Describe your overall duties/responsibilities as a Senior Staff Engineer and Deputy Project Manager:

Brown and Caldwell is a 100% environmental consulting firm which means my work spans across a multitude of project types. In our Columbus office, I focus on designing green infrastructure projects, sanitary sewers and pump stations, and wastewater/water treatment plants. My responsibilities within every project include performing preliminary studies, writing technical memos and design reports, detailed plan design, and construction management services. Within these various tasks, work will include calculations, utilizing GIS mapping software, technical writing, permitting, field work, and budgeting. I have also been given the opportunity to serve as a deputy project manager for a few projects and clients in which I have begun the learning process of all it takes to be a successful project manager in this business.

Explain the skills/abilities that are required for being successful in your role:

I have learned that the main skills needed to be a successful engineer consultant are teamwork, adaptability, communication, and technical skills. Technical skills are the foremost important skill to have when it comes to my field but there will always be someone who is more technically sound than you and that is where teamwork and communication help immensely. No project will ever go according to script and being able to adapt on the fly and think outside of the box for a solution will go a long way in pleasing the client. Fully understanding the clients’ wants and needs is paramount and being able to adequately deliver a project on time and on budget with a solid solution will make for a happy client.

What advice would you give to students who are considering majoring in Environmental Engineering?

My advice to students who are considering this major would be to do it! If someone has a passion for solving complex problems and values clean water, air, etc. then this is the perfect major for them. This major can take a graduate down any number of career paths from consulting to regulatory agencies or to working for a municipality serving the local population. I would also implore these students to get involved in a student organization while in school. Networking is a big part of my life as a consultant and the peers you study with and get involved with while in school are the same peers who you will see at professional organization events and possibly even be working with later in your career.