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## **PROOF OF DELAY AND DISRUPTION DAMAGES IN COURT**

Time is a precious commodity. Many of us were reminded of that fact during the recently holiday season when we spent time with our families. Time is also a precious commodity in construction projects. As the old adage goes, “time is money” and many events can conspire to rob a project of time. This paper will address several ways construction projects can be delayed and disrupted and how parties should act to protect themselves when such events occur.

### **I. Various types of construction delays**

A delay claim on a construction project relates to the period of time for which the project has been extended or work has not been performed due to circumstances which were not anticipated when the parties entered into the construction contract. Delay claims are damages over and above direct costs expended to remedy cause of delay, whether it be change orders, defective plans and/or specifications, or differing site conditions. There are several different classifications of delays including excusable or non-excusable delays, concurrent or non-concurrent delays, and compensable or non-compensable. It is critical to understand each classification and its impact.

#### **A. Excusable or non-excusable delays**

Excusable delays are often defined in the contract and typically involve matters

beyond the contractor's control. Examples of excusable delays include "labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other *causes beyond the Contractor's control.*" See AIA Document A201-2007, ¶8.3.1(General Conditions of the Contract for Construction)(emphasis added). Additional examples of excusable delays include differing site conditions, errors and omissions from the designer, owner initiated changes in scope of work, unanticipated weather and Acts of God. Non-excusable delays are those for which the contractor has assumed the risk under the contract such as delays caused by the contractor, his subcontractors, suppliers or employees.

**B. Concurrent or non-concurrent delays**

A concurrent delay is a second, independent delay occurring during the same time period as the delay for which recovery is sought. For delays to be "concurrent," most courts do not require the periods of concurrent delay to precisely match. The analysis of concurrent delays is complex, and is often used as a defense to a delay claim. If the contractor is able to apportion damages for the concurrent delay, he will be compensated for the owner-caused delay and will be denied compensation for any contractor-caused delay.

**C. Compensable or non-compensable**

Compensable delays are those caused by the owner or persons controlled by the owner. When a delay is compensable, the contractor is entitled to compensation for the costs of a delay in addition to time extensions to complete the project. Construction contracts normally include classes of delay which are compensable. See AIA Document A201-2007,

¶8.3.1. Examples of non-compensable delays are those occasioned by Acts of God or bad weather. In those situations, although those delays are excusable, they are not compensable. Thus, rather than receiving an award of delay damages, the contractor is given an extension of time to complete the project for delay caused by Acts of God or bad weather.

## **II. Disruption damages distinguished from delay damages**

Disruption means a reduction in expected productivity of labor and equipment. Disruption claims are distinct from delay claims in that disruption is “micro” in focus, whereas delay is “macro” in focus. Disruption claims are not dependent upon whether the impacted activities are on the critical path or whether the contract end date is extended. Disruption damages can be traced to specific activities, such as an interruption in the planned work sequence or flow of work. Disruption damages are commonly lost labor productivity costs and labor cost overruns.

The DC Circuit explained the distinction between disruption and delay in *U.S. Industries, Inc. v. Blake Construction Co., Inc.*, 671 F.2d 539 (D.C. Cir. 1982), holding:

Unlike the delay claim, the disruption claim is intended not to redress [the subcontractor’s] loss from being unable to work, but to compensate [the subcontractor] for the damages it suffered from [the contractor’s] actions that made its work more difficult and expensive than [the subcontractor] anticipated and than it should have been.

As noted above, delay and disruption are different types of damages. However, in practice, disruption is often the cause of project delay.

### III. Acceleration

Acceleration means a speeding up of the construction work at a faster pace than anticipated in the original schedule. Acceleration is a compression of the contract time to either achieve an earlier project completion or to overcome previous delays. There are three types of acceleration: “directed,” “constructive” and “voluntary.” Directed acceleration occurs when the owner instructs the contractor to increase the pace of the work or to complete by an earlier date. Constructive acceleration occurs when the owner fails to grant extensions for requested delays and demands completion within the original schedule. In that case, the contractor is expected to do more work in less time.

