



# CPE WORKSHOP

# Unit 6 Outline

- Post Bid Procedures
- Change Orders
- Contingency
- Testing location (BCOM office)
- Testing procedures

- “as-bid” = estimator’s review of the bid.
- Archive forms, telephone bids, letters, and faxes.
- “as-bid” analysis = estimators re-bid the project.

### **As-Bid Analysis**

The focus of the period immediately after the bid is on the “as-bid” analysis. The term “as-bid” refers to the estimator’s review of the compilation of the project bid. The estimator will recompile the bid to confirm the decisions made on bid day were correct and that the arithmetic was accurate. The lead estimator on the project must take responsibility for this task and personally perform the analysis.

The first step is to put copies of the completed forms, qualifications, summary, and bid bond in a clearly identified file folder or envelope. When the bid summary is on a computer, print it out and place it in the file.

The next step is to collect all the telephone bid forms, scope letters, faxed bids, and add/deduct sheets and organize them by trade. When using a checklist or scope card to analyze subcontractor bids, attach the related paperwork to each checklist.

Place the apparent low bid quotation at the top. Separate bid takers may do the analysis of specific disciplines of work, such as mechanical or electrical. Those individuals must organize the information and clarify their notations before giving the package to the estimator.

The “as-bid” analysis may take a day because the estimators will re-bid the project at their own pace. Carefully review each subcontractor bid to be sure there was a correct analysis on bid day. Estimators may concentrate on the apparent low bidder in each trade, but they also must read the other bids. One reason for this requirement is that occasionally on bid day, a subcontractor qualification or exclusion is misunderstood or missed. Quotations with alternates or extensive breakdowns may not have received proper analysis.

- Scope of bids

The estimator also may find bids inadequately reviewed at bid time due to time constraints. During the “as-bid” check the arithmetic on each quotation. Compare qualifications or exclusions to the scope the estimator expected for that trade. An unexpected qualification by a third bidder may require review with the apparent low bidder. The estimator must pay particular attention to the analyses performed by the separate bid takers mentioned above. These individuals may be qualified to review bids but depend on the estimator’s broader knowledge of the entire project. This may provide a different perspective to the bid analysis.

- Transfer of bids to the bud summary

With the review of each bid, the estimator must show the accurate transfer of information to the bid summary or spreadsheet for the trade. When using a spreadsheet for the analysis of each trade, confirm all entries. Check all arithmetic on the sheet. Upon finding discrepancies, the estimator should note them on a separate piece of paper or on the spreadsheet. Spreadsheet notations should show that they occurred after the bid. Enter any bid omissions due to lack of time on bid day on the spreadsheet with a note about the addition. Erasures or changes to subcontractor bid forms are not appropriate. Do not alter the bid day paper trail. An exception to this rule would be when a telephone bid is not signed or dated by a bid taker. Identify the bid taker and require immediate completion of the form.

- Confirm accuracy of transfer

Confirm that the initial information on the spreadsheet is correct and then check the accuracy of transfer of numbers to the bid summary. Upon checking the initial transfer, trace all later changes. Use the example of an apparent low price changing twice during the bid. See if the summary matches the spreadsheet. There should be “add” or “deduct” paperwork that tracks the changes.

- Subcontractor notations

During the “as-bid,” the estimator must pay attention to all notations on the subcontractors’ bids. Do they show whether the low subcontractors’ bids were per plans and specifications? When estimators knowingly use bids not per plans and specifications, they must recognize the cost exposure.

- Substitutions and subcontractor selection

Maintain a list of suggested substitutions for materials and suppliers. Owner or architect decisions on substitutions can affect subcontractor selection. Ask for cost saving suggestions from subcontractors, since owners may ask for cost saving suggestions after the bid. This is especially true when the bids are over budget. Address value engineering and substitutions as soon as possible to get a decision. The timely completion of the job may depend on the proper processing of these changes at the start.



- “as-bid” bid summary

At the end of the review, the estimator should prepare a new bid summary. Label it “as-bid.” This reflects all the potential savings or losses identified by the “as-bid” analysis. A loss may occur when the scope of a subcontractor’s bid does not match the scope on the spreadsheet. The general contractor may lose money by having to use a higher, complete bid. The analysis also may identify a “hole,” or item not covered by any subcontractor. Savings may occur if the estimator finds a “double-up,” or item covered twice.

- Verify scope is covered once.

