TRIP MEMO

TO: EILEEN CASHMAN FROM: JOSEPH CAMINITI

SUBJECT: TRIP MEMO

DATE: OCTOBER 9, 2014

The purpose of this trip was to explore the nearby entities that are heavily involved in environmental engineering practices. By visiting the Schatz Energy Research Center, students got to observe some of the kinds of testing materials present and hear about some local, national, and global projects. The Campus Center for Appropriate Technology utilizes various types of technologies that are deemed appropriate for the local area, such as a wall made from mortar and chopped firewood.

One design project from CCAT is the rainwater catchment system. This system captures rainwater runoff from the roof of the main building, and stores it in a large tank. The water in this tank is then used to water some of the gardens that are on the CCAT property via drip irrigation. If the tank gets full, there is an overflow pipe that leads to a small plot of land. The benefit to this project is that the system catches water that would otherwise be let off as runoff water and contribute to the erosion of the land. Also, the drip irrigation portion of the design is a highly efficient way to distribute the water, as compared to just letting the tank drain out onto the gardens. Plus, the locals get to enjoy whatever plants come from the gardens that they use the water on. The major downside to the current status of the project is that the overflow pipe is just directed to the nearest part of land, where it still contributes to runoff and erosion. The tank also is not that large, so not very much water can be stored before this overflow occurs.

Many of these projects peak my interest, even though many are over my current educational level. Volunteering would be a great way to get involved, because even though many concepts don't make sense yet, getting a hands on experience early will make things easier to understand in the future. Plus, I've always wanted to get involved in a local project to make a positive impact on the surrounding community. Hopefully with enough experience, I will be able to take part and volunteer in a national, or maybe even a global project.

The most interesting thing on the trip was by far the amazing diversity of projects on the CCAT property. One shed had 3 different walls utilizing three different appropriate technologies. While some of these technologies around the property may be a bit extreme, (such as using blood for paint,) most of them have great potential for practical use such as the solar water heater and the food forest project.

This trip gave many real-world examples of the concepts that students learn in class. It also showed how close an amazing amount of technology and research is to the engineering department, so that if any students want to get involved in any way, they know where to go. On top of that, students were also able to meet some upper classmen and professionals who can give them great advice and guidance on any of their own future projects.