

CLAIMS PREVENTION AND RESOLUTION FOR PUBLIC WORKS

Pre-Seminar Survey Results

Construction changes, delays, and claims are a major problem for public works agencies and facility managers. They siphon off a significant portion of the available funds for capital improvement programs and divert management attention from essential duties and functions. Reducing the frequency and severity of changes, delays and claims can significantly improve delivery of a CIP program, while making the process far more enjoyable.


Unfortunately, the extent of the problem is not fully understood and the solutions are often not identified and readily implemented. More information is needed on the extent of problems and how to avoid and resolve delays and changes. The result of a recent survey of public works and facility management managers as part of a one-day seminar on construction claims is offered as a first step in that process and as a possible prototype for further investigation and implementation of better dispute avoidance and resolution tools.

1. Survey Results – Part of Construction Claims Seminar for Public Works Managers

**CONTRACTOR CLAIMS:
Prevention and Effective Resolution**

Presented by: Buckley & Leaders, Moss Adams, Washington Department of General Administration, Sampley Consulting, Pinnell/Busch, Inc.

**SUMMARY OF PRE-SEMINAR SURVEY
By Buckley & Leaders, Seattle, WA and
Pinnell/Busch, Portland, OR**



Total Respondents: 38 P066PublicWorks

The following survey results are based on 38 responses by the 79 attendees at the 12Nov04 seminar titled “*CONTRACTOR CLAIMS: Prevention and Effective Resolution*” for public works agencies and their consultants, which was presented by Buckley & Leaders of Seattle, Pinnell/Busch of Portland, the Washington Department of General Administration, Moss Adams, and Sampley Consulting. The survey was conducted by Buckley & Leaders and analyzed by Pinnell/Busch, Inc. Contact Pinnell/Busch at cathy@pinnellbusch.com for additional information or to request a presentation of the results for your agency or professional association.

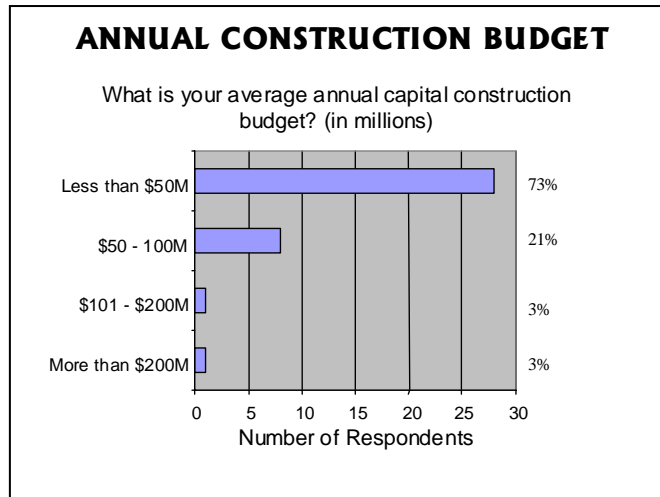
Commentary

The results of the survey have been summarized in charts and was presented at the seminar as power point slides. We have added a commentary on the slides, along with an analysis and tentative recommendations for claims avoidance and resolution. The commentary and analysis are based on the survey and 30-plus years of consulting experience by Steve Pinnell, the Pinnell/Busch staff, and the company’s associates, colleagues and clients.

Survey of Scheduling Practices and Experience

Pinnell/Busch is currently conducting an on-line survey of scheduling practices and experiences on public works projects, in preparation for presentation at a Project Management Institute – College of Scheduling Conference in Scottsdale, Arizona in May. Please contact Pinnell/Busch if you would like to participate in the survey or to receive information on the survey results and the paper to be presented.

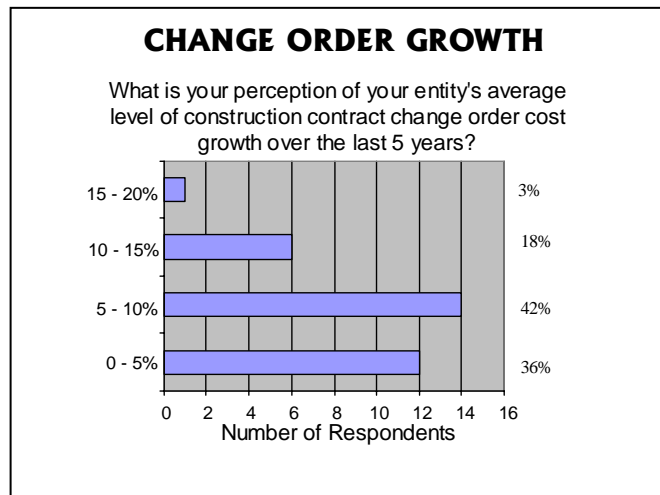
2. Annual Construction Budget of Agencies Responding



Commentary

It is probably easiest to survey and analyze public works (and facility management) agencies by four categories of size: \$1 to \$10 million, \$10 to \$50 million, \$50 to \$100 million and over \$100 million. At what break points do the functions, problems and solutions vary for a typical public works agency? Should a survey collect separate results for different sizes of programs?

