Construction Claims Guide

PREFACE

Construction and risk go hand-in-hand. Construction project participants are constantly dealing with challenges that arise from budget, schedule, and staffing limitations, and it is rare for all parties to see eye-to-eye during construction. Thus, even the best-planned project can encounter disputes.

Unexpected circumstances, disruptions, and delays — and their financial consequences — can damage reputations, drain the resources of project participants, place projects and businesses in jeopardy, and result in disputes. These disputes often evolve into monetary claims by the project participants against each other.

Contract Solutions group has prepared this guide as an overview of the disputes and claims that frequently arise in construction contracts. This guide provides insight and practical advice to anyone involved in design and construction, whether an owner, designer, contractor, supplier, construction manager, or attorney.

Claims Avoidance and Mitigation

Construction disputes can often be resolved before they become claims without ending up in a courtroom. Contract Solutions group has more than 35 years

Below, we discuss means and methods to effectively avoid construction disputes prior to construction as well as to mitigate disputes during construction. The timely implementation of these means and methods will minimize your exposure to the risks associated with these challenges and decrease the chances they will threaten the success of your project.

KEY CONTRACT PROVISIONS

SCHEDULE MANAGEMENT

CHANGE MANAGEMENT

RISK MANAGEMENT

PROJECT DOCUMENTATION

PARTNERING

ELEVATED PROJECT ISSUE RESOLUTION

KEY CONTRACT PROVISIONS

Notice Provisions

Most construction contracts require that requests for additional costs or time due to unanticipated circumstances or events must be preceded by written notice to the owner within a specified time following the event. The purpose of notice is to allow the owner time to make a decision on the reasonableness of the request, evaluate potential impacts, and participate in identifying solutions that may mitigate the impacts. Failure to give proper and timely notice can result in waiver of a contractor's rights, particularly if it prejudices the owner.

Differing Site Conditions

A differing site conditions clause provides the contractor a means of receiving a fair adjustment to its contract price if the contractor encounters a differing site condition. This adjustment is typically contingent upon the contractor providing the owner timely notice of the condition so the owner has the opportunity to investigate it. From the owner's perspective, the presence of the clause eliminates the risk of receiving higher contractor bids that include contingencies for encountering unanticipated, subsurface conditions.

Time Extensions

Construction contracts usually state that "time is of the essence" and may make the contractor liable for delayed project completion, including paying the owner liquidated or actual damages. Consequently, a contractor must insist on inclusion of an extension of time clause providing that

the contractor's time of performance be extended should the contractor be delayed by reasons beyond its control.

Disputes Clause

Because of the likelihood of disputes on construction projects, a contractually mandated dispute resolution process can provide for timely and cost-effective resolution as alternatives to long and expensive litigation. A disputes clause will specify the administrative claims procedure and detail the necessary processes (e.g., notice, alternate dispute resolution, mediation, arbitration, venue, and applicable law).

Audit and Access to Records

Contractors usually have access to the public owner's records by virtue of various "sunshine" or "freedom of information" laws, but often an owner can access a contractor's records only during litigation. A well-drafted audit or access to records clause provides the owner with the contractual right to the contractor's project records during construction, thereby giving the owner much more information to utilize when assessing a request for change order or a claim.

SCHEDULE MANAGEMENT

Most contentious and difficult to resolve construction claims involve a schedule or delay component. Therefore, if you have a high-quality schedule and manage it properly, you have a greater chance of avoiding a claim. The creation and maintenance of a schedule is generally the contractor's responsibility. To ensure that a contractor follows proper scheduling procedures, an owner should include scheduling specifications in the contract documents and develop processes to ensure the contractor adheres to these requirements.

To avoid claims, owners need to verify that the scheduling provision is appropriate for the project and that the contractor adheres to contractually specified scheduling quality parameters when preparing and submitting its schedules. At a minimum, the following areas should be covered in a scheduling specification:

- Schedule format, specifying a critical path method (CPM) schedule or a less sophisticated schedule such as a bar chart
- Technical qualifications of the contractor's scheduler
- Technical requirements and timeframes for the initial baseline and update submissions (e.g., monthly)
- Procedures and timeframes for the review and acceptance of submissions
- Treatment of "early completion" schedules and ownership of project "float"

- Requirement to include submittal and procurement activities in the schedule
- Specified maximum activity durations that do not exceed the period duration between updates
- Procedure for submitting requests for time extensions (e.g., time impact analysis)
- Contractual remedies for failures to comply with scheduling requirements

It is highly recommended that options for scheduling specifications be reviewed during the development of bid documents to gather examples. An owner should consult a scheduling expert to provide a better understanding of the benefits of certain scheduling requirements.

Owners should require contractors to submit all CPM schedules in the native CPM scheduling software format and have a qualified individual analyze that schedule so that all parties can understand the big picture and the details of the contractor's plan moving forward. The contractor's submittal should include printouts of the schedule in summary and understandable formats, as well as a narrative that summarizes key aspects of the schedule, such as critical activities and significant changes.

CHANGE MANAGEMENT

Late and numerous changes are common causes of construction claims. Thus, an effective strategy for minimizing and managing change is a key aspect of claims avoidance.

High-quality bidding and construction documents set clear expectations for the contractor and can prevent costly changes and delays due to design errors and omissions. Thus, minimizing changes starts with the selection of a qualified design professional. The owner should establish a realistic budget and contingencies (accounting for risks), and allow adequate time and fee for design.

