

Adam Finley

Construction Management Option

Thesis Proposal



**The Pennsylvania State University
Health and Counseling Services Building
University Park, Pennsylvania**

Executive Summary

Health and Counseling Services is the latest addition to the Penn State's University Park campus. It will replace the aging Riteneour building as a state of the art health and counseling facility near the downtown State College district. This proposal will address three technical analysis areas and one critical issues research subject. The purpose of this report is to clearly identify problems and then layout the associated research and analysis that will be performed to solve the problem. Two of the technical analysis will incorporate a breadth into electrical and structural options. The three technical analysis areas are the emergency electrical system, curtain wall, and commissioning. LEED cost and schedule increases are the focus of the industry research.

The emergency electrical system has been identified through the owner as a potential problem. Penn State wants the building to have the ability to stay in full electrical service in the event of a city, state, or national disaster. At this time, the method to accomplish this is under review by the electrical engineer and Penn State's Office of Physical Plant. The second analysis aims to solve a problem with the cost and schedule of the curtain wall. The curtain wall has been under scrutiny since the bids were received due to the unexpected high cost that all contractors contacted priced from the documents. The last analysis evaluates the commissioning process. Commissioning of new buildings has taken longer and caused delays to project completion on the campus.

The critical industry issue that this proposal lays out a plan for solving is green design and construction cost and schedule increases. As design professionals use less widely known materials and more complicated designs on green buildings, subcontractors have increased their schedules and prices.