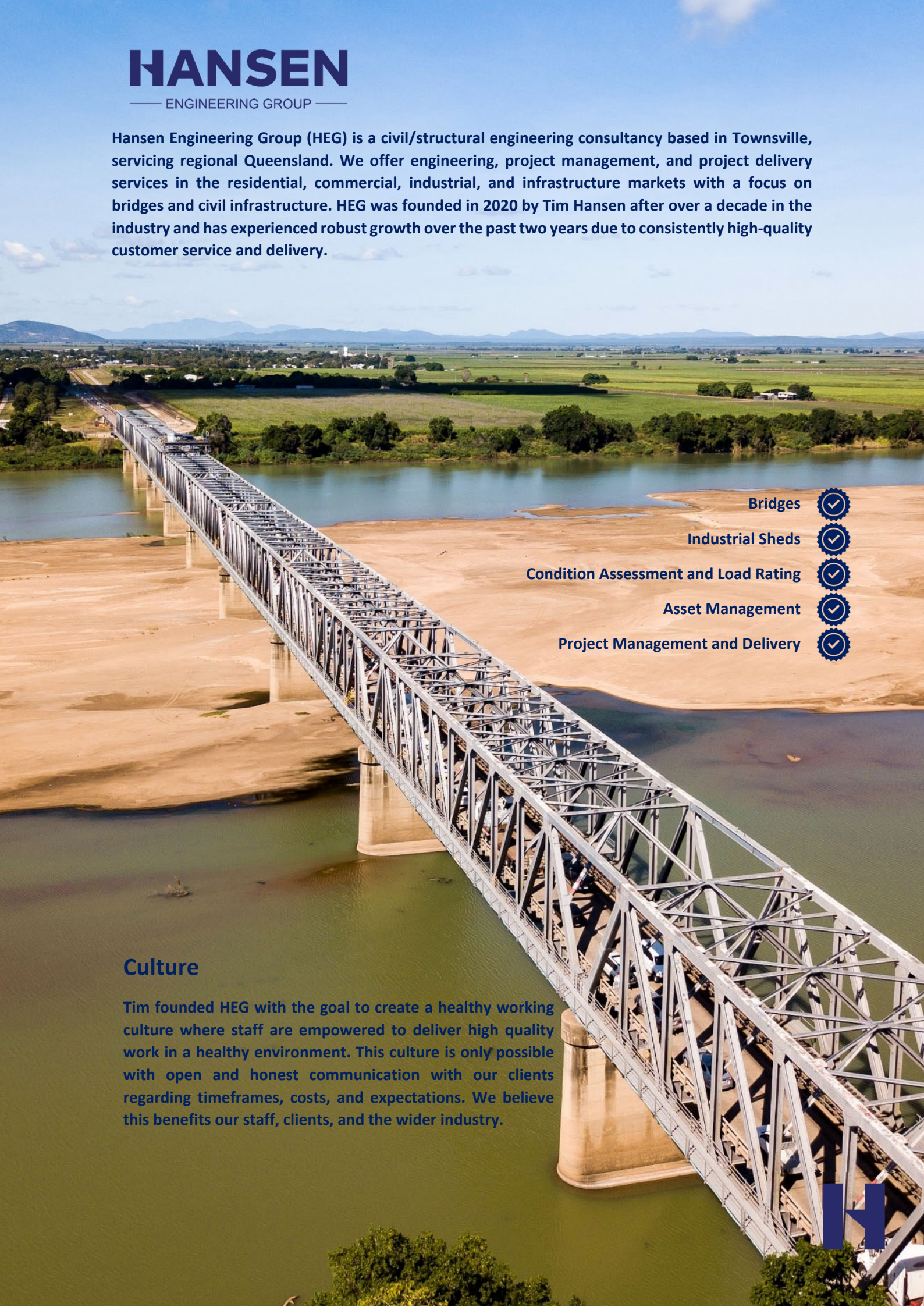
HANSEN

ENGINEERING GROUP

CAPABILITY STATEMENT

HANSEN
ENGINEERING GROUP

Hansen Engineering Group (HEG) is a civil/structural engineering consultancy based in Townsville, servicing regional Queensland. We offer engineering, project management, and project delivery services in the residential, commercial, industrial, and infrastructure markets with a focus on bridges and civil infrastructure. HEG was founded in 2020 by Tim Hansen after over a decade in the industry and has experienced robust growth over the past two years due to consistently high-quality customer service and delivery.



- Bridges
- Industrial Sheds
- Condition Assessment and Load Rating
- Asset Management
- Project Management and Delivery

Culture

Tim founded HEG with the goal to create a healthy working culture where staff are empowered to deliver high quality work in a healthy environment. This culture is only possible with open and honest communication with our clients regarding timeframes, costs, and expectations. We believe this benefits our staff, clients, and the wider industry.