3. Change Order Growth

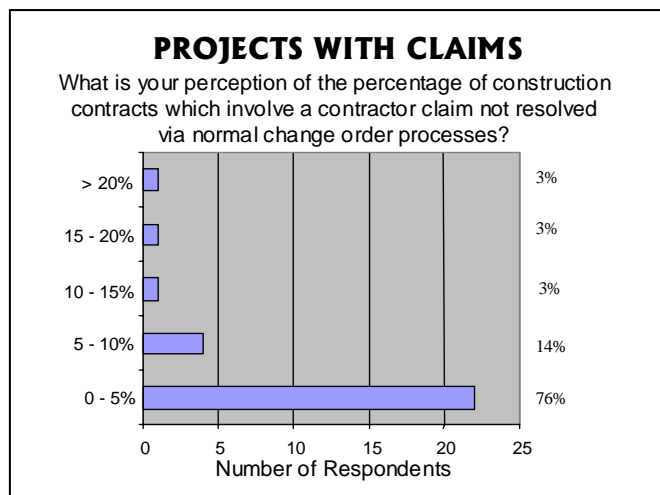


Commentary

Changes (cost growth) on an individual project in excess of 5% are a concern; greater than 10% is excessive, and over 15% is a failure. Overall program changes of over 5% is a sign of problems, with over 10% a failure of budgeting, design, or contract administration. The exception is changes from variations in unit quantities, which is a problem if the contractors are using it to unbalance their bids.

A more extensive and more detailed survey is needed to determine if the variation in cost growth can be tied back to specific variables and what changes in policies, practices, and personnel skills can reduce the cost growth.

4. Projects With Claims



Commentary

More than 5% is a concern. More than 10% is a serious problem that needs to be addressed.

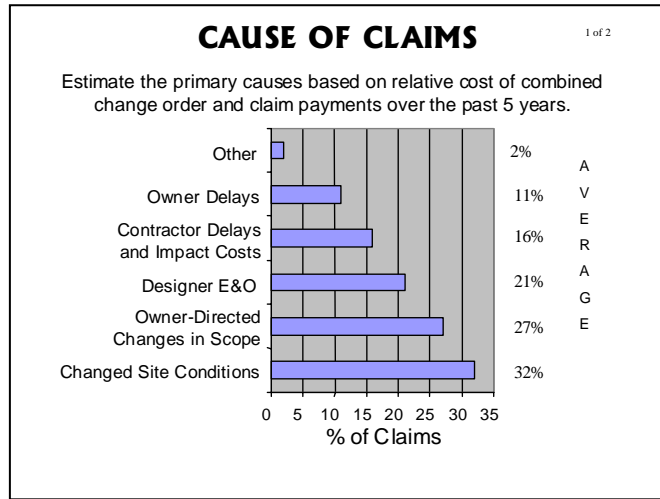
If the contractors are at fault, the problem can be reduced by: (1) better designs and contract language, (2) additional training of agency personnel in contract administration and field oversight, (3) improved contractor schedules via tighter scheduling specification, enforcement of those specifications, and improved tracking and recordkeeping practices, (4) evaluation and possible improvement of the agency's reputation as a fair and reasonable owner, and (5) improved

marketing of the agency's projects to the construction community. Changing contracting procedures from competitive low bid (design-bid-construct) to CM or design/build may help, but has other shortcomings and still won't eliminate all of the problems.

If the designers are at fault, the consultant selection process needs improvement, along with changes to administration of A/E contracts, clearly defined scope, adequate design and construction budgets, timely award of design contracts, and feedback on consultant performance into future selection procedures.

If the construction managers are either the designer or independent consultants and are at fault, the solution is to select a better construction manager. If the construction managers are in-house personnel and at fault, the solution is training, coaching and improved supervision.

5. Cause of Claims



Commentary

There is a need to correlate the extent and severity of changes to practices, including: partnering, better scheduling specifications, contract administration procedures, etc. And, there are means to minimize claims, depending upon the cause.

