George Washington University School of Business and Public Management



Technical Report 1 Brad Hartman Lighting / Electrical Dr Moeck October 5th 2005

The purpose of my first technical assignment is to evaluate the existing conditions within the new George Washington University School of Business and Public Management. Taking advantage of the rendering capabilities of AGI 32 and the plans and specifications provided for me by Smith Group, I have modeled a few of the more interesting spaces that I would like to examine for the possibility of redesign.

However, before I began my renderings of the existing spaces, I consulted the IESNA Lighting Handbook to determine lighting criteria for the various spaces. Using the handbook to help interpret "acceptable" lighting design, I created a standard for each space that I hoped to achieve as a lighting designer. With the building being a school, lots of variables needed to be considered in my standard, including important factors such as glare, VDT use, and lighting levels. Also taken into careful consideration where power densities, which were set according to ASHRAE 90.1 standards.

Basically, all the spaces adhere to the standards that have been set due to the IESNA Lighting Handbook, and all the spaces are acceptable to my standards as well. The few mistakes that were found will be adjusted according to the codes, and the other spaces that do not have issues dealing with code will be redesigned to accent the features that I have found to be important in my analysis of the spaces.

The criteria that I have set forth to be the standard I work in achieving with my design will not be etched in stone, and it is subject to change as I spend more time exploring the spaces. Having set forth my design criteria, I have taken the first step in my design by creating a standard I hope to implement.