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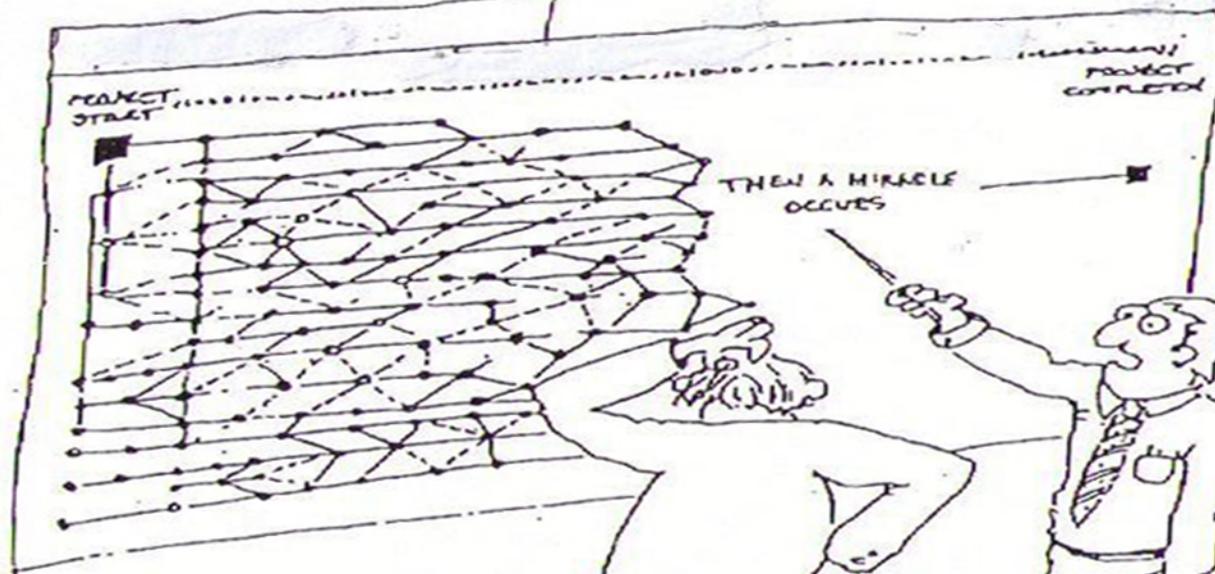
# Schedule & Delay Provisions in Industry Standard Contract Forms

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# Agenda

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- **AIA and ConsensusDocs Schedule & Delay Clauses**
- **Issues for Contractors & Potential Contract Revisions**
- **Issues for Owners & Potential Contract Revisions**
- **Practice Pointers**



Good work, but I think we need a little more detail right here.

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**EXPECT  
DELAYS**

# AIA Form Contracts

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- **Document A201-2017 General Conditions of the Contract for Construction**

# Time - Definitions

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## **ARTICLE 8 TIME**

### **§ 8.1 Definitions**

**§ 8.1.1** Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

**§ 8.1.2** The date of commencement of the Work is the date established in the Agreement.

**§ 8.1.3** The date of Substantial Completion is the date certified by the Architect in accordance with Section 9.8.

**§ 8.1.4** The term “day” as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

# Basis For Time Extensions

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**§ 8.3.1** If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine.

## 8.3.1 Does Not Preclude \$

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**§ 8.3.3** This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

# Separate Contractors

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§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

# Suspension Of Work Due To Nonpayment

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## § 9.7 Failure of Payment

If the Architect does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Architect or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner and Architect, stop the Work until payment of the amount owing has been received. **The Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.**

§ 9.5.1 The Architect may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Architect's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Architect is unable to certify payment in the amount of the Application, the Architect will notify the Contractor and Owner as provided in Section 9.4.1. If the Contractor and Architect cannot agree on a revised amount, the Architect will promptly issue a Certificate for Payment for the amount for which the Architect is able to make such representations to the Owner. The Architect may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Architect's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of:

....

.6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay ....

# Emergency

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## § 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

# Owner May Suspend Work

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§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

# Owner May Suspend Work

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§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

# Claims Deadline

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§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party and to the Initial Decision Maker with a copy sent to the Architect, if the Architect is not serving as the Initial Decision Maker. Claims by either party under this Section 15.1.3.1 shall be 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, whichever is later.

# Claims for Additional Time

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## § 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

# ConsensusDocs Form Contracts

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## **ConsensusDOCS 200: (UPDATED 2017): Owner/Contractor Standard Agreement & General Conditions (Lump Sum)**

**6.3.1** ... Examples of causes beyond the control of the Constructor include, but are not limited to, the following: (a) acts or omissions of the Owner, the Design Professional, or Others; (b) changes in the Work or the sequencing of the Work ordered by the Owner, or arising from decisions of the Owner that impact the time of performance of the Work; (c) encountering Hazardous Materials, or concealed or unknown conditions; (d) delay authorized by the Owner pending dispute resolution or suspension by the Owner under section 11.1; (e) transportation delays not reasonably foreseeable; (f) labor disputes not involving the Constructor; (g) general labor disputes impacting the Project but not specifically related to the Worksite; (h) fire; (i) Terrorism; (j) epidemics; (k) adverse governmental actions; (l) unavoidable accidents or circumstances; (m) adverse weather conditions not reasonably anticipated. The Constructor shall submit any requests for equitable extensions of Contract Time in accordance with ARTICLE 8.

