



Senior Thesis Program
The Department of Architectural Engineering
The Pennsylvania State University
University Park, PA

***Faculty Consultant Review Form for
Structural Technical Report No. 3***

Student Name: _____ Grade: _____

- ☐ **Executive Summary** – should be a condensed version of the report.
Brief description of building, including use, location, height, gravity framing system and lateral system. Summary of what you did and what you found should be included.

- ☐ **Introduction**
General description of building, including use, location, height, gravity framing system and lateral system. Should provide a few more details than the description provided in the executive summary.

This section should conclude with a brief description of report topics (ie. a listing of the sections).

- ☐ **Loads and Load Cases**
Loads and load cases should be reasonably summarized in the main body of the report with appropriate sections or pages of the appendix identified should more detail be required.

- ☐ **Distribution**
Some reasonable method of determining distribution should be applied. Clear information on the total load and subsequently, loads being applied to each lateral element should be provided. The intent is to show the consultant that you understand how to distribute loads to individual frames and walls.

- ☐ **Analysis**
A reasonable manual estimate should always accompany a computer solution.
Overturning should also be considered.

- ☐ **Member Checks**
As in the analysis, using a computer program as a “black box” is highly discouraged! Letting a computer do all of the member check with no manual verification is unacceptable.

- ☐ **Conclusions**

This report should, above all else, demonstrate that you are becoming competent to practice as a structural engineer. The more clearly and succinctly this is demonstrated, the better the grade. Taking the consultant through what you did and why you did it provides the best opportunity for a good grade. Clarity and quality in writing is also essential.

A note on final grades: The proposal due at the end of the semester can include a complete existing conditions report that effectively cleans up any problems with earlier reports. As a minimum, the proposal should include enough information on the existing conditions to put the proposal in proper context.