Chris Voros
Construction Management
Faculty Advisor: Dr. David Riley
Cancer Institute
Penn State Milton S. Hershey Medical Center
Hershey, Pennsylvania



Presentation Outline

- I. Introduction/ Overview (2 Slides)
 - A. Self-intro
 - B. Project Intro.
 - C. Presentation synopsis
- II. Analysis 1- Structural Breadth Analysis (8 Slides)
 - A. The problem
 - 1. Deep foundation issues
 - 2. Parking Garage outcomes
 - B. The solution
 - 1. Alternate foundation feasibility analysis- compare/contrast options
 - 2. Solution- geopiers with mat slab combination
 - a. load and differential settlement analysis
 - b. value engineering analysis
 - c. secondary analysis- schedule red. and constructability rev.
 - C. Recommendation
- III. Analysis 2- 4D Cad Analysis (6 Slides + 2 Animations)
 - A. The problem
 - 1. Logistical errors of implemented plan
 - 2. Consequences- schedule impact
 - B. The solution
 - 1. 4D side-by-side comparison
 - 2. Schedule analysis
 - 3.
 - C. Recommendation
- IV. Analysis 3- Brief Acoustical Breadth Analysis (4 Slides)
 - A. The problem
 - B. Analysis- adjacent space analysis
 - C. Recommendation
- V. Critical Industry Research- Building Respect with Subcontractors (10 Slides)
 - A. Background
 - 1. Evolution of idea- PACE, Internship experience
 - 2. Expectations

- B. Methodology
 - 1. CM/GC Survey summary
 - 2. Subcontractor online survey
- C. Results
 - 1. Qaulitative analysis- CM/GC responses vs. Sub comments
 - 2. Quantitative analysis- Sub responses to questions and case-studies
 - a. Graphical analysis- selected questions
 - b. Prediction matrix for subcontractor markup
 - c. Case-study examination- reasons for breakdown
- D. Research Conclusion
 - 1. Revisit expectations vs. outcome
 - 2. Personal learnings
 - 3. Industry benefit

VI. Conclusion (5+ Slides)

- A. Analyses & Research Wrap-up
 - 1. Recommendations
 - 2. CM Relevance of Analyses
 - 3. Personal learnings
- B. Acknowledgements
- C. Questions
- D. Backup slides?

Total Number of Slides: 35