BYU | CIVIL & ENVIRONMENTAL ENGINEERING

IRA A. FULTON COLLEGE



Project Status Report: CEEn-2016CPST-007: Flood Control Plan Feasibility Study Team Members: Matthew Johnson, Fabian Zamorano, Donald Anderson Date: 1/30/2017

1) Summary of technical/non-technical challenges encountered

We encountered several obstacles to overcome before being able to analyze the Ridge Lane area. One obstacle that we had was determining the contributing watershed area for Ridge Lane. The exact area and water flow was not known. In addition, there are no local streams nearby, so it was difficult to find the area using Watershed Modeling System (WMS). Another obstacle that we faced was learning unfamiliar engineering programs. This is the first time anyone in our group had used WMS and AutoCAD Civil 3D for storm water and flood analysis.

2) Team approaches/resolutions to overcome challenges

We did a lot of background research this month to get a better understanding of the process of designing a storm water system. Initially, we had a couple of spreadsheets that was given to us from our sponsor. The research helped us to understand what the spreadsheet was computing, how it was computing it, and what all the variables meant. We also drove to Ridge Lane in Payson to view the project site in person. This gave us a first hand understanding of the area and helped us to determine what homes experienced flooding, directions the water might flow during the storm, and locations on where collections basins should be. In addition, we were able to speak to one of the residents in the area about the flooding and he confirmed our suspicions.

3) Status of challenge resolutions & potential project impacts

We are still experience problems with using the new programs, but we are getting a better idea on how they work. These problems have not caused any schedule or cost impacts for the project. These were initially planned and accounted for in the project proposal. Overall, we feel we have made good progress on the project and are confident in future progress.

4) Project Status & Summary

There have been no delays or scopes changes due to additional customer request. We have completed most of the research that we need for this project. We have just started the design of the storm water system. We plan on finishing the design in the upcoming week and start putting together the report. At this point, we are plan on completing the project on time, perhaps even a little early.

February 6, 2017