**6.3.2** In addition, if the Constructor incurs additional costs as a result of a delay that is caused by items (a) through (d) immediately above, the Constructor shall be entitled to an equitable adjustment in the Contract Price subject to section 6.6.

# Notice of Delays

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**6.3.3 NOTICE OF DELAYS** If delays to the Work are encountered for any reason, the Constructor shall provide prompt written notice to the Owner of the cause of such delays after the Constructor first recognizes the delay. The Owner and the Constructor agree to take reasonable steps to mitigate the effect of such delays.

# Notice of Delay Claims

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**6.4 NOTICE OF DELAY CLAIMS** If the Constructor requests an equitable extension of the Contract Time or an equitable adjustment in the Contract Price as a result of a delay described in the section above, the Constructor shall give the Owner written notice of the claim in accordance with section 8.4. If the Constructor causes delay in the completion of the Work, the Owner shall be entitled to recover its additional costs subject to section 6.6. The Owner shall process any such claim against the Constructor in accordance with ARTICLE 8.

# Claims for Cost or Time

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**8.4 CLAIMS FOR ADDITIONAL COST OR TIME** Except as provided in subsection 6.3.2 and section 6.4 for any claim for an increase in the Contract Price or the Contract Time, the Constructor shall give the Owner written notice of the claim within fourteen (14) Days after the occurrence giving rise to the claim or within fourteen (14) Days after the Constructor first recognizes the condition giving rise to the claim, whichever is later. Except in an emergency, notice shall be given before proceeding with the Work. Thereafter, the Constructor shall submit written documentation of its claim, including appropriate supporting documentation, within twenty-one (21) Days after giving notice, unless the Parties mutually agree upon a longer period of time. The Owner shall respond in writing denying or approving the Constructor's claim no later than fourteen (14) Days after receipt of the Constructor's claim. Owner's failure to so respond shall be deemed a denial of the claim. Any change in the Contract Price or the Contract Time resulting from such claim shall be authorized by Change Order.

# Delay Issues for Contractors

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# Contractor Issues - Commencement

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Commencement options in A201-2017:

- (1) the date of the agreement;
- (2) a date set forth in a notice to proceed issued by the owner; or
- (3) another date or means of determining a date described in the agreement

# Contractor Issues - Weather

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- (1) Identify set number of weather days to be taken into account in the schedule.
- (2) Be cognizant of any requirements for documenting and reporting weather days as they occur.

# Contractor Issues: Liquidated Damages

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(1) Layered/Phased?

(2) Reasonable Rate?

(3) Cap?

# Contractor Issues: Definition of Substantial Completion

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AIA Document A201-2017 defines Substantial Completion as follows: “Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.”

ConsensusDocs 200: “Substantial Completion” of the Work, or of a designated portion, occurs on the date when the Work is sufficiently complete in accordance with the Contract Documents so that Owner may occupy or utilize the Project, or a designated portion, for the use for which it is intended, without unapproved disruption. The issuance of a certificate of occupancy is not a prerequisite for Substantial Completion if the certificate of occupancy cannot be obtained due to factors beyond Constructor's control. This date shall be confirmed by a Certificate of Substantial Completion signed by the Parties.

# Contractor Issues: Definition of Substantial Completion

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Make sure definition and criteria are within contractors control.

- Certificate of Occupancy
- Owner's approval/agreement

# Contractor Issues: No Damages For Delays

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To be covered later. Make sure it is on your red flag checklist.

# Delay Issues for Owners

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# Owner Issues: Schedules

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- Contract should include detailed requirements for schedule contents, maintenance and reporting.

# Owner Issues: Schedules

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- the type of schedule that will be maintained (e.g., CPM, software, resource-loaded, etc.);
- the format of schedule reports to the owner;
- the frequency of schedule updates;
- important milestone dates;
- the ownership of float;
- schedule treatment of unresolved requests for time extensions and potential change orders; and
- reporting of delays.

# Owner Issues: Partial or Early Occupancy

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- Process should be clearly addressed.
- Areas of the facility that owner intends to occupy early.
- Timing for move-in activities.
- Specific system requirements needed for move-in.
- Sign-off procedures to distinguish punch list items from owner-caused damage.

