

## Job Description

### Designer – Principal Engineer

**Reports to**

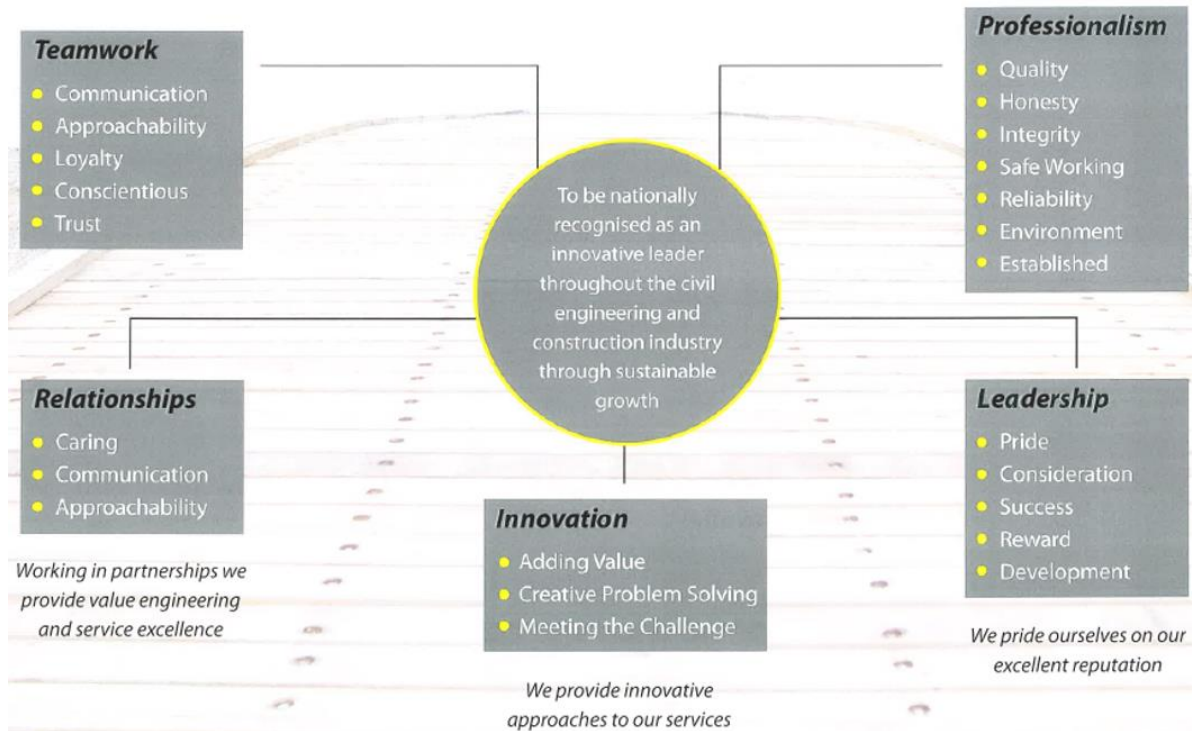
Technical Services Manager

**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 respond to all technical and design matters as required. This will include supporting the delivery of outline designs at tender stage, temporary works and permanent works designs at contract stage. Build on relationships with external design teams and act as the lead between designers and clients and promote successful collaboration between all team members. To provide strategic and technical advice throughout the organisation, including product specifications and suitability, geotechnical site investigation, BIM modelling provision and development of innovative techniques. To lead and mentor less experienced design team members and supervise and manage external design support.

**Accountability**

**Quality**

- Work to & within the Mackley company procedures, policies & regularly communicate with your line manager.
- Build strong working relationships with clients, both internal and external.
- 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.
- Review & ensure the relevant company procedures are complied with & provide feedback on procedures as & when appropriate.

**Stakeholders & Communication**

- Promote and build relationships with external designers and lead procurement of permanent and temporary works designs including design scope, specification and review.

- Liaison with external clients, Principal Designers, Supervising Engineers, ensuring that all requirements are fulfilled & expectations are met.
- Maintain awareness, advise and promote procedures for CDE and BIM to meet expectations.
- Support the Managing Quantity Surveyor with contract disputes to mitigate the impact on-time delivery.
- As required, attend training sessions, conferences & meetings in line with our commitment to Investors in People.

**Productivity**

- Overseeing and approving the design of temporary and permanent works at tender stage and contract stage including provision of calculations, drawings, specifications and design process documentation to agreed timescales.
- Provide strategic & technical advice throughout the organisation, including product specifications and suitability, geotechnical site investigation and design costs
- Provide cost effective technical solutions.
- Promote the use of models using AutoCAD, Civils 3D, Revit & Navisworks.

**Leadership**

- Manage multiple projects of a complex nature or high value.
- 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.
- Advise on strategy & cost effectiveness of various methods of construction.
- 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** – Development & mentoring of staff 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
- Chartered Engineer or heading towards CEng (desirable)

**Training**

- Leadership training
- CDM Regulations
- 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
- Driving License

**Skills & knowledge**

- Technically competent in geotechnical and structural design
- Commercial awareness (e.g. NEC3,4, JCT)
- A logical, organised & understanding individual who can deal responsively & 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**

- 15+ years' work experience in a design office or similar environment
- Design experience within a water, temporary works or geotechnical environment. Ideally including cofferdams, water control structures, working in soft ground, crane stability, flood defence works

**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**

- Knowledge of AutoDesk software packages, Ideally; AutoCad, Civil 3D, Revit, Robot, Navisworks & Infracore
- Knowledge of B.I.M. (Building Information Modelling)
- IT Microsoft Office skills (including Word, Excel, PowerPoint & Access)
- Business Collaborator (desirable)

**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.