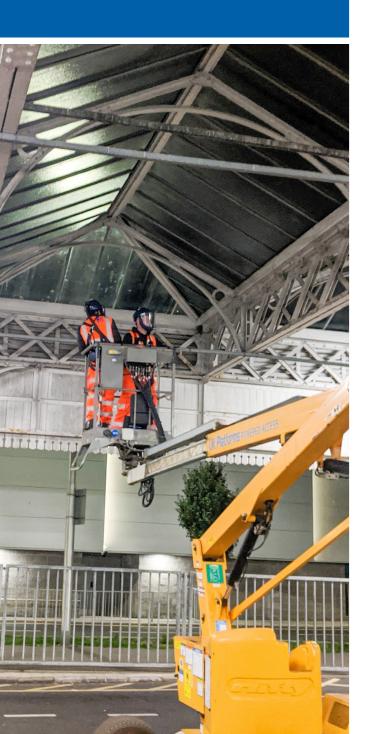


FRANKHAM

Civil Engineering Department



The Frankham Civil Engineering Department's core services and capabilities are Bridges, Civil Engineering and Building Structure assets in transport and infrastructure.

Our clients operate in 4 main market sectors - Maritime, Rail, Highways and Land and Legal.

A sample of our services are shown here as an indication of our ability to assist clients with Civil Engineering Consultancy requirements.

BRIDGES, CIVIL ENGINEERING, INFRASTRUCTURE ASSETS



RAIL INFRASTRUCTURE

Contractors Responsible Engineer CRE
Contractors Engineering Manager CEM
Designated Project Engineer (DPE)
Detailed, Visual and Enhanced Examinations
- Rail

STE2, STE3, STE4, STE5 & STE6 Examination Competencies

Hidden Critical Element Examinations
Rail Side Development Advice (BAPA) Asset
Protection Negotiation
Reactive Maintenance Surveys

Design using GRIP Stages



MARITIME

Marine Structure Inspections

Docks and Associated Building and
Infrastructure Engineering

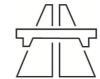
Marine Licences and Consents

Water Framework Directive and Environmental Impact Assessments

Bed sampling and Other Environmental Surveys (Including Hydrology)

Hydrographic Surveys

Vessel Mounted Laser Scanning Submarine ROV Surveys



HIGHWAYS AND LAND

General, Principal and Special Inspections -Highways

Highway Design

Drainage Investigation and Design

Design of Resurfacing of Car Park Depots and Access Roads

Car Park and Depot Design

Civils 3D

Topographical Surveys, CCTV Drainage and Services Trace

Design support on major infrastructure projects



LEGAL

Forensic Investigations
Expert Witness
Civil Cases Expert Support
Testing of Failed Elements and Interpretative
Reports

Failure Identification and Reporting Root Cause Analysis and Identification

INDUSTRY-WIDE SERVICES

Asset Management
Building Information Modelling (BIM)
Cathodic Protection Design
Certification for Fixed Access Equipment
Concrete Repair Specification
Confined Space Entry
Consents, Licences and Flood Risk Assessments
Consultancy
Contract Administration and Site Supervision
Defect Investigation and Reporting
Design Management
Design using RIBA Stages
Detailed Design Superstructure and Foundations

Drone, ROV and UAV Surveys

Engineering Management
Feasibility Studies and Concept Design
Finite Element Analysis
Foundation Design
Ground Investigation, Geotechnical & Earthworks Investigations
Health, Safety and CDM Duties and Guidance
Minor Works and Routine Maintenance Specifications
Multi-Disciplinary Design and Project Delivery
Project, Programme and Portfolio Management
Remedial Work, Maintenance and Repair Specification
Repair Strategy
Retainings wall design
Revit & Civils 3D & 3D visualisations and Fly Through
Presentations

Roped Access
Specialist Access Inspection
Steel and Iron Repair Specification
Strengthening and Refurbishment Design
Structural Analysis
Structural Assessment
Structural Pathology
Structural Repair Strategies
Structures Inspection, Investigation and Reporting
Structures Monitoring
Temporary Works Design
Transportation Engineering
Underwater Surveys (Scour and Structure Condition)
Working at Height