# Owner Issues: Hard Deadlines

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- Certain industries or sectors may have a project deadline that cannot be moved.
  - Industrial outages
  - Student housing move-in

# Owner Issues – Hard Deadlines

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- Owner must give careful consideration to available remedies and procedures for addressing excusable delays.
- If time extensions are not an option, the owner will have to revise the delay and change order procedures to provide a basis for additional compensation and acceleration.
- Robust provisions allowing the owner to supplement the contractor's workforce or to hire additional contractor's in the event of delays, regardless of who is at fault.
- Special attention must also be given to terms addressing coordination, interference and labor concerns.

# Practical Advice

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# Practical Advice: Notice

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- At the beginning of the project, prepare a checklist of notice provisions in the contract, including:
  - necessary content,
  - timing,
  - method of delivery and
  - recipient.

# Practical Advice: Requesting Time Extensions

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- What if you experience a delay but the full impact is not then known?
- Give the notice with the explanation that the full impact will be revealed when known.

# Practical Advice: Record Keeping

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- Delay claims are won or lost based on the level of documentation / detail maintained on the project.
- Detailed daily reporting, photos and videos are essential.

# Questions?

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# PRESERVING, PROVING AND DEFENDING DELAY CLAIMS

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# Owner Delay Damages

- Loss of use
- Lost rents
- Lost profit
- Financing costs
- Project management/supervision costs
- Architect and Consultant costs
- Lost tax credits
- Insurance costs
- Loss of goodwill/damage to business reputation
- Liquidated damages owed to third parties

# Contractor Delay Damages

- Jobsite overhead (general conditions)
- Labor and material escalation costs
- Lost productivity (causing increased manhours and equipment costs)
- Financing costs
- Insurance and bond costs
- Unabsorbed home-office overhead
- Project administration costs

# Owner Delay Damages - Liquidated Versus Actual

- Actual damages may be difficult to prove (too speculative) or barred by contract waiver of consequential damages
- Liquidated damage provisions are generally enforceable; penalty clauses are not
- Missouri test to determine if a penalty:
  - (1) amount stipulated as liquidated damages must be a “reasonable forecast” of the harm caused by the delay”; and
  - (2) contemplated harm intended to be compensated by liquidated damages must be “incapable or very difficult of accurate estimation”
- Missouri courts follow minority approach -- some showing of actual harm or loss caused by the delay is required
  - Need not show the precise financial harm, but must demonstrate that some harm or damage occurred
- Fact that liquidated damages may grossly exceed the value of the contract is not the relevant inquiry
- Even if Owner is the cause of the delay, unless Contractor complies with contract notice requirements for delays, Owner may still be able to recover liquidated damages

# Contractor Defenses to Owner Enforcement of Liquidated Damages

- Owner caused the delay (sole or concurrent) - just make sure to timely notify Owner of the delay per contract requirements
- Delay otherwise excusable (force majeure, third party fault, etc.)
- Owner failed to comply with contract requirements for notice of liquidated damages claim
  - AIA forms define “Claim” very broadly and include any claim for payment, by Owner or Contractor
  - But 2017 AIA forms expressly note that notice of enforcement of liquidated damages is not required

# Owner Recovery of Liquidated Damages after Contractor Termination

- May be recoverable for a “reasonable time” after Contractor abandons the project or is terminated by Owner

# Contractor Delay Theories and Measure of Damages

- Delayed Early Completion
- Lost Productivity
- Constructive Acceleration
- Unabsorbed Home-Office Overhead
- Total Cost Method
- Modified Total Cost Method
- Cumulative Impact

# Contractor Waiver of Delay Claims

- Failure to comply with contract requirements for notice and claim submission
- Execution of overly broad lien/claim waiver
- Execution of overly broad Change Order
- Contract limitations: no-damages-for-delay provision

# Failure to Comply with Notice and Claim Submission Requirements

- MUST COMPLY WITH CONTRACT NOTICE REQUIREMENTS!!!
- In many instances, the contract dictates notice and claim submission requirements as a condition precedent to claim recovery, such as -
  - When notice must be provided (including weekly updates until impacts can be fully quantified)
  - Who must get the notice
  - Form of notice and supporting claim documentation
- Missouri is a strict compliance jurisdiction - failure to strictly comply with notice/claim submission requirements may bar recovery; possible exceptions:
  - Owner is familiar with the cause of the delay and notice would be futile
  - If Owner is attempting to withhold a substantial part of the contract price as liquidated damages, even though Owner caused the delay

# Failure to Comply with Notice and Claim Submission Requirements

- Prejudice/fairness standard applied by many federal courts - alternative to strict compliance standard
  - More equitable approach based on fairness
  - Federal courts consider:
    - Does the Owner have actual, imputed or constructive knowledge of the facts giving rise to the delay claim?
    - Would notice to the Owner be futile?
    - Has the Owner frustrated the giving of notice?
    - Did the Owner consider the claim on the merits?
    - Was the lack of notice prejudicial to the Owner?

