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Executive Summary

Alternative Methods and Research

The following report identifies problems and concerns with the Cancer Institute project and the construction industry as a whole, presenting opportunities for further analysis and research. These issues will become the core of the final thesis proposal, and eventually the topics of interest for the upcoming semester's research.

The first section of the report summarizes three sessions attended at the PACE Roundtable Meeting held in October of 2006. Breakout sessions were held on three general industry issues, with each session looking at a particular aspect of the problem. This paper focuses on complex MEP systems, BIM implementation and challenges, and building respect with the owner. Ideas generated through these discussions helped to shape some of the technical analysis proposals.

Next, a critical industry issue is analyzed and discussed with the intent of carrying out thorough research on the topic. The problem identified deals with subcontractor bid markups and their relationship to the construction manager (CM) or general contractor (GC) that is on the job. A survey-based analysis will lead to the formation of a matrix which will aid these companies in reevaluating their subcontractor management methods and how to better their relationships and bid competition.

This section is followed by an identification of project-specific problems that the project team is facing or will potentially encounter. This includes the Emergency Delivery renovation plan as related to the Infection Control Risk Assessment (ICRA) plan, the radiotherapy construction, and the early phasing plans.

Following this problem identification are summaries of the applicable analysis methods that will be used for each, falling under the core thesis investigation areas of value engineering, constructability review, and schedule reduction / acceleration. Lastly, a weighted matrix depicts the distribution of effort that will be expected for all four research topics throughout the second semester.