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Critical Issues Analysis
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Executive Summary

The PACE Roundtable held on October 13, 2005 was a very good place to hear about the issues that are affecting construction. It allowed an open forum for students and industry people to get together and discuss problems, expectations and the future of the construction industry. There was a chance to go to two breakout sessions and group discussion on team building and the Katrina resultants.

I went first to the discussion on integration. In it, the topics of performance specifications, value engineering, design assist, and early subcontractor involvement were discussed. Here, things like the issues with incomplete construction drawings were looked at to see where improvements could be made. By involving project teams earlier or utilizing design assist options less change orders due to a lack in system cohesion. Another thing that would be gained by bringing contractors on earlier is better value engineering.

For the second session I attended a dialogue on team unity. This session covered owner and design professional motivation, personal skills, and contractor prequalification. All of these topics are oriented toward how a project team can learn to work together well to get a project completed. By finding a section of the team's drive, one can learn how to deal with them and what is really important. Contractor prequalification also helps teams work well together because it forces all members to be proficient for their jobs. This allows for more trust in team members.

The team building and Katrina also gave insight in to the workings of the construction industry. One showed the importance of making good teams. The other expanded on possible changes to the construction industry over the next few years with respect to construction techniques, work loads, work availability and material prices was a huge advantage.

Critical Industry Issues

The PACE Roundtable was held on October 13, 2005 at the Penn Stater Hotel and Conference Center. The day was started with a welcome breakfast and introductory speech. Then the attendees divided up into one of the four sessions. For my first session, I attended 1-A: Integrated Design Management.

This session focused on improving the construction drawings by innovative approaches such as performance specifications, value engineering, design assist, and earlier subcontractor involvement. Performance specifications seem as though they can either help or hurt the project depending on the project and how limiting the specifications are. A good way to improve specifications is by design assist or just allowing subcontractors to pick their systems and locations by earlier involvement. This will allow subs to use systems that they are good at installing and know work well.

The other important topic that was discussed was that of value engineering versus cost cutting. The difference being one reduces price while maintaining the buildings integrity while the other just reduces the bottom line. It was discussed that the earlier that this is done the better. Most contractors that I talked to implied that value engineering should be performed while the building is in schematic design and only about 5-10 % of projects do this correctly. This means that the subcontractors and Project Managers need brought onto the project earlier on (or a design assist option used). This could lead to more contractor desire for design-build delivery method.

Our last topic focused on owner motives. We discussed that for most owners the project cost, schedule and final appearance and use are the driving forces for the owner. It is a contractor's job to make sure that the owner gets what they need for the building to be complete on time, on budget and with their desires. It is also our job to enforce an appropriate distribution of money. This means that we need to be able to tell the owners no to elaborate systems that will do little for the project. It surprised me to think of telling the owner how to spend his/her money was part of my job. I thought we just acted an executer of their will.

Going into this session I was interested in specifications since I had written and corrected a number of these for my last job. I also desired to learn how to give solid

value engineering advice. Although these issues had little bearing on my thesis project at this time, I still found the discussion filled my interest and provided me with useful ideas for my future jobs.

For my second session I decided to switch topics. This time I chose to attend Session 2-D: Team Building – Project-Level Team Development. This session discussed owner and design professional motivation, personal skills, and contractor prequalification. All of these topics are oriented toward how a project team can learn to work together well to get a project completed.

Owners are motivated by a number of things. Some are out to make money. Others need additional space. Still others would like recognition. All however would like a good experience while having the building designed and constructed. This means that listening to the owner's expectations, monetary limitations, and needs is an important skill. To do this it was stated that the soft skills come into play. Being personal and using the soft skills (listening, reading body language, expressing interest, looking people in the eye, good communication etc.) are central to ensuring owner satisfaction. I was surprised to hear that a few business and etiquette classes would be useful. These skills would then also be useful for managing the rest of the project teams.

The other key person whose motives it is necessary to understand is the Professional. If they are looking for notoriety, then asking to change parts of the building might be difficult. It is important to find out the mission of the company that they work for as well as their own agenda. Also it is important to find that one thing that should NOT be changed. Figuring this "sacred cow" out early could prevent a big issue at later times. I was a little shocked to hear that design teams really do like being involved in the construction. A good piece of advice that I picked up was: if you allow them participation in the construction, then they will accept more of your ideas with the design changes.

The last subject that was discussed in this session was contractor prequalification. It was pronounced that many of the contractors looked very favorably with prequalification. Requiring firms to submit their financial, safety, experience, and team information helps owners limit who bids on projects. This also prevents under-qualified companies to sweep in and low bid a project from the true competitive bidders.

This issue had a lot of bearing on my thesis. I am looking into the cost and team impacts of requiring WBE/MBE soliciting for state jobs. Hearing professionals state that they like when prequalification is required on jobs surprised me and also made me wonder if they look at this in a similar light. I met a number of people at this conference that work on State jobs that I would be able to send out a survey to once one has been developed.

When this session concluded, the conference was dispersed for lunch. After lunch, we rejoined in the large room for a discussion on the effects of Hurricane Katrina. Listening to the professional depict what they thought would change in our industry over the next few years with respect to construction techniques, work loads, work availability and material prices was a huge advantage.

I was particularly interested in the location of work that would be expected in the next few years. At first, I was nervous about needing to move to the south to be able to work in a good company after graduation. Hearing that, although building cost will go up due to labor and material price increases, there is still expected to be a continuous amount of work in other areas made me extremely happy.

All in all, I found this roundtable to be very good. It provided a place for students to hear what concerns there are in the industry and the professionals to see what students are coming through the program this year. I was pleased that this conference gave me extra confidence for beginning a job in a company. I was unsure how prepared I was for graduating and becoming a professional, but now I feel sure that will some work the transition will not be too difficult. For this especially, as well as everything else, I would like to thank the industry members again for allowing this even to happen.