensions. These other types of time-related actions are covered, as appropriate, by the Suspension of Work Clause (FAR 52.212-12) or the Default Clause (FAR 52.249-10).

3-5.2 Constructive Changes

Paragraph (b) of the Changes Clause addresses the constructive or *unintentional* change order. The constructive change order can be verbal or written, (letters, faxes, reports, etc.). The effect of the communication is what is important; it is construed by the Contractor from the conduct of FLH personnel with real or apparent authority.

A constructive change order can be initiated by the action or inactions of the Government without realization or acknowledgment that an order was issued. An example of this situation could be overzealous inspector who requires subgrade tolerances which are later deemed to have been in excess of those required by the Contract or prevailing industry standards. The inspector could be considered as having issued a constructive change order.

A 1968 Board of Contract Appeals decision discusses the constructive change as follows:

> *The government's representative, by his words or deeds, must require the contractor to perform work which is not a necessary part of his contract. This is something which differs from advice, comment, suggestions or opinions which the government engineering or technical personnel frequently offer to the contractor's employees.*

Many constructive changes arise from differing interpretations of the plans and specifications or from the Project Engineer's insistence on a certain method for the Contractor to use to do the work. This does not mean that opinions, advice, or comments cannot be given to the Contractor. Good communication and frequent contact with the Contractor in regards to the project is necessary and encouraged.

Care should be taken to avoid the constructive change, but also the Project Engineer should be firm with the Contractor when the Government's intent has been established.

Although it should be used sparingly, paragraph (b) of the Changes clause does allow for immediately ordering work in an emergency situation, such as the protection of life or property.

A. Required Notice

Paragraph (b) of the Changes Clause requires the Contractor to give written notice of any constructive change. The notice should state:

- the date, circumstances, and source of the order; and

- that the Contractor regards the order to be a change order.

If the Contractor fails to make the required notice, recovery of costs is usually denied; providing the Government was somehow harmed (prejudiced) by the lack of notice, and was otherwise unaware of the situation.

There are a number of cases where a claim was denied as the Government was unaware of a change or differing site condition and no notice was received from the contractor.

Once an unintentional change order (i.e., a order not meeting the requirements of paragraph (a) of the Changes Clause) is issued, or notice has been received from the Contractor (written or oral), of an alleged constructive change, it is imperative that the COE be notified and that detailed documentation (actual cost type records) be kept of the work in question.

B. Time Limit on Costs

Paragraph (d) limits the costs to be considered under a constructive change to only those costs incurred 20 days prior to the Contractor submitting the notice required by paragraph (b). This 20-day limit on costs would more likely be applied to the constructive order which was unknowingly issued than to the situation where an order was knowingly issued. The exception to the 20-day limit on incurred costs is a claim concerning a defective specification.

3-5.3 Proposal Requirement

Paragraph (e) of the Changes clause requires the Contractor to submit a proposal for an equitable adjustment within 30 days after receipt of a unilateral change order, or within 30 days following their notification to the Engineer of the receipt of a constructive change order. This requirement has not been generally supported by the Courts, as it is the Government's burden to show that it was prejudiced (harmed) by the untimely submission of the proposal.

3-5.4 Impact and Ripple Effects

Paragraph (d) of the Changes Clause grants the Contractor or Government the right to an equitable adjustment (in money and/or time) if a CM increases or decreases the cost of (or time required for) the performance of any part of the work, whether or not changed by an order. A change ordered by a CM can indirectly affect other aspects of a project. Effects of this type should be recognized in the equitable adjustment of the CM. Note that these indirect effects can sometimes ripple (*snowball*) into additional costs and delays that exceed the expectations of the original CM.

The overall impact of each CM on all parts of the entire project (whether directly changed or not) should be carefully considered prior to its issuance.

3-6 DIFFERING SITE CONDITIONS

The Differing Site Conditions Clause (FAR 52.236-2) allows the Contractor to make assumptions with the understanding that if materially different conditions of an unusual nature are encountered that affect performance, an equitable adjustment will be made. The Government assumes the risk of a differing site condition to protect the bidder from possible financial loss. In turn, the Government usually receives lower bid prices.

Most CM's initiated by the Government are undertaken to change some feature of the plans or specifications to meet the existing field conditions; however, these conditions are seldom considered a differing site condition and the CM's are normally accomplished under the Changes Clause. Reference to the Differing Site Conditions Clause would more likely come from the Contractor, and many of the responses to these allegations are addressed under the Changes Clause.

3-6.1 Prompt Notice Requirement

The requirement in paragraph (a) of the Differing Site Conditions Clause for prompt notice by the contractor and a prompt investigation by the CO is of particular importance. A prompt investigation allows the Government to analyze the condition at the site, in its undisturbed state, and to make appropriate modifications. The following are two examples of modifications allowed through a prompt notice and investigation:

- Changing the profile or alignment of the roadway to avoid an unsuitable soil condition.
- Redesigning a footing or eliminating piles, if rock was encountered instead of an expected soil.

A prompt investigation is necessary to minimize the Government's liability for any costs and delays, and to protect the Contractor's rights with respect to the conditions actually encountered.

3-6.2 Physical Conditions

The Differing Site Conditions Clause addresses only physical conditions. The physical condition can be natural or man-made. The condition must differ *materially* - which is a judgement and can lead to disagreements. The COE should be informed as soon as the Contractor makes a written or verbal notification of a differing site condition.

Economic, political non-site related conditions that differ are not considered under this clause. Examples of differing conditions that should not be considered under the Differing Site Conditions Clause are:

- an increase in labor costs due to a change in wage rates or other construction in the area,
- a change in the local government so that existing regulations (e.g., load limits) were more strictly enforced,
- a change to a more critical or strict inspector (as long as the inspection standards applied are consistent with the Contract.).

A. Weather

Unusually severe weather conditions (such as excessive rainfall, snow, drought, and hurricanes) often justify an excusable delay - time extension only (FAR 52.249-10). The courts, have generally ruled these situations do not fall in the category of differing site conditions. An exception has been when a subsurface condition, such as the water table, is materially changed by long term weather conditions.

B. The Site

The condition must also exist at the site - not only within the bounds of the project limits but also including any designated sources in the Contract, such as borrow pits, quarries, supply sites, etc.

3-6.3 Ripple Effect

The differing Site Conditions Clause contains

language similar to the Changes Clause concerning the indirect effects of the CM that affect other aspects of a project. The indirect affects of this type should be addressed in the equitable adjustment to avoid later claims for possible ripple or snowball effects.

3-6.4 Two Types of Differing Site Conditions

The Clause recognizes two general categories of Differing Site Conditions.

A. Type 1--Differing Site Conditions

> *Subsurface or latent physical conditions at the site which differ materially from those indicated in the contract.*

Differing site conditions falling under the Type 1 category are those normally encountered on construction projects. The conditions are not limited to those underground (subsurface). Latent conditions are any that are not evident and that are materially different from the conditions represented or implied in the Contract documents.

Below are examples of possible Type 1 differing site conditions:

- Encountering rock or water at a substantially different level than indicated by the boring logs.
- Finding utilities or foundations in areas indicated in the contract as being clear of these.
- Encountering a large quantity of unsuitable material in a designated borrow pit when the plans showed a minimum of this material.
- Finding the actual elevations of the existing ground substantially lower or higher than those shown on the plans (a latent condition).
- Encountering rock in an excavation when no rock, substantially less rock, or substantially harder or softer rock was indicated by the boring logs included in the contract documents.

In deciding whether a differing site condition should fall under a Type 1 category, the existing condition is compared to the condition depicted in the Contract documents. If the Contract makes no representations directly or indirectly, concerning the condition, a Type 1 differing site condition cannot exist (provided the Government had no prior or superior knowledge of the condition. See below.).

B. Type 2--Differing Site Conditions

> *Unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and [which are] generally recognized as [inherent] in work of the character provided for in the Contract.*

The Type 2 differing site condition is established differently from the Type 1. In Type 2, the condition encountered is not compared to the condition represented by the Contract documents. Instead, a situation must have the following characteristics for it to fall under the Type 2 category:

- Unknown [to either party] conditions.
- Unusual conditions.
- Materially different and not ordinarily encountered conditions.

Establishing a condition to be *unknown, unusual, differing materially and not ordinarily encountered* is usually very difficult; therefore, few CM's are prepared under this portion of the clause.

3-6.5 Superior Knowledge

The doctrine of superior knowledge means that information regarding the performance of the work which is not available from other sources but is known to the Government, should not be withheld from the Contractor. This doctrine does not apply to some existing feature that is readily visible or available for inspection. The doctrine of superior knowledge means that where there is

superior knowledge on the part of the Government, the Contractor does not necessarily have to show that the condition is unusual, or not normally encountered in order to be entitled to an equitable adjustment. In extreme cases the Government can be found to have breached the Contract.

3-7 CM's UNDER OTHER CONTRACT CLAUSES

The previous two sections described the Changes Clause (FAR 52.243-4) which is the basis for the majority of CM's, and by the Differing Site Conditions Clause (FAR 52.236-2) or the two in combination. The following describes FAR clauses which less frequently can be the basis of a CM:

3-7.1 Variation in Estimated Quantity Clause (FAR 52.211-18).

This clause entitles either the Government or the Contractor to request an equitable adjustment if a contract item overruns or underruns by 15% or more. The adjustment covers only the quantities exceeding the 15% overrun or underrun. That is, the contractor must absorb costs up to that point. The clause also permits the Contractor to request a time extension for the quantity variation.

If the variation results from a change or differing site condition then those clauses (FAR 52.243-4 or FAR 52.236-2) would take precedence and the equitable adjustment should be computed under one of them. The principal difference would be that the entire overrun or underrun would be considered, not just the amount over 15%.

It is the burden of the party invoking the clause to present the cost data supporting the equitable adjustment. That is, if it is the Government which wants a contract price reduction it must generate the data supporting it. It is not permissible to simply demand that the Contractor *justify* a high bid price when an item overruns. For this reason it is not recommended that the Government routinely invoke the clause unless potential benefits are significant - say $5000 or more per incident.

The following guidelines and examples are based on a traditional understanding of the principle of equity. However, in recent years the courts have been inconsistent in their rulings. Because of the difficulty in predicting an outcome to litigation, all requests and disputes under the clause should be negotiated with the Contractor.

The equitable adjustment should be computed as a lump sum after quantities for the item are final.

It is usually easier to deal with *net* costs, i.e. the contractor's cost less what has been, or would be paid under the Contract.

An equitable adjustment to the Contractor for an overrun would occur when the Contractor underbid the item, or incurred significant additional costs as a result of the overrun. A equitable adjustment to the Government for an overrun would occur when the Contractor overbid the item, or had significant fixed or startup costs included in the bid quantity, which were not incurred with respect to the overrun quantity.

