

Highways and Infrastructure

Construction Methodology

Gantries and Heavy Lifting

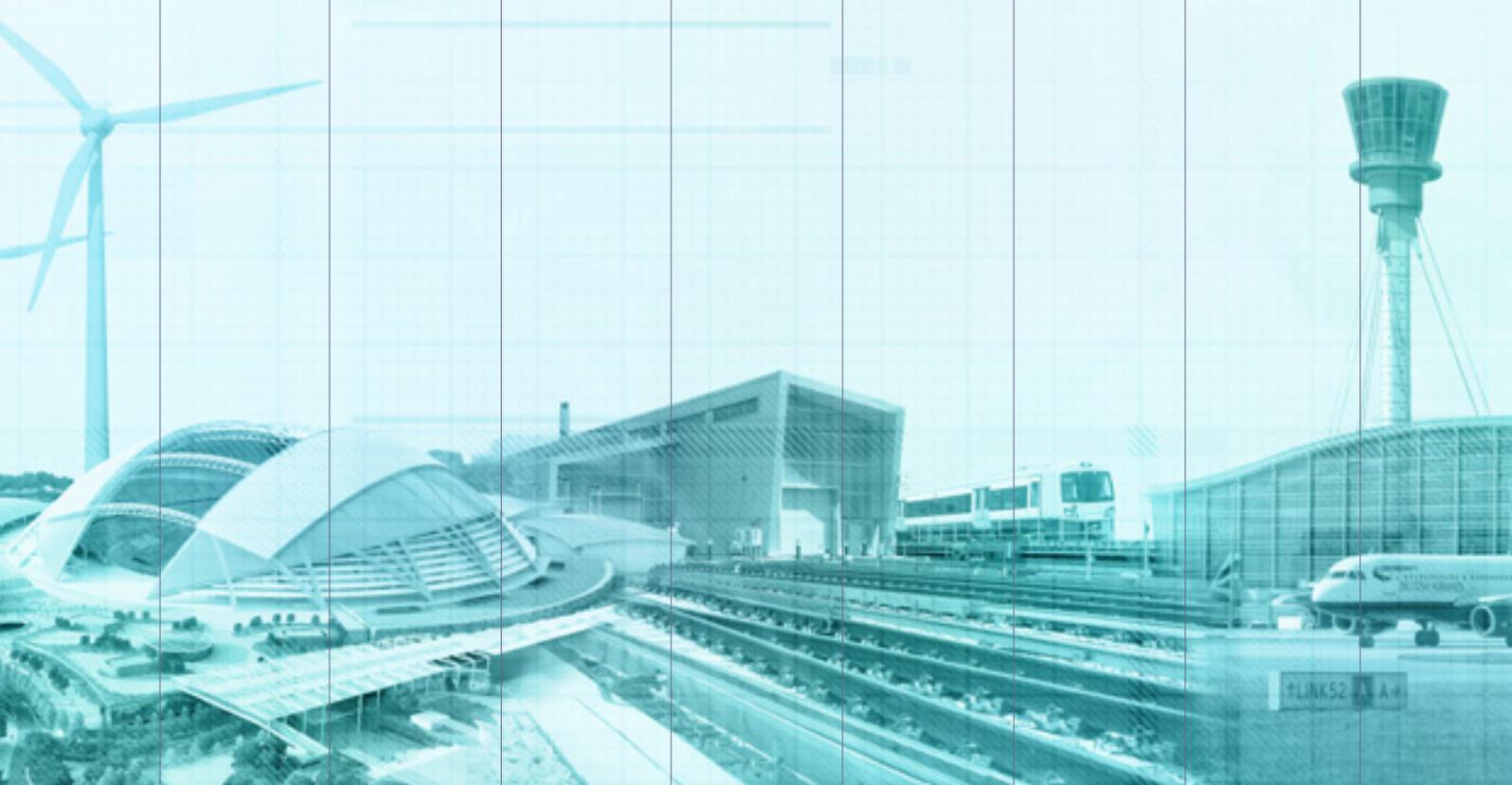
Rail

Stadia and Clear Span

Airports

Marine

Power and Energy



Tony Gee and Partners provides specialist engineering consultancy services to the global construction industry. We pride ourselves on producing high calibre, award winning and innovative engineering designs.

Our owner-managed business was formed with a management structure centred on short lines of communication, ensuring prompt responses to our clients.

Integrated Design

We provide engineering solutions to a wide variety of clients including building owners and infrastructure operators. We have formed close relationships with our contractor clients and other consultants, enabling us to meet the rapidly changing demands of any construction project.

We are renowned for our ability to integrate permanent works with the development of temporary works necessary to produce the most economical design.