# Contractor Waiver - Lien/Claim Waivers

- No statutory lien waiver forms in Missouri (some states mandate the use of statutory forms)
- Lien versus claim waiver
  - Pure Lien Waiver - only waiving right to lien property
  - Claim Waiver - waiving all claims for payment through the period of time covered by the waiver, including liens against the project, subject to any express carve-outs, such as -
    - Retention
    - Pending Change Orders
    - Disputed claims
    - Claims for which notice is not yet due

# Lien/Claim Waivers

- Lessons Learned - *Parkway Construction Services v. Blackline LLC* (Missouri Ct. of Appeals, March 2019)
  - Plumbing subcontract involving rework of existing piping (extent of rework unknown)
  - Parties agreed that subcontractor responsible for (and contract price included) rework for up to 50% of the piping
  - No extra work without GC's written approval
  - Sub notified GC that it replaced 50% of the piping, but more rework required
  - GC disagrees and instructs Sub to complete the rework for the original contract price
  - Sub continues to perform the disputed work and much later submits a Change Order Request that is rejected by GC; Sub then stops all work on the project
  - Sub then signs a lien and claim waiver in exchange for partial payment of the disputed amount, waiving
    - *"all right, title and interest to any claim for payment of any kind for payment of its Work through today's date" but "reserves the right to assert claims for payment...for Work performed after the date listed."*
  - Mo. Appellate Court found that "the plain and unambiguous language of the waiver prohibits [the sub] from recovering payment for all Work...on the Project up to June 16, 2015," even the known disputed extra piping work that caused Sub to stop work in the first place

# Contractor Waiver Through Change Orders

- Owners and Contractors - be mindful of how the Change Order is written
- Owner's objective - fully and finally resolve all claims and impacts resulting from the change in the work, whether known or unknown, including without limitation, lost productivity, cumulative impact, extended general conditions, unabsorbed home-office overhead, etc.
- Are the parties in agreement as to the claims and issues being resolved by the Change Order?

# Contractor Waiver No-Damages-For-Delay Provision

- Typical no-damages-for-delay provision: *No payment or compensation of any kind shall be made to contractor for damages because of hindrance, interference or delay of any kind in the progress of the work from any cause*
- No-damages-for-delay provisions unenforceable in public work contracts (Mo. Rev. Stat. § 34.058(2))
- Missouri courts have not squarely addressed the enforceability of no-damages-for-delay provisions for private works contracts, but a federal court in Missouri recently opined that such provisions are valid under Missouri law

# No-Damages-For-Delay Provision

- Exceptions to enforcement of no-damages-for-delay provisions:
  - Active interference - requires some affirmative, willful act in bad faith which unreasonably interfered with the other party's performance and/or compliance with the contract
  - Cause of delay not within the reasonable contemplation of the parties
  - Delays of an unreasonable duration
  - Delays attributable to the inexcusable ignorance, incompetence or gross negligence of the party attempting to enforce
  - Delays so unreasonable that they constitute an intentional abandonment of the contract
  - Delays resulting from the enforcing party's breach of a fundamental obligation of the contract (the fundamental breach must completely frustrate the performance of one of the parties, not merely delay it for a time)

# Contractor Delay Claims Delayed Early Completion

- Theory: Contractor achieves Substantial Completion by the contract completion date, but contends it planned to complete earlier and was prevented from doing so by Owner's actions
- Damages
  - Lost profits caused by extended general conditions costs
  - Lost early completion bonus
- Delay theory not fully tested in Missouri, but widely recognized in other jurisdictions

# Delayed Early Completion

- Federal courts have applied a 3-prong test:
  - Contractor intended to complete the contract early
    - Proof - an actual early completion schedule that existed at the time of the bid; best practices - notice to the Owner of plan to complete early, including sharing early completion schedule
  - Contractor had the capability to do so
    - Proof - must demonstrate that early completion schedule was reasonable and achievable; does it reasonably account for Owner submittal review, expected adverse weather, long lead time for procurement of materials, etc.?)
  - Contractor actually would have completed early but for Owner's actions
    - Proof - prior to the delaying event, was contractor working at a pace necessary to complete early?; would any non-Owner actions have prevented Contractor's early completion?

# Delayed Early Completion

- Owner defenses to early completion delay claim
  - No-damages-for-delay provision
  - Allocation of float in the construction schedule
    - If contract provides that the Project owns the float (to be used by the contractor or owner on a "first come, first served" basis), early completion delay claim may be in jeopardy
    - Reason: contract already contemplated that Owner may consume the schedule float for its benefit, meaning contractor had no reasonable expectation of completing early
    - Best practices - expressly note in the contract:
      1. Project owns the schedule float, available for use by Owner or Contractor on a "first come, first served" basis
      2. Contractor waives any right to seek or recover early completion delay damages, regardless of the float consumed by Owner
- Owner not responsible for the delay or Contractor's conduct contributed to the delay

