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Claims Avoidance Techniques: Best Practices for Contract Administration

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This paper provides best-practice recommendations on contract administration procedures to help a project team successfully bring or defend against change order requests, claims, and litigation. These recommendations include advice on document management, schedule analysis, cost control, and negotiation.

Complex construction projects are high-risk ventures involving multiple parties with different interests, resulting in a high potential for conflict. Often, these conflicts are left unresolved until the project's conclusion, when the parties' memories are questionable and their positions are more firmly entrenched. To avoid this, proper contract administration from the bidding phase through contract closeout is essential. Then, if disputes do arise despite your best efforts, the parties are prepared with all of the facts needed to make a decision readily available.

DOCUMENT MANAGEMENT

Pre-Award

During the bid phase a contractor generally documents its approach to the project through an estimate breakdown, correspondence with subcontractors and suppliers, preliminary schedules, and presentations to management on expected profit. This documentation helps determine what was in the bidder's mind when he/she planned the work. Some owners require contractors to escrow their bid computations. Even in the absence of this requirement, it should be standard operating procedure for contractors to keep complete records of how the bid was prepared, including computations and their basis, quotations and price lists, correspondence, telephone records, bid clarifications, changes, and all bid documents.

If a prebid site investigation is made, the contractor should document what was seen (take pictures), any conclusions reached, and any areas of concern identified. The owner's representative leading the site visit should document all questions asked and comments made by each bidder.

Each bidder should carefully review the bid documents, including all referenced documents that are not part of the formal contract documents. All too often, bidders do not review documents that are referenced in the bid documents, only to later discover problems they could have accounted for. Courts can imply knowledge of the documents even though the bidder may never

have seen them on the theory that the bidder "should have known."

Premobilization

Bidders should have reviewed the contract as part of bidding the work; however, generally the reviewers are not the people who will have to live with it during the project. If this is the case, the premobilization phase is the best time for the entire project team, from executive to field engineer, to read the contract. All too often parties "think" they know the detailed requirements of a contract, such as who is authorized to direct extra work, receive notices, etc., only to later discover their preconceived notions are incorrect. It is a good idea to have someone on each team thoroughly analyze the contract and make a "cheat sheet," a one or two page summary that lists all the key clauses for their project team. Well-meshed owner-contractor teams might even work together to create the cheat sheet, thereby fostering a common understanding of the risk and responsibilities that are allocated by the agreement.

Contract notice provisions are very important, and a single contract may have different provisions depending on whether they apply to extra work or delays. Often written notices are not sent because the contractor's staff doesn't want to create problems with the owner or feels that "everybody" knows of the problem. Neither of these reasons are sufficient justification for not giving proper notice. Even if everyone knows of the problem, in many states the failure to give proper notice as required by the contract will bar recovery. Whenever a situation is encountered that may increase cost or time of performance, the contractor should send a brief notice letter that meets the contract requirements. Owner representatives should review their notice requirements and ensure that they have some "teeth," clearly outlining the result of a failed notice.

Construction Phase

Documentation should be kept in the regular course of business. It is important to create and maintain a record-keeping system that documents job progress and problems as they occur. Personnel should keep daily records that fully and accurately document progress in the field and significant problems that occur. Get all agreements, changes, or directed extra work in writing and make sure the individual directing any additional or extra work is authorized to do so.

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Correspondence Logs

All correspondence should be uniquely and consecutively numbered and maintained in a log, in order to facilitate analysis in the event of a dispute. The log should track everything, including letters, e-mails, telephone reports, transmittals, submittals, requests for information (RFI), change notices, proposals, and payment requisitions. Nowadays, significant amounts of important correspondence occur electronically, and the system must be able to thoroughly capture them all. Best practice dictates that the person maintaining the correspondence log be copied on all outgoing and incoming e-mails, with staff forwarding e-mails not sent directly. All parties should reference the correspondence or change/request they are replying to by its number.

It is preferable that the log be kept in a relational database such as Primavera Expedition or Meridian Prolog, or at least a spreadsheet program that has sort and filter capabilities. This will allow a single log to be used for both incoming and outgoing correspondence between various companies. Reply-due and actual response dates should be tracked in the system. On a weekly basis, the log should be sorted by the reply-due dates, and appropriate follow-up action taken.

