BYU CIVIL & ENVIRONMENTAL ENGINEERING

IRA A. FULTON COLLEGE

CAPSTONE

Report Date: October 15, 2018

Project Status Report: CEEn-2018CPST-007

Team Members: Ryan Smart, Nicole Hastings, Hanna Opdahl, Daniel Fiso

Project Title: Woodland Hills Snow-Runoff Drainage Options

1) Summary of technical/non-technical challenges encountered

During construction of our statement of work, we were not sure how to define the budget for the project. As we started the map in GIS, we came across the problem of finding relevant GIS data (topography, drainage, output points, etc.) that would help us in the analysis. In addition, we are familiarizing ourselves with GIS software again; it has been a long time since we last used the software. We encountered a mix up in the time of a meeting with our faculty advisor.

2) Team approaches & resolutions to overcome challenges

To prevent future meeting mix ups, we plan to sending intermediate and reminder emails to those in the meeting. To resolve the project budget definition we plan on meeting with Ted Mickelson to discuss the project budget and the rest of the Statement of Work. To improve our familiarity with the GIS software, we will do weekly GIS tutorials on an individual basis.

3) Status of challenge resolutions & potential project impact

A video call was held on October 5, 2018 with Ted Mickelson (Jones and DeMille Engineering) to discuss the Statement of Work. The team clarified project tasks and defined the project scope and schedule. Members of the team downloaded the GIS software on their individual computers and began tutorials. Regular tutorials in ArcMap will help the team become more efficient as well as enhance the quality of the final product. An email was sent to the faculty advisor to clarify meeting times and ask technical questions about additional data to add to the map.

4) Project status & summary

The project is currently in the middle of Task 1 – data collection. We have arranged with Ted to hold biweekly meetings as necessary, in order to keep him involved in the project. We have made a simple GIS map of the city of Woodland Hills which includes: base-map, municipalities, debris flow, landslide paths, and watershed area. Moving forward, we plan to acquire more GIS data from Jones and DeMille Engineering including LIDAR imagery, which will be used to more accurately map drainage path and basins.

10/18/2018