talis consultants

STRUCTURAL ENGINEERING

Capability Statement





TALIS CONSULTANTS

Your Trusted Partner for Structural Engineering Services

Who We Are

Talis Consultants is a national consultancy providing specialist services in Engineering, Environment, Noise, Spatial, Waste, and Asset.

Founded in 2012, we have grown to over 130 professionals across offices in WA, QLD, and NSW.

Our experienced team delivers practical, cost-effective solutions for public and private sector clients, backed by a strong commitment to quality, innovation, and collaboration.

1 UNPARALLELED EXPERTISE

We combine technical expertise with a collaborative approach to deliver safe, innovative solutions for industrial structures, site development, waste facilities, ports, and mining.

2 TAILORED TO YOUR NEEDS

We understand client and project needs, listen and collaborate to anticipate challenges, delivering practical, efficient solutions tailored to goals.

3 LASTING PARTNERSHIP

Guided by core principles, we create outcomes that stand the test of time and build lasting partnerships through quality and reliability.



Structural Engineering Services

Industrial Structures and Buildings

Our team designs and delivers innovative, cost-effective design solutions for:

- Warehouses
- Processing and mining facilities
- Ports
- Complex industrial environments
- Commercial and mixed-use developments
- Work Depots

We believe that optimum solutions arise from a high-quality, collaborative process with architects, consultants, and stakeholders, resulting in buildings that deliver real value to our clients. We integrate structural integrity with architectural vision to balance aesthetics, safety, durability, functionality, and sustainability.

We look to the future to build flexibility, resilience, and lasting value into our structural designs, anticipating how they might need to adapt in a rapidly changing world.

Project Highlights

CLIENT: EMRC
PROJECT: Heavy Duty Vehicle Maintenance Workshop (WA)

Talis was engaged by the Eastern Metropolitan Regional Council (EMRC) to prepare structural engineering designs for a new heavy duty maintenance workshop facility at their Hazelmere facility. The building comprised maintenance area with an overhead gantry cane, staff amenities, materials testing laboratory and offices on the mezzanine floor level.

Services Provided:

- Preliminary, tender and construction structural engineering designs
- A pre-tender cost estimate
- Technical specifications
- Construction phase services including resolving technical queries and requests for information, review and approval of shop drawings, undertaking regular site inspections, and assisting the Principal when called on.

The different areas within the building and the high level of architectural finish required Talis to work closely with the architect to produce coordinated designs. The project was a finalist in the Master Builders Association Awards 2022.

EMRC Heavy Duty Vehicle Maintenance Workshop



Structural Engineering Services

CLIENT: **Shire of Upper Gascoyne**
PROJECT: **Gascoyne Junction Bridges (WA)**

Talis provided consultancy services for the planning of two bridges and a causeway across the Gascoyne River located at Gascoyne Junction. Talis was involved in the whole project, from engaging designers, developing a successful business case and fulfilling the role of Superintendent during construction.

Services Provided:

- Project management and superintendent roles across all works
- Business case development securing $10M in Royalties for Regions funding
- Management of all approvals (DoW, MRWA, Native Title, GDC)
- Tender preparation and evaluation
- Project management & contract administration (AS 4000)
- Full-time on-site supervision
- Budget and financial management



Killili Bridge Gascoyne Junction

CLIENT: **City of Karratha**
PROJECT: **Pedestrian Footpath & Cycle Network Expansion (WA)**

Talis provided structural designs and technical specifications for seven pedestrian footbridges with maximum span of 32m as part of the project. The scope of works encompassed the structural and civil designs in compliance with current Australian Standards.

These designs will be implemented in a number of locations throughout the City's pedestrian and cycling network.



City of Karratha Pedestrian Footpath

Industrial Site Development

We offer end-to-end industrial site development solutions, combining our project management and environmental expertise with our in-house structural and civil engineering capabilities.

Our integrated team supports projects across all stages of delivery:

- Feasibility studies and master planning
- Detailed design and construction support
- Site investigations
- Environmental planning and approvals
- Coordination of approvals and specialist consultants

Talis work closely with our trusted sub-consultants, including architects, electrical, hydraulic, and fire engineers, as well as NCC/BCA compliance experts. Together we deliver efficient, compliant solutions aligned with client operations.

