

Job Description

For Engineer Positions

This form is used to provide a complete description of the specific job (or role) and defines the skills, knowledge and abilities required to undertake the specific and generic role profile.

Section A: Specific Role Profile

The specific role profile provides key information relating to the salary and working conditions e.g. location of a job, along with the current focus of the job role and a brief description of the main duties.

Role Details

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|-----------------------|----------------------------------------------|------|-------|
| Job Title: | Principal Traffic Signal and ITS Engineer | JEID | EN006 |
| Salary Grade: | Grade O | | |
| Team: | Traffic Control and Information Systems | | |
| Service Area: | Communities (Environment Services) | | |
| Primary Location: | Barrack Street, Warwick | | |
| Political Restriction | This position is not politically restricted. | | |
| Responsible to: | Section Manager | | |
| Responsible for: | Engineers and Technicians | | |

Role Purpose

Provide leadership in this specialist area to individual team members, other colleagues and key stakeholders in order to provide an effective service in urban traffic control. To supervise the maintenance, operation and implementation of traffic signals, pedestrian crossings, car park management signs, variable message signs and other Intelligent Transport Systems. To ensure that existing traffic signals and pedestrian crossings operate efficiently. To carry out the authorisation of temporary signals.

Role Responsibilities

Provide leadership in all areas associated with Urban Traffic Management and Intelligent Transport Systems.

Project Management and Financial control of the Asset Management Modernisation Plan.

Managing and priorities works associated with the Asset Management Modernisation Plan.

Responsible for the specification, ordering, testing, supervising the installation of traffic signals, pedestrian crossings and Intelligent Transport Systems.

Carry out post commissioning monitoring and fine tuning of traffic control installations and diagnostic

fault analysis on equipment as required.

Manage the installation, commissioning and maintenance of traffic signal control and other electronic highway control applications, collaborating with other project delivery / management teams as necessary.

Responsible for maintaining the Asset Management database for all assets.

Manage the day-to-day operation of the SCOOT based UTMC system.

Manage the operation of other associated systems, including Siemens remote monitoring, InView fault management system, Siemens Stratos including car park management signs / variable message signs / strategy management and Highways CCTV.

Assist with investigating the need for traffic signals, pedestrian crossing facilities and other traffic control equipment in accordance with County Council policy, Department for Transport standards, technical standards, safety considerations and costs.

Manage the authorisation of temporary signals including review of traffic management proposals, liaison with utility contractors and WCC Streetworks Team.

Managing the authorisation of three or more phase temporary traffic signals maintaining an accurate record of all payments.

Deal with written, telephone, email requests and queries from elected Members, members of the public, District Councils, Police and other bodies.

Contribute to the Councils traffic management duty, operationally supporting the functions of its SCOOT UTC facilities through proactive / reactive interventions as required.

Writing reports which concern specific schemes or which assist in establishing County Council policy or report progress.

Managing the performance of the maintenance contractor and ensuring that key performance indicators are achieved.

Managing and priorities works associated with the Asset Management Modernisation Plan.

Keeping up to date with new technology i.e. CAV and associated systems.

Undertake the day-to-day maintenance and updating of record, registers, inventories, plans and other information to ensure that information, databases and contracts are accurate and complete, including the investigation and resolving of queries as relevant.

Advise on the need for new policies and standards.

Positively contribute to the management and delivery of the service area aims and objectives embedded

in the Councils service business plan.

You will be required to join the emergency call-out rota to deal with out of hours calls for unplanned random events/ failures/ accidents/ emergencies.

Carry out such other duties as may be required from time to time by the Section Manager.

Section B: Generic Role Profile

The generic role profile provides a list of the main tasks that cover the broad range of duties and responsibilities performed at this level for the job role. An employee may not be undertaking all of these at any one time, but they could be expected to do so under their contract of employment.

Generic Role Details

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| Job Role: | Engineer – Level 6 |
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Main Tasks

- To hold client responsibility for management of contracts and development and management of substantial work programmes and projects.
- To advise senior managers and elected members on technical, contract, commercial and political aspect of a specialist aspect of relevant transport planning, engineering, and construction works and recommending optimum solutions balancing engineering, economic and environmental aspects.
- To monitor changes in relevant national technical standards/guidelines and obtain and respond to feedback on service from the public and elected members in order to redefine service and working practices and to take a lead working with operational managers to achieve a consistent and improving service.
- To have responsibility for the management and delivery of programmes and capital and revenue budgets within the relevant work area, including the identification and securing of funding.
- To estimate and forecast expenditure necessary to meet service plans and develop and monitor the teams annual budgets.
- Controlling demand for limited available budget by working within set priorities and parameters for expenditure on reactive operations. To deal with difficult correspondence, whilst working under pressures.
- To provide sensitive responses to persistent requests from elected Members, parish Councils, locality forums and members of the public for actions/interventions which are problematical, impractical, or not affordable.
- To provide leadership and management to a team of professional, technical and support staff including determining priorities, directing the development and delivery of plans to achieve service aims.
- Responsible for the recruitment, appraisal and development of staff in order to meet service objectives.
- To lead the continual review of efficiency and effectiveness leading to improved business improvement and performance within the postholder's service area.
- To have responsibility for major consultations in relation to the service managed.
- To be responsible for the effective handling and resolution of complaints, investigating concerns and obtaining resolution, referring to directorate complaints officer, and liaising with corporate complaints

officer as required.

- To ensure that the Construction Design and Management Regulations (2007) and other relevant schemes and regulations are applied within the service and by contractors including acting as client and appointing or acting as CDM co-ordinator.
- To report to and attending/presenting proposals to County Council Committee meetings and checking, amending and revising committee reports written by members of the team and/or preparation of complex technical reports.

