

**Minutes**  
**LCI Design Forum**  
**Berkeley, CA**  
**December 10, 2004**

The first meeting of the Lean Construction Institute's Design Forum was held on the University of California, Berkeley campus on Friday, December 10, 2004, and was attended by approximately 40 people (see attendee list attached). The meeting was devoted to taking the first steps in redesigning the design process.

David Mar, principal of Tipping Mar Associates, chaired the meeting and kicked things off with a position paper describing some of the problems with the way design is currently done and some of the opportunities for improvement (see position paper attached). The presentations that followed each picked up on one of the improvement opportunities and developed it further, with case studies and examples. (Presentations can be downloaded from [www.leanconstruction.org](http://www.leanconstruction.org))

In the discussion of David's position paper, a counter position was offered to the proposal to pay specialists hourly fees in predesign: 'It's important to me to see how a client values my services in predesign, so I prefer a fixed fee. I'm willing to bet on my ability to perform.'

### ***Presentations and Learnings***

Following each presentation, we recorded what attendees heard and were impressed by. Below are those notes.

#### **Laura Lesniewski – Design with the charrette process**

- Loved image of everyone sitting down eating
- A community that your kids could come back to – my grand kids!
- Extremely valuable to figure out what you don't know. Beware being a knower.
- Helped clients figure out what they don't know
- Collective competence
- Highlighted how we professionals must stretch our abilities. Must train and mentor people for that.
- Tools (Packard project) to break through current thinking; e.g., the CFO's
- Also being willing to share what we do know
- Avoid design by ambush
- Noisette Rose
- Key point: led by owner values
- Owner put team together by how they solve problems-took them for a test drive
- Different ways to establish a common vocabulary
- A consistent focus on getting the right players for each project

- Truly understanding what's in front of you

### **David Mar – Design with construction in mind**

- Allow time and resources to be spent on engineering
- Innovation through adaptation
- Intellectual property and group relationships—inhibits? Supports?
- Bringing people together to rethink and challenge
- Knowing when accommodating another player can make life easier
- Anyone can take the initiative
- Tapping knowledge outside your normal circle
- How to compensate contributors?
- Never dreamed we could do a shear wall out of straw!
- Really like the idea of the job launch
- Tune the architecture
- Early involvement
- Engage craft skill sets
- Question standards
- Learning from extreme situations
- Start from the value proposition
- Escaping from fear of legal situation
- Knowing when to stop/slow down

### **Blaine Tuchsherer – Designing to Target Cost**

- Other challenges in trying to design to target cost:
  - How to gain confidence in cost numbers
  - How to avoid losing sight of other values than cost; e.g., aesthetics, daylighting, etc.
  - Understanding the impact of different delivery methods such as design-build
- Clarity of responsibility of individuals
- Necessity to drill down
- Hire alumni
- Liked rules of engagement for the target cost teams
- Budget development is more than just target costing
- Liked concept of common language

### **Greg Howell and Ed Beck – Reliable Promising and Pull Scheduling**

- Start with the goal in mind
- Provides role client has to play
- The conversation is between people—what they need to do their work
- Reliable promises is a big idea-commitments
- Starting process (design) with scheduling
- Hopeful can use pull scheduling to formulate a mutual process for all team members—that serves client values
- Helps educate other team members
- Focuses people on what absolutely has to be done

- Reveals ‘aha’s’ and ‘oh shoots’
- Promotes better understanding of the handoffs
- Important to avoid hidden contingency—make it public so can see and decide how to spend
- Liked that the pull schedule included all the steps you knew would be there, such as revisions after permitting authority’s review
- Reaches effectively across organizations

### **David Fouché – 3D Modeling**

- Multiple versus single building models
- Focus on process first, then bring tools in
- Use multiple tools, not just one package
- Can use models to look at sequencing (4D)—testing and communication
- Using models for constructability analysis
- Who can use what tools? Who’s on the team? These are often more relevant questions than what’s the best tool.
- A picture paints a thousand words
- If you can get quantities out of a model, it pays for itself by that alone
- Finding a lot of value from a construction perspective in 3D models

### **John Sutton - Contracting for Excellence**

- Coherent system integrating value commitments
- Goal setting descriptions
- Elaborate—stakeholders at all levels
- Simple concepts such as credibility

### **Philip Sun – Problem Seeking**

- We should manage square feet as well as we manage dollars
- I never really appreciated the importance of having people sign off

### **Ed Beck – Fees and Meeting Performance Targets**

- A good summary
- Demonstrated that it is enormously difficult to figure out incentives

### ***Next Steps***

- Future Design Forum meetings
  - Frequency?
  - Continue to start with a position paper
  - *Note: LCI has already scheduled a Design Forum meeting for Chicago June 16-17, 2005.*

- Add today's learning to the position paper and add speakers' voices, then circulate for comment, then publish. *David Mar and Glenn Ballard have this action.*
- Form work groups around points in the position paper. *Anyone wishing to form a work group should contact Glenn Ballard, [gballard@leanconstruction.org](mailto:gballard@leanconstruction.org), 415.710.5531*
- Design the design process in the next meeting using the charrette method. Try for late February again in Berkeley. *Glenn Ballard to explore possible dates and schedule the meeting.*

## ***Plus/Delta***

### **Plus**

- Recording feedback from the audience after each speaker
- Having practitioners speak
- Variety of presentations
- Immediate discussion
- Good facilitation
- Quality of content
- Great lunch

### **Delta**

- More time for discussion; had one too many presentations
- Enforce time limits
- Hold meeting in a room with windows
- Schedule from noon to noon
- Add devil's advocates