# Design-Build Delivery A look into the future of construction



By: Kelsy Ausland, PE, DBIA Aaron Ausland, CEO, CCM

DESIGN + CONSTRUCTION

April 9, 2024

### OUR PRESENTERS





#### Kelsy Ausland, PE, DBIA

- President of Ausland Group
- Accredited Design-Build Professional
- Leader in Design-Build Project Delivery

#### Aaron Ausland, CEO, CCM

- CEO of Ausland Group
- Certified Construction Manager
- Leader in Design-Build Project Delivery





## AGENDA

The Move to Integration

Ausland's Design-Build Model

#### **Case Studies**

- Western Oregon University
- Oregon Military Armory Projects
- Yreka Carnegie Library Renovation

#### Next Steps



### THE MOVE TO INTEGRATION



## Traditional Project Delivery

#### "Design – Bid – Build"





AUSLAND

## Moving to Integration

#### "Design-Build"





## Problems with the "old way":

- ✓ Late to secure pricing leads to **budget overruns and price uncertainty**.
- $\checkmark$  Owner assumes risk associated with the completeness of design.
- ✓ Change orders are issued to owner for gaps in design documents.
- ✓ Project schedules are extended and delayed
- ✓ The design lacks the insight of the builder to inform efficiency, cost, & logistics.



## Problems with the "old way":

- ✓ Late to secure pricing leads to **budget overruns and price uncertainty**.
- $\checkmark$  Owner assumes risk associated with the completeness of design.
- ✓ Change orders are issued to owner for gaps in design documents.
- ✓ Project schedules are extended and delayed
- ✓ The design lacks the insight of the builder to inform efficiency, cost, & logistics.

### The status quo is inefficient and adversarial.



## Advantages of Integration

- $\checkmark$  Predictability of Price
- ✓ Team member accountability
- ✓ Improve project relationships
- ✓ Increased certainty of outcomes
- $\checkmark$  Less risk for owners
- ✓ Faster Delivery





Design-Build over the traditional model resulted in:



Design-Build over the traditional model resulted in:

✓ 6% less unit cost



Design-Build over the traditional model resulted in:

 $\checkmark$  6% less unit cost

 $\checkmark$  12% faster construction delivery



Design-Build over the traditional model resulted in:

 $\checkmark$  6% less unit cost

 $\checkmark$  12% faster construction delivery

 $\checkmark$  33% faster overall project delivery



Design-Build over the traditional model resulted in:

- $\checkmark$  6% less unit cost
- $\checkmark$  12% faster construction delivery
- $\checkmark$  33% faster overall project delivery
- $\checkmark$  Exceeded quality expectations on all levels



### The Future of Design-Build

Currently Design-Build represents 40% of all non-residential construction.

Expected to make up over **50% of market by 2026**.





### AUSLAND'S DESIGN-BUILD MODEL



### Forming an Integrated Team





### Forming an Integrated Team

### Integrated Team



Architecture

### Integrated Team



Architecture

Planning

Construction Management

### Integrated Team







	Architecture	
Planning		Civil Engineering
Construction Management	Integrated Team	Structural Engineering

Skilled Tradepersons



	Architecture	
Planning		Civil Engineering
Construction	Integrated	Structural
Management	Team	Engineering
Ou <sup>.</sup>	tside	Skilled
Spec	cialists	Tradepersons



### Influence Project Cost Early





## Fast Tracking Saves Time & Money





### CASE STUDIES



## #1 Western Oregon University

Vick Building – Occupational Therapy Program Remodel

#### THE NEED:

WOU received limited funding to start an Occupational Therapy Program in Salem.

- ✓ Required a facility to be open for September 2024.
- ✓ Limited facilities staff to manage design and construction projects.
- ✓ Fear of budget overruns from past projects delivered the traditional model.





## Western Oregon University

#### THE SOLUTION:

- $\checkmark$  WOU performed feasibility study in Summer of 2023.
- $\checkmark$  Hired Ausland to turn-key design-build process to:
  - ✓ Deliver on the programmatic requirements for the OT program within existing building (13,800 sf)
  - ✓ Limit spending to \$2 Million budget
  - ✓ Complete project by September 2024 (12 months)





## Western Oregon University

#### **RESULTS:**

- Overlapping design-construction process to expedite delivery.
- Early locking in of prices on key items, remainder designed per the budget.
- Project being delivered at \$117 per square foot, less than the average for Oregon University system.

