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Project Proposal: Group 10

The objective of this project is to improve the poor drainage conditions in the area just south of Burdine Hall on the UT Campus. The small number of drains near the building is not effectively removing water from the area and because of this, temporary measures are being utilized to drain the water. However, this issue needs a long-term fix, which we will be researching for this project. Whether it be increased drainage through added gutters or grates or decreased flow through the use of low impact development techniques, we plan to choose the most suitable alternative to control stormwater flow through the area.

To proceed with this project, flow data from the chosen area must be collected. The section we'll be studying is limited enough for us to determine catchment areas and slopes, and therefore design flows for given rainfall intensities can be calculated. This will help in creating the parameters for our improved drainage design. To consider low development impact designs for the area, researching case studies will be helpful in deciding the most beneficial methods for the type of area we're looking at.

To aid in the design process, we plan to use an ArcGIS viewer of the university for calculating the data discussed above. To create our actual design, we will most likely use AutoCAD to form a computerized model of our final chosen solution.

The key project element we intend to focus on is creating a rain garden to replace the problematic soil around Burdine Hall that disrupts flow paths to the drains in the area. This will help with the drainage issue as well as make the area more aesthetically pleasing.

Within the group we will divide work amongst ourselves according to the main aspects of the project. The three primary steps we will focus on are data collection, drainage improvements and design, and low impact development designs. As of now, Abby will work on data collection, Phillip on drainage improvements and design, and Lexi on the low development impact techniques. However, this is preliminary and is subject to change as the project presents new objectives and requirements.