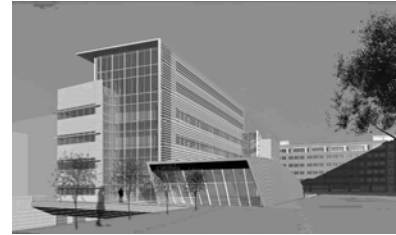


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Breadth Study 1—Cost and Duration of FDA-CDRH Laboratory Construction:

The FDA-CDRH Laboratory is an office and laboratory space located on the Food and Drug Administration’s White Oak Consolidation Campus. Currently, it is constructed out of concrete, and has been proposed to be constructed out of steel. A complete cost comparison as well as a time comparison will be done by first using R.S. Means to find material and labor costs as well as activity durations. I will find these prices and durations for the current system as well as the proposed steel system and the proposed steel system with additional vibration reduction components such as a thickened slab and vibration reduction elements. I will also be sure to account for all price variations due to the total foundation material necessary based on the overall mass of the structure. I will then take the completed material and labor costs and work with ICE 2000 Estimating to estimate a total price for the three different structural systems. I will also work with Primavera to make a construction schedule of all three systems, being sure to include the necessary lead time for any steel design and ordering. Finally, I will look over all the reports to find which system is the best based on overall cost, labor needed, and total duration of work.