

De-mystifying Schedule Compression: What the Owner Needs to Know About Scheduling and Scheduling Disputes

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Presented By:



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Introductions

- Christopher Hillmann, President and CEO, Hillmann Environmental Group, LLC
- Robert C. McCue, P.E., President, MDCSystems®
- John E. Osborn, Esquire, Partner, John E. Osborn, P.C.
- Mark D. Steele, P.E., C.C.E., Vice President, MDCSystems®

Scheduling Specifications

Understanding the Schedule

- Why have a schedule?
- What is driving the schedule?
- Change Integration
- “Games” schedulers play

Scheduling Specifications

- Who?
- What?
- When?
- Why?

The Schedule Specified

- Baseline Review
- Reasonability of the Schedule
- Recoverability

Schedulers and Software

- All schedulers are not created equal
- All owners are not created equal
- Scheduling software

Managing the Schedule

- Floating completion dates or negative float?
- Reporting
- Changes
- Resource Loading
- Payment Milestones

The Construction Contract and Scheduling

The Owner's Role In Avoiding Scheduling Delays

- Require full investigation of building and site conditions before design
- Owner's strategy to avoid schedule and cost claims due to environmental conditions
- Require scheduling specifications with detailed obligations
- Set procedures in contract to address changed conditions if encountered

The Owner's Role Cont.'d

- In contract establish project participant responsibilities to address unanticipated environmental, subsurface, water intrusion or mold condition if encountered
- If an environmental clean up or abatement phase comes first: Coordinate scheduling and the scopes of the architect, environmental consultant and contractors

The Owner's Role Cont.'d

- Answering basic questions upfront avoids surprises on budget and schedule
- Analysis of damages when issues affect schedule
- Resolving disputes on schedule and impact during the job

The Owner's Role Cont.'d

- What leads to the worst case scenario?
- “Clearing the way”
- Contract Clauses: How they help or hurt

Case Studies

Case Study #1 (CS #1)

- Description
- Situation when problem discovered
- Description of the problem

CS #1 – Actions & Impacts

- Actions Taken
- Project Impacts

CS #1 – Mitigation of Impacts

- Technical Mitigation
- Legal Posture
- Schedule Recovery

CS #1 – Avoidance & Recovery

- Problem avoidance
- Recovery decision-making

Case Study #2 (CS #2)

- Description
- Situation when problem discovered
- Description of the problem

CS #2 – Actions & Impacts

- Actions Taken
- Project Impacts

CS #2 – Mitigation of Impacts

- Technical Mitigation
- Legal Posture
- Schedule Recovery

CS #2 – Avoidance & Recovery

- Problem avoidance
- Recovery decision-making

Recovering the Schedule

Recovery Decision-Making

- Urgency required
- Independent judgment
- Challenge existing assumptions and data
- Thorough review of project status
- Time Impact Analysis (TIA)[®]

Resource Effectiveness

- Current status (quality, resource availability)
- Supplementing or altering the team

Realistic Recovery

- Problem Definition/ Solutions not blame
- Cost/Benefit Analysis
- Avoid the “something for nothing” mentality
- Schedule compression
- Recover or live with delay?

Trouble Signs

<u>Symptom</u>	<u>Potential Problem</u>	<u>Response</u>
<i>Contractor Refuses Or Delays Providing An Initial Schedule.</i>	<i>Lack of a real plan. Problems discovered after bidding. Long Lead Time Problems.</i>	<i>Require Schedule Submission. Require Initial Cashflow Projection. Require Procurement/Shop Drawing Submission Schedule.</i>
<i>Real Delays To Critical Activities Don't Change Completion Date.</i>	<i>Hidden Delays. Poor Productivity. Delivery Problems.</i>	<i>Require explanation of Logic and/or Duration Changes – especially to Critical Path Activities.</i>
<i>Missed Updates.</i>	<i>Hidden Delays. Poor Productivity. Delivery Problems.</i>	<i>Require Update Submission. If necessary, do your own.</i>
<i>Change Orders Not Incorporated Into Schedule.</i>	<i>Hidden Delays. Delivery Problems. Possible Future Claims or waived.</i>	<i>Require Impact of Change Orders be shown in schedule.</i>

Trouble Signs Cont.'d

<u>Symptom</u>	<u>Potential Problem</u>	<u>Response</u>
<i>Schedule Logic Changed To Show More Trades Working In An Area At One Time.</i>	<i>Hidden Delays/Future Acceleration/Disruption Claims. Poor Productivity. Delivery Problems.</i>	<i>Require explanation of Logic and/or Duration changes—especially to Critical Path Activities.</i>
<i>Projected Durations For Incomplete Or Unstarted Work Changed For No Apparent Reason.</i>	<i>Hidden Delays. Delivery Problems. Unrealistic Recovery Projections.</i>	<i>Require explanation of Logic and/or Duration changes—especially to Critical Path Activities</i>
<i>Apparent Disconnect Between Cost/Progress Or Earned Value/Time.</i>	<i>Hidden Delays/Future Acceleration/Disruption Claims. Extended or increased Overhead Costs. Poor Productivity.</i>	<i>Require explanation of Logic and/or Duration changes—especially to Critical Path Activities.</i>

Priorities

- Avoid and prevent problems
- Recognize problems early
- Solve them quickly and efficiently
- Develop realistic recovery plan

Contact Us!

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