Foster + Partners

Job title: Water Infrastructure Engineer
Reporting to: Discipline Lead on a day-to-day basis and ultimately to the Senior Partner
Objective: To contribute to the Practice's sustainable large scale infrastructure engineering, planning, master planning, benchmarking and strategic sustainability output for projects

Responsibilities

- Advise and support design teams in the integration of sustainable infrastructure design concepts for various scales of masterplans with a focus on wet utilities' (water, wastewater, irrigation, stormwater drainage, etc.) demand, alternative water sources, treatment requirements and water network elements
- Support the delivery of conceptual and schematic wet utility infrastructure design for masterplanning projects within F+P.
- Conduct research on all relevant aspects of utility infrastructure including water networks, water, wastewater and irrigation demand calculations for various infrastructure plants.
- To provide design, research, and analysis support to the integrated environmental and sustainable design of masterplans and projects.
- Liaise with other members of the team towards the integration of resource efficient solutions in shaping masterplans and guiding towards zero water framework.
- Present analysis results in the form of reports and presentations to the clients and design teams internally.
- Thorough knowledge of and compliance with Foster + Partners procedures and standards.
- Contribute, or otherwise assist, as required.

Qualities and skills required

Essential

- Able to demonstrate ability to undertake the above responsibilities.
- Legally able to work in the country in which the position is based
- Undergraduate degree in Engineering (civil, mechanical or similar) and/or master's degree in Engineering/Environmental Design/Sustainability.
- Minimum 3~5 years of experience in large scale masterplans, urban development, and sustainable infrastructure applications.
- In depth understanding of the principles of sustainable utility infrastructure design
- Hands-on experience in hydraulics and hydrological models
- Enthusiasm to pursue sustainable infrastructure design on large scale masterplans as the central part of the individual's career development
- Technical knowledge and expertise in:
    - Large-scale multi-disciplinary utility infrastructure projects
    - A good understanding of masterplan scales and land-use typologies
    - Circular water approach and strategies
    - Designing of all types of water networks (i.e. potable water, wastewater, irrigation, drainage)
    - Assessment/Proposal of different water supply alternative sources/technologies
    - Wastewater/sewage collection, treatment and reuse
    - Sustainable urban drainage systems (SUDs) applications and Sponge City applications
- Broad understanding of multidisciplinary design process
- Good communication and presentation skills
- Able to demonstrate initiative and a proactive approach to daily tasks
- Able to work under pressure and to tight deadlines
- Excellent organisational skills
- Able to manage sensitive and sometimes confidential information
- Self-motivated and able to take responsibility
- Able to manage and prioritise tasks and time efficiently
- Good interpersonal skills and able to work independently and as part of an effective team
- Flexible attitude

- Able to build relationships at all levels, internally and externally

Desirable

- Qualified as a Chartered Engineer in the UK, or actively working towards.
- Awareness of latest technical innovations within the utility infrastructure systems and design processes
- Hands-on delivery focused
- Experience in the use of the following tools/ software packages: Photoshop, Illustrator, InDesign, Word, Excel, PowerPoint
- Professional accreditation preferred: LEED, BREEAM, WELL

This description reflects the core activities of the role but is not intended to be all-inclusive and other duties within the group/department 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.

Applicants should forward a CV and portfolio of no more than 10 pages.

May 2022