32% – Changed Site Conditions

This can be reduced, but not eliminated by better site investigations and more accurate as-builts – both geotechnical investigations (including review of historical records and discussion with neighbors and previous contractors) and detailed investigations of building conditions (instead of relying on old as-builts).

27% - Owner-Directed Scope Changes

This can be largely eliminated by involving user groups (and operations and maintenance) in pre-design and design, setting clear objectives, and by getting 'sign off' by user groups. Other 'stakeholders' should also be involved, if their use of the facility is important and especially if they have the ability to 'derail' the project. Public involvement is usually very beneficial, even when it is not mandatory. If properly managed, it won't take a great deal more time and can save time and money, in addition to better serving the taxpayers.

21% - Designer Errors and Omissions

This can be reduced by more time and money for design, but also by selection of better managed consultants. Other solutions are: clearly written scope of work, better design schedules, tighter owner oversight of the design process, value engineering, constructability reviews, etc.

16% - Contractor Delays and Impact Costs

This can be significantly reduced by: (1) better scheduling specifications, (2) enforcement of those specifications, (3) partnering workshops and efforts at team-building, and (4) fair, timely and firm resolution of changes and claims.

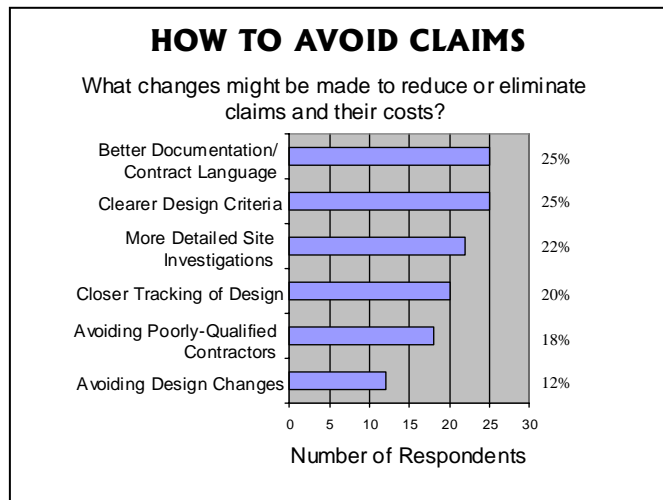
11% - Owner Delays

This is avoided by more thorough site investigations to avoid differing site conditions, a clearly written scope of work, user group and O&M input during design, and firmer control of construction budgets.

2% - Other

Not relevant.

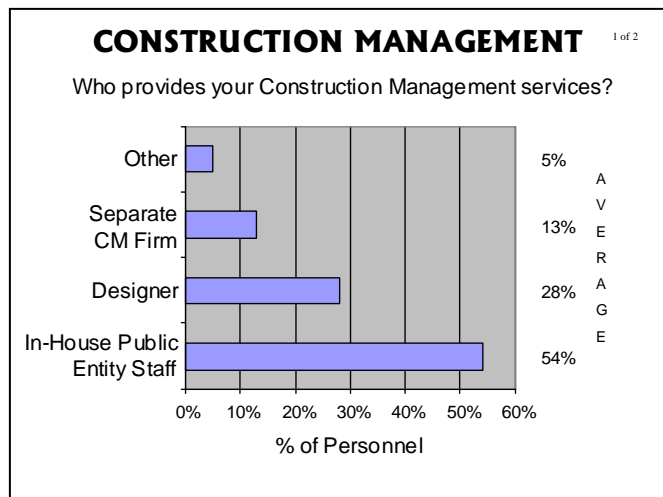
6. How To Avoid Claims



Commentary

See the survey results and commentary in sections 3, 4 and 5 above plus the recommendations in section 14 below for our comments.

7. Construction Management



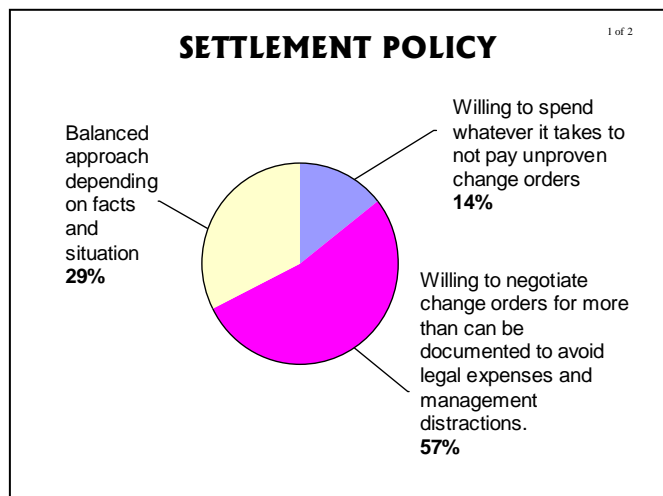
Commentary

We need to determine the advantages and shortcomings of each of the methods. It appears to the authors that a mixture of methods would be best.

