

Group Memory
 Bridge Construction Forum
 March 7, 2007
 Southern California

Upshot

These are the action items brought forward at the meeting.

Ref. #	Who	What	When
--------	-----	------	------

Critique from this meeting:

What went well	What Needs Improvement
1.	1.

1. Opening –
 1. 1. We are trying to generate ideas to improve efficiency, and improve the way we do business.

2. Ground rules:
 2. 1. Introduce yourself when you speak.
 2. 2. One meeting at a time.

3. Opening remarks
 3. 1. First forum was 2001.
 3. 2. Purpose is to share information and concerns
 3. 3. We will be collecting your ideas as you speak today. We will combine this input with the Northern Forum and identify action items.
 3. 4. Topics from all the past forums are on the OSC website.
 3. 5. Expectations:
 3. 5. 1. New ideas,
 3. 5. 2. management panel open discussion, Feedback on the forum.

4. Structural Specifications discussion
 4. 1. Bridge demo specs need to be more specific. “One size spec fits all” does not work.
 4. 2. Bridge rep needs to understand what is being done on the job.

4. 3. Review time with specs on A + B. Review times are excessive. We can't keep the job moving with 15 – 30 day review times. Example: Column case approval – twenty or twenty five days to review the shop drawings is too long.
 4. 4. Specs include product specific information and there is not enough background work done to see if it should be included in the spec.
 4. 5. Combining various welding specs – API, ASTM, AWS specs makes a Frankenstein spec.
 4. 6. Job by job items – is pipe coming from specific manufacturer? Pre-approved manufacturers on an annual basis.
 4. 7. Approval to change - metric conversion issue created an un-standard size. Requested to use standard size, and approval took too long. Made up the particular column casing per metric spec and got approval to use it the day I was putting the specially made one in.
 4. 8. MSE retaining wall specs – QC/QA spec is extremely rigorous. Cost increase is at least ten per cent; competitiveness has dropped – pre-casters who can/will do the work is limited. How do we talk to designers?
 4. 9. Welding specs – ERW process is a misnomer – it is not welding, per se. Process needs to be looked at – Need edits to Section 8. This does not really fit the WQCP.
 4. 10. When will plain language specs be implemented? What is the status on this? (See Office Engineer Web Site.)
 4. 11. Form liners: Mandatory Elastomeric - why is that specified? Why do you tell us every form liner on every job? Six and seven times more expensive...
 4. 12. Form liner: Pattern repeat on the form liner should match footing depth.
 4. 13. Form liner: innies and outies: Difference is thousands of dollars. If you intentionally make it an outie where we have to cut the form liner to match it is very expensive...
 4. 14. Haunches on tall type 1 walls - Retaining walls – walls eighteen feet or greater is where the haunch starts. Why is this? Include batter in any wall higher than 18 feet.
 4. 15. Submittal reviews prior to award – at the job level the review periods are outstanding – that did not flow through other departments, specifically METS. Their clock does not start until there is an award.
 4. 16. Materials specs: Rock gradations different than other agencies – Need to alternate the location of the Rock Products meetings. (Contact Phil Stolarski.)
5. Structure Economics Discussion
5. 1. Bidders inquiries – we need real answers.
 5. 2. Materials on hand – contractor responsibility
 5. 3. Schedule of values within a Pay Item – One standard list for materials on hand.
 5. 4. Partial payments should be in the specs, not based on “internal policy.” Example: message boards.
 5. 5. Materials escalation. There are spec that address steel, but they do not address MSE. (Check?)