For example, the HVAC and electrical bidders may both include the same motor starters. The estimator also may find purchasing some scopes of work may differ from bid day assumptions. “Plug numbers” in the bid may eventually result in a saving or a loss. The estimator should try to firm up the plug numbers during the as-bid.

- Go back and review bids not used.

Sometimes a subcontractor other than the one used on bid day actually has a more complete number or lower bid. This may be a result of a hectic bid day. There may be receipt of the number without proper recording or recognition. The estimator should note these issues on the spreadsheet as a reminder to improve receipt and recording of information on bid day.

- Why did the low bidder win?
  - Bids not received?

If a contractor is not the low bidder and the estimators cannot discover why from the analysis, they should try to find the answer. Estimators may determine from industry contacts if there were subcontractor bids not received. They may find that the low bidder omitted an item from the bid. The estimator should do some research because the answers may help on the next bid.

- Decide ahead of time what your policy is on late bids.

Frequently, late bids are hand-delivered or sent by fax machine. Company policy must address the disposition of late bids. The best policy is to disregard late bids. Late telephone bids should not be acceptable. Some contractors consider late bids as those received after more than one to two hours before bid time.

- Archive the entire post bid analysis in an organized manner.

The estimator should carefully document the analysis. This makes the subcontracting process easier for the individuals involved with that process. When a project manager awards the subcontracts, the estimator's notes must clearly identify the status of each trade and his recommendations. Before making an award, the project manager should review the final selection with the estimator.

- Sub selection and
- how to release information to the subs.

With the issue of subcontractor selection comes the question of when and how to release information to the subcontractors. Keep subcontractor bid results in confidence until the final general contractor results are available. If there is a public bid opening, the unsuccessful bidders may release results immediately. The successful bidder will want to complete the “as-bid” analysis before releasing information.

- How to handle curious subs.

Regardless of the status of the bid results, direct all questions from subcontractors to the estimator. Until estimators complete the analysis, they should advise subcontractors that the bid result tabulation is incomplete. The receptionist also should remind the subcontractors to confirm their bids in writing. The estimator's goal should be to have all apparent low bids confirmed in writing before completing the as-bid review. Occasionally, the confirmation alters the information received at bid time. When this happens, the estimator (and bid taker, if applicable) must resolve the discrepancy immediately. The estimator should respond with a letter of record to identify a potential problem.



- Who will release bid results?

Company policy must be clear on who releases bid results and when to do it. There is always pressure by subcontractors on the bid takers to provide information. In spite of this, members of the estimating team must direct the calls to the estimator. Simple comments like, “You’re in the running,” may lead to misunderstandings.

- Make company policies known ahead of time.

There is always room for personal judgment. However, the best way to let subcontractors know that everyone receives fair treatment is to have clear company policies and procedures.

- Award sub contracts within 30 days.

When a contractor is the successful bidder, the estimator or project manager usually release bid results. This depends on who awards the subcontracts. Notification of subcontractor standings should follow the award of the subcontract. Complete the subcontract awards promptly, usually within thirty days. This is for the contractor's benefit as well as the subcontractors. Subcontractors need the feedback so they can adjust for the next job. When a subcontractor is out of contention, the estimator may choose to convey this information early in the process. The estimator should do this without revealing facts about the other bids. Ideally, advise subcontractors of their competitive position as to price and scope. Sometimes the release of exact figures and subcontractor names may create problems.

- Prevent bid peddling when disseminating position of subs.

General contractors may analyze the scope of bids in different ways. A subcontractor may misinterpret exact figures and names if they receive contradictory information from another general contractor. Another option is to give results to a subcontractor on a percentage variance or standing basis, or both. For example, advise the subcontractor that they were the third bidder and four percent high. Handle the process to prevent or discourage bid peddling and bid shopping in the marketplace.



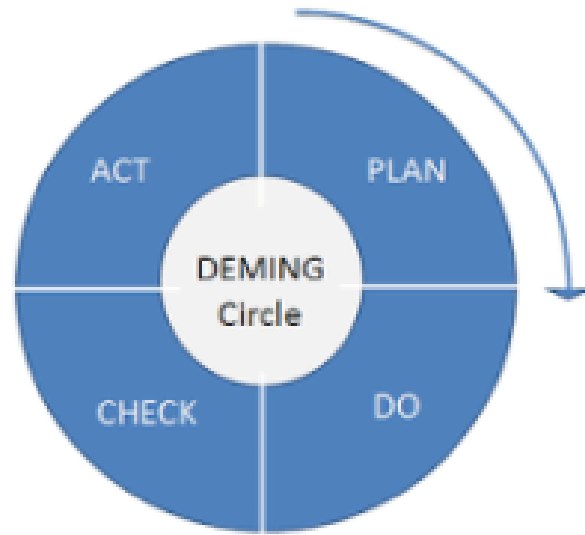
- Be consistent how results are announced.

