

Risky Business Cogence Northwest Ohio - 18 April 2018

Owner risks (captured by Pam Neckar during report out)

- Defining project completion
- Missing dates impact business operations
- Value engineering Never again just cuts costs in near term.
- staying on budget
- Scope intent understanding
- Quality control warranty what goes in goes in correctly
- Pricing fluctuations
- Unrealistic schedule goals
- Labor availability
- Changing business conditions over life of project
- Environmental conditions
- Owners looking to A/E/C be making decisions in best decisions for project
- Project delivery impact:
 - NO multiple prime
 - Design Build has values and risks

Owners (from Sticky Notes)

- Major Risks
 - Missing timeframes proforma
 - Status within budget
 - Scope creep / scope understanding
 - Intent of project defined and "signed off"
 - o Misunderstanding of Project details
 - Value Engineering
 - Quality Control
 - Pricing fluctuations
 - Unrealistic schedule goals
 - Tutorial & Labor availability
 - Changing business conditions over Life of Project
 - Environmental conditions (change)
- Impact of Project Delivery
 - o Don't do Multiple Prime
 - o Design-Build can improve time to market. Not suitable for all project types.

Architects (captured by Pam Neckar during report out)

- Define expectation alignment
- Fee alignment with design requirements
- Effective project management all around and internally
- Align design with owner budget

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- Align exceptions of owner with their budget
- Constructability of design
- Staff development
- Vilitality of marketplace
- Cash flow
- Low bid contractor selection vs quality contractors
- Understanding of design process and workflow
- Expectation of perfection
- Problem finding vs problem solving atmosphere
- Architects design dream forces compromises on team
- Construction team not familiar or involved in design how to create alignment
- Traditional predesign estimates
- Balance change financially
- Relationship shift with Owner with A in design to owner with CM/GC during CA
- Contractual consequential damages
- Not empowered to say no
- Building inspection/code interpretations

Architects (from Sticky Notes)

- Risks
 - Architects design dream forces compromises
 - Construction team not understand and influence design
 - o "Traditional" pre-design estimate
 - Client mind change out of sequence
 - Balance change dollars
 - During CA alliance with Owner shifts to CM/GC
 - Contractual issues with consequential damages not rewards /incentives
 - Building inspections / code interpretations
 - Not empowered to say No
 - Full understanding of process required to design
 - Expect perfection
 - Apples to Oranges comparison
 - RFI process problem seeking vs. problem solving
 - Design requirement
 - Clear scope prior to design
 - Fee alignment with design
 - Effective project management on all/any side
 - Align design with Owner or any budget
 - Align expectations to Owner budget
 - Constructability of design
 - Staff development
 - Volatility of market place
 - Cash flow

o Low bid contracts vs. qualification

CM (captured by Pam Neckar during report out)

- Inexperience
- Pace of business
 - Skipping checks and balances
 - Cutting corners
- Service as a commodity
- Delegated design
- Proper assignment of risk risks shifted to CM outside of control
 - o Force Majure/weather
- Change in regulations
- Scope gap in documents but responsibility lies with CM creates adversarial relationships
- Cost established before design
- Project Delivery Risk
 - 1. Highest risk CMR with GMP @ selection
 - 2. Design bid build
 - 3. Design-build
 - 4. IPD
 - 5. Agency CM
 - 6. Cost-plus

CM/GC (from Sticky Notes)

- Major Risks
 - o Inexperience: Owner; Employees; Team Members
 - Pace of business
 - Service as a commodity
 - Delegation of design
 - Proper assignment of risk
 - Changing regulation
 - Scope gap in documents
 - Force majure / weather
 - Cost established before design (GMP)

Engineers (captured by Pam Neckar during report out)

- Uneducated clients understanding impacts
- Changing scope
 - Frequency
 - o Parameter
- Disconnect of expectations
- Direction from different sources
- During CA others managing design intent without involvement
- A's not communicating scope changes + keeping communication open

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- Unrealistic schedules
- Internal risks
 - o Inexperienced staff developing their skills
- Scope not matching fee
- Under scoping a project pushing fee down to get the work
- Project delivery methods that limit inclusion
- Design contingency non existence
- Misunderstanding contractual terms
- Contracts that peg design fees to cost of projects

Engineers (from Sticky Notes)

- Risks
 - o Uneducated (Owner) client
 - Changing scope (frequency /parameters)
 - Disconnect of Expectations in Owner group
 - Direction coming from different areas of Owner
 - Others managing design intent without our involvement
 - Architect as primary communication
 - Unrealistic schedule / budget
 - When we create our own risk (inexperienced staffing, etc.)
 - Under scoping a project to push fee down
 - Sometimes project delivery limits inclusion
- Approach
 - Get everyone in room early
 - Define change management process
 - More focus on design contingency
 - o (% of cost construction risk) \rightarrow Fee Impact
 - o Clarity on when budget established, try and include team input
 - Talk and Listen Team be Open (all team be trusted advisors)

Trade Contractors (captured by Pam Neckar during report out)

- Cash flow
- Schedule
 - Vague
 - o Unreasonable
 - No lead time to prepare
- Procurement materials
 - Access
 - Submittal returns
- Labor shortage
- Incomplete drawings
- Scope Interpretation
- Harsh unfair contract language

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- Don't get to pick trade construction team
- Unqualified Project Management and or change in PM

Trade Contractors (from Sticky Notes)

- ID Major Risks
 - o Getting paid in timely manner
 - Schedule
 - Vague
 - Unreasonable
 - No Leadtime
 - Procurement Materials
 - Submittals returned
 - Access to materials available on-time
 - Labor Shortage
- Incomplete drawings
- Scope interpretation
- Harsh/Unfair Contract Language
- Don't get to (Trades/Construction) Team
- Unqualified management people running job
- Change of management staff

Delivery System

Risks	D/B/B	CMR	CM w/ DA	D/B	IPD
Schedule	Н	Н	M	M	M/L
Cash	Н	Н	Н	Н	M
Procurement	Н	Н	М	L	L
Scope	Н	H/M	L	L	L
Contract	Н	H/M	M	M	M/L
Project Leadership	Н	H/M	M	М	M
Labor Shortage	Н	Н	М	M	M

H = High Risk; M = Medium Risk; L = Low Risk