



### **Breadth Work: Solar PV System**

With the increasing energy costs and environmental concerns related to conventional energy methods, I plan on evaluating the feasibility of using a photovoltaic array on the roof of the Natty Boh building to help meet the energy demands of the building. Some of the factors to be considered are energy load capability with the current roof area, initial cost, and simple payback period.

### **Breadth Work: Mechanical**

The mechanical equipment within the Natty Boh building will be affected considerably by the changes in the lighting and electrical work, specifically the space above the conference room ceiling and the roof. I plan on increasing the ceiling height within the conference room, and the Solar system will need as much space on the roof as I can manage. Therefore, I will be evaluating the mechanical equipments layout and location and relocating as needed to achieve a single, cohesive design.