

**C.A.S.H. 25th ANNUAL
CONFERENCE**

**CONSTRUCTION
101**

INTRODUCTION

DON LUSSIER
Supervisor of Facilities Div.
Corona-Norco Unified School District

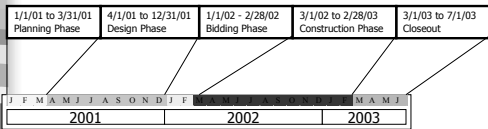
Today's Presentation

- The legal framework
- Selecting and working with architects and construction managers
- Managing your construction project
- Cost savings and preventative measures
- Bidding and payment
- Budgeting

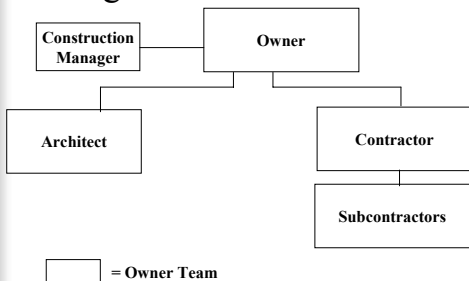
THE LEGAL FRAMEWORK

MARK W. KELLEY
Attorney
Miller Brown & Dannis

Timeline



Project Organization: Design/Bid/Build



Pre-Construction

- Architects and construction managers must be selected by competitive process
 - Request for qualifications
 - Request for proposals
- Decide on approach to project delivery
- Develop program schedule

Bidding

- Construction contracts in excess of \$15,000 must (generally) be publicly bid
 - Not acceptable to split into smaller packages
- The lowest responsive, responsible bidder gets the contract
- Formalities of bidding
 - Front end documents
- Listing subcontractors

Bidding, cont'd.

- Prequalification
- Prevailing wage requirements
 - Contractors must pay prevailing wage on almost all school projects
 - Labor Compliance Programs required where there is any state money

Substitutions and Sole Sourcing

- Substitutions
 - District option to accept/reject
 - Timing issues
- Sole Sourcing
 - Public Contract Code 3400
 - Newly expanded to include “necessary” items

Construction

- Performance issues
- Inspection
- Payment
 - Progress payments and pay applications
 - Stop notices
 - Change orders
- Requests for Information (RFI's)

Closeout

- Required for all projects
 - Potential Board liability if not completed
- Parties responsible for closing out projects
 - Contractor
 - Architect and CM
 - Inspector



Other Issues

- Site acquisition
- Funding
- Performance and fiscal audits
- CEQA compliance
- Claims

SELECTING AND WORKING WITH ARCHITECTS, CM's AND INSPECTORS




WILLIAM SAVIDGE
Facilities Engineer
West Contra Costa USD




STARTING THE PROCESS

- District decisions on Facilities Program
- Master Plan
- Implementation Plan
 - Project Delivery Method
- Planning, design, construction Phases
- What Consultants needed?
- Can in-house services be used?



Which comes first, the Architect or the CM?

- Building the Team
- Architects key role in planning, design, approval process
- Architects did it all in the past...
- Can still do it, want it back!
- Many Arch firms offer menu of CM, State Program, Consulting services



Which comes first, the Architect or the CM?

- Building the Team
- CM's are more than just "Construction" Managers
- Offer an array of services to Districts
- Program Management
- Project Management
- Ala Carte—Estimating, Scheduling...



Hiring Consultants: The Rocky Road to Success

- A competitive selection process for Professionals Specified in Proposition 35
- That's the easy part
- Setting up, managing and surviving a fair, open process is the real test



Competitive Selection Process Requirements

- Not just Architects and CM's
- Other Consultant Team Members
 - Landscape Architects
 - Environmental Consultants
 - Engineers
 - Structural, Mechanical, Electrical, Soils
 - Land Surveyors



Competitive Selection Process Requirements

- Requests proposals from qualified consultants
- Describes the work to be performed
- Outlines the submittal process
- States the selection criteria



Competitive Selection Process Requirements

- Districts must select for each project
 - Or have the architects you select hire their own consultants
 - Provide for an appointment covering a selection of projects

