

## Job Description

### Designer – Graduate Engineer

**Reports to**

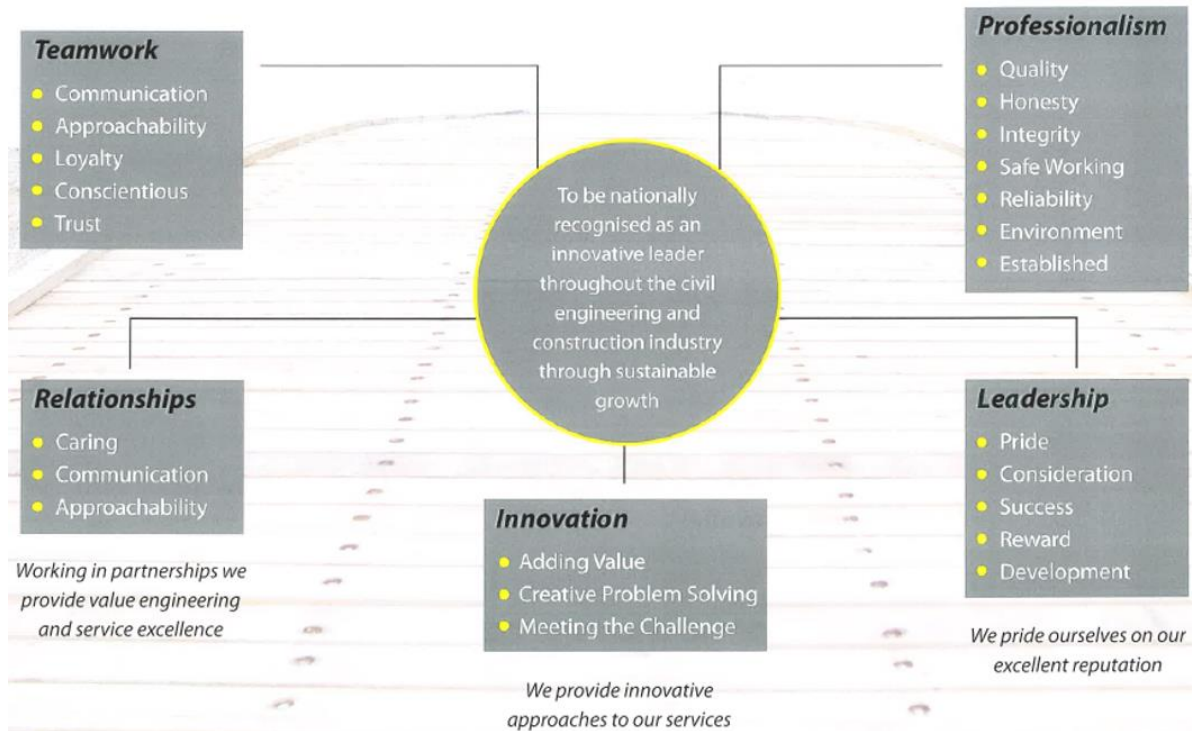
Technical Services Manager

**Direct and Indirect Reports**

**Our Mackley Mission**

“To be nationally recognised as an innovative leader throughout the civil engineering and construction industry through sustainable growth”

**Our Vision and Values**



**Job Purpose**

Provide efficient, cost effective solutions and support the business in design and technical matters as required. This will include supporting the delivery of outline designs at tender stage, temporary works and permanent works designs at contract stage. Provide technical support to the business across a range of innovative and technological areas, including 3D, 4D and 5D modelling, GIS, computer based design and visualisation for tenders and projects, etc. To develop technical and behaviour based skills which support the business and further personal development.

**Accountability**

**Quality**

- Work to & within the Mackley company procedures, policies & regularly communicate with your line manager.
- Build strong working relationships with internal clients and external designers.
- Maintain compliance with relevant procedures & provision of documentation for Quality, Environmental & Health & Safety (CDM Regulations).
- Keep up to date with changing legislation & codes of practice to ensure compliance.
- Assess design risks with consideration in all designs of buildability, safety & environmental factors, maintenance.
- Ensure design information is of the right quality & keeps up to date with project timescales.
- Comply with the relevant company procedures & provide feedback on procedures as & when appropriate.

