

BTW COMPANY

Shaping land
Connecting communities
Creating a better future

SURVEYING | ENGINEERING | PLANNING | ENVIRONMENT

Get in touch 0800 289 787 info@btw.nz **www.btw.nz**

Ngāmotu – New Plymouth
179-181 Courtenay St
New Plymouth 4340

Kirikiriroa – Hamilton
517 Anglesea St
Hamilton 3240

Taupō
55 Kaimanawa St
Taupō 3330

Whāingaroa – Raglan
1 Wainui Rd
Raglan 3225

Taumarunui
35 Morero St
Taumarunui 3920







Creating a better future with innovative and sustainable solutions, technology and great people.

BTW Company is an integrated multidisciplinary consultancy, empowering property owners, communities, and project leaders with professional expertise, collaboration, and the intelligent use of leading-edge technology. From our offices in Ngāmotu – New Plymouth, Kirikiriroa – Hamilton, Taupō, Taumarunui, and Whāingaroa – Raglan, our 100 person strong team of surveyors, engineers, planners, UAV pilots, environmental scientists, and digital specialists (3D scanning, GIS, BIM) deliver clarity, confidence, and cost-efficient outcomes across Aotearoa – New Zealand.

Our ongoing investment in innovation, our people, and a commitment to continuous improvement ensures best-fit solutions, while our engagement with iwi, hapū, whānau, landowners, developers, councils, and communities keeps projects future-focused and delivering real, lasting value.

SURVEYING	3D LASER SCANNING	BIM AND MIXED REALITY
ENVIRONMENT	UAV SERVICES	DATA AND DOCUMENT MANAGEMENT
STRUCTURAL ENGINEERING	CIVIL ENGINEERING	GEOTECHNICAL SERVICES
PLANNING AND RESOURCE MANAGEMENT	ENERGY	THREE WATERS INFRASTRUCTURE

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Knowledge and values are important to our business, guiding the work we do and how we go about it.

At BTW, kotahitanga and collaboration are central, with integrated teams working together to support the people and communities we serve. Drawing on specialist skills, we provide smart, seamless solutions that save clients time, money, and complexity while building trust.

We are guided by manaakitanga, with values focused on client outcomes and balanced by sound professional advice. Our people are empowered and continually developed, supported by the latest knowledge, processes, and technology.

Good business is built on good relationships. At BTW, we value strong connections with our team, clients, iwi, and partners. For over 50 years, we have delivered smart, innovative, and cost-effective solutions. Our passion, supported by leading-edge technology, ensures the high-quality service and reliable outcomes our clients depend on.

Our culture is guided by five key principles:

MATAURANGA
Knowledge & understanding

We are committed to learning, continuous improvement, growth, and investment in technology. At BTW, innovation means finding smarter ways to deliver results. Equipping our people with advanced tools, systems, and training ensures clients benefit from efficient, accurate, and future-ready solutions.

KAITIAKITANGA
Guardianship

We take a long-term, sustainable approach to protecting what matters. Proudly connected to our communities and iwi, we act with care for people and place. Our environmental commitment includes achieving Toitū certification and making continuous improvements so projects deliver lasting benefits.

ŌHANGATANGA
Empowering ownership

At BTW, we know every project begins with the goal of improving your position. Regardless of the nature or scale of a project, experience tells us that true value comes from understanding your starting point and then engaging the right people at the right time. We work with all parties to acknowledge diverse interests upfront and provide clear, comprehensive insights that guide decisions, protect assets, and map a confident path forward.

WHANAUNGATANGA
Participation & connection

Strong relationships deliver better results. We foster a diverse, inclusive workplace where knowledge is shared and ideas thrive. By collaborating closely with clients, consultants, and partners, we create solutions that are more effective, innovative, and robust.

HAUMARU ME TE MOHIO
Smart solutions start with smart systems

Our certified quality and HSE systems, backed by smart tools, deliver efficient, transparent, and reliable outcomes. Every step is documented, ensuring clients have confidence in both process and results.