5. 6. Rock and sand materials – not indexed; only asphalt/oil. In D-11 the cost of rock products has gone out of sight.
 5. 7. Escalation – when we get into mega projects – is there any thought to labor escalation? We have to account for this in our bids. How can we share the risk?
 5. 8. Change orders – They get field agreement in the beginning but they are bounced - getting rejected and sent back for re-work.
 5. 9. Develop guidance for RE and Structure Rep to understand the dynamics on forward pricing that includes risk.
 5. 10. Would be helpful for contractors to turn in “This is my optimal scenario” to CT engineers.
 5. 11. Caltrans needs to improve the estimates – be more acquainted with the realities in the field. (example: parking drill rig near vs. five thousand feet away at a gore area. Difference can cost thousands.)
 5. 12. Give the right at job site level to get agreement on analysis of extra work, rather than forcing the issue to go to DRB.
 5. 13. Agreed upon price: contractors not all aware that this is preferred.
 5. 14. What about a one-day estimating seminar where CT and others are stepped through the estimate and then shown what the job actually cost.
 5. 15. Risk management – need to use a range of hours for force account work to reach agreement with the RE.
 5. 16. Joint classes with industry to collaborate on the Caltrans RE Certificate Program educational effort.
 5. 17. Time to execute CCO work – Takes a long time to get the approval. Cash flow issue.
 5. 18. CCO's - Notice to proceed – Some have been pulled back – there is no time frame for schedule review. CCO review has not contractual timing on the review. CCO's with prior approval should take days, weeks not months.
 5. 19. If our designers do the change, they need to include the estimate with that change.
6. Structure Materials Discussion
6. 1. Split faced soundwall block – should be addressed within the spec to acknowledge there is an architectural block which does not comply. There needs to be a vehicle to allow us to get through the process.
 6. 2. Why don't we move towards performance spec on concrete?
 6. 3. Should specify performance, not name brand. Ex: Sheet piling.
 6. 4. Form liners – getting more complicated, more pre-approval.
 6. 5. 2x2 sample for painting –
 6. 6. MSE Sound wall – only two pre-casters active in So Cal. One no longer wants to do CT work.
 6. 7. Spec creep on MSE sound wall – manufacturer requirements are often very different than the CT requirements on the backfill; this costs the state a lot of \$\$.

- 6. 8. Caltrans standards – why use the gamma gamma; the Kelly ball; pre-qual joints on micro piles – Why does Caltrans have its own standards different than what everyone else uses?
- 6. 9. Suppliers want to see things more standardized, not unique to Caltrans.
- 6. 10. Pipe piles – concrete piles – several different manufacturers, several different sizes – why do this? Why can't we prequalify manufacturers rather than doing this project by project?
- 6. 11. Spec creep costs \$\$.
- 6. 12. Don't make the pre-qualification overly involved.
- 6. 13. Caltrans insists on Caltrans spec, not industry spec.
- 6. 14. Gamma-Gamma – New CTM – not being used anywhere else in the world.
- 6. 15. Cost of audits of pre-cast manufacturers is prohibitive. ISO-9000 certified company.
- 6. 16. Inspection gets to levels that are intrusive.
- 6. 17. Put responsibility of the QC on the contractor.
- 6. 18. QA inspector work does not seem to be coordinated – people who do the QA inspections for the same product cross in the air... There are significant savings for Caltrans and the primes if you could eliminate some of the QA trips – there may be three or four on the same product on a project.
- 6. 19. Manufacturers provide WQCP to the contractor. They perform QC work for the contractor- they never send a QC Manager onsite.
- 6. 20. Get coordination between the approval and manufacturing. Manufacturer has a lot of planning to do in the mill to be able to roll the project.
- 6. 21. No one produces pipe every day that will satisfy Caltrans due to the paperwork required.
- 6. 22. Caltrans should consider accepting certificates of compliance on rebar – Why can't Caltrans accept the certificate of compliance on other materials?
- 6. 23. Specs from Caltrans are used by municipalities – people who are there to monitor for those municipalities may not be able to effectively monitor for compliance.
- 6. 24. Certificate of compliance – METS wants certificates sooner on 14 And 16 inch pipe. Manufacturer is responsible for product right up to shipment, and does not want to certify until product is loaded on the rail car for shipment, due to liability.
- 6. 25. Simplify the Welding Specs on connections - - Hoop, couplers and etc...
- 7. Structure Bidding and Construction Environment
 - 7. 1. Proper contract time is needed – seems like estimates/schedules are all over the map – too much political influence.
 - 7. 2. Oversight - - what is the engineer doing?
 - 7. 3. Errors and Omissions – need more checks
 - 7. 4. Caltrans engineers need to review the plans – when the designer has a design plan that says one thing and a spec that says another.... Problem. Need independent assurance... ensure design standards are used.