There are five elements for a successful constructive acceleration claim:

- (1) the contractor experienced an excusable delay entitling it to a time extension;
- (2) the contractor properly requested the extension;
- (3) the owner failed or refused to grant the requested extension;
- (4) the owner demanded that the project be completed by the original completion date despite the excusable delay; and
- (5) the contractor actually accelerated the work in order to complete the project by the

original completion date and incurred costs as a result. *See Envirotech Corp. v. Tennessee Valley Auth.*, 715 F.Supp. 190, 192 (W.D. Ky. 1988)

Acceleration is disruptive because the contractor must increase its labor and equipment costs either by bringing in additional crews and equipment, working overtime or

both. A contractor can receive damages for directed and constructive acceleration which include the additional costs incurred to complete the project pursuant to the shortened schedule beginning on the date the acceleration order was issued or when the proper request for an extension was denied. *See Dep't. of Transp. v. Anjo Constr. Co.*, 666 A.2d 753,757 (Pa. Commw. Ct. 1995). However, “voluntary acceleration,” when a contractor seeks merely to “recover the schedule” or complete the project early is not compensable.

#### **IV. Evidence contractors need for proving or defending claims related to delay and disruption damages**

Proving delay damages is often a difficult task. Therefore, as soon as a delay is suspected, a party should maintain complete documentation of all activities that may be affected. A contractor should also continue to update the schedule to show how one delay caused impacts throughout the project. Examples of documentation that should be gathered are:

- (1) All correspondence and e-mails between the parties;
- (2) Daily job reports;
- (3) Progress reports;
- (4) Time cards;
- (5) Photographs;
- (6) Invoices, purchase orders and payment applications;
- (7) Accounting records;
- (8) Diaries and notes of the project manager;

(9) Job meeting minutes;

(10) Critical Path Method (CPM) updates. (CPM measures time, not costs, but can be critical evidence in convincing the court that there were delays and what tasks caused them.);

(11) Weather records;

(12) Test and inspection reports;

(13) Shop drawing and RFI logs, and

(14) Change orders.

It would also be prudent to review the contract to determine the notification requirements for any delay or disruption claim. See e.g. AIA Doc. A201-1997, ¶4.3 which provides that claims must be made in writing and initiated within 21 days after occurrence of the event giving rise to such claim or within 21 days after the claimant first recognizes the condition giving rise to the claim. See also AIA Doc. A201-1997, ¶4.3.4-4.3.7 which address claims for concealed or unknown conditions, claims for additional cost and claims for additional time. Finally, be certain to notify the appropriate parties (i.e., owner, architect, engineer) within the time prescribed with the foregoing supporting documentation.

The party with the better documentation usually prevails in the case of a dispute.

**V. Ways in which to quantify a claim for delay damages, including the use of scheduling experts**

**A. Typical owner delay damages:**

Liquidated damages: Often liquidated damage clauses are inserted into construction contracts when actual damages will be difficult to prove. Liquidated damages are a specific sum of money listed in the contract for each day the project is extended beyond its contract completion date. Pursuant to La. Civil Code art. 2009, an owner who avails himself of a stipulated damages clause need not prove actual damage caused by non-performance, defective performance or delay in performance.

Liquidated damages provisions are not penal in nature and have been upheld in Louisiana courts. However liquidated damages provisions are subject to attack as a disguised penalty provision. *See Serv. Investors Ltd. v. Scully*, 2008-1062 (La. App. 3 Cir. 03/04/09); 9 So. 3d 910; *see also Lombardo v. Deshotel*, 647 So. 2d 1086 (La. 1994). La. Civil Code art. 2012 provides that stipulated damages cannot be modified by the court unless they are so manifestly unreasonable as to be contrary to public policy. *See Phillppi v. Viguerie*, 606 So.2d 577 (La. App. 5 Cir. 1992)(court reduced amount of stipulated damages as manifestly unreasonable and contrary to public policy). In Louisiana, when a stipulated damages clause exists, actual damages will not be awarded even if the actual damages are greater than the stipulated damages. *See Grimsley v. Lenox*, 643 So. 2d 203 (La. App. 3d Cir. 1994).

In situations where the construction contract does not contain a liquidated damage clause, owners may seek actual damages. La. Civil Code art. 2769 provides that if a contractor fails to do the work he has contracted to do or if he does not execute in the manner and at the time he has agreed to do it, he shall be liable in damages for the losses that may ensue from his non-compliance with the contract. The following types of actual damages are available to an owner:

- (1) Loss of use
- (2) Loss of earnings such as rentals
- (3) Owner's project management and supervisory expenses
- (4) Project-specific overhead expenses
- (5) Lost profits from business not opening on time
- (6) Project-specific insurance costs
- (7) Construction loan interest expenses

**B. Typical contractor delay damages:**

In delay claims, contractors can seek the following types of damages:

