

| Role Profile Title: | Design Engineer | Job Code: | |
|---|------------------------|------------|---|
| Job Title: (for use when creating an individual job description) | Design Engineer | | |
| J 1 / | Engineering and Design | LAL Level: | 1 |
| Position Reports to: | Design Manager | | |
| BU / Project / Dept.: N103 North South Corridor | | | |

LEIGHTON ASIA

LEIGHTON ASIA, established in 1975, is a leading international construction company. Headquartered in Hong Kong, Leighton Asia delivers a portfolio of high-profile infrastructure projects throughout Asia. As a proven leader in the delivery of complex tunnel, rail and road networks, Leighton Asia also delivers turn-key renewable energy infrastructure including utility-scale wind, geothermal energy and waste-to-power installations. Its building projects range from schools, embassies and luxury high-rise residential towers, to large scale leisure complexes, a growing number of which are built to international green building and energy efficiency standards. Leighton Asia currently operates in Hong Kong, Indonesia, India, Macau, Malaysia, Philippines, Singapore, Thailand and Iraq.

Leighton Asia is a member of the CIMIC Group.

PURPOSE OF THE ROLE (why does the position exist, WITH what objectives)

The role is responsible for executing and reviewing design engineering work; adding value and bringing innovation to design engineering aspects of projects; conducting reviews and providing value engineering input for post award / permanent works design WITH THE OBJECTIVE OF delivering high quality and timely engineering and design services to the organisation in line with CAD standards and Leighton's standard operating procedures.

Key working relationships (*Explain the people and levels and reasons both within and outside the organisation with which this job has to interact*)

| PRIMARY AUDIENCE (Internal) PRIMARY AUDIENCE (External) | |
|---|---|
| Project Manager | IT Team |
| Design Manager | Engineering Managers (on-site) |
| Construction Manager | Design Managers (on-site) |
| Senior Engineer | Temporary Works Coordinator (on-site) |
| Chartered Engineers | Engineering team across the sites |
| • Engineers | • Site Agents |
| Sr. CAD Operators | |
| • Draftsmen | |





Qualification, Experience and Skills (*Please provide typical qualification and experience requirements for the position, and not qualifications of the position holder*)

| QUALIFICATIONS | EXPERIENCE | |
|---|---|--|
| • A Chartered Civil / Structural or Geotechnical engineer | Total Work Experience: 4 - 5 years Total Relevant Experience: 3 years of design experience with at least 1 year of consultant experience | |

BEHAVIOURAL SKILLS

(Refer to Knowledge: Leadership Capabilities / Behavioural Expectations for the descriptions of behavioural skills for the role)





Key Accountabilities (*List all areas of responsibilities, with key tasks and performance metrics defined*)

| KEY TASKS & PERFORMANCE INDICATORS | |
|---|--|
| Gather input on design requests from Engineering Managers Act as temporary works coordinator on-site and implement the role of TWC as described in the procedure for "Design and Control of Temporary Works; discuss the scheme; seek clarifications and provide information about engineering design aspects; develop productive and respectful relationships with the site operations team and provide assurance of as-built temporary works construction; convey key temporary works design expectations to the Responsible Site Persons; be mindful and aware of changes in site conditions and raise temporary works design change requests to the Designer when appropriate. Prepare drawings / sketches with CAD team and resolve queries Approve final drawings, prepare design calculations and present to Engineering Manager Seek final approval from Head of Engineering Act as geotechnical engineer in reviewing, interpreting and reporting the results of all geotechnical instrumentation in accordance with the Instrumentation & Monitoring Generalised Plan of Action. Driving required actions with respect to AAA exceedances by liaising with the site operations team and managing the Engineer's and other third party expectations under the Contract with respect to Geotechnical Instrumentation. | |
| Performance indicators: Quality of engineering design work Efficiency of design Timeliness of deliverables Effectiveness of managing geotechnical instrumentation issues | |
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| Review and monitoring of design deliverables | Guide engineers to execute design requests from Engineering Managers Develop and maintain design management tools for tracking, reporting and monitoring the progress and delivery of design packages. Identify design delays at the earliest stage, investigate causes and proactively seek to mitigate delays to mitigate any adverse impacts on procurement, fabrication and construction. Verifying permanent works designs meet Client's specifications under the contract for Contractor's permanent works designs and liaising with the Client/Engineer and external interested parties for their comments, where applicable. Monitor progress of work, check design for completion and efficiency; review design calculations Guide team to correct / modify design, as required Seek final sign-off from Head of Engineering and send final output to Engineering Managers Performance indicators: Feedback on designs by Project Teams Quality of the design work Feedback from Client/Engineer and interested parties on permanent works designs. Timeliness i.e. less turnaround time |
| Compliance Review And Monitoring | Review all designs for compliance with engineering principles and relevant design codes Review all drawings for adherence with CAD standards and Leighton's operating procedures Guide team to file designs / drawings, maintain record of delivery and timesheets for development and delivery schedule Guide team to resolve instances of non-compliances Performance Indicators: Number of non-compliances (should be minimum) |





Tasks: Proactively seek to optimise temporary works solutions, by eliminating risks during construction, maximising temporary works reuse, ensuring practical constructability and seeking the most economical solution. Collaborate with designers and site operations teams to seek consensus on engineering solutions and drive initiatives through. Conduct peer / value engineering reviews for tender design / post award design / permanent works design by external consultants Value engineering review Engage with consultants, provide input and seek clarifications Resolve issues, provide insight and escalate critical concerns to Engineering Manager Facilitate collaboration between stakeholders to complete engineering design reviews and enhance efficiency **Performance indicators:** Feedback on inputs provided Quality and timeliness of input Entry into the Leighton Innovation Competition

Agreed By (please sign when agreeing on this job description):

| | Name | Signature | Date |
|-----------|------|-----------|------|
| Employee: | | | |
| Manager: | | | |