An equitable adjustment to the Contractor for an underrun would normally occur when the Contractor has large fixed or startup expenses that are then unabsorbed as a result of the underrun. *There are no conditions which would result in a equitable adjustment to the Government for an underrun*.

Documentation of the proposed equitable adjustment should follow this process:

(1) Computation of the contractor's fixed and unit costs including reasonable overhead and profit. Overhead should be the audited or certified overhead rate. Profit should be negotiated in the approximate 0% to 10% range depending on the Contractor's profit on the rest of the work and its efficiency in managing costs on this item. All costs must be verified as having been reasonably incurred.

(2) Computation of the Contractor's net costs that would have been associated with the item at a 15% overrun (or 15% underrun).

(3) Computation of the Contractor's net costs associated with the item at the actual overrun (or underrun) greater than 15%.

(4) Verify that the costs are reasonable and that they have been incurred.

(5) Equitable Adjustment -

Overruns - For an adjustment in favor of the contractor **(3)** must be greater than **(2)**. For an adjustment in favor of the Government **(2)** must be greater than **(3)**. The equitable adjustment is **(3)** minus **(2)**.

Underruns - **(3)** must be a positive value, greater than **(2)**. The equitable adjustment in favor of the contractor is **(3)** minus **(2)**, but not more than **(3)** if **(2)** is negative.

Example #1 - Overrun (Contractor Initiated)

(1) Cost Data -

Contract Quantity : 5000 Units
Contract Bid : $ 4.50/Unit
Actual Quantity : 7000 Units
Actual Cost: $ 7.00/Unit

(2) Net costs @ 15% overrun -

5000 x 1.15 = 5750 Units
Cost - 5750 x $7.00 = $ 40,250
Pay - 5750 x $4.50 (25,875)
Net Costs = $ 14,375

(3) Net costs @ actual overrun -

Cost - 7000 x $7.00 = $ 49,000
Pay - 7000 x $4.50 (31,500)
Net Costs = $ 17,500

(4) Verify that costs are reasonable and that they have been incurred.

(5) Equitable Adjustment $17,500
- 14,375
$ 3,125

Example #2 - Overrun (Government Initiated)

(1) Cost Data -

Contract Quantity : 5,000 Units
Contract Bid : $15.00/Unit
Actual Quantity : 7,000 Units
Actual Cost: $3.00/Unit

(2) Costs @ 15% overrun -

5,000 x 1.15 = 5,750 Units
Cost - 5,750 x $3.00 = $ 17,250
Pay - 5,750 x $15.00 = (86,250)
Net(Profit)= $(69,000)

(3) Net costs @ actual overrun -

Cost - 7000 x $3.00 = $ 21,000
Pay - 7000 x $15.00 = (105,000)
Net(Profit)= $(84,000)

(4) Verify Costs

(5) Equitable Adjustment $(84,000)
-(69,000)
$(15,000)

A negative adjustment indicates payment to the Government.

Example #3 - Underrun (Contractor Initiated)

(1) Cost Data -

Contract Quantity: 5000 Units
Contract Bid: $4.50/Unit
Actual Quantity: 2000 Units
Actual Cost (Startup) $10,000
Actual Cost (Unit) $2.25/Unit

(2) Cost @ 15% Underrun -

5000 x 0.85 = 4250 Units
Startup Cost = $10,000.00
Unit Cost 4250 x $2.25 = $ 9,562.50
Pay - 4250 x $4.50 (19,125.00)
Net Costs = $ 437.50

(3) Net Costs @ Actual Underrun -

Startup Cost = $10,000
Unit Cost 2000 x $2.25 = 4,500
Pay - 2000 x $4.50 = (9,000)
Net Costs = $ 5,500

(4) Verify Costs

(5) Equitable Adjustment $5,500.00

- 437.50

Difference $5,062.50

Example #4 - Underrun (Contractor Initiated)

(1) Cost Data -
Contract Quantity: 5000 Units
Contract Bid: $4.50/Unit
Actual Quantity: 2000 Units
Actual Cost (Startup): $5,000
Actual Cost (Unit): $2.25/Unit

(2) Cost @ 15% Underrun -

5000 x 0.85 = 4250 Units
Startup Cost = $ 5,000.00
Unit Cost 4250 x $2.25 = $ 9,562.50
Pay - 4250 x $4.50 ($19,125.00)
Net Costs = ($ 4,562.50)

(3) Net Costs @ Actual Underrun -

Startup Cost = $ 5,000.00
Unit Cost 2000 x $2.25 = 4,500.00
Pay - 2000 x $4.50 = ($ 9,000.00)
Net Costs = $ 500.00

(4) Verify Costs

(5) Equitable Adjustment $= 500.00

Equitable adjustment is (3) minus (2), but not more than (3) if (2) is negative.

3-7.2 Value Engineering Clause - (FAR 52.248-3)

This clause is used to accept a VECP where appropriate, as discussed earlier in this chapter.

3-7.3 Inspection of Construction Clause (FAR 52.246-12)

This clause is used to accept work, usually at a reduced price, which does not conform to the contract requirements. It does not apply to marginal work accepted at a reduced pay factor pursuant to a contract acceptance plan.

3-7.4 Time Extensions

A time extension is most often included in the CM as a part of the equitable adjustment due to the change or differing condition. This is call a *compensable time extension* because it is combined in the CM with payment for the Contractor's increased costs also associated with the change or differing site condition. See Section 3-6.

For a Government caused delay that extends beyond a reasonable period of time, which causes an increase in the cost of (or the time required for) performing any part of the work, a compensable time extension is possible under the Suspension of Work Clause (FAR 52.212-12). If the delay is *reasonable* depending on the circumstances, there is no compensation required.

A noncompensable time extension (one not combined with entitlement to money) can more commonly be provided under the Default Clause (FAR 52.249-10(b)(1)) for an unforeseeable delay which is neither caused by, nor resulted from, the negligence of the Government or the Contractor, subcontractors or suppliers. Unusually severe weather is a typical cause of a noncompensable time extension. Regardless of costs incurred by the Contractor during most unusual weather delays, they are not compensable by the Government.

3-8 CONTRACT TIME IN THE CM

See also Chapter 7, *Prosecution and Progress*.

3-8.1 Amount of Time in the Equitable Adjustment

A time extension can be included in the *equitable adjustment* allowed in a CM issued under the remedy/relief clauses of the contract, such as the Changes Clause or the Differing Site Conditions Clause. The extension granted by the CM would normally be the number of days the contract completion date is extended due to the modification.

An equitable extension of time is not necessarily the total number of days required to mobilize and complete the additional work required by the CM. If the contract completion date for the entire contract is not extended by the additional work, no time should be granted. (i.e., if the work added by the CM was completed concurrently with other *critical* contract work.)

The accepted construction schedule should be used to analyze the contractor's entitlement to a time extension, or at least not be inconsistent with that analysis. See Section 7-3. This is one reason the construction schedule must be kept up-to-date. CPM formatted schedules usually provide a more definitive analysis of time associated with a CM, than do bar charts. This is because CPM schedules, by definition identify the critical or controlling items.

It is preferable to settle time considerations when negotiating the CM before the work is done. However, if this is not possible, settlement of the time effects due to the change should be accomplished with a supplemental agreement as soon as possible.

The overall impact on the contract completion time due to a CM, delay, disruption or suspension is sometimes difficult to predict. Contractors, therefore, will often seek to defer a time settlement until after the additional work has been completed, or the entire Contract is nearing completion.

When negotiating contract time, the value of the time involved should be assumed to be represented by the liquidated damages or incentive/disincentive provisions of the Contract. Time extensions should not be given just to settle a dispute unless an analysis of the time and money issues supports the settlement.

3-8.2 Acceleration

Acceleration occurs when the Contractor is compelled by the Government to increase the production rate on the Contract work. Increased production is obtained from an increase in resources, such as equipment, materials, personnel and/or by extending the normal daily work period (i.e., work overtime or double-shift). Acceleration may be ordered due to the Government's desire to:

- complete the work in advance of the Contract completion date, or
- meet a planned completion date when additional time cannot be granted for additional work, changes or differing site conditions.

A. Directed Acceleration

The *Changes Clause (FAR 52.243-4(a)(4))* allows the CO to issue a CM to order an acceleration in the performance of the work.

A CM for directed acceleration should be executed in accordance with the Changes Clause and handled like any CM. The *equitable adjustment* to the Contractor usually consists of the additional costs required to increase production rates.

A CM for directed acceleration should be negotiated in advance with the Contractor as to precisely what actions will be taken and what kinds of costs will be incurred in the acceleration effort. It is not desirable to simply change the Contract completion date to some earlier date, or to simply order *acceleration*. Acceleration CM's are enforceable only to the extent the Contractor is able, but refuses to take the ordered or agreed on actions. They are generally not enforceable

through the liquidated damages or default provisions unless the Contractor specifically agrees to be subject to these provisions as a condition of the CM.

Although directed acceleration is uncommon, it should be considered when a project must be completed by a certain date, and Government is willing to pay extra in an attempt to make that happen. The following are two examples of situations where directed acceleration might be considered:

- To meet a critical schedule commitment for a multi-contract project (such as the completion of a necessary access road to begin a missile silo).

- To get the Contractor back on schedule instead of granting an entitled, but costly, time extension. For example, acceleration may be directed to minimize an anticipated ripple effect claim, or to avoid a costly winter shut down.

Directed acceleration, as with all contract time adjustments, should be discussed with the COE prior to discussing the possibility with the Contractor.

B. Constructive Acceleration

Constructive acceleration occurs when the Contractor is entitled to, but is not granted, a time extension and is therefore compelled to increase performance to meet the original completion date. If the Government fails to grant a time extension when in a timely manner, constructive acceleration can result. By not granting the entitled time the Government causes the Contractor to accelerate to complete performance in a shorter period of time than should contractually be required - usually resulting in a claim.

Constructive acceleration can occur even if the event causing the entitled time extension was not the Government's fault. It is not necessarily the cause of the entitled time extension, but the Government's failure to grant the time, that results in the Contractor's need to accelerate. For example, if an extension for an excusable delay due to abnormally heavy rain (which is not the fault of the Government) is not granted, constructive acceleration can result.

3-8.3 Unilateral Time Extensions

When agreement on an equitable adjustment in a CM cannot be reached, a CM ordering the work would normally be unilaterally issued (i.e., a change order). In addition to the price to be paid for the work, a unilateral CM can also be used to grant a time extension.

If a time extension is due the Contractor, it is usually prudent to promptly grant the extension and avoid the possibility of constructive acceleration. The time extension should be justified by an analysis of the contractor's schedule and the impact of the CM on the overall performance of the Contract.