# Contractor Delay Claims

## Lost Productivity and the Measured Mile

- The primary cause of cost overruns and budget busts is often unanticipated labor costs resulting from poor labor productivity
- Lost productivity claims are hotly contested and controversial because so many factors, compensable and non compensable, can contribute to reduced labor productivity
  - poor or over-ambitious estimating
  - poor planning/execution
  - inadequate coordination of subcontractors
  - high labor turnover
  - poor weather
  - changed site conditions
  - owner directed changes or acceleration
  - site access problems
  - crowded working conditions
  - extended overtime
  - poor worker morale
  - defective design
  - poor constructability

# Lost Productivity and the Measured Mile

- Consequences of lost productivity
  - more man-hours
  - more equipment
  - more project administration
  - project delay
  - extended general conditions
  - more costs
- Proof of lost productivity
  - “Measured mile” remains the preferred method for proving lost productivity
  - “Measured mile” compares (a) contractor’s productivity, for a given activity, during a period of time impacted by the disruption at issue, with (b) the same or similar activity during a period of time without such impacts (assuming such comparable activity and time period is available)
- Productivity during the period without impact serves as the baseline or “measured mile” to measure the impacted productivity

# Lost Productivity and the Measured Mile

- Relevant factors to consider -
  - The work performed in the measured mile and the impacted period should be substantially similar in type, nature and complexity
  - Work environment and conditions should be similar
  - The makeup and skill level of the labor force should be comparable
  - The measured mile should be based on actual productivity performance on the project or, if actual productivity is not available, then based upon reasonable productivity assumptions, premised upon -
    - Contractor's bid (supported by historical data and/or detailed estimates)
    - Contractor's productivity on similar projects
    - Industry standards as reflected in industry guides, manuals and other publications

# Lost Productivity and the Measured Mile

- Requires expert testimony
  - Experienced construction productivity expert
  - Direct experience in the type of construction project at issue and with the type of trade work whose productivity is claimed to be disrupted
  - Based on a thorough review of the project files that considers and accounts for all potential non-compensable causes of inefficiency
  - The volume and quality of the project documentation is critical

# Lost Productivity and the Measured Mile

- Watch out for *Daubert*
  - In 2017, Missouri adopted the federal *Daubert* standard for determining the admissibility of expert testimony (Mo. Rev. Stat. 490.065)
    - Expert may only testify if:
      - Expert's scientific, technical or other specialized knowledge will help trier of fact understand the evidence
      - Testimony is based on sufficient facts or data
      - Testimony is the product of reliable principles and methods
        - Have the methodologies been tested, peer reviewed and published?
        - Any known or potential rate of error?
        - Is the methodology generally accepted in the relevant scientific or technical community?
      - Expert has reliably applied the principles and methods to the facts of the case

# Lost Productivity and the Measured Mile

- If actual productivity data from similar, non-impacted work is simply not available, must be able to provide a reasonable and meaningful approximation of the damage via a modified measured mile analysis
- The “efficiency factor” - applied when identical impact-free measured mile work is not available because Project was delayed from the beginning
  - First, determine the ratio (the efficiency factor) between the actual labor hours spent and actual labor hours budgeted for the similar work (by dividing the budgeted hours by the actual hours)
  - Second, take the budgeted hours for the impacted work and multiply by the “efficiency factor” = the “should have been” labor hours
  - Third, calculate the diminished labor productivity = difference between the “should have been” labor hours and the actual hours spent for the impacted work

# Contractor Delay Claims

## Total Cost Method

- Warning - disfavored by many courts (in *Penzel Construction Company, Inc. v. Jackson R-2 School District, et al.*, Missouri Ct. App. Eastern District found this method incompatible with Missouri law)
  - Method - calculates delay damages as simply the difference between a contractor's anticipated cost to perform the work and the actual cost
  - Requires fact finder to assume that the labor and material estimates underlying the original contract price were reasonable and achievable
  - Generally ignores potential that non-compensable impacts caused the increased costs or budget bust
  - Should only be used in extreme cases, where it is difficult or impossible to specifically identify defendant's actions that caused specific cost increases

# Modified Total Cost Method

- *Penzel* court found this method theoretically compatible with Missouri law
- Method - party seeking relief under this theory must first satisfy 4-prong test
  - Nature of the loss makes it impossible or highly impractical to determine with reasonable degree of certainty
  - Plaintiff's bid or estimate was realistic
  - Actual costs were reasonably incurred under the circumstances
  - Plaintiff was not responsible for the increased costs
- Unlike Total Cost Method, the modified approach adjusts the original contract price (to account for bidding errors) and/or the actual costs (to account for contractor-caused or other non-compensable impacts) to more accurately and fairly calculate the compensable loss

# Contractor Delay Claims

## Unabsorbed Home-Office Overhead

- Home-office overhead - costs incurred by contractor to run its home office and overall business operations:
  - Employee salaries; utilities; rent; office equipment; etc.
- Contractors generally seek to absorb such costs through revenue generated from multiple projects
- When project is delayed, and such delay prevents contractor from deploying resources towards other revenue generating projects, a claim for unabsorbed home-office overhead may exist

