



Thesis Proposal

Executive Summary

In the upcoming semester I will be performing an in-depth study of the Woolly Mammoth Theatre. In this study there will be two depths prepared; the redesign of the lighting and the electrical systems. Also there will be two breadths prepared to incorporate other important building systems in the building.

For my lighting and electrical depth, I chose to focus on the entrance canopy, lobby, theatre and office suite. The lighting in these spaces will be redesigned to make them come alive. An energy efficient solution will be a main consideration in all of the spaces. Following the new lighting design, the panelboards, circuiting, feeders and branch circuits will be redesigned.

For my first breadth, I will perform an acoustical analysis of the 6000 SF theatre space. The reverberation times will be found and the current acoustical solution will be analyzed. An alternate solution will be provided if necessary. My second breadth will be an analysis on hydronic heating systems. Equipment for a new system will be designed, and a cost analysis of the will be done. Then the payback period will be found using previous electrical bills from the theatre.