Release bid results over the telephone, by written notification to bidders or by posting the information in the plan room. The method chosen by the estimator depends on the timing of the release and on the time available to put in a publishable format. The procedure should be consistent from job-to-job within the company. The as-bid review provides other important information to the estimator for future bids and for historical purposes.

- Capture new subs to the company's permanent list.

For example, a competitive bid will frequently identify new subcontractors for the estimator. During the as-bid, a recording device is convenient for developing a summary of the subcontractor bidders by trade and by relative bid order. Listing the subcontractor, the contact, and the telephone number provides important information. Use this to update the telephone numbers and contacts on the subcontractor list. Also use this to identify subcontractors for addition to the permanent list. The relative bid order also may provide an indicator of which subcontractors are most competitive at that period. The subcontractor with the second bid may be the one to watch on the next bid.

- Fix systematic procedures.



- \* The “as-bid” will highlight errors that the estimating team may have made during the bid. For example, if the telephone bid forms are incomplete, review the mistakes with the team at a pre-bid meeting before the next bid. When delivery of critical bids to the bid room is late and not addressed at bid time, review and correct the reason.

- Build your database.

✱ The “as-bid” also gives the estimator an opportunity to develop historical information. These include unit prices or cost per square foot figures for various trades. Every piece of information can be helpful on the next project when recorded and accessible. The contractor should have a historical cost data base in place for various building types, systems costs, etc. The estimator then assembles information for the data base during the “as-bid” period. This is to provide the company with up-to-date historical information.



- Housekeeping after losing a bid.

When the contractor was not the successful bidder, the estimator may have additional items to take care of after the bid. Collect bid documents from subcontractors for return to the architect or owner for a deposit refund, when required. When there is a log book of deposit checks, the estimating secretary may have the responsibility for this task. Use a tickler file or log book to record bid bonds and return them as necessary. An apparent low bidder should tell their bonding company that they will be receiving the contract. An unsuccessful bidder also should contact the bonding company immediately to maintain the contractor's bonding capacity.

- Buy-out time-sensitive contracts first.

\* When the contractor is the apparent low bidder, use the post-bid period to address scheduling, bonding, and contract conditions with the proposed subcontractors. Resolution of these issues may affect subcontractor selection. The estimator also must note any supplier or subcontractor qualifications that restrict their bid or material pricing to a limited time. The estimator may give preliminary verbal notification or letters of intent to subcontractors before contract award. Use this to tie down prices for materials and to start the submittal process for long lead items.

- Estimator to PM transition.

\* During the buy out and job set-up period, the estimator should communicate frequently with the project manager. This will assure the most effective buy out of the job. The estimator may request the use of specific cost accounts to track important costs during the job. At the completion of job buy out, provide a list of the final subcontractors and suppliers to the estimator.

- The value of post bid procedures

When estimators complete the post-bid procedures, they will know if the bid meets expectations. “Win or lose,” they can put that bid aside and start work on the next one. The post-bid procedures will have provided valuable feedback to make operations more effective.

- Changes in the work

III. Types of Changes - There are many ways in which the contract can be changed, either by adding or deleting or modifying particular items of work or by creating conditions where the effort required by the contractor is increased without changing any items of work themselves.

- Reasons for changes

| DGS-30-096<br>(Rev. 06/17) |               | CHANGE ORDER JUSTIFICATION<br>( Statistical Summary )    |  | CO-11a<br>Part 3                 |
|----------------------------|---------------|--|--|----------------------------------|
| <u>Project Code</u>        |               | <u>Change Order Number</u><br>0                          |  | <u>Change Order Date</u><br>#N/A |
| <u>Reason Code</u>         | <u>Amount</u> | <u>Reason Code Description</u>                           |  |                                  |
| 1                          | \$ -          | 1 - Unforeseen site conditions                           |  |                                  |
| 2                          | \$ -          | 2 - Existing building or utility conditions not as shown |  |                                  |
| 3                          | \$ -          | 3 - Change in agency's requirements                      |  |                                  |
| 4                          | \$ -          | 4 - Substitution or alternate method                     |  |                                  |
| 5                          | \$ -          | 5 - Item not as shown or specified                       |  |                                  |
| 6                          | \$ -          | 6 - Conflict or discrepancy in requirements              |  |                                  |
| 7                          | \$ -          | 7 - Other.   |  |                                  |
| <b>Total</b>               | <b>\$ -</b>   |  |  |                                  |

