Risk Management in Construction
How to Avoid the Construction Industry Wheel of Misfortune

UMass Amherst
Building and Construction Technology
Spring Lecture Series
February 12, 2018
Disclaimer/Notice
This presentation is for informational and educational purposes only and does not constitute legal advice. Answers to questions at this presentation do not create an attorney-client relationship and do not constitute specific legal advice. Opinions expressed herein are solely those of the author and may not necessarily reflect the position of the presenter or the firm on any issue or that of any current or former clients of the firm. This presentation contains copyrighted material; unauthorized distribution or reproduction is prohibited. © 2018 Steven J. O’Neill
About Steven J. O’Neill

• 42 years overall experience with construction industry issues
  – Former carpenter, licensed supervisor, contractor, and project manager

• 26 years full-time law practice (business, construction, technology)
  – Admitted to State a & Federal Courts in MA and CT
  – Appointed to Emerging Technology Law Committee Transportation Research Board, 2006 - 2015

• Legal Experience
  – Construction & Surety Law at Halloran & Sage, Hartford
  – Construction & Gov. Contracts at Thelen Reid, Hartford
  – Construction & Technology Law Partner, Bowditch & Dewey, Worcester
  – Current Practice in Hartford and Springfield areas
"I'm sorry, Mr. Muckler, that's incorrect. As a penalty, your wife has agreed to run off with your best friend! One more wrong answer and we'll wipe out all your assets!"
The Wheel of Misfortune
Vegas Style

https://www.google.com/maps/@36.084464,-114.913962,405m/data=!3m1!1e3
The Wheel of Misfortune
Clark County Nevada
The Wheel of Misfortune
Boom Towns Like Henderson, NV
The Wheel of Misfortune
Built on the outskirts of Vegas
The Vegas Wheel of Misfortune
Now Abandoned Development

https://www.google.com/maps/@36.0927605,-114.9221707,155a,35y,145.69h,71.08t/data=!3m1!1e3
The Vegas Wheel of Misfortune
End of the Road

https://www.google.com/maps/@36.0927605,-114.9221707,155a,35y,145.69h,71.08t/data=!3m1!1e3
The Construction Wheel of Misfortune
What Could Possibly Go Wrong?

- Insolvency
- Bankruptcy
- OSHA Violations
- Slip & Fall – Tort
- MCAD – EEOC
- Construction Defects
- False Claims Act
- Warranty Claims
- Litigation
- Late / No Payment
- Fraud / defalcation
- Criminal Prosecution
- Lien & Bond Claims
Thinking About Risk
Learn how things break and rot
Thinking About Risk
Plan Ahead
Thinking About Risk
Attention to Detail
Thinking About Risk
Scheduling: Form vs. Substance
Thinking About Risk
Sometimes it actually is a church
Risk Identification
Six Years of Litigation
What is Risk?

Basic Risk Categories

- Assets
- Income
- Legal Liability
What is Risk?

Static or Pure Risks = BAD
- Fire
- Flood
- Wind
- Unsafe Employee Conditions
- Strikes
- Theft
- Pollution

Speculative Risks = GOOD or BAD
- Mergers & Acquisitions
- New Markets
- New Employees
- Investments in Equipment / Technology

Force Majeure ~ ACT of GOD
Objectives of Risk Management

1. **Preserving** an organization’s assets, reputation and other value,

2. While **maximizing** profits / shareholder value

3. Through the **management** of both pure and speculative risks.
## Defining Risk Management

### Several Approaches

<table>
<thead>
<tr>
<th>Approach 1</th>
<th>Approach 2</th>
<th>Approach 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance</td>
<td>Avoidance</td>
<td>Avoidance</td>
</tr>
<tr>
<td>Control, Minimize</td>
<td>Mitigation</td>
<td>Mitigation</td>
</tr>
<tr>
<td>Assumption</td>
<td>Acceptance</td>
<td>Acceptance</td>
</tr>
<tr>
<td>Allocate to Others</td>
<td>Transference</td>
<td>Transference</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td>Contingency</td>
</tr>
</tbody>
</table>
Risk Management

