CITY OF BRADFORD METROPOLITAN DISTRICT COUNCIL JOB PROFILE

DEPARTMENT: Regeneration & Culture	SERVICE GROUP: Planning, Transportation & Highways
POST TITLE: Assistant Engineer / Engineer	REPORTS TO: Principal Engineer
GRADE: Band 8 – PO1	SAP POSITION NUM

The following information is furnished to help Council staff and those people considering joining the City of Bradford Metropolitan District Council to understand and appreciate the general work content of their post and the role they are to play in the organisation. The duties and responsibilities highlighted in this Job Profile are indicative and may vary over time. Post holders are expected to undertake other duties and responsibilities relevant to the nature, level and scope of the post and the grade has been established on this basis.

As a candidate you will be expected to demonstrate your ability to meet the special knowledge, experience and qualifications required for the role by providing evidence in the application form for the purpose of shortlisting. Applicants with disabilities are only required to meet the essential special knowledge requirements shown by a cross in the end column of this section.

The employee competencies are the minimum standard of behaviour expected by the Council of all its employees and the management competencies outlined are those relevant for a post operating at this level within our organisation.

Both sets of competencies will be used at interview stage and will not be used for short listing purposes.

Key Purpose of Post

- To assist in carrying out feasibility and concept studies, public engagement and consultation, design, inspections, assessments, procurement, construction supervision and project management on a variety of highway, structural, casualty reduction, traffic management, traffic signal and UTC, integrated transport, public transport and civil engineering projects for programmes undertaken by the Service on behalf of internal and external clients.
- To provide expertise and specialist knowledge in aspects of the following appropriate

to the placement within the Service:

- a) Urban traffic control and signal maintenance
- b) Traffic Engineering
- c) Highway Design
- d) Highway Maintenance
- e) Civil and Structural Engineering, or
- f) Street Lighting & Signs/Street furniture illumination.
- Ensure that the services delivered meet the needs of local people, that continuous improvement in service delivery is actively pursued and that performance targets are achieved whilst ensuring that the Council's legal and statutory obligations as Highway Authority are fulfilled.

Main Responsibilities of Post:

Duties will include most, or all, of those listed below according to degree of experience and training reached and placement within the technical specialism units of the Service

- 1) Provide independent judgement, advice and guidance based on evaluation and analytical skills to produce alternative solutions to a wide range of complex engineering and procurement problems, formulate recommendations and solutions appropriate to technical specialism including but not limited to, the provision of advice related to improvements secured through legal agreements with third parties.
- 2) Undertake checks of information provided by other Council services or third parties as being in accordance with established engineering standards and Council Requirements appropriate to role within Service including the following:
 - a) Consultation documents, questionnaires, exhibitions and displays;
 - b) Diagnostic and survey data;
 - c) Proposals for highway structures;
 - d) Highway drainage proposals;
 - e) Highway maintenance proposals;
 - f) Road Safety Audits / Checks;
 - g) Design briefs, data and preliminary/detailed highway scheme designs; and
 - h) Engineering drawings, specifications, bills of quantity and project estimates.
- 3) Carry out investigations, feasibility studies, concept designs, transportation studies, transportation assessments, sustainable and integrated transport studies of alternative solutions to engineering and procurement problems as required including such schemes as may arise from the Local Transport Plan, revenue budgets and other external funding sources. Prepare feasibility designs, calculations, budget estimates, outline programmes, project briefs and work instructions for other Service units as appropriate in line with established QMS procedures.
- 4) Carry out or assist in the detailed design of civil, structural and highway

engineering schemes including schemes for:

