Draft Presentation Outline
March 26, 2010

A. Introduction (2-3 slides)
1) Title slide and self introduction
2) Name of building and where it is located
3) Outline of presentation

B. Existing Building Information (3-4 slides)
1) Overview of building statistics
2) Current structural system
   a) Gravity system: Tapered steel HSS trusses spanning 130'-0", precast concrete planks at concourse level, foundations
   b) Lateral system: Steel braced frames and steel moment frames in North/South direction, steel moment frames in East/West direction

C. Project Goals (2-3 slides)
1) To redesign elements of the building to better meet the financial needs of the owner (describe how original project went over budget)
2) Briefly describe the structural depth, architectural depth, and building enclosure depth

D. Structural Depth Study (16-18 slides)
1) King-post truss system design
2) Steel space frame design
3) Wood truss design
4) Comparison of the three systems (advantages and disadvantages)
   a) Comparison of cost, architectural effects, and feasibility
5) Final selection: Wood trusses
6) Tongue-and-groove decking
7) Design of wood truss connections (bolted metal side plates)
8) Lateral system redesign
   a) Replaced steel braced frames in North/South direction on West side of building with wood braced frames (used wood to match the wood trusses)
   b) Replaced steel braced frames in North/South direction on East side of pool with concrete moment frames
   c) Replaced steel moment frames in East/West direction with concrete moment frames; replaced sloped steel beams with sloped concrete beams
   d) Redesign of steel wind columns as wood wind columns
   e) Diaphragm action of roof system

E. Architectural Breadth Study (4-5 slides)
1) Room layout redesign due to new column sizes and locations
2) Architectural impacts of new roof shape
3) Effects of daylighting and interior lighting

F. Building Enclosure Breadth Study (4-5 slides)
1) Wall system models and analysis using H.A.M. Toolbox (condensation and dew point investigation)
2) Corrosion resistance of interior building components

G. M.A.E. Course Related Study: Façade, Computer Modeling (4-5 slides)
1) Discuss additional analysis of moisture related problems, along with computer models

H. Conclusions (1-2 slides)
1) Brief review of depth and breadth studies
2) Were the initial project goals met?

I. Acknowledgements (1 slide)

J. Questions and Comments (1 slide)

Total Number of Slides ≅ 40 – 45