A separate field (column) should be created in the correspondence log to capture change order or issue numbers. This will allow all correspondence related to a specific event to be quickly retrieved. Individuals maintaining correspondence logs should be trained to cross-reference all letters and changes, and should always have a current list of change order numbers.

Daily Reports

Another important report generated during the construction phase is the daily report (DR). The information in this report may be used to create an as-built schedule if one was not kept during the project, to measure productivity, to determine if proper resources have been applied, or to verify dates and events. Therefore, it is important that the DR provide enough information to allow these kind of analyses.

Daily reports should be factual, unbiased, legible, clear, comprehensive, and written in an objective, professional tone that avoids any statements that may discredit or be embarrassing to the writer when read from an adversarial perspective. Courts and arbitration panels give great weight to such information, provided the general character of the reports are of such quality as to create confidence in their factual reliability. The daily report must be dated, signed by the author, and completed for each day work is performed, including weekends or holidays.

Other Documents

Accurate minutes should be kept of all meetings. Because of their importance, meeting minutes prepared by other companies should be corrected if the author leaves out or distorts any events.

Submittal logs track the date a shop drawing was submitted, when a response is required, when it is actually reviewed, who has the action item, and the number of days overdue. Often delays result from the late delivery of material that resulted from a late submittal approval. Expedition offers a standard feature that allows submittals to be linked to a Primavera project schedule,

which allows ready identification of critical submittals and the automatic updating of the schedule from the submittal log.

Most contracts require progress photographs, but even if they do not, the contractor and owner should take them. Note on the back of each picture the photographer, date, location, and description of the problem.

Document/Contract Management Systems

By now it is pretty obvious that there is a lot of information that has to be prepared and organized that may be relevant in a claims situation. It is not unheard of to spend years going through discovery and spending millions of dollars in legal and consulting fees trying to get all of the facts understood and boiled down to the key issues to be discussed at trial. Collecting all of the documentation electronically can substantially reduce this problem and the resulting costs.

As previously mentioned, the best way to capture information is to use a relational database such as Access, FoxPro, SQL Server, Oracle, etc. This allows search, filter, and sort capabilities and can greatly facilitate the preparation of trial exhibits. However, creating a custom relational database requires a programmer, and takes time while he or she learns the business processes and writes code. For this reason, it is preferable to collect data in a system that already incorporates an understanding of the functional needs of the users and has standard reports that address most of their needs.

There are several systems that meet the needs of a contract administrator. The most widely used is Expedition by Primavera, which held 69 percent of the market in a recent ENR survey. The next most popular system was Prologue by Meridian Project Systems at 12 percent. A primary consideration when selecting a system is how well it will help the project team collaborate electronically. In today's market, the designers, contractors, owner, and construction manager are generally located in different offices without a common network, so the system should allow the use of the Internet. Each of the systems mentioned allows some use of the Internet, but in most cases people's expectations exceed the actual capabilities of the systems. This is an area where there are rapid advances in technology and new versions of the software released every 3-12 months. Companies interested in a new contract management system should research the very latest packages available, or turn to a program management consultant knowledgeable in these systems for assistance.

SCHEDULE MANAGEMENT

On large, complex projects, the use of an electronic critical path method (CPM) schedule should be considered. In many instances the owner requires such a schedule. A CPM schedule helps planning, coordination, early identification and mitigation of delays, and proof of entitlement to a time extension and delay damages.

Types of Schedules

There are several schedules that should be created and saved on any project. Many owners require a contractor to submit and update a preliminary schedule that establishes their plan for the

first 60 to 120 days of work. The benefit of this schedule is that it gives the owner a tool to track the project during a period when the contractor usually does not know all the details of the later work.

Generally, within the first 3 months of a project, the contractor will submit a baseline schedule and narrative that lays out the plan for the entire project from notice to proceed to substantial completion. Contractors should give consideration to resource restraints caused by staff size when establishing schedule logic ties. The baseline submittal is reviewed by the owner and either accepted or rejected, generally with some comments. These comments, the narrative, and a disc copy of the baseline schedule should be kept until final payment is received.

