

## EXECUTIVE SUMMARY

This document proposes several different topics for my research next semester. The four analyses that I chose include schedule deceleration, guest room energy conservation, efficient landscaping, and the impact of the current economic status on my project. The majority of my topics focus on energy use and ways to reduce overall lifecycle costs.

### Analysis I: Schedule Deceleration

This analysis focuses on the choice by the owner to decelerate the schedule and overall project finish date by one year. An investigation into the cost implications of completing the project on time and letting it sit empty for the additional year is performed. Research is done to determine the overall lost income the owner will incur by not opening in March 2009.

### Analysis II: Guest Room Energy Conservation

A significant amount of energy use in hotels is wasted due to occupants not turning off lights and turning the heat down when not in the room. This analysis investigates ways to reduce energy use in each of the guest rooms by altering lighting and mechanical fixtures and controls.

### Analysis III: Efficient Landscaping

This analysis topic deals with the landscaping plan and irrigation system in place. I investigate alternative plants and their organization on site in order to reduce redundant watering. A redesign of the irrigation system is also proposed.

### Analysis IV: Economic Impact

This final analysis explores the impact the current economic situation has had on the project. Value engineering has changed a large portion of the systems in the building and this analysis looks into which of those topics impact the overall image the owner wants for the building.

### Breadth Analysis 1: Lighting/Electrical

Analysis II incorporates a lighting redesign in the guest rooms for reduce overall energy use when the guests are and are not in the room. The lighting breadth will be used to find before and after energy costs and payback period for the added fixtures and systems.

### Breadth Analysis 2: Mechanical

Analysis III incorporates an irrigation system redesign. I propose to add a rainwater collection tank and reorient the planting and piping system to provide better water efficiency.