“The Design Consultants Role in Diverse Delivery Methods”

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Presentation Objectives

- Selecting the Right Consultant / Systems Contractor / Technology
- Understanding Project Delivery Options
  - Design-Bid-Build
  - Design Build
  - Turnkey Design Build Systems Operations and Maintenance
  - Design Competition
- Risks & Benefits of Delivery Methods
- Lessons Learned
Role of the Design Consultant

Representing the Client’s Best Interest

- Establish Project of Ownership
- Stakeholder Interviews
  - Interface with Public Safety Agencies
- Assist in Development of Statement of Work Concept of Operations (CONOPS)
- Develop Pre-Qualification Criteria
- Develop RLIs, RFQs and RFPs
- Provide Guidance and Oversight Over Project Life Cycle
- Construction Oversight
- Oversight During Testing And Commissioning
- Assist With Project Oversight
Build Acceptance for Collaboration

- Identify Decision Makers and Stakeholders
- Emphasis on the Mutual Value of Collaboration
- Building Project Trust - Partnering and Collaboration between all Stakeholders
- Enlist Staff Support (Facility Managers, Administration, Port Security, Engineering, IT, Local Police, Fire and Rescue)
Scope Development

- Determine Basis of Design:
  - Grant Requirements
- Facility Security Assessment
  - Mitigation Strategies
  - Migration Strategies for Legacy Systems
- Port Master Plan
- Security Master Plan
  - Security Breaches
- Stakeholder Input
Design-Bid-Build Life Cycle

- Planning
- Concept Design
- Schematic Design (35%)
- Drawings and Specifications
  - Design Development - 60% & 90% Completion
  - Construction Documents - 100%
- Bid process
  - Advertise (30 to 60 days)
  - Selection and Negotiations (30 to 60 days)
  - Award (30 to 60 days)
Design-Bid-Build Life Cycle
(Continued)

- Construction Phase
  - Kick-off
  - Mobilization
  - Construction
  - Submittal Reviews
  - Acceptance Testing and Commissioning
  - Training
  - Project Close Out
Design-Bid-Build Life Cycle
(Continued)

- Benefits:
  - More detail in project requirements
  - RFP- low bid – based on 100% Engineered Drawings

- Risks:
  - Can be costly with poorly executed specs & drawings
    - Change orders
  - Opportunity for finger pointing
    - Integrators vs. Engineers/Consultants
  - Longer delivery time
Design Competition/Bid-Build

- Develop Statement of Intent
- Announce RLI and Pre Qualification Requirements
- Select Pre Qualified firms
  - Qualifications
  - Approach
  - Technical solution
- Selection of Solution
- Negotiations
  - Cost
  - Time
- Bid then Build
Design Competition/Bid-Build (Continued)

- **Benefits:**
  - Less up front cost to the owner
  - Ability to Preview Creative solutions

- **Risks:**
  - Subjective rating of solutions
  - Higher Cost Investment by Consultants & Integrators
  - Lower contractor participation
Design-Build Life Cycle

- Effective Planning:
  - CONOPS
  - Develop Statement of Work
  - Develop Pre-Qualification Requirements
- Advertise & Select Pre Qualified D/B Contractors
- Provide performance based specs and S/D or D/D level for pricing
- Evaluate proposals based on solution and cost
- Selection of Design Build Team
  - Negotiate and Award
- Final Design and Build
Benefits of Traditional Design Build

- Single Contractor & Point of Contact
  - Facilitates Project Coordination
  - Enlists Creative Solutions (Value Engineered)
  - Cost Savings
  - Expeditious Implementation
- Project Accountability
- Mitigation of Cost Overruns (At Risk)
Benefits of At-Risk Design Build

- Single Contractor/Point Of Contact
  - Ease Of Project Coordination
  - Creative Solutions (Value Engineered)
  - Expeditious Execution
- Guaranteed Maximum Price (GMP)
  - No Cost Over Runs and Few Change Orders
  - Cost Incentives For Early Completion
Design Build Risks

- Potential For Higher Costs Of Bids
- Increase Risk When Consultant Is Not Involved In Decision Making Process
Design-Bid-Build vs. Design-Build

Resources

Design-Build

Finish

Duration

Design-Bid-Build

Finish
Turn Key

- Effective Planning:
  - CONOPS
  - Develop Statement of Work
  - Develop Pre-Qualification Requirements
- Advertise & Select Pre-Qualified D/B Contractors
- Provide Performance Based specs and S/D or D/D Level for Pricing
- Evaluate Proposals Based on Solution and Cost
- Selection of Design Build Team
  - Negotiate and Award
- Final Design and Build
Lessons Learned

- **Verify** qualifications of consultants, contractors, and integrators
- **Planning** is imperative
- Enlist the Support of the entire team
- Facilitate a Process to define knowledge of today’s collaboration technologies
- **Staff support** is essential
- **Choose** the best integrated solution
- **Pre-qualification** is critical
- Implement solid quality control processes
Questions?

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