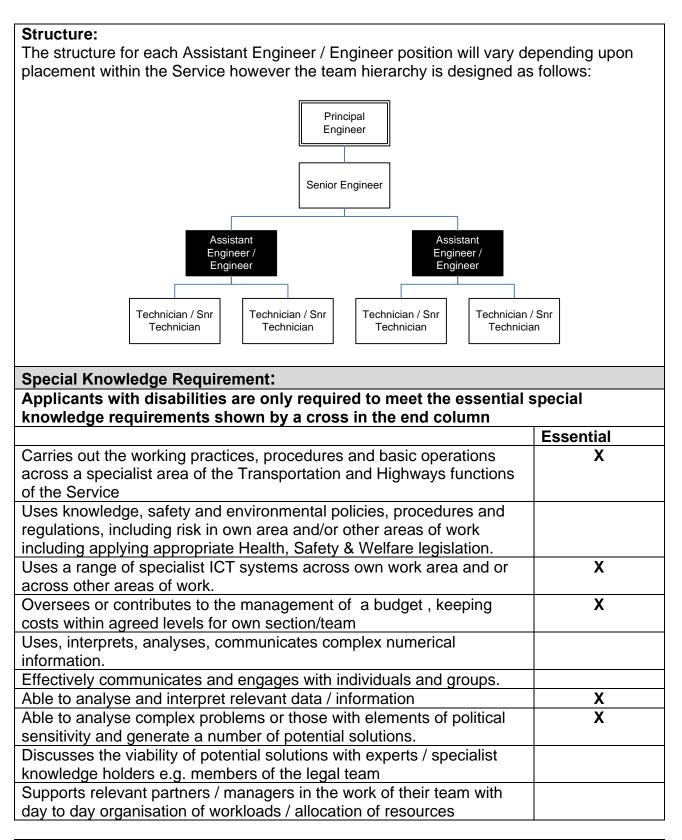
- a) Traffic management;
- b) Casualty reduction;
- c) Traffic signals;
- d) Street lighting;
- e) Highway structures and demolition works;
- f) Highway improvements; or
- g) Highway resurfacing or reconstruction works.
- 5) Assist in the procurement, award and administration of contracts according to role within the service for:
 - a) Civil engineering works;
 - b) Minor traffic works;
 - c) Highway lighting works;
 - d) Highway structures, demolition and associated works;
 - e) Traffic signal and ancillary UTMC equipment;
 - f) Highway maintenance works; or
 - g) General highway works contract activities.

and the supervision of construction, including undertaking checks for compliance with safety requirements, conditions of contract, drawings and specification and the issuing of instructions to this end. Prepare and issue orders under various term contracts and/or specific tender documentation to tenderers. Undertake the processing of site measure, payments and preparation of final accounts and variation orders in accordance with the contract terms and the Council's Standing Orders and Financial Regulations.

- 6) Act as the Engineer's Representative or equivalent in contractual matters related to civil engineering works including undertaking the supervision, inspection, monitoring and management of allocated construction projects ensuring compliance with documentation with regard to quality, methods of working etc. appropriate to experience and seniority.
- 7) Ensure compliance with the Service's Health and Safety Policy and in particular the requirements of the Construction, Design & Management Regulations (CDM) and other safety legislation together with the Quality Management system.
- 8) Be aware of the political dimension of a local authority and be responsive to the legitimate interests of local ward members, committees and sub-committees. Prepare committee reports for the Constituency Area and other Committees. Establish effective, courteous and responsive lines of communication with Members, third parties, the community, the press etc. to keep all clearly informed of priorities, targets and progress. Attend public exhibitions and other public meetings. Act as liaison between external parties and other internal units. Liaise with other teams and units in the preparation of legal agreements/traffic regulation orders and requirements thereof.
- 9) Monitor costs against pre-determined budgets and targets initiating minor amendments as necessary and recommending corrective action as appropriate.

Ensure that all reports in respect of financial approvals are completed to ensure that projects or programmes are delivered to budget.

