

# 2020 Project Delivery Symposium

## The Role of Effective Teaming in Managing Risk



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# Learning Objectives

- *Understand where the design risks lies in the Design-Build Project*
- *Understanding the importance of choosing your projects and partners wisely*
- *Impact and risks of the Owners procurement strategies on the design and the team*
- *Building a high-performance team that can collectively and collaboratively identify and mitigate design risks*

# Moderator and Distinguished Panelists



Greg Gidez, FDBIA  
Hensel Phelps – Moderator  
Director of Design Services



Virginia McAllister  
AIA DBIA, President  
Iron Horse Architects



Deb Sheehan, AIA  
Managing Director, BDO  
Center for Healthcare  
Excellence and  
Innovation



Patrick Crosby, PE DBIA  
The Crosby Group  
Structural Engineers

# What we hear.....

- My Design Build partner will not let me access the Owner's team
- My Design-Build partner thinks my E&O insurance is a profit center
- My Design-Build partner does not give me feedback on cost, constructability or schedule
- The Owner is AWOL, not engaged and will not answer questions
- I don't have adequate time to complete the documents
- The design documents do not reflect the scope of the work
- The design documents are late and incomplete
- Designers cannot meet schedules or budgets
- Designers push their own agendas beyond contractual obligations

# What we hear.....

- The Owner only needs a Schematic level of documentation to select the winning solution
- The Design-Builder only cares about the bottom line
- The Design-Builder does not understand the design process
- The Design-Builder is only concerned with the schedule



# The rowing crew.....

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- Understand the rules of the race
- Understand the cadence of the race
- Understanding of the desired outcome
- Understanding of team dynamics
- Understand how to win! How to succeed.
- Can't win unless the TEAM IS ALIGNED!







# Crosby Group

Patrick Crosby, SE, DBIA

## Hurdles to Know and Clear for Successful DB Projects



# Crosby Group

- **\$6B in Design Build Work**
  - **International and National DB Projects**
- **IPD, Progressive and Two Step Experience**
- **Private, Federal, State and County DB Experience**
  - **First DB Project in 1988**

# Owner vs Contractor Requirements

- First Question: Bridged, Unbridged or Progressive....Stipend?? Pay to play?
- Owners may have limited requirements but....
- The world of BIM
  - Limited time allowance to vet a model
- Designers risk of Contractor costing an incomplete design



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# Level of Documentation

- Design from scratch vs Historical Data
- Specifications may come from Owner
- BIM does not mean buildable
- Level of Design for Pricing – are you involved in determining contingencies



# Architects risk - MEP Design Involvement

- MEP Consultants a thing of the past?
- Subcontractors will take risk on limited documentation
- Traditionally a late involvement
- Entire project not fully vetted when submitted

**ENGINEER**  
SOLVING PROBLEMS  
YOU DIDN'T KNOW  
YOU HAVE  
IN WAYS YOU CAN'T  
UNDERSTAND

# Original Budget vs Real Costs

- Escalation
- Design Contingencies....where do they come from?
- Two Step procurement delays
- Specialty Design Ex: ATFP



# Higher Design Fees

- Designer Involvement unlike DBB
- CA fees doubled
- Redesign Costs in contract?
- Pay to Play ...price to lose
- Sell value vs low price

**HOW TO  
COMMUNICATE**

**A PRICE  
INCREASE**

WITHOUT SPOOKING

~~CUSTOMERS~~

**Contractors**





# Smaller Firms pursuing DB Projects

- Risk vs Reward is higher
- Educated Owner?
- Experienced Contractor?
- Can your firm size survive losing a project?
- E&O Insurance



# Design Build Risk Management for Small Business

How to successfully navigate risk as a small business.



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## Iron Horse Architects

- Women Owned Architecture Firm
- Practicing Design Build Coast To Coast
- Prime and a Subconsultant
- Delivered Design Build projects with construction costs totaling \$7.5B
- Won 5 national design and Design Build awards



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## Navigating Risk

- Is Design Build right for your company
- Don't be afraid
- Understand the business of Design Build
- Team structure
- Know your scope and do the math
- Protecting your business



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## Follow Playground Rules

- Think before you act
- Try something new
- Play safe
- Include others
- Share
- Be kind and respectful



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# Think before you act.



