



A. Executive Summary

Technical Assignment #3 explores areas of Ursinus College Residence Hall 2 that are candidates for further research, alternative methods, value engineering, and schedule compression. After attending the PACE Roundtable event, completing technical assignments #1 and #2, and exploring alternative methods, many areas of this project present possible research topics for use in my final thesis proposal.

On Thursday, October 12, 2006, I attended the PACE Roundtable event held by the department. The theme this year was “Building Respect.” By attending I was able to gather information on several possible research topics. Sessions that I attended that provided valuable information from the industry members were:

- Operations and Maintenance: In-house Teams and Business Development
- BIM: Education and Workforce Development: Who will lead BIM teams
- Building Respect: With Owner’s and Operators

Shortly after this event I also had Bill Moyer of Davis Construction attend AE 473 and discuss a collapse of a parking deck that Davis Construction experienced. It was through this presentation I hope to further research precast concrete erection safety methods and provide alternative methods for that. OSHA does not offer many safety guidelines for this particular form of construction.

The Problem Identification section of this report discusses areas of Residence Hall 2 that can be further analyzed. These areas include alternative methods, value engineering, as well as schedule compression/acceleration. Most areas of interest on this project will focus on alternative methods to accelerate the schedule of the building. This is important because Warfel Construction Company has a very limited amount of time to finish a project of this size as well as have the building enclosed before bad weather arrives in Collegeville, Pennsylvania. Many of the areas that will be analyzed will also present value engineering possibilities as well. The overall theme to my research is precast concrete and constructability, cost, and schedule reviews that are a result of switching to the precast system.