A public works agency needs to maintain in-house expertise and to offer opportunities for career growth to its personnel. In addition, it needs to involve the designers to a certain extent in contract administration for both their needed input and their development as designers. Finally, it is important to use outside CM firms to a certain degree in order to learn new techniques and procedures that can be incorporated into agency procedures and to handle a varying work load. It isn't

economical to staff up for the maximum work load.

8. Settlement Policy



Commentary

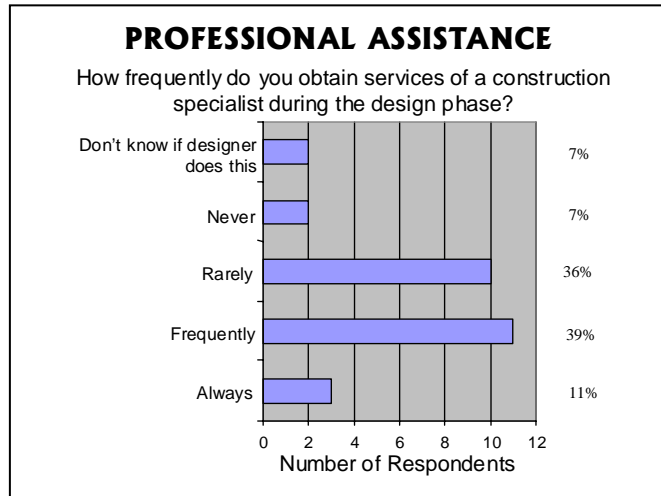
Willingness to negotiate is important and paying somewhat more than you think the claim is worth is often a good idea, as you probably don't have all of the facts and the contractor's position may have more strength than you realize. On the other hand, a reputation of settling to avoid litigation costs will result in unwarranted claims, as some contractors will take advantage of that policy. You need to walk the line between the two.

Spending whatever it takes to avoid paying is a good policy – but only if you're certain that

you don't owe more. That usually requires better procedures, more detailed recordkeeping, and more reliable information than most public works managers and officials have. Improving these items will give greater assurance that your negotiation position is defensible and in the best interest of your taxpayers.

You can earn a reputation as a no-nonsense owner that will discourage unwarranted claims, but you might become known as an unreasonable owner, with the better contractors not bidding your projects and resulting in greater cost from lack of competition.

9. Professional Assistance



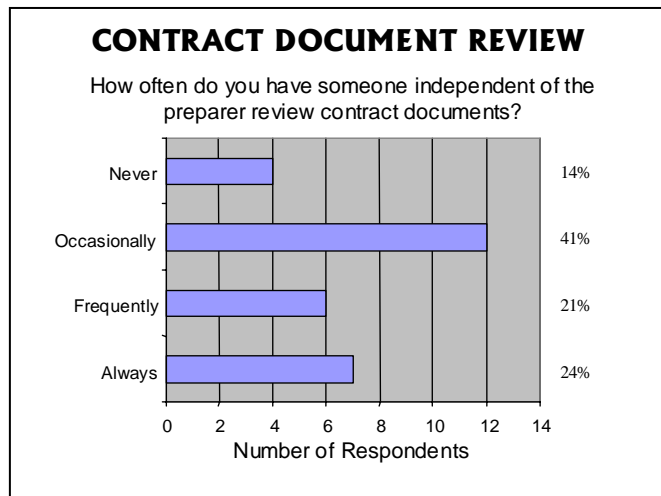
Commentary

These services can include value engineering, constructability reviews, schedule analysis, risk assessment, cost estimating for design reviews and the engineer's estimate, life cycle costing, and design-to-cost efforts.

We need to survey and correlate practices with results in order to determine whether and in what circumstances it pays to hire outside professional assistance.

In our opinion, input by construction consultants or retired contractors will save many times more than the cost of the service.