Project Highlights

CLIENT: City of Wanneroo
PROJECT: Neerabup Resource Recovery Precinct (WA)

The City of Wanneroo is developing the Neerabup Resource Recovery Precinct (NRRP) to address the lack of waste processing infrastructure in Perth's northern suburbs. The precinct will include a Material Recovery Facility (MRF) for recycling and waste, Community Recycling Centre (CRC), and Stage 1 of the Waste Transfer Station (WTS), delivering improved recycling capacity, reduced transport costs and emissions, and local employment opportunities.

Services Provided:

- **Design:** Conceptual, schematic, and detailed designs for the CRC and WTS, and 3D visualisations
- **Master Plan and Feasibility:** Master plan design, financial model, and contract delivery model
- **Site Investigations:** Geotechnical and hydrogeological, flora and fauna investigations
- **Documentation:** Technical specification and bills of quantities
- **Project Management:** ISO 9001-accredited systems, stakeholder liaison, and reporting
- **Approvals:** Clearing permit, works approval, and development application, supported by environmental, odour, noise, and surface water studies
- **Community Engagement:** Consultation support and integration of community feedback
- **Construction Support:** Tender review, technical advice, site inspections, and contract administration through construction and defects liability phases
- **Traffic Engineering**
- **Waste Consulting Services**

Talis also engaged sub-consultants across architecture, electrical engineering, fire engineering, hydraulic engineering, landscape architecture, mechanical engineering, and NCC/BCA compliance to deliver a fully integrated project outcome.



Remedial Engineering Works

We deliver remedial engineering solutions that restore or enhance the structural integrity, safety, and functionality of assets. Through detailed condition assessments, our engineers diagnose issues and implement tailored works. Working closely with clients, we advise on the most effective remediation pathways to support the long-term sustainability of infrastructure.

Our remedial services include:

- Investigate and report on underperforming structures
- Scope of work and cost estimates for remediation
- Assessment of asset life extension options

Project Highlights

CLIENT: Shire of York
PROJECT: York Swing Bridge Assessment (WA)

Talis performed a structural assessment of the York Swing Bridge, a pedestrian suspension bridge spanning the Avon River in York, WA. A risk-based approach was used to assess the general structural condition and the requirements for planned future maintenance works. Talis created a report as part of the assessment.



York Swing Bridge

CLIENT: JLL
PROJECT: Indian Ocean Territories Asset Inspections

Talis provided structural engineering services for various assets managed by JLL (on behalf of the Department of Infrastructure and Regional Development and the Bureau of Meteorology) across the Cocos (Keeling) Islands and Christmas Island. Our team assessed over 15 buildings, including school buildings, a weather station, and an Australian Federal Police building, among others.

The scope included identifying defects of these assets, delivering condition assessment reports, and providing concept level engineering sketches of the recommended remediations.



Recycling Centre Balcatta

CLIENT: City of Stirling
PROJECT: RCB Remediation Works (WA)

Talis carried out a structural condition assessment of the Waste Transfer Station at the Recycling Centre Balcatta (RCB). The assessment identified areas at risk of structural failure, estimated the facility's operational life without remediation, reviewed compliance of the drop-off wall barrier system, outlined remediation options with detailed designs and cost estimates.

Talis also completed the detailed designs of the remediation options.

Structural Engineering Services

Waste Management Facilities

Our engineers alongside our Waste Infrastructure team deliver innovative, sustainable structural solutions for waste and resource recovery facilities. We provide design documentation, procurement, project management, and construction support, ensuring each structure withstands heavy operational demands, enables efficient waste processing, and meets all regulatory requirements.

We have helped clients deliver waste management facilities, including:

- Landfills
- Hazardous waste management facilities
- Materials recovery facilities
- Waste transfer stations

Project Highlights

CLIENT: Shire of Esperance
PROJECT: Myrup Waste Management Facility (WA)

Talis developed the concept and detailed designs for a new Waste Management Facility to serve the Esperance community and wider region. The centralised facility will feature a modern Community Recycling Centre, Waste Transfer Station (WTS), and Materials Recovery Facility.