<table>
<thead>
<tr>
<th>Avoidance</th>
<th>✓ Eliminate the threat or condition or to protect the project objectives from its impact by <strong>eliminating the cause</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigation</td>
<td>✓ Reduce scope</td>
</tr>
<tr>
<td>Acceptance</td>
<td>✓ Change project plan</td>
</tr>
<tr>
<td>Assumption</td>
<td>✓ Add resources or add time</td>
</tr>
<tr>
<td>Transference</td>
<td>✓ Adopt a familiar approach instead of an innovative one</td>
</tr>
<tr>
<td>Allocation</td>
<td>✓ Include aggressive change order clause for forced changes</td>
</tr>
<tr>
<td>Insurance</td>
<td>✓ Punt - Don’t take the job!</td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
</tr>
</tbody>
</table>
### Risk Management

<table>
<thead>
<tr>
<th>Risk Management Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoidance</td>
</tr>
<tr>
<td>Mitigation</td>
</tr>
<tr>
<td>Acceptance</td>
</tr>
<tr>
<td>Assumption</td>
</tr>
<tr>
<td>Transference</td>
</tr>
<tr>
<td>Allocation</td>
</tr>
<tr>
<td>Insurance</td>
</tr>
<tr>
<td>Contingency</td>
</tr>
</tbody>
</table>

- **Early action**
  - Reduce the probability and/or consequences of a risk event to an acceptable level of impact to
    - cost
    - scope, or
    - schedule

- Better plan, better crew, better weather, better equipment, better contract, better records, better luck, etc.
Risk Management

- Decision to deal with risks if/when they pop up
- Decision not to change project plan
- Reasonable when no feasible way to change the project plan to deal with anticipated risk
- May be reasonable when extensive experience with project type
  - What can really go wrong on my 150th roofing job?
Risk Management

Avoidance
- Shifting the consequence of a risk to a third party with the responsibility for its management via contracts, performance bonds, warranty.

Mitigation
- Allocating financial, scheduling, liability and other risks to any other party is one of the fundamental goals of a contract

Acceptance
- Can be to owner, subcontractors, suppliers

Assumption

Transference

Allocation

Insurance

Contingency
Risk Management

- Get a real design & construction insurance broker on your team
- Review CGL policies with broker – know all exclusions
- Understand Builders Risk coverage
- Price Hazmat / Pollution insurance
- Business Interruption Insurance
- Know options for increasing / supplementing coverage for risky project – add premiums to price
- Coverage extension from claims-made policies to cover actual period of risk
- Umbrella Policy
Risk Management

- If plans are undeveloped at bid stage, add a contingency factor to the price – lump sum or line item

- Use “allowances” in cost schedule – and clearly define the terms in the contract

- Know that a “Change Order” is a legal tool to modify a contract
  - to alter the scope of work,
  - the value, and/or
  - the contract time (schedule)

- Have clauses that allow you to extend the contract time in the event of the occurrence of various classes of risk
Risk Management
Wheel of Fortune

- Avoid
  - Communicate Better
  - Avoid Disputes
  - Plan better

- Allocate
  - Contract apportions and allocates specific risks
  - Insurance

- Mitigate
  - Planning
  - Quantify risks & impacts
  - Reduce probability of:
    - Occurrence
    - Impact

- Assume
  - Save $, resources
  - Ready for Reaction
  - Higher risk of Eating Costs
  - There be Dragons

attorneyoneill.com | © 2018 Steven J. O’Neill
http://br.wikipedia.org/wiki/Hic_sunt_dracones
Benefits of Risk Management

• Get Paid
• Avoid Disputes
• Win Disputes
• Smaller Target for Litigation
• Protect Assets
• Protect Reputation
• Stay in Business
• Lower Insurance Premiums
• Spend less time putting out fires
• Smarter, more profitable, because of eventual ROI
• Easier, unless you are always always lucky
Risk Management
Whose job is it?

Larger companies have formal risk management departments.
- Objective to avoid or minimize risk through loss prevention programs
- Formal written risk management policy template
- Risk management policy then adapted and applied to each project type
- Risk management part of contract terms
- Risk management part of insurance coverage
- Risk management policy built into training, employment manuals, jobsite policies, etc.

