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Structural Option
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Senior Thesis Proposal

Breadth Studies Summary

Two breadth studies will be carried out as part of this thesis project. The first will be a construction management study which will include detailed cost comparison of the alternative designs and the original. In addition, the study will include a comparison of schedules of each of the designs. The cost comparison will include short and long term costs of the structure.

The second breadth study will concentrate on the mechanical systems. Since the current design allows the building to operate using either natural ventilation or mechanical cooling, any change to the structural system will impact the ability for the cooling system to act this way. This ability for passive cooling is critical for the sustainability points in the LEED system. This study will show the impact the new structural system has on the mechanical system and adapt it as necessary.