

Anderson Clemenceau

Mechanical Option

Advisor: Dr. Donghyun Rim

Thesis Presentation Outline – March 30, 2015

1. Introduction – Name, Option, Project... (1 Slide)
 - a. Building Overview – Orientation (1 Slide)

2. Existing Mechanical Systems Overview
 - a. Water Source Heat Pump System and Radiant Floor Zones (1 Slide)
 - b. Goals for Improvement (1 Slide)

3. Mechanical Depth
 - a. Variable Refrigerant Flow System
 - i. System Design and Sizing (1 Slide)
 - ii. Energy Use (Trace 700 Analysis) (1-2 Slide)
 - iii. Cost Analysis (1 Slide)
 - b. Solar Thermal Water Heating
 - i. System Sizing (1 Slide)
 - ii. Solar Performance (CombiSys Analysis) (1-2 Slide)
 - iii. Cost Analysis (1 Slide)

4. Structural Depth
 - a. Solar Panels – Structural Requirements and New Design Criteria (1 Slide)
 - b. Design Process and Selections (1 Slide)
 - c. Cost and Comments (1 Slide)

5. Recommendations and Conclusion
 - a. VRF System (1 Slide)
 - b. Solar Thermal System (1 Slide)

Total Number of Slides: ~15-17

(Approx. 45-50 seconds/slide)