A constructability review will also help to identify problems with the design early in the process, minimizing the impact of changes issued later during construction to correct the problems. Quality bidding and estimating is essential so that the contractor has a thorough understanding of the project scope and can identify problems early. The contractor can use job costing from the bid as a change management tool throughout the project.

If a change is necessary, the project team should minimize the time of the change order process to eliminate potential delays and cash flow problems. Contractors should adhere to notice provisions of the contract and prepare to document time extension requests if changes cannot be resolved without impact to the schedule.

To avoid costly claims, it is important to resolve change order requests before they become claims, whenever possible.

RISK MANAGEMENT

Setting expectations and planning accordingly is a major component of claims avoidance. Forward-thinking project teams use risk assessments and quantitative modeling to proactively identify project factors that could potentially impact project costs and schedule. This process facilitates the setting of realistic contingencies for the project and potential schedule issues. With this information in hand, project teams are well positioned to manage project risks and avoid claims.

Quantitative risk assessments involve the identification, analysis, quantification, and mitigation of risk factors at the start of the project and periodically throughout the project life. Knowing these factors and their probability and potential impact to the project costs and schedule allows the project team to prioritize risks and justify measures (additional upfront costs) to mitigate or avoid these risks completely.

PROJECT DOCUMENTATION

A well-structured and -implemented document management plan, including organized project record keeping, is an important component of successful project management, claims avoidance, and cost-effective fact-based dispute resolution. No matter what the dispute resolution forum, the quality of documentation often plays a bigger role than the testimony of the witness or even the facts themselves.

Some basic guidelines for documentation include the following:

- Record facts and not opinions.
- Make sure that what you write is what you mean and is something you would not mind an independent third-party reading three years into the future.
- Make sure all team members send a consistent message. Consider having one person be the "voice" for all claim-related correspondence.
- Make sure that you understand what you receive in the way of reports, schedules, and other correspondence and respond in a timely manner if necessary.
- Minimize the use of personal files. Set up a well-organized central filing system for both hard-copy and electronic documents, including e-mails.
- Address one topic per e-mail and accurately describe that topic in "Subject" line. Print and file important e-mails.

- Daily reports may ultimately carry as much or more weight than the craftily drafted letter. Make sure they are prepared every day, completely and legibly.
- Track quantities of work delivered and productivity in as much detail as practically possible as the work is being performed.
- Accurately and concurrently track all costs associated with changes.
- Have a written document retention/destruction policy.

An organized system allows for easier access to the necessary information. Having all the relevant documentation available supports a more complete evaluation or preparation of change order requests, time extension requests or claims. The practice of maintaining thorough "issue files" with the related documents can greatly assist in the claims resolution process during construction.

Project management databases are useful tools for document management that can be shared among all parties. Keeping them up to date so that they maintain their value is well worth the commitment and investment. The better documents are managed during a project, the more efficiently legal and expert analysis can proceed.

If a dispute proceeds to litigation, it will be necessary to review and produce each party's documents to the other side as part of the discovery process. Discovery rules vary from jurisdiction to jurisdiction, and the process is different for the various resolution forums (e.g., litigation, mediation, arbitration, or negotiations).

PARTNERING

Human relationships are often the cause of claims. Partnering is a formal process that is usually mandated by contract to promote harmony and cooperation between and among individuals key to the project's success. Partnering is designed to make these individuals recognize the motivations they have in common with each other and the benefits of working together to make the project a success.

On partnered projects, everyone who can affect the success of the project, particularly key decision makers, attends workshops facilitated by an outside expert in partnering. There is a workshop at the start of construction and, sometimes, follow-up workshops periodically during construction. Follow-up partnering workshops during construction provide structured environments for the resolution of problems that jeopardize the project goals.

Better communication always helps in the avoidance of claims. Partnering alone will not prevent claims, but it provides an ideal forum in which the parties can be educated and reminded of the unnecessary risks they all will face by not resolving disputes before they adversely affect the project and become claims.

ELEVATED PROJECT ISSUE RESOLUTION

Many project-level disputes and major issues affecting project costs and time may ultimately evolve into costly claims if they are not dealt with as soon as they arise. For this reason, it is increasingly recognized that project-level people may not be able to resolve these issues, but executives of the owner and contractor often can.

Therefore, contracts usually specify that the project executives meet periodically (typically monthly or quarterly) or in a formal issue resolution process that elevates the resolution to an increasingly higher level of authority, from the project level to the executive level. This can be a very effective way to promote the early resolution of project issues and claims avoidance.

Alternative Project Delivery Methods

Claims occur on all types of project delivery methods. While several alternative project delivery methods purport to reduce the probability of claims, claims are possible when the allocation of risk (as stated in the contract) is inconsistent with the parties' abilities to control and manage that risk. An appropriate and properly executed delivery method can reduce claims.

Each of these methods has its advantages and disadvantages. Successful project outcomes depend upon the selection of the appropriate method and the culture and ability of the owner and other parties to perform their respective duties inherent in the method and the risks allocated to them.

