

What I Did During My MATC Summer Internship

Jess Hastings
MATC Summer Intern - 2006

Prepared For:
Mid-America Transportation Center
W333.2 Nebraska Hall
P.O. Box 880530
Lincoln, NE 68588-0530

Internship with:



No college course or textbook can give a student real life experience in the engineering field. Sure, it can provide formulas or equations and teach you the theories of engineering, but that alone does not equate to a successful career. Fortunately for all of the students participating in the MATC internship program, that void has been filled for us. We were given the chance to be placed in an environment where we could observe and learn what really went on in the field. My sponsor firm was HWS Consulting, and while I may be a bit biased, I feel that it was the ideal situation to be put in.

The HWS Omaha office has a fairly young staff, thus it was much easier to relate and work with my superiors. From the first day on the job they have treated me like an equal.

This proved to be very useful when a question would arise or I needed some help with computer programs. I generally used AutoCad 2007 and MicroStation V8 to work on projects. I started working



on smaller tasks like making corrections or doing detail work. Although it was not the most mentally challenging work, it did in fact help me a great deal to become familiar with the software.

The two largest projects that I worked on consistently throughout the summer were The Lincoln Beltway and Midtown Omaha. The Beltway is a highway system that wraps around Lincoln. The work that I conducted on this project was all in MicroStation. I would do some detail work and learned the beauty of cutting cross sections. I designed all of the driveways and pulled quantities.

The Midtown project involved a variety of tasks. I did some work in AutoCad, but my work was not limited to design work. I had several other responsibilities, including documenting existing conditions and public meeting summaries.

To document existing conditions, I had to drive around downtown Omaha and note all existing drives or garage access points that would need to be included in the Dodge Street expansion.



The most interesting part of the project for me, was reading all of the public's response letters from our public hearing. I was supposed to try and separate the letters into similar thoughts. Once I began reading the letters, I realized how passionate people feel about construction in their area. I also realized that many people do not really know what is going on, which makes the public hearings and encounters all the more important.

The project that I was most involved with was the American Disabilities Act (ADA) curb ramps. The federal government mandated that the city of Omaha reconstruct its curb ramps, so that they are handicap accessible and comply with

the ADA codes. A coworker and I were in charge of a construction crew that was contracted out by the city to begin working on the project. This was a great



learning experience because decisions had to be made at each location in order to best fit what the specs called for along with what the existing conditions were. Another lesson that I learned through this experience was that engineers have to be able to work with people

who are not engineers, and at times this can be very challenging. However, I was very proud of how the project turned out, and the city inspector congratulated my coworker and I on doing such a professional job.

The experience gained through office life and field work this summer is something that I will never forget, and I know will help me immensely. HWS has asked to me stay on during the school year as well, so the learning doesn't have to stop when the MATC program is over. Without the MATC internship program I would not have had such a great summer learning experience or an internship for the school year. Judging by all of the other MATC interns' presentations, it seems as though everyone had a great summer as well, which shows just how beneficial of a program MATC is. As my college career gets more in depth, I look forward to the challenge of applying the knowledge gained from courses and textbooks, to real life situations.