Discussion Overview

• Synopsis: this discussion will present current factors that are driving risk for contractors in today’s market, examine how these risks can trigger or complicate a contract or insurance claim, and then present solutions.

• The objectives of the session include providing attendees with:
  – Research and opinion about what’s driving risk in construction today.
  – Relatable approaches to minimize contract disputes and maximize recovery under a Subcontract Default Insurance or Builders Risk policy.
  – Tactical steps to manage contract risk during project execution.
Florida P3

• New Projects Under Consideration:
  – Tampa Bay Next
  – I-4 Beyond the Ultimate

• Under Construction:
  – I-4 Ultimate in Orange & Seminole Counties
  – SR 79

• In Operations:
  – Port Miami Tunnel
  – I-595 Improvements

• Construction Complete:
  – US 19
  – SR 9B
  – I-95 South of SR 406 to North of SR 44

• Contract Complete:
  – Palmetto Section 5
  – I-4 Connector
  – I-75 in Lee and Collier Counties
  – Palmetto Expressway Widening and Interchange Improvements Section 2
  – I-95 Widening/Pineda Causeway Interchange
  – I-95 Express Lanes Phase I
  – US 1 Improvements in the “18-Mile Stretch”
  – I-75 North of SR 80 to South of SR 78

Behind the Numbers

Fortune 500 balance sheet strength

overseas capital 10% of U.S. CAPEX

88%+ domestic capital is “alternative capital”

Avg. project size 21% in excess of $1 billion

Increasing Complexities
Complicating Factors

- Labor productivity stuck at 1% annual growth.
- Incident rates flat.
- No marginal improvement in TCOR.
Behind the Risk

- Contractor fragmentation has meant inconsistency persists.
  - Top 20 construction firms have only 8% market share.
- Suboptimal procurement focused primarily on reducing price and offloading risk.
- Inexperienced yet risk-averse owners.
- Mismatched contractual risk allocations/rewards.
- Capacity stretched thin.
- Labor pool volatility.
Contract Disputes and Claims Pose Non-Trivial Risk to Projects

High Level Views

• 75% of owners and contractors have experienced a claim or dispute in the last five years.

• Claims and disputes are still prevalent, causing disruption and cost increases for all stakeholders involved.

• Most common drivers of claims and disputes:
  – Construction defects ranked most frequent and expensive for owners.
  – Subcontractor default/termination top the list for GCs.
  – Warranty issues are the most common for trades; defects and warranty are most expensive.

“CONTRACTORS ARE THREE TIMES AS LIKELY TO FAIL IN A RECOVERY THAN IN A DOWNTURN.”

– Thomas Schleifer, PhD
  Del E. Webb School of Construction at Arizona State University
## Cause for Failure

<table>
<thead>
<tr>
<th>Strategic</th>
<th>Organizational</th>
<th>Uncontrollable</th>
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<td>New markets.</td>
<td>Poor financial management.</td>
<td>Banking/Surety changes.</td>
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<td>New types of work.</td>
<td>Poor field performance.</td>
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## Cause for Failure – A Deeper Look

<table>
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<th>Too Much Change</th>
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<td>• Taking on too many new ventures simultaneously:</td>
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<td>– Geographic expansion.</td>
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<td>– Acquisitions/Mergers.</td>
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<td>– New products/services.</td>
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<th>Loss of Discipline</th>
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<td>• Move outside core competencies.</td>
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<td>• New hires that do not fit.</td>
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<td>• Poor job costing focus.</td>
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<th>Inadequate Capitalization</th>
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<td>• Cash flow on new projects exceeding expectations.</td>
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<td>• Poor performing projects over stressing cash on hand.</td>
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What is the Extra Strain During a Recovery?

- **Cash Flow**: Negative, especially in the early phases.

- **Gross Margins**: Low/Stagnant, especially in the early phases.

- **Human Capital**: Expensive to attract/retain.
Contract Disputes and Claims Pose Non-Trivial Risk to Projects

Views Distilled

• Top risks vary for owners and contractors.