## Is Design Build right for your company?

- Expertise
- Access to project types
- Access to larger projects
- Access to clients
- It's what everyone is doing



Try something  
new.



Don't be afraid.

- Read/review the prime contract that comes with the RFP/Q
- What clauses can be insured
- Read/review the prime's contract
- Ask for a meeting early if you have issues with the contract
- Self insured...what is the risk



# Play safe.



## Understand the business of Design Build.

- Spend the money to have legal council review your contracts
- Even small firms have the right to negotiate
- Know the value you bring

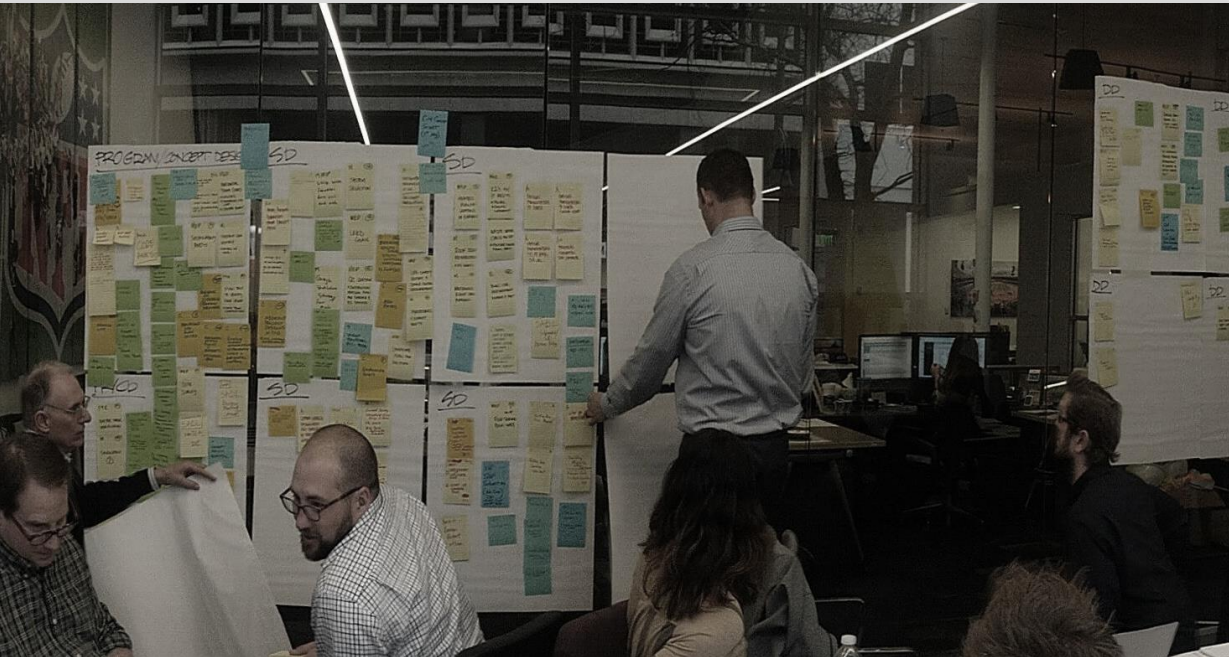
# Include others.



## Team Structure.

- Know where you stand
- Are you a third-tier sub
  - Can you wait 120-160 days to get paid
- Do you have the right liability insurance
- Get organized
  - Do you have the processes in place within your company to properly handle documentation, billing, lines of credit, human resources, and legal counsel

# Share.



Know your scope and do the math.

- Cash flow
- Schedule
- Pursuit cost
- Project costs
- Liability
- Profit
- Overhead



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# Be kind and respectful.



## Protecting your business.

- Business is business
- Good business is built out of good relationships
- Good relationships build good projects
- Good projects are fair and balanced
- Have a Memorandum of Understanding (MOU) in place early in the process





# Role of Effective Teaming in Managing Risk

Deborah Sheehan, ACHE, DBIA  
Managing Director BDO USA, LLP



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BRIGHTEST  
COMPANIES  
TO WORK FOR**

