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Lighting/Electrical Option

James J. Whalen Center for Music, Ithaca, NY

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Photo courtesy of HOLT Architects, P.C.

Lighting Existing Conditions and Design Criteria Report October 8, 2003

Executive Summary

This report contains analysis of the existing lighting systems at the James J. Whalen Center for Music at Ithaca College. Design criteria for the four spaces to be redesigned have been developed using IESNA guidelines and regulations set by ASHRAE/IESNA Standard 90.1-1999. It is noted that this facility was designed before Standard 90.1 took effect, and therefore nearly all lighting systems do not conform. This report also investigates architectural features, as well as required tasks, that will impact the lighting system design for each space. It is found that many special conditions exist within the facility, including the need for nearly 24/7 operation of all corridor lighting systems as students have continuous access to the building. The need to reduce power densities and add control devices is a recurring issue throughout the building, but it is also important to consider the aesthetic and task specific goals that are not achieved. The lighting system in the rehearsal room achieves most task requirements, but does not comply with Standard 90.1 requirements. The architectural lighting system in the recital hall has an extremely high power density compared to system output, and lacks a certain aesthetic continuity. The lighting systems in the three main circulation spaces consume more than the allowance set by Standard 90.1 and lack automated controls. Although the pathways adjacent to the Whalen center are well lit and safe, façade lighting is virtually non-existent, and the appearance of the building could benefit greatly from the addition of an architectural lighting system. In conclusion, the Whalen Center for Music has very unique architectural features and serves the school of music well, yet suffers from an underdeveloped lighting system. With the use of automated control systems and more energy efficient lighting, all regulatory, aesthetic and task-specific design goals will be reached in the redesign of the four selected spaces.