Sample Outline

This outline is intended to be a guide to the structuring of your case analysis. It need not be used at all, or followed in detail if it is used in part. Use it as a checklist to see that you cover the major features of your chosen project. Expand it where required to emphasize areas of special importance to your project.

1. General
    a. Introduction: This is the section that says why the project is of particular interest. It is usually a brief description of what you are going to tell.
    b. List the firm or firms responsible for the project:
        i. Architect(s)
        ii. Structural Engineer(s)
    c. Describe the location of the project. Explain the site and specific contour problems. Are there any water, wind or earthquake problems?
    d. Present the owner's name and occupants or users of the project and its major activity and function. Has this activity changed since the building was first used?
    e. Has the project experienced any major difficulties or failures?
    f. Have you personally seen the project? What are your impressions?
2. Systems
    a. What is the structural system?
    b. Why was the particular type of structural system adopted?
    c. Is the structure well integrated and compatible with the architecture?
    d. How Is the structure externally expressed? Is it throughout the building?
    e. How is it finished and how is it maintained? It is an "honest" structure?
    f. What structural materials are used? How are they joined and combined? How is the connection between different structural systems handled (if any)?
    g. In your opinion, is the structure the most appropriate structural system for this activity, the site conditions, and the environmental context of the project?
    h. Does the architectural plan respect (conflict with and/or take advantage of) the structure?
    i. Is the structure dominant (compared to the architectural context or the general site)?
3. Design
    a. Describe all live loading conditions. (Are seismic, snow, wind,... loading conditions involved)?
    b. Describe the bay size (if any). Was a module used and if so, what is its basis? How was it determined (planning, service, construction, etc.)?
    c. Describe the floor to floor height and integrations with one or more mechanical systems in the service sandwich of the building.
    d. What are some typical span/depth ratios or the span/sag ratio or the span/rise ratio?
    e. Describe the foundation system employed to support the building and joint between sub-structure and super-structure. Discuss special foundation problems.
    f. How is the building laterally stabilized?
    g. Trace the major load paths to ultimate support locations with an isometric (or similar) drawing. Magnitude of loads need not be calculated.
4. Construction
    a. Cost?
    b. Describe the method and sequence of the construction process.
    c. Discuss special methods used for special considerations.
    d. What was the time open span of the construction period? Construction time?
5. Additional Considerations
    a. Describe the type of fireproofing used, if any.
    b. Is the structure flexible or versatile?
    c. Can the structure grow (horizontally or vertically)?
    d. Others
6. Critical Summary
    a. Do you like the structure? Why? (This is to be a subjective observation based on the objective data from the analysis).
    b. Does the architectural statement work? Does the structure influence the architecture or vice versa?
7. Presentation
    a. Will present to the class your findings (through a PowerPoint presentation or similar)