The possibility of a constructive acceleration claim is usually not so serious as to warrant granting time extensions in marginal situations just to avoid a claim. If the Government is responsible for the event that resulted in the time extension the Contractor will usually make a claim for indirect or impact costs associated with the added time. These costs are typically much larger than acceleration costs due the Government's failure to grant a time extension.

3-8.4 Compensable Delays

CM's which grant time extensions for events which are the responsibility of the Government should address indirect and/or impact costs because the delay is a compensable delay.

Examples of costs associated with compensable delays are as follows:

- **Home office overhead**. For work associated with changes and differing site conditions, overhead is usually audited as a percentage of direct costs. However, for a delay or time extension that is lengthy compared to the work in the CM, however, the Contractor may

attempt to justify overhead on a daily rate basis. When a CM includes both added work (costs) and delay or extended performance associated with the same work, overhead costs should not be paid on both a percentage and daily rate basis. Costs used to establish the home office overhead rate can include home office rental, staff salaries, utilities, etc.

- **Field Supervision and Overhead**. These types of costs include salaries and vehicles of supervisory personnel at the project site, utility bills, site offices and laboratories, etc.

- **Equipment**. This type of cost includes standby costs for the Contractor's equipment on the site and idle due to the CM - even if the equipment is unrelated to the CM. The Contractor must show that it was the event precipitating the CM that caused the equipment to remain idle and on the site. The equipment rates used to compute the costs are generally the standby rates, unless additional operating time was required also by the CM.

- **Traffic Control**. This cost type includes additional costs for the increased period that traffic control is required due to the CM.

3-8.5 Excusable Delays

Delays which are not the fault or responsibility of the Government but are also due to unforeseeable causes beyond the control and without the fault or negligence of the Contractor are excusable delays. Paragraph (b) of the Default Clause (FAR 52.249-10) addresses excusable delays. Below are the eleven examples of delay listed in the Default Clause which are normally considered excusable. (This list is not intended to be all inclusive.)

- Acts of God or of the public enemy.

- Acts of the Government in either its sovereign or contractual capacity.

- Acts of another contractor in the performance of a contract with the Government.

- Fires.

- Floods.

- Epidemics.

- Quarantine restrictions.

- Strikes.

- Freight embargoes.

- Unusually severe weather.

- Delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the contractor and the subcontractor or supplier.

A. No Impact Costs Under an Excusable Delay

A CM recognizing an excusable delay under the Default Clause, FAR 52.249-10(b), should grant only additional contract time. The clause does not provide for payment to the Contractor for costs resulting from the delay (including indirect or impact costs).

B. Required Notice for Excusable Delay

FAR 52.249-10(b)(2) requires that the Contractor, within 10 days from the beginning of any delay, notify the CO in writing of the cause(s) of the delay. Like most other notice requirement, in order to be enforced, the Government may be required to show that it was prejudiced by a lack of timely notice.

C. Acts of God and Weather Delays

Acts of God have been defined by the Comptroller General as follows:

> *...some inevitable accident which cannot be prevented by human care, skill, or foresight, but results from natural causes such as lightening, tempest, floods, and undulations.*

Delay due to a tornado, earthquake, abnormal drought or other natural disaster can be excusable.

If the weather is abnormally severe (as compared to the normal weather for the location and time of year) then a time extension can usually be granted. Normal weather, including rain, snow, drought, etc. is not considered an *Act of God* under the FAR. Averages, based on minimum of the last ten years of data, are often used as the comparison to establish extremes in weather. This data is typically compiled monthly. However, an analysis of long term or chronic bad weather should look at the entire period in question - or even the entire period of the Contract - since unusually good weather sometimes offsets unusually bad weather when extended periods are evaluated.

3-8.6 Government Suspensions of Work

The Suspension of Work Clause (FAR 52.212-12) also addresses delays. There are two types of suspensions of work which are (1) for the convenience of the Government, and (2) constructive suspension.

A. Suspensions for Convenience

Paragraph (a) of the clause allows the CO to suspend, delay or interrupt a Contractor's work for the convenience of the Government (i.e., a suspension for convenience). In return, the Government agrees to pay the Contractor for any increase in costs (excluding profit, but including impact costs) *if the suspension is for an unreasonable period*. That is, the delay is compensable as described in Subsection 3-8.4 except that profit is not allowed.

A suspension for convenience is seldom used since there are very few situations where the Government would suspend the Contractor's work. However, an example where it might be appropriate is a project where a decision to modify work currently underway is pending, and the Contractor must wait for the redesign.

B. Constructive Suspension

Paragraph (b) of the Suspension of Work Clause establishes the concept of the constructive suspension. If the CO's act or failure to act delays the work for an unreasonable period, the Contractor is entitled to any increase in costs due to the delay. The burden of proof is on the Contractor to show that the CO or delegant did something or failed to do something that caused an unreasonable delay, suspension, or interruption to the work that caused an increase in costs.

The following are examples of constructive suspensions:

- Unreasonable delay for the approval of shop drawings.
- Delay in issuing a CM for which the Contractor is waiting.
- Failure to investigate a differing site condition in a timely manner.

A Contractor is entitled to any additional attributable costs for the unreasonable portion of the delay under the Suspension of Works Clause. Profit is excluded; however, indirect or impact costs should be considered in the equitable adjustment of the CM prepared to settle the effects of the delay.

3-8.7 Responsibility for Delay

The basic factor for consideration in any delay situation is who was responsible for the event(s) that caused the delay.

A. Contractor's Responsibility

If the Contractor is responsible for the event(s) which caused the delay(s), or inexcusably falls behind schedule there is no relief under the Contract and the Government can demand increased performance (acceleration). (Reference FAR 52.236-15).

B. Third Party Responsibility

If a third party, which would include an Act of God or an extreme act of nature, is responsible for the event, an excusable delay would be appropriate under paragraph (b) of the Default Clause (FAR 52.249-10).

C. Concurrent Responsibility

If the Government and a third party are concurrently responsible for the delay, e.g. the Government is late with a falsework approval, but a flood prevents the Contractor from working on the falsework anyway, the Contractor would be entitled to a time extension for an excusable delay, and the Government may avoid responsibility for increased (delay) costs since they would have been incurred anyway.

If the Contractor and Government are concurrently responsible for the delay, through interwoven events such that the relative causes cannot be analyzed separately, then traditionally the same has been true, i.e. the Contractor has been entitled to a time extension, but no compensatory damages.

However, recently some courts are taking the view that damages resulting during such concurrent delays should be apportioned between the Government and the Contractor based on their relative responsibilities for the delays. Although advice from counsel should be sought before implementing this method, it could provide a means of resolving a dispute.

D. Government's Responsibility

If the Government is solely responsible for the event that caused the delay, the Contractor is entitled to a time extension if the time required to complete the contract is increased. (Such an event could be the discovery of a differing site condition or a defective specification.) The Contractor is also normally entitled to additional costs incurred due to the delay.

Delay costs can always include profit unless they are under the Suspension of Work clause (FAR 52.212-12). For this reason Contractors typically argue for a change or differing site condition delay rather than a constructive suspension.

When performing CM work (unless directed to accelerate) the Contractor is not automatically obligated to hire additional people, rent additional equipment, or otherwise *force* the CM work into the original progress schedule. For this reason, the schedule and resources for performing CM work should be negotiated as a part of the CM. Otherwise, a Contractor can decide to delay the performance of CM work until near the end of the contract if all labor and equipment is allocated to critical items of work. If the Government insists on the immediate performance of the CM work, the Contractor may elect to pull resources off critical work in order to expedite the CM work. This could entitle the Contractor to a time extension even if the CM work itself is not theoretically critical.

3-8.8 Events Not Warranting Time Extensions

The following are examples of events which usually do not entitle the Contractor to a time extension, even if the events result in poor progress and increase the time required to perform the contract:

- Late or inadequate submissions (job mixes, shop drawings, etc.).
- Insufficient equipment or other resources.
- Poor workmanship, incompetent personnel.
- Poor or incomplete scheduling.
- Supplier fails to deliver on time.
- Rainy weather when rainy weather is normal.
- Subcontractor leaves project for other work.

Note that the Contractor is responsible for the performance of the subcontractors and suppliers. Subcontractor's and supplier's delay must meet the same requirements as the Contractor in order to justify a time extension.

3-9 COSTS AND PRICES FOR A CM

It is the Government's policy to pay a fair and reasonable price for work resulting from the CM. Fair and reasonable is a concept subject to varying interpretations involving personal viewpoints based on past experience, existing conditions, data available and whether or not the person is the buyer (Government) or seller (Contractor).

3-9.1 Price and Cost

FAR 15.801 defines *price* as cost plus profit. A price simply includes everything in a single amount. The components of costs and profit are not separated. Only the single bottom line amount is considered, be it the contract price for an entire project, a lump-sum for a small or large amount of work, or an individual unit-price for an item of work.

FAR 31.201-3 defines *reasonable* in relationship to cost as follows:

> *A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business.*

Although a CM is not done under competitive conditions, this definition is often used to describe the concept of reasonable cost.

Two examples of costs (or prices) being unreasonable due to the nature of the cost are a proposal to use hand labor to excavate a footing instead of a backhoe or, a proposal to use six trucks when the loader being used can only handle three trucks.

An amount could be unreasonable even if the nature is acceptable. For example, if the use of a backhoe is being proposed however, the price requested for its use is considered excessive. This is the most common reason for judging a cost or price to be unreasonable.

A. Allowable Costs

A cost must be allowable. Part 31 of the FAR, Contract Cost Principles and Procedures, addresses allowable costs and is the reference whenever a cost is questionable. Certain costs, although reasonable as a business expense and incurred by the Contractor, are not allowed by law to be paid under a Government contract.

B. Allocable Costs

- A cost must be *allocable*. That is, the cost must be somehow connected to the performance of the contract (completion of the project) or necessary for the operation of the Contractor's company. Allocability is discussed in FAR, Part 31. Allocability is easily recognized for direct costs, such as labor and materials used on a project; but allocability becomes more difficult to recognize when dealing with indirect costs, such as supervision or overhead.

In summary, costs must be allowable (as defined in FAR Part 31), reasonable and allocable in order to be included in the CM.

3-9.2 Contractor's Cost or Pricing Data

The requirements for Contractor's cost and pricing data, are in FAR 15.804 and TAR 1215.804. These regulations, which are summarized below, precisely define cost or pricing data, require it to be *certified* as correct by the Contractor, and define the conditions under which it may or may not be required.

Note that in A.,B., and C. below, even when cost or pricing data is not required, the CO always has the discretion, delegable to COTR's including Project Engineers, to request and obtain noncertified documentation or information to support Contractor price proposals if the CO cannot otherwise make a determination of price reasonableness. From a practical standpoint this noncertified information may be very similar in complexity and scope to cost or pricing data.

