

Project Status Report: CEEEn-2018CPST-001

Report Date: 22 October 2018

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Project Title: Bluffdale Bridge Options

1) Summary of technical/non-technical challenges encountered

- During our first site visit last week, the canal we expected to be dry still held about 6 inches of water. This prevented us from gathering all the measurements we had anticipated to obtain that day. Furthermore, the pavement on top of the bridge deck was being replaced on the day that we went for the site visit. Since the pavement was gone, the information regarding possible reflection cracking was eliminated in addition to having to work around the active construction site.
- Requesting the plans from UDOT is proving to be more difficult and lengthy than we anticipated.

2) Team approaches & resolutions to overcome challenges

- We attempted to gather as much data as we could with the canal still filled. We also planned for a second trip such that we can gather the measurements at a later time.
- To expedite the obtaining of the plans, we asked for the assistance of the City in obtaining the plans. However, we did not wait for the plans before beginning our analysis. Using the preliminary measurements obtained during the site visit, we began our analysis to eliminate the time that we are waiting around for the plans. We also began looking at bridge replacement options since we are still waiting for the plans.

3) Status of challenge resolutions & potential project impact

- We began our analysis based on the preliminary measurements gathered during the site visit. When we do get the plans, we should quickly be able to insert the correct information to get a more accurate analysis.
- While we have still yet to receive the plans, UDOT appears to be more responsive to the City, so we anticipate getting the plans this week.
- We have identified some options for bridge replacement and contacted the appropriate people to get an estimate of the cost. However, they also require the plans for the bridge to get a better estimate. If we get the plans this week, we should be able to get the estimates quickly afterwards.

4) Project status & summary

- We have begun our preliminary analysis of the bridge.
- We have also identified some of the possible reasons for the quick deterioration (e.g. the rebar in the double T-beams only had $\frac{3}{4}$ " cover).
- We have begun gathering some of the replacement options and cost; we will have more information once we receive the plans.
- We have set another date for making a site visit.