

The Monday Interview – “So, what’s it really like working as a ... civil engineer?”

I’m very excited today to be starting a new weekly feature, ‘The Monday Interview’. At the start of each week I am going to be publishing an online interview where a professional gets to talk about their job. I’m hoping to capture some of the detail that straightforward careers information sometimes fails to get across. It is, if you like, an insider’s guide to what it is really like doing a particular job – the highs, the lows, how *they* got into it, and the advice they can give *you* on how to break into the career.

I am so totally grateful to the people who have given me their time, and their thoughts, in contributing to this feature. Please let me know if there are any career areas you are particular keen to hear about and I’ll see what I can do.

Today’s very first interview is with Elizabeth who is helping to explain a little more about what it is really like working as a civil engineer. Enjoy!

So, briefly, what is your job?

“I’m a Chartered Civil Engineer. My background is in highway engineering but I’m currently working as a Membership Development Officer for the Institution of Civil Engineers.”

How did you get into it?

“I always wanted to build bridges so I attended a Women in Science and Engineering (WISE) event run at Birmingham University much to the horror of my parents who felt a career in music was more appropriate. I learnt from this that I needed to get maths and physics at A-Level and then do an accredited degree in civil engineering. I did my degree in Manchester. I then got a graduate job and worked my way round the industry getting the right experience to complete the criteria for sitting my Chartered Professional Review to become a Chartered Engineer. I took just under 4 years from graduating to achieve this.

In order to get chartered I took a job with a major consultancy as a drainage designer. I spent 6 months designing drainage for the A1(M) Darrington to Dishforth motorway scheme before going on to site dealing with construction issues relating to highways and drainage.

Before this I worked in London for another large civil engineering consultancy undertaking minor highway works schemes in the City of Westminster. My most famous scheme you’ve all seen on the TV as I designed a scheme looking at improving the access to Westminster Abbey for state events. The interim plan had to be put in place for the Queen Mother’s funeral.

Once I had got Chartered in 2004 I moved to a Team Leader Role with another consultancy heading up a team of graduate engineers delivering a programme of minor highway works for Leeds City Council. Most of my work was in delivering a programme of Private Streetwork Adoptions. Very different to the fast pace of motorway building.

I was promoted to the grade of Project Manager in 2007. I took on the management of the design of the A65 Quality Bus Corridor and then part way through this left unexpectedly early for my first period of Maternity Leave of 12 months. I returned to work on a part time basis and went back to managing minor works schemes and had responsibility for a team of graduates and technicians.

In 2010 at the start of my 2nd maternity leave I was made redundant due to the down turn in the Highway sector.

Being made redundant gave me a chance to review my options and find a truly flexible part time role. I successfully applied and attained the post of Member Development Officer for the Institution of Civil Engineers in

May 2011. In this role I deal with many people across Yorkshire and the Humber who are Civil Engineers in Training or responsible for the training of Civil Engineers. I also deal with the senior members of the profession encouraging them to become fellows or reviewers amongst other roles in the professional body.”

Describe a typical day.

“The great thing about civil engineering no 2 days are the same. In my current job I tend to read my email in the morning and check where I’m visiting that day. I gather information for visits. On a company visit I tend to deal with groups of graduates and provide them advice on how things are going and point them in the right direction to find more out.

I also get a lot of telephone calls from members so have to call them back when I get in from a visit.

I record details of the days visit and then prepare for the next.

This is very different to my project manager role. In my last project I managed a team of designers for a major highway scheme in Doncaster. Every morning I used to have a team briefing to make sure everyone was set up for the day. Then I’d deal with the client email and discuss progress with my senior managers. I’d usually also deal with checking highway alignments, answering queries on the design constraints, approve drawings for issue. Some time I’d have to factor in travel to a client office to present progress to date. “

What do you enjoy most about your job?

“Currently meeting people, helping them out and knowing that I’m encouraging more people to become professionally qualified civil engineers. In my previous roles I loved the sense of making a difference. The highway improvements whilst sometimes a disruption whilst they were being undertaken would usually make a difference to the general public.

It’s also nice to be able to drive along the A1(M) and say I designed that and helped build it!”

And the least?

“Dealing with complaints from the General Public about the work going on outside their homes. Sometime the mess is a necessity and it’s hard to explain that it’s short term pain for long term gain.“

What are the common misconceptions that people have about the work you do?

“That engineers fix washing machines! I don’t, I never had done, and I’m not about to start. I’m a civil engineer and I can design roads. However this is just a very small part of the world of civil engineering. Despite there being so many women in engineering now it’s hard to make people realise that I am a qualified engineer sometimes and not a PA.”

What are the main skills you need to be a Civil Engineer?

“Creativity, independent judgement, problem solving skills and leadership skills.”

Tell us a little about the benefits that come with the job.

“Salaries in civil engineering are improving graduate entry salaries are circa £21k. The experience available worldwide is amazing and many companies offer good training schemes to help you on your way to professional qualification. The job satisfaction is great and the work is so varied.”

What advice would you give someone wanting to break into this career?

“Get good grades in Maths and science and keep studying. Get some work experience in engineering. If you’re female get on to one of the WISE courses to get a taster of what it’s all about. There are so many options at the end of a civil engineering degree; may be you could become a bridge designer, deal with supplying people with clean water or taking the dirty away, or you could build HS2. Who knows, the world is your oyster.”

Where do you see yourself in 10 years’ time?

“In 10 years’ time I will probably be working full time again. Where, I’m not sure. Civil engineering is a very changeable beast. I may still be working with the professional body but I might have gone back to road building. I think it depends on how the spend on major infrastructure changes in the UK over time.”

AND JUST FOR FUN...

First in the office or last to leave?

“Neither”

Tea or coffee?

“Tea – a good old builders brew”

Staff canteen or packed lunch?

“Packed lunch”

The lift or the stairs?

“Stairs”

Out after work or straight home to bed?

“Home to bed! I have children I’m tired all the time!”
