Role Definition

Job title: Senior Water Infrastructure Engineer

Reporting to: Discipline Lead on a day-to-day basis and ultimately the Senior Partner

Responsibilities

- To be design lead, manage, and co-ordinate water infrastructure over a wide range of large scale projects
- To act as a technical expert within the field, providing research, data, design and coordination to support sustainable and innovative water strategies and infrastructure design.
- To contribute to the design process and co-ordinate environmental engineering activities relating to the project including coordination with engineering sub-consultants and other disciplines.
- To fulfil the Practice's overall objective in producing first class sustainable design on time and on budget
- To negotiate with utility companies and water authorities to achieve project targets and objectives

Qualities and Skills required

Essential

- Able to demonstrate ability to undertake the above responsibilities
- Track record of designing and delivering large scale infrastructure / master planning projects
- Legally able to work in the country in which the position is based
- Qualified as a Chartered Engineer with EC-UK or FEANI member organization, or actively working towards the final stages of applying.
- LEED, or other international recognised benchmarking standards, qualified or having working familiarity with environmental assessment methods appropriate to large scale development and infrastructure design.
- Familiarity with international design standards including ASHRAE, and latest water initiatives including Sponge City (PRC) and Sustainable Drainage Systems (SuDS-UK)
- In-depth technical knowledge and experience (in order of priority):
 - o Large scale water distribution including potable and fire ains distribution
 - o Water treatment including grey and black water treatment and sustainable water strategies
 - o Smart city infrastructure design
 - o City scale low carbon energy strategy and infrastructure
 - o District energy systems including district cooling and heating (LTHW/MTHW/steam) networks
 - o Large scale renewable technology installations; e.g. photovoltaics, fuel cells
 - o High and medium voltage power generation and distribution and system resilience
- Broad understanding of other engineering disciplines engaged in the built environment
- Expert knowledge in chosen field of international best practice, benchmarking and KPIs, and innovation relating to large scale development and infrastructure design.
- Proven skills in all aspects of communication (whether graphical, written or verbal) including ability to listen and to understand others
- Applied use of specialist technical software within their area of expertise/ field
- Ability to understand and formulate design decisions
- A flexible and open attitude towards new ways of working and a proven commitment to independent, life long learning
- Organisational skills and use of initiative
- Good interpersonal skills and able to work independently and as part of an effective team
- Resilient to cope with conflicting demands, able to prioritise duties and work effectively under pressure
- To have thorough knowledge of, and comply with, company procedures and standards

Desirable

- A wide range, in scale and typology, of International project experience
- Ability to use some of the following software applications: Energy Plus, Energy Pro, IES, Amtech, Microsoft 'Office' suite, Adobe Creative Suite
- Language skills in Mandarin, Cantonese or mainland European languages

This description reflects the core activities of the role but is not intended to be all-inclusive. Other duties within the Group may be required in addition to changes in the emphasis of duties as required from time to time. There is a requirement for the post holder to recognise this and adopt a flexible approach to work. Job descriptions will be reviewed regularly and where necessary revised in accordance with organisational needs. Any major changes will be discussed with the post holder.