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:	Highway Engineer	JEID	EN003
Salary Grade:	Grade K		
Team:	Structural Highway Maintenance		
Service Area:	County Highways		
Primary Location:	Countywide		
Political Restriction	Political Restriction This position is not politically restricted.		
Responsible to:	Responsible to: Delivery Service Manager		
Responsible for: Delivery of Capital and Revenue works programmes			

Role Purpose

To work as required by the Delivery Service Manager in partnership with the locality team and term maintenance contractor to deliver all planned highway works and capital highway programme, within agreed timescales, budgets and quality standards. To assist when required with the management and delivery of planned cyclic, reactive and emergency maintenance works.

Role Responsibilities

To investigate, cost and design highway structural and surface maintenance schemes/works, (including

carriageway and footway reconstruction/resurfacing; structural patching; micro-asphalt; surface dressing; footway slurry sealing etc) and manage their delivery in conjunction with the term contractor.

To investigate, cost, design and manage the delivery of small-scale capital improvement projects/programmes (including traffic schemes; pedestrian crossings; minor works etc) on behalf of a range of clients.

To investigate, cost, design and manage the delivery of highway drainage maintenance/improvement schemes.



To specify, develop and manage works in accordance with design and quality management standards. To plan, co-ordinate and implement programmes of work, as efficiently and effectively as possible in partnership with the term contractor and his sub-contractors/suppliers.

To manage and supervise all planned works to ensure that they delivered in accordance with agreed programmes, budgets and required quality and safety standards.

To manage works costs and provide information to inform financial management of works budgets and

expenditures.

To collect and provide information for performance and quality management reporting.

To manage and implement the requirements of the Traffic Management Act.

To help develop longer term programmes of work designed to maintain and improve the condition of the

highway network.

To assist in the provision of information to the Insurance Officer- this may include presentation of information in evidence in court.

To undertake any other relevant and appropriate duties and responsibilities commensurate with the post

as required to ensure that the delivery service is run in a flexible and efficient manner.

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 3
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Main Tasks

****Bold tasks indicate those that are specific to the Highway Engineer role working within the Structural Highway Maintenance Team****

- To be responsible for the development or design of large or complex projects and schemes in accordance with all relevant polices, regulations and design and quality management standards and taking a lead role across one or more of the following areas as required:
 - 1. undertaking feasibility studies

- 2. maintaining specialist capability with service area and provide technical guidance/ supervision to less-experienced members of the team and assisting with training junior staff in technical and professional disciplines
- 3. maintaining technical standards and good practice within the team;
- 4. initiating legal processes for traffic regulation etc
- 5. undertaking detailed investigations, design of appropriate solutions involving complex engineering works where there may be competing and conflicting demands and which demand significant specialist knowledge
- 6. planning, developing and coordinating programmes of transport schemes and engineering work across the medium to long term (up to 5 years) including the development of costings and recommendations and working effectively with contractors, subcontractors, suppliers, utilities and all other parties as required
- 7. complex transport planning or safety engineering schemes and programmes, including letting work packages to consultants and supervising their work with limited supervision undertaking complex safety audits and carrying out assessment of construction risk and ensuring all planned works are delivered in accordance with required quality and safety standards
- To act as project manager for the delivery of large or complex schemes including where appropriate the supervision of and negotiations with consultants or contractors, anticipating and resolving complex problems in order to achieve agreed objectives in relation to quality and safety standards.
- To agree and certify with contractors interim and final valuations for works completed and to authorise variations as required to resolve problems on site with the contractor in a timely manner in order to deliver "value engineering" solutions that make positive improvements to the scheme.
- To monitor and manage budgets for complex schemes and projects, providing financial information as required, ensuring compliance with financial regulations and taking corrective action when expenditure diverges from budget, seeking direction only in complex circumstances.
- To produce and monitor project plans and provide a range of performance management information, including contract and business specific reports and committee reports with limited supervision.
- To provide day to day supervision to less-experienced members of the team including delegation and checking of work and provision of technical guidance, also covering for and providing technical support to the Team Leader as required.
- To take a lead role in partnership working with external organisations and make decisions outside standard parameters with limited supervision.
- To take the lead role in the management of consultation, attending and taking the lead at contentious public meetings, answering technical and policy questions and delivering presentations on complex projects to both internal and external customers as required.
- To analyse and compile information and devise recommendations / develop committee reports covering all relevant aspects of proposals including analysis of consultation responses without direct support from senior colleagues.
- To communicate effectively on complex issues at all levels, including dealing with complaints and frequent contact with elected members, the press and a range of external stakeholders, including negotiating in cases of competing and conflict demands and politically sensitive issues.
- To be responsible for undertaking complex safety audits and carrying out assessment
 of construction risk and ensuring all planned works are delivered in accordance with
 required quality and safety standards.

****Bold tasks indicate those that are specific to the Highway Engineer role working within the Structural Highway Maintenance Team****

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:
Either hold a full relevant professional qualification or have significant experience of managing large projects at a senior level	A/I/D
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/I
Have experience of using ICT including relevant Engineering/Transport Planning systems e.g. CAD	A/I
The ability to make frequent decisions and exercise initiative independently to fulfil the requirements of the role	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
Ability to provide day to day supervision to less-experienced members of the team including delegation and checking of work and provision of technical guidance, also covering for and providing technical support to the Team Leader as required	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
Mobility essential. Able-bodied applicants must be able to drive, have a driving licence and be a car owner. Disabled applicants should be able to perform the job with aid, where necessary	A,I,D

Desirable Criteria

Assessed By:

A good understanding and experience of highway engineering specifications, material, techniques, treatments and procedures (including design and site supervision).	A/I
Good knowledge of all relevant highway legislation and statutory obligations applicable to highway and drainage matters including health and safety and CDM	A/I

requirements and a thorough knowledge of all relevant highway legislation; design	
and maintenance standards; quality management procedures; and the term maintenance contract	
Customer focussed with a willingness to develop and maintain effective working relationships with a range of Clients and Warwickshire's Term Maintenance Contractor	A/I
Sector 12D Accreditation (Maintaining and removing temporary Traffic Management on rural and urban roads	A/I/D
Evidence of continuing professional development	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.

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):	