

# Job Description Assistant Engineer (Traffic Signals Design)

Service:	Highways	Team:	UTMC – Traffic Signal Design	
Location:	Countywide			
Salary	£29,577 – £33,782	Grade:		8
range:				
Reports to:	Greg Bonner (Grade 9)	Staff responsible for:		0

## **Job Purpose**

With over 700 Traffic Signals installations in Lancashire, the Urban Traffic Management and Control (UTMC) team is a key team in ensuring the smooth operation of Lancashire's Highway Network. The UTMC team is made up of 3 key sub teams each focussing on different elements of Traffic Signal Control seeking to maintain, improve and optimise existing installations as well as delivering new, innovative and efficient signal sites throughout Lancashire.

**Network Optimisation Team** – Optimise the performance of Lancashire's network using UTMC and ITS systems. Issue commissions and manage LCC framework consultants working on UTMC projects. Undertake traffic counts and surveys and use systems to collect and analyse traffic and transport data.

**Traffic Signal Design Team –** The team undertakes a full traffic signal/UTMC design service with modelling and assessment leading to commissioning and validation. They also provide technical acceptance on behalf of the highway authority for new changes and developments. The team also develops and manage an annual capital programme to improve the condition of existing Traffic Signal installations.

**Traffic Signal Operations and Maintenance –** Manage and supervise the signal maintenance and equipment supply term service contract. Maintain the asset and records system. Respond to customer queries.

We are recruiting for an Assistant Engineer within the Traffic Signals Design Team, which is a small team of engineers working on a range of exciting and interesting projects introducing new signal junctions and crossings to the Lancashire Highway Network. The successful candidate will be heavily involved in the team's activities and will play a key role in progressing projects through the design stage.

Working closely with 2 technicians, you'll be expected to produce high quality design packages for new traffic signal installations. This will involve the production of design drawings using AutoCAD, TOPAS 2500 documentation and a range of risk assessments and associated health & safety information. This will require good teamworking skills, close attention to detail as well as an eye for design, critical thinking and creative and innovative thinking.

The role will also require you to be heavily involved in the Technical Acceptance Process for new traffic signal installations provided as part of new developments. These are usually delivered by third parties, usually under a Section 278 Agreement. This will involve the checking of submitted design documentation including the production of a detailed report on the submission. Once a design has been accepted your role will involve the close coordination of the construction activities involving the Traffic Signals team. This will range from answering queries related to the designs, attending site meetings to resolve design issues, arranging and attending FAT and SAT events as well as attending Pre-SATs to ensure the sites are suitable to be switched on. This is a crucial element to the role therefore it is essential you have excellent communication and interpersonal skills. It is essential you are able to overcome conflict and can manage the relationship with third parties effectively to ensure all works are carried out to the Traffic Signals Teams specifications.



You'll be expected to keep on top of advances to technology in the traffic signals industry as well as keeping up to date with the latest legislation and guidance relating to traffic signals.

Working closely with the Traffic Signals Design Team Leader you'll be expected to ensure each project the team is involved in meets the deadlines set, achieves it's target and adds value.

With support, guidance and training offered the role will allow you to develop your skills in the Traffic Signal Industry.

## **Accountabilities/Responsibilities**

The list below provides the main accountabilities / responsibilities of the role. Full training will be given to the successful candidate in order to carry out these duties.

- Provide technical design input to team members preparing traffic signal design documentation.
- Prepare 2500 documentation and carry out MOVA / UTC design work.
- Produce risk assessment documentation & other health & safety documentation.
- Check / review traffic signal design documentation carried out by members of the teams.
- Perform site inspections, FAT, SAT and Validation exercises.
- Assist with mentoring and developing junior members of the team.
- Undertake design reviews of traffic signals design packages produced by third parties to provide technical acceptance.
- Manage and coordinate the traffic signals team input into the installation of traffic signal sites undertaken by third parties.
- When required, assist in the concept development of traffic signal and other UTMC and ITS projects
- Guide team members, to ensure all design documentation is suitable to handover to the Traffic Signals Maintenance Team.
- Work closely with colleagues in the wider UTMC team to assist in the development of processes / new methods of working which improve the efficiency and effectiveness of The Traffic Signals Design Team
- Work closely with other internal teams to ensure that signal designs are developed in collaboration, teams include Development Support, Design and Construction and Traffic Signals Maintenance.
- Undertake a continuous improvement ethos for all aspects of work including carrying out mandatory training, on the job training, and participating in courses necessary to the development of traffic signal designs.
- Ensure that any work undertaken is of a high standard and conform to necessary guidance and legislation.

#### Other

#### Equal Opportunities

We are committed to achieving equal opportunities in the way we deliver services to the community and in our employment arrangements. We expect all employees to understand and promote this policy in their work.

## Health and safety

All employees have a responsibility for their own health and safety and that of others when carrying out their duties and must help us to apply our general statement of health and safety policy.

#### Customer Focused

We put our customers' needs and expectations at the heart of all that we do. We expect our employees to have a full understanding of those needs and expectations so that we can provide high quality, appropriate services at all times.



#### **Our Values**

## We expect all our employees to demonstrate and promote our values:

## Supportive

We are supportive of our customers and colleagues, recognising their contributions and making the best of their strengths to enable our communities to flourish.

#### Innovative

We deliver the best services we possibly can, always looking for creative ways to do things better, putting the customer at the heart of our thinking, and being ambitious and focused on how we can deliver the best services now and in the future.

## Respectful

We treat colleagues, customers and partners with respect, listening to their views, empathising and valuing their diverse needs and perspectives, to be fair, open and honest in all that we do.

#### Collaborative

We listen to, engage with, learn from and work with colleagues, partners and customers to help achieve the best outcomes for everyone.



## Person Specification Assistant Engineer (Traffic Signals Design)

All the following requirements are essential unless otherwise indicated by \*

Your ability to meet the job requirements will initially be assessed by the information provided on your application but further assessment will be undertaken at interview and, in some cases, by using other types of assessment(s).

#### Qualifications

Degree or HND/C or demonstrable equivalent gained through relevant work experience.

## **Experience**

- Experience of working in a relevant engineering field such as Traffic Signals or Civil Engineering.
- Production of Risk Assessments and Health and Safety documentation including an understanding of CDM.
- Mentoring / guiding junior members of the team\*
- MOVA Design including datasets and validation\*
- Use of AutoCAD.\*

#### Essential knowledge, skills & abilities

- Excellent planning, analytical and problem solving skills with a flair for finding creative solutions to problems.
- Effective communication skills including an ability to present information in a range of written formats and an ability to communicate verbally across a range of settings including face to face and electronically.
- Traffic / Highway engineering knowledge and skills.
- Ability to build relationships and influence internal and external parties to achieve desirable outcomes.
- Excellent organisational skills.
- A strong report writing capability with the ability to assess information and describe requirements clearly in a written format.
- Ability to plan, coordinate and manage own workloads to meet a variety of deadlines, both self imposed and externally generated.
- Up to date knowledge of relevant policy, technical, regulatory or professional framework.\*
- Ability to work individually and as part of a team.



## Other essential requirements

- Commitment to equality and diversity.
- Commitment to health and safety.
- Display the LCC values and behaviours at all times and actively promote them in others.
- This is an essential car user post so you must be able to drive and provide a vehicle.

You will be required to provide a car for use in connection with the duties of this post and must be insured for business use. In certain circumstances consideration may be given to applicants who, as a consequence of a disability, are unable to drive