Smaller companies can make it part of job descriptions
- Use Checklists
Process Steps:

1. Identification of Risk
2. Analysis of Risk
3. Evaluation of each Risk
4. Selection of appropriate means to deal with each Risk; and
5. Monitoring Results (Improvement)
Risk Management Process - 2

RISK MANAGEMENT PROCESS

Establish the Context
- Internal & external factors
- Objectives
- Appetite for risk

Risk Identification
- Describe the risk
- Find risk source or trigger
- Potential consequence

Risk Analysis
- Understand the risk
- Determine level of risk

Risk Evaluation
- Consider risk v appetite
- Determine acceptability

Risk Treatment
- Trous
- Share
- Retain
- Avoid


attorneyoneill.com | © 2018 Steven J. O’Neill
<table>
<thead>
<tr>
<th>Likelihood of residual risk</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rare</td>
<td>Insignificant 1</td>
</tr>
<tr>
<td>1 Acceptable</td>
<td>1 Acceptable</td>
</tr>
<tr>
<td>Unlikely</td>
<td>2 Acceptable</td>
</tr>
<tr>
<td>2 Acceptable</td>
<td>4 Acceptable</td>
</tr>
<tr>
<td>Possible</td>
<td>3 Acceptable</td>
</tr>
<tr>
<td>Probable</td>
<td>4 Acceptable</td>
</tr>
</tbody>
</table>

Risk Management Process - 3
Risk Analysis & Evaluation Matrix

http://upload.wikimedia.org/wikipedia/commons/f/fc/Risk-Based-Audit_technical.jpg

attorneyoneill.com | © 2018 Steven J. O’Neill
NARI CRPM 2013
The 6 Certification Domains

A. Project Planning
B. Communications
C. Project Cost Management
D. Quality Assurance
E. Risk Management
F. Recordkeeping
NARI CRPM Risk Management

1. Reviewing the existing job conditions to assess how deviations from what was known at contracting may affect project completion and performance.
2. Analyzing how the work contracted to be done will affect the overall project with respect to safety, efficiency, meeting or exceeding code, and passing inspections.
3. Construction-specific risks such as LRRP, Asbestos, Mold, and "work safe" guidelines.
4. Monitoring the financial performance of the project and how it affects the business' stability, success, and profitability.
5. Identifying potential risks and incorporating plans to monitor or mitigate them into the overall project plans.
6. Identifying and managing unexpected situations that may have been missed in the estimating process.
7. Making the entire project team aware of potential risks and actions they need to take, especially on the jobsite, to manage and mitigate risks

8. Conducting appropriate and timely risk assessments and identifying when and how to bring in specialists such as a risk assessment professional and/or industrial hygienist

9. Monitoring and reporting on changes in the risks and when/if a potential risk occurs on the project
REFERENCES:


Legal Approaches to Risk Management
What Contracts Can Do

- Contracts can allocate, avoid, limit, quantify, transfer, disclaim or otherwise manage risk.
- Aside from a handful of mandatory statutory or boilerplate provisions, anything not illegal or against public policy can be in a contract.
- Court’s (or arbitrator’s) role is to interpret and enforce terms and expectations of parties to contract.
- Contract’s goal can be to push away as much risk as possible, so you can focus on the core objective of delivering quality work.
- The clearer and more detailed the contract, the less likely a dispute will arise, the less likely that the dispute will need an attorney’s services, the more likely that it can be worked out.
Contracts – 2
Choice of Contract

• Contracts of Adhesion in Public Construction
• AIA, ConsensusDocs or Home-Grown?
• One size does not fit all
• Consider modifying a standard form contract to suit your project
• AIA can be modified
  – Architects understand it
  – Judges and arbitrators understand it
  – Courts everywhere have written opinions as to what specific clauses mean
• More certainty = less risk.
Contracts – 3
Interpretation

• Intent of the Parties
• Course of Dealing; Waiver
• Notice of Claim
• Courts interpret contracts sometimes using the concept of “Omitted Cases.”
  – This means that if your contract omits discussing part of the contractual relationship (e.g., allocation of risk), then the court will try to essentially guess what the parties intended based on common law, course of dealing and other concepts developed to construe (interpret) the contract.
• Huge (Huuuge?) risk that undisputed terms will be decided against you
Subcontracts

