

STUDENT WORK REPORT

Student Information

Date: 7/29/2019

Student Name: _____

Student Signature: _____

Student Email: _____

School/Discipline: Civil Engineering

Please circle your current work session:

➤ 3-session 1 2 3

➤ 5-session 1 2 3 4 5

➤ Internship Fall Spring Summer

Employer Information

Does the Work Report contain Proprietary Information? Y or N (please circle one)

May Purdue post the Work Report on the CE or OPP website? Y or N (please circle one)

Employer: WSP USA

Supervisor Signature: _____

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Summary

This work session at WSP USA I was given more responsibility and tasks. I was thrown into projects because of the CAD knowledge I had gained in the previous work session. It felt easier to absorb information from my supervisor and use it to complete my tasks. I learned about maintenance of traffic (MOT) and what goes into making sure the traffic is hindered as minimally as possible during construction. Last Fall, I was working on a Bus Rapid Transit project and this work session I was put back on the same project. I did some new task with pavement and learned different aspects of the CAD software. I also had the opportunity to do erosion control plans. This was something completely new and took some time to understand. In my time here at WSP, I grew more as a person as I felt more of myself working here and getting comfortable around the work place. I also gained valuable knowledge on different parts of the project which will help me in the future.

Introduction

I began my second work session with WSP USA, located in the heart of downtown Indianapolis in the summer of 2019. WSP USA is a civil engineering firm that works in many fields in the civil industry, from roadway, geotechnical to construction services.

I was still part of the roadway team at WSP. During my second session, I became more comfortable at using the CAD software's and was given more responsibility. Of course, I was still learning, and my supervisor Nick Parsons helped guide me through some of the questions I had. This time around, I feel like I was quicker in understanding the tasks given to me by my colleagues. It was usually them explaining it once and then leaving it to me to figure out the rest.

At the coming end of this work session I wrote this work report self-analyze the work I did over the 3 months. This report gave me the opportunity to evaluate my own experiences and help me have a better grasp on the work activities I did.

Experience

The second time around, coming into this work session was much easier than before. I had got familiar with the work place, so I felt comfortable being put to work straight away. At the beginning I had to play catch up with the projects the road team was doing. I learned the progress done on the Purple Line Bus Rapid Transit project (BRT). This project was what I worked with the team with last work session. So, I was excited to hear how far along it had come and how much was needed to be done.

During the first few weeks, I started off with helping my supervisor Nick with maintenance of traffic (MOT) plan sheets for a ramps project in Indianapolis. MOT is a plan for how the traffic is supposed to be diverted while the project is under construction. Everything is considered, from the construction signs to the barriers placed on the diverted road. At first, I had little to no idea how I was going to go about designing something like that. But, after Nick explained to me how a MOT is designed, I gave it a go. I learned the Indiana Department of Transportation standards when it came to MOT. Things like, placing a construction sign at least a thousand feet apart or when to start putting up signs. After, multiple attempts and going back and forth with Nick, I had a comprehensive understanding on how to do this task.

It was not long before I was put onto the Purple Line BRT project. My task was to show where the road had been widened and measure the area of the widening. I had to be aware of a few things when going through the process of this task. For example, in some areas there were gutters while in some areas there were not. Some areas had asphalt and others concrete. The

length of the widening also changed so I had to account for that as well. Under the guidance of my supervisor I was able to get through this task with ease.

I also had the opportunity to get experience in erosion control plans. Erosion control prevents sediments and other material from leaving the construction site. This can be very important as there may be a stream or river nearby. At first, it was challenging as I had no idea where to begin or what even goes into erosion control. One of my road team's colleague John guided me as to what kind of documentation is needed, what are some of the erosion control measures and when are these measures needed. After explaining it to me, I was left with the task of getting the plans together. I started off with the documentation, for this the project information was needed and with my colleagues help I was able to complete it. Then I used CAD to create plans for the erosion control. This took several days to complete, by going back and forth with John as to what needed to be in the plans as well as what the end product should look like. After that, I estimated the cost for the implementation of the erosion control. This whole task was something new for me, I learned a lot and gained knowledge of erosion control as well as INDOT's standard drawing and specifications.

Professional Development

This work session I felt more comfortable and meshed well with the team. I was given responsibility and task for the start of the session which at first made me a little nervous but then my experience from working last fall kicked in. I gained knowledge of various parts of roadway and transit projects. As a person, I felt like I really changed and it was easier for me to talk and mingle with the people at work. I sat in on project meetings which showed me a new side of what it's like to see how people manage projects. I had the chance to go out on social gatherings

with the office and it was great to network and talk to people in a relaxed environment. I am still learning a lot about road projects and hopefully learn even more in my next work session.