Once the owner accepts the baseline schedule and narrative, they are generally updated on a regular cycle (usually monthly). There also may be supplementary schedules used on the project such as concrete placement schedules, 2-week look-ahead schedules, etc. In addition, trade subcontractors and even some suppliers may have their own CPM schedules to track their work. All of these schedules should be retained, preferably as disk, if possible. Having electronic copies of these schedules can save the expense of having a consultant recreate the project schedule to prove delay in the event of a claim. The monthly updates are especially important for delay analysis, which is performed in the schedule update in effect at the time of the delay.

Also important to retain are any hand-drawn schedules used by field personnel to explain how a particular portion of the work is to be constructed, and records of schedule input provided by consultants, subcontractors, or other prime contractors relating to the duration of activities or the sequencing thereof.

Representing Delays in the Schedule

Activities should be added to the schedule to represent any effects to the project, including design changes and differing site conditions. These additional activities should be logically tied to the schedule activities they affect. Text fields in the schedule, such as log notes, should be used to record details of the impacts. Many owners refuse to let contractors add delay activities to the schedule for fear they are being "set up," but this is not a best practice. If the delay activities are added to the official update, the owner is informed of the contractor's position in a timely manner and may be able to mitigate delays or at least respond while the events are still fresh and memories reliable.

One way to incorporate delays for a schedule activity that has started would be to split the affected activity up with the delay added in the middle, as shown in figure 1.

In this example, the affected activity had an original duration of 10 work days, but was delayed after only 3. Once the delay ends

the activity would still take 7 workdays to finish. It is good practice to distinguish the delay activity by using a different case than the original schedule activities (if the schedule activities use a normal sentence case, the new activities can be in UPPERCASE).

The change order number should be referenced in the activity ID or description of each new activity so the delay activities can be easily filtered. All activity codes should be consistent with the original schedule coding so the delay subnet properly appears in all schedule layouts. Another way to represent a delay is by suspending the original activity for the period of delay, resulting in a "necked down" bar but no explanation of what the delay was.

Preparing a Time Extension Request

Establishing entitlement to a time extension using the schedule requires specialized analytical skill and knowledge of the underlying body of case law governing delay analysis. A common mistake is using the project scheduler to prepare the backup documentation for the time extension. This results in a time extension request that does not withstand the scrutiny of an expert during negotiation or litigation. The generally recognized way to prepare a time extension request is using the "windows" analysis method described below.

The key to an effective time extension request is proper documentation of the relevant schedule activities both before and immediately following an impact. The first step is to investigate the delay to determine the start and end dates and the affected schedule activity. Once the start date is known, the next step is to open a copy of the schedule update that was current just prior to the delay being encountered so that you are analyzing the critical path as it existed at the time of the delay. In this schedule, create a schedule layout (view) of the activities, making sure it clearly shows all of the milestones and the critical path activities that will be affected by the new activities. Select only the number of activities necessary to show the delay (preferably 1-2 pages). Make a copy of this schedule and attach it as a "target." Then insert new activities representing the delay into the copy of the schedule and code them so they appear in the layout view. Recalculate the copy of the schedule and analyze the affect on intermediate milestones. Any change to the milestone dates that results from adding the new activities is the time extension that would be due if the new activities were caused by an event beyond the contractor's control and without its fault or negligence. The final result is shown in figure 2.

No Damage for Delay Clauses

Many contracts have a no damage for delay clause. Depending on the state having jurisdiction and the specific facts

