The Value of the Design-Build Experience

by: Ty Williams and Doug Smith

WILDLANDS ENGINEERING

Introductions

WILDLANDS ENGINEERING

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WILDLANDS CONSTRUCTION

Doug Smith
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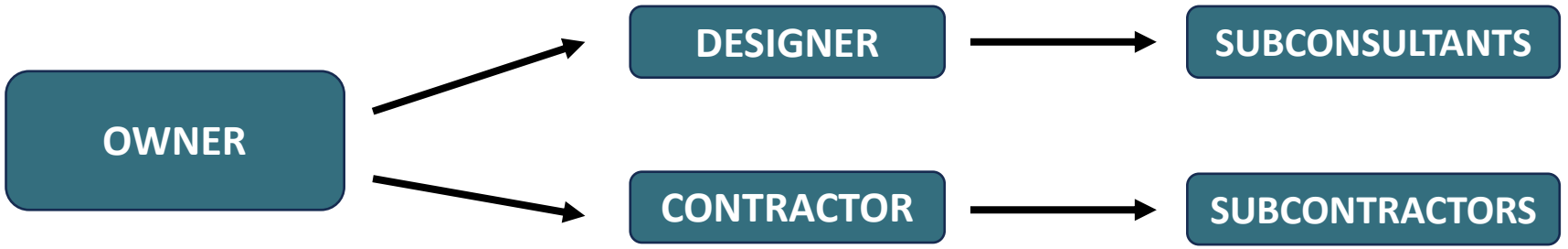
Project Implementation Hurdles

- Inflation
- Increased fuel costs
- Increased material costs
- Supply chain delays
- Hiring and employee retention

<u>COST IS INCREASING $$$</u>

TRADITIONAL PROJECT DELIVERY



VS

DESIGN-BUILD PROJECT DELIVERY

Traditional Project Delivery

Design-Bid-Build

Pros

- Typical industry model
- Competitive bids
- Suited to longer time frames
- Suitable for most funding mechanisms

Cons

- Economically driven
- Subject to inflation
- Independent parties require more management
- Potential to lose design vision during implementation

Advantages of **Design-Build**

Increased Efficiency

- Contracting process
  - Defined cost from the start
- Design process
- Construction/Construction oversight

Streamline Communication

- Align expectations early on
- More timely effective communication
  - Avoid “telephone"

SANDY SPRINGS
GEORGIA

Nancy Creek Stream and Water Quality Improvement Project

Sandy Springs, GA

Nancy Creek

Background

- Urban system within a community park
- Park floods frequently and stream banks are actively eroding
- Lateral bank migration threatening the adjacent walking trail and park grounds

Scope

- ~ 250 LF of streambank stabilization
- Invasive species management
- Promote public awareness of watersheds and water quality

Nancy Creek, Existing Conditions

Nancy Creek

Objectives

- Implement natural channel design techniques
- Improve water quality
- Provide and promote public awareness

Value add of Design-Build

- Reconfigure site access based on contractor feedback
  - Avoided necessary change in LOD during construction mobilization
- Limit boulder quantity through value engineering
  - Avoided change order to the client

Nancy Creek, Existing Conditions

Gilder Creek Emergency Stabilization Project

Greenville, SC

Gilder Creek

Objectives

- Implement natural design techniques to stabilize streambanks and protect recently installed sewer infrastructure
- Provide aesthetic value to the stream for adjacent homeowners and golf course

Value add of Design-Build

- Utilization of no-cost change orders to provide highest degree of stability on site
- Limited construction oversight expenses due to designer/contractor relationship and clear mutual understanding of project objectives

Gilder Creek

Background

- Client initiated infrastructure upgrades of sewer lines adjacent to Gilder Creek
- Stream banks exposed and sewer infrastructure vulnerable

Scope

- ~ 1400 LF of streambank stabilization
- Provide aesthetic uplift using boulder toe protection and Geolifts
- Protect sewer infrastructure across the stream with grade control and channel bed stability

Design-Build: Who benefits and how?

Client

- Single contract
- Decreased costs
- Minimized risk
- Higher quality product

Designer

- Industry innovation and career development
- More effective construction oversight

Contractor

- Schedule efficiency
- Limited field changes
- Increased flexibility
- Design input

Questions?

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