 $\checkmark$  WOU staff says taking 50% less time to manage.





## #2 Oregon Military Department



#### Grants Pass - \$6 Million



#### Salem - \$17 Million



Ashland - \$6 Million



## Oregon Military Department

#### THE NEED:

Upgrade facilities throughout the State using multitude of funding sources for different project components.

- $\checkmark$  Cost overruns are not an option, no additional funds.
- ✓ Desire for creative solutions to deliver most "bang for buck."
- Requirement for contractors to be highly adaptable to logistical requirements of ongoing operations.



### Example Process





## Example Project Criteria

"MISSION CRITICAL"			
Project Component	Description		
Budget	Facility must be completed and useable for the prescribed budget.	1	
Code Compliance	Upgrade building systems, Facility and Site to comply with current building codes, ADA and any other applicable codes	2	
SEED	Facility must comply with Oregon SEED Requirements.	3	
Regulated (Hazardous) Building Materials Abatement/Remediation	Remove and replace all Regulated (Hazardous) building materials in the facility including but not limited to: lead dust, lead paint and asbestos containing products.	4	
Green Energy	ORS 279C.527 mandates that COMPONENTS Construction DeJECT CONFORMED to this Project.	5	
Thermal Performance	Provide factors and modernization measures including building insulation, window replacement (w/ hurricane rated windows), , utility line repairs, as well as energy conservation measures in support of the Net Zero Ready.	б	
Comply with the Electrification Implementation Policy	Replace the natural gas HVAC units with electrical units and add cooling to Administration Areas.	7	
Backup Power Supply	Install a backup power supply with Automatic Switch gear to service up to 35% of the facility's electrical load	8	
Seismic Resistance	Increase the building's ability to survive a seismic event, pathways of tenants to safely exit the facility	9	
SIPRNET Room	Build Secure Internet Protocol Router Network room	10	

"HIGHLY DESIRABLE"			
Project Component	Description	Priority	
Remodel/Construct Restroom and Shower Facilities	Remodel existing restrooms to incorporate ADA requirements as needed	1	
Reconfigure	Add/alter the administrative and classroom space and provide		
Administrative and	new furniture, fixtures and equipment to accommodate tenant	2	
Classroom Space	needs.		
Access Control	100% PROJECT COMPLISHED	3	
Upgrade Utilities	Evaluate and repair/upgrade as needed.	4	
Add Electrical outlets	Add electrical outlets to accommodate current and anticipated future needs	5	
Upgrade IT and ESSSystems	Upgrade the existing facility's telecom and data lines to accommodate tenant needs	6	
Kitchen Remodel	Add/alter the kitchen space to commercial kitchen requirements and accommodate tenant needs.	7	



### Example Process – Type 2



## Oregon Military Department

#### THE RESULTS:

- $\checkmark$  Projects guaranteed to be delivered on-budget.
- ✓ Owner benefits from designers and contractors working together to deliver the best value, aligned as one team.
- ✓ Ability to create shovel ready packages to capitalize on additional funding that comes in.



## #3 Yreka Carnegie Library

#### THE NEED:

Siskiyou County Economic Development Council is leading the rehabilitation of the historic Carnegie Library.

- Vision for the project grew as fundraising became successful.
- ✓ ORW Architecture provided, but integrated team required to design the final details of the project to the budget and historic restoration requirements.





## #3 YREKA CARNEGIE LIBRARY

#### THE SOLUTION:

- ✓ Integrated team facilitated project came in <u>under-budget</u> allowing for wish-list items.
- ✓ Fast-design changes made possible with integrated team.
- Development of new project additions being presented to grant agencies.
- $\checkmark$  Construction in-progress.





### NEXT STEPS



## Taking Your Agency Design-Build

- Organization needs to be ready for trust-based collaboration
- Several key steps to follow in ORS for public procurement
- Design-Build Institute of America excellent resource



#### DESIGN + CONSTRUCTION