

Presentation Outline
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Construction Management
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Welcome and Introduction [00:15]

1. Project Overview [01:30]

- 1.1. Project Team Dynamic – Joint Venture of Barton Malow and Samet
- 1.2. Owner Dynamic – UNC and A&T
- 1.3. Building Statistics

2. Analysis I – Aquatherm [03:00]

- 2.1. Problem
 - 2.1.1. Inefficiencies and high cost of Copper piping in building.
- 2.2. Suggestion
 - 2.2.1. Aquatherm provides solution to cost and long-lasting quality in plumbing.
- 2.3. Results
 - 2.3.1. Aquatherm proved to reduce installation cost and outlast the life span of traditional piping.
 - 2.3.2. Mechanical Breadth
- 2.4. Recommendation
 - 2.4.1. Aquatherm should be considered for case by case instances where the specific type of piping designed for particular plumbing lines can be affected.

3. Analysis II – Material Storage Warehouse [03:00]

- 3.1. Problem
 - 3.1.1. Clean Room specifics for Protocol Installation
 - 3.1.2. Housing laboratory equipment for installation and process piping hook ups.
- 3.2. Suggestion
 - 3.2.1. Use Mahaffey Structures for warehouse
 - 3.2.2. Place warehouse on auditorium slab
- 3.3. Results
 - 3.3.1. Warehouse cannot be placed on slab due to delay on overall schedule by 1 month.
 - 3.3.2. Auditorium slab needs to increase by 4" in depth to be able to hold the MRI temporarily.
 - 3.3.3. Structural Breadth
- 3.4. Recommendation
 - 3.4.1. Place warehouse on slab outside of the building on the exterior of the building footprint.

4. Analysis III – Wetland Preservation [03:00]

- 4.1. Problem
 - 4.1.1. Erosion Control
 - 4.1.2. Preservation of Wetlands
- 4.2. Suggestion
 - 4.2.1. Use of a sand filter as a permanent solution to controlling run-off and storm water management
- 4.3. Results
 - 4.3.1. Sand Filter provides mean of effectively taking care of wetlands. Initial installation cost is high, but is a one-time fee.

4.4. Recommendation

4.4.1. Initial cost is somewhat high, but in comparison to the cost of repairing the damage left behind, it ends up evening out in the long run.

5. Analysis IV – Total Cost of Ownership, MRI [02:00]

5.1. Problem

5.1.1. Making decisions on laboratory equipment in a timely fashion for construction

5.1.2. Understanding the cost of maintaining the equipment after installed

5.2. Suggestion

5.2.1. Having one entity making the decisions on behalf of the joint school for both UNC and A&T.

5.3. Results

5.3.1. Maximo software can proved an efficient means of tracking cost and maintenance of equipment

5.3.2. Establishments such as Gateway keep all parties interests' considered and met.

5.4. Recommendation

5.4.1. Gateway remains as the sole entity in charge of operation and maintenance of equipment

5.4.2. Make of use of Maximo to track and record data of all equipment used

6. Conclusions/ Recommendations [01:00]

7. Acknowledgements and Credits [00:15]

Total Estimated Time [14:00]