Macenzie Ceglar Structural Option Heather Sustersic April 2, 2014 UVA's College at Wise New Library Wise, Virginia

Presentation Outline:

- 1. Introduction of project and self (1 Slide)
- 2. Building Information (4 Slides)
 - a. Statistics
 - b. Unique Feature: 60ft Hillside
 - c. Existing Gravity and Lateral System
- 3. Problem Statement (1 Slide)
- 4. Proposed Solution and Goals (1 Slide)
 - a. Redesign floor system in using a two-way flat slab
 - b. Determine the feasibility of a PT slab system
- 5. Two-way Redesign (8 Slides)
 - a. Trial Floor Designs and Final Design
 - b. Verification of Output
 - c. Column Design
- 6. Post-tensioned Redesign (9 Slides)
 - a. Pros, Cons, and Complications of the PT system
 - b. Slab and Tendon Design
 - c. Feasibility of the PT system
- 7. Lateral System Check (2 Slides)
- 8. Breadth 1 Cost and Schedule Analysis (6 Slides)
 - a. Cost Comparison
 - b. Schedule Comparison
- 9. Conclusion (3 Slides)
 - a. Comparison of Systems
 - b. Where goals met?
 - c. Acknowledgements

Total Estimated Number of Slides: 35