# Proof of Unabsorbed Home-Office Overhead

- First element of proof - that it was impossible or impractical to shift its workforce to another project, or that its bonding capacity or capital prevented reassignment of resources
- Eichleay formula (not yet tested by Missouri courts)
  - Still the most recognized standard for proving unabsorbed home-office overhead due to delay
  - Application -
    - (1) First, find the contract overhead supported by the project at issue (the “Allocable Contract Overhead”) =  $\text{contract billings} / \text{total billings for contract period} \times \text{total overhead for contract period}$ ;
    - (2) Second, find the Daily Contract Overhead rate allocable to the project at issue =  $\text{Allocable Contract Overhead} / \text{days of contract performance}$ ;
    - (3) Third, find the recoverable amount =  $\text{Daily Contract Overhead} \times \text{number of delay days}$

# Contractor Delay Claims

## Constructive Acceleration

- Occurs when a contractor is entitled to an extension of time due to an excusable delay, but owner refuses to provide such schedule relief and still demands compliance with the contract schedule
- Missouri courts have not squarely addressed this issue
- Proof required in other jurisdictions:
  - Contractor entitled to schedule relief due to an excused delay
  - Contractor notified owner of the excusable delay and requested a time extension
  - Owner refused the time extension
  - Owner demanded compliance with the current schedule
  - Contractor took reasonable steps to accelerate the work and incurred additional costs in the process

# Contractor Delay Claims

## Cumulative Impact

- Theory: multiple changes in the work, over an extended period of time, create a ripple-type impact on the time for performance and efficiency, the cumulative impact of which is not readily ascertainable or otherwise appreciated at the time of pricing each individual change.
  - Individually, the changes may not be large in size or complexity, but collectively, they may negatively and systematically impact the project, undermining efficiency and the project schedule
- Proof: (1) actions or inaction of Owner (2) caused cumulative impact that (3) injured Contractor
  - Merely showing cost overruns is not enough; must show a direct causal connection between the Owner's conduct and the impact such conduct had on Contractor's performance
  - By same token, not required to trace the specific increased costs attributed to each specific change; just need to demonstrate, by a preponderance of the evidence, that the cumulative impact of the changes negatively impacted Contractor's performance
  - Contemporaneous project records documenting the severity of the impacts is essential, along with a reliable "as planned schedules" and realistic bid estimates

# Cumulative Impact

- Must also be able to demonstrate that the impacts complained of are not attributable to other causes for which the Owner is not responsible
- Has the cumulative impact claim been released by Change Orders addressing individual impacts?
  - Depends on the wording of the Change Order and the intent of the parties
  - Cumulative impact claims typically involve the disruption that occurs between multiple change orders, which total impact may not be discernible when just one of the change orders is executed
  - If the Change Order expressly requires the Contractor to waive any cumulative impact claims attributed to such Change Order, Owner will have an easier time arguing that Contractor waived and released its cumulative impact claim
  - Also, if the negotiations for the Change Order occur near the end of the project, the more difficult it will be for the Contractor to argue that the cumulative impacts associated with such Change Order were not reasonably discernible when pricing the Change Order

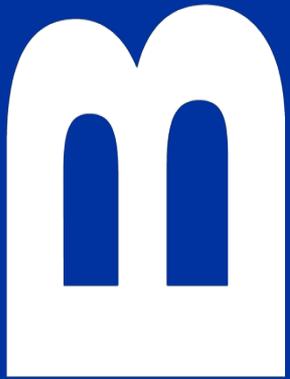
# Thank you

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# **Construction Project Delays: A Tangled Analysis**

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# Responsibility and Compensability of Delays

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- The time and effort required
- Can exceed the value of the claim
- consider cost, contract provisions, and the expense
  - Lawyers
  - Experts
  - Time away from other work



# Responsibility and Compensability of Delays

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## Schedule Analysis

Show causation between the claimed  
events and the delay



# Responsibility and Compensability of Delays

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## Multiple Delays on Projects

- Impacting to completion date
- Must impact the **critical path** running through the project



# Responsibility and Compensability of Delays

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## Determining the Critical Path

1. A logic or network diagram must be prepared for the project's activities
2. Assign durations to each
3. Then the critical path can be calculated



# Responsibility and Compensability of Delays

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## What is the Critical Path?

