

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

Job Title:	Data Manager	JEID	EN002
Salary Grade:	Grade J		
Team:	Transport Planning		
Service Area:	Transport and Highways - Communities		
Primary Location:	Shire Hall		
Political Restriction	This position is not politically restricted.		
Responsible to:	Alan Law, Lead Commissioner - Modelling and Monitoring		
Responsible for:			

Role Purpose

To manage traffic monitoring databases
To manage the procurement of traffic monitoring infrastructure
To identify and develop multimodal transport monitoring strategies
To produce data analysis to support complex transport and modelling projects
To lead on the development and the provision of transport data to inform regular monitoring report requirements
To supply of transport data to internal and external clients
On-site deployment and maintenance of survey infrastructure
To manage the procurement, deployment and storage of the County's traffic survey data

Role Responsibilities

Ensuring the efficient maintenance of permanent monitoring sites and the setting up and servicing of ad hoc sites by means of loops, tubes, radar or any future means of traffic monitoring equipment deemed appropriate, at roadside sites and on cycleways etc.
Implementing and ensuring the efficient running of the automated multi-modal data collection programme for Warwickshire.
Assessing the suitability of count site locations.
Planning the use of monitoring resources and preparing work schedules.

Providing method statements and cost estimates in response to enquiries and briefs received.

Assisting in providing advice and solutions to data collection requirements, including cost estimates, scheduling, staff resources, implementation, site maintenance and data collection.

Maintaining and replacing equipment, including personal safety clothing, keeping inventories and fault records up to date.

Keeping abreast of developments in traffic survey technologies and methods to improve data collection and accuracy. This will include investigations and analysis of big data sourced from mobile networks, sta navs and potentially 5G.

To act as the expert user for traffic monitoring and to advise on the most appropriate methodologies.

Ensuring Health & Safety requirements are met and safe working practices are adhered to, including reviewing and updating risk assessments.

Procuring specialist survey services (eg. high mast CCTV, drone surveys) as and when appropriate.

Uploading and checking the accuracy of data and making corrections where necessary.

Analysing data and producing reports to support LTP annual monitoring requirements, scheme monitoring requirements.

Liaising with private companies and other authorities to obtain and upload data.

Leading work within an ISO90001 QMS framework, ensuring the appropriate process are followed.

Managing process updates to optimise ISO90001 QMS framework for best practices

Resolving any potential disputes linked to on site operations or supply of data.

Managing capital revenue budget associated with transport infrastructure monitoring

Managing and monitoring of the revenue budgets

Managing permit schemes for surveys in the county

Provide advice and guidance to junior traffic survey staff

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

Job Role:	Engineer – Level 2
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Main Tasks

- To be responsible for the management and / or delivery of small to medium sized projects and programmes of work of moderate complexity as required by the service, including where relevant the planning, co-ordination and implementation of programmes of work, letting work packages to consultants and supervising their work with limited managerial support.
- To directly support senior staff through the specification, development and management of works and/or projects in accordance with all relevant policies and/ or design and quality management standards including where relevant compiling scheme details, schedules, drawings, bills of quantities, tender documents and prepare contract documents, including fee and construction estimates as required.
- To provide technical and professional support to activities as required by the service e.g.:

1. development of transport projects from initial conception of ideas, engagement with stakeholders, commissioning studies and/or technical investigations, identifying and acquiring funding, through to determination of proposals and commissioning detailed design using PRINCE2 project management methodology, and mapping software as appropriate
 2. identification of highway defects and appropriate remedial measures and the development of design solutions for inputting into works schedules
 3. supporting the supervision of winter maintenance and emergency response to incidents that occur throughout the year
 4. undertaking feasibility studies for longer term programmes of work designed to maintain and improve the condition of the highway network
 5. authorisation and co-ordination of temporary traffic signals, including multi-phase installations as required
 6. monitoring of street works in order to ensure compliance with NRSWA, including negotiations with utilities as required and ensuring that utility and private reinstatements comply with agreed specifications, instructing remedial action and issuing of defect notices where required
 7. consideration of technical reports submitted to support less complex planning applications and assessment of proposed development layouts in the interests of highway safety and in light of local, regional and national guidance
 8. negotiations with developers to secure financial contributions and required improvements to mitigate the impact of the development
 9. undertaking road adoption approvals to ensure compliance with relevant conditions guidelines and legislation, including preparing estimates of the cost of the proposed adoptable works and direct liaison with the prospective developer or their representative
 10. investigating traffic management problems requiring the cooperation of other teams/agencies and examining various options including cost implications and recommending solutions
 11. preparation of technical reports and complex engineering drawings using AutoCAD and providing engineering solutions to complex technical problems
- To monitor and manage budgets for own projects and under supervision, take corrective action when expenditure diverges from budget and ensure compliance with relevant financial regulations.
 - To deal with a range of routine and non complex verbal and written enquiries from elected members, district, town and parish councils, the press and the general public providing professional response and feedback in a timely manner.
 - To play a lead role in undertaking statutory and non statutory consultation with limited supervision, delivering presentations on complex matters to both internal and external customers as required and attending public meetings and with elected members and other stakeholders, with the support of more senior officer on more controversial issues.
 - To manage and supervise from the earliest stages all planned projects and works to ensure that that they are delivered in accordance with required quality and safety standards including safe systems of work, risk assessments and the identification of on-site hazards and their control measures (CDM).
 - To monitor progress in relation to the execution of work and to provide information for performance management reporting as required, including the provision of monitoring reports to Committees and other bodies.
 - To represent the County Council as a witness in external formal settings where evidence is required in association with contravention of relevant legislation.

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:

Relevant degree or other qualification to NVQ Level 4 or a minimum of 3 years experience within specialist discipline	A, D, I
The ability to independently interpret and analyse varied and complex information or situations and to produce solutions over the long term	A, I
The ability to communicate complicated and contentious information with varied audiences in person and/or writing.	A, D, I
Have experience of using ICT including relevant Engineering/Transport Planning systems eg CAD	A, D, I
The ability to organise own workload and decide priorities.	A, I +
The ability to work under a 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 monitoring and managing project budgets	A, I
Experience of contributing to the development of Engineering/Transport Planning Policies and Procedures	A, I
The ability to persuade others to adopt a course of action which is not necessarily their preferred approach	A,I
The ability to use own initiative to respond independently to difficult problems and unexpected situations	A, T, I

Desirable Criteria

Assessed By:

Experience in traffic survey analysis or data collection	A, T, I
Experience in using software for processing big/complex datasets - Python, R, GIS, Excel VBA	A, I
Driving licence	D
Experience in other specific Transport Planning/Modelling software - Junctions 10, Paramics etc	A, I, D
Experience working on the highway or similar environments	A, I, D
Experience in working as part of a team and providing advice/guidance to junior staff	A, I
Experience in data management and working with large datasets	A, I
Experience of procurement and delivery to support large scale projects	A, I
Understanding privacy implications and DBS checks	A, I, D

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.

<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 checked="" 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 checked="" 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/ 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 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):	