Some alternative project delivery methods currently being used in lieu of traditional Design-Bid-Build include:

FAST-TRACK CONSTRUCTION

MULTI-PRIME CONSTRUCTION

CONSTRUCTION MANAGEMENT AT RISK

DESIGN BUILD

PUBLIC-PRIVATE PARTNERSHIP

INTEGRATED PROJECT DELIVERY

FAST-TRACK CONSTRUCTION

This delivery method begins construction on early portions of the project prior to completion of design of later parts of the project. Owners using this system believe that the costs associated with an earlier overall completion outweigh the risks associated with starting construction with an incomplete design. Risks include the need to coordinate the interfaces between the multiple contracts, which can lead to claims or disputes.

MULTI-PRIME CONSTRUCTION

When this method is used, it is mandated by state law on public contracts that require that the project be broken up into several prime contracts, (usually general, mechanical, electrical, and plumbing) each with a separate contract with the owner. In multi-phase construction, the owner or agent, usually a construction manager, typically has the responsibility for providing overall coordination among the prime contractors.

CONSTRUCTION MANAGEMENT AT RISK (CM@R or CMAR)

In this system, the CM@R is initially engaged by the owner to perform pre-construction services, including estimating, scheduling, and constructability reviews. As the design nears completion, the CM@R executes a construction contract for a specific scope and specific price. This method tends to generate fewer claims because the CM@R is more informed as to the scope and risks of the project.

DESIGN BUILD

This method requires a Design-Build contractor to complete the design based upon the owner's concept and then construct it. While the Design-Build project delivery system can be an appropriate vehicle for shifting design- and schedule-related risk from the owner to the Design- Builder, it is no guarantee of a claims-free contracting method. Ambiguities in contract language can and do arise under Design-Build, leading to claims.

PUBLIC-PRIVATE PARTNERSHIP

This is another relatively new delivery method. In this approach, a developer works with an owner and provides a wide-range of services that may include site selection, programmatic development, and financing, in addition to traditional design and construction activities. As a result, owners can develop needed buildings or infrastructure with minimum up-front cost. In exchange, it often relinquishes project control to the developer.

INTEGRATED PROJECT DELIVERY

This delivery method requires a three-way contract between the owner, contractor, and designer that establishes the risks and responsibilities of each party. In exchange for greater certainty of cost and liability, each party gives up some of its ability to claim for changes in the project. This method is very specialized, includes the need for unique insurance coverage, and is generally restricted to teams that have worked together frequently.

Types of Claims

DIFFERING SITE OR CHANGED CONDITIONS

DELAYS

ACCELERATION

CONSTRUCTIVE CHANGES

DISRUPTION AND CUMULATIVE IMPACT OF CHANGES

TERMINATION FOR CAUSE

DESIGN ERRORS AND OMISSIONS

DIFFERING SITE OR CHANGED CONDITIONS

Most differing site or changed conditions clauses address two types of conditions:

- Type 1 – Subsurface or latent (hidden) physical conditions at the site differing materially from those indicated in the contract documents
- Type 2 – Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered in work of the character provided for in the contract

Typically, to recover for differing site or changed conditions, the contractor generally must show the following:

- Demonstrate that it encountered a material difference and that the condition encountered caused it to expend additional cost and/or time
- Establish that it reasonably relied upon the representations in the contract documents concerning the site conditions
- Provide notice to the owner when it encounters what the contractor believes to be differing site conditions

DELAYS

Project delay is a common problem in construction, and the financial consequences of finishing a project late can be significant for all parties. As a result, contractor claims for delay damages and owner's claims for liquidated damages are common.

Delay, in many contracts, is generally defined as an event or circumstance that delays the contract completion date. Depending on the causes and timing, delays can be non-excusable (no time extension and owner may be entitled to delay damages from contractor), excusable and non-compensable (time extension and no delay damages for either party), or excusable and compensable (time extension and contractor entitled to delay damages from owner).

The existence of concurrent delays by the owner and contractor is often the most contentious aspect of resolving delay claims, because concurrent delays affect the amount of delay damages owed to the contractor or liquidated damages due the owner from the contractor. There is not a consensus in the industry regarding the definition of concurrent delay. Since the issue relates to damages, two reasonable definitions of concurrent delay are as follows:

1. Where there are periods of both contractor and owner delays and it is not possible to make a clear apportionment of responsibility for the project delay between the contractor and owner (where the owner will not be entitled to assess liquidated damages and the contractor will not be entitled to delay damages).

2. Concurrent delays exist when it is possible to determine with reasonable certainty that there were independent delays by the owner and contractor that would have caused delays to project completion whose effect on the project completion overlap.

In this second circumstance, the award of delay damages is based on the legal theory that damages are awarded to an injured party to place that party in the financial position it would have been in prior to being harmed. Under this theory, the contractor's entitlement to delay damages is limited to the time that owner-caused project delay exceeds an overlapping concurrent contractor delay. Similarly, the owner's entitlement to liquidated damages is limited to the time that a contractor delay to project completion exceeds overlapping concurrent delays by the owner.

Sorting out the amount and causes of delay can be very complicated for the construction of major capital projects. This is particularly true on projects that finish late. To evaluate the validity of these claims, you should do the following:

- Obtain baseline and updated project schedules, in electronic format if possible.
- Consider developing an as-built schedule using daily reports and /or other project document.
- Compare as-planned schedule updates and as-built schedules to determine which activities were delayed and whether concurrent delays occurred.
- Identify periods of delay, disruption, or acceleration.
- Associate claims issues with the identified periods.
- Perform a detailed schedule analysis.

A number of contemporaneous and after-the-fact CPM-based and non-CPM-based schedule analysis methods can be used to determine a contractor's entitlement to time extensions and to apportion financial responsibility for delays.