**167**

COUNTRIES

END-TO-END CAPABILITIES WITH

**Decades** of experience

# Top 5 Risks in Design-Build

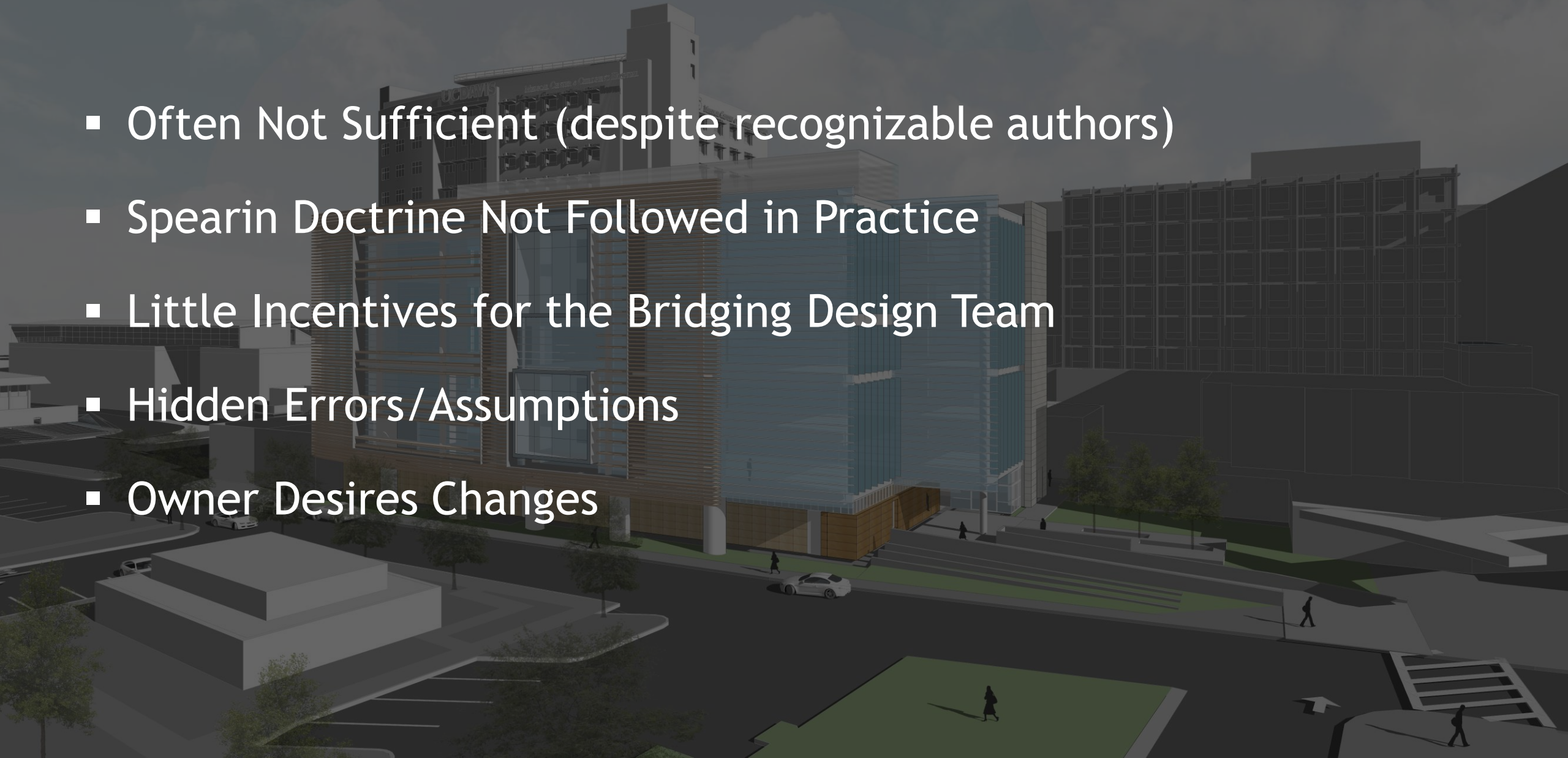
- Insufficient Bridging Documents
- Design Re-Work Related to Pricing
- P/L Insurance Used Inappropriately
- Unrealistic Schedule or Deliverables
- How is Design Team Success Defined





# RISK: Bridging Documents

- Often Not Sufficient (despite recognizable authors)
- Spearin Doctrine Not Followed in Practice
- Little Incentives for the Bridging Design Team
- Hidden Errors/Assumptions
- Owner Desires Changes