A. CM's Greater than $500,000

Cost or pricing data is required from the Contractor if the CM involves an aggregate

amount greater than $500,000. The aggregate amount is the total of all added work plus the total of all eliminated work (see FAR 15.804-2) associated with a single change or event.

Certification of the cost or pricing data is required as soon as practical, after the prices are agreed to. See **Figure 3-13, Certificate of Current Cost or Pricing Data.** The cost or pricing data must be current. The certification is usually requested when the CM is sent to the Contractor for signature and is returned along with the signed CM. The format for the certification of current cost or pricing data is shown in FAR 15.804-4.

B. CM's Between $100,000 and $500,000

Cost or pricing data may be required from the Contractor, for CM's that involve an aggregate amount between $100,000 and $500,000 if the CO cannot make a determination of price reasonableness in accordance with the criteria in the FAR. Generally cost or pricing data is not required for commercial items and items which are priced competitively. (See FAR 15.804-1) If cost or pricing data is requested for CM's in this range, the reasons should be documented, and the request approved by the CO.

C. CM's Less than $100,000

Cost or pricing data may not be required for CM's under $100,000.

3-9.3 Methods of Payment

The method of payment for approximately 65 percent of FLH's CM's is by unit price. Often the unit prices used are the Contractor's unit bid prices included in the Contract. When adequate competition and quantities are present, and there are no indication of *unbalanced* bids, the prices obtained from the lowest responsive, responsible bidder can be considered fair and reasonable. However, not all unit bid prices reflect the cost plus a fair profit for completing the actual work required by a CM and should be appraised prior to their adoption in a CM.

A. Unit Prices

For items which may vary significantly in quantity, such as embankment, paving, or removal of unsuitable material, the unit price method of payment is preferred. Although the cost risk is shared between the Contractor and Government, the profit incentive for economy and efficiency should still exist.

B. Lump Sum

When quantities are fairly certain and not likely to vary, the preferred method of payment is by lump sum or firm fixed-price, as any cost risk is with the Contractor and the method contains the incentive of increased profit for the Contractor to complete the work efficiently and economically. There is also less documentation and no obligation for detailed measurement/-remeasurement of the work with this payment method.

C. Actual Cost

The method of payment least favored by the Government and often preferred by the Contractor, is by actual cost.

Profit for actual cost work should be negotiated as a fixed fee. The fixed fee is established at the time costs are estimated. The amount paid is the actual cost, plus the established fixed fee. When the profit fee is negotiated, since the risk factors to the Contractor are minimal, the fee should be in the 5 percent or less range, as a percentage of the estimated cost.

The actual cost payment method should only be used when it is not possible to accurately estimate the extent or duration of the work, or to anticipate costs with any reasonable degree of confidence; or when it is otherwise impossible to reach agreement and a unilateral CM is not desirable due to risk concerns.

The following are some of the kinds of problems encountered with actual cost:

- The Government assumes any risk and uncertainty in the work.

- The positive incentive to the Contractor for cost control or labor and equipment efficiency is removed.

- Increased surveillance or inspection by project staff is required.

- Increased expertise of the project staff is required to effectively monitor Contractor work processes.

- The administrative work load is increased with daily cost records, summaries, etc.

D. Retroactive or Post Work Pricing

This form of payment is done after the work is completed using records of actual costs to arrive at an agreed lump price. Typically this method is used to settle a dispute when the Government did not acknowledge liability for costs incurred until after the work was done. Retroactive pricing should be avoided if possible and done with care when necessity requires its use. The actual costs of a Contractor are not necessarily reasonable, especially if the Contractor has reason to believe that the Government will pay all of those costs. Also reported costs for the CM in question may not be effectively segregated from the costs of work already required as a part of the Contract.

The use of the Contractor's actual costs is discussed in FAR 31.201-3 as follows:

> *No presumption of reasonableness shall be attached to the incurrence of costs by a contractor*.

Also, the Contractor's risk in pricing the work is virtually eliminated by retroactive pricing; therefore, the profit paid should be minimal, such as less than 5 percent even with effective management and cost control.

E. Undefinitized (Unpriced) CM's

An undefinitized CM is a CM issued unilaterally with:

- A specific timetable for negotiation of price while the work is progressing.

- A not-to-exceed estimate of cost which is used to obligate funds for the CM.

FAR 43.102(b) states

> *Contract modifications, including changes that could be issued unilaterally, shall be priced before their execution if this can be done without adversely affecting the interest of the Government.*

In many cases, halting or impeding the Contractor's work until a CM is issued would adversely affect the Government's interests. However, the decision to allow work to begin on an undefinitized CM should be made by the CO with the authority to approve the definitization. When work is started on any unpriced CM detailed records (actual cost type) of the operations and incurred costs are absolutely necessary.

When work begins on an unpriced CM, the CO should establish a schedule with the Contractor for definitizing the CM. In order to encourage adherence to that schedule the CO may limit progress payments on the work until definitization is accomplished.

These procedures for unpriced CM's do not negate the obligation of the CO to be assured that funds are available for the estimated amount of the work. In extreme cases where for example, a differing site condition is impeding the remainder of the work, the authorization to proceed with the CM may have to be coupled with an intent to eliminate less critical work from the Contract in order that funds for the more critical CM work can be certified as available.

3-10 EQUIPMENT USE (RENTAL) RATES

There is no strict, unwavering equipment rate policy that will necessarily override all the other issues involved in negotiating a fair and reasonable agreement for a contract modification - either for extra work or to settle a dispute. All aspects of the modification, one of which is the estimate of equipment costs, should be collectively considered in the process.

3-10.1 Government Policy, FAR Part 31

If work which includes equipment is necessary, FAR Part 31, Contract Cost Principles and Procedures, Section 31.105 contains the Government's policy for the allowable ownership and operating costs (i.e., rental or use rates) for construction equipment. A summary of the FAR requirements are as follows:

- Equipment ownership and operation costs considered for payment should be in accordance with the cost principles within FAR Part 31.

- Actual costs to the Contractor for the ownership and operation of the equipment should be used if it is possible to determine the actual costs from the Contractor's records.

- If the Contractor's actual costs are used, the determination of those costs must be consistent with the requirements of FAR Part 31.

- When actual costs cannot be determined, the contracting agency (FLH Division office) may specify the use of a particular schedule of predetermined rates.

- If the predetermined rates do not consider costs of labor, mobilization, demobilization, or overhead and profit, additional payment may be necessary.

- If the predetermined rates contain elements which are obsolete or otherwise not applicable to the equipment in question, they shall be adjusted accordingly.

- Reasonable costs for the renting of construction equipment are allowable.

3-10.2 Implementation

The FLH's implementation of the FAR is accomplished by applying and supplementing FAR Section 31.105(d)(2) as follows:

- The predetermined schedule of construction equipment ownership and use rates is the Construction and Equipment Ownership and Operating Expense Schedule published by the United States Army Corps of Engineers for different geographical regions. This booklet and the rates it specifies are referred to as the *Corps Rates*.

- Personnel involved with the use of equipment ownership and operating rates should be familiar with the methodology used by the Corps to arrive at the rates. The initial chapters of the Corps Rates booklet contains this methodology.

- The Corps Rates do not include an overhead rate. Therefore, the contractor's actual overhead rate based on a recent audit report should be used.

- The Corps Rates do not include profit. Therefore, profit should be established, for the total CM, not just equipment in accordance with FAR Subpart 15.9.

- The standby allowance for owned equipment should be as shown in the Corps Rates book, not to exceed 8 hours in any 24 hour period and to be no more than 40 hours for a calendar-week period.

- Mobilization and demobilization costs are not included in the Corps Rates and therefore these costs may be considered for payment if the equipment is not available on the site. Payment of the applicable rate is appropriate for the hauling equipment plus the standby rate for the equipment being hauled to the

project and costs associated with any required assembly or disassembly of the equipment.

- The Corps Rates are based on the cost of diesel fuel, the current Treasury Department interest rate, age of the equipment, and other variables as noted within the booklet. If any existing condition is different than those assumed in establishing the rates, or if variables within the rates have changed significantly since they were last published, it may be necessary (and equitable) to adjust the rates. Adjustments to the rates should be based on the formulas, guidelines or adjustment tables within the Corps Rates booklet.

- If a piece of equipment is not shown within the Corps Rates booklet, a rate may be established as follows:

  (1) Use the rate for a similar piece of equipment.

  (2) Adjust the rate of a similar piece of equipment based on capacity, horsepower, size, etc.

  (3) Calculate a rate using the formulas and guidelines (methodology) contained in the Corps Rates booklet.

  (4) If the piece of equipment cannot be found in the Corps book, but can be found in another rate schedule such as the Blue Book or AGC Rate Book, establish a conversion factor based on similar equipment in both books, and compute an equivalent Corps rate for the piece in question using this factor. The use of rates directly from the Blue Book or other commercial schedule is not recommended unless the methodology for computing the rates is verified by Division office specialists as being consistent with FAR Part 31 requirements.

- Reasonable costs for the lease or rent of needed equipment from a commercial source are allowable. Supplier quotations or invoices are required to support costs for rented or leased equipment.

3-11 INDEPENDENT GOVERNMENT (ENGINEER'S) ESTIMATE (IGE)

An Independent Government Estimate (IGE), traditionally referred to in FLH as the *Engineer's Estimate* should be completed for all monetary CM's. The FAR, Section 36.203, only requires an IGE for CM's exceeding $25,000; however, an estimate should be prepared and recorded, at least informally, on all CM's. The level of detail should be commensurate with the complexity and value of the CM. The IGE should not be based on data furnished by the Contractor.

3-11.1 Estimate Data

An IGE can be based on prices that have previously been considered reasonable for similar work or established from known cost data and an awareness of the work required.

Data for the IGE could come from one or a combination of the following:

- Bid prices within the Contract or prices from other current, competitively bid contracts.
- Costs established from estimates of labor, equipment, materials, and amounts for overhead and profit (i.e., an actual cost analysis).
- Historical data (i.e., average bid prices).
- Quotations received from suppliers or other contractors.
- National averages or unit-prices from sources such as FHWA's *Price Trends for Federal-Aid Highway Construction, Engineering News Record,* or the *Means* or *Dodge* handbooks, can also be used to obtain *ball park* estimates or to ensure prices are within a reasonable range.

3-11.2 Adjustments to Data

The estimated prices obtained from any of these methods should also be adjusted for inflation, location, quantity, special conditions, trends, new technology, or any other information that could affect the Contractor's costs. The prices proposed by the unsuccessful bidders for the ongoing contract can also be useful for comparison purposes.

