

Job Title: Geotechnical & Off-Track Engineer

Purpose: Nexus technical lead supporting the Principal Engineer Civils & Structures in geotechnical and off-track engineering matters across capital projects, maintenance, and operations. The Geotechnical & Off-Track Engineer will ensure that Nexus assets – including earthworks, retaining structures, vegetation, drainage, boundaries, access points – and the geotechnical and off-track interfaces meet all relevant statutory, regulatory, and industry best-practice engineering standards. The Geotechnical & Off-Track Engineer will work collaboratively with internal and external stakeholders.



Safety Rating: Not safety related

Remuneration: Salary Band 5

1. Principal areas of responsibility

- 1.1 Support the Nexus Engineering team and the Principal Engineer Civils & Structures in carrying out their duties as the asset steward for Nexus geotechnical and off-track engineering assets.
- 1.2 Act as the Nexus technical and key Nexus stakeholder and subject matter expert for geotechnical and off-track matters.
- 1.3 Act as the Nexus technical lead for geotechnical and off-track matters associated with Capital Programme projects, supporting and determining requirements for projects from conception, design, tendering, construction to handover.
- 1.4 Act as the Nexus technical lead for geotechnical and off-track engineering matters associated with non-capital programme workstreams, maintenance, and operations, including the production and continually improving of standards.
- 1.5 Provide specialist geotechnical and off-track engineering advice to internal and external stakeholders, including design teams, project managers, senior leadership, maintainers, consultants, and contractors.
- 1.6 Provide geotechnical and off-track engineering related sign-off or acceptance where appropriate, whether project or non-project related.
- 1.7 Lead the review and updating of all Nexus geotechnical and off-track strategies and plans, ensuring they remain current, accurate, and compliant with evolving regulatory requirements and best practice.
- 1.8 Assess the current condition of geotechnical and off-track engineering assets and provide lifecycle management of the assets in accordance with ISO 55000 series and the Nexus Asset Management Policy.
- 1.9 Undertake and support audits/ inspections and other similar activities aimed at evaluating compliance of the assets against regulatory requirements, standards, and specifications.
- 1.10 Undertake and support investigations and post-incident reviews where geotechnical and off-track engineering advice and expertise is required.
- 1.11 Provide geotechnical & off-track engineering input as necessary during emergency incidents.
- 1.12 Work closely with key internal and external stakeholders to ensure that Nexus

- complies with the appropriate regulatory requirements and best practice.
- 1.13 Work closely with key internal stakeholders in the engagement and coordination of geotechnical and off-track engineering matters with external stakeholders including but not limited to local authorities.
 - 1.14 Identify opportunities to innovate, trial, and adopt new geotechnical and off-track engineering systems or processes, technologies, data, or methodologies, contributing to continuous improvement.
 - 1.15 Where applicable, lead the relevant engineering resource that is under your direct control whether internal or procured externally.
 - 1.16 Represent the Engineering team from a geotechnical and off-track engineering perspective and cover the Principal Engineer Civils & Structures and/or the Head of Engineering when necessary.

2. Dimensions

2.1 Communications

- 2.1.1 Verbal and written communication with all levels of internal stakeholders.
- 2.1.2 Verbal and written communication with all levels of external stakeholders
- 2.1.2 Communicate complex geotechnical and off-track engineering concepts clearly to non-technical stakeholders.
- 2.1.3 Communicate complex geotechnical and off-track engineering concepts clearly to technical stakeholders.
- 2.1.4 Represent geotechnical and off-track engineering in multi-disciplinary project meetings, non-project meetings, design reviews, safety working groups, and other applicable audiences.
- 2.1.5 Produce high-quality technical scopes, reports, specifications, standards, and other documentation as necessary.

2.2 Decision Making & Problem Solving

- 2.2.1 Provide technical input/ designs relating to geotechnical and off-track engineering, balancing compliance, safety, asset lifecycle management, and operational need.
- 2.2.2 Interpret engineering data, standards, and regulations to recommend and determine practical solutions to both project and non-project items.
- 2.2.3 Determine the applicable regulatory requirements, standards, and best practice that Nexus are working to.

2.3 Initiative & Independence

- 2.3.1 Independently lead geotechnical and off-track engineering decision-making within project and non-project environments, and across the asset base.
- 2.3.2 Independently lead the design and/or evaluation of existing and new geotechnical and off-track engineering systems, considering innovation continually.
- 2.3.3 Develop and define maintenance, repair, and renewal specifications for the geotechnical and off-track engineering discipline.

2.4 Resources

- 2.4.1 Utilise electronic tools, engineering software (where appropriate), and other engineering platforms to analyse, design, or modify geotechnical and off-track engineering assets.
- 2.4.2 Utilise access to external resources including but not limited to British

Standards portal, Accuris / Information Handling Services to analyse, design, or modify geotechnical & off-track engineering assets.

2.5 People

- 2.5.1 No direct line management responsibilities but may oversee and direct external geotechnical and off-track engineering consultants, or specialist contractors.

2.6 Health & Safety

- 2.6.1 Ensure geotechnical and off-track engineering considerations are integrated into Nexus Health & Safety systems, standards, procedures, processes and any other applicable documentation/ information.
- 2.6.2 Understand and follow the appropriate Nexus Rulebook, Safe Systems of Work, Risk Assessments, Method Statements, etc. and ensure correct usage of PPE where necessary.

3. Statutory Duties

- 3.1 Responsible for managing those elements of the safety management system allocated to Nexus Engineering and specially to the role of Engineer for the safe operation of Nexus assets, and associated project and non-project workstreams.
- 3.2 Responsible for carrying out duties and ensuring procedures and processes are in place to meet regulatory, legislative, and standard requirements for Nexus, ensuring Nexus are in line with industry best practice.
- 3.3 Maintain awareness of relevant safety publications.

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