A firm which has carved out a strong reputation as a provider of technical maestros who can sort out any complex construction challenge

New Civil Engineer Magazine

Highways and Infrastructure

Marine

Airports

Industrial

Rail

Power and Energy

Commercial

Education

Health

Retail

Research and development

Inspections and assessments

Feasibility studies

Ground investigations

Permanent works design

Temporary works design

Lifting and moving systems

Design checking

Demolition and façade retention

Construction methodology

Site monitoring

Expert witness



Our People

Our resources comprise a blend of technical staff directed by highly experienced, professionally qualified engineers. Together with our carefully selected and vetted supply chain partners we are able to offer integrated teams capable of working across all disciplines.

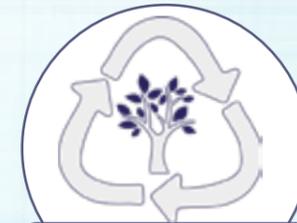
Investment in people is fundamental to our success. Through our leading apprenticeship, student and graduate programmes, we continue to nurture aspiring engineers. This approach ensures that a high standard of service is delivered consistently.



Our Values

Environment, social and economic awareness are fundamental in all aspects of our work. Following CEEQUAL requirements, we strive to achieve the highest markers in sustainable design.

Our engineers understand the importance of the local community of which our work takes place. We ensure that community liaison in partnership with our clients remains at the heart of all of our operations.



Reduction of waste, with increased reuse and recycling



Investing in the development of all staff



Commitment to success through collaborative working



Working positively and responsively



Community liaison in partnership with the client and the project team



Conscientious design with due regard to its impact on the environment and the wider community



Proud Patron of international disaster relief charity RedR



Highways and Infrastructure

Our expertise covers most aspects of highways design and construction monitoring on projects ranging from property development schemes to major trunk road improvements and bypasses.

Our reputation for providing solutions to the most difficult challenges has led to work on highly complex road schemes and some of the world's largest bridges.



Our scope includes:

- Planning
- Site surveys and ground investigations
- Geo-environmental studies and remediation of brownfield sites
- 3D soil / structure modelling
- Ground improvement and formation treatment
- Earthworks slope stability and retaining measures
- Major drainage schemes including forensic drainage investigations
- Non-linear finite element analysis
- Major road interchanges, at grade and grade separated
- Bridges of all types and spans
- Permanent and temporary works design
- Steelwork and lifting apparatus design
- Third party checking and verification



Saadiyat Island Expressway, Abu Dhabi

Sheikh Jaber Al Ahmad Al Sabah Causeway, Kuwait



Adelaide Riverbank Precinct Pedestrian Bridge, Australia



Kuala Lumpur Elevated Highway, Malaysia



DP World London Gateway, UK



Stonecutters Bridge, Hong Kong

Construction Methodology

The efficient integration of construction methods with the design of permanent works is often critical to the success of a project. Selecting the most economical construction sequence and equipment is part of this process.

Our extensive experience on major bridges and building projects is used to define the most suitable methods of construction and to design any associated temporary works.

Our scope includes:

- Cable supported bridges
- Balanced cantilever bridges
- Steel girder and segmental concrete bridges
- Complex roofs
- Sliding, lifting and lowering structures
- Deep excavations and foundations

City of Dreams, Macau



San Tin Interchanges, Hong Kong



Marina Bay Sands Skypark, Singapore



Yamuna Bridge, India



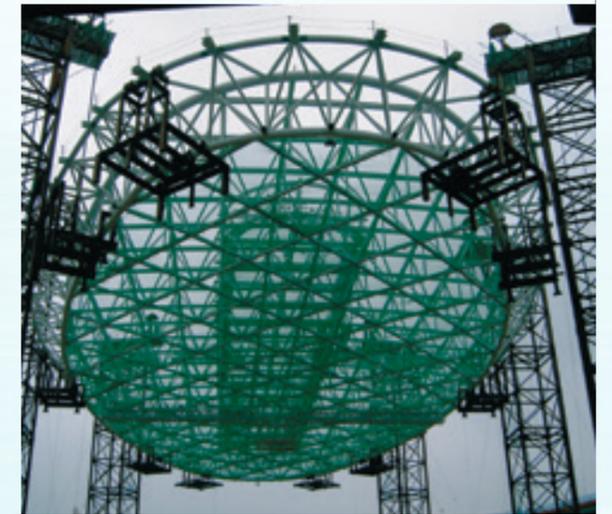
Gantries and Heavy Lifting

We are renowned for the design of erection gantries and other mechanical equipment used in bridge construction and for other industrial purposes.