When using historical or comparable data the following should be considered and allowances made for any major differences.

- Were the prices obtained from full and open competition? Adequate competition is accepted as a method to produce fair and reasonable prices, but not sole source procurement.
- Are prices relatively current or do they need adjustment for inflation or other changes?
- Are similar quantities and specifications involved for those items being compared?
- Are overhead, profit, and other additions included in the prices?
- Is the project in a remote or special location such that costs are effected?

3-11.3 Compiled Estimates

FLH construction projects are often unique due to such elements as their location, aesthetic considerations, special features, terrain, environmental concerns, infrequency of work in some areas, and contractors unaccustomed to the FAR. Therefore, it is acknowledged that obtaining truly comparable prices is sometimes difficult. For these reasons, the IGE is often established from a combination of whatever data is available (e.g., known labor costs from the payrolls, the established unit bid prices, schedules of equipment use rates and estimates of production rates on equipment currently working on the project) plus an estimated amount for overhead and profit (e.g., 15 percent for overhead and 7 percent for profit).

3-11.4 Estimates from Unit-Prices

Often, unit bid prices can be proportioned or

interpolated to arrive at a reasonable estimate. Using half the unit price for half the thickness of the same material, such as for base course aggregates or asphalt pavement is an example. This method of proportioning unit prices has limited uses since the fixed costs in a material or item do not vary in relation to the thickness.

Sometimes adding or subtracting a price for the additional material or additional work to an existing unit price can be used. This method can often be used when the specification for an amount of a component material requires changing, such as the thickness of paint, type of geotextile fabric or cement type.

The estimated price should be likened to whatever comparable data is available, such as previously listed, to ensure the price is within the range of other reasonable prices and to highlight any inconsistencies.

3-11.5 Availability of Funds

Once the approximate monetary scope of a proposed CM is known, the COE should be notified for a preliminary verification that the required funding is or will be available. This early notification is needed because coordination with the Planning and Coordination office and possibly the funding agency could be necessary.

The CM might be based on, or limited to, the available funds. If funding is a problem, it is important to know before discussions and negotiation with the Contractor.

3-12 PRELIMINARY DISCUSSIONS AND PRICE PROPOSAL

The next or concurrent step to the preparation of the IGE (in the CM process) consists of introducing the proposed CM to the Contractor by means of the following two actions:

- Preliminary discussions concerning the CM and a field review of the work proposed by the CM are conducted with the Contractor.
- A pricing proposal for the CM is requested from the Contractor.

3-12.1 Preliminary Discussion and Field Review of the CM

With the consent of, or preferably in the presence of the COE, the Project Engineer should discuss and field review a proposed CM with the Contractor. These discussions are not negotiations and are not intended to compel the Contractor to accept any particular method to accomplish the work. The purpose of these discussions is to ensure the scope and intent of the CM is clearly understood by the Contractor, and to allow the Contractor to share its own ideas as to how best to accomplish the work.

The IGE should not be disclosed, and issues outside the Project Engineer's delegated authority should be discussed with the COE before being discussed with the Contractor.

Items for preliminary discussions with the Contractor might be

- scope and details of the CM,
- methods and manner of work to accomplish the CM,
- alternate materials or design revisions,
- time required for the CM work, or
- possible impact on the schedule.

3-12.2 Proposal Request to Contractor

A proposal should be requested from the Contractor for all CM's that involve price/cost changes. As this request usually initiates the CM process with respect to the Contractor, any relevant data that would assist the Contractor in the preparation of the proposal should be included. The proposal becomes a part of the basic documentation for pricing the CM.

3-12.3 Cost or Pricing Data Required

See Section 3-9.2. If the CM is estimated to cost more than $100,000 and cost or pricing data is required for all or part of the costs, the proposal must be submitted with an SF-1411 (**See Figure 3-12**) cover sheet, and in the format required by FAR 15.804-6.

3-12.4 Cost or Pricing Data Not Required

For CM's for which cost or pricing data is not required (See FAR 15.804-1) the format of the Contractor's proposal, including information other than cost or pricing data is flexible. The proposal must be sufficient for the CO to perform a price analysis (See FAR 15.805-2).

The Contractor's proposal should include sufficient information and detail for the CO to do the following:

- **Complete a Price Analysis** (i.e., a comparison with the IGE) or, if necessary, a cost analysis; **and**
- **Establish Prenegotiation Objectives, and**
- **Negotiate**

A. Marginally Complete Proposal

If the Contractor's proposal is only marginally complete, the Project Engineer may obtain the necessary clarification from discussions with the Contractor, or request clarification and additional information in writing. These discussions are not negotiations and the Contractor should be clearly so advised.

Following are possible topics for discussion with

the Contractor concerning a marginally complete proposal:

- Alternatives for doing the CM work more economically.
- Proposed price, labor, equipment, or materials which seem excessive or insufficient for the CM.
- Time or schedule problems in accomplishing the work.

If the Contractor wishes to modify the price proposal as a result of discussions, this should be noted in the files and considered during any negotiations or preparation of the CM.

It is permissible to consider revisions to the proposed CM if any relevant information is revealed in discussions or within the Contractor's proposal. The original IGE should be modified accordingly. Complex modifications to the proposal may necessitate and/or a written confirmation from the Contractor.

B. Proposal Containing Unreasonably High or Low Prices

When the Contractor's proposed price is judged to be significantly higher or less than fair and reasonable, the work should be discussed with the Contractor to ensure that no misunderstandings exist concerning the requirements of the CM. The definition of *significantly higher or lower* depends on numerous variables, such as the magnitude, location, and complexity of work; specialty items, techniques or capital investment required; or socioeconomic programs involved.

C. Incomplete Proposal

As discussed in FAR 36.402(b)(1), if the Contractor's proposal is incomplete or otherwise not sufficient for analysis, the Contractor should be advised of the insufficiency in writing. The Contractor should also be requested to supply the specific information concerning the elements of the proposal that differ significantly from the IGE.

Data other than cost or pricing data frequently requested from the Contractor due to an incomplete proposal are as follows:

1. Direct Costs

- **Materials** - Supplier quotations or paid invoices of previous transactions.
- **Labor** - Rates, fringes, etc., for all classifications of workers employed in the performance of the work related to the CM including a breakdown of payroll burden, such as FICA, FUTA, worker's compensation, insurance, etc.
- **Equipment rates** - A complete descriptive listing of equipment and data necessary to determine the equipment's ownership and/or operating costs. Vendor quotations are required to support costs for rented or leased equipment.
- **Other direct costs** - Bonds, mobilization, permits, demobilization, royalties, etc., require invoices, quotes or rates to support their costs.
- **Overhead** - Data on which the Contractor based overhead cost, such as a recent audit report. The overhead rate is usually applied to the direct costs allowed above. The prime contractor's overhead rate may be applied to subcontractor payments, provided it is an audited rate which was calculated to include subcontractor payments.
- **Subcontractor costs and profit** - Same support data as required of the contractor.

2. Other Data Frequently Requested

- **Production rates** - Hours of work required or projected for each labor classification and each piece of equipment.
- **Schedule** - Sufficient information and dates to demonstrate whether and to what extent the change will delay the contract.

D. Late or Reluctant Proposals

If the Contractor procrastinates in submitting the requested proposal or is reluctant to submit a proposal that seems reasonable, the issuance of a unilateral CM should be considered. Delays in issuing a CM, even when the Contractor is delaying the process, may result in additional liability to the Government due to delay (such as equipment standby costs or other impact from the CM on the existing schedule of work).

3-13 ANALYSIS AND NEGOTIATIONS

When a Contractor's proposal is complete as received or when sufficient data is eventually received, it should be reviewed and/or forwarded to the COE for review. Part of the review and evaluation is a cost or a price analysis to establish whether the prices proposed for inclusion in the CM are fair and reasonable.

3-13.1 Cost or Pricing Data Required

See Section 3-9.2. The use of the cost or pricing data from the Contractor's proposal is addressed in FAR 15.805-3. The FAR requires a cost analysis of the proposed prices when ever cost or pricing data is required.

A. Cost Analysis

A cost analysis must be performed when cost or pricing data has been requested from the Contractor, or when a price analysis cannot be used to judge that the proposed price is fair and reasonable.

From FAR 15.801

> *Cost analysis means the review and evaluation of the separate cost elements and proposed profit of (a) an offeror's or contractor's cost or pricing data or information other than cost or pricing data and (b) the judgmental factors applied in projecting from the data to the estimated costs in order to form an opinion on the degree to which the proposed costs represent what the cost of the contract should be, assuming reasonable economy and efficiency.*

A cost analysis is a review and evaluation of the following:

- Factual cost data obtained from the Contractor--verifiable from records, audits, etc. This is data, such as previously listed in this chapter as the cost or pricing data frequently requested from the Contractor to supplement a proposal (i.e., direct costs, such as for labor, materials; indirect costs, such as overhead rates, etc.).
- Judgments or projections (non-factual) made by the Contractor in estimating the future cost for the proposed items of work, such as anticipated productivity rates, an add-on for estimated inflation or an add-on for anticipated increase in labor.

B. Field Pricing Support

For CM's which exceed $500,000, field pricing support is required unless waived in accordance with agency procedures. For smaller CM's, the CO may request Field Pricing support to the extent necessary in accordance with FAR 15.805. Field pricing support may include, but is not limited to an audit. FAR 15.805-5 states:

> *Requests for field pricing support should be tailored to ask for minimum essential information needed to ensure a fair and reasonable price.*

C. Certification

Whenever cost or pricing data is required in accordance with the standards of FAR 15.804-6, a Certification of that data is (before execution of the CM) required in accordance with FAR 15.804-4. See **Figure 3-13, Certificate of Current Cost or Pricing Data.**

D. Price Analysis

A cost analysis should always be followed by a price analysis. That is, the final overall price including indirect costs and profit should be judged for reasonableness. See FAR 15.804-1(b)(iii).

When cost or pricing data is not required, or after the completion of cost analysis, a price analysis should be made to ensure that the overall price offered is fair and reasonable.

See FAR 15.805-2. A price analysis is the means to judge a price to be fair and reasonable without examining the details of the costs or profit which make up the price. Adequate independent data

(i.e., the engineer's estimate) or experience are necessary to judge if the proposed price is fair and reasonable.

For many CM's, a price analysis (i.e.,a comparison of the prices in the Contractor's proposal to the prices in the IGE.) is sufficient to determine if the proposed prices are fair and reasonable. If the proposed prices are not deemed fair and reasonable, negotiation should be considered.

Although it is not a FAR requirement, some form of breakdown may be necessary for a lump-sum price over $10,000. A simple division of the lump-sum price into two or more prices might be sufficient to judge them to be fair and reasonable.

