The Secrets of Succeeding with Military-Design Build

Lessons Learned from Much Hard Experience

Speakers:

Pete Sturdivant, P.E., USACE Omaha
Clay Benson, Mortenson
Mark Baker, AIA, Lantz-Boggio Architects
PLEASE TAKE NOTE of the **EXITS** in case of an **EMERGENCY**
SILENCE PLEASE!
The organization of today’s presentation:

**DESIGN BUILDER**
Clay Benson
Mortenson

How to Communicate

**ARCHITECT**
Mark Baker, AIA
Lantz-Boggio Architects

“TRUE” D/B

**GOVERNMENT REP**
Pete Sturdivant, P.E.
USACE Omaha

How to Partner

How to Reduce Risk

Quality Control

How to Work Together

Candid Conversations

How to Improve Performance

Incentives

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Open Communication During Design Meetings

• Secure Communications and Dialogue
• Builder Led, 60 Min Internal/External Design Meetings
• Clear Meeting Agenda and Minutes
• Discuss Money Weekly Through Trend Logs
• Hold Each Other Accountable thru Action Items
• “Over The Shoulder” Reviews
The Power of TRUE Design/Build:

1. Surveys prove D/B harnesses the competitive creativity of the AEC Marketplace*

2. We are confident everyone reduces their risk and improves the outcome when the Government + builder + A/E work as one integrated team throughout the project

*2014 Study by Adobe & Foster Partners
What does Design-Build mean?

Government Client

Design-Builder

Construction Subs

Design Team

Too Much Risk!

Not Enough collaboration!

Not Good Enough Results!
Design-Build Done Wrong

DURING DESIGN:
Costs and buildability are unknown!
Team meets only at discrete intervals

DURING CONSTRUCTION:
Fight to control costs & schedule!
Team rarely meets

Proposal

Surprise Redesign Loop

Award

A/E Designs With Minimal Builder Input

Bid

Builder Builds With Minimal A/E Input

2019 Joint Engineer Training Conference & Expo
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“TRUE” Design-Build

DURING DESIGN:
Integrated team meets regularly
Costs are known!

DURING CONSTRUCTION:
Integrated team meets regularly
Costs are maintained!

Proposal

Bid Or Negotiated Subs
GOVT + A/E + Builder + Subs
Work Together to Control Costs, Buildability and Compliance

Builder Builds with Ample GOVT + A/E Input With Less Risk For All
*Uncertainty, Expectations and Performance

* Perspectives of Owner, Designer, Constructor

- Develop documents that meet program requirements and are constructible within budget
- Anticipate problems and resolve through Communication, Collaboration and Integration

*Design is Clean. Construction is Ugly and Imperfect*

Partnering is Good Business:

It’s *for your own benefit*

to help your partners – not hurt them
TRUE D/B: Protect your POP

- GOVT + A/E + BUILDER + SUBS INPUT DESIGN TO A FIRM FIXED PRICE
- PURCHASE LONG LEAD ITEMS
- PURCHASE THE REST
- TRADITIONAL PURCHASE START
1997 Technology - Typical ProjNet Review Cycle

ONE DESIGN CONFERENCE PER SUBMITTAL
2018 Technology – Virtual “OTS” Reviews
2018 Technology – Virtual “OTS” Reviews

- **Cloud Based** – everyone can access the model from anywhere anytime, with permission.
- **Virtual OTS** every 1-2 weeks
- Answer questions and resolve problems **instantly** on line.
- Meeting minutes and agenda track issues and allow participation by key personnel.
- **Reduces ProjNet 90%** if you get customer buy-off.
Virtual “Over the Shoulder” Reviews

VIRTUAL DESIGN CONFERENCE EVERY TWO WEEKS
Design and construction tasks are, by their nature, in conflict.

*2017 study by the University of Colorado*
Understand Constraints*

• **Relationships Matter**
• **Builders Involved in Design Meetings**
• **Designers Involved in Site Meetings**
• **Reduce or Eliminate Transition**
• **Early Constructability Input Saves Time, Money, and Brings Best Value**

*2017 study by the University of Colorado
Candid Conversations

“Fix relationships when nothing is wrong.”

-Shari Harley, Author
Candid Conversations

- Leadership Buy In Is Critical
- Shared Experience Builds “Bank Account”
- Keeping Teams Together Gets You “There” Sooner
- Team Health Check Ins
- Teams Comfortable Talking About Money and Time Are More Successful
The Value of Failing*
Blame is counterproductive. Shift to a learning culture

"Failure is an option here. If things are not failing you are not innovating."

-Elon Musk

*2016 Study by Columbia University
Lessons Learned 2005-Present*

**BEST D/B PERFORMERS:**

- The owner placed a high emphasis on creating a relational project culture
- Repeated use of experienced designer and builder

**WORST D/B PERFORMERS:**

- Lack of experience with the project delivery system or project management in general
- Poor communication between owner and builder
- Understaffing or turnover within the owner, designer or builder’s organization

*2018 Study by Univ Fla, Univ Colorado, CHII*
Performance Incentives

• Carrot is better than a stick

• Performance Award Incentive Fees

• Simple and Clear Requirements to mitigate owner impacts

• Understand potential 2nd and 3rd order impacts
THE 3 MAIN SECRETS OF DESIGN-BUILD:

“TRUE” Design-Build has been proven to have much **Less Risk** and much **Higher Rewards** for The A/E, The Design/Builder and The Government Customer

But the only way to get the rewards of D/B is to be a **good partner for each other and communicate like crazy**.

**INCENTIVES work better than DISINCENTIVES**
Questions?