**Stakeholders & Communication**

- Liaise with internal Contracts and Estimating Staff to provide design support, create models and visualisations for tender submissions and contract support.
- Liaison with internal design team to ensure that all requirements are fulfilled & expectations are met.

- Maintain awareness, advise and promote procedures for CDE and BIM to meet expectations.
- As required, attend training sessions, conferences & meetings in line with our commitment to Investors in People.

**Productivity**

- Delivery of design drawings and supporting calculations for temporary and permanent works at tender stage and contract stage including provision of calculations, drawings, specifications and design process documentation to agreed timescales with the support of the senior design staff.
- Provide technical advice throughout the organisation, including product specifications and suitability of products, structural calculations and geotechnical analysis.
- Provide cost effective technical solutions.
- Producing working drawings using AutoCAD, Civils 3D, Revit & Navisworks.
- Assisting with the preparing of licensing applications.

**Leadership**

- Support multiple projects.
- Promote a culture of integration, continuous improvement and use of best practice across the organisation.
- Supporting the less experienced members of the internal design team and mentoring when required.
- Be proactive and influential in the success of the company.
- Ensure that BIM and our CDE is fully integrated in to all business processes.
- Keep up to date with advancements in design, digital technology and new software.

**Key Result Area's**

- **Time/efficiency** – Plan and deliver results to the agreed programme & timescales.
- **Client relationship** – Be an ambassador for the company & maintaining satisfied clients.
- **Quality** – Promote the right 1<sup>st</sup> time approach to the agreed specification and standards.
- **Development & Mentoring** – Develop personal attributes and support others also seeking professional qualification.
- **Leadership** – Be positive and lead by example. Embrace company objectives and deliver department goals.

**Person Specification**

**Qualifications**

- BSc/BEng or MSc/MEng in Civil Engineering

**Training**

- Leadership training
- Site Safety Plus- Site Manager Safety Training Scheme (SMSTS)
- Site Safety Plus- Temporary Works Coordinator
- Site Safety Plus- Site Environmental Awareness Training Scheme (desirable)
- Technical training in software and design standards as required
- Academically Qualified CSCS card
- Full Driving License

**Skills & knowledge**

- Heading towards technically competent in geotechnical and structural design
- Commercial awareness (e.g. NEC3,4, JCT)
- A logical, organised & understanding individual who can deal responsibly & make responsible decisions.
- Able to work at high concentration levels to ensure right 1<sup>st</sup> time'
- Can prioritise with good time management
- Strong analytical skills

**Experience**

- 0 to 3+ years' work experience on site or in a design office or similar environment

**Personal qualities**

- A problem solver who enjoys a challenge and short timescales.
- A natural forward planner who is comfortable communicating with their colleagues and external companies
- Proven team player
- Resilient
- People management skills
- Enthusiastic & results focused
- Ability to find ways to improve own level of knowledge & skill by networking both within & outside the company.
- Is motivated to drive self-development using all available resources to achieve success

**Technology skills**

- Keen to learn AutoDesk software packages, Ideally; AutoCad, Civil 3D, Revit, Robot, Navisworks & Infracore

- Knowledge of design and analysis software.
- Knowledge of B.I.M. (Building Information Modelling)
- IT Microsoft Office skills (including Word, Excel, PowerPoint & Access)

**Relationships**

*Internal*

Technical Services Manager  
Design team  
Contracts Team  
Estimating Procurement  
Commercial  
Plant

*External*

Clients  
Subcontractors  
Designers

**Additional information**

You will be expected to travel to various Mackley sites throughout the UK.

The Company may, from time to time, require you to undertake duties other than those outlined in this job description and/or to undertake work in other departments/sites to meet customer demands. Any changes to this job description will be discussed and agreed with you.