Jamie Devenger Lighting/Electrical Option Dr. Richard Mistrick Sherrerd Hall Princeton, New Jersey 5 April 2010 Draft Presentation Outline

The following outline provides a detailed estimate of the general outline for the final thesis presentation, to be given at 9:40AM on April 14. The outline is still somewhat speculative currently and is thus subject to change in the coming weeks. However, the outline does clearly indicate which specific areas of study are most likely to appear in the final presentation. Each spread will include three slides, and the color scheme for the presentation will match that used in the schematic design presentation given at Lutron in December.

## I. Introduction and Overview

- A. Personal Introduction
- 1. Introduce myself to the present faculty and the relevant areas of study this semester (1 spread)
- B. Thesis Building Overview
  - 1. Provide relevant background information about Sherrerd Hall and its relation to other buildings on the Princeton Campus (1 spread)
  - 2. Discuss important members of the design team (1 spread)
  - 3. Review major architectural, lighting, electrical themes present with the existing building (2 spreads)
- C. Overview of Scope of Redesign
  - 1. Indicate criteria for design and change and which systems were redesigned (1 spread)
  - 2. Briefly outline which designs will be discussed during this presentation (1 spread)

## II. Lighting Design

- A. General program statement and overall design themes
  - 1. Provide a coherent design statement for the whole building (1 spread)
- B. Façade and perimeter office lighting design
  - 1. Space existing conditions (1 spread)
  - 2. Design concepts for space (1 spread)
  - 3. Final solution, including plan view, details, and renderings (2 spreads)
  - 4. Additional discussion of daylighting redesign, including quality, energy, and controls issues as related to M.A.E. and honors topics (1 spread)
- C. Lobby/atrium/stair lighting design
  - 1. Space existing conditions (1 spread)
  - 2. Design concepts for space (1 spread)
  - 3. Final solution, including plan view, details, and renderings (3 spreads)
- 4. Additional discussion of daylighting redesign for expanded skylight-M.A.E. topic and also mention structural breadth related to the skylight expansion (1 spread)
- D. Lecture hall lighting design
- 1. Space existing conditions (1 spread)
- 2. Design concepts for space (1 spread)
- 3. Final solution, including plan view, details, and renderings (2 spreads)
- E. Graduate Bullpen I lighting design
  - 1. Space existing conditions (1 spread)
  - 2. Design concepts for space (1 spread)
  - 3. Final solution, including plan view, details, and renderings (2 spreads)
  - 4. Additional discussion of daylighting redesign, including quality, energy, and controls issues as related to M.A.E. topic (1 spread)
- F. Open Work Space lighting design
  - 1. Space existing conditions (1 spread)
  - 2. Design concepts for space (1 spread)
  - 3. Final solution, including plan view, details, and renderings (2 spreads)

## III. Electrical Design

- A. Copper versus aluminum feeder study
  - 1. Provide all cost and quality analyses and data from this depth topic (2 spreads)
- IV. Mechanical Design (Breadth topic)
  - A. Change in thermal loads as a result of modifying northwest façade for daylighting
    - 1. Discuss physical properties of new curtainwall materials (1 spread)
    - 2. Provide summary results of the overall change in thermal load with the new design (1 spread)

## V. Summary and Conclusions

A. Provide a summary of the initial goals and compare with the ultimate solution and success (2 spreads)