• Understand Legal Concept of “Flow Down”
• Understand Legal Concept of “Incorporated by Reference”
• Require insurance to stay in force during performance
• Indemnification clause
• Alternative to formal Subcontract: Jobsite Rules incorporated into subcontract by reference. Rules can address:
  – clean up
  – acceptance of work in place
  – coordination of trades
  – security, theft, etc.
Contracts – 5
Other

• Limit and exclude warranties

• Termination provisions
  – Risk of being first party to “materially breach”
  – T for Default
  – T for Convenience

• Know thyself – be realistic about strengths and weaknesses

• Know who you are dealing with
Safety

• Adequate safety programs including training and implementation of safe practices
• OSHA can levy large civil and criminal penalties for willful violations
• Who controls site?
• Subcontractor liability?
• Slip & Fall: visitors, customers, children, subs, invitees, trespassers
• Owner occupied project
• Tort Patrol
Employment Issues

- Independent contractor vs. employee status
- Discrimination
- At-will employment but with employment manual
- Training in Risk Management
- Many more . . .
Insurance

- Get a real design & construction insurance pro on your team
- Review CGL policies with broker – know all exclusions
- Understand Builders Risk coverage
- Price Hazmat / Pollution insurance
- Business Interruption Insurance
- Know options for increasing / supplementing coverage for risky project – add premiums to price
- Coverage extension from claims-made policies to cover actual period of risk
- Umbrella Coverage
Asset Protection

- Operate under one or more entities: LLC, corporation, etc.
- Observe corporate formalities
- Only sign in your organizational capacity: Joe Doe, Pres., My LLC
- Do not commingle assets between personal and business
- Try not to give full personal guarantees
- Record a homestead exemption
- Set up trusts for assets
- Have an estate plan
- Put assets in other entities or spouse/children
- Document loans to your business
- File tax returns
- Know how to use bankruptcy laws – Insider preferences
Financial Controls

• Data tells you where you are making or losing money by job or job type
• Use technology
• Get help
  – CPA for planning
  – Get consultant to help set up office and paperwork systems
Recordkeeping
“Build a Record You’ll be Proud Of”

• Make a record that will help in a dispute. Records should:
  – Be factual
  – Be specific
  – Be accurate
  – Be as contemporaneous as possible (e.g., dictate to voicemail)
  – Explain who, what, when, where, & how
  – Not overstate facts or positions
  – Not be emotional

• Tax records
• Payroll records
• Undocumented labor
• Employment posters
• Enforcement is often through audit
Schedule

- Is important to owner, prime, lender, sureties, etc.
- Is in the contract, whether you see it or not
- Start with a simple bar or Gantt Chart
- Keep it simple
- Keep it updated
- Communicate it to all stakeholders
- Plan ahead to stay on schedule
- Who is your backup?
- Recordkeeping & Communications should validate changes in case of dispute
Privacy and Data Security

- Employee steals customer lead list from iPad
- Loss of laptop computer
- Hacked or virused computer – you can’t get invoices out
- Computer breaks – backup copies don’t work
- Credit card use requires PCI Compliance on some level
- If MA customers or employees – you must have a WISP
  - Written Information Security Program
Disaster Recovery

- Fireproof safe
- Off-site computer backup – actually tested
- Business interruption insurance
- Disability insurance
Other

• BIM – Who owns the risk?
• Computer software
  – Estimating software malfunction
  – Energy modeling software assumptions
• Green Building Performance Warranties
• Value Engineering
• Commissioning
• Dispute Resolution
  – Do you really want to bet your entire business on one arbitrator?
Risk Identification
Weakest Link
LAW OFFICES OF
STEVEN J. O’NEILL

90 Main St.
Monson, MA 01057

100 Pearl St.
Hartford, CT

Phone: 888-766-3455
Fax: 888-766-6040
soneill@attorneyoneill.com
attorneyoneill.com
www.LinkedIn.com/in/attorneyoneill

Massachusetts Connecticut