



Breadth:

A change in the building materials and structure will have an impact on all other systems throughout Lexington II. As breath work, two other aspects of the building will be investigated and examined for compatibility with the newly chosen structural system.

MECHANICAL:

The first system that will be investigated is Lexington II's mechanical systems, including HVAC and plumbing. The current systems are run throughout Lexington II by way of ducts concealed in soffits along interior partition walls. With the creation of larger floor sandwiches it will be possible to redirect the MEP systems through the floor sandwiches and conceal them using a suspended ceiling which would be in place to conceal the structural floor beams as well. A major consideration of changing materials and duct layouts will be acoustics and vibrations and the method in which they are transmitted through Lexington II.

CONSTRUCTION MANAGEMENT:

The second issue that will be looked at is the construction management involved with a steel system versus the current concrete system. Changes in construction management will include a variety of issues ranging from crane placement to the time and cost to erect a steel structural system. Other specific items to be investigated are the advantage of prefabricating steel elements offsite and the addition fireproofing to the structure as well as the creation of a new construction schedule and cost analysis.