Marissa Delozier {Structural Option} James W. & Frances G. McGlothlin Medical Education Center VCU – Richmond, VA AE Faculty Consultant: Hanagan

Presentation Outline

I. Introduction {1}

II. Project Overview {4}

- a. Building Stats
- b. Project Team
- c. Existing Structural System

III. Proposal {2}

- a. Opportunities
- **b.** Depth & Breadth Studies Overview

IV. Gravity Redesign {5}

- a. Existing System vs Non-composite K-series joists + girders
- **b.** Vibration Control
- c. RAM Output Comparison

V. Lateral Redesign {4}

- **a.** Loadings & Load Path
- b. Moment Frames (w/ few Braced Frames)
- c. RAM Model
- d. Wind & Seismic Analysis

VI. Cost & Schedule Analysis {4}

- a. Cost Impacts due to Redesign (both structural & total project)
- **b.** Schedule Impacts due to Redesign
- c. Comparison to original system

VII. Architectural Impacts due to Redesign {2}

- a. Effects of Redesign on Interior Layout
- b. Passive Fire System & Fireproofing Requirements
- c. Verify Results conform to VCU program

VIII. Conclusion {4}

- a. Revisit Opportunities & explain how they were met
- **b.** Acknowledgements
- c. Comments Screen
- **IX.** Supporting Documentation {Unknown at this time} Possible Screen Count: 30 – 35