The longest path through the network of activities on the diagram measured in time

The path with the longest duration defines the shortest duration for the project



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

- good faith and fair dealing
- Implied in every contract
- neither party to the contract will do anything to prevent, hinder, or delay performance
- ***Peter Kiewit Sons' Company v. Summit Construction Company, 422 F.2d 242, 257 (8<sup>th</sup> Cir. 1969)***



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

## Recognized Types of Delays

### “Inexcusable” Delay

- Within the contractor’s control
- Could have been avoided by prudent construction management



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

## Recognized Types of Delays

### “Excusable” Delay

- arises from a “mutual risk”
- Typically include unusual weather, strikes, and unavoidable delays in the delivery of materials
- the contractor would be entitled to additional time to complete
- Responsible for its own time related overhead costs



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

## Recognized Types of Delays

### “Excusable Compensable” Delay

- For the contractor, arise from owner controlled or responsible event
- Typically include design changes or corrections, site access, permit issues, payment delays
- the contractor would be entitled to additional time to complete
- Owner is responsible for related costs



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

## Concurrent delays

Two delays occur at exactly or nearly the same time and both delay the completion date.

- One the responsibility and the other is the responsibility of the contractor
- If concurrent, each party must absorb its own delay costs



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

*Dicon, Inc. v. Marben Corporation*

*618 F.2d 40 (8<sup>th</sup> Cir. 1980)*

- *Advised project start subject to HUD approval*
- *Asked for an extension pending HUD approval*
- *But signed contract and started work*
- *Court found Dicon was made aware of the lack of approval*
- *Could have conditioned the contract, but failed to do so*



# **Responsibility and Compensability of Delays: Notice and Submittal Requirements**

***Southwest Engineering Company v. Reorganized  
School District R-9***

***434 S.W.2d743 (Mo.App 1968)***

Notice provisions generally enforceable



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

## *Southwest Engineering Company v. Reorganized School District R-9*

- If written notification of the delay is required
- Then **giving the notice is a condition precedent to recovery**, even though the delay is caused by the owner or those for whom he is responsible



# Responsibility and Compensability of Delays: Notice and Submittal Requirements

## *Dicon, Inc. v. Marben*

- *Waiver of Notice Requirement*
- *Dicon submitted letters to the developer seeking an extension due to the bad weather and the owner submitted those letters to the architect*
- *Developer did not object and appeared to accept the assessment of delay*
- *Developer had waived the notice requirement*



# Responsibility and Compensability of Delays: Clauses Limiting Recovery for Delay

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***Roy A. Elam Masonry, Inc. v. Fru-Con Construction  
Corporation***

***922 S.W.2d 783 (Mo.App. 1996)***

- Missouri Court of Appeals: Not a no damages for delay clause
- Elam could recover if the owner paid Fru-Con



# Responsibility and Compensability of Delays: Clauses Limiting Recovery for Delay

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## *Roy A. Elam Masonry, Inc. v. Fru-Con Construction Corporation*

- two experienced entities
- Equal bargaining positions
- no fraud or misrepresentation
- not buried in the subcontract
- terms were readily ascertainable



# Responsibility and Compensability of Delays: Clauses Limiting Recovery for Delay

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***Roy A. Elam Masonry, Inc. v. Fru-Con Construction  
Corporation***

“We see no unconscionability, procedural or substantive barring the application of [the clause] to the delay at issue here.”



# Confronting the Schedule Analysis

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**Approach to the schedule analysis will depend**

- Available records
- Quality of the project scheduling efforts
- Budget (What are you willing to spend?)



# Confronting the Schedule Analysis: Passive v. Active

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## Passive or Observational Analysis

- Takes project schedules and performs a study
- Expert identifies delays and mitigation efforts
- Produces a summary with an allocation to the responsible party
- Key attribute: schedule expert does not add or delete anything to the schedules.
- Can be performed at a very basic level or in great detail



# Confronting the Schedule Analysis: Passive v. Active

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## Active or Modeled Analysis

- Looks at the project's schedules and performs an impact analysis
- Show the impact the added activities has on the on the project completion date



# Confronting the Schedule Analysis: Passive v. Active

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## Choose Active or Passive?

- Available data
- Quality of the schedules
- Complexity of the issues
- Mitigation efforts
- Amount of potential recovery
- No simple process for selecting the best method



# What is a Delay Analysis Supposed to Provide

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## Functions of Delay Analysis

- Establish causal link between events on the project and the delay
- Apportions the delays
- Necessary to show which event resulted in delays and which only appear to have impacted the project completion date



# What is a Delay Analysis Supposed to Provide

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## No “one size fits all”

- Scheduling Experts cannot agree on the “correct” methodologies or the jargon
- When presented with a schedule analysis,
  - Investigate the method used
  - Do not rely on the name given to the analysis by the analyst
  - Some guidelines apply, consult them



# Selecting the Correct As-Planned Original Schedule

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## Original Project Schedule (Probably Not One Choice)

- Schedules go through refinements and adjustments so what is the “original CPM schedule.”
- Some projects have multiple schedules of differing types, including bar charts and rolling bar charts.



