

	Job Description	REF:	EF1064		
		ISSUE:	1		
		DATE:	08/04/2016		
		PAGE:	1	OF	4

Employee	
Job Title	Design Engineer (Electrical)
Location	London - Waterloo
Department	Engineering
Line Manager	CRE or CEM – Principal Engineer, or Engineering Manager
Number of Subordinates	TBC

Job Purpose

Equate Design is a growing design consultancy working in the rail and infrastructure sectors. Due to continued growth we are looking to recruit a Design Engineer Electrical or M&E to form an integral part of our design consultancy and engineering teams in London.

The Design Engineer will be expected to work within a multi discipline design and engineering services team. Experience of Electrical designs in an infrastructure sector is key. Design experience on Cable routes and an understanding of DNO power systems along with electrical calculations would be key.

The Engineer shall perform a variety of functions in scoping & producing designs in addition to assisting with construction works and feasibility reports as required.

The Engineer shall perform a variety of design activities working with both 2D and 3D design, including input into Technical Specifications, Performance Specifications, Written Reports (Design and Feasibility), production of Technical Design Drawings (2D and 3D), preparation of design packs for interdisciplinary design checks / reviews, preparation of Approved for Construction design packages and production of As-Built Information. Other duties to be undertaken as assigned / needed.

Key Responsibilities

The role will cover two main areas, Survey & Design. Duties for these three areas are outlined below.

Survey

- 1 Input into production of scope and specifications of surveys required including;
 - a. Condition Assessments
 - b. Topographical
 - c. Ground Investigation
 - d. Drainage
 - e. Structural
 - f. Gauging
 - g. Asbestos
 - h. Monitoring
 - i. Tag & Trace

- j. P-Way
 - k. Signalling
 - l. Telecoms
- 2 Assisting with undertaking surveys where needed
 - 3 Managing sub-contractors where needed
 - 4 Managing processing/analysis of returned survey data
 - 5 Reviewing survey data received and ensuring data is saved and distributed in line with BCM/client requirements
 - 6 Input to analytical & interpretative reports on technical and commercial factors

Design

- 1 Ensure designs are produced in accordance with all relevant standards (Eurocodes and NR Standards mainly)
- 2 Adopt the Safe by Design approach, taking constructability into account during the design stage so to reduce risk as far as reasonably practicable, or eliminate where possible so to facilitate a safe build
- 3 Production of 2D/3D designs and associated deliverables
- 4 Preparing construction drawings associated with the designs
- 5 Verify & control status of consultants and sub-contractor's drawings and specifications & maintain registers
- 6 Attendance of construction review meetings to accommodate construction input into the design process
- 7 Attendance at IDC/IDR meetings
- 8 Input into production of design risk assessments
- 9 Ensure the team is fully aware of any impact on cost, quality and timely delivery of the design teams work
- 10 Liaison with Clients, approval bodies and other relevant third parties as needed
- 11 Input into the BIM process and BIM procedures
- 12 Assist the CRE/CEM with the assurance of designs
- 13 Actively work towards taking on the Design CRE role
- 14 Assisting with standards update briefings
- 15 Carrying out reviews/checks of designs produced by other organizations when required

Construction

- 1 Assist with design queries on site if required
- 2 Responding to TQ's from the construction team

	Job Description	REF:	EF1064		
		ISSUE:	1		
		DATE:	08/04/2016		
		PAGE:	3	OF	4

- 3 Receiving red-line 'Y' revision drawings and interpreting for updating CAD models
- 4 Managing as-built process including production of 'Z' revision drawings

Job Requirements

Qualifications:
Degree or equivalent in a relevant discipline
Member or actively working towards Professional Membership of an applicable engineering institution (e.g. ICE, etc.)

Experience:
Railway experience with both, Network Rail (required) and London Underground (preferred)
Experience in common data environment (CDE) use and administration (i.e. ProjectWise)
Good knowledge of railway and general electrical engineering standards including Eurocodes, BS, NR, RSSB, TSI, etc.

Technical Proficiency:
Working knowledge of CAD software
Knowledge of processing of survey data
Skilled in PC usage and associated software including Microsoft Office
Knowledgeable of standard drafting practices and procedures
Knowledge of operational/project delivery and site experience of major schemes
Familiar with railway terminology

Leadership Imperatives:
Excellent communications skills: interpersonal, listening, oral, and written.

Additional Skills:
Efficient Time Management.
Able to work well under pressure.
Team Player.
Good Communicator.
Able to discuss ideas with the engineers.
Health & Safety awareness.
CDM Awareness

Declaration

By signing this Job Description, I confirm that I have been briefed and understand its content and will carry out my work in strict accordance with BCM policies & procedures in conjunction with any additional clients' requirements.

Name:	Signed:	Date:
-------	---------	-------

Deputising Duties

The undersigned have been briefed and understand the above job description and responsibilities. I will undertake these duties in the event of the absence of the above Manager (subject to any constraints listed below).

Name	Position	Location	Date Briefed	Signature

Job Description

REF:	EF1064		
ISSUE:	1		
DATE:	08/04/2016		
PAGE:	4	OF	4