

CONSTRUCTION MANAGEMENT AT RISK SERVICES

1. PRE-CONSTRUCTION SERVICES

- A. Review district's **GOALS AND PRIORITIES**
- B. Review district's overall **PROJECT BUDGET**
- C. Review district's **TIME SCHEDULE**
- D. Develop an **OVERALL MANAGEMENT PLAN AND CPM MANAGEMENT SCHEDULE** of critical design and construction dates in order to accomplish the stated objective.
- E. **SCHEMATIC DESIGN**
 - 1. Monitor evolving design and make suggestions with regard to equipment, material and systems selections.
 - 2. Consult with the Owner and Architect on means and methods of construction.
 - 3. Review schematic design documents.
 - 4. Submit input to the Owner and the Architect relative to time and cost control.
 - 5. Identify certain areas of phased construction.
 - 6. Prepare a critical data schedule.
- F. **DESIGN DEVELOPMENT**
 - 1. Review the design development documents.
 - 2. Prepare a detailed estimate based on available design drawings in a Subcontractor bid format to insure that the project is within budget.
 - 3. Analyze the project for potential alternative equipment, material and systems selections for cost savings.
 - 4. Prepare [trade-off] studies relative to value engineering.
 - 5. Review and update the critical data schedule.
 - 6. Review project for constructability.
 - 7. Discuss project with Subcontractors and Material Suppliers to determine work loads, bonding capacity availability, worker/mechanic availability, etc., and to develop interest in project, intent in bidding the work, and fine tuning the time schedule to provide best possible time to receive bids and construct the project.
 - 8. Prepare a site use study to be used for allocation of space for storage, parking and temporary facilities.
 - 9. Prepare cash flow analysis for both the design and construction phases.
- G. **CONSTRUCTION DOCUMENT/PROPOSAL PHASE**
 - 1. Prepare and update estimates in the sub-contractor format at the 50% and 90% working drawings stage and recommend any changes necessary to stay within Owner's budget and time schedule.
 - 2. Review the drawings and specifications and make comments and suggestions.
 - 3. Develop a detailed CPM construction schedule.
- H. Prepare **SUBCONTRACTOR PROPOSAL PACKAGES**, including:
 - 1. Project manual, outlining the requirements of the construction.
 - 2. Schedule (by proposal package interface).
 - 3. Detailed scope of work.

4. Detailed document listing.
5. Proposal forms for each proposal package.
6. Form of Contract and Purchase Order forms.
7. Insurance requirements.
8. Bonding requirements.
9. Other special requirements.

I. CONDUCT PRE-PROPOSAL MEETINGS addressing:

1. Project requirements.
2. Document review for specific questions.
3. Sequence/schedule review.
4. Site restrictions.
5. Owner and Architect comments.
6. Other questions raised during discussions.

J. RECEIVE PROPOSALS

1. Assist Owner in advertising and soliciting proposals.
2. Assist Owner in proposal opening.
3. Prepare proposal tabulations for each proposal package.
4. Review proposal for compliance with Contract Documents.
5. Review apparent low proposers' qualifications, past experience and liquidity.
6. Develop recommendations for awards.
7. Assist Owner in preparation of amendment number one (1) (Guaranteed Maximum Price) Owner/Construction Manager at Risk Agreement.
8. Prepare all Subcontractor Construction Manager / Subcontractor Agreements and other paper work. Submit performance and payment bonds, insurance and other required items.

2. CONSTRUCTION PHASE SERVICES

A. PROVIDE PROJECT COORDINATION AND MANAGEMENT OF SUBCONTRACTORS

1. Establish site organization, including work and storage areas.
2. Establish job site management organization and job site procedures.
3. Maintain daily log for job site record and maintain as-built drawings and records.
4. Provide general conditions work to meet project requirements.
5. Monitor and maintain quality control.
6. Shop drawing control.
7. Equipment and material control.
8. Provide and monitor overall progress and short interval scheduling.
9. Prepare billings and progress payments.
10. Conduct Subcontractor Coordination Meeting.
11. Provide coordination between Subcontractors.
12. Prepare and receive requests for information.
13. Establish, monitor and maintain safety program and procedures.
14. Prepare agendas and conduct weekly safety and progress meetings.
15. Prepare and distribute weekly safety and progress meeting minutes.

B. PROJECT CLOSE-OUT/POST CONSTRUCTION

1. Provide operating and maintenance manuals.
2. Secure and assemble warranties or guarantees.

3. Provide check-out of equipment.
4. Instruct operating personnel in equipment operating and maintenance procedures.
5. Assist in actual start-up of equipment.
6. Complete all punch list items.
7. Implement close-out procedures and ensure requirements are met including:
 - a. Subcontractors and vendor's final payment.
 - b. Resolution of claims.
 - c. Final change orders.
 - d. Lien releases.
 - e. Final lien waivers.
 - f. Consent of sureties.
8. Receive warranty/guaranty work items from Owner, contact Subcontractors and monitor work to insure satisfactory repairs in a timely manner.
9. Conduct walk-through with Owner and Architect at end of one-year operation.
10. Log all warranty items encountered during the first year of operation.