

**Project Status Report: CEE-2018CPST-001**

**Report Date: 12 November 2018**

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**Project Title: Bluffdale Bridge Options**

### 1) Summary of technical/non-technical challenges encountered

- We have faced problems in creating the model for the bridge. Unfortunately, the pictures taken during the first site visit did not provide enough covering and clarity to create a model that was recognized by the compiling system.
- Additionally, we are still trying to discover the best method for analyzing the highway loads and capacity of the T-girders.

### 2) Team approaches & resolutions to overcome challenges

- Our first approach was to determine the requirements of the model and decide whether the current information the model provides is sufficient for the current needs of the project analysis.
- Next, we determined whether we would require a highly detailed model for later in the project.
- Our approach in the analysis is to continue to use our faculty support to understand how to calculate the capacity of the beams.

### 3) Status of challenge resolutions & potential project impact

- Based on our discussion, we determined that the need of model is simply to provide a visual tool to support our measurements. Since we have already determined most of the measurements, a highly detailed model is not necessary at this point in the project.
- We also determined that while we may want to get a more detailed model in the future, this caWe are continuing to parse through the information and gather the pertinent material for our analysis.
- n be pushed to next semester when we have more time.

### 4) Project status & summary

- We are in the process of analyzing the girders for capacity.
- We have begun organizing the spreadsheet to evaluate different options for bridge rehabilitation or repair. In addition to a full bridge replacement option, we have also started looking at coating materials that could be used to minimize further erosion. This is another option that can be used to increase the design life of the bridge.
- We have a quote from the manufacturer for the cost of a full bridge replacement. The manufactures of the coating material Tyfo is also in the process of providing a quote.