• Owners experienced most significant impacts from schedule changes, scope/planning, and cost escalation.

• GCs and trades most concerned with labor procurement, contract risks (risk allocation in contracts/i.e. – warranties, etc.).

• Differences in risk experiences/priorities result in different risk diagnosis and mitigation strategies.

What’s the Point?

- Bigger, more complex projects.
- More dollars in play from more sources.
- Project efficiency has not kept up.
- Larger risks accruing to project stakeholders.
- Larger single-project financial risk.
- Default risk is ever prevalent.
You have an obligation to manage this.
Aligning Risk and Construction Procurement

Areas to be proactive

- Profit Margin
- Cost Control
- Quality Control
- PM Control

Delays & Cost Over Runs
Balancing Risk and Spend – Leveraging Analytics

Critical Steps
- Assess the risk.
- Prioritize critical risk issues.
- Quantify the exposure.
- Evaluate finance options.
- Compare to alternatives.
- Align stakeholders.
- Implement a plan.
- Measure the progress.
- Manage and adjust.
- Cost and schedule.
- Early dispute resolution.

Your Tool Belt
- Risk assessment.
- Project proforma.
- Project loss cost modeling.
- Casualty PML/BR PML.
- Project risk finance optimization.
- Prequalification.
- Project/Claims management.
How Risk Is Managed
High Level Views

• Owner vs. contractor vs. subcontractor
• Design firm A/E risk
• Lenders
• Public, private, P3

By Stakeholders

By Organizational Function

• Risk management
• Project management
• Legal
• Financial
• Executive

Risk matters differently to different groups based on risk strategies.
## Managing Performance Risk - Defaults

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<tr>
<th>Financial Risk</th>
<th>Operational Risk</th>
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| **First understand the risk.**  
  • Key financial ratio review. | **Three key components.**  
  1. New contractor.  
  2. New type of work for the contractor.  
  3. New location. |
| **Then mitigate.**  
  • Bond.  
  • SDI.  
  • Self-insure. | **Tripping one needs to be watched.**  
  **Tripping two, watch out!** |
Example Pre-qualification Framework: Benchmark Analysis Tool

Process

- Subcontractors’ financial reports against standard financial reporting guidelines.
- Score subcontractor’s:
  - Balance sheet.
  - Work in progress.
  - Income statement.
  - Cash flow.
  - Working capital.
  - Net worth.
- Compare to ratios commonly used by sureties in their underwriting reviews.
- Subcontractor credit report.
- Determine existence of any liens, judgments, or lawsuits outstanding.
- For each subcontractor analyzed.
- Measure of corporate financial distress and potential economic bankruptcy.
- Separates each subcontractor’s risk score into four quartiles.
- Quarterly reports provided reflecting the overall quality of your subcontractor portfolio.
Risks Overlap Stakeholders and Functions
Examples of Risk Managers Working Across Divisions

• **Builders Risk Claims**
  – Rebuild challenged as betterment by carrier requires risk management and project management to support “no other alternative.”
  – Challenge T&M costs as inefficient or excessive requires risk management, legal and project management to align and demonstrate coverage.
  – Delays affect time impact (direct and indirect) and span contract and policy.

• **Subcontractor Default Claim**
  – Owner changes vs. GC performance vs. subcontractor defaults.
  – Risk drivers and impacts are very different than property-related risk.

• **Owner or Lender Audits on GMP contracts**
  – Align and reconcile areas that span legal, risk management, project management.
    - Cost of the Work, OCIP deducts, labor/equipment rates/burdens, estimate v. actual.
Facts about Project Results
Risk Management Will Mitigate Problems

- Projects that perform formal Risk Assessment have 9.4% lower project cost and 10.1% less schedule growth.¹
- Implementing Risk Assessment best practices can reduce the cost of changes and rework.¹
- Using an external risk management consultant results in a more effective and thorough assessment process.²
- Investment in Risk Management is often less than 1% of overall project cost, but results in return of more than 20% in savings.²

¹ Construction Industry Institute (CII), Best Practice Guide: Improving Project Performance (draft February 2012)
² Oliver Wyman, Getting Things Done, Risk Journal, Volume 3
“The ability of the stakeholders to influence [the finished project] is **highest at the start and gets progressively lower as the project continues.**

A major contributor to this phenomenon is that the cost of changes and correcting errors generally increases as the project continues.”

