BYU | CIVIL & ENVIRONMENTAL ENGINEERING

IRA A. FULTON COLLEGE

CAPSTONE

Project Status Report: CEEn-2018CPST-001

Team Members: Rex Henretta, Shane Oh, Ryan Wilkinson

Project Title: Bluffdale Bridge Options

1) Summary of technical/non-technical challenges encountered

While we have since received the plans, we are unsure the best way to analyze the bridge for its capacity and loading. The plans indicate that the structure includes prestressed strands that we have not analyzed before in classwork.

2) Team approaches & resolutions to overcome challenges

Our approach to overcome this challenge is to contact experts in the field and ask for their assistance. This includes faculty such as Dr. Fonseca and Professor Isom, and also other professional companies such as Forterra could provide a better and more complete view of what needs to be done and how best to approach the problem.

Report Date: 29 October 2018

3) Status of challenge resolutions & potential project impact

- Currently, we are setting up meeting times with the aforementioned persons and planning to complete most aspects of analysis within the next two weeks.
- In terms of timing, we are still on schedule to complete the full analysis by the end of this semester. In order to save time later in the process, we have started the process of gathering different mitigation options and writing the 30 percent completion report.

4) Project status & summary

- We have obtained the plans and have compared the current standing structure to the intended design.
- We have organized times to meet with our faculty to learn the best methods for analyzing the bridge capacity.
- We have contacted one company to receive an alternate bridge replacement option and are currently waiting for a response.
- We have begun organizing the spreadsheet evaluating the different options for bridge rehabilitation or repair.

10/29/2018