These methods range from simple observational approaches to complex computer simulations. When deciding to use a particular method, select one that is possible using the information available in your particular case and that will answer the particular question in dispute in your particular situation. If the claim involves requests for delay damages, the analysis should consider concurrent delays by all parties.

Depending on the size of the project, schedule analysis can be very complex and labor intensive. There are a number of schedule analysis methods, all with varying degrees of reliability and validity depending upon the actual circumstances of the delays and the documentation available. Competent professional advice should be sought before conducting complex delay analysis.

ACCELERATION

The owner may direct the contractor to accelerate work and shorten the time of performance, or to overcome owner-caused delays (i.e., to "buy back" delay time). This is called directed acceleration. Typically, these directives are issued in the form of a change order. So long as the contractor is not mitigating its own delays, the net increase in the contractor's costs incurred in complying with this directive (e.g., added equipment or labor, overtime pay) is usually recoverable by the contractor.

Constructive acceleration occurs when the owner does not grant an excusable time extension, thus requiring the contractor to accelerate and perform more work in the same period of performance to avoid the assessment of liquidated damages.

To recover on a claim of constructive acceleration, the contractor must generally show that:

- A delay occurred for which a time extension should have been granted.
- A notice of delay and time extension request were properly submitted.
- No time extension was granted or part of the time extension owed under the contract was denied.
- Contractor was required or directed to complete "on time" or threatened with the imposition of late completion damages.
- Contractor filed a separate notice of constructive acceleration.
- Contractor actually accelerated its operation and incurred additional costs as a result of the acceleration.

CONSTRUCTIVE CHANGES

Constructive changes are project circumstances that require the contractor to perform extra work, or contract work different from what was implied by the contract documents, and are changes that were not formally directed by the owner. That is, some action or inaction of the owner or the owner's agents causes the contractor to perform work beyond that required by the terms of the contract documents.

In situations that involve constructive changes, the owners may become responsible for the actions of their representatives (e.g., architects, engineers, and/or construction managers) even if they do not intend to direct changes. Examples of such unintended changes are:

- Comments on shop drawing submittals that require the contractor to perform extra work
- Unclear contract requirements necessitating the contractor to perform extra work to comply with the owner's interpretation

Typically, to recover for a constructive change, the contractor must show the following:

- The work performed was not required within the original scope of the contract.
- Appropriate notice of change was given to the owner.
- The change was actually required by the owner, not volunteered by the contractor.
- Additional costs and/or time were actually incurred in performing the changed work.

DISRUPTION AND CUMULATIVE IMPACT OF CHANGES

Cumulative impact or disruption is the effect of a series of changes, design clarifications, requests for information (RFIs), schedule re-sequencing, unanticipated field conditions, or other project circumstances on the contractor's productivity. The events need not be individually significant. The existence of an unreasonable amount of them, however, can result in a total disruptive impact that exceeds the sum of the individual impacts caused by the circumstances and changes.

However, the fact that a project experiences a large number of changes does not in itself validate the cumulative impact claim. Due to the general nature of this type of claim, it is difficult to establish the necessary causation that links specific issues and responsibilities to these damages. In addition, the contractor must show that, at the time it negotiated the individual changes, it could not have anticipated these inefficiencies.

Detailed documentation of the original plan, its reasonableness, and examples of the impacts are required to establish cumulative impact claims. Other methodologies that can better demonstrate a contractor's lost productivity should be considered first, before resorting to a more-general "total cost" type of claim.

TERMINATION FOR CAUSE

In the event that the contractor fails to perform in accordance with the contract in a substantial manner or materially breaches the contract, the owner may, under certain circumstances, terminate the contractor's right to continue the work. Consistently failing to provide sufficient labor, materials, or equipment; consistently failing to maintain required quality; or consistently refusing to comply with laws and codes are situations that may give rise to a termination for default.

If the contractor has provided the owner a performance bond, the owner can usually look to the contractor's surety to fulfill its obligations if the default was justifiable and proper. The bond specifies the obligations of the surety in the event of a default by the contractor.

Performance bonds often give the surety the option of completing the remaining work using a contractor of its choice (which can be the original contractor), pay the owner a negotiated settlement up to the full value of the bond, or do nothing if it believes that the owner's termination action was wrongful.

It is very important that owners follow the steps outlined in the contract prior to terminating the contractor for cause. Typically, these steps usually include providing the contractor with a "cure notice" setting forth specific conditions that the contractor must remedy and by when.

Default terminations have serious consequences for the contractor and their sureties, and usually lead to disputes and legal actions. Thus, owners considering defaulting

a contractor for cause should anticipate litigation and prepare for it. For this reason, owners should read the bond and seek legal advice before making this significant decision.

In the event of a termination for cause, an owner should also consider the following actions:

- Secure the project site immediately because the contractor is typically not entitled to remove materials, equipment, or records from the site.
- Document on-site conditions (e.g., with inspection records, photographs, or videotape).
- Inventory on-site equipment, materials, and supplies not yet incorporated into the project.
- Work cooperatively with the bonding company.

DESIGN ERRORS AND OMISSIONS

Many contractor claims against owners arise from the deficient performance of the architect/engineer (A/E), including design defects, tardy shop drawing review, untimely response to RFIs, or inadequate inspections. In these situations, some owners seek recovery from the A/E for the damages the contractor may recover from the owner.

