

## Co-op Chris C.

Chris C., Purdue University, comments on his co-op experience at Traylor...

Before arriving for my first co-op session in Galveston, I had no idea what to expect out of my first term. I had little to no construction experience and just one semester of civil engineering core courses, so I felt unprepared. After walking the jobsite with another engineer, things started to make more sense to me.

The first week, I spent a lot of time watching the crews and learning about the part of the bridge they were building. Crews were working on demolition of the old bridge, seals, footings, columns, caps, drilled shafts, setting girders and panels, main span activities, and working on the bridge deck. After learning about the bridge, I learned the process behind constructing the segmental main span. I spent the majority of my time on the main span stressing, grouting, launching the form travelers, grading, and surveying. I gained a lot of experience as a field engineer working on the main span. Some of that experience came in the form of quality control. There were checklists, sometimes for another checklist, that I had to complete to insure everything was correct before pours.

Working on the main span, I learned a lot about post-tensioning and grouting. I knew nothing about concrete coming into the job. During my session, I learned post-tensioning was necessary to offset concrete's natural weakness in tension. While stressing, I got to operate the hydraulic ram and record the tendons' elongations. Later that day, the post-tensioning ducts were grouted to prevent corrosion. During grouting, I ran a number of tests to make sure the grout was mixed correctly.

I spent a lot of time surveying as well. My first week, I was the rodman for an engineer taking shots on the main span. The second week, he showed me how to set up the level and use it. After learning to use the level, I began surveying a lot. The main span had to be surveyed before and after each joint was poured. I also spent some time surveying concrete girders in the pre cast yard. I feel my surveying experience will be helpful because I have yet to take the required surveying course.

During my work session, I learned about the importance of safety. A lot of my safety training came through an OSHA 30-hour course in which I learned about the broad range of safety hazards on a construction site. I took an aerial lift course and became a competent certified aerial lift operator. I also learned CPR and first aid in a Heartsaver First Aid course.

Most importantly, during my first co-op session with Traylor, I got to go out in the field and learn about the construction industry. The useful tools I picked up in my work session will help me to excel in future courses at Purdue. I am grateful for the opportunity to co-op and am anxious to begin my next work session.