Section B: Person Specification

The person specification provides a list of essential and desirable criteria (skills and competencies) that a candidate should have in order to perform the job.

Each of the criteria listed below will be measured through; the application form (A), a test / exercise (T), an interview (I), a presentation (P) or documentation (D).

Essential Criteria

Assessed By:

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| Substantial post professional experience working within a relevant discipline and/or significant experience at a senior level of partnership working and diverse project management | A, I, D |
| The ability to demonstrate a high degree of complex problem solving skills | A, I |
| The ability to communicate complicated and contentious information with varied audiences in person and/or writing | A, I |
| Have experience of using ICT including relevant Engineering/Transport Planning systems eg CAD | A, I, D |
| The ability to work within a broad policy framework using managerial discretion over a very broad area of activity | A, I |
| The ability to work under a very high degree of pressure, including meeting unpredictable deadlines and dealing with conflicting demands | A, I |
| The ability to cope in situations where there is an emotional demand arising from the work being undertaken | A, I |
| Experience of managing others within an Engineering/Transport Planning environment | A, I |
| Experience of monitoring and managing and being accountable for large project budgets | |
| Experience of monitoring programme budgets and cost centre management | |
| Experience of leading on the development of policy/service practice within the relevant service | A, I |
| The ability to pull together plans/develop solutions through the introduction of new/original thinking | A, I |
| The ability to persuade others to adopt a course of action which is not necessarily their preferred approach | A, I |

Desirable Criteria

Assessed By:

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| Project and Financial Management | A, I |
| Expert and specialist - producing the traffic signal controller specification documents than leading the works associated with the Factory Acceptance Testing, Site Acceptance Testing and Commissioning. | A, I, P, T |
| As an expert in traffic engineering - conducting site surveys and recommending the specific locations for positioning detection loops/agd's for all methods of control. | A, I, P, T |
| Comprehensive skill in the management of the UTC database. | A, I, T |
| Comprehensive knowledge of traffic signals maintenance procedures. Reviewing traffic signal timings for all signal control methods including SCOOT, VA, CLF and MOVA, in order to reduce congestion. | A, I, T |
| Comprehensive knowledge of the current standards relating to the design, specification, installation and maintenance of traffic signal junctions i.e. Guidance Notes, Chapter 6, DMRB, LTN, TAL, etc. | A, I, T |

Section C: Working Conditions

The working conditions relate to those non-contractual elements of the job that may impact on the holder of the position, as well as those workplace-based responsibilities that are part of this job. These are not contractual but provide a guide to the working conditions and the potential hazards and risks that may be faced.

Health & Safety at Work

To take responsibility for your own health, safety and wellbeing, and undertake health and safety duties and responsibilities for your role as specified within Warwickshire County Councils Health and Safety Policy, and all other relevant health and safety policies, arrangements, procedures, systems of work as specified for the post/ role.

Potential Hazards & Risks

The potential significant hazard(s) and risk(s) for this job are identified below (those ticked). The purpose of recording this information on the job description is so that the health status of the potential and actual post-holders can be assessed with regard to the significant hazards and risks. These hazards and risks should be based on the appropriate activity, process and/or operation risk assessment whereby all of the significant risks are identified, recorded and appropriately controlled. The list below is therefore not an exhaustive list because it is the risk assessment that details all significant risks that could arise out of or in connection with the work activity, but any others will be identified in the 'other' section.

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| <input type="checkbox"/> Provision of personal care on a regular basis | <input type="checkbox"/> Driving HGV or LGV for work |
| <input type="checkbox"/> Regular manual handling (which includes assisting, manoeuvring, pushing and pulling) of people (including pupils) or objects | <input type="checkbox"/> Any other frequent driving or prolonged driving at work activities (e.g. long journeys driving own private vehicle or WCC vehicle for work purposes) |
| <input type="checkbox"/> Working at height/ using ladders on a regular/ repetitive basis | <input type="checkbox"/> Restricted postural change – prolonged sitting |
| <input checked="" type="checkbox"/> Lone working on a regular basis | <input type="checkbox"/> Restricted postural change – prolonged standing |
| <input type="checkbox"/> Night work | <input type="checkbox"/> Regular/repetitive bending/ squatting/ |

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|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| | kneeling/crouching |
| <input type="checkbox"/> Rotating shift work | <input type="checkbox"/> Manual cleaning/ domestic duties |
| <input checked="" type="checkbox"/> Working on/ or near a road | <input checked="" type="checkbox"/> Regular work outdoors |
| <input checked="" type="checkbox"/> Significant use of computers (display screen equipment) | <input type="checkbox"/> Work with vulnerable children or vulnerable adults |
| <input checked="" type="checkbox"/> Undertaking repetitive tasks | <input type="checkbox"/> Working with challenging behaviours |
| <input type="checkbox"/> Continual telephone use (call centres) | <input type="checkbox"/> Regular work with skin irritants/ allergens |
| <input type="checkbox"/> Work requiring hearing protection (exposure to noise above action levels) | <input type="checkbox"/> Regular work with respiratory irritants/ allergens (exposure to dust, fumes, chemicals, fibres) |
| <input type="checkbox"/> Work requiring respirators or masks | <input type="checkbox"/> Work with vibrating tools/ machinery |
| <input type="checkbox"/> Work involving food handling | <input type="checkbox"/> Work with waste, refuse |
| <input type="checkbox"/> Potential exposure to blood or bodily fluids | <input checked="" type="checkbox"/> Face-to-face contact with members of the public |
| <input type="checkbox"/> Other (please specify): | |