

Outline - Project Management from Design through Construction

The presentation is shown in PowerPoint and takes 60 to 90 minutes.

Objectives

Review the six phases in Project Management

Identify the potential risks in managing capital projects

Identify controls to minimize risks

Project Management

1. Client selecting the Design Firm
2. Pre-Project Planning
3. Design Phase
4. Construction Documents
5. Bid Phase
6. Construction Phase

Selecting the Design Firm

Request office resume and qualifications (RFQ) from 3 to 5 firms

Visit project examples

Set up interviews. Invite 2 – 3 to submit proposal (RFP)

Make selection based on qualifications, staff experience and previous similar projects; not fee

Contracts

Types of Contracts:

- Design, Award, Build
- Design, Build

Compensation Models:

- Hourly - Time and Expenses
- Lump Sum
- Percent of Construction (Set limit)

Fee Allocation

Pre-Project Planning	Set Fee
Schematic Design	15% +/-
Design Development	35% +/-
Construction Documents	35% +/-
Bid Phase	5% +/-
Construction Phase	10% +/-
As-Built Drawings	Set Fee

Pre-Project Planning

Defines Scope of Project

Documents Existing Site Conditions

Based on Client Needs

Develop Project Budget

- Recommend a set budget
- Final pre-bid design should equal 80% of budget
- Allocate 20% of budget for alternatives, additions and/or deductions

Design Phase

Schematic Design - 2 or 3 alternative concepts

Preliminary Design - 20% +/- of design budget

Final Design - 10% +/- of design budget

After acceptance of final design, no significant changes without additional compensation

Construction Documents

Construction Drawings

Project Specifications

General conditions, special conditions, technical specifications

Construction Estimate (Opinion of Probable Costs)

10% +/- of budget

Bid Phase

Project is bid as total project or by construction specialty

Solicit bids by invitation and not by advertisement

Municipal projects are solicited by advertisement

Always require sealed bids

Contractors should not have any relationship to design firm or staff

Bid Phase

Invite or advertise for, qualified contractors/sub-contractors

Qualifications may include:

- Completed projects similar in scope and scale
- Insurance certificates, regardless of project size
with client listed on declaration page
- Equal opportunity statement
- Residence requirement
- Bond requirements

Bid Phase

Bid Bond (Ask class to identify and describe each)

Performance Bond

Maintenance Bond

Bid Phase

Contract Requirements

- Set payment schedule
 - Payments Less 5% - 10% retainage
 - Payments tied to project schedule
- Erosion control measures
- Tree protection and damage penalties

- Temporary fencing requirements
- Poured concrete protection

Bid Phase

Contract Requirements

- Workers dress and smoking requirements
- Warranty periods defined
 - Building, Equipment, Landscaping
- Set contract completion dates
 - Substantial Completion vs. Final Completion
- Liquidated damages - What are they and do you need them?

Bid Phase

Open or Closed Bids?

Schedule a Pre-Bid Conference to avoid any appearance of collusion

Invite bidders and open all bids on a set date

Reserve the right to reject any or all bids

Construction Phase

Schedule a Pre-Construction Conference

Require Contractor to submit a Project Schedule

Owner issues a Notice to Proceed (10 days)

Require Weekly/Bi-weekly Project Meetings

Require and review submitted Progress Reports

Evaluate against Project Schedule

Payments withheld if project is not on schedule

The contract lists what constitutes acceptable project delays

Construction Phase

When construction starts, advise client to

STAY OFF THE SITE

One person should represent the client

Authorize Payments on

APPROVED CHANGE ORDERS ONLY

At Substantial Completion

Construction equipment is off the site

Client has effective use of the property

If applicable, Certificate of Occupancy is issued

Hold Harmless / Release of Liens Submitted

Develop punch list

Retainage is released on completed items

Hold Retainage on Punch List items

At Final Completion

Punch list completed and project ends

Project Management

Should your client be their own General Contractor?

Pros and Cons

Project Management

Costs – Time - Quality and Quantity

The relationship to each other in project management

Questions and a Final Comment

Nick LoPiccolo, RLA

Land-Use Planner/Property Management Consultant

Girl Scouts of the USA

212-852-8058 – nlopiccolo@girlscouts.org

Nick LoPiccolo, RLA

P.O. Box 32, Pomfret, CT 06258 - 860.928.5240 – nlopiccolo@girlscouts.org

EXPERIENCE

Girl Scouts of the USA, New York, NY

Land-Use Planner/Property Consultant: October 1979 to July 1988 – April 2001 to current

- Develop long-range plans and recommendations for site evaluation, acquisition, development and maintenance of agency properties
- Develop and conduct for corporate staff and national volunteers, training seminars and workshops on property management principals and practices
- Review and comment on project bids and contractor request for payments
- Publications - Co-author, *Property Management in Girl Scouting*, GSUSA (1984)

Parks Department, City of Arlington, Arlington, TX

Park Planner, Project Manager: April 1996 to June 1999

- Responsible for implementing in excess of \$10,000,000 of park projects including contract negotiation and project management from design through construction
- Prepare project specifications, cost estimates, bid documents, and inspections
- Prepare comprehensive long-range park planning documents
- Prepare and present written, oral and graphic project presentations

John Murray and Partners, Wayne, PA

Partner, Senior Project Manager: July 1988 to April 1996

- Client development, contract negotiation and project management from design through construction
- Prepare project drawings, specifications, cost estimates, bid documents, and inspections
- Coordinate activities between clients and contractors
- Prepare comprehensive long-range planning and master plan documents
- Prepare and present written, oral and graphic project presentations

Carter and Burgess Inc. Consulting Engineers, Forth Worth, TX

Staff Landscape Architect: April 1977 to September 1979

Parks Department, City of Dallas, Dallas, TX

Staff Landscape Architect: August 1976, to April 1977

Barton Aschman Associates, Inc. Consulting Engineers, Evanston, IL

Staff Landscape Architect: June 1973 to April 1976

LICENSE

Registered Site Developer/Landscape Architect, State of Connecticut, # 894

TRAINER

- American Camping Association annual national meetings - Developed and conducted numerous workshops on the *Principals and Practices Property Management* and *Developing a Master Plan and Capital Budget*
- YMCA - 2005 North American Camp Maintenance Conference, Keynote Speaker

EDUCATION

- UT Arlington, Graduate School - City and Regional Planning (33 hours), 1977 through 1979
- State University of New York, College of Environmental Science and Forestry
Bachelor of Science, Environmental Studies, Bachelor of Landscape Architecture, May 1973
- New York City Technical College, Associate of Construction Technology, December 1968

Courses

- Design Development for Project Managers - Neighborhood Reinvestment Institute, August 2002
- Playground Safety Inspection Certification - National Playground Safety Institute, August 1998
- Graduate, Colorado Outward Bound School, September 1980

MILITARY

United States Air Force, Civil Engineering/Site Development Unit, March 1966 to August 1970

Site Development Specialist, Honorable Discharge - August 1970