Competitive Selection Process

The RFP

- Request proposals from qualified professionals
 - Circulate your request as you would for bids
 - RFQ's vs RFP's
- Describe the work to be performed
 - Be as specific, or general, as your needs dictate
- Outline the submittal process
 - State the time and place for receipt of proposals
 - Stipulate the form and format to be used
- State the selection criteria
 - List specific criteria you will use in selection
 - Your criteria may be weighted
 - Price (low bid) need not be the determining factor

Competitive Selection Process Requirements

Typical Information in Proposals

- Letter of Intent
- Description of Firm
- Relevant Experience
- Project Team
- Firm's Track Record
- Sub-Consultants
- DVBE
- Fee Schedule

Competitive Selection Process

Typical Selection Criteria—Add Yours!

- Responsiveness to the RFP
- Firm and sub-consultant experience
- Team Qualifications & Experience
- Client satisfaction
- Budget & Schedule record for projects
- Stability and production capacity of firm and sub-consultant
- Performance/perception at Interview

Negotiation and Contract

- After Selection, the dance continues...
- Negotiation Process
 - Sets tone for entire relationship
 - Understand Consultant concerns
- Contract Discussion
 - Start during RFP/RFQ Process
 - Give out the contract then for review
 - Be flexible!

Architect/CM Management

Architects are from Venus...

- Simple keys to success in relationship
 - Timely reviews of design/work
 - Quick responses to information and decision requests
 - Clear direction for projects
 - “Single Source” of contact at District
 - Empowerment of the Architect as team (co)leader
 - Adequate fees to complete work

Architect/CM Management

CM's are from Mars...

- Simple keys to success in relationship
 - Get the right staff assigned to District
 - Play to strength of selected firm
 - Provide managers all the information needed to complete the job you want
 - Watch the billings, watch the staffing
 - Get out of the way let them be tough
 - Watch them every minute, not too tough!

Architect/CM Management

When the dust settles remember...

- Management Realities
 - Your own Architects/CM's will be the first to get you into trouble
 - Additional Services requests and other fun
 - Contract Disputes will happen
 - Assigning responsibility, the reality of consultant Claims
 - A Good Fit Gone Bad--Termination happens!

MANAGING YOUR CONSTRUCTION PROJECT

LEN METCALF, AIA
Principal, Education Facilities Group
GKKEDUCATION

Site Acquisition



- Civil Engineer/Architect/CM to assist with assessment
 - Topography can impact project costs
 - Proximity of utilities
 - Site drainage issues
 - Soil structural characteristics
 - Buried conditions (preliminary testing)
 - Groundwater/rock/organics
 - Soil contamination/conditions
 - Phase I report to DTSC
 - CEQA

Pre-Design / Design

Programming



- Develop criteria with user groups; stakeholders
- Complete educational specifications

Pre-Design / Design

Design Specifications



- Architect to develop site master plan and design concept basis;
 - District standards
 - Design preferences
 - Structural / materials preferences
 - Site utilization standards

Pre-Design / Design

Master Budget/Schedule



- Architect to coordinate estimates with CM budget
- Architect to provide design schedule/ coordinate with CM master schedule
- Monitor State Agency submittals
 - DSA / CDE / OPSC / Status of application and funds

Pre-Design / Design

Conceptual and Design Estimates

- Compare scope and budget at all phases
- Utilize Architect / CM/ third party estimates



Pre-Design / Design

Value Engineering/Constructability

- Architect/CM to assist with design options
- Utilize CM / third party constructability reviews



Pre-Design / Design

Local Agency Coordination

- Fire
- Health
- Utilities
- Off-site improvements



Pre-Design / Design

General Conditions/Division 1

- Provide cost controls
 - Unit Costs
 - Alternates
 - Substitutions
 - “Or equal” proof / contractor burden
 - Line item comparison
 - Acceptance not guaranteed / architect review
 - Not for convenience / look for savings; value
 - Submittals
 - Contractor to provide submittal schedule
 - Track schedule progress