People

Tim Hansen (Director) CPEng RPEQ NER

Tim has over 11 years' experience as a consulting civil/structural engineer in the design and delivery of infrastructure, industrial, commercial, and residential projects. Tim has extensive experience working in and around North Queensland's tropical climate and conditions, as well as experience throughout wider Queensland, Australia, and Papua New Guinea. Throughout Townsville and North Queensland, Tim is known in the engineering community and to his clientele as a reliable, practical, and dependable engineer. Tim's skillset includes civil and structural design, load rating and condition assessment, project management, contract administration, construction verification, independent verification/owner's engineer and more.

Ethan Farrell (Senior Structural Engineer) CPEng RPEQ NER

Ethan has over five years' experience in structural analysis and design of reinforced concrete, masonry, steel, and timber structures. Areas of experience include Water and Sewer Infrastructure, Single and Multi-Level Buildings, Industrial Buildings/Sheds and Steel Support Framing, Bridges and Culverts, and Liquid Retaining Structures. Ethan has advanced skills in structural design and assessment software Space Gass and Strand7 finite-element-analysis.

Projects

Strategic Local Government Asset Assessment Project (SGLAAP)

In 2021 HEG was engaged by the NHVR to conduct load rating assessment on 39 bridges and culverts throughout Queensland. Many of the assets were aging with a range of defects which required thorough examination and engineering assessment to ensure we provided sound but not overly conservative or risk-averse advice to enable the communities to make best use of the structures. In many circumstances the available drawings were limited or missing information, requiring us to work with the asset owners and NHVR to apply historic information and engineering judgement to provide a good outcome to all parties. The services were delivered over a 10-month period. Due to the quality, value-for-money, and customer service we provided the NVHR has recently requested HEG perform further assessments throughout Australia over 2022.

Burleigh Crossing Bridge

NQCC and HEG were recently awarded the Design and Construct contract for the Burleigh Crossing bridge after preparing numerous options and tender designs for RSC. The structure is 180m in length in a remote location, requiring a practical and constructable design. HEGs scope includes civil approach works, structural design of the bridge, and the necessary geotechnical and hydraulics studies associated with the bridge structure.

NQCC and HEG have worked together on multiple remote and regional bridge projects throughout Queensland. This provides us with insight into the constructability and supply chain challenges of bridge construction in remote areas which we take into consideration in our designs.

Industrial Steel Portal Framed Sheds

HEG has designed multiple industrial steel structures for clients in the Burdekin and Townsville. As a recent example HEG provided design services for a new 20 m by 56 m steel portal framed industrial shed in Burdekin, QLD. The shed was constructed out of re-used steel members from a previous design that were retrofitted to suit the new structure, which required bespoke non-standard detailing and first-principals engineering assessment to ensure it met the strict cyclonic wind load requirements of North Queensland while minimising wastage and cost.

Monorail Beam Independent Verification

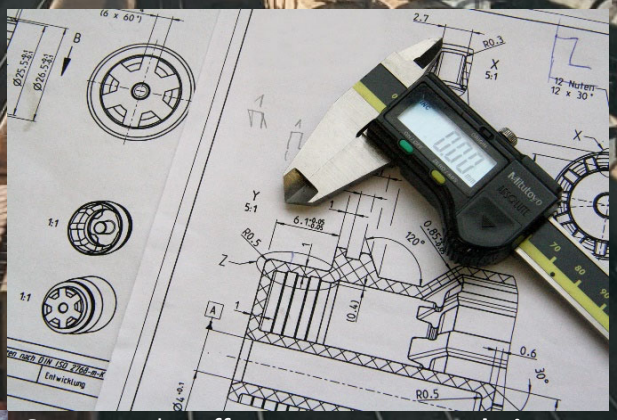
Rockfield Technologies has engaged HEG to provide third party independent verification on multiple monorail beams for FMG in Western Australia. HEG reviewed the design calculations, reports, models, and drawings. We carried out an independent check and were able to provide written certification that the monorails met relevant Australian Standards and good industry practices. Both Tim and Ethan have experience in the design and load rating of monorails, gantry crane beams, and lifting hoists using Australian Standards.

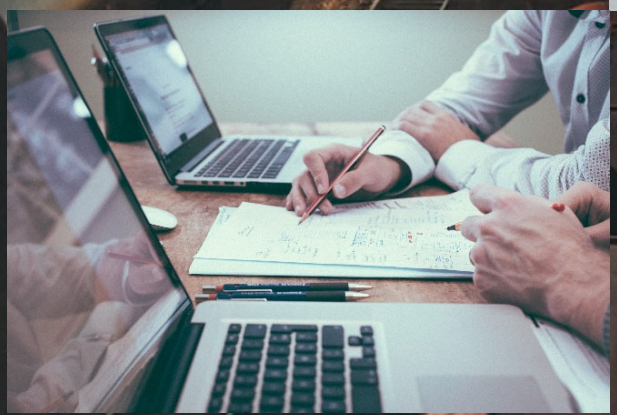
Project Management and Planning Services

Tim is engaged by TMR's Northern District Planning Team to provide project planning and project management services across a number of their projects surrounding Townsville and the Burdekin. We cannot disclose specific details of these projects due to contractual obligations with the Department. Tim's role includes the management and coordination of hydraulics, geotechnical, structural, and civil design teams; program and cost control; reporting to meet state and federal government legislative obligations; ensuring value-for-money outcomes for the Department; preparing funding requests for State and Federal government bodies; and technical review of project deliverables. The projects include culvert and bridge upgrade works and road and highway realignments.

