

Samuel Cartledge



My name is Samuel Cartledge and I work for Laing O'Rourke who are the largest privately owned construction companies in the UK who deliver state of the art infrastructure and buildings for clients in the UK, Middle East and Australia. Laing O'Rourke is a vital part of the construction industry, placing significant emphasis on off site manufacture which reduces costs and programme time. The company uses a fully integrated Design for Manufacture and Assembly (DfMA) business model to deliver solutions for some of the worlds most complex projects. I am very proud to work for such a major construction company who strives to improve the industry by utilising an innovative approach to enhancing the quality of our projects and ensuring that all those involved remain safe during all our works.

Why did I choose an apprenticeship?

I am currently in Year 4 of a 5 year Level 6 Degree Apprenticeship in Civil Engineering with Site Management at Exeter University. I complete my studies on a block release basis whereby I work for 6 weeks followed by a 2 week block at University. I felt the apprenticeship was the best way for me to learn and develop as a Civil Engineer as it allowed me to gain on the job learning whilst completing my studies. I am able to work with experienced engineers who pass on their knowledge and expertise which I have found to be very beneficial. I benefit from ongoing and personalised support from both the university and my colleagues which enables me to develop my knowledge and skills at an enhanced rate. I will gain recognised qualifications which include BEng degree and also accreditation with the Institute of Civil Engineers (ICE) which will progress my career further whilst allowing me to put my knowledge into practice on site. The programme has provided me with opportunities to further develop my skills through completing case studies on Machine Control technology which developed my report writing whilst also my communication skills. I have thoroughly enjoyed the first 2 years of the programme and extremely recommend this route for anyone looking at Civil Engineering as a career.

How Did I Get into The Construction Industry and in particular, the transport sector?

During my early years of Secondary School, I completed several different pieces of work experience to ascertain the career path that most suited my interests. This included a weeks experience at an architects firm whereby I was able to develop my skills at reading drawings followed by a weeks experience at a BAM construction site where I followed a Site Engineer and Construction Manager. From studying STEM subjects at both GCSE and A Level, I felt that a career in engineering was the right thing for my interests. In particular, the problem solving aspect of engineering was of interest to me whilst the fact that the industry is so broad means there will be a wide range of career opportunities available. Furthermore, the possibility to work abroad was extremely exciting after I had just completed a month long expedition to Cambodia in the Summer of 2018. It afforded me the opportunity to develop a greater understanding of how small engineering projects can have huge impact on local communities and also allowed me to develop skills in communication and problem solving. During this time, I completed various projects in the local communities including the construction of a chicken coop for a lady who was extremely poor and several water wells for a local village. It was a very beneficial experience and made me realise the importance of both small and large scale engineering projects. Civil Engineering is all about creating infrastructure that will benefit the local community and this interest was shown during my time in Cambodia.

As part of Civil Engineering, I have spent the past 3.5 years within the transport division working on the East West Rail project, which is working to re-introduce the railway network between Oxford and Cambridge. I have been involved in a wide range of activities since starting my career with Laing O'Rourke which includes haul road construction, Continuous Flight Auger & Sectional Flight Auger Piling, reinforcement installation, buried service diversions among others. I am very proud of what I have worked on so far in my career and look forward to the future in different aspects of the industry.

What Has The Industry Taught You?

I have learnt a lot from my first couple of years on the programme, with my construction knowledge developing significantly due to the wide range of activities that I have been involved with. I have been able to work alongside experienced professionals who have taught me the basics of construction and the processes involved in ensuring that works are completed safely, to programme and to the correct quality. I particularly enjoy the variety of activities that I complete daily, from setting out works on site to writing up paperwork for upcoming works and attending meetings to ensure that all disciplines are involved in the works. No one day is the same and each day is challenging, with a variety of problems to solve. I really enjoy collaborating with colleagues to discuss a problem and then solving it, something that the construction industry is very good at.

What Can You See For The Future Of The Industry?

I see the construction industry placing a greater focus on Sustainable construction techniques and placing greater emphasis on ensuring that all construction is completed in an environmentally and ecological way. This will involve greater collaboration between disciplines and utilise DfMA techniques to enhance construction activities. I feel that Laing O'Rourke are in a great place to succeed with this and will drive the industry forward with their existing focus on off site manufacture.