- Fixed-price contracts cover a fixed amount of work
- RFPs

(A) Formal Contract Modification: Where the owner sees a need for a change to overcome a design deficiency or simply in order to upgrade the present design, the owner normally will send to the contractor the scope of work encompassed by the change and request a proposal for an equitable adjustment in the price and time of performance. The proposal is then submitted and the parties come to an agreement, with or without negotiation, on a fixed price and a time extension for the change. If it always worked that way, however, the lawyers who specialize in government contracts would be doing something else for a living. Too often, the government will demand that the contractor perform the extra work before there is an agreement on the price, thanking the contractor for his proposal and assuring him that they will work out an agreement on the price later. As most contractors know, this practice can cause many problems, all of them dealing with lack of cash flow. It is not unheard of for a contractor to perform \$200,000 worth of extra work over a 12-month period without receiving any formal contract modifications, which means that he cannot include the value of those extras in any of his requisitions.

- Bilateral v. Unilateral
- Reservation of rights for time and money

(B) Bilateral v. Unilateral: A bilateral modification is one that is executed by both the owner and the contractor, whereas a unilateral modification is executed only by the owner and constitutes an order to perform the specified work at a stated price without prejudice to the contractor's right to claim additional compensation and/ or time.

In executing a bilateral modification, the contractor should be aware that all claims for additional time or money growing out of that change will be barred unless there is a clear reservation of rights contained in the modification. Appropriate wording to preserve such rights and the typical government resistance to the inclusion of such language in bilateral modifications are discussed later.



- Changes from concealed conditions

(C) Differing Site Conditions: Changes in the scope of the work or in the method or manner of performance which increase the cost or time of performance often arise out of differing or changed site conditions. There are two types of such changes. One category deals with differences between the contract documents and actual concealed conditions at the site. For example, soil borings in the invitation to bid might depict stable subsurface conditions, whereas after excavation is commenced, the contractor might find excessively moist conditions which require well-pointing to dry the site and additional earth handling and time to dry the stockpiled excavated material before backfilling. To support the contractor's entitlement to an equitable adjustment in price and time for this change, the actual subsurface conditions must not be known to the contractor or able to be observed with a reasonable pre-bid site inspection.

- A simple clarification may be a change

(D) Constructive Change: A constructive change is an actual change in the work that is not recognized to be a change by the contracting officer. The government may issue what it believes to be a simple clarification of a portion of the specifications, and the contractor may consider that instruction to represent a change in his planned method of performance or an increase in the work that he was required to do under the contract. In that case, the contractor must give written notice to the contracting officer before he undertakes that work that he considers to be a change to the contract and that he will follow the instruction under protest and reserve his right to seek additional money and time; without such advance notice the contractor normally will be barred from any type of equitable adjustments on account of that change. Most contracts contain provisions as to when notice of the change must be given and as to when the claims for additional money or time must be submitted and those time limitations must be carefully observed to avoid losing what otherwise would be a valid extra.

- Accelerating the schedule is a change

(E) Acceleration: A change occurs when the contractor is ordered by the owner to accelerate his work in order to meet an early completion date. This will normally result in a number of trades over-manning the job simultaneously instead of working with the optimum crew sizes in an orderly sequence; if the contractor pays overtime hours or, due to the inevitable loss of efficiency, incurs greater labor costs than would otherwise have been spent to perform the same work, he is entitled to an equitable adjustment.

