

Breadth Proposal

Revised Breadth Proposal for Spring 2011 Project



APPELL LIFE SCIENCES

York College of Pennsylvania

York, PA

Joshua R Martz

Mechanical Option

1/14/2011

Dr. Srebric-Faculty Advisor

Construction Breadth

Since the use of a GSHP system is being implemented the schedule cost and schedule will change. An analysis of the schedule of the cost to the construction schedule and changing of the schedule will be done. Excavation is a big part of adding the GSHP system so this will most likely add time to the construction schedule, with drilling bore holes and repaving the parking lot. Along with this a life cycle cost analysis of the GSHP system will be done to ensure that it is efficient.

Electrical Breadth

Since the use of a GSHP system is being implemented there are many pumps being added to the system. The adding of these pumps will change the electrical demand from the mechanical systems. Changing the sizes of the feeders that will go to the pumps will have to be done and also more will have to be added. The size of the main switchboard will most likely change, so it will have to be resized accordingly.

Tools for Analysis

Proposed Breadths

For the construction breadth research on excavation costs will need to be implemented. Also, a schedule of construction from the project might be needed to add and make changes to, so a comparison of time for completing the initial project and redesign can be done.

Information about the current electrical system will be needed to help compare the new system that will supply the mechanical systems. Research will have to be done to ensure that the system will be efficient enough for the new mechanical systems.