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My Summer Internship

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Civil Engineer, what does it mean to be one? Respect, experience, and practical thinking all come to mind, but civil engineering is really a broad category of professionals that work towards the betterment of society through many different specialized fields. At Olsson Associates, I am part of the traffic team, which is one of the many teams that are dedicated to quality designs and the satisfaction of the client, while maintaining a productive, professional environment. My summer at Olsson's has exposed me to a variety of different projects, clients, mentors, and general experience that demonstrates all of the components necessary to successfully handle the various responsibilities placed on engineers.

Olsson Associates is a nationally recognized design firm that offers comprehensive consulting and design in a variety of engineering services. Founded in 1956, Olsson has grown to over 950 employees in 28 offices across 8 states. Olsson is an employee owned company and focuses on putting clients' and employees' needs first. The Lincoln headquarters consists of over 250 employees and is located in the Haymarket. The traffic team at the Lincoln office consists of 8 employees, with 3 more employees located at the Omaha office.

During my time at Olsson Associates, I have worked on a wide variety of projects, each giving me a new and unique experience. The first project I worked on was a Traffic Impact Analysis in Beatrice, Nebraska. The City of Beatrice had approved the construction of a new elementary school and middle school in a location near the existing Beatrice High School. Olsson Associates was selected to provide the evaluation of level of service and current capacity of the surrounding roads, along with recommendations for future road geometrics, signage, and possible lane expansion. I was involved in the project from start to finish, contributing my efforts for the AM and PM traffic counts and three different intersections, the evaluation of current conditions, and the prediction of the future volume of the intersection, along with the trips generated by the sites. All of the information was then compiled into a report that was sent to the client. This project taught me several important lessons. While the traffic

count was being performed, several members of the public questioned me on what I was doing, and addressing their questions and concerns taught me how to properly interact with the general public. The client changed the scope of the project several times in the duration of the project, and this taught me patience along with flexibility because we adjusted the project according to changes made by the client.

The second major project I was involved in was the installation of a fiber network for Unite Private Network. While it is not normally associated with traffic, fiber installation is actually a large portion of the traffic team's revenue and is a rapidly growing part of the team's responsibilities. For this fiber installation project, Olsson was tasked with designating a route for and designing fiber throughout Lancaster County and other surrounding counties. The fiber would be installed along country roads and existing pole lines to connect different cell phone towers. To this end, various routes and pole lines had to be evaluated. This involved travelling to various locations around Lancaster County taking measurements of existing telephone poles and locating storm drains that will have to be bored under. I experienced a large amount of field work during this project, and it taught me how to properly and safely conduct field work, along with having been exposed to how the modern telecommunications infrastructure is designed and constructed.

There were a variety of other smaller projects that I worked on throughout my time at Olsson, including an annual traffic count of turning movements and average daily traffic for the City of Lincoln, the maintenance of the Nebraska Department of Roads' (NDOR) weather monitoring towers, and several smaller traffic studies for the impact of the construction of a Dollar General. All of these projects had their own unique experiences and lessons.

My time at Olsson was not just spent working on projects at my cubicle, there many times where I was pulled into meetings to experience what a professional meeting atmosphere was like. The first meeting I was invited to was with NDOR about a fiber network that was being installed along I-80. I attended several of these meetings and observed how to properly address a client that was still

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unsure about what they wanted even as the design process was moving forward to meet a deadline NDOR had to submit the design. Besides NDOR, I was in attendance of several different meetings and webinars with various vendors of camera and signaling equipment. These vendors pitched their product hoping that Olsson would recommend it to their clients. I was unaware previously as to how this process worked, and it was interesting to see how the vendors approached selling such specialized products as traffic controllers. My team also had bi-weekly meetings to stay on top of the current workload, checking the progress of the projects since the last meeting, along with addressing any notable changes that affect the team. I was impressed to see how well the team was managed and how organized the traffic team leader, Justin, actually was. Being able to attend such a variety of meetings during my time at Olsson really gave me a wide breadth of experience on what to expect from meetings in the future.

The mentorship that I received at Olsson was extraordinary and I was able to learn more about the traffic field and engineering in general. All of the engineers and technicians on the traffic team never hesitated to answer any questions I had and were very patient while I tried to learn new information. The atmosphere I was surrounded by was one of approachability, I never felt like I couldn't ask a question. My team did more than just answer my technical questions, they also gave me career advice, such as their opinion about graduate school, and advice on which classes to take. The advice I received at Olsson helped me grow as an engineer, and helped me decided on my future as a student.

During my tenure at Olsson, I was lucky enough to experience many different faces of civil engineering, and was able to see first-hand the dedication and many skills required to be a successful engineer. The projects I was involved in had an amazing variety and were a good mix of office work and field work. The mentorship I received at Olsson was excellent and helped me through problems in technical and educational areas. MATC and Olsson have increased my interest in becoming a traffic engineer, and I am grateful for the opportunity and support I have received from both organizations.



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