Collaborative Delivery Between Design and Fabrication: Passing the Baton

Engineering Executive Council for North America
PASSING THE BATON

Better project handoff processes with BIM

North America Engineering Executive Council

Companies logos:
Who is the North America Engineering Executive Council?

The Engineering Executive Council, formed in 2017, is composed of a select group of high-level executives from a variety of engineering and fabrication firms throughout the U.S. and Canada. With a focus on the MEP and structural disciplines, the group regularly convenes to network, explore issues affecting the industry, and share best practices among peers.

The purpose of the Council is to identify and discuss industry-agnostic transformative technology trends and key business challenges and opportunities, and to better understand and react to the impact of these forces on their business.

David Bleiman
*Chief Executive Officer*
Rutherford + Chekene

Dr. Kristopher Dane
*Vice President / Director of Digital Design*
Thornton Tomasetti

Josh Getz
*Senior Director, AEC Technologies*
Southland Industries

Erleen Hatfield
*Chief Executive Officer*
The Hatfield Group

Susan Koenigs
*Director of Digital Practices*
AEI

Paul McGilly
*Associate Principal / Digital Design*
Buro Happold

Alfonso Oliva
*Director of LERA*
LERA Consulting Structural Engineers

Sébastien Paré
*Vice President of Engineering & Estimation Services*
Canam Group

David Pikey
*Vice President of Corporate Technology*
The Hill Group

Jeremy Woodgate
*Senior Vice President*
SSOE Group
VISION

"ENHANCED INFORMATION EXCHANGE OF DESIGN TO FABRICATION IN AEC THAT IMPROVES PROJECT DELIVERY AND THEREFORE PROJECT OUTCOMES."

The purpose of the council is to identify and discuss industry-agnostic transformative technology trends and key business challenges and opportunities, and to better understand and react to the impact of these forces on their business.
CHALLENGES

CULTURE
The industry continues to use traditional process methods and cultural mindsets that restricts our industry to adopt technologies to their fullest potential.

The automation and repeatability of BIM workflows ought to have resulted in shrinking project schedules, fewer change orders, and cost reductions across the industry. So far that hasn’t happened.

Engineers will take a challenge further along than they need to, often working to a level of detail (LOD) that could be used in fabrication.

CONTRACTS
Server the goal of minimizing the risk of liability and cost over runs of each individual team, rather than optimize and streamline the entire design and construction process.
SOLUTIONS

HANOVER
How do we create a system that allows a seamless flow of work from the engineer to the fabricator?

PEOPLE
Perhaps the greatest roadblock standing in the way of improvements to the design to fabrication hand off is a lack of trust, caused by factors including, a lack of data fidelity, misaligned goals between teams, a low bid mentality between clients and a lack of understanding of the all inclusive design lifecycle

TECHNOLOGY
By optimizing the value of information as it passes between engineers and fabricators, stakeholders can reduce wasted time and do more with less, the question is how do we streamline the flow of data between teams?

PROCESS
The AEC industry needs to adopt a framework for project delivery that is flexible for all delivery types
IMPLEMENTATION

OWNERS
Owners can create an environment where all stakeholders collaborate to improve project quality, reduce costs, and speed up timelines