Services

Hansen Engineering Group provides civil/structural engineering design services to the infrastructure, industrial, commercial, and residential markets throughout Queensland. **Our team excels at bespoke, innovative design with a strong emphasis on engineering principals and industry leading research.** We offer quality outcomes and fit-for-purpose solutions.

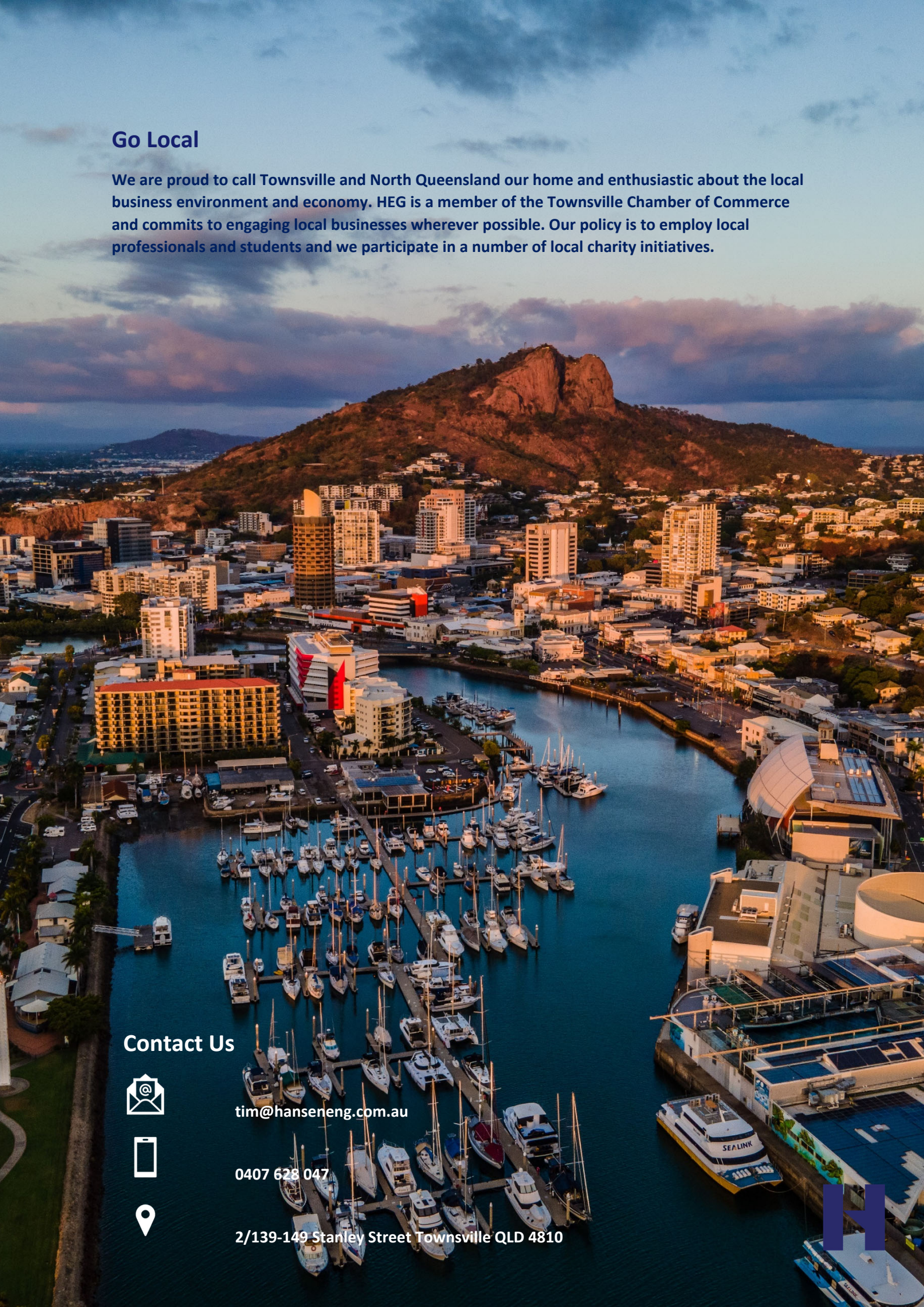




Our team also offers **concept-to-completion project delivery services** including grant and funding applications, planning, tender administration, contract administration, project management, superintendency, site inspections, secondments, owner's engineer duties, and independent verification.

Go Local

We are proud to call Townsville and North Queensland our home and enthusiastic about the local business environment and economy. HEG is a member of the Townsville Chamber of Commerce and commits to engaging local businesses wherever possible. Our policy is to employ local professionals and students and we participate in a number of local charity initiatives.



Contact Us

tim@hanseneng.com.au

0407 628 047

2/139-149 Stanley Street Townsville QLD 4810