E. Profit

From FAR 15.901

> *Both the Government and Contractors should be concerned with profit as a motivator of efficient and effective contract performance. Negotiations aimed merely at reducing prices by reducing profit, without proper recognition of the function of profit, are not in the Government's interest. Negotiation of extremely low profits, use of historical averages, or automatic application of predetermined percentages to total estimated costs do not provide proper motivation for optimum contract performance.*

Profit should be dependent on the risk involved (for work priced in advance), and the quality of management and cost control (for work priced after it is performed). Generally higher profit margins are used for advance pricing since risks are higher. The lower profits are used for post-work pricing. Profit is limited by statute to 10 percent for post-work pricing. See Subpart 3-10.4

3-13.2 Negotiations

The initial result of the review and evaluation of the Contractor's proposal that includes a cost and/or price analysis is either of the following:

- The proposal is reasonable and a supplemental agreement is issued.
- Negotiation is required.

Acceptance of proposed prices that originally seemed unreasonable sometimes happens when additional information, is considered during negotiations or review of the proposal.

Before or after negotiations, if the Contractor's proposed price is agreed to; but is significantly higher or lower than the IGE, the rationale for the agreement should be documented.

A. General

From FAR 15.803

> *Price negotiation is intended to permit the contracting officer and the offeror [Contractor] to agree on a fair and reasonable price. Price negotiation does not require that agreement be reached on every element of cost. Reasonable compromises may be necessary, and it may not be possible to negotiate a price that is in accord with all the contributing specialists' opinions or with the Contracting Officer's prenegotiation objective...*
>
> *...The Contracting Officer's primary concern is the price the Government actually pays; the contractor's eventual cost and profit or fee should be a secondary concern...*
>
> *...The Contracting Officer's objective is to negotiate a contract [supplemental agreement] of a type and with a price providing the contractor the greatest incentive for efficient and economical performance.*

The Government's negotiator should consider the following:

- The goal is to agree on a fair and reasonable price. For a price agreement, an accord on all cost elements is unnecessary.
- The primary concern is the price the Government pays (as compared to historical

prices, the IGE, etc.). The Contractor's cost and profit should be a secondary concern.

- A compromise may be necessary. Reconciliation of prenegotiation objectives, audit reports or other contributing inputs may not be achieved.

- The agreement should contain the incentive for the Contractor to exert an effort for an efficient and economical operation.

Successful negotiations, as with most facets of Government/Contractor relations, depend on genuine communication, mutual respect, cooperation, and an understanding of both parties interests.

B. Prenegotiation Objectives (FAR 15.807)

From FAR 15.807:

> *The contracting officer shall establish prenegotiation objectives before the negotiation of any pricing action. The scope and depth of the analysis supporting the objectives should be directly related to the dollar value, importance, and complexity of the pricing action.*

Prenegotiation objectives are the intended goals of the negotiations. The general prenegotiation objective is to reconcile difference between the Contractor's price proposal and the IGE so that an agreed price for the CM work can be reached. Any other significant objectives, such as Contract time effects, methods of work or price reductions on related work, should be established in preparation for the negotiations.

C. The Government's Negotiator

The Government may be represented by a CO with the delegated authority to approve the CM, or by someone with prenegotiation objectives and limits approved by the CO. Usually, the Government's negotiator is the Project Engineer, COE, Construction Engineer, or in some cases the Division Engineer. For the purposes of this chapter, the representative is called the *Government's Negotiator*.

The Contractor should be advised of the extent to which the Government's Negotiator has the necessary authority and intention to reach an agreement on the CM. If the Project Engineer is the Government's Negotiator, approval authority will be retained by the CO. The Contractor may have similar constraints on its representatives at the negotiations.

A negotiating session may be by telephone, but usually is done in person either by single negotiators from each party, or with the Project Engineer and COE facing equivalent Contractor personnel. For very large or complicated CM's, a team of negotiators may be appropriate.

D. Agenda for Negotiations

The agenda can play an important part in negotiations and should be prepared by the Government's Negotiator. Some negotiators will initially discuss non-controversial elements at the negotiations in order to create a climate of cooperation; others prefer to start by bringing up an issue where the Government has strength to create positive momentum. In any case, all elements of the CM should be clear to both parties, including the work involved, any unusual features or technicalities, time required for work, impact on existing schedule and estimated quantities.

The technical details and requirements of the CM should be understood prior to discussions on price, as usually the price would be dependent on the scope, specifications, and time effects.

E. New Information

During the negotiations, a new concept or additional information could be brought forth, which alters the basics of the prenegotiation objectives. The Government should review the new information, and, if additional time for study is required, the Contractor should be advised and negotiations rescheduled as appropriate. An

example of this situation might be a clarification which alters the Contractor's proposal, or undermines the assumptions on which the IGE was based.

From FAR 36.402:

> *If negotiations reveal errors in the Government estimate, the estimate shall be corrected and the changes shall be documented in the contract file.*

F. Memorandum of Negotiations (FAR 15.808)

At the conclusion of each negotiating session, the Government's Negotiator should document the session with a memorandum of the negotiations to the files to the CO, to become a part of the supporting documentation for the CM. The complexity of the memorandum will depend upon the nature of the CM and the negotiations. If cost or pricing data is required, Part 15 of the FAR should be reviewed for details of required documentation.

For most CM's, the memorandum of negotiations should list the following:

- The name, position, and organization of each person representing the Contractor and the Government in the negotiation.
- The results of the meeting, the agreements that were reached, the basis of these agreements, the remaining unresolved issues, and the understandings as to what should happen next.
- The technical, contractual, prices, and other notable aspects of the CM negotiated.
- The differences between the prenegotiation position and the final negotiated settlement, and the basis for those differences.
- The basis for determining the negotiated profit, if profit is negotiated separately.
- The extent to which the CO relied on cost or pricing data, if such were required.

3-13.3 Finalizing the CM

The CO has the sole responsibility for the final pricing decision and should review and approve all prices prior to any agreements with the Contractor. Input from all appropriate sources should be used as necessary to obtain, with or without negotiations, fair and reasonable prices. Regardless of the methods used, the end result often involves personal judgement and experience.

A. Partial Agreements

When only a portion of a CM can be agreed upon, a supplemental agreement should be prepared delineating the agreed elements. The elements not agreed can also be delineated and also any suggestions on how these outstanding elements might be settled. For example, the Contractor might be agreeable to the Government's proposed payment for the modification, but not to the proposed time effect. The resulting supplemental agreement should include the agreed price and defer the time settlement until the completion of the work.

B. No Agreement

If there is no agreement with the Contractor on a CM, the CO should consider:

- not proceeding with the CM,
- issuing the CM unilaterally (fixed price),
- issuing the CM unilaterally (undefinitized),or
- issuing the CM on an actual cost basis.

These options are discussed in Subsection 3-8.3.

3-14 COMPONENTS AND ASSEMBLY OF A CM

3-14.1 Components

The components of a CM (as furnished to the Contractor for signature) consist of the following:

- Contract Modification Form (Amendment of Solicitation/Modification of Contract, Standard Form 30),
- Continuation Sheet , and
- Plan sheets, details, specifications, drawings or other data required to clearly state the work required by the CM and the resulting equitable adjustment.
- Certification for Cost or Pricing Data if required

In addition to the above, the project file for the CM should contain the following:

- Administration Control Sheet (Optional if the Division requires a structured means of tracking CM preparation and non-contractual approvals.
- Procurement Request (Required by Transportation Acquisition Regulation).
- IGE and contract time assessment.
- Contractor's price proposal (Cost or Pricing Data if required).
- Field Pricing Report(s) if required.
- Evaluation of the proposal.
- Prenegotiation objectives.
- Records of negotiations.
- Correspondence concerning CM.
- Records of any relevant discussions or field reviews.

3-14.2 CM Form (Amendment of Solicitation/Modification of Contract, SF 30)

The Amendment of Solicitation/Modification of Contract, SF 30 when completed is the actual CM. (See **Figure 3-14**) This form is used for both change orders and supplemental agreements.

Block 1 CONTRACT ID CODE. Leave blank.

PAGE OF PAGES - Include only pages to be sent to the Contractor.

Block 2 AMENDMENT/MODIFICATION NUMBER. Enter four digit consecutive number assigned to each supplemental agreement, change order, and amendment. (e.g., "CM No. 0004". The words "Supplemental Agreement" or "Change Order" can also be used in block 2 to more closely define the type of modification being issued.

Block 3 EFFECTIVE DATE. Normally enter , See Block 16C."

Block 4 Not applicable. Leave blank.

Block 5 PROJECT NO. Enter the Project Number, such as NTP 3X2, ID FH 23(1).

Block 6 ISSUED BY. Enter the name and address of the appropriate FLH Division.

Block 7 ADMINISTERED BY. Leave blank.

Block 8 NAME AND ADDRESS OF CONTRACTOR. Enter Contractor name and address as shown on the contract.

Blocks 9A & 9B Not applicable.

Block 10A MODIFICATION OF CONTRACT/ ORDER. Enter the DOT Contract Number such as DTFH70-95-C-0123.

Block 10B DATE. Enter the Contract date.

Block 11 Not applicable.

Block 12 Use appropriate account number and include the net amount of the changes.

Block 13A Mark this block for a unilateral change order. Reference the appropriate FAR clause. (In most cases this will be the Changes Clause, FAR 52.243-4).

Block 13B Mark this block for a unilateral CM issued for an administrative change that does not require an equitable adjustment, or the Contractor's agreement.

Block 13C Mark this block for a supplemental agreement. With this type of CM, both the Contractor and Government have agreed to modify the pricing of the CM. The FAR reference is usually the Changes Clause, however, there are situations where another Contract clause is appropriate.

Block 13D This block is normally not used. If using this block seems appropriate, it should be discussed with the COE.

Block 13E Mark the *is not* block for change orders as change orders do not require the contractor's signature. Mark the *is required to sign this document and return ___ copies to the issuing office.* block for supplemental agreements and indicate the number of copies the Contractor is to sign and return to the project or Division office.

Block 14 DESCRIPTION OF AMENDMENT/MODIFICATION. Give a concise description of the modification and the effect on Contract time. If there is no effect on Contract time, it should be so stated. A release statement is included in all supplemental agreements and should be worded as shown in FAR 43.204 or as provided by the COE. If the CM is a change order, a release statement is not included; however, state that the Contractor's signature in Block 15B acknowledges receipt of the order. Use a continuation sheet if necessary.

Block 15A NAME AND TITLE OF SIGNER. The name and title of the person authorized to sign or receive a CM for the Contractor should be typed or printed in this block. This block is usually filled in by the Contractor but can also be filled in by the CO's staff if the name and title are known at the time the CM is being prepared.