Pre-Design / Design

General Conditions/Division 1

- Direct contractor on how to document change order requests
 - Full labor / material breakdown
 - Itemized credits
- Specify reasonable RFI response time
 - Avoid artificial “case” building
 - Allow sufficient Architect / Engineer review
 - Manage RFI schedule / specify need



Pre-Design / Design

Pre-Bid Activities

- Architect / CM assist
 - Solicit bidder interest
 - Prequalification
 - Pre-bid meetings
 - RFI's
 - Addenda
 - Clarifications



Pre-Bid

Bid Review/Notices

- Architect to assist CM with evaluation
- Recommendations
- Issue notice of award
- Issue notice to proceed



Pre-Bid

Issue Contract Documents

- Pre-construction meeting
 - Establish meeting protocol
 - Policies / Procedures
 - Paths of communications
 - Receive insurance and bonds



Pre-Bid

COST SAVINGS AND PREVENTIVE MEASURES

LEN METCALF, AIA
Principal, Education Facilities Group
GKKEDUCATION

Cost Savings & Preventative Measures

Preventive Measures lead to cost savings



- During planning and design phases, what can be done to limit:
 - RFIs
 - Extensions
 - Delays
 - Claims
 - Change Orders
 - Walk-offs
 - And other financial nightmares

Clear Programming

The vision responds to the need



- Educational specifications
 - Understanding educational goals/facilities needs
- Participation of all stakeholders
 - Site/Community/District/Agency
- Communication and feedback
 - Open meetings/community ownership

Control Design Meetings

Focus on the task; respect limits



- Designated site committees
 - Dedicated to specific project(s)
- Set agendas
 - Formal; published; clear purpose
- Documented proceedings and outcomes
 - Oversight committee/bond requirements met

Close Communications: District/Design Team

Dedicated path for flow of information



- Designated District representative
 - Coordinate COC/site committees/CM/architect
- Designated CM representative
 - Uniform distribution of information
- Primary contact/architectural project director
 - Single point responsible for design team

Complete Facilities Assessments

Understanding existing conditions is critical in modernization, expansions, and additions



- Obtain records
 - Existing drawings and field data
- Access compliance survey
- Tour facilities with maintenance
- Destructive testing/field locate utilities
 - Key areas where surprises can be costly
- As-builts do not exist
 - Document existing conditions

Control Scope Creep

The project and budget are already at critical mass



- Compare the original scope
 - Recheck: is it the same project
- Confirm priorities
 - Don't forget promises to the community
- Construction cost estimate updates
 - Incremental review of estimate vs. budget

Good Construction Documents

Even codes and regulations are reinterpreted



- Allow sufficient time
 - Property coordinated documents are crucial to saving money
- Confirm document coordination
 - Attend coordination meetings/checklist systems/interim submittals
- Provide for constructability review
 - Third-party assessments are valuable

Manage Budgets

A design phase approach: place controls in the front-end specifications



- Provide for unit process
 - To control future change costs
- Provide a “substitution” time limit
- Provide planned/designed alternatives
 - With community promises intact

Site Master Planning

Evaluate the cost-effective approach



- Review sequencing of all projects
 - Construction access/campus impact
- Careful project planning
 - Shared functions/infrastructure planning
- Consider pricing efficiencies
 - Multiple bids/quantity purchasing

Phasing/Interim Housing Plan

*Compare cost/benefit of interim housing
component of decisions*



- Utility connections
- Number of construction phases/portable housing per phase
- Number of concurrent project portable relocations

BIDDING AND PAYMENT

ED MIERAU
President and CEO
Neff Construction, Inc.

BID DOCUMENTS

- Bid Documents and Procedures
 - Documents
 - DSA/CDE and Local Agency Plan Approval
 - General Conditions and Front-End Documents are current
 - Establish Methods of Selecting Low Bidder in NIB (Pub. Cont. Code, § 20103.8)

BID DOCUMENTS, Con't.