# Bridging Documents

- Analyze the Documents Before Providing a Fee
- Communicate With Your D/B Partner Any Problems
- Have a Plan With Owner and D/B Team to Address Changes
- Estimating Reserves & Design Fee Reserve



# RISK: Design Re-Work

- Lack of a Detailed Cost Model
- Estimating Team is Reactionary not Proactive
- D/B Sub-Contractors' Designers Behind Schedule
- Buy-out Process is out of sequence
- Owner Changes



# Design Re-Work

- Choose Your Partner Wisely
- Clear Design Schedule and Decision Milestones
- Communicate with Estimating
- D/B Partner to include Design Fees in Change Costs
- Design Fee Contingency



# RISK: P/L Insurance Used Improperly

- Lack of Contingency by D/B
- Bidding from Incomplete Packages
- Coordination Holes Between Design/Build Trades
- Liquidated Damages Clauses
- Increased Insurance Premiums for Consultant Trade Partners



# P/L Insurance Use

- Choose your Partner Wisely
- Aim to Help Define the Rest of the D/B Team
- Teaming Agreement Clauses
- Design Responsibility Matrix (Define Who is Responsible)
- Limit Damages to Actual Damages



# RISK: Unrealistic Schedule/Deliverables

- Schedules authored by D/B in a vacuum
- Insufficient Quality Control Time
- Insufficient Development of Design by Other Trades (Coordination)
- Insufficient Access to the Owner/Decision Makers
- Dozens of Procurement Packages





# Unrealistic Schedule/ Deliverables

- Choose your D/B partners and Trade Partners Wisely
- Participate Early in Schedule Development
- Clear Expectations—Define Content of Deliverables
- Have a Clear Design Schedule—Vetted by D/B and Owner
- Document Control—Limit Design/Procurement Packages

# RISK: Design Team Success Defined

- Future References Tied to D/B Team Success
- Left at the Altar (Business Decision by Others)
- Project Success Dependent on Elements Beyond our Control
- Not the Prime Contract Holder
- D/B unfamiliar with Design Leader



# Design Team Success Defined

- Mentor Your Partner (Individuals)
- Teaming Agreements (@ Procurement/Stipends)
- Speak Up & Participate
- Structure Fee to Allow Participation in CA Phase

# Key Take-aways From Conversation

- Balanced risk and reward
- Teaming agreements/MOU's
- Educated in DB Best Practices
- Partnerships and relationships matter
- Spearin Doctrine – understand it
- Contract – understand before an issue
- Aligned expectations
- Connect Estimators to the Designers
- Criteria compliance
- Alternate technical concepts – how discussed, graded?
- Risk managed by those best equipped to manage
- Fair and equitable fees, contingencies
- Conceptual estimates with A/E input
- Allowances and contingencies understood
- Reputation of the Owner, partners
- Owners vision understood
- Timely payments
- Planned omissions vs. missed scope
- Pre-qualify company, qualify individuals
- Standard of Care, negligence



# INTEGRATION IS A TEAM SPORT

*When Done  
Right...*

*Its POETRY IN  
MOTION*

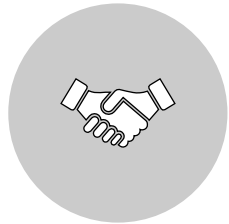


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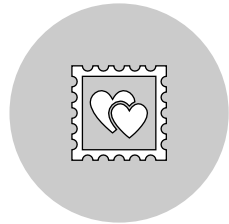
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# Words of Wisdom



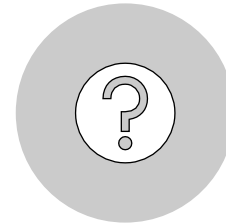
Pick your partners wisely!



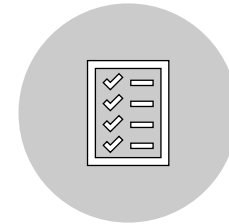
Don't fall in  
love too soon! Choose projects for the  
right reason



The owner matters big time!



What makes your approach  
so attractive?  
What are the Teaming  
Arrangements?



Follow DBIA's Design-Build  
Best Practices.

# Questions



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# Key Take – Away's

- Choose your Design-Build partners wisely
- Choose your Owner and their project wisely
- Educated and Understand Design-Build best practices
- Your partner is educated in DB Best Practices
- Team alignment achievable
- Mental shift from adversarial relationship
- What's best for the project is best for the people