- (1) Project supervision costs
- (2) Extended general conditions
- (3) Jobsite trailer rental
- (4) Rental of temporary facilities, toilets, communications, fencing, power, etc.
- (5) Liability insurance



- (6) Equipment rental
- (7) Equipment maintenance
- (8) Field labor if scope of work is increased as direct result of delay
- (9) Increased material costs
- (10) Lost productivity caused by delay due to disruption and inefficient task sequencing
- (11) Hourly labor rate increases due to longer duration of project
- (12) Demobilization and remobilization expenses for extended delays

**C. Use of schedules to establish delay claims**

Schedules are an important part of proving delay claims because they provide a detailed medium for comparing and measuring time and intent. The following are several types of schedules that can be used along with the pros and cons for using each.

**1. Bar charts**

The most frequently used construction schedule is the bar chart. The bar chart consists of a collection of activities along with a projected start and end date for each activity. The length of the bar is dependent upon the length of time necessary to complete the activity. A bar chart is simple and easy to understand. However, the bar chart does not show the relationship of one activity to another and cannot show the impact of a delay on succeeding activities.

Thus, courts have consistently held bar charts to be less effective than network diagrams to show the cause of delays or to apportion multiple causes of delays. A contractor's delay claims have been denied because the bar charts submitted failed to establish the causal interrelationship between the delaying events alleged to be caused by the owner, the contractor's activities and the overall delay in project completion. *See Mega Construction Co. v. United States*, 29 Fed. Cl. 396 (1993). Bar charts are also unable to show the interrelationships between multiple causes of delay and therefore have not been accepted as proof of apportionment of delay. Despite these shortcomings, bar charts continue to be successfully used to prove some types of delay claims. *See Hunter Bros. Sys., Inc. v. Brantley Constr. Co.*, 332 S.E.2d 206 (S.C. 1985).

## **2. Network diagrams**

The most common network diagram is the critical path method ("CPM"). Preparing a critical path method schedule requires four steps: (1) determine most of the activities necessary to complete the project; (2) determine the sequence or logic among those activities; (3) present those relationships in the form of a network diagram and (4) assign a duration of time to each activity and calculate the critical path. Most CPMs have a scheduled completion date that matches the contract completion date.

Network diagrams are preferable because they are able to show interrelationships among multiple causes of delay. This is key when clear proof of apportionment of delay is required. In cases where both owner and contractor contribute to a delay, neither can recover

unless clear proof of apportionment is presented. *See Lee Turzillo Contracting Co. v. Frank Messer & Sons, Inc.*, 261 N.E.2d 675 (1969).

In analyzing schedules, courts have created guidelines that any reliable schedule should meet in order to establish a delay claim. First, the schedule must be complete. Courts have held that an incomplete schedule cannot be used to measure delay. *See Fortec Constructors v. United States*, 8 Cl. Ct. 490 (1985)(reliance on incomplete and inaccurate CPM to substantiate denial of time extensions was clearly improper). Second, the schedule should include as-built data. Regular, monthly updates to the schedule recorded contemporaneously gives the updates a certain validity. Third, the information on which the as-planned, baseline and updated schedules are based must be reliable. Courts have refused to accept schedules where there were serious doubts of the validity of the data used to create the as-built schedule. *See Weaver-Bailey Contractors, Inc. v. United States*, 19 Cl. Ct. 474 (1990)(schedule rejected where it had been created by someone without personal knowledge of project and based on summaries of documents not in evidence).

## **VI. Ways to quantify delay damages**

A contractor asserting a delay claim bears the burden of proof to show the extent of the delay, that the delay was proximately caused by the owner's action and that the owner's delay caused damage to the contractor and the amount of the damages. In Louisiana, a party must prove with specificity the damages incurred because of the delay. However, such demand will not be rejected simply because the party cannot establish an exact amount.

“When damages are insusceptible of precise measurement, much discretion shall be left to the court for the reasonable assessment of these damages.” La. Civ. Code Art. 1999. The following is a summary of the various ways to calculate delay damages:

**A. Detailed damage calculation based on actual costs**

The best proof of a delay claim is known as the “detailed damage calculation method” in which actual cost information is taken from the contractor’s accounting books and records and accumulated so that the damage calculation presents a direct cost for each item of delay. Louisiana courts have expressed their preference for the detailed cost calculation method. *See Al Smith’s Plumbing & Heating Serv., Inc. v. River Crest, Inc.*, 365 So. 2d 1122 (La. Ct. App. 1978).