- Actual and constructive delays

(F) Delays and Suspensions of Work: Delays, disruptions, and suspensions of the work necessarily cost money. If they are the fault or responsibility of the contractor, he will be exposed to liquidated damages; if they are the fault or responsibility of the owner, the contractor will be entitled to his direct and indirect increased cost of performance during the overrun period. As in other types of changes, the contracting officer can be responsible for both actual delays and constructive delays. These changes are actual when the contracting officer can be responsible for both actual delays and constructive delays. These changes are actual when the contracting officer recognizes that the government has delayed or disrupted or suspended the work, such as when the contracting officer issues a suspension of work order which halts all or some portions of the work while the government considers and decides upon certain design changes. A constructive delay or a constructive suspension occurs when the contracting officer is not aware of or does not acknowledge that his conduct is delaying or disrupting or suspending the work, such as when he permits the work of another contractor on an adjacent site to interfere with the contractor's project or when the government improperly rejects shop drawings on critical material or equipment and thereby extends the time when those items can be ordered and fabricated and installed. As with other constructive changes, notice is vital; as soon as the contractor becomes aware that the government's conduct is or may be disrupting and delaying his progress, he must give the government written notice of that fact in order to be sure that he does not lose his right to additional money and time.



- Termination for breach of contract or convenience

(G) Termination: Most contracts give an owner the right to default terminate the contractor for what the owner perceives to be material breaches of the contract, and most government contracts as well as many private contracts give the owner the right to terminate the contract for the convenience of the owner, that is, a “no fault” termination. All Federal procurement provides that if a contractor is default terminated erroneously, that is, where it is later determined by a Board of Contract Appeals of the Claims Court that the default was improper because the contractor was not in material breach, the remedy is to convert the default termination into a termination for the convenience of the government.

When a contractor is defaulted properly, he (and his performance bond surety) will be liable for the amount by which the government’s costs to re-procure and complete the work exceeds the balance remaining in the contract. When the government improperly defaults a contractor, it is deemed to be a constructive termination for convenience under which the contractor is entitled to recover his actual out-of-pocket expenses, including payment under the contract for all work done to the date of termination, all restocking charges for material returned to suppliers, all demobilization costs and even the reasonable fees paid to an attorney for the preparation of his convenience termination cost reimbursement claim.

Under the termination for convenience clause, the government is permitted to terminate all or some portion of the remaining work without being guilty of a breach of contract. Without that clause, an owner who decided that he did not want to complete a project and who thereby terminated the remainder of a contract would be guilty of a breach of contract and have to answer to the contractor for the loss of anticipated profit on the terminated portion of the work. In effect, the convenience termination clause converts what would be a breach of contract into a convenience termination by eliminating the loss of anticipated profits as an element of recovery.



# AIA Document G701™ – 2001

## Change Order

PROJECT: (Name and address)

CHANGE ORDER NUMBER:

OWNER ☐

DATE:

ARCHITECT ☐

CONTRACTOR ☐

TO CONTRACTOR: (Name and address)

ARCHITECT'S PROJECT NUMBER:

FIELD ☐

CONTRACT DATE:

OTHER ☐

CONTRACT FOR:

The Contract is changed as follows:

(Include, where applicable, any undisputed amount attributable to previously executed Construction Change Directives.)

The original (Contract Sum) (Guaranteed Maximum Price) was

\$ \_\_\_\_\_

The net change by previously authorized Change Orders

\$ \_\_\_\_\_

The (Contract Sum) (Guaranteed Maximum Price) prior to this Change Order was

\$ \_\_\_\_\_

The (Contract Sum) (Guaranteed Maximum Price) will be (increased) (decreased) (unchanged) by this Change Order in the amount of

\$ \_\_\_\_\_

The new (Contract Sum) (Guaranteed Maximum Price), including this Change Order, will be

\$ \_\_\_\_\_

The Contract Time will be (increased) (decreased) (unchanged) by

( ) days.

The date of Substantial Completion as of the date of this Change Order, therefore, is

*NOTE: This Change Order does not include changes in the Contract Sum, Contract Time or Guaranteed Maximum Price that have been authorized by Construction Change Directive until the cost and time have been agreed upon by both the Owner and Contractor, in which case a Change Order is executed to supersede the Construction Change Directive.*

**NOT VALID UNTIL SIGNED BY THE ARCHITECT, CONTRACTOR AND OWNER.**

ARCHITECT (Firm name)

CONTRACTOR (Firm name)

OWNER (Firm name)

ADDRESS

ADDRESS

ADDRESS

BY (Signature)

BY (Signature)

BY (Signature)

(Typed name)

(Typed name)

(Typed name)