To recover against the A/E, the owner must typically show that the A/E did not exercise the standard of care in the performance of its duties as a design professional. In most jurisdictions, the standard of care is defined as the degree of skill and care ordinarily exercised by other similarly qualified professionals, practicing at the same time and location and under similar circumstances.

When owners make claims against their A/Es, the measure of damages are the costs the owner incurred that it would not have incurred if the A/E performed its work to the standard of care. These costs typically include rework and any premiums the owner may have paid by adding omitted work by change order instead of having that work competitively bid in the original bid documents.

False Claims

The federal government, and some states, have statutes to protect themselves against false claims (e.g., claims based upon "knowing" misrepresentations or falsified records). The definition of false claims can be far reaching and can include items such as overstating the value of change order work or the value of work performed or provided within an application for payment.

If a claim can be proven to be "false" as defined in the False Claims Act, the claimant may be subject to restitution, civil penalties, direct and indirect costs, punitive damages, and attorney fees. While these laws have existed for many years, some public owners are only now beginning to assert false claims lawsuits as a means for affirmative recovery.

Types of Damages

INCREASED DIRECT COSTS

DELAY COSTS

LIQUIDATED DAMAGES

INCREASED DIRECT COSTS
(Lost Productivity Claims)

Direct costs include labor, equipment, material, and other costs for specific aspects of the work that make up the finished project. They may be described as “hard dollar costs” or costs incurred in performing “extra work.” Contractors typically track these costs by project and work activity.

Contractors commonly claim entitlement to increased labor and equipment costs due to productivity losses that the contractor asserts resulted from issues such as disruptions, acceleration, or cumulative impact of changes. Impact/lost productivity claims are based on the assumption that these issues caused the contractor to incur additional crew costs due to the fact it took more effort to accomplish a specific quantity of work.

Proof of loss of productivity damages requires the demonstration of contractual and legal entitlement and a credible connection between causation and damages to a sufficient degree of reliability.

There are a number of accepted methods commonly used to quantify impact costs. The reliability of these methods depends on their underlying data and how they are applied. Generally, methods that rely on project-specific data, such as measured mile studies, are more reliable than those that rely on general industry studies or research on the impact of specific issues, such as overtime or weather.

DELAY COSTS

Delays can result in the contractor incurring additional direct costs for idle equipment, labor and material escalation, and increased indirect costs.

Indirect costs are for services or project support necessary for the project but not incorporated in the finished labor, material, and equipment of the project. Many indirect costs are also time-related costs; that is, they continue or increase as the project performance period is extended. There are generally two basic types of indirect costs: field overhead and home office overhead.

Examples of field overhead costs include superintendent salaries, field offices, temporary fencing, temporary water, and project signs. Usually, contractors track these costs on a project-by-project basis in their job cost reports. Field overhead costs often increase when project duration of the contract is extended due to delays.

Home office costs are general and administrative costs that typically include expenditures such as executives, support (e.g., estimating, accounting) and administrative staff, and office rent and other office costs. While these costs are usually necessary to support the contractor's projects, most contractors pool these expenses and do not allocate them to specific projects in their accounting records.

Contractors may also incur additional home office costs due to delays. This is particularly true when there is a suspension of work on the project of uncertain duration that prevents the contractor from securing other work to provide cash flow to pay home office expenses.

Because contractors do not typically track home office costs by project, a number of formulas have evolved to estimate home office overhead resulting from delays on a project. The Eichleay and Manshul formulas are examples. Home office overhead is often a controversial topic in the claims arena. Court decisions vary widely as to its allowability.

LIQUIDATED DAMAGES

Liquidated damages are provided for in the contract at a specific and agreed-upon dollar amount that the contractor must pay the owner for each day of contractor-caused (i.e., non-excusable) delay.

Liquidated damages should be a reasonable forecast of costs that the owner may incur for late completion for such things as lost use of the facility, lost rental income, lost profits, delayed proceeds of the sale of the facility, increased or extended financing costs, extended general conditions and/or personnel costs, storage costs, holdover penalties, and extended professional fees. If the liquidated damages amount is construed as a penalty and not reasonable forecast, it may be unenforceable.

If liquidated damages are not specified in the contract or deemed a penalty, the owner is entitled to recover provable actual damages for contractor-caused delays. Actual damages are effectively unlimited; thus, a contractor may prefer the fixed value of a liquidated damages clause.

Dispute Resolution

A litigated resolution of a claim is usually the worst outcome for everyone involved in a construction dispute. As a result, the construction industry now has available to it a number of Alternative Dispute Resolution (ADR) approaches that have evolved to promote the quickest and most cost-effective resolution.

STRUCTURED NEGOTIATION

MEDIATION

PROJECT NEUTRALS/DISPUTE REVIEW BOARDS

STRUCTURED NEGOTIATION

Parties can often settle even the most difficult disputes about time and money by agreeing to thought-out structured settlement negotiations. Structured settlement negotiations between the parties usually result in the parties being in a better financial position than they would be after arbitration or litigation due to the time and expenses associated with these formal dispute resolution forums.

Structured negotiations require an agreed-upon process and may take time. Furthermore, they take a dedicated good-faith effort by both parties to work. This is usually possible when principals within the organizations agree on the benefit of seeking a timely resolution of the dispute as an alternative to post-construction arbitration or litigation.

