

Finding and Making the Most of an Internship in Heavy Civil Construction



*Courtesy of The Beavers, an association of companies involved in heavy engineering construction
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Internships are a “Win – Win”!

Internships give you the chance to see a company from the inside and determine whether it is the type of organization you want to join. Not only will you have a well-paid summer (or longer) job, but the practical experience you will gain will enhance your classroom learning. And as a bonus, you will be making valuable contacts that could very likely lead to a permanent job after you graduate.

Internships don't just fall out of the sky – it's up to you to research companies and be proactive in finding these opportunities – starting your freshman year! Just as you would start a job search, you need to take advantage of all the avenues to find internships – school job fairs, company and association websites, personal contacts, guest speakers/visitors – work them all! See the list on the next page for suggestions on how to find internships.

An internship provides you the chance to explore different areas within the heavy civil market to see which ones capture your interest. Sometimes this means having internships with different companies, or it could mean working with the same company multiple summers in different areas of their operations.

What Type of Internship Do You Want?



An internship in heavy civil construction can come in a few different forms as far as the required duties and responsibilities. Like most of construction, the two most frequent options for a student in Construction Management or Civil Engineering during an internship are working in the main office with the estimating/pursuit group or working in the field during the construction phase

and supporting the project manager, project engineer, and/or the superintendents. These provide different, but both valuable, perspectives of heavy construction projects. Try to gain experience in both of these areas, and others, through your internships.

Estimating - Where it all starts!

The estimating side of the business is just as, if not more, important than actually building the project. Pursuing work and being awarded a contract, whether it is by low-bid, best value, design-build, or any other form of contacting, is multi-faceted in itself. There are many tasks for an intern during this stage ranging from quantity takeoffs, sub-contractor and supplier solicitations, scheduling, proposal writing, historical data and production rate analysis, and bid close-outs, etc.. This part of the business can be very rewarding. Even if a student knows he or she wants to be in the field eventually, estimating training is essential to being a successful project manager/engineer or superintendent.

Field Work - Making it happen!

If an intern is not in the main office, they will most likely be in the field with a project team. Working in the field provides hands-on experience with construction operations and the challenges of turning the design and construction plan into reality. Resource management, coordination across operations, and productivity are all part of making a heavy construction site run effectively and efficiently.

The biggest difference being in the field for an intern in heavy civil construction compared to building work is the heavy civil companies typically self-perform more of their own work. This offers more opportunities for the intern to be involved with planning and executing an operational work plan with more “skin in the game.”

In the field, the intern would typically be assigned to a project engineer or a superintendent. When assigned to a project engineer, the intern may assist in monitoring the projects schedule, write requests for information (RFI), coordinate and price change orders, claim quantities for end of period reporting, keep the project photos, monitor all the project logs: RFI, contract change orders (CCO), letters, keep as-built drawings, manage



material and sub-contracts, review and transmit submittals and more. When assigned to a specific superintendent, the intern would be more involved with daily operations including creating work plans, analysis of safety hazards, tracking quantities and daily production rates, reviewing timecards, coding activities to cost accounts, tracking man-hours, ordering materials, reviewing submittals, and more.

Whatever responsibility you are assigned, make sure that you are responsible, committed, and engaged in performing

Finding Your Internship

Important points to consider when seeking your internship:

1) Review the company background by attending a pre-session, job fair, or visiting the company's website.

To learn more about the company and to be informed, try to answer some of these questions:

- What industry/work type does the firm provide?
- What is the area and location of the home or regional office and projects?
- What is the typical current project and what is the typical project size?
- How big is the firm or division, both in the number of employees and annual revenue?
- What responsibilities are typically assigned to interns?
- Are interns assigned to the office (estimating), field (engineering), or other (specify)?
- What is the company safety record and experience?
- For what types of owners does the firm work?
- Is the firm public or privately held?
- Why would I want to work for this company?
- Does the website give you an idea of the company culture?
- What can I learn about the firm from their Facebook, Instagram, and/or LinkedIn pages?

2. Make sure you have a professional looking resume

A one-page resume is recommended. Have your resume reviewed by a trusted faculty member. Ask your current/previous employer to look at your resume.

3. Dress professional for the interview.

Never be less formal than the person across the desk from you. In some cases a suit and/or tie is not appropriate, but when in



doubt, ask the HR person or always just error on the more professional side. Many times, it depends where the interview takes place. If it is on campus, you may be able to dress more casual. If it is at their office, usually it is safer to dress professional with tie and possibly suit. Yes, it is construction, but you do not want to be out-dressed by your competition.

