

# CE 461 – STRUCTURAL ANALYSIS

## Fall, 2006

### Ill-Defined Problem for Lesson Plan No. 3:

Walk over to Allen Fieldhouse, go inside, and look up. There are some BIG moment-resisting frames making up the “guts” of the structure. Estimate the dimensions as accurately as you can, and prepare a detailed CAD drawing of one of those moment frames. Draw the shear and moment diagrams for that frame if a wind load is applied (positive pressure) on the east side of the frame and (negative pressure) on the west side, both with constant values of 20 lbs/ft applied normal to the structural members. You may assume for this problem that the east column is pin-connected to the foundation, and the west column is a roller connection at the foundation.