- 7. 5. One measure for plans & specs - DRB – how many times does the recommendation by the DRB in favor of the contractor and rejected by CT subsequently get resolved in favor of the contractor, overturning the CT rejection?
 - 7. 6. Permits – probably Caltrans interpretation in permits summary will be uncomfortably conservative from perspective of the contractor.
 - 7. 7. We would like more detail on the “No Merit” responses.
 - 7. 8. Put the various technical committee members/contact information on the forum web site so the contractors can participate all year long.
8. Panel opening comments
- 8. 1. DES
 - 8. 2. Bob P –
 - 8. 2. 1. Timely payment on change orders
 - 8. 2. 2. DRB process – Informal process would allow issues brought to them for a consultation to decide if you want to go to the formal DRB.
 - 8. 2. 3. DR Advisor – spec should go in around the first of the year. A one-person DRB panel for projects between 3 and 10 million dollars.
 - 8. 2. 4. Beginning of work spec –modified from a 15 day start to a 55 day variable start for projects over 5 million and two hundred days.
 - 8. 3. Design –
 - 8. 3. 1. English Units used for all projects starting March 2005. 150 projects next fiscal year will still be in metric units. In 8/9 year there are thirty to fifty; beyond that, there are only two projects that have metric exception; the rest should be in English units.
 - 8. 3. 2. Deadline for metric projects is July 2007; any project delivered after that date requires an approved exception.
 - 8. 3. 3. Estimates – Bid Trend has gone from over to below the engineer’s estimates in the last year.
 - 8. 3. 4. Material sources and aggregate supply – CT encourages the project teams that adequate supply of aggregate is available. CT will get aggregate supplies secured on projects where it makes sense to do so.
 - 8. 3. 5. Design information on staging is under development. We want you to help us with this – the audience for this information is designers. We want them to put this information into play before they finish the project. This will be going out in draft form for comments.
 - 8. 4. Environmental –
 - 8. 4. 1. Now working with FHWA on Environmental Commitments Record. FHWA is now auditing Caltrans on this in a process review. Mainly environmental and archeological issues.
 - 8. 4. 2. Working on State Water Board, Coastal Commission, etc on new nationwide permits. To be published on on March 12 in the Federal Register.
 - 8. 5. Traffic Ops

- 8. 5. 1. Sometimes we are client, sometimes we are stakeholder on projects.
- 8. 5. 2. We recognize the need for more flexibility on lane closure windows.
- 8. 5. 3. COZEEP – We will continue to use this to make the work areas as safe as possible.
- 8. 5. 4. Permits for transportation – We are working to keep the information on clearances and weights current in the permits routing systems.
- 8. 6. Chief Engineer
 - 8. 6. 1. We are working together as a team on the issues brought to us.
 - 8. 6. 2. Not Business as Usual. We are not afraid of making a sea change – we have a large organization so change takes time, but we are not afraid to do it.
- 9. Questions or comments from the audience, directed to the panel.
 - 9. 1. SWPPP – Need consistency of cost for SWPPP. Need bid items for storm water.
 - 9. 2. Time – We need to improve on time specifications. On smaller projects can we do something on the way we administer time on smaller projects?
 - 9. 3. Windows – doesn't seem to be a connection on activities and the work windows. We need more flexibility for certain items. The more work we do while we are running the equipment, the cheaper the work is overall. We need longer work windows. Caltrans can succeed if it manages the expectations of the traveler.
 - 9. 4. We need to have better design and plan work. Cut and Paste work on a CADD system is not good engineering – if there is a mistake on the first cut and paste and it is repeated five times that is not good. We need to get plans that look like what we are building.
 - 9. 5. It is not unusual for us to redraw things because there is not enough detail on the plan from CT. The more information on the plans, the less the mistakes.
 - 9. 6. Interim safety review – Needs to be done to make sure we are doing the right thing.
 - 9. 7. MSE – state design has never been built.
 - 9. 8.