4. When interviewing, be prepared with 5 to 10 questions for the interviewer.

Questions should be specific about the company that were not already discussed in the pre-session. Realize that some of the questions may be answered in the interview; having a couple extra questions for the end of the interview shows that you are prepared.

5. Do not focus on just one company.

Interview with 3 to 5 companies. This will increase your experience with interviewing and will give you a better understanding of the companies and overall industry.

6. Notify the company ahead of time if you have to cancel an interview.

7. Consider getting your OSHA Safety 10/30 prior to your internship. Ask the companies if they can provide this. Doing so shows initiative and that you are thinking Safety-First.

8. Talk to fellow students about their experiences but realize that every student has different goals and expectations.

9. Ask the company for names and contact information for students you can call as references. Especially talk to Juniors and Seniors at your School.

10. Ask Faculty about the company you are exploring.

11. Do not choose a company solely based on pay.

Other aspects may be more important, such as the location you will be working, the cost of living there, what you will be working on, the experience you will be receiving and the people with



whom you will be working.

12. Many companies will give you a short time period to accept their offer. If you still have some interviews, tell them you need more time (be reasonable with your request). Companies will usually grant you one to two weeks of additional time with the understanding they can pull the offer if other interns respond quicker. In most cases, this does not affect your offer.

13. Join student teams and student clubs such as the Associated General Contractors (AGC), Associated Schools of Construction (ASC) construction competition, design-build institute of America (DBIA), American Society of Civil Engineers (ASCE), the construction honor society of Sigma Lambda Chi (SLC) and others. Get involved!

14. Ask faculty about other companies that may not have made the job fair or school recruiting sessions.

15. Go on The Beavers website and download the list of member companies - both contractors and subcontractors.

<http://thebeavers.org>. Explore these firms!

Visit The Beavers jobs web page:

<http://www.heavyconstructioncareers.com>



During Your Internship

Before you begin your internship, if you need a week after school is out to take care of some personal business, ask the company as soon as possible. Preferably at the time of the offer or acceptance. You want to free up your time during the internship to fully focus on your job. Although this is a learning experience, it is also a job and your employer expects value from your time. If you must have time off during your internship, be up-front about it early and request the time off.

Here are some important items to consider during your internship:

- 1. Be prepared to take and pass a drug test.** Most companies today require a drug-free work place.
- 2. Always be on time or be early.** In fact, plan to show up early. Stay late if they ask or if you think you can help or learn something, even if you do not get paid. On the flip side, do not let the company take advantage of you and your time.
- 3. Do not hesitate to ask questions.**

4. Try to take on more responsibilities. Ask for more work if you feel you are not being challenged. On the contrary, tell someone if you get in over your head.

5. Try to meet and build relationships with different people in the company and with your sub-contractors.

6. Respect your field personnel and sub-contractors. They have often been doing their work for a long time and you can learn a lot from them. Ask them questions. Ask them if you can shadow them for a day/week.

7. Do not be afraid to go outside your comfort zone (within reason).

8. Try to find a mentor within the company if one is not assigned to you.

9. Ask to experience different parts of the firm (e.g. estimating, field work, safety). If there are other sectors of the company you want to explore, pursue these. Talk about this early on in the internship. Three months goes by fast.

10. Be open-minded as every company does things differently.

11. Accept challenges. Sometimes the company wants to see how you handle tasks outside your current areas of expertise and competencies.

12. Ask for a mid-summer review. You do not want to find out you could have made improvements at the end of your internship.

13. Although you are there to learn, this is a job and no task should be beneath you.



Looking Back at your Internship

At the end of your internship, request an exit interview with your direct manager if the company does not already schedule this. This can potentially provide you valuable feedback and the company an opportunity to rate your performance. At the same time, you have an opportunity to reflect on your internship experience and may get a chance to provide feedback to the firm.

Decide if you are going to experiment with different companies or try to invest all into one company. If geographically possible, ask the company if you can intern during winter or spring break.

Some other proactive things you could consider are:

1. If you are near graduation, ask the company for an offer for permanent employment.
2. Write a letter to your manager/mentor and thank that person for the opportunity.
3. Request an exit interview. You are also interviewing them and telling them what you benefitted from and not.
4. Keep in contact with co-workers
5. Ask about upcoming events that you can attend such as outdoor events, company picnics, golf outings, etc.
6. When you get back to school, discuss and compare your internship to your friends.
7. Search for a very different company for your next summer internship. If you worked for a small company, find a larger company and vice-versa. Mix it up!



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