Block 15B CONTRACTOR/OFFEROR. The person named in block 15A, the authorized representative of the Contractor, signs in this block to indicate agreement to a supplemental agreement. Change orders (CM's which the Contractor is not in agreement with) should be acknowledged by the Contractor as being received, although in hostile situations this is not required as long as the Engineer documents the files that the CM was in fact, delivered to the Contractor.

Block 15C DATE SIGNED. The person signing in block 15B enters the date signed.

Block 16A NAME AND TITLE OF CONTRACTING OFFICER. Enter the name of the Contracting Officer.

Block 16B UNITED STATES OF AMERICA BY. Signed by the Contracting Officer with authority to sign the size and type of CM indicated.

Block 16C DATE SIGNED. Enter the date the CM is signed by the CO for unilateral CM's , or both parties for bilateral CM's.

3-14.3 Continuation Sheet (Tabulation of Contract Changes)

A continuation sheet is used to summarize the contract item and dollar amount changes due to the CM. This form or an equivalent is required for CM's which include new items, changes in quantities, or changes in unit prices. All the items of work involved or affected by the CM should be listed separately as follows:

- **Decreased items**.
- **Increased items**.

- **Deleted items.** It is preferable not to unnecessarily delete items, and replace them with new, slightly changed item. A new item reflecting only the change is preferred to avoid giving a misleading indication of the size of the CM.

- **New items.**

- **Changed items** (changes in unit price).

For each item list the following:

- **Item number** (e.g., 20401, 40101).

- **Item Name** (e.g. Roadway excavation; or Hot asphalt concrete pavement, class___, grading___, class___pavement smoothness)

- **Quantity.** (i.e., the quantity changed, created, or otherwise affected by the CM).

- **Unit** (square meter, metric ton, etc.)

- **Unit Price or Lump Sum** (i.e., the contract price, agreed or unilaterally established price for the item).

- **Dollar Amount** (i.e., the product of the quantity and the unit price). For decreased or deleted items, the amount will be a negative value. The algebraic total of the amounts is the *Estimated Net Change in Probable Contract Amount as a Result of this CM*.

3-14.4 Administrative Control Sheet

The Administrative Control Sheet is an internal document used to document the sequence of preparation of the CM, as well as technical, administrative, or cooperating agency concurrences not required contractually, but required by Division procedures. It is attached to the front of the CM from initial preparation through approval but is detached prior to sending the CM to the Contractor. The use of, and format for the Administrative Control Sheet is optional with each Division.

3-14.5 Contract Modification Checklist

The following is a suggested checklist which may be used by the Division for CM quality control. It may also be incorporated into the Administrative Control Sheet. The checklist should be completed by the Project Engineer and/or COE. The CM checklists address the availability or completeness of the following elements:

- **Procurement Request** including documentation of funds availability.

- **Independent Government Estimate** and contract time assessment.

- **Contractor's Proposal**.

- **SF 1411, Cost or Pricing Data and Certification of Cost or Pricing Data**, if required.

- **Evaluation of Proposal** (a price or cost analysis).

- **SF 30, Amendment of Solicitation/Modification of Contract**.

- **Continuation Sheet - Tabulation of Contract Changes**.

- **Records of discussions, objectives, negotiations**

3-15 CM REVIEW

The Government generally requires full and open competition, and although FAR 6.001 waives competition requirements for CM's, any modification to an ongoing contract (since it is non-competitive) is subject to review and scrutiny.

3-15.1 Reasons for Review

CM procedures are reviewed and monitored for the following reasons:

- To determine the adequacy of management and internal controls over CM's,
- To determine reasons for the CM and eliminate a need for the same CM on future projects, and
- To determine contract growth generators to refine monetary controls and for budget purposes.

3-15.2 Audits of CM's and CM Procedure

Audits or reviews of CM procedures are periodically done by organization outside FLH, such as, the Office of the Inspector General (OIG), the Office of the Secretary of Transportation or FHWA Office of Contracts and Procurement.

The objective of these CM reviews is usually to determine the adequacy of management and internal controls over CM's to help prevent fraud, waste, and abuse. These reviews normally evaluate how effective CM procedures are.

3-15.3 Contract Growth

Contract growth is a measure additional funds required to complete a contract (project). A microcomputer system to store, sort, identify and monitor contract growth using CM's and other growth generators has been developed for use in the FLH Program. A data base program to analyze CM's is available which contains sufficient details to determine the reasons for any contract growth.

The input data sheet (data base form) for this program allows over 70 selections in areas such as reason for change, initiated by, agreement type, areas of work affected, and contractual effects. (See **Data Base Report, Figure 3-15**) This input data results in 25 pieces of information (data fields) concerning each CM available that can be sorted or combined as desired with all other CM's. The program can also include other growth generators, such as overruns, incentives and contingent sums.

3-16 FEEDBACK

Feedback concerning the causes of CM's from the construction staff to the project designers and other appropriate personnel is encouraged, and is necessary to evaluate and improve the FLH design/construct process. The FLH, Project Development and Design Manual, Volume 1, Chapter 11 is devoted to feedback and should be reviewed for further information.

3-16.1 Forms of Feedback

The feedback systems, in addition to the CM's themselves, range from informal communications, such as telephone calls, and *Minute Memos*, to field reviews and management reviews of CM procedures. Other feedback items are as follows:

- Trip reports from construction, materials, and design staff.
- Contractor claims and resulting evaluations and reports.
- Reviews of Contractor initiated Value Engineering Change Proposals (VECP's).
- Formal program management reviews or audits of CM's and CM procedures.
- Feedback form reports.
- Surveys and correspondence from owner or maintaining agencies, such as requests for modifications, post-construction problems, environmental concerns or commitments.

3-16.3 Feedback Report

At present, a feedback form is being used in the FLH Divisions. (**See Feedback Report, Figure 3-16**) Although the procedure might vary within the Divisions, the form is basically handled in the following manner:

1. The originator, usually the Project Engineer, states the problem with a recommended solution and sends the form to the COE.
2. The COE concurs and/comments on the proposal and forwards the form to the relevant offices. The form includes space for the appropriate offices to enter what process changes or other action was taken, or to add comments.
3. When the dissemination is complete, a copy of the completed form circulates back to the COE and the originator of the form.
4. The COE usually prepares a quarterly report of all feedback obtained and distributes it to the relevant offices, such as Materials or Project Development.

CONTRACT PRICING PROPOSAL COVER SHEET
(Cost or Pricing Data Required)

1. SOLICITATION/CONTRACT/MODIFICATION NUMBER

OMB No.: 9000-0013
Expires: 09/30/98

Public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition Policy, GSA, Washington, DC 20405.

2a. NAME OF OFFEROR	3a. NAME OF OFFEROR'S POINT OF CONTACT	3c. TELEPHONE
2b. FIRST LINE ADDRESS	3b. TITLE OF OFFEROR'S POINT OF CONTACT	AREA CODE / NUMBER
2c. STREET ADDRESS	4. TYPE OF CONTRACT *(Check)*	
2d. CITY / 2e. STATE / 2f. ZIP CODE	a. NEW CONTRACT; b. CHANGE ORDER; c. PRICE REVISION/ REDETERMINATION; d. LETTER CONTRACT; e. UNPRICED ORDER; f. OTHER *(Specify)*	
5. TYPE OF CONTRACT *(Check)*: ☐ FFP ☐ FPI ☐ CPFF ☐ OTHER *(Specify)* ☐ CPIF ☐ CPAF	6. PROPOSED COST *(A + B = C)*	
	A. COST	B. PROFIT/FEE / C. TOTAL

7. PERFORMANCE

PLACE		PERIOD	
a.		a.	
b.		b.	

8. List and reference the identification, quantity and total price proposed for each contract line item. A line item cost breakdown supporting this recap is required unless otherwise specified by the Contracting Officer. *(Continue on reverse, and then on plain paper, if necessary. Use same headings.)*

a. LINE ITEM NO.	b. IDENTIFICATION	c. QUANTITY	d. TOTAL PRICE	e. PROP. REF. PAGE

9. PROVIDE THE FOLLOWING *(If available)*

NAME OF CONTRACT ADMINISTRATION OFFICE	NAME OF AUDIT OFFICE
STREET ADDRESS	STREET ADDRESS
CITY / STATE / ZIP CODE	CITY / STATE / ZIP CODE
TELEPHONE ▶ AREA CODE / NUMBER	TELEPHONE ▶ AREA CODE / NUMBER

10. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY IN THE PERFORMANCE OF THIS WORK? *(If "yes" identify)*	11a. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT? *(If "Yes," complete Item 11B)*	11b. TYPE OF FINANCING *(Check one)*
☐ YES ☐ NO	☐ YES ☐ NO	☐ ADVANCE PAYMENT ☐ PROGRESS PAYMENTS ☐ GUARANTEED LOANS

12. HAVE YOU BEEN AWARDED ANY CONTRACTS OR SUBCONTRACTS FOR THE SAME OR SIMILAR ITEMS WITHIN THE PAST 3 YEARS? *(If "Yes," identify item(s), customer(s) and contract number(s) on reverse of form.)*	13. IS THIS PROPOSAL CONSISTENT WITH YOUR ESTABLISHED ESTIMATING AND ACCOUNTING PRACTICES AND PROCEDURES AND FAR PART 31, COST PRINCIPLES? *(If "no," explain on reverse of form)*
☐ YES ☐ NO	☐ YES ☐ NO

14. COST ACCOUNTING STANDARDS BOARD (CASB) DATA *(Public Law 91-379 as amended and FAR PART 30)*

a. WILL THIS CONTRACT ACTION BE SUBJECT TO CASB REGULATIONS? *(If "No," explain in proposal)*	b. HAVE YOU SUBMITTED A CASB DISCLOSURE STATEMENT (CASB DS-1 or 2)? *(If "Yes," specify in proposal the office to which submitted and if determined to be adequate)*
☐ YES ☐ NO	☐ YES ☐ NO
c. HAVE YOU BEEN NOTIFIED THAT YOU ARE OR MAY BE IN NONCOMPLIANCE WITH YOUR DISCLOSURE STATEMENT OR COST ACCOUNTING STANDARDS? *(If "Yes," explain in proposal)*	d. IS ANY ASPECT OF THIS PROPOSAL INCONSISTENT WITH YOUR DISCLOSED PRACTICES OR APPLICABLE COST ACCOUNTING STANDARDS? *(If "Yes," explain in proposal)*
☐ YES ☐ NO	☐ YES ☐ NO

This proposal is submitted in response to the solicitation, contract, modification, etc., in Item 1 and reflects our estimates and/or actual costs as of this date and conforms with the instructions in FAR 15.804-6(b)(1), and Table 15-2. By submitting this proposal, the offeror, if selected for negotiation, grants the contracting officer and authorized representative(s) the right to examine, at any time before award, those records, which include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or any other form, or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.