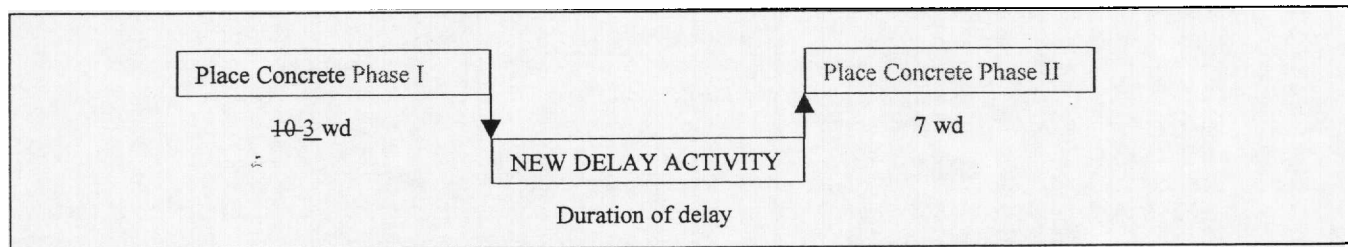


Figure 1

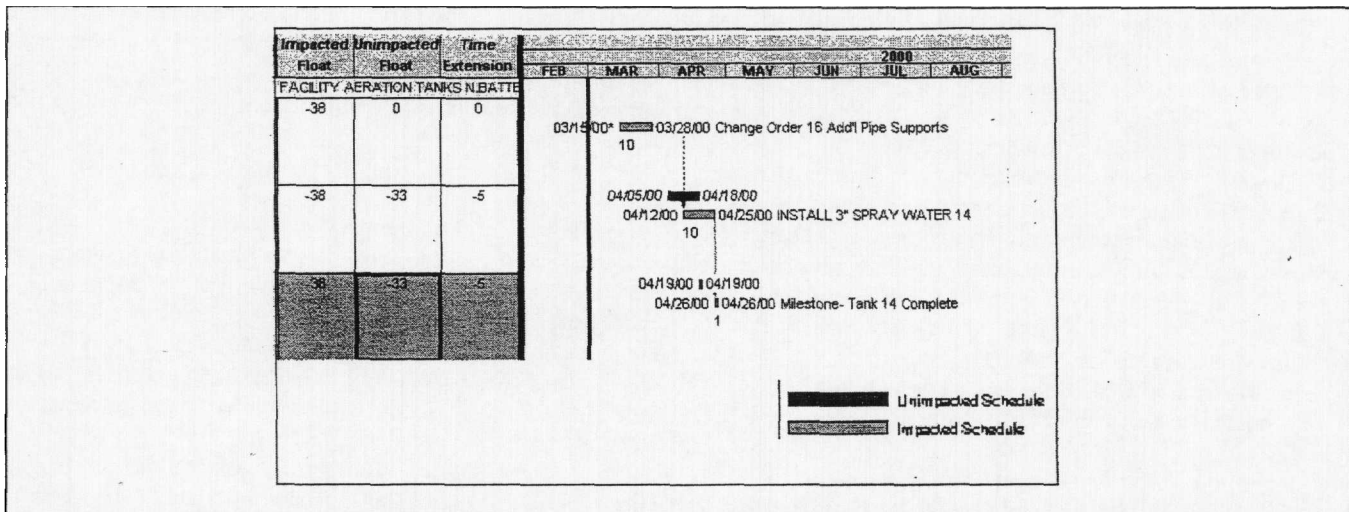


Figure 2

of the delay, this clause may preclude you from obtaining reimbursement of costs for extended field or home office.

These clauses generally state that the contractor's sole remedy for delay shall be a time extension. However, the damages can sometimes be characterized to make them compensable despite the clause. In addition, there are several exceptions to a no damage for delay clause, including the following.

- Delays caused by fraud, misrepresentation, or the bad faith of the owner.
- Delays resulting from the active interference of the owner.
- Unavoidable delays that are unreasonable because of length or nature of the delay.
- Delays that were not contemplated by the parties.

Each of these exceptions could be the basis for its own paper; the important thing to note here is that contractors may be able to recover delay damages despite the existence of a no damage for delay clause.

CHANGE MANAGEMENT

Changes are inevitable on large, complex projects. The contract governs the time frame and procedures for recovering cost and time. It is the contractor's responsibility to prove the merits and quantum of the claim.

Payment for extra work/claims that are otherwise valid may be rejected if notice or the request is untimely, contract procedures are not followed, proper records are not kept, the claim does not establish any valid entitlement under the contract, or adequate documentation is not provided to quantify the effect. Payment for extra work that has already been performed can be rejected if the individual requesting the change order is not authorized under the contract.