*A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*

by Project Management Institute
Recurring Key Claim Issues – Stemming from Lack of Project Management Basics

- **Scope Management**
  - Proceeding with work without written instruction.

- **Schedule and Cost Control**
  - Failure to recognize or track changes—time/cost impacts.
  - Recognizing/communicating critical path delay.
  - Failure to up-date progress accurately.
  - Cost coding for added scope.

- **Review**
  - Failure to give notice/proper, reserve rights.
    - Documentation: poor contract records.
Schedule Control and Risks: Back to the Basics

• Scheduling is project control, not just a contract requirement.
  – As a planning tool.
  – Input from project team (disciplines, subcontractors, etc.).
  – Realistic progress.

• Schedule risks must be effectively managed to mitigate impact.
  – Early identification of the sources of risk.
  – Early recognition of the timing of potential impact.
  – Address the time impact in the schedule when it occurs.
Claim Prevention/Management
Schedule Management

Baseline Schedule Development

• Allocating labor resources does not have to be resource loading.

• Linking work breakdown structure (“WBS”), estimate, and schedule activities.

• Check the BASICS — critical path, logical sequence through completion, crew allocation.

Schedule Updates/Impacted Schedules

• Awareness of contract requirements.

• Address impacts as they occur.
  – Reasonable durations.
  – Confirm criticality.
  – Review for concurrency.

• Allocation of resources for scheduling.
Claim Avoidance Within Risk Management
Compare and Relate to Traditional Risk Management Focus and Collaborate

Project control is embedded in risk management.

- Risk triggers should be within project controls system.
- Failure to recognize or track changes — time/cost impacts.
- Recognizing/Communicating critical path risks.
- Contemporaneous schedules.
- Failure to update progress accurately will affect triggers.
- From baseline schedule through monthly updates.
- Cost coding for added scope.
- Schedule dates consistent with job cost reports, daily reports.
- EACs/ETCs updated regularly; Cold-eyes review for larger projects with noted changes.
Integrating project management with risk management:

- Progress tracking (actual vs. planned).
  - Long lead procurement check (prioritized risks).
  - Milestone review (approvals/permitting).
- Daily reports, time sheets, and extra work order support.
- Meeting minutes, key decisions documented.
- Subcontractor payment records, progress reporting.
- Cost coding reflects work breakdown structure.
  - Extra work (change orders).
Claim Avoidance Within Risk Management
Risk Register Heat Maps Allow Identification and Prioritization of Project Risks
Risk Management During the Project Lifecycle Is Largely Project Management

**Risks**
- Aggressive / inaccurate schedules and budgets.
- Gaps and conflicts in contract.
- Complex procurement strategy.
- Outside schedule drivers.
- Change in leadership.
- Short bid cycles, inadequate resources reviewing bid risk.

**Solutions**
- Governance, Risk Assessment, Performance Audit
  - Identification and assessment of contract risks.
  - Develop risk register: Identify, prioritize, monitor risks.
  - Risk Triggers: Notification of risk early, allows mitigation.
  - Bid / No bid decision gate process.
  - Governance assessment to drive profit, improve margins.
  - Assess budget and schedule against deliverables.
  - Project controls gap analysis.

- Claims Avoidance, Dispute Resolution
  - Assessment of deliverables against project expenditures.
  - Risk trigger review, develop mitigation (action plans).
  - Claims avoidance workshops.
  - Review and analyze change orders.
  - Analysis of loss of productivity and cumulative impact.
  - Assessment of delay and time impact.
  - Quantification of damages.
  - Negotiations / alternative dispute resolution.
  - Expert witness testimony.
Contact Us

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