The owner must convince the contractor that its claims will receive a fair evaluation by the owner and that there is a willingness to recognize and pay costs legitimately due the contractor. Similarly, the contractor must take consistent positions that make contract- and fact-based arguments and recognize legitimate owner arguments by reducing the claim when appropriate.

The negotiating teams on both sides must have the authority to compromise with the confidence that they will not be second-guessed later on. If the negotiation teams cannot compromise and are forced to take rigid positions, structured negotiations will not be successful.

MEDIATION

Mediation is a formal process that utilizes a trained facilitator to achieve a negotiated settlement of the dispute. Mediation is private and gives the parties complete control over the outcome. Successful mediation saves time and money and enables those involved to preserve valuable business relationships. Mediation is often an antecedent to arbitration or litigation, and it can be mandated by contract or by a court.

In non-court-mandated mediations, the parties usually jointly chose a mediator utilizing referrals or lists provided by dispute resolution organizations such as the American Arbitration Association. The parties typically split the costs of the mediator, which can be substantial depending on the reputation of the mediator. However, good mediators are generally worth their cost.

Each mediator structures the mediation differently, but always requires individuals with sufficient settlement authority to attend the mediation. During the mediation itself, the mediator guides the parties toward an agreement that all parties find mutually acceptable rather than imposing a settlement upon them.

Attendance at the mediation is often the first time that key decision makers hear the “other side of the story” rather than the biased one told by their subordinates. This other side of the story can be particularly compelling when told by the mediator, and it generally goes a long way toward achieving compromise.

PROJECT NEUTRALS/DISPUTE REVIEW BOARDS

The use of a "project neutral" is evolving as one of the most effective ADR techniques. The neutral is usually an independent construction industry expert or team of experts who are used to expeditiously facilitate the technically based resolution of disputes. Dispute Review Boards (DRBs) are one way of implementing the project neutral concept.

Because lingering disputes can pollute the construction process and escalate the routine challenges and hassles present on all projects into major problems, project neutrals and DRBs are most effective if they take an active approach during construction in ensuring that disputes are dealt with quickly.

Decisions by project neutrals and DRBs can be binding or nonbinding by the parties' prior agreement. If non-binding, the parties are likely to accept the decision as fair because they jointly chose the neutral. Furthermore, it can be expected that the decision will carry substantial weight before formal triers-of-fact if the dispute is subsequently litigated.

The contractor and owner typically share the costs of project neutrals, and they work best when the owner and contractor mutually select them before construction begins. It is also very helpful if they are trained in conflict resolution techniques, such as mediation.

ARBITRATION

Arbitration is a formal process that can be faster and less expensive than litigation. This makes arbitration particularly useful in resolving smaller claims that the parties cannot resolve on their own. Parties may mutually agree to use arbitration to resolve disputes, or its use may be specified by contract.

In arbitration, the parties mutually agree to procedural rules and submit the dispute to a jointly chosen impartial "arbitrator" or panel of arbitrators for a decision. This decision is generally binding, although the parties can agree to make it advisory and non-binding if they desire. Typically, the parties split the administrative costs and the arbitrator fees.

To initiate arbitration, the parties submit an Arbitration Demand and Answer to an arbitration organization such as the American Arbitration Association, which provides the parties with lists of possible arbitrators to choose from. These lists typically include construction attorneys, owners, contractors, and design and other construction professionals, all trained in the arbitration process.

Some of the **advantages** of arbitration are as follows:

- The disputes are presented to and decided by industry experts rather than judges and juries.
- Typically, the arbitration process is designed to get the parties into the arbitration itself as soon as possible. The parties set and jointly agree to the dates for each step, rather than judges and court timetables setting them.

- Discovery, particularly the costly taking of depositions, is usually limited, which saves time and usually makes arbitration much less expensive than litigation.
- Arbitration is private and is not subject to public disclosure as is most litigation.

Some of the **disadvantages** of arbitration include the following:

- Arbitration proceedings, particularly the rules of evidence, are much less formal and structured than litigation. As a result, it is possible for one party to "ambush" the other with new evidence in the hearings. In addition, the arbitrators may allow evidence of questionable weight to be introduced: information that would not be introduced in court because it is hearsay or otherwise lacks proper foundation.
- Arbitrators sometimes make their decisions on fairness and sometimes do not strictly construe contract provisions, nor give much weight to legal precedents.
- Most arbitrators also have full-time jobs as construction industry professionals, time that they must consider when setting hearing dates. As a result, many arbitrations, particularly long ones, are not continuous and can last a long time.
- If the dispute is large and requires a significant number of hearing days, arbitrator fees and the administrative fees paid to the arbitration organization can add up to a significant cost.
- The arbitrator's decision is generally final and non-appealable.

GLOSSARY

Abandonment: The surrender, relinquishment, disclaimer, or cession of property or rights. In construction contracting, where the contractor fails to "substantially complete" the work, he has abandoned the work. An owner, however, cannot sue a contractor for abandoning the work where the job has been substantially completed.

Ambiguous Specification: The meaning of the provisions of a contract requirement, document, or specification is susceptible to multiple reasonable interpretations. If there is an ambiguity in the plans and specifications, it will be construed against the drafter. On the contrary, if the ambiguity in the plans and specifications is patent or obvious, then the rule does not apply because the contractor has a duty to inquire as to the true meaning of the contract. Contra Proferentem is the legal term for this concept.