Because of these contractual issues, on larger projects it is in both parties' best interest that there be full-time contract administrators who are responsible for preparing and negotiating changes and claims.

Identify the Events That Cause Effects

Every change order request starts with some event that affects the contractor's cost or time of performance. It is essential that the field staff be able to identify these issues when they arise, and then proceed appropriately.

Common events that frequently form the basis of changes and claims include changes in method of performance, acceleration, performing work out of sequence, performing multiple tasks simultaneously, suspensions of work, delayed access to the site, late permits, and delayed shop drawings approval or responses to RFIs.

Set Up Procedures and Systems to Collect All Required Documentation

Collect all costs related to each change order in the project controls system and cost accounting system. Each change order file should contain a copy of all related documentation. Change orders submitted to the client should be consecutively numbered and a change order log maintained. The log should, at a minimum, track the change order number and revisions, the amount requested, whether it is an estimate or based on time and material tickets, and the status (approved, under negotiation, or rejected). The log must be updated on a regular basis.

Prepare a Complete Change Order Request

Contractors should prepare change order requests that seek all known impacts on cost and time. All too often, contractors put off doing a detailed time extension analysis when preparing change order requests, generally because of a lack of qualified staff. This is obviously not a best practice and often leads to disputes. Proving entitlement to a time extension is a prerequisite to recovering extended overhead and other impact costs.

The owner can only determine how best to proceed after the full effect of any change has been submitted. Untimely change order documentation may deny the owner the opportunity to observe and investigate the conditions, modify the design, or take other corrective action to minimize the problem and warn executive staff so that financial, timing, political, or legal provisions can

be made. If owners do not have all of the information needed to make an informed decision they will be reluctant to later assume the costs for a decision made without all the facts. Furthermore, claims submitted months after the problem is discovered without the proper notice are viewed with suspicion.

However, there are times where the full impact of the change truly cannot be determined in the contractual time frame, and the contractor wishes to recover known direct costs in a change order as soon as possible. In these cases, the change order should include a clause that reserves the right to seek schedule and impact costs when they can be properly assessed. Both parties should avoid this situation wherever possible, and vigorously pursue getting a full analysis at the earliest opportunity.

A possible reservation of rights clause follows.

This proposal is based solely on direct costs elements such as labor, material, and normal markups, and does not include any amount for changes in sequence of work, delays, disruptions, impact damages, rescheduling, extended overhead, acceleration, wage, material, or other escalations, and our rights are expressly reserved and notice of potential claim made, for any and all of these and related items of cost prior to any final payment under this contract.

Calculate the Damages

Assuming merit has been established, the next step is quantifying the cost and time that can be recovered. Generally, it is relatively easy to calculate and reach agreement on direct costs such as labor, materials, equipment, and most general conditions costs. The more difficult damages to prove are "soft costs" such as labor inefficiencies, escalation, fringes, taxes and insurances on hourly rates, increased material transportation costs and manufacturing disruption premiums, idle equipment, increased repair costs, and rate differentials of leased versus owned equipment

Other commonly disputed costs include small tools, idle, extra or extended supervisory personnel, per diem charges, extended home office overhead, and increases in builder's risk insurance coverage and bond costs.

Include Appropriate Backup Documentation

Every claim or change order request should include a brief description of the impact, the contractual basis, details of any additional work undertaken or costs incurred, valuation of the claim supported by sufficient details, and demonstrated entitlement to any time extension due.

The degree of supporting information required will depend on the specific circumstances. The contractor should cooperate with the owner to ensure that the information is adequate (but not unnecessarily detailed or voluminous) and identify the issues that are not in dispute.

Submit a Meritorious Change Order Request

Contractors should clearly distinguish and segregate project costs/delays that are due to their problems. Nothing hurts a change order request more than requesting costs where no entitlement exists, because it raises questions about even the legitimate parts of the request. A file also should be set up for unperformed change orders, with an explanation of all rejections or withdrawals.

The contractor has a common law responsibility to mitigate effects to cost and time and must act reasonably. Change order requests should demonstrate that the contractor has made every reasonable attempt to minimize its costs and make up lost time.

