

Cathedral Place

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Executive Summary

Based on the lighting and electrical redesigns of the building at an in-depth look, the impact these design have on the building stretch to all of the remaining building disciplines. Of particular interest to these redesigns are the cost impacts they will have both initial, and long-term (payback), and the mechanical impact elements such as daylighting will have on the space. The additional analyses of these topics will give a much better real-world look at the building and broaden the scope of the project such that I will have a much better “bigger-picture” look at the building and the necessity to integrate many of its components.

The mechanical analysis will take into consideration the use of daylighting specifically at the open office and reception areas of an office tenant space. The thermal characteristics of the glazing on the curtainwall, and the glazing applied to the skylights (and skylights in development) have a great impact on cooling and heating loads over the course of the year. The possible integration of a daylight harvesting heat-storage option will be analyzed briefly, and the possibility exists for the analysis of further utilizing the steam utility provided to the building currently.

The construction management breadth topic will take all of the redesign issues and the breadth work into account and attempt to quantify as a cost or profit the impact these systems and redesigns will have initially and into the long-term. Analyses of costs incurred from a utility standpoint, a construction standpoint, maintenance and life-expectancy standpoint, as well as development and ownership profitability can be accounted for in the construction management breadth analysis. While all redesigns have inherent cost effects, attempting to redesign systems with the intention of reducing budgets for those systems should be addressed separately.

The following breadth analyses give a more specific idea of their intentions and the impact they have on the overall thesis project. They correlate themselves with the depth topics to prove that a clearer view and understanding of the “grander-scheme” can be obtained through their analysis.