- 10) Undertake, plan and arrange continuing professional development (CPD) activities on behalf of self in areas appropriate to role. Maintain a detailed up-to-date knowledge of appropriate techniques, statutory instruments, legislation, application of new technology and materials appropriate to role within Service. Understand the requirements of design manuals, codes of practice, technical instructions and memoranda and ensure that such requirements are applied.
- 11) Undertake data acquisition, inspections, surveys and assessments in connection with role and undertake investigations appropriate to area of expertise including where appropriate with other public bodies. Prepare high quality written documents, statistical analysis and correspondence and maintain such manual or computerised records as necessary for the efficient and accountable operation of the Service.
- 12) Be competent in the use of appropriate technical computer software necessary for carrying out your duties and recommend appropriate improvements to office systems. Use appropriate computer modelling techniques to develop documentary evidence for programme determination and decisions including but not limited to, deterioration modelling, accident statistics, macro- and micro-simulation models and asset management records.
- 13) Undertake such other duties and responsibilities of an equivalent nature, as may be determined by the Service manager from time-to-time, in consultation with the post holder.
- 14) The post holder will be responsible for the following assets:
 - a) Access to confidential information held on databases, confidential information relating to the work of the Council/Commercial/Private interests in land and property, restricted legal and Council documents;
 - b) Computer equipment;
 - c) Camera equipment (when in use);
 - d) Survey equipment (when in use); and
 - e) Protective clothing and other PPE.



Relevant experience requirement: Essential for shortlisting

• Must have Demonstrable design and construction supervision experience in Traffic Engineering, UTC, Highway Structures or Highway Engineering disciplines.

• Evidence of Continuing Professional Development

- Ability to proficiently use Microsoft Office suite and other technical software appropriate to role (e.g. AutoCAD)
- Holds appropriate driving license and has the ability to drive to different locations of the District.

Relevant professional qualifications requirement: Essential for shortlisting

- HNC/D in Civil Engineering (pre-1999 intake) or related discipline <u>OR</u> BSc (Hons) in Civil Engineering (post 1999 intake) <u>OR</u> NVQ Level 6 in Civil Engineering <u>OR</u> other qualification certified by the Engineering Council UK as academic base for Incorporated Engineer status
- Engineering Technician status <u>OR</u> Further progression with Membership of the Institute of Highway Engineers (MIHE)

Accelerated entry onto Engineering Career Grade with higher academic qualifications and Incorporated Engineer (See Engineering Career Grade) or Chartered Membership of the Institute of Logistics and Transport (CILT) qualification or Transport Planning Professional Qualification.

Core Employee competencies at manager level to be used at the interview stage.

Carries Out Performance Management – covers the employees capacity to manage their workload and carry out a number of specific tasks accurately to a high standard.

Communicates Effectively - covers a range of spoken and written communication skills required as a regular feature of the job. It includes exchanging information/building relationships, giving advice and guidance, counselling, negotiating and persuading and handling private, confidential and sensitive information.

Carries Out Effective Decision Making - covers a range of thinking skills required for taking initiative and independent actions within the scope of the job. It includes planning and organising, self effectiveness and any requirements to quality check work.

Undertakes Structured Problem Solving Activity - covers a range of analytical skills required for gathering, collating and analysing the facts needed to solve problems. It includes creative and critical thinking, developing practical solutions, applying problem solving strategies and managing interpersonal relationships.

Operates with Dignity and Respect - covers treating everyone with respect and dignity, maintains impartiality/fairness with all people, is aware of the barriers people face.

Management Competencies: to be used at the interview stage.

Operates with Strategic Awareness Our managers work with corporate priorities and policies in a joined up way with others, internally and externally. Works democratically, transparently and accountably.

Practices Appropriate Leadership Our managers motivate their staff to exceed expectations through raising their awareness of goals and moving them beyond self interest for the sake of the team or service. They consider serving the District in all that they do.

Delivering Successful Performance Our managers monitor performance of services, teams & individuals against targets & celebrate great performance. They promote the District's vision & work to achieve Council's values & agreed outcomes.

Applying Project and Programme Management Our manager's work to ensure that outcomes and objectives are achieved within desired timescales, make best use of resources and take a positive approach to contingency planning.

Developing High Performing People and Teams Our managers coach individuals and teams to achieve their potential and take responsibility for continuous improvement. They champion the Council's values and goals.