Betterment: In the context of change orders required due to omissions by design professionals, what the work added by the change order would have cost had it been in the original bid documents and competitively bid rather than added later by change order.

Bond, Bid: A bond that is included with the submission of a bid that guarantees that the bidder will execute the contract if awarded the contract.

Bond, Payment: A bond that guarantees the payment of the contractor's subcontractors and suppliers on the project.

Bond, Performance: A bond that guarantees the performance of the work of the contract under the circumstances described in the bond.

Breach of Contract: Failure by either the owner or the contractor, without legal excuse, to perform any work, obligations, or duty owed to the other.

Burden of Proof: The requirement to prove facts in dispute and/or alleged damages. In a claim, the burden of proof is on the party making the claim.

Change: Additions, deletions, or other revisions to the work as defined within the general scope of the contract. A change may be authorized by written directive from the owner to the contractor or arise informally by a constructive change.

Change, Bilateral: An agreement executed by the owner and the contractor for a change to the contract requirements. Agreement includes the scope of the change, the cost, and the time impact (if any).

Change, Cardinal: A change or combination of changes to the work that is beyond the general scope of the contract. The basic legal test for a cardinal change is whether the type of work is within the scope established when the parties entered into the contract and whether the project as modified is fundamentally different from the project that was bid.

Change, Constructive: An act or failure to act by the owner or its agents that is not a directed change, but that has the effect of requiring the contractor to perform work beyond that required under the terms of the contract.

Change, Unilateral: A change to the contract issued by the owner without the agreement of the contractor as to the scope, cost, and/or the time impact.

Contract Completion Date: The date established in the contract documents for completion of the work or specified portions of the work. This date may be expressed as a calendar date or a number of calendar or work days after issuance of the Notice to Proceed or other defined point in time.

Critical Path Method (CPM): CPM scheduling is a mathematics-based scheduling technique that establishes the significant work activities and the relationships between these activities for the purpose of creating a network of activities used in planning, scheduling, and controlling the work. The path of the longest duration of continuous and dependent work activities through the schedule network is identified as the critical path and is the minimum amount of time required to build the project as depicted by that schedule.

No-Damages-for-Delay: A clause in a contract that provides that, in the event the contractor is delayed in completion of the project by fault of the owner or the owner's agents, the contractor may be entitled to an extension of time but not to additional compensation.

Defect or Condition, Latent: A site condition or defect in the work that cannot be observed by reasonable inspection.

Defect or Condition, Patent: A site condition or defect in the work that can be observed by reasonable inspection.

Delay: An unanticipated event or interference with the progress of a critical path work activity being performed at the time that causes the end date of the project to be extended.

Delay, Excusable and Compensable: Delay that results solely from the owner's actions or inactions that entitles the contractor to both a time extension and delay damages. Examples are directed or constructive suspensions of the work by the owner or the issuance of change orders that delay the project's end date.

Delay, Excusable and Non-Compensable: An unforeseeable delay caused by an event beyond the control and without the fault or negligence of the contractor (including their suppliers or subcontractors). Examples typically include acts of God, unusual weather, strikes, fires, floods, acts of government in its sovereign capacity, and so forth. In such situations, the contractor is normally entitled to a time extension and relief from liquidated damages, but no compensation for delay costs.

Delay, Non-Excusable: Delay within the control of the contractor, its subcontractors, or suppliers, or a delay resulting from a risk allocated to the contractor under the terms of the contract. Examples include a lack of workers or late delivery of contractor-furnished equipment or materials. The contractor is generally not entitled to relief for such a delay, and must either make up the lost time or be contractually liable to the owner for late completion or liquidated damages.

Delay, Pacing: A delay in taking action, making decisions, and/or starting or completing work on non-critical path activities due to knowledge of delays on critical path work. For example, owners may delay issuing change orders on non-critical paths or the contractor may slow down non-critical work due to delays on the critical path in an effort to keep pace with the overall schedule delays. Pacing delays are typically not considered concurrent delays.

Discovery: The pre-trial phase in a lawsuit or arbitration in which each party can obtain evidence from the opposing party by means of requests for answers to written questions (interrogatories), requests for production of documents, and requests for admissions and depositions of parties and potential witnesses. Through this process, all parties go to trial with as much knowledge as possible, and neither party should be able to keep secrets from the other.

Disruption: An event that hinders a party from proceeding with construction as it was planned. Examples include labor inefficiencies as a result of frequent work stoppages, work performed out of sequence, or work performed concurrently with other activities, causing a crowded work site.

Eichleay Formula: The Eichleay Formula is a method used for the calculation of Extended Home Office Overhead. The formula has its origins in a case against the federal government brought by a company named Eichleay. The formula is generally applicable in federal work and in many states, depending on local law.

Entitlement: The legal, contractual, and factual bases of claims by owners, contractors, and other parties to construction contracts.

Equipment Costs, Idle: The cost of equipment that remains on site ready for use, but on a stand-by basis.

Equipment Costs, Owned: Expenses incurred in owning and maintaining equipment, such as depreciation, replacement cost, repairs, maintenance, taxes, and insurance.

Errors or Omissions: Generally refers to design deficiencies in the plans or specifications that must be corrected in order for the project to function or to be built as intended. Errors are typically design aspects that are shown incorrectly. Omissions are design aspects that are not included in the documents, but should have been.

Exculpatory Language: Clauses and phrases in the contract that are intended to release or limit the liability of one party for certain actions that may occur during the performance of the work. Certain exculpatory language may be un-enforceable or prohibited by law.

