Nathan McGraw Faculty Advisor: Dr. Richard Behr Submitted: March 26th, 2012 Inova Fairfax Hospital – South Patient Tower Falls Church, VA

Proposed Presentation Outline – 3 Screen Format

- I. Introduction
 - a. Title Slide (3 screens)
 - b. Index (1 screen)
 - c. Building Statistics/Site Map (2 screens)
 - d. Project Team (1 screen)
 - e. Architecture (2 screens)
- II. Existing Structural System
 - a. Summary (1 screen)
 - i. Bay Sizes
 - ii. Slab Details
 - iii. Lateral System Layout (3 screens for the above)
 - b. Roof/Penthouse Layout (1 screen)
- III. Problem Statement
 - a. Scenario of Relocation to Sacramento, California (2 screen)
- IV. Proposed Solution and Objectives (2 screens)
- V. System Redesigns
 - a. Additions of Columns and Shear Wall (1 screen)
 - b. Gravity Redesign One-Way Slab (1 screen)
 - c. Moment Frame Layout (1 screen)
 - d. S-1 Design Optimization (1 screen)
 - e. S-1 Fixed Base Summary (1 screen)
- VI. Base Isolation System
 - a. Introduction (2 screens)
 - b. Base Isolation Layout (1 screen)
 - c. Modeling Parameters/Preliminary Sizing (1 screen)
 - d. MAE Material Nonlinear Analysis (2 screens)
 - e. S-1 Base Isolated Structure Summary
 - f. Video Depicting Fixed Structure vs. Isolated Structure (1 screen...roughly 10 seconds)
- VII. Comparison of Designs
 - a. CM Breadth Summary (1 screen)
 - b. Comparisons (1 screen)
- VIII. Architectural/Façade Breadth
 - a. Introduction (1 screen)
 - b. Additional Columns and Shear Wall Locations (1)
 - c. SketchUp Model with Current Façade (1 screen)
 - d. SketchUp Model with New Façade (1 screen)
 - e. Thermal Performance of Wall Assemblies Using TRACE (2 screens)
 - i. MAE Material HAM Toolbox/TRACE
- IX. Conclusion
 - a. Acknowledgments/Open the Room to Questions (2 screens)

Total Screens: Roughly 40