Negotiation

Generally, change order/claim negotiations will not be resolved in just one meeting. A detailed negotiation schedule should be set when it becomes obvious that more than one meeting is needed. Deadlines for any deliverables should be established as part of the meeting schedule. If an impasse is reached in the negotiations, escalate the issues to the next resolution level immediately.

Disputes frequently involve "gray" areas such as contract interpretation, productivity loss percentages, or the impact on home office overhead. This creates a natural range of possible outcomes, as depicted in figure 3.

On the left of the gradient there is clear entitlement. These are the types of change orders that are resolved without much difficulty, usually involving a directed change and no dispute about the number of hours, rates and markups, or equipment used. To the extreme right there is no entitlement, and going beyond the line results in an unfair and possibly an illegal result. Most negotiations take place in the gray area, and by recognizing the limits of that range negotiators have a much better chance of resolving their conflict.

Recognizing these ranges, it is recommended that before parties start to negotiate they prepare three negotiating positions. The first, the amount of money and time requested, should represent the border between the gray and black areas; seeking everything that can be legitimately requested, assuming all debatable issues are resolved in your favor. The second position is somewhere in the middle of the gray area, representing where you would like to

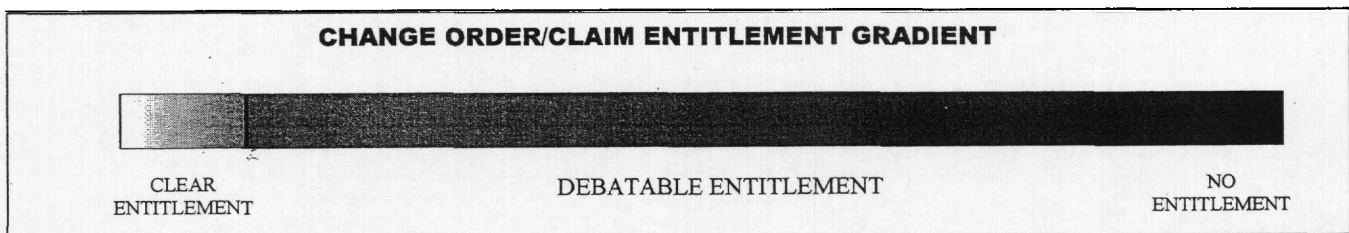


Figure 3

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ultimately resolve the dispute. The third position is at the border between the gray and white, or your "drop dead" position below which resolution is not possible. Once you have established these three positions review them with management and get an independent evaluation before locking them in.

By starting with a high number and having some "give-away," a negotiator allows his opponent to walk away feeling like a winner. If instead you pare all the gray out of your request and start negotiations with the "bottom line" number, the other side has nowhere to go, and negotiations will almost always drag on unresolved for long periods of time. Remember, your opponent cannot go back to his management without having won some concessions from you, so be prepared to lose some issues. Negotiations are like basketball games; both sides are going to score a lot of points. The main difference is that in negotiations, both sides can walk away feeling like winners.

Negotiators demeanors are also important. All parties should be respectful and appear fair and reasonable. Shouting, abusive language, accusations, and finger-pointing will not be helpful, and are most always counter-productive. Escalating a negotiation into an emotion-laden dispute will not resolve it in a timely manner. Instead, approach the negotiations with a collaborative problem-solving (win-win) attitude. Neither party gains if litigation or arbitration is the final outcome.

Finally, if the change order request is denied at or after the negotiation, it should be immediately resubmitted as a claim following the dispute procedure in the contract. Exhaust all of the administrative remedies in the contract before filing suit

Companies managing large projects need to put procedures in place to properly keep track of the myriad of documents, drawings, and cost and schedule control information that is generated during construction. A professional contract administrator can manage these efforts and ensure that the procedures are followed. Proper contract management saves time and money when change orders are requested or claims prepared, especially when specialists who are not familiar with the job (such as claims consultants or attorneys) are brought in to help.

There are several commercially available software packages that facilitate the contract manager's job and simplify the gathering and analysis of data by outside specialists. These should be considered as part of any contract administration plan.

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