Analysis of Senior Project Design

Please provide the following information regarding your Senior Project and submit to your advisor along with your final report. Attach additional sheets for your responses to the questions below.

Project Title: _____

_____ Quarter / Year Submitted: _____

Student: (Print Name) _____ (Sign) _____

Advisor: (Print Name) _____ (Initial) _____ Date: _____

- **Summary of Functional Requirements**

Describe the overall capabilities of functions of your project or design. Describe what your project does. (Do *not* describe how you designed it.)

- **Primary Constraints**

Describe significant challenges or difficulties associated with your project or implementation. For example, what were limiting factors or other issues that impacted your approach? What made your project difficult? What parameters or specifications limited your options or directed your approach?

- **Economic**
  - Original estimated cost of component parts (as of the start of your project)
  - Actual final cost of component parts (at the end of your project)
  - *Attach a final bill of materials for all components*
  - Additional equipment costs (any equipment needed for development?)
  - Original estimated development time (as of the start of your project)
  - Actual development time (at the end of your project)
- **If manufactured on a commercial basis:**
  - Estimated number of devices to be sold per year
  - Estimated manufacturing cost for each device
  - Estimated purchase price for each device
  - Estimated profit per year
  - Estimated cost for user to operate device, per unit time (specify time interval)
- **Environmental**

Describe any environmental impact associated with manufacturing or use.

- **Manufacturability**

Describe any issues or challenges associated with manufacturing.

- **Sustainability**
  - Describe any issues or challenges associated with maintaining the completed device or system.
  - Describe how the project impacts the sustainable use of resources.
  - Describe any upgrades that would improve the design of the project.
  - Describe any issues or challenges associated with upgrading the design.
- **Ethical**

Describe ethical implications relating to the design, manufacture, use or misuse of the project.

- **Health and Safety**

Describe any health and safety concerns associated with design, manufacture or use.

- **Social and Political**

Describe any social and political concerns associated with design, manufacture or use.

- **Development**

Describe any new tools or techniques used for either development or analysis that you learned independently during the course of your project.