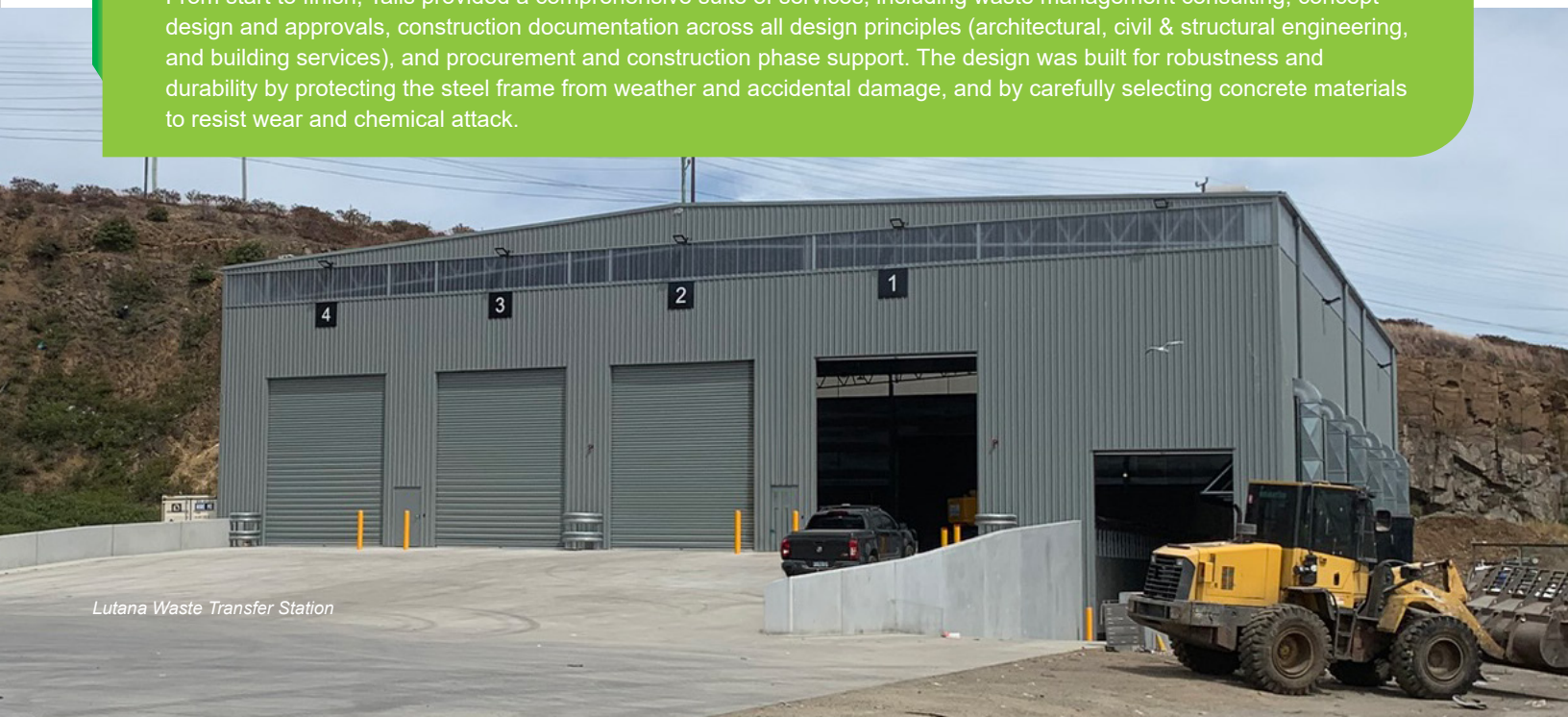
Talis developed the design for the site that allowed for the safe disposal of waste, maximised resource recovery, and increased operational efficiency.

Services Provided:

- Civil, structural, geotechnical, and traffic engineering consulting
- Concept design report and cost estimate in BOQ format
- Environmental and Planning Approvals
- Concept and preliminary design documentation

CLIENT: South Waste Solutions
PROJECT: Lutana Waste Transfer Station (TAS)

From start to finish, Talis provided a comprehensive suite of services, including waste management consulting, concept design and approvals, construction documentation across all design principles (architectural, civil & structural engineering, and building services), and procurement and construction phase support. The design was built for robustness and durability by protecting the steel frame from weather and accidental damage, and by carefully selecting concrete materials to resist wear and chemical attack.