**B. Jury verdict approach**

The jury verdict method is used by courts to calculate damages when the amount cannot be ascertained with certainty. This method is often used when the claimant has suffered damages but the claimant’s method of calculating costs is rejected. The use of the jury verdict approach often results in the final damage award being on the low side.

**C. Total cost method**

In the total cost method, the contractor does not tie particular costs to particular events; rather, it seeks the difference between its actual costs of performance and its anticipated costs. This method rests on the theory that the full cost overrun is due. The total cost method is disfavored because it assumes that the original contract price was proper and

that any additional costs are necessarily due to delay caused by another. In *Baldi Bros. Constructors v. United States*, 50 Fed. Cl. 74, 79-80 (2001), the Court of Federal Claims stated, “Trial courts are advised to use this method with caution because bidding inaccuracies can create an unrealistically low estimate of the contractor’s costs, and performance inefficiencies can increase the costs incurred.” See also *Boyajian v. United States*, 423 F.2d 1231 (Ct. Cl. 1970).

Even though courts have cautioned against using the total cost method, it is still widely used. Courts have held that the total cost approach may be used when five conditions exist: (1) there is no other way of estimating damages; (2) no underbid or bidding errors took place; (3) inefficiency by the claimant can be distinguished from the costs of delay due to improper acts of others; (4) actual costs incurred are reasonable and (5) the user of the total cost method has used a reasonable cost accounting system to accumulate job costs.

#### **D. Quantum meruit**

When the owner has repudiated the contract, the contractor may recover the value of its performance in quasi-contract. Under quantum meruit, a contractor is compensated for the reasonable value of its labor and materials provided, which in the absence of recovery the owner would be unjustly enriched. An owner can avoid reimbursing those reasonable costs only by proving that the costs are unreasonable or of no benefit.

### E. Recovery of home office overhead

The calculation of home office overhead and the recovery of same in delay claims are difficult subjects. The formula often used in allocating extended home office overhead to the delay is called the “Eichleay formula”. See *CBC Enters. v. United States*, 978 F.2d 669 (Fed. Cir. 1992)(applying *Appeal of Eichleay Corp.*, ASBCA No. 5183, 60-2 BCA (CCH) §2688, 1960 WL 538.

The Eichleay formula contains four steps:

- (1)  $\frac{\text{Billings for this contract}}{\text{Total billings for all contracts during contract period}} = \text{Percentage for allocation of home office overhead for this contract}$
- (2)  $\text{Allocation percentage} \times \text{Total home office overhead for contract for contract period} = \text{Home office overhead allocable for this contract}$
- (3)  $\frac{\text{Allocable overhead amount}}{\text{Actual days of contract performance}} = \text{Daily home office overhead rate for this contract}$
- (4)  $\text{Daily rate} \times \text{Number of days delay} = \text{Claim for unabsorbed home office overhead.}$

Louisiana courts have also affirmed the award of home office overhead in a breach of contract action. See *The McCarty Corp. v. Industrial Scaffolding, Inc.*, 413 So. 2d 1322 (La. App. 1 Cir. 1981).

There are several problems with the *Eichleay* formula. First, it is considered an estimate and its accuracy can be questioned. Second, the contractor must prove that the actual overhead costs are real via audited financial statements. Third, some items included in home office overhead can be questioned, such as entertainment and advertising expenses. Finally, courts may consider it too speculative in that the home office overhead would be incurred regardless of any delay.

**F. “Measured mile” analysis**

The “measured mile” analysis is a way for contractors to demonstrate lost productivity by comparing the cost of “impacted” work with the cost incurred to perform the same or similar “unimpacted” work. This analysis is straightforward if the contractor has kept productivity records by location, type of work and crews. First, the contractor must identify and define the impacted work, for example, installation of walls. Second, identify the impacted and unimpacted time periods and project locations. (The measured mile analysis assumes all work on the project would have been performed at the same rate as the unimpacted segment). Third, assemble job cost records for impacted time periods. Finally, determine whether analysis will be based on hours and/or dollars. An hourly approach would be based on the total crew hours to complete a task, for example, the square feet of walls installed or yards of concrete paved. A dollar approach would be based on the total cost to complete a task. This analysis is acceptable if based on reasonably similar work to the impacted work and both activities should involve similar skill level and effort.