- Include Prequalification or LCP requirements in NIB (Pub. Cont. Code, § 20111.5, AB 1506)
- Identify Prebid Conference Date, Time, and Location in NIB
- Clearly identify place and time bids are to be accepted

BID PROCEDURES

– Procedure

- Competitive bidding required when construction is over \$15,000 (Pub. Cont. Code, § 20111)
- Advertising (Pub. Cont. Code, § 20112)
- Answer bidder RFI's and Issue Addenda timely
- Get legal counsel review of any withdrawals or protests (Pub. Cont. Code, § 5101-3)
- Be prepared to address subcontractor listing errors (Pub. Cont. Code, § 4107.5)

BID STRATEGIES

- Manage your bid date
- Use trade publications wisely
- Avoid unnecessary innovations that may alienate bidders
- Confirm bidders
- Keep bid from simple

BID STRATEGIES, Con't.

- Do not reissue bid forms
- Minimize addenda
- Formalize bid protest procedures
- Use targeted prequalification
- Use prebid to identify site characteristics and any special scheduling requirements

PAYMENT PROCEDURES

- Establish formal internal payment procedures
- Establish invoice submission time lines
- Contract documents should state invoice approval procedures
- Schedule of values

PAYMENT PROCEDURES, Con't.

- Projected billings
- Stored materials
- Conditions of payment
- Stop notice procedure

PAYMENT STRATEGIES

- Monitor payment time lines (Pub. Cont. Code, § 20104.5, 7107; Code Civ. Proc., § 685.010)
- Use payment as incentive
- Avoid reputation as “slow” or “no pay”
- Establish methods to avoid overbillings
- Retention release strategies

BUDGETING

MARK MARDOCK
Senior Vice President, Education
McCarthy Building Companies, Inc.

TOTAL PROGRAM BUDGET

- Includes Soft Costs and Construction Costs
- Establish Early and Hold Constant (75% / 25%)
- Clearly Define What the Design Team is to Target for Construction Cost

TOTAL PROGRAM BUDGET

- **Soft Costs**
 - Design Fees & Reproduction
 - DSA, CDE & Utility Fees
 - IOR & Testing Fees
 - Furniture, Fixtures & Equipment
 - Interim Housing
 - Consultants (Legal, Financial, Acquisition)
 - District Contingencies (Mod's vs. New)

TOTAL PROGRAM BUDGET

- **Construction Costs (Hard Costs)**
 - The Budget for Construction Bids
 - May Include CM General Conditions (Establish Up-Front)
 - Should Include Escalation Factors
 - Should Include Prioritization of Needs Assessment

MANAGING YOUR BUDGET

- **Determine Who Tracks Expenditures and Projected Expenditures**
 - Soft Cost Expenditures by District
 - Hard Cost Expenditures by Construction Manager or District
 - Determine How to Tie the Two Together for Total Budget Management

MANAGING YOUR BUDGET

- Track Expenditures In a Manner that will Show Trending
- Develop a System for Projecting Expenditures Before You Start
- DON'T Utilize Contingency to Cover Bid Overages (You May Need It Later)

MANAGING YOUR BUDGET

- Continuously Test Your Design to Budget
 - The Earlier You Recognize a Budget Problem, The Greater the Ability is to Adapt
 - Once the Design is Complete, Budget Problems Cause Project Delays Which Equate to Even More Budget Problems

MANAGING YOUR BUDGET

- Budgeting During Design
 - Program Estimate
 - Schematic Estimate
 - Design Development Estimate
 - DSA Submittal Estimate
 - Monitor Design Changes / Addendums for Budget Impacts



UNDERSTAND THE MARKET CONDITIONS

- Bond Capacities Squeezing Market
- Plywood Prices Up 187%
- Reinforcing Steel Up 29%
- Gypsum Board Up 15%
- Copper Pipe Up 40%
- Insurance Up 20%



BUDGET CONTROL DURING THE BID

- Establish a Smart Bid / Procurement Strategy
- Keep Your Options Open with Additive Alternates
- Focus Your Efforts on Getting The Right Bidder Interest



MANAGING YOUR BUDGET

- Budgeting During Construction
 - Time IS Money (Resolve Issues Promptly)
 - Avoid Deferring Change Order Claims Resolution
 - Track Contingency Expenditures
 - Keep up With Projected Cost Forecasting