Lutana Waste Transfer Station

Engineering Solutions Backed by Experience

Our Key Structural Engineers



ELLIOT PANIZZA

Structural Team Lead / Senior Structural Engineer

BE(Hons) BCom MEngStruct MIEAust CPEng NER

Elliot Panizza is a Senior Structural Engineer with expertise in buildings, maritime infrastructure, and asset management. He drives innovation in structural design to deliver client-centric solutions and seeks out cutting edge technologies to push the boundaries of what is possible in the field.

Key Structural Projects:

- **Neerabup Resource Recovery Precinct (WA)**
  Structural design and multidisciplllinary design coordination of eight structures and ancillary infrastructure of the facility
- **Adelaide GPO Marriott Hotel (SA)**
  Design of steel framing systems including floor structures, columns, and transfer structures for a 16-storey hotel development
- **Dampier Cargo Wharf - Stage 2 & 3 Reference Design (WA)**
  Project lead & structural design for a new Class 50 export wharf and the rehabilitation of an existing wharf
- **Power Up Electricity Museum in Manjimup (WA)**
  Structural design and contract administration for a new museum building in Manjimup
- **Melville Library and Cultural Centre project (WA)**
  Project Lead responsible for structural design of a 3-storey architectural building for the City of Melville
- **Rio Tinto Parker Point & Cape Lambert Structural Remediation (WA)**
  Developed an automated process to assess the structural capacity of steel members with corrosion patches, enabling the rapid assessment of corroded steelwork on-site



SHONA MEHDI

Structural Engineer & Project Manager

BE(Civil)

Shona is a Structural Engineer with close to 10 years experience in design and quality assurance across structural projects. She is skilled in structural analysis and design, cost estimation, technical reporting, and project management with a focus on buildings and waste infrastructure. Her work includes coordinating with service designers and architectural consultants to integrate best practice design principles with relevant standards and codes.

Key Structural Projects:

- **Neerabup Resource Recovery Precinct (WA)**
  Lead Consultant and Project Manager working directly with end client to deliver their vision for the facility
- **Lutana Waste Transfer Station (TAS)**
  Delivered concept design of the waste transfer station for Southern Waste Solutions
- **EMRC's Hazelmere & Red Hill Heavy Vehicle Workshop (WA)**
  Completed detailed design, with project works spanning from 2020 to 2022
- **Broome Community Recycling Centre (WA)**
  Completed detailed structural design of the community recycling centre for the Shire of Broome



COLM O'NEILL

Senior Structural Drafter

BSc (Hons) Architectural Technology & Management, 2nd Class Hons Upper Division

Colm is skilled in producing engineering drawings and plans, focusing on the design and layout of buildings. Colm has worked closely with engineers to translate concepts into precise technical drawings, ensuring structural integrity and adherence to regulations. He is also experienced in the creation of site master plans and the coordination of drawing sets across disciplines.

Key Structural Projects:

- **Neerabup Resource Recovery Precinct**
  Delivered detailed drawings for all structures included in this project
- **Wangara Waste Transfer Station**
  Delivered detailed drawings for all structures included in this project
- **JMG Systems Headquarters**
  Designed a two-storey private office, delivering an energy-efficient and contemporary outcome in collaboration with the architect
- **Two Oaks Residential Development**
  Designed electrical drawings for a mixture of high-end apartments, a creche, undeground carpark, and commercial and amenity buildings all spread over five blocks
- **Lutana Waste Transfer Station**
  Delivered detailed drawings for all structures included in this project
- **Myrup Waste Management Facility**
  Delivered detailed drawings for all structures included in this project



Engineering Solutions Backed by Experience

Our Key Engineers

We have a dedicated team of engineers and drafters, led by Nathan Hanrahan



NATHAN HANRAHAN

Engineering Section Leader

BTech (Manufacturing Engineering) BEng (Civil Engineering)

Nathan brings over 20 years of civil engineering experience across local government, consultancy, and significant secondment roles with Port Authorities, Main Roads, and the City of Greater Geraldton. His project experience spans small-scale investigations through to large multi-million dollar construction projects, including major transportation infrastructure. Nathan's skills encompass design and project management, government procurement, and water and wastewater engineering.

