

Position: Civil Engineer, Marine Structural Civil Engineer – Marine Structures

The Civil Engineer, Marine Structures, is responsible for the planning, analysis, design, inspection, and construction support of marine infrastructure projects. The role involves designing and maintaining structures exposed to marine environments. The engineer works closely with multidisciplinary teams to deliver safe, sustainable, and cost-effective engineering solutions.

Key Responsibilities

Design and Engineering

- Perform structural and civil engineering design for marine and waterfront facilities.
- Prepare engineering calculations, technical reports, specifications, and construction drawings.
- Design reinforced concrete, steel, timber, and composite marine structures.
- Analyze structures for wave, current, tidal, wind, seismic, berthing, and mooring loads.
- Develop rehabilitation and strengthening solutions for existing marine assets.
- Coordinate with geotechnical, coastal, hydraulic, and environmental engineers.

Project Delivery

- Support project planning, scheduling, budgeting, and resource management.
- Prepare design packages and ensure timely delivery of project milestones.
- Participate in technical reviews, value engineering, and risk assessments.
- Assist in preparing proposals, cost estimates, and tender documentation.

Site and Construction Support

- Conduct site investigations, inspections, and condition assessments.
- Review contractor submittals, shop drawings, and construction methodologies.
- Provide technical support during construction, installation, and commissioning.
- Monitor construction activities to ensure compliance with design requirements and quality standards.

Asset Management and Inspection

- Perform structural condition assessments of marine infrastructure.
- Identify defects, deterioration, corrosion, and structural risks.
- Recommend repair, maintenance, and rehabilitation strategies.

- Prepare inspection reports and asset management documentation.

Health, Safety, and Compliance

- Ensure designs comply with applicable engineering codes, standards, and regulations.
- Support environmental permitting and regulatory approval processes.
- Adhere to company Health, Safety, Environment, and Quality (HSEQ) procedures.
- Promote safe engineering and construction practices.

Qualifications

- Bachelor's degree in civil engineering or Structural Engineering.
- Professional Engineer (PE, P.Eng.,) is required.
- 3–10+ years of experience in marine, coastal, port, or waterfront infrastructure projects.
- Experience in structural analysis and design of marine facilities.

Technical Skills

- Structural analysis software such as SAP2000, STAAD.Pro, ETABS, or MIDAS.
- AutoCAD, Civil 3D, MicroStation, or similar drafting/design tools.
- Knowledge of marine construction techniques and materials durability.