Working Conditions:

- Must be able to perform all duties and tasks with reasonable adjustment, where appropriate, in accordance with the Equality Act 2010 in relation to Disability Provisions.
- May be required to undertake work outside normal office hours, including nights, weekends and Bank Holidays.
- Must be able to travel to any location in the District.
- May be required to attend outdoor sites at all times of year.
- A flexible approach to the work is required, and this may result in staff being temporarily assigned to other teams within the Service thus enabling the work programme to be managed effectively.
- Progression through the Post Grade will be in accordance with the approved Career Grade. (See Appendix 1: Engineering Career Grade, Responsibilities and Remuneration Package)

Special Conditions:

You will outline here if there is a requirement for the post to have recruitment checks such as DBS, Warner Process.

None.

Compiled by:	Grade Assessment	Post Grade:
R Gelder	Date:	Band 8 – PO1
Date: Mar 2013 (Reformatted Apr 2015)		

Job Profile compiled from:

Assistant Engineer / Engineer / Project Engineer – Major Highways Assistant Engineer / Engineer / Project Engineer – Major Maintenance Assistant Engineer / Engineer / Project Engineer – Traffic & Highways South (Design) Assistant Engineer / Engineer / Project Engineer – Traffic & Highways North (Design) Engineer/Project Engineer – Traffic & Highways (South) Assistant Engineer / Engineer / Project Engineer – UTC Assistant Engineer / Engineer / Project Engineer – Highway Structures

APPENDIX 1

ENGINEER CAREER GRADE RESPONSIBILITIES AND REMUNERATION PACKAGE

The responsibilities of an individual at different levels of the Engineer Career Grade (see below) relate to the following requirements at the specified level.

Assistant Engineer – SO1

• Coordinate the resources and requirements of other departments and bodies during the detailed design of traffic management, casualty reduction, traffic signals, street lighting, highway structure & demolition proposals and highway improvement schemes.

Engineer – SO2

- Prepare project briefs for Consultants as appropriate.
- Provide independent technical judgement, based on evaluation and analytical skills, to produce alternative solutions to a wide range of complex engineering problems and formulate recommendations.

Engineer - PO1

- Develop, programme and deliver engineering solutions and schemes of work with the minimum of guidance from Senior and Principal Engineers. Proactively manage the progress of own workload including that of any allocate staff, setting objectives, targets and ensuring effective decision making to deliver successful schemes or projects within defined budget and programme constraints with the minimum of guidance. Project manage external consultants and contractors to ensure delivery of project and services to agreed targets.
- The programming and delivery of engineering solutions working as part of a team with some supervision from Senior and Principal Engineers.
- Mentor technicians and engineers on technical and procedural matters based on a sound understanding of core engineering principles and knowledge of the values of the Council.
- To advise the Principal Engineer on the planning and managing of the service improvements based on a performance management framework.

Scale	Designation	Qualifications and Experience
Band 8	Assistant Engineer	 HNC in Civil Engineering (pre 1999) or related discipline <u>OR</u> BSc (Hons) in Civil Engineering (post 1999) or related discipline <u>OR</u> Technical NVQ Level 6 in civil engineering or related discipline accredited by Engineering Council UK for Academic base for Incorporated Engineer status. Engineering Technician Status (Eng.Tech) <u>OR</u> Further progression with Membership of the Institute of Highway Engineers. Band 1 Engineering Competencies at minimum 'GOOD' level.
SO1		 As Band 8 <u>plus:</u> Further progression with Eng.Tech status <u>OR</u> I.Eng Training Scheme Completion Certificate <u>OR</u> ICE Career Appraisal for Member Professional Review <u>OR</u> Fellowship of the Institute of Highway Engineers <u>OR</u> CILT or Internal Transport Planning Professional Training Review.

Engineer Posts

Scale	Designation	Qualifications and Experience
SO2	Engineer	As SO1 <u>plus:</u>
		Band 2 Competencies to Minimum 'GOOD' Level
PO1		As SO2 <u>plus:</u>
		 Incorporated Engineer status <u>OR</u> Further Progression with Internal Transport Planning Professional Training Review.