

Walter Nichols
Hawthorn Building
Altoona, PA



Conclusions

Overall, I feel that my goal to redesign the architectural engineering systems of the Hawthorn Building was successful. I was able to achieve the lighting systems I wanted the way I wanted them while meeting ASHREA 90.1 as well as the IES guidelines. I was also able to optimize the lighting system by selecting the most efficient lamps that I could find, saving money, but more importantly, saving energy. After changing the lighting system in the music room, I was then able to do an acoustical analysis to make sure that the changes I made to the lighting as well as the acoustics were ok for the room and it's activities. Finally, I was able to resize the electrical system according to NEC 2002 to make sure my changes to the lighting system were ok. Though this thesis project, I was able redesign 4 building systems to my liking, and then prove that I did the changes correctly. Because of these reasons, I feel the project was a success.