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. The wider generic role profile is set out in Section B.

Role Details

Job Title:	Technical Specialist Engineer	JEID	EN007
Salary Grade:	Scale Q		
Team:	Traffic Control and Information Systems		
Service Area:	rvice Area: Communities (Environment Services)		
Primary Location:	Shire Hall, 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 design and implementation of traffic signal junctions, pedestrian crossings, variable message signs and other Intelligent Transport Systems in order to support both the annual capital programme and developer funded schemes. To ensure that existing traffic signals and pedestrian crossings operate efficiently.

As the Technical Specialist Engineer you will advise the Traffic Signal Design Team to deliver the service associated with the: - investigation, evaluation, design, consultation and specification of complex traffic signal junctions, pedestrian crossings, variable message signs and other Intelligent Transport Systems.

Model complex traffic signal junctions using the LinSig software and evaluate the output results.

Write Committee reports on Capital and Developer funded schemes.

Write detailed reports on the outcome of any investigation or studies based upon County Council policy and making reference to any national guidance.

Evaluate Transport Assessment reports and review and undertake technical approval of third party's design.



Role Responsibilities

Project management of Capital and Developer funded schemes.

Supervise and mentor the other design engineers.

Carryout detail design of complex traffic signal junctions using AutoCAD.

Evaluating the need for traffic signal junctions, pedestrian crossing facilities and other intelligent transport systems in accordance with County Council policy.

Experience in applying - Design Manual for Roads and Bridges, Manual for Streets and Department for Transport's Local Transport Notes / Traffic Advisory Leaflets.

Project management of schemes which includes for the: - detail design, consultation, financial management, reporting and procuring the associated equipment for various types of schemes.

Deal with enquiries from elected Members, members of the public, District Councils, Police and other bodies.

Write reports and policies as and when required i.e. for elected Members on specific schemes and which assist in establishing County Council policy.

Carrying out Site Acceptance Tests and Commissioning of traffic signal junctions and pedestrian crossings.

Write/amend documents associated with the Quality Management Systems.

Carrying out as and when necessary site observation and traffic movement inspections; some of which will be outside normal office hours.

Keeping up to date with new technology i.e. CAV and associated systems; advise on the need for new policies and standards.

Assist with the day-to-day operation of the UTMC system including other associated systems: - Siemens remote monitoring system, Siemens fault management system, car park management signs, variable message signs, automatic rising bollards and CCTV.

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.

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

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.

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

1151	
Job Role:	Engineer – Level /
	Lighter Level /

Main Tasks

- To hold overall client responsibility for management of contracts and development and management of substantial work programmes and projects.
- To provide high level expertise to 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 act as senior professional in specialist field by representing the Authority at regional and/or national level, to influence policy and strategy development.
- To undertake a lead role in the development of policy and strategy by interpreting local service needs and regional and national developments, codes of practice and legislative change.
- To have overall 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 budget, attending financial review meetings with Head of Service and regular reporting to Group Manager on budget position and financial performance.
- 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 have overall 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.
- To deputise for the Group Manager as required.

Section C: 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:

Substantial post professional experience including experience of managing a significant area of service within an Engineering/Transport Planning environment	A, I, D
The ability to demonstrate a high degree of complex problem solving skills	A, I
The ability to communicate with a very wide range of audiences over a range of subjects, including topics which are broader than the Engineering/Transport Planning discipline represented	A, I
Have experience of using ICT including relevant Engineering/Transport Planning systems e.g. 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
Experience of staff management, including the responsibility for the recruitment, appraisal and development of staff in order to meet service objectives	A, I
Experience of monitoring and managing and being accountable for large project budgets	A, I
Experience of monitoring programme budgets and cost centre management	A, I
Experience of developing significant policies/ practices which impact across a broad area of the organisation	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
Mobility essential. Able-bodied applicants must be able to drive and have a full driving licence. Disabled applicants should be able to perform the job with aid, where necessary	A,I

Desirable CriteriaAssessed By:

Supervise and mentoring other design engineers and experience in applying - Design Manual for Roads and Bridges, Manual for Streets and Department for Transport's Local Transport Notes / Traffic Advisory Leaflets.	
Extensive experience in using AutoCAD to detail design: - a complex traffic signal junctions (SCOOT/ MOVA), signalised roundabouts and pedestrian crossings.	A, I, T
Extensive experience in using the LinSig software for modelling a complex traffic signal junction and evaluating the output results into a report.	A, I, T
Experience in project management of various schemes at different stages: - investigation, consultation, detail design, reporting, procurement and financial control.	A, I,
Review and undertake technical approval of third party's design.	A, I,
Experience in evaluating Transport Assessment reports.	A, I,

Section D: 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.		
Provision of personal care on a regular basis	☐ Driving HGV or LGV for work	
Regular manual handling (which includes assisting, manoeuvring, pushing and pulling) of people (including pupils) or objects	Any other frequent driving or prolonged driving at work activities (e.g. long journeys driving own private vehicle or WCC vehicle for work purposes)	
Working at height/ using ladders on a regular/ repetitive basis	Restricted postural change – prolonged sitting	
□ Lone working on a regular basis	□ Restricted postural change – prolonged standing	

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