

# 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:	Engineering Technician (Bridge & Structural Design)	JEID	EN001B
Salary Grade:	Grade I		
Team:	Engineering Design Services		
Service Area:	Communities (Environment Services)		
Primary Location:	Shire Hall		
Political Restriction	This position is not politically restricted.		
Responsible to:	Barrack Street, Warwick		
Responsible for:			

#### Role Purpose

To provide engineering support to the Bridge & Structural Design Team and Bridge Maintenance Team which are part of Engineering Design Services. The Bridge Maintenance Team is responsible for managing the County's Highway Structures which includes 1167 bridges and other highway related structures such as culverts and vehicle restraint systems. The team is also responsible for the design and construction of structural refurbishments and replacements. The Bridge and Structural Design Team are responsible for delivering large capital schemes. Both teams work closely together due to the interdependency in the nature of work undertaken.

Daily tasks will involve a full breadth of engineering activities including carrying out inspections, completing Bridge Condition reports following inspections, writing general and principal bridge inspection reports, completing engineering drawings on AutoCAD and carrying out quality assurance tasks.

#### Role Responsibilities

Technician to provide engineering input on minor and ordinary bridge design and maintenance engineering projects which may involve other organisations. This will include:

- assisting other engineers within the team in the delivery of Computer Aided Drawings (CAD) associated with the delivery projects ranging from small highway improvement schemes to multi-million-pound infrastructure projects.
- assisting the senior engineers within Bridge Maintenance to carry out the inspection of assets in

their annual maintenance programme. This will involve completing both general and principal inspections of bridges and culverts around the County.

- Write principal bridge inspection reports and Inspection for Assessment reports.
- Carry out preliminary structural assessment utilising Archie or similar software.
- Complete Bridge Condition reports and update the Asset Management Database following inspections.
- Procure work related to refurbishments and improvement to existing assets.
- complying with the authority's quality assurance systems, legislative health and safety, environmental protection, traffic management and flood risk management requirements.

## 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 1B
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### Main Tasks

To be responsible for delivery of complex work projects, undertaking straightforward studies, investigations, inspections, assessments, audits and considering applications and claims, including the interpretation and application of technical and planning standards and legal requirements, provision of briefing notes / technical reports as necessary and to assist with the supervision of contractors and consultants undertaking routine or regulated work.

To assist with the supervision of contracts and consultant commissions and support the development and supervision of a range of transport/ engineering schemes and projects, providing technical support / information including assessing construction risk and safety implication of proposals, completing CDM documents, issuing prequalification questionnaires to contractors and issuing works instructions.

To undertake routine monitoring of costs and budgets for transport projects or engineering works or other procured services, or carry out activities required that support income generation.

To development of projects including engagement with stakeholders, commissioning studies and/or technical investigations, through to determination of proposals and commissioning design which ensuring compliance with local, regional and national guidance

To undertake monitoring, maintenance, support and responsive activities across all disciplines, prioritising and arranging remedial actions as necessary *e.g.*

- addressing traffic management problems
- assessing the condition and safety of the highway
- dealing with street lighting works etc

- undertaking general bridge or site inspections

To undertake a wide range of engineering or transport planning processes and procedures requiring checking, analysis, interpretation of information and interaction with stakeholders as necessary, including issuing of routine statutory notices and work required to support legal processes *e.g.*

- traffic Regulation Orders
- section 38 / 106 and 278 Agreements and other planning related matters
- highway licenses and 'stopping up' notices
- to implement and enforce any other relevant legislation

To undertake day to day maintenance and updating of records, registers, inventories, plans and other information to ensure that information, databases and contacts are accurate and complete, including the investigation and resolving of queries as relevant.

To carry out straightforward planning or design for transport projects or engineering works using CAD or mapping software to produce drawings and plans with due regard to design standards, policies and regulations.

Attend meetings to deal with difficult issues, to provide information and advice and to obtain views of partners/ stakeholders and to provide support to more senior officers at meetings with elected Members, public and stakeholders, to undertake consultation, provide information and advice and answer routine technical and policy questions and assist senior officers with writing committee reports.

To liaise with partner organisations other relevant parties to ensure effective working practices

To deal with a range of difficult customer enquiries complaints and associated correspondence, including the provision of advice and carrying out investigations as necessary *e.g.* responding to highways insurance claims.

To monitor progress in relation to the execution of work and to provide information for performance management reporting as required

To ensure all work is 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).

## 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 a relevant specialist discipline	D
The ability to independently interpret and analyse varied and complex information or situations over the medium term.	A, I
Experience of working with customers, clients and partners	A, I
The ability to organise own workload and decide priorities.	A, I
Experience of working within budgets or financial management	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 communicate, in person and/or writing, complicated or sensitive information with varied audiences	A, I
Have experience of using ICT including relevant Engineering/Transport Planning systems e.g. CAD	A, I
To be able to use own initiative to respond independently to difficult problems and unexpected situations	A, I
The ability to work under pressure including meeting deadlines and dealing with interruptions	A, I
The ability to cope in situations where there is an emotional demand arising from the work being undertaken	A, I
Experience of contributing to the development of Engineering/Transport Planning Policies and Procedures	A, I
The ability to co-ordinate a number of elements within a project plan.	A, I

## Desirable Criteria

Assessed By:

Previous experience undertaking bridge inspections and completing relevant reports post inspection.	A, I
An understanding of common bridge defects and reasonable rectification measures	A, I
A good working knowledge of the 'Microsoft Office' suite of software applications, Bridgestation asset management software and the AutoCAD 2D design/drawing application.	A, I
Experience producing bridge engineering drawings (working drawings, drawings for tender purposes and as-built drawings etc) to a high drafting standard.	A, I
An understanding of the current Construction (Design and Management) Regulations and the responsibilities of the dutyholders.	A, I
Ability to travel effectively between WCC offices and construction sites around the county in both urban and rural locations.	A, I

## 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 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 checked="" type="checkbox"/> Restricted postural change – prolonged sitting
<input type="checkbox"/> Lone working on a regular basis	<input type="checkbox"/> Restricted postural change – prolonged standing
<input checked="" 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 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 checked="" 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 checked="" type="checkbox"/> Other (please specify):	Working in the vicinity of watercourses and working on civil engineering construction sites.