

# Warren County Engineer's Office Internship

Jacob Parks, Junior, Civil Concentration



## WCEO

The Warren County Engineer's Office (WCEO) is in charge of maintaining all county and township roads and bridges in Warren County, Ohio. In addition to regular maintenance of roads, the WCEO inspects contractor work, maintains the storm sewers in county right of way, and works to meet all Ohio DOT standards.



**Above:** Figure 1. The Mason-Montgomery Rd Corridor, site of the curb ramp project

## Responsibilities

- 1) I created cost estimates for three projects including a storm sewer renovation project, a roadway and riverbank restoration project, and a curb ramp project (Figures 1, 3).
- 2) I collected data on 80+ aluminum box culverts so that the bridge engineers could calculate load ratings (Figure 2).
- 3) I revised two sets roadway widening/resurfacing plans on AutoCAD.



**Above:** Figure 2. One of the many aluminum box culverts I collected data from

**Left:** Figure 3. Kings Mills, site of the storm sewer renovation project

## What I Learned

I learned how to create a cost estimate by analyzing a set of plans and summing quantities of materials. I also learned how the public and private sectors interact. For roadwork the public sector decides what projects it needs and then it bids out the projects to contractors. For neighborhood construction, the private sector decides what projects it wants to build, and it is the public sector who has to approve the construction projects and inspect road construction.



**CALVIN**  
MINDS IN THE MAKING