Float: A term used in CPM scheduling that is the measurement of time, indicating how late any activity or group of activities in a schedule can be completed without impacting the critical path and the scheduled end date of the project.

Implied Duties and Obligations: Principles of general contract law imposed upon both parties even if not stated in the contract. Examples include the duties of non-interference and cooperation that exist between the parties to the contract.

Implied Warranty: The legal theory that when an owner requires a contractor to build the project in accordance with plans and specifications, the owner is responsible for the design and additional costs to the contractor associated with design defects in the plans and specifications. The owner, therefore, impliedly warrants that the plans and specifications furnished are adequate to accomplish the work.

Impossibility: A contract requirement that is physically impossible to perform. For a requirement to be impossible, it generally must be shown that no contractor could perform the work required, not that just a particular contractor cannot perform it.

Impracticability: Inability to perform work called for under a contract due to unforeseeable extreme and unreasonable cost — an economic impossibility even though the work requirement may be physically possible to perform.

Manshul Formula: The Manshul Formula is a method used for the calculation of Extended Home Office Overhead. The formula was created by a New York court in a case involving Manshul Construction. The formula is generally applicable in the State of New York.

Material Difference: A change of condition that will have a significant impact on the performance of the work in terms of means and methods, time, and/or cost.

MCAA Studies: The Mechanical Contractor's Association of America has publications on a variety of issues, including labor productivity for mechanical tasks. These publications include tables listing the labor productivity losses that occur due to many typical causes.

Measured Mile: A methodolgy to calculate lost productivity by comparing the productivity of the impacted work with the productivity of the same or similar work that was not impacted or delayed.

Mechanics' Liens: A lien on real propery, created by statute, in favor of persons supplying labor or materials for a building or structure for the value of labor or materials supplied by them.

Misrepresentation: Information that is false or misleading, even if unintentional, that would have made a difference in the performance of the work if known at the time of contract formation.

Mitigation of Damages: The responsibility of both parties to a contract to minimize costs or time when encountering a potential or actual claim situation.

NECA Studies: The National Electrical Contractors Association has publications on a variety of issues, including labor productivity for electrical tasks. These publications include tables listing the labor productivity losses that occur due to many typical causes.

Order of Precedence: When two or more provisions within a contract conflict, the rules of contract interpretation establish an order of precedence to resolve the conflict.

Reservation of Rights: A statement that one is intentionally retaining one's full legal rights, so as to warn others of those rights. This notice avoids later claims that one "waived" legal rights held under a contract.

Schedule, Cost-Loaded: A cost-loaded CPM schedule includes project costs (to the owner) allocated to the activities within the schedule. Costs are loaded into the schedule based on a code or chart of accounts that corresponds to a schedule of values, contract item, or other accounting identification system. The schedule is updated to reflect modifications to the budget (change orders), actual utilization of cost elements, and estimates of remaining costs for work to be completed. This type of schedule provides historical cost records and future projections of cash flow. In some cases, owners evaluate progress for payment based solely on cost-loaded CPM schedules.

Schedule, Resource-Loaded: A resource-loaded schedule is a schedule with resources (labor, equipment, and/or materials) allocated to the activities within the schedule. Resources loaded into the schedule may include those belonging to the prime contractor, subcontractors, owner, or any other stakeholder. The schedule is updated to reflect changes to budgeted resources, resource limitations, actual utilization of resources, and estimated resources to be utilized on remaining work activities. Resource loading is the basis for resource leveling. Various scheduling software programs load, allocate, and level resources differently and can impose a potential impact on the CPM schedule.

Schedule Compression: This is the result of delays that force more work to be done in a given duration of time than planned. It can result in the utilization of more personnel than originally planned or can be effectively managed. Schedule compression also usually reduces float in the schedule, making it more likely that future delays to specific activities will delay the completion of the project.

Spearin Doctrine: In U.S. v. Spearin (1918), the U.S. Supreme Court held that the owner impliedly warrants that the plans and specifications it issues are free from defects. Moreover, the contractor has a right to recover its additional costs when defective plans and specifications necessitate extra or remedial work.

Standard of Care: In the law of negligence, that degree of care that a reasonably prudent person should exercise in the same or similar circumstances.

Statute of Limitations: Statutes of the federal and state governments that set maximum time periods during which certain actions can be brought or rights enforced. After the time period set out in the statute has expired, no legal action can be brought, regardless of whether any cause of action ever existed.

Subpoena: A command to appear at a certain time and place to give testimony on a certain matter or to produce evidence under a penalty for failure.

Substantial Completion: Generally, when the project or a portion of the work is sufficiently complete in accordance with the contract documents so that the owner can use the project for its intended purpose. Conditions precedent to Substantial Completion are often defined by contract.

Superior Knowledge: Information known or available to one party but not made known to the other party (either intentionally or unintentionally) before the submission of the bid or entering into the contract.

Surety: A bonding company licensed to conduct business in the state where the project is located and authorized by appropriate government agencies to issue bonds. Sureties issue bonds that, under certain circumstances, obligate the surety to complete a contractor's work if the contractor fails in that regard (performance bond) and that subcontractors and suppliers will be paid by the contractor (payment bond).

Suspension of Work, Constructive: An act or failure to act by the owner that is not a directed suspension of work but that has the effect of suspending or interrupting all or a portion of the work.