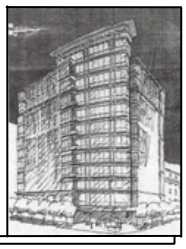
SENIOR THESIS PROPOSAL
EXECUTIVE TOWER

SEAN HOWARD
STRUCTURAL



EXECUTIVE SUMMARY

The Executive Tower is an 11 story office building in downtown Washington DC; just two block North East of the White House. In the middle of a high land valued city, the Executive Tower is one of the highest rents per square foot office building in DC. Owned and Managed by the Kaempfer Company, the Executive Tower was constructed in December of 2000 by Tompkins Building and designed by the international group Hellmuth, Obata + Kassabaum (HOK).

Due to regulation set by the Washington DC area, the Executive Tower was designed 8" short of it maximum building height, 130'. The Executive Tower was designed with a two-way concrete flat slab with drop panels to maximize the number of floor within in its limits.

This proposal describes the uses of three methods to lower the building further under its current building to ultimately construct a 12th story.

An in depth study of the building's framing system as a two-way concrete flat slab with drop panels and post tensioning. The new system will decrease the floor thicknesses of up to 4" per floor.

Two breadth studies of alternative mechanical systems and an architectural redesign of the building 1st floor area will be analyzed; both will have the common goal of decrease the total building height to add a 12th floor to the overall building.