Key Projects:

- **Doncaster Road Interchange Temporary Works Package (VIC)**
  Design management of a large multi-disciplinary temporary works package for the Doncaster Road-Eastern Freeway interchange
- **Main Roads WA State-wide Road Construction Panel Contract (WA)**
  Management and administration of the project, which included a panel of 23 civil contractors working across the entire state of WA on road construction projects in the $5M-$30M CAPEX range
- **Yanchep Rail Extension & Thornlie-Cockburn Link (WA)**
  Design management of rail systems design packages, which included overhead equipment, rail communications, low voltage power, rail corridor facilities, traction power, and earthing and bonding disciplines
- **Barwon Water Alliance (VIC)**
  Design management of a number of water and sewerage pumping stations, gravity pipelines, pressure pipelines, and water storages



Our National Footprint

LEGEND

Offices

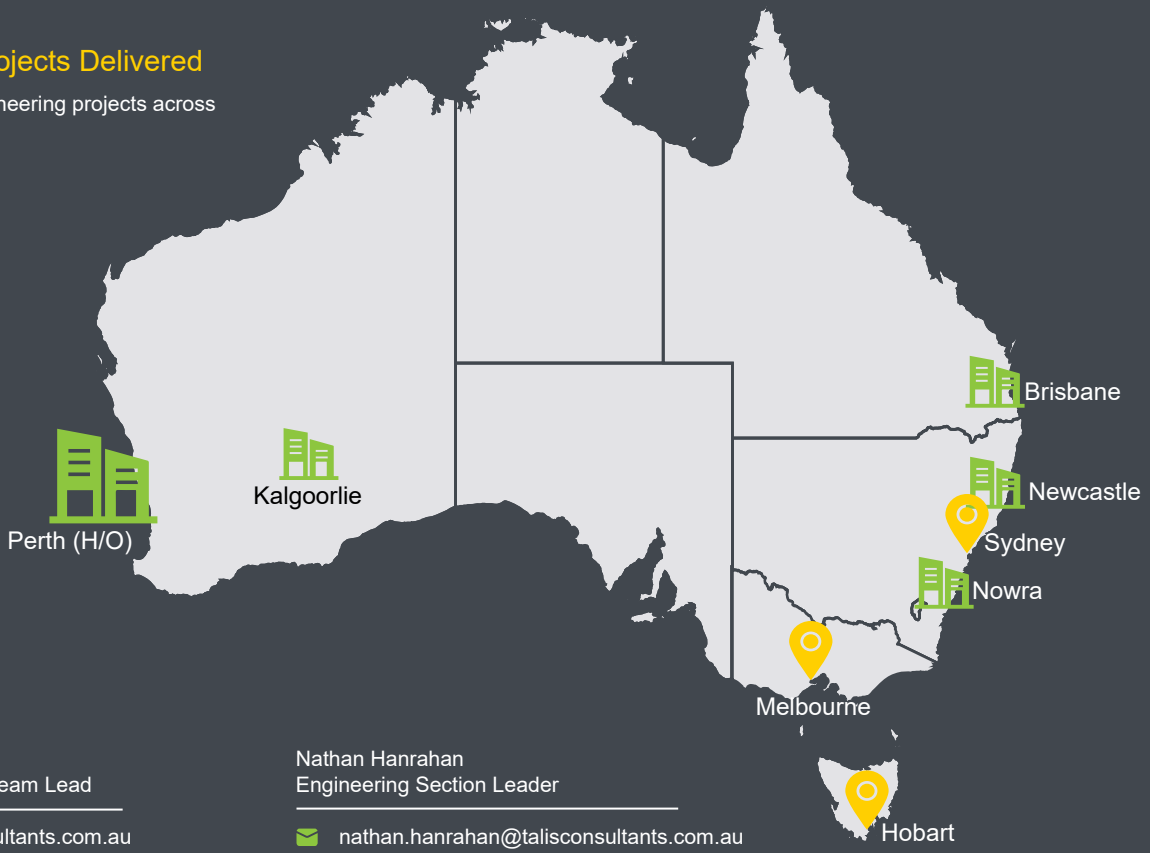
Operating Bases

15+ Engineers

Specialising in civil and structural engineering.

+330 Engineering Projects Delivered

Successfully completed engineering projects across the nation.



CONTACT US

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Engineering Section Leader

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Hamilton NSW 2303

NOWRA
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Nowra NSW 2541

BRISBANE
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South Brisbane QLD 4101

OPERATING BASES
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