As noted in the Louisiana Construction Law Manual:

While it is often not difficult to determine when delays occur, and the costs and expenses related thereto, it becomes much more difficult to determine the costs and expenses resulting from disruptions, changes in sequence, and other actions of the owner which could cause significant productivity loss to a contractor. In those instances, it is almost mandatory that experts in the areas of delay damages be utilized to review, analyze, and assist in the presentations or defense of the claim.

*See James S. Holliday, Jr. and H. Bruce Shreves, Louisiana Construction Law Manual at §8:10 (1991).*

Organizing the foregoing information on a demonstrative chart is helpful in establishing lost productivity under a measured mile analysis.

## **VII. Forums for dispute resolution**

### **A. Negotiation**

Negotiation is a method of dispute resolution where either the parties themselves or their representatives attempt to settle conflicts without resort to the courts. Negotiations do not involve impartial third parties, but rather is merely an attempt by the parties to resolve their disputes amicably.

### **B. Mediation**

Mediation is a method of dispute resolution where a neutral third party, a mediator, works with the parties to help them resolve their disputes. Mediation is non-binding, therefore if no agreement is reached the parties may proceed to arbitration or litigation.

### **C. Arbitration**

Arbitration is a method of dispute resolution where the parties agree to submit their



disputes to third party for a binding resolution. Most construction contracts today contain provisions that any disputes shall be resolved by arbitration. Both the Louisiana Arbitration Act and the Federal Arbitration Act provide that such contractual provisions are valid and will be enforced. *See* La. R.S. 9:4201 et seq., and 9 USC §1 et seq. Typically in these types of cases the arbitration is conducted before the American Arbitration Association (“AAA”), which has a panel of experienced industry and legal professionals available to render a decision. Arbitration before the AAA is similar to litigation in state or federal court but it is designed to provide a swifter resolution of claims. Any decision by the arbitrators are binding on the parties and will be affirmed by a court, absent unusual circumstances, such as the award being “procured by corruption, fraud or undue means.” *See* La. R.S. 9:4210.

#### **D. Litigation**

Litigation is the method of dispute resolution that most are familiar with, in which the parties bring their dispute before a state or federal court for a ruling by a judge. Litigation is a judicial contest through which legal rights are sought to be determined and enforced.

#### **IX. How certain clauses within construction contracts can impact delay and disruption claims**

Review construction contracts carefully because they can greatly impact delay and disruption claims.

Some delays are not compensable. Most contracts exclude delay damages occasioned by Acts of God or bad weather. In such situations, contractors are not awarded delay damages but are given an extension of time to complete the work.

“No damages for delay” clauses are also common in construction contracts. Such provisions purport to prevent a contractor from recovering damages for delays caused by the owner or its representative. Louisiana courts have upheld such clauses. See *Pellerin Constr. Inc. v. Witco Corp.*, 169 F. Supp. 2d 568 (E.D. LA 2001)(court upheld clause in absence of evidence of intentional or gross fault of owner). However, some courts have refused to enforce “no damages for delay” clauses where the delay: (1) was not contemplated by the parties, (2) amounts to an abandonment of the contract, (3) was caused by bad faith, or (4) amounts to active interference. James S. Holliday, Jr. and H. Bruce Shreves, *Louisiana Construction Law Manual* §8:10 (citations omitted).

The Louisiana Public Works Act prohibits “no damages for delay” clauses on contracts governed by that Act. See La. R.S. 38:2216(H) which provides:

Any provision contained in a public contract which purports to waive, release or extinguish the rights of a contractor to recover cost of damages, or obtain equitable adjustment, for delays in performing such contract, if such delay is caused in whole, or in part, by acts or omissions within the control of the contracting public entity or persons acting on behalf thereof, is against public policy and is void or unenforceable. When a contract contains a provision which is void and unenforceable under this Subsection, that provision shall be severed from the other provisions of the contract and the fact that the provision is void and unenforceable shall not affect the other provisions of the contract.

The contract between the contractor and the owner should be reviewed carefully for any provisions which may impact a contractor’s right to bring delay claims.

## **X. Conclusion**

Proving delay damages is not a simple task. Since a contractor asserting a delay claim bears the burden of proofing both the extent of the delay, that the delay was caused by the owner's actions and resulting damages, it is imperative that a contractor begins assembling proof as soon as a delay is suspected. A contractor should also continue to update the schedule to show how one delay has caused ripple effects throughout the project. Legal counsel and experts in scheduling/accounting should be consulted to assist in drafting clear and compelling demonstratives, showing that a delay has occurred and the resulting damages.

If you need any further information, please do not hesitate to contact me or refer to any of the following references:

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