10. Independent Contract Document Review



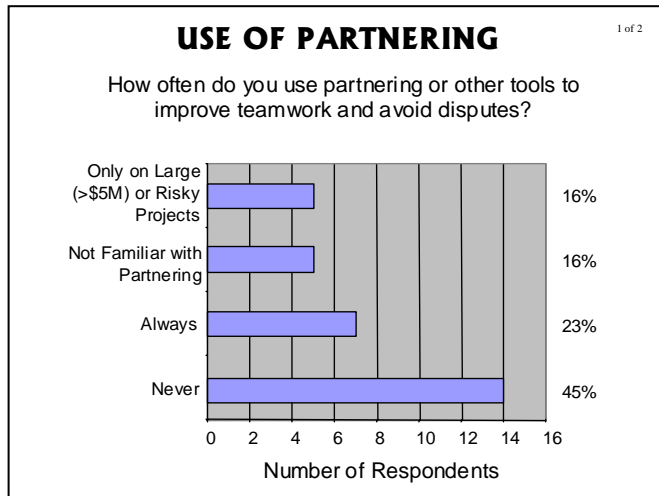
Commentary

We need to survey again and determine the correlation between independent contract document review and the frequency and severity of claims. A comparison of the cost of the independent review and the probable savings would be most valuable. Details on the type of review (typical design review by another designer, constructability review by contractor, or value engineering by professional) would also be helpful.

The fact that some agencies always or frequently secure outside reviews and some never or only occasionally do indicates a need for further investigation. If it is beneficial for some agencies, it is probably beneficial for

most or all.

11. Use of Partnering

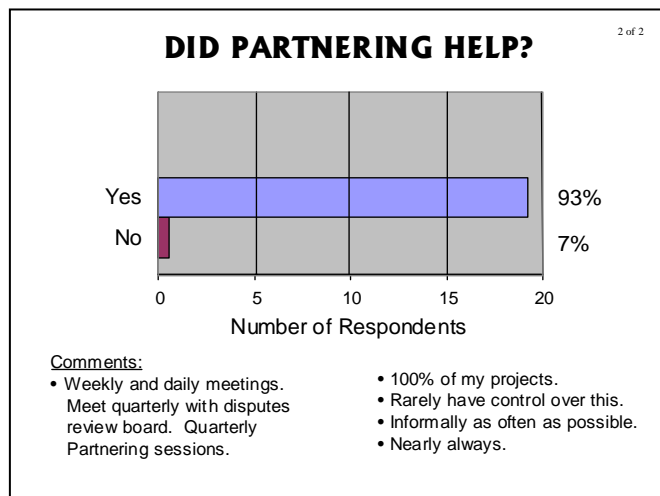


Commentary

The majority of agencies don't use partnering and probably don't understand how it works and its benefits, although some of them mentioned informal partnering and working as a team. An industry-association sponsored education program on what partnering is, its benefits, and how to implement it would probably result in a substantial increase in the use of partnering.

Again, the fact that some agencies use it on all or most of their larger projects indicates that there are significant benefits that the other agencies should consider.

12. Did Partnering Help



Commentary

Given the remarkably high 'Yes' response, we should examine this in much greater detail. If partnering is so good, why aren't more agencies using it?

- * Lack of knowledge of the process and benefits?
- * The cost?
- * Concern for losing control?
- * Concern for protecting contract rights?
- * Mistrust of contractors?
- * What else?

The cost of a one-day partnering session (normal for a five to twenty million dollar project) is only \$3,000 to \$4,000 – plus the

value of the time of the attendees (which can be several thousand dollars, but not out-of-pocket). A half-day session for a one to five million dollar project can be accomplished for only \$1,500 to \$2,500. The benefits will exceed those costs by an order of magnitude or far more. A well-conducted partnering workshop with good follow up can save hundreds of thousands of dollars from improved relationships and cooperation among parties.

We need to link the use of partnering to benefits – which shouldn't be too difficult in a general manner, but may be more difficult to quantify. And, we need to determine why partnering sometimes doesn't work and how to improve even a 93% success factor.

13. Summary of Participant Comments

Key topics emerged from a review of the comments by the participants at and after the seminar. A summary follows:

Key Terms

- * Risk Avoidance and Risk Management
- * Controlling Cost Growth
- * Loss of Control to Litigators

Most Important Actions To Avoid Claims

- * Partnering and constructability reviews.
- * Pre-job planning and timely resolution of changes.
- * Good documents, good contractors, and enforce the contract.
- * Pay attention, make full use of contract terms, train your personnel, and have the systems, processes and people skills.
- * Good planning and good project managers who aren't just paper pushers.
- * Understanding the rights and roles of the parties.
- * Work with the end user to avoid mid-design and (especially) construction phase changes.
- * Adequate contingencies (and initial budgets).
- * Experienced Clerk of the Works/Construction Manager/Owner's Representative w/the needed skills and backbone.

