

Executive Summary

Situated on a 29 acre site in McLean, Virginia, the 20,400 ft2 addition to the base building will eventually house Capital One's recruiting and educational events. From the start of the demolition phase on 13-May-2005 to the proposed project closeout on 23-August-2006, the Design-Bid-Build project will approach \$15 million. Major project requirements include a Lecture Hall with approximately 400 seats, designed to accommodate large meetings, recruiting events, and educational sessions. In addition to the main hall, there will be support space including a green room, breakout space, a catering pantry, administrative space and two mid-size conference rooms.

Main construction research was aimed to reveal industry member concerns relating to current involvement within a construction project's value engineering process. This study came as a result of observations made from a lackluster debate at a Partnership for Achieving Construction Excellence conference in the Fall of 2005. Further investigations revealed agreement between designers and general contractors that VE process frequently began too late and unequal idea contributions created unsatisfied project teams. In order to resolve dissemination between key players, utilization of partnering activities may pose more beneficial VE results.

These deficiencies are then applied to the Capital One Lecture Hall Addition and its inefficient value engineering process. If project teams were given sufficient time and increased communication, foundation work and other interior building system costs could have been revised. Within the breadth analyses, more thorough evaluations of valuable products and processes are conducted. The central building components examined were the steel catwalk, boilers contained in a congested mechanical room, and foundation work. Main selection criteria dealt with cost, lead times, installation times, and other feasibility concerns.

Final recommendations and calculations of these three options revealed a total savings around \$96,000. Not only would there have been reduced costs, but a cumulative 4-6 weeks in schedule savings was possible.



Advisor: Dr. Michael Horman