We provide design services for:

- Bridge launching girders
- Balanced cantilever erection
- Lifting gantries
- Lifting roofs by strand jacking
- Transporters
- Casting cells
- Construction stage stress analysis

Gwangmyeong Velodrome, South Korea



Qatar National Convention Centre



Jamuna Bridge, Bangladesh

Bahrain Flyover



Rail

Tony Gee's railway experience ranges from independent validation and verification of high speed railways in Asia network infrastructure to renewal and enhancement in all regions of the UK.

Operating under contractual arrangements varying from partnering to highly competitive design and build forms, projects are delivered by staff trained to the highest standards of health and safety appropriate to the rail environment.

We have specific expertise in:

- Road, rail and pedestrian bridges
- Strengthening with carbon fibre reinforcement
- Polymer composite bridges
- Replacement structures
- Earthworks monitoring
- Earthworks remediation and renewal
- Demolition and temporary works
- Slope stability remediation
- Drainage
- Stations, depots and interchanges
- Permanent way design
- Car parks
- Construction methodology
- Route development
- Independent verification and validations

Klang Valley LRT, Malaysia



Scomi Monorail, Malaysia



MRT 618, Singapore



Taiwan High Speed
Verification and Validation



Westrail CC212,
Hong Kong



Stadia and Clear Span

As design for stadia becomes more and more ambitious it is vital that the correct techniques for construction are adopted. We have been involved in many high profile stadia and other clear span facilities all over the world.

Our reputation for producing innovative designs is coupled with an appreciation of the dynamic behaviour of long span structures.

Structures assembled on the ground, where safety and quality can be well supervised and enforced, can be constructed off the critical path before raising the module or roof to its final position. As the lightweight structures flex, geometrical adjustments must be predicted to ensure the completed structure meets the aspirations of the client and its architect.

Our services includes:

- Permanent works design
- Dynamic analysis
- Construction methodology
- Geometry control
- Temporary works design

Rades Stadium, Tunisia



Singapore Sports Hub



Jeonju Stadium, South Korea



Wembley Stadium, UK



Dubai Mall, UAE



Korean Air Hangar, New Seoul Airport, South Korea



Airports

Working either directly for airport owners or through their supply chain partners, we design aviation infrastructure for airports worldwide. Our ability to integrate permanent and temporary works design with construction engineering methodologies ensures minimal disruption to airport operations.

Our scope includes

- Airport hangars and roof erection schemes
- Structure stability analyses throughout construction
- Terminal buildings, including airside facilities and mezzanine floors
- Roads and runways
- Control towers
- Footbridges and passenger transport
- Escalator and lift installation
- Multi-storey and surface car parks
- Hotels
- Façade retention

Midfield Terminal Roof, Abu Dhabi, UAE



Gatwick Airside Operations Building, UK



Heathrow Airport Control Tower, UK



Haeco Hangar, Hong Kong



Skyplaza, Hong Kong International Airport



Marine

Coastal, river and canal schemes are undertaken for clients including port authorities, developers, asset managers and contractors. We pride ourselves in providing cost effective and frequently innovative solutions to repair and maintain existing assets and enhance operation facilities.

Westport CT7, Kuala Lumpur, Malaysia



Three Mills Lock, UK



Our scope includes

- Ports and harbour development
- Docks and locks
- Berths and fendering
- Sea and river defences
- Flood prevention, alleviation and emergency response
- Sea and river defences
- Jetties, linkspans and brows
- Pontoons, marinas and quays
- Cofferdams and marine temporary works
- Shoreside facilities
- Piles and dolphins
- Foundations and retaining walls
- Collision protection structures
- Marine inspections
- Legislation consents

Ipswich Tidal Barrier, UK



London Eye, UK



Hay Point Jetty, Australia



Central-Wan Chai Bypass, Hong Kong



Power and Energy

Tony Gee has successfully completed a diverse range of commissions designing infrastructure to deliver power generated by nuclear, gas and renewable forms of energy. Contractors particularly appreciate our ability to integrate temporary and permanent works design.

Our clients include major utility companies, developers, operators and plant suppliers worldwide.

Williams Way Substation, UK



Barking Reach Power Station, UK



Brechfa Wind Farm, UK



Afton Wind Farm, UK

Our scope includes

- Power station structures
- Transmission and distribution networks
- On-shore and off-shore wind
- Site common infrastructure
- Operational equipment manufacturing
- Substations
- Transport logistics
- Geotechnical assessments
- Piling
- Deep foundations and basements
- Access shafts
- Pumping stations
- Marine structures including jetties
- Platforms for heavy cranes and machinery
- Temporary works
- Lifting and moving structures
- Strengthening with carbon fibre reinforcement
- Construction methodology



Tomatin Substation Delivery, UK



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