Job Summary: Term 1

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My official position at Simpson Gumpertz & Heger (SGH) was a co-op for the BT or Building Technology team. On paper, I worked for them. In actuality, the borders at SGH are not so easily defined. If anyone in the office has work, it can be assigned to one of the co-ops. This exposed me to many different aspects of civil engineering. At different times, I worked as a drafter, researcher, lab technician, field tester, and all-around grunt.

At SGH most of the students in the co-op program are grouped in one area called the “Co-op corral.” This was a smart idea on SGH’s part for two reasons: Firstly, I was constantly surrounded by other college students going through the same experience as I. If I had any questions about my assignment or if I was just lonely, I was able to talk to a group of my peers. Secondly, if anyone in the office needed some help they could simply walk by the corral and find a co-op. I did not have to waste my or the company’s time looking for an assignment.

At the beginning of term, all the coops received a brief orientation. This familiarized us with the office, its different departments, and with some of the HR and administrative processes. I was also assigned a “buddy.” This was a person at SGH who was relatively new to the firm and was available to show me around and answer my questions. This was mostly only for the first few days to help me get my bearings. Most of the training was provided informally. I would be taught how to perform a task when it was given to me. If I had a problem, I could ask anyone in the office and they would answer my questions. I was also given many tutorials on the specific computer programs that I might use, such as Autocad and Revit. Finally, I learned from the lunch talks that took place every week. At these talks, either a guest speaker or an employee would present on a topic that was related to civil engineering. These topics spanned from new products to briefings on SGH projects.

As mentioned above, I was assigned many different types of assignments on various projects. In the laboratory, I calibrated field equipment and performed material property tests. These included tensile strength, permeability, and reactivity tests. One major project was the creation of a comprehensive database for the lab. I spent approximately a week cataloguing the various chemicals stored around the building. Another significant activity was the editing of building plans and details with Autocad. Usually, I would be given a drawing with some markups, and I would have to either create or alter a computer file accordingly. These were normally jobs that would only take a few hours, but cumulatively they added up to a significant amount of time. This also exposed me to many of SGH’s projects as the drawings would be for any one of a dozen separate buildings they were working on. I also spent a few days in the field testing the waterproof membrane of a roof to ensure that it had been applied properly. Finally, for the last few weeks of my term, I researched construction projects and papers which involved a material called soil-cement. This involved reading the information, sorting it, and putting the relevant parts into an easily understandable layout.

Besides being a job, my co-op term was also fun. The office setting was very informal and comfortable. During Halloween, people dressed up and carved pumpkins. A party was held before Thanksgiving which included good food and games. SGH also organized team activities. There were a few sports teams that anyone could sign up for including basketball and softball. Also, periodically, there were building competitions. During my term, there was a gingerbread house contest just before Christmas.
I learned many things about civil engineering during the course of my term. For example, liability is always a very important consideration. Even the smallest construction project can involve literally hundreds of drawings and thousands of documents. Every aspect of a building has to be designed, placed properly, tested, and redesigned when the contractor makes a mistake. Most importantly, I learned how to work in an office setting. As a student, I was relatively unused to being part of a team for extended periods of time. Also, I had never worked before in a formal environment. With this co-op, I had to adjust to working for a set amount of time, at a set time of day. I was relied upon by others to finish my tasks in a timely manner so that they could finish theirs. My work had to meet a certain standard. Even the smallest task had to be approached with enthusiasm because every job had a purpose.

But work is not everything. Boston is a great city. There are dozens of colleges and thousands of students. If you want to go out, I recommend listening to a concert in the commons or attending a Patriots football game. Housing is not a serious issue as landlords are used to college students. Housing quality depends on your budget and the area. For smaller budgets, I recommend Craigslist. It usually has a good selection of cheaper college rentals. I personally found an apartment through a cousin, but I saw some good places online. Location is a bit tricky as you have to take your office address into consideration. I worked in Waltham, but I would not recommend searching for a place in that area. In the small towns outside Boston like Waltham, there is not as much choice for housing or activities. Your best bet is to live closer to Boston and commute to work. Public transportation can be good, but it is very dependent on where you want to go. It is best within or close to downtown. As you go further out, trips take much longer because of all the transfers. The best way to get around Boston, outside of the downtown area, is to own a car. The only problem with this option is parking can be expensive and Bostonians are terrible drivers.

The worst feature of the job was that co-ops had the lowest priority for work. While this would not have been a problem during normal economic times, during the recession there were periods of time where there was almost no work at all for co-ops. As a result, I spent a few days working on online tutorials and searching for jobs to do. This was not SGH's fault as every company involved in construction was also having a very hard time, but the lack of a purpose was pretty depressing.

The best feature of the job was that it was consistently interesting. By working in many different capacities on several different projects, I was able to learn more and experience a wider set of SGH's work. I followed a few different projects for the entire term, but I never work exclusively on one project for a long period of time. There was a good mix of being able to see how a job progresses but also, at the same time, having the opportunity to work on a wide variety of assignments. This approach helped make my time at SGH a truly enjoyable and educational experience.

In conclusion, I believe that the most important question in determining whether my time at SGH was beneficial is whether the co-op was better than anything else I could have done. With SGH, that question was easy to answer.
The training provided during the Orientation was mainly provided to get familiar with the working culture and departments in the company. Although there was no official technical orientation, training was readily available through many employees throughout the company anytime during my working period. When you are assigned a job, there will always be someone that could and will assist you or help you work your way through. The tasks given were mainly need-based, meaning that I didn’t have a specific function during my work term; therefore, I had the chance to have a grasp in various services that the company offered, from investigating failing structures to planning reparations to examining lawsuits and class actions. Being exposed to different projects was the aspect that I liked the most about working in SGH, since it honed and challenged my ability to adapt to and learn from unprecedented projects. In a nutshell, some of the tasks I’ve performed were drafting and editing blueprints, calculating reparation costs, researching documents as well as participating in discussions to deal with lawsuits, and performing site settlement surveys. The always changing tasks was the aspect I liked the most about working in SGH: projects were unpredictable and different. I was assigned a mentor to get familiar with the working environment and any logistics in the company; however, whenever I needed help with a project, I would approach someone with more expertise in the project field.