DATE

DATE

DATE

**CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.**

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810711AG2001

# AIA Contract Documents

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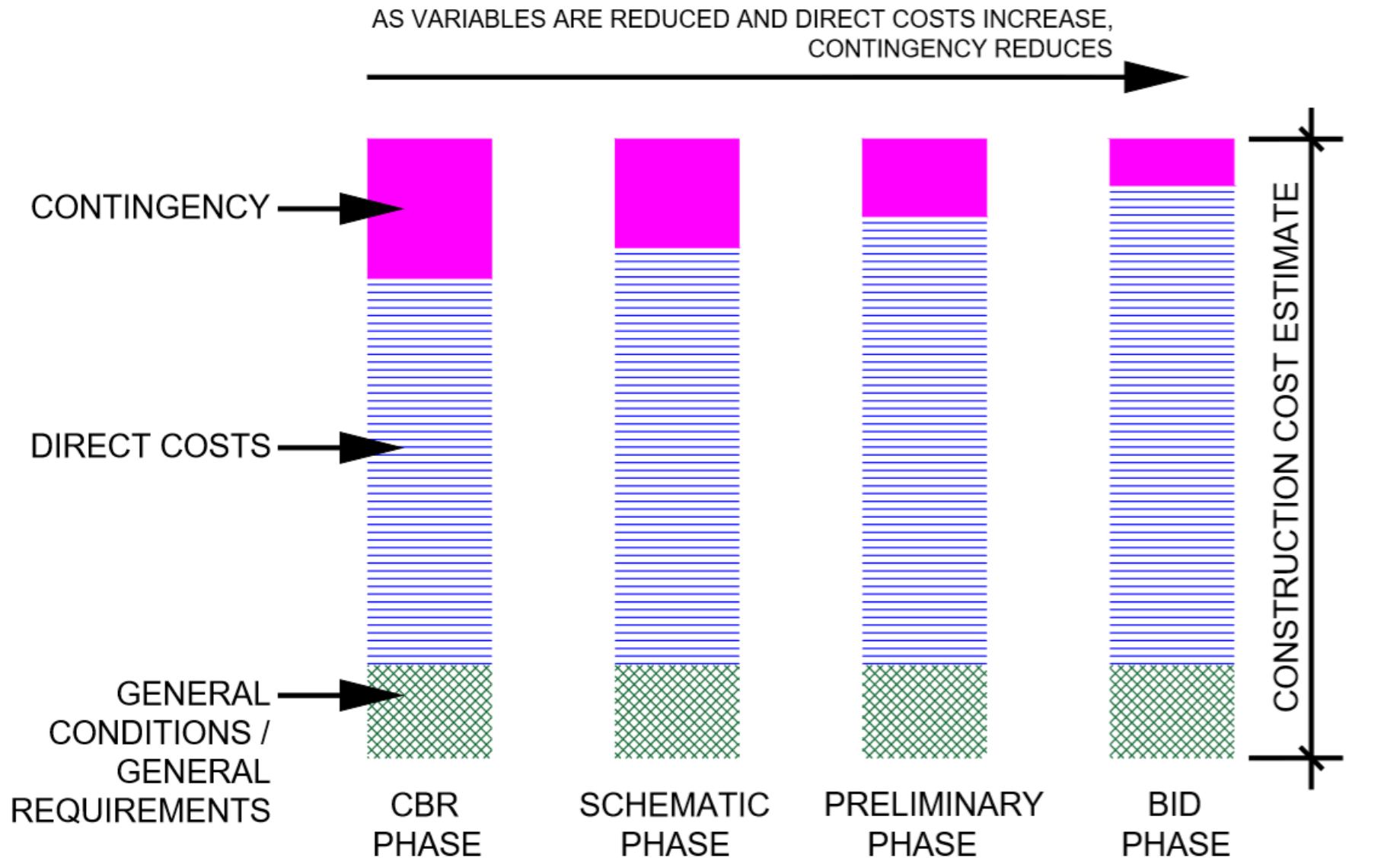
AIA Document G701™-2001 is for implementing changes in the work agreed to by the owner, contractor, and architect. Execution of a completed AIA Document G701-2001 indicates agreement upon all the terms of the change, including any changes in the contract sum (or guaranteed maximum price) and contract time. The form provides space for the signatures of the owner, architect and contractor, and for a complete description of the change.

## When to use

- Any size project
- Amends an owner/contractor agreement
- Use when parties agree to the terms of the change

<http://specsandcodes.typepad.com/keynotes/2011/06/contract-modifications.html>

# BUDGET DEVELOPMENT DIAGRAM





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