15. NAME OF OFFEROR *(Type)*	16. TITLE OF OFFEROR *(Type)*	16. NAME OF FIRM
17. SIGNATURE		18. DATE OF SUBMISSION

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STANDARD FORM 1411 (REV. 10-95)
Prescribed by GSA - FAR (48 CFR) 53.215-2(a)

Figure 3-12

Certificate of Current Cost Or Pricing Data

This is to certify that, to the best of my knowledge and belief, the cost or pricing data (as defined in section 15.801 of the Federal Acquisition Regulation (FAR) and required under FAR subsection 15.804-2) submitted, either actually or by specific identification in writing, to the contracting officer or the contracting officer's representative in support of _____* are accurate, complete, and current as of _____**. This certification includes the cost or pricing data supporting any advance agreements and forward pricing rate agreements between the offerer and the Government that are part of the proposal.

Firm_____

Signature_____

Name_____

Title_____

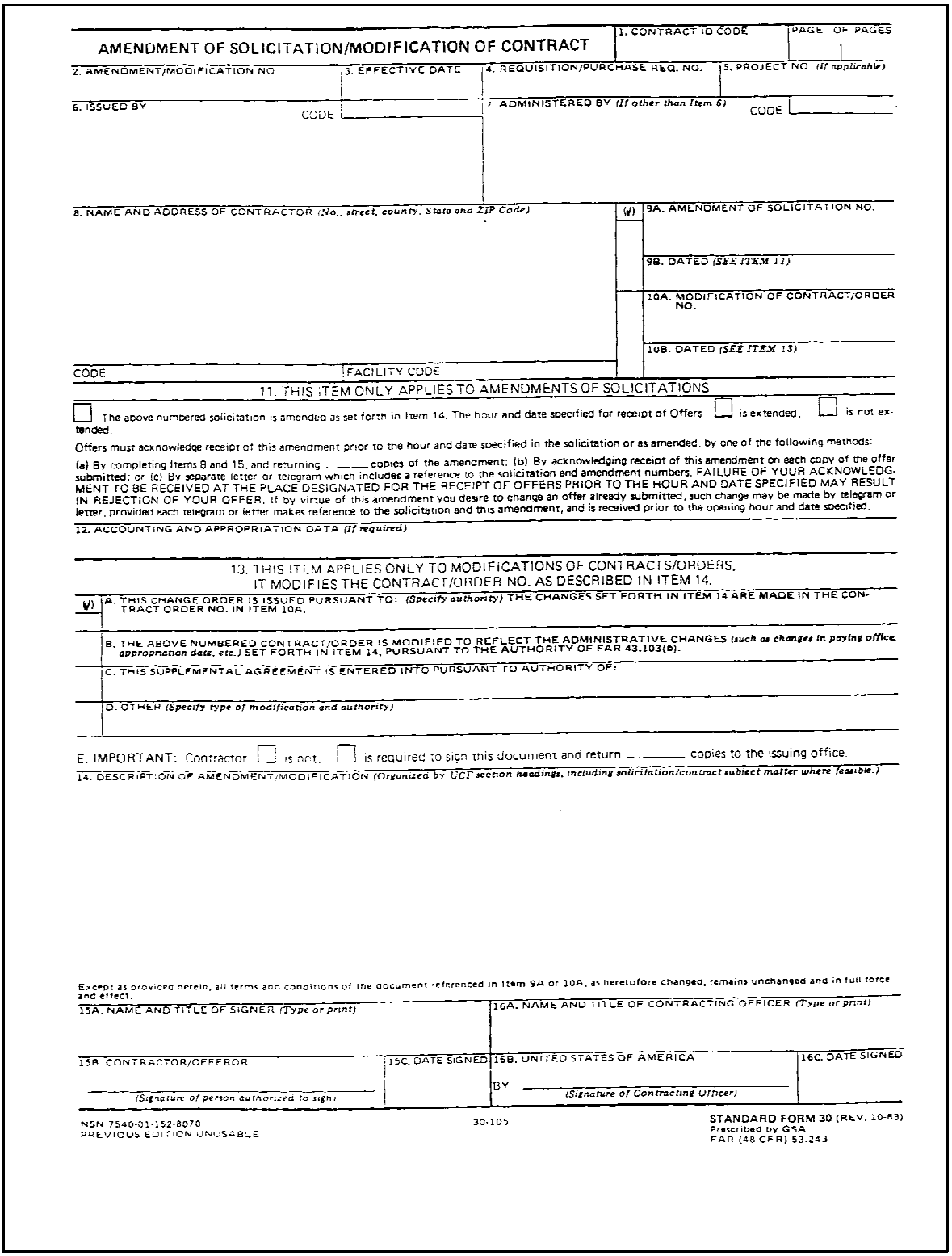
Date of Execution*** _____

* Identify the proposal, quotation, request for price adjustment, or other submission involved, giving the appropriate identifying number (e.g. RFP No.)

** Insert the day, month, and year when price negotiations were concluded and price agreement was reached or, if applicable, another date agreed upon between the parties that is as close as practicable to the date of agreement on price.

*** Insert the day, month, and year of signing, which should be as close as practicable to the date when the price negotiations were concluded and the contract price was agreed to.

Figure 3-13



AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE | PAGE OF PAGES

2. AMENDMENT/MODIFICATION NO. | 3. EFFECTIVE DATE | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. (If applicable)

6. ISSUED BY CODE

7. ADMINISTERED BY (If other than Item 6) CODE

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)

(X) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED (SEE ITEM 11)

10A. MODIFICATION OF CONTRACT/ORDER NO.

10B. DATED (SEE ITEM 13)

CODE FACILITY CODE

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).

C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)

16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)

15B. CONTRACTOR/OFFEROR | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA | 16C. DATE SIGNED

(Signature of person authorized to sign)

BY (Signature of Contracting Officer)

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30-105

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA
FAR (48 CFR) 53.243

Figure 3-14
Amendment of Solicitation/Modification of Contract

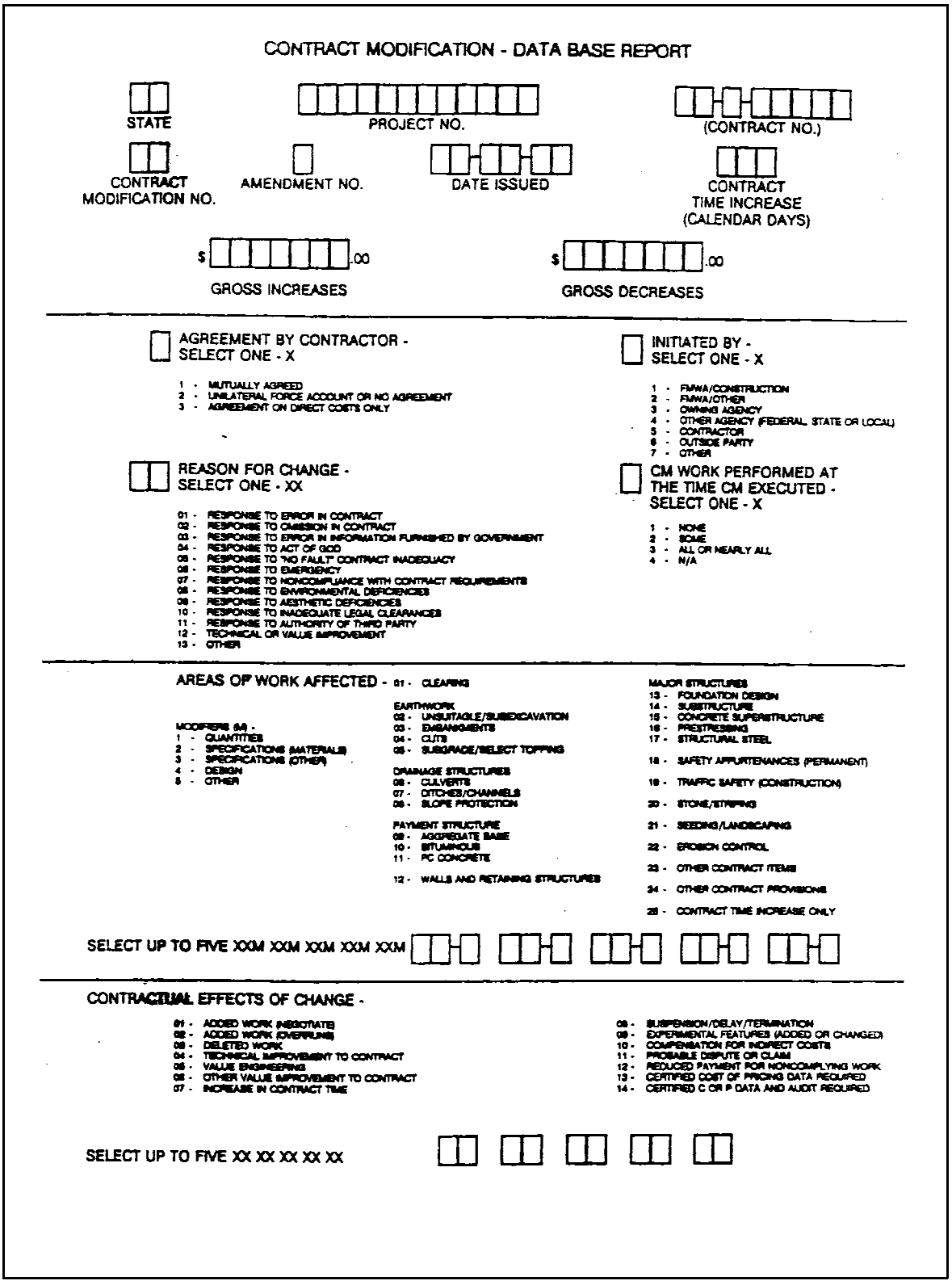

Figure 3-15
Contract Modification - Data Base Report

FEEDBACK REPORT

To: _____

From: _____

Date: _____

Instructions:

1. One problem per report.
2. May be completed in pencil or ink.
3. Forward original and 1 copy to Division office.
4. Retain a copy for your records.

Project Name: _____

Type of Contract: _____
(Grading, Base, Paving, Bridge, etc.)

List any problems encountered in the plans, specifications, or administration of your contract, any problem associated with Division support services, or any deficiencies where correction action or improvements can be incorporated into upcoming projects. Timely submission is essential for implementation of corrective actions.

Problem: _____

(attach additional pages if more space is needed)

Corrective Action Taken and Improvements Recommended for Future Projects:

Division Staff Comments: _____

Action Recommended and by Whom: _____

Figure 3-16
Feedback Report