# Selecting the Correct As-Planned Original Schedule

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## Criteria of Selecting the Correct Schedule

- Needs to be complete
  - Preliminary schedules are generally not appropriate for use in a schedule analysis
  - Schedules that fail to include procurement activities are usually, but not always, unacceptable
- Sometimes a complete schedule was never created
  - The schedule analyst may need to modify or “allow for” missing activities in the “original schedule”



# Selecting the Correct As-Planned Original Schedule

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## Criteria for Selecting the Correct Schedule

- Original schedule need not be in CPM format
- Bar charts are acceptable on many projects
- If there is no original schedule, the analyst likely must create one using the information available



# Selecting the Correct As-Planned Original Schedule

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## Criteria for Selecting the Correct Schedule

- Must reflect the contractor's plan to execute the project
- Use superintendent's input if at all possible, for several reasons
  - Gives the analysis credibility
  - Gives the analyst the ability to withstand cross-examination



# Selecting the Correct As-Planned Original Schedule

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## Criteria for Selecting the Correct Schedule

Planning errors discovered in the original schedule

- generally should be corrected or accounted for
- only change the original CPM to correct physically impossible sequencing errors or logic that does not meet contractual provisions
- General rule, a contractor's poor scheduling techniques should not be corrected



# Selecting the Correct As-Planned Original Schedule

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## Criteria for Selecting the Correct Schedule

Planning errors discovered in the original schedule

- Any modification to the original CPM schedule should be carefully documented and explained
- Analyst should err on the side of not correcting the schedule if the correction will appear to be a manipulation of the logic



# Important Evaluations and Logic: All Significant Delays Should Be Evaluated

- All delays should be evaluated regardless of responsibility
- Careful consideration should be given before concluding that certain delays are not evaluated or included
- Failure to progress as planned can be a significant factor, but it is rarely listed as an impact item even when those delays have been evaluated.
- Some delays are evaluated via monthly progress updates or regular monthly logic adjustments.



# Important Evaluations and Logic: All Significant Delays Should Be Evaluated

- Some lawyers in cross examination will attack the analysis by pointing to obscure delays or delays never identified
- Any event not adequately identified in the project documents should be viewed with skepticism



# Important Evaluations and Logic: Procedure Should Separate Critical and Non-critical Delays

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## Project Delays and Internal Delays

- Project delays
  - extend the completion date
  - consume available float, if any, prior to impacting the completion date



# Important Evaluations and Logic: Procedure Should Separate Critical and Non-critical Delays

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## Project Delays and Internal Delays

- Internal delays
  - measured without regard to float
  - Do not extend the project completion date
  - Internal delays can cause the contractor to incur additional overhead; however, the damages are typically limited to only the site overhead directly associated with the portion of the project which was delayed



# Important Evaluations and Logic: Concurrent Delays Should Be Evaluated

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Concurrent delays should be analyzed

- Impacts the number of compensable delay days that may be due
- Impacts days upon which the owner can amass liquidated damages
- Without a concurrent delay, analysis the proper allocation of delays is not complete



# Important Evaluations and Logic: Results Should Not Be Affected by Who Is Responsible

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- the length of the delay should not change depending on responsibility for the delay
- The responsibility for the individual delays should never affect the length of the individual delay



# Important Evaluations and Logic: Accuracy Should Not Be Overstated

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## Accuracy Should Not be Overstated

- Depends on the quality of the original schedule and the schedule information
- Depends on the technique selected and the execution
- The higher the quality of information and schedules, the better the technique, and more research done will diminish the inaccuracy
- Higher quality drives up the cost



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## SEARCH FOR THE TITLE

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### Construction Project Delays: An Expensive Gordian Knot

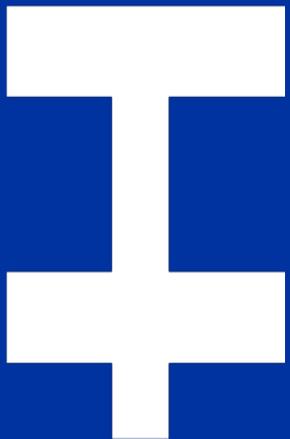
By Kenneth A. Slavens and Daniel Quackenbush

Construction projects suffer delays in virtually unlimited ways. The schedule is impacted by everything from design errors to poor management. Any event can result in a delay claim, but delay claims are only one type of construction dispute. When other claims arise on the project, those claims must be coordinated with the delay claim. We are looking only at delays

project. Everyone has heard talk of CPM schedules. Regardless of the schedule, all projects have a critical path. To determine the critical path, a logic or network diagram must be prepared for the project's various activities with durations assigned to each. Once durations are assigned, the critical path can be calculated. Before CPM Scheduling analysis, critical path activities were com-

jectively. This process is still used for some types of schedule analysis.

The critical path is the longest path through the network of activities on the diagram measured in time.<sup>1</sup> The path with the longest duration defines the shortest duration for the project. In other words, the project cannot finish until every path has been traversed.<sup>2</sup> A delay to an activity on the critical path will delay the project's



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# Questions? Construction Project Delays: A Tangled Analysis

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