HAND Training
Effective Construction Project Management
Sponsored by Bozzuto Construction Company
Overview of Training Topics

• Delivery Methods
• Preconstruction and Selecting a General Contractor
• Scheduling and Site Utilization
Delivery Methods

- Design Build
- Cost Plus
- Design – Bid – Build (Lump Sum)
- Construction Manager at Risk (GMP)
Design Build

Pros:
- Allows for fast track delivery
- Good for less complex projects — office etc.

Cons:
- Client has little control over design
- No checks and balances between A/E & CM

Delivery Methods
Cost Plus

Pros:
- Open Book
- Lower CM Fee

Cons:
- No guarantee or cap on the project cost
- CM doesn’t provide input during preconstruction
Design – Bid – Build

Pros:
- Simple contract
- Less paperwork

Cons:
- Potential adversarial relationships
- Must have completed drawings

Delivery Methods
Delivery Methods

Construction Manager at Risk (GMP)

Pros:
- Guarantee on maximum project cost
- Open book

Cons:
- Complex contracts
- More paperwork
Preconstruction & Selecting a GC
Proposal Criteria:

Tools to help select a Construction Manager

• Financial Health
• Key Staff
• Relevant Experience
• Understanding the Scope of Work
Financial Health

• Request financial statements
• Letters from bonding company
• Current workload & backlog

Preconstruction & Selecting a General Contractor
Key Staff & Company Resume

- Interview Vice President/Team Leader, Project Manager, and Superintendent
- Do they have specific experience in this jurisdiction and this product type?
- Ask for references
Understanding Scope of Work (Items to ensure are included in GC’s Proposals/Bids)

1) Clear & concise project description (see sample checklist)
2) Inclusion and Exclusion checklist
3) Schedule & Logistics
4) Request specific sub coverage amount in GC’s number
5) State the contract type or provide agreement
6) Clarify bond and insurance requirements
7) Provide escalation and contingency that is to be held in the number
8) Provide format for the GC’s to input their numbers (show CSI breakdown with all other indirect costs)
9) Qualification & Assumptions (most important)
10) Alternates & Allowances
11) Value Engineering
Scheduling & Site Utilization
Schedule and Site Utilization Plans

- Should be part of every project plan
- These two elements work together, and form the management backbone for the execution and monitoring of the work
Considerations that should be addressed in Schedules and Site Use Plans include:

- **Strategy for completion:**
  - Every project has a unique situation

- **Site Logistics:**
  - How equipment, manpower, and materials use and move around the site

- **Project Phases:**
  - Account for the separate components of the project

- **Sequence of Operations:**
  - De-conflict adjacent and overlapping work

- **Temporary & Permanent Utilities:**
  - Verify that you will have what you need when you need it

- **Safety:**
  - Projects with solid plans are safer

Schedule & Site Utilization Plan
5 Items must be considered in a schedule:

- **Owner**
  - Specific delivery deadlines (tax credits)
  - Delivery sequencing (lobby/leasing first)

- **Design**
  - Is it complete and adequate

- **Access**
  - Required for manpower & materials

- **Manpower**
  - How much and where

- **Material**
  - How much and where

**Schedule & Site Utilization Plan**
Components:
- Activities
- Relationships
- Durations
- Organization

Types:
- Bar Charts
- Critical Path (CPM) Schedule
  - Milestones
  - Summary
  - Development
  - Working

Schedule & Site Utilization Plan
Elements in a Site Use Plan

- Access roads
- Ramps
- Utilities
- Fences
- Walkways
- Cranes
- Trailers
- Storage sheds

- Dumpsters
- Hoists
- Temp toilets
- Signage
- Parking
- Staging
- Unloading
- Safety

Schedule & Site Utilization Plan
Project Mobilization
Demolition
Month 1 to 5

- No construction traffic on south bound Idaho
- Temporary electric shed 600 Amp overhead service
- Pad mounted transformer
- Underground duct bank
- Office Trailers On 38th St. for duration
- 38th Street
- Temporary electric shed 2000 Amp service
- Future tower crane locations
- Bus stop remains open
- Primary construction vehicle access from Wisconsin
- Newark remains open to vehicular traffic only
- Bus stop closes
- Newark remains open to vehicular traffic only

Legend:
- Temp Fence
- Utility Work
- Street Work
- Sidewalk Work
- Sidewalk Access
- Construction Traffic
- Construction Entrance

North Parcel
South Parcel
38th Street
Newark Street
Idaho Avenue
Wisconsin Avenue
Ordway Street
Why do we plan projects and develop schedules?

A comprehensive job plan that includes a schedule and site use plan will benefit all parties. It will assist in:

- Clearly identify the end date
- Communication of the plan
- To ensure all critical tasks are identified
- Monitoring and measuring the progress of the project
  - Make sure to measure revised schedules with original
  - Beware of vertical stack
- Recognition, identification, and correction of problems as they occur will ultimately help to reduce risk and therefore help to maximize profits

Schedule & Site Utilization Plan
THANK YOU FOR YOUR PARTICIPATION!