14. Recommended Actions to Avoid Claims

The following recommendations are based largely on our prior experience. Additional surveys are needed to confirm, correct, and prioritize these recommendations.

1. The Right Philosophy and Culture

To be successful, an organization needs the right prevailing philosophy and culture. Preferably, this is based on partnering and teambuilding. It should include: (1) reasonable expectations, (2) support of the governing body, (3) good management and experienced and trained personnel, and (4) firm but fair and timely resolution of disputes.

2. Adequate Budget and Timely Decision To Proceed

If the budget is too tight or the time too short, the governing body needs to provide a larger budget, additional resources, and more management attention.

3. Clear Objectives and Design Criteria/Architectural Program

Clearly documented objectives and a well-written scope of work (architectural program, engineering design criteria, etc.) are essential if the designer is going to design the project you really need.

4. The 'Right' Design Team – with Support and Oversight

Not just good designers, but good project managers of design – who guarantee commitment to your timeline are essential. Then, ensure your designer uses 'Design to Cost' and cost and time control of the design process.

5. User (and Operations and Maintenance) Input During Design

Involve the user groups in pre-design (architectural programming, setting design criteria) and design. Train them in how to review plans and help them organize so that they identify their needs during design instead of during construction or later. In some cases, use design charrettes to get a broad range of input. Be certain to get a 'sign off' by key user groups. Use life cycle costing to avoid operational budget problems in the future

6. 'Construction Expertise' During Design

This should include constructability reviews, value engineering, cost estimating of each design phase, and Cost and Scope Management throughout the design process.

7. Well Designed Plans and Specifications

This is even more important that the general conditions, as design errors and unexpected changes can wreck havoc with the contractor's budget, leading to claims for more time and money, conflict over entitlement and costs, and construction disputes. In some cases, especially if one of the parties is unreasonable or unaware of contract law, claims will result and partnering efforts will fail.

8. Good Contract General Conditions

Well-written contract conditions provide the Owner's Representative with the tools to enforce appropriate behavior by the contractor. They include: (1) updated scheduling specifications, (2) a reasonable changes clause, (3) an effective disputes clause, and (4) all of the other contract clauses affecting the schedule and resolution of disputes. For details, see Steve Pinnell's master scheduling specification.

9. Bid-Phase: Marketing Your Job to the Industry

In a competitive bid (design-bid-build) situation, it is essential that a public works agency develop a reputation for firm but fair contract administration, in order to ensure adequate competition and that the better contractors will bid your projects, while the 'claim artists' will avoid them. In addition, public works owners should alert the bidders that you want them to bid your project – through contractor associations (AGC, etc.) plus individually to those contractors that you particularly want to bid your projects. Careful scheduling of bid opening for the best time of the year, while avoiding conflicts with other bid openings will also increase competition and lower the overall bids.

10. Timely Award and Notice To Proceed

Prompt award and issuance of notice to proceed will help avoid delays.

11. Effective Pre-Construction Conference and Partnering

The pre-construction conference and partnering will help with teambuilding, so that all of the parties (owner's representative, designer, general contractor, subcontractors, etc.) are working together. The pre-construction meeting is when you should review the schedule (at least a preliminary schedule), set the 'ground rules', create reasonable expectations, and explain important issues.

12. Joint Schedule Review, Schedule Updates, and Time Extensions

This is an essential element of schedule management. For an overview, see page two of our October 2004 newsletter.

13. Submittal Schedule, Log, and Charette

Late material delivery is a frequent cause of delay. To avoid the possibility: (1) list the key submittals in the bid documents and require the contractor to submit a submittal schedule, (2) maintain a submittal log and update it regularly to ensure against delays, (3) tie key submittals to the CPM schedule, and (4) use charettes when appropriate for key trades and materials.

14. Change Management – Recordkeeping

Maintaining complete and accurate records is essential to minimize claims. This includes, (1) RFIs and RFI logs, (2) forms and logs for notices of change, ASI, change orders, change order proposals, field authorizations, etc. form, procedures, and log (with categories), (3) force account recordkeeping, photographs that are date stamped and annotated, (4) superintendent and subcontractor daily field reports, (5) correspondence logs and numbered serial letters, (6) telephone conversation records, (7) emails and memos, (8) minutes of meetings, (9) and others.