Convert and Renovate Company Operations Facility (COF)
Building 249
Joint Base Myer-Henderson Hall
Contract Number W912DR-09-C-0061

Developing the RFP

Army Military Construction—Company Operations Facility
• Planned As New Construction—Standard Design/Site Adapt
• At Customer’s Request, Changed to Historic Renovation
• Stimulus Program Funds (ARRA)
  o Imposed Funding Constraints
  o Fully Coordinated but Severable Projects
• RFP Requirements
  o Validate Basic Concept
  o Apportion Risk
  o Execute Within Time and Budget
Design Build Team’s Perspective on RFP

• One-Phase
• Limited bridging documents
• Primarily performance-based
• Prescriptive requirements
  o Historical Preservation
  o Polyurea Wall Reinforcement
  o AT/FP
  o Prescriptive LEED Credits

Sample of RFP Drawings
Our Approach to Design Build

Use the DBIA Model: “Design Build Done Right”

- Fully integrate design and construction
- Clear lines of authority and communication
- Encourage cross-discipline interaction
- Significant involvement by senior staff
- Building Information Modeling (BIM)

Building the Right Team

- What team members did we need?
Building the Right Team

- Who did we select, and why?

3d U.S. Infantry Regiment (The Old Guard)

- Army’s oldest active-duty infantry unit, serving our nation since 1784.
- Official ceremonial unit and escort to the president, providing security for Washington, D.C., in time of national emergency or civil disturbance.

Alpha Company (Commander-in-Chief’s Guard)

- Patterned after General George Washington’s personal guard unit. The unit maintains ceremonial and tactical proficiency in the weaponry and tactics of the 18th century.
- Performs in many Department of Defense ceremonies each year and conducts memorial affairs in Arlington National Cemetery.

Echo Company (Honor Guard Company)

- Executes Joint and Army ceremonies to showcase the traditions of the Army and defend the dignity and honor of our fallen comrades.
Existing Conditions

Existing Conditions – Pre-Bid
Existing Conditions – Pre-Bid

Advanced Contract for Demolition & Abatement

- Owner’s Perspective
- Design-Builder’s Perspective
  - Mitigated unforeseen conditions related to environmental issues
  - Allowed D/B team to assess structural conditions and existing conditions
  - Specialty trades review of existing conditions and input on potential design & constructability issues
Existing Conditions – After Demo and Abatement
Existing Conditions – After Demo and Abatement
Partnering & Design Build Approach

PARTNERING CHARTER

“We are one team dedicated to providing a quality project in accordance with the project’s parameters using the contract as the framework. We are committed to honest and open communication, trusting each other, building a strong partnership, resolving problem issues quickly and at the lowest reasonable level possible, a safe work site producing a quality project, timely completion, protection of the environment, and minimizing inconvenience to Joint Base Myer-Henderson Hall.”

Creating the Right Layout: Pre-RFP Layout
Creating the Right Layout: Proposed Concept Layout

Creating the Right Layout: Final Approved Concept

- Historical preservation
- Open lobby
- Showcase conference rooms
- More traditional finishes
- Exposed columns and wood structure
- Room finishes changed from RFP
- Closets
- Changes to locker room
Discussion on Budget & Schedule Control

- Controlling Costs and Schedule during Design Phase
  - Pricing within RFP Requirements
  - Incorporating Owner Priorities through Innovative Design Solutions

- Subcontractor Procurement
  - Prospective Bidders with D/B experience
    - Understanding documents are not 100%
    - “Closing the Gap” based on design intent
  - Design/Assist Subcontracts
    - Attending design meetings
    - Incorporating subcontractor drawings into design

- Controlling Costs During Construction
  - Schedule Updates and Reporting
  - Close Collaboration between D/B Team, USACE & DPW
    - Alternate methods to reduce costs
    - Wood Flooring example

Challenge:
Maintain Flexibility and Trust on Meeting RFP Requirements
AT/FP Reinforcement at Perimeter Walls

AT/FP

- Restrictions on Design Build
- Coordination of AT/FP & SHPO requirements
  - Mural compromise for exterior wall
- Innovative Solutions
AT/FP Reinforcement at Perimeter Walls

Challenges - Owner’s & Design Build Team’s Perspectives On Each

Historic Preservation Criteria

- Columns
- Ceilings
- Murals
- Floors
- Light Fixtures
- Arms Storage Vault
Cast Iron Columns

Historic Columns as a feature of Conference Room
Existing Tin Ceilings

[Image of existing tin ceiling]

Restored Tin Ceilings

[Images of restored tin ceilings]
New Tin Ceilings

Light fixtures chosen to emulate historic feel
Historic Mural – Exposed Prior to Building Renovation

Historic Mural at Pre-bid
Historic Mural on Display

Floors Before Renovation
Floors – Restored and Repaired

Arms Vault Under Construction
Arms Vault

Challenges – continued

Restoring and Reinforcing Historic Windows
Restored and Reinforced Historic Windows

Challenges – Owner’s & Design Build Team’s Perspectives On Each LEED
Challenges – Owner’s & Design Build Team’s Perspectives On Each LEED

Challenges, Opportunities, Solutions for an Existing Historic Building

- LEED v. 2.2 Silver Required (Preregistered)
- Partial scorecard in RFP – left some freedom for creative strategy
- Focused on:
  - High-Performance envelope elements
  - High-efficiency HVAC system and lighting
  - Maximized low-emitting materials and recycled content
  - Exemplary performance in water use reduction, construction waste diversion
  - Sustainable Sites

Overall Conclusion
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Contract Number W912DR-09-C-0081