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## Mechanical Redesign Report

December 18, 2007

### Structural Breadth

Implementing an intensive green roof is structurally load intensive so a proposed breadth topic is to redesign the structural system on the roof to support this increased load. Currently the roof has composite steel decking which are supported by W14x74 steel beam spaced five feet on center. When designed, the system originally was only suppose to support dead loads from the rooftop units and snow loads, but with the addition of a green roof, the steel member would need to be redesigned.

### Construction Management Breadth

The LEED certification process also specifies several prerequisites that must be taken during the construction of the project. The techniques and methods used during the construction process will be researched to discover what the additional cost gaining a LEED certification would be.