

Green Fund Project

Final report

Project Title: Touch of Nature Bridge

Project ID#:16SP136

Award Date: April 22, 2016

Completion Award: 3/29/17

Total Funds Used: \$1416.13

1. The Project coordinator out at Touch of Nature came to ASCE asking the group if they would be willing to construct a pedestrian trail bridge that would cross a creek.
2. The fall semester was primarily used to design the bridge that the people of Touch of Nature wanted. They made requirements for the bridge such as what the decking need to be and some ideas about how it should look. Knowing this the design group went to work designing a suitable bridge. The team design a suitable structure and a foundation that would hold the pedestrians and the dead load of the bridge. After the team collaborated with Touch of Nature, they added a rope railing instead of a wooded rail that was suggested in one of the phone meetings. Once the design was finalized the team went to work with purchasing and cutting all of the materials to decrease the construction time. The team continued to cutting the material for the first couple of weeks into the spring semester. After all of the material was cut the team scheduled dates to begin the construction phase. On the first weekend of construction, the team used the tools Touch of Nature loaned them and a jackhammer that was rented from a local business to dig four foundation holes. The jackhammer was used to hammer through the bed rock underneath the ground. After the holes were dug, posts were put into the ground and concrete was poured around them. The team then waited two weeks because of the weather, before any other construction. During the second weekend of construction, the main girders were bolted together and attached to the posts. Also, the support beams were installed and all cross bracing was added. Decking and railing was then added on during the following week to finish the construction phase of the project.
3. Throughout the project, the people from Touch of Nature were documenting the construction process and posting pictures on their Facebook page.
4. The only thing that should be done differently would be to try to begin the construction phase sooner than what the team did.

5.



The existing bridge



Post holes being dug



Post being set



girders and support beams



Decking being added



finished product



Finished product