Grant Aitken
KAIWHAKAHAERE MATUA
MANAGING DIRECTOR



Cam Twigley
POU TAIAO DIRECTOR,
PRINCIPAL PLANNER



Ian Steele
DIRECTOR ENGINEERING,
PRINCIPAL CIVIL AND TRANSPORT
ENGINEER



Mathew Dickey
TECHNICAL DIRECTOR - THREE
WATERS, PRINCIPAL CIVIL ENGINEER



Keith Preston
TECHNICAL DIRECTOR - SURVEY
AND SPATIAL



Kathryn Barrett
SURVEY TEAM LEADER
NEW PLYMOUTH, ASSOCIATE



Trevor Masters
INFORMATION SYSTEMS
MANAGER, ASSOCIATE



Sean Husband
KAIPŪKAHANGA METARAHI
CIVIL TEAM LEADER,
ASSOCIATE



Dave Bolger
PRINCIPAL ENVIRONMENTAL
SCIENTIST, ASSOCIATE



Wasi Shirwali
ENGINEERING TEAM LEADER,
HAMILTON, ASSOCIATE



Carwyn May
SURVEY TEAM LEADER, TAUPŌ,
ASSOCIATE



Trudy Brewer
ADMINISTRATION MANAGER,
ASSOCIATE



Aaron Edwards
POU WHAKAMĀHERE
TAIAO MATUA MANAGER
PLANNING, ASSOCIATE



Taryn Martin
SENIOR LICENSED CADASTRAL
SUREYOR, ASSOCIATE



Chris Twaddle
PRINCIPAL STRUCTURAL
ENGINEER, HAMILTON, ASSOCIATE



Greg Larkin
PRINCIPAL ECOLOGIST



Angina Lal
SURVEY TEAM LEADER,
HAMILTON



Jodie Hurley
LOCAL GOVERNMENT
SECTOR LEAD



Russell Harrison
STRUCTURAL TEAM LEADER,
NEW PLYMOUTH





QUALITY, SAFETY AND ENVIRONMENT

At BTW, quality, safety, and environmental responsibility shape everything we do.

We operate under AS/NZS ISO 9001:2015 Quality Management and AS/NZS ISO 45001 Health and Safety systems, with Toitū Gold Certification recognising our sustainability leadership. Guided by rigorous checks, peer reviews, and oversight from our Directors and Quality and HSE Team, we deliver safe, high-quality, fit-for-purpose, and environmentally responsible results through a culture of continual improvement.

COMMUNITY

BTW supports programmes and causes through grants, sponsorship, and volunteer hours. As kaitiaki of our whenua and culture, we invest in communities and conservation projects across Aotearoa, including our long-standing partnership with Taranaki Mounga. Recognised with a 2020 Taranaki Regional Council Environmental Award, we are leaders in ecological restoration, pest control, and innovation on Taranaki Maunga, combining conservation with staff wellbeing.

MEMBERSHIP

BTW holds active memberships with leading industry and business organisations throughout New Zealand, demonstrating our commitment, participation, and contribution to the communities we work in.

For a list of memberships, visit: btw.nz/about/memberships

Our story of delivering professional services to the regions of Aotearoa – New Zealand began over 50 years ago.

In 1974, surveyors Buxton, Tuder, and Waugh launched hydrographic and land surveying in New Zealand. Since then, BTW has played a pivotal role in major projects in Taranaki and beyond.

Our 50-year symbol celebrates being proudly New Zealand-owned, honouring the people, partners, and communities who have shaped our growth, best practice, and project delivery. It reflects our optimism, resilience, leadership, and collaboration as we create a better future, guided by our past and connected to place and people.

With meaningful connection and engagement, great things can happen.

BTW COMPANY IS
AN RSK COMPANY.

Global network. Local insights.

The strength of global expertise, backed by local knowledge, trusted relationships and on-the-ground delivery.

BTW Company is part of RSK Group, a global leader in environmental and engineering solutions, bringing together more than 200 specialist businesses across an international network spanning over 40 countries.

Through RSK, BTW can draw on a broader depth of technical expertise, international experience, specialist resources and shared knowledge to deliver smarter, more integrated and sustainable solutions.

For our clients, this means access to greater capability and capacity, while continuing to work with the same trusted BTW people who understand the local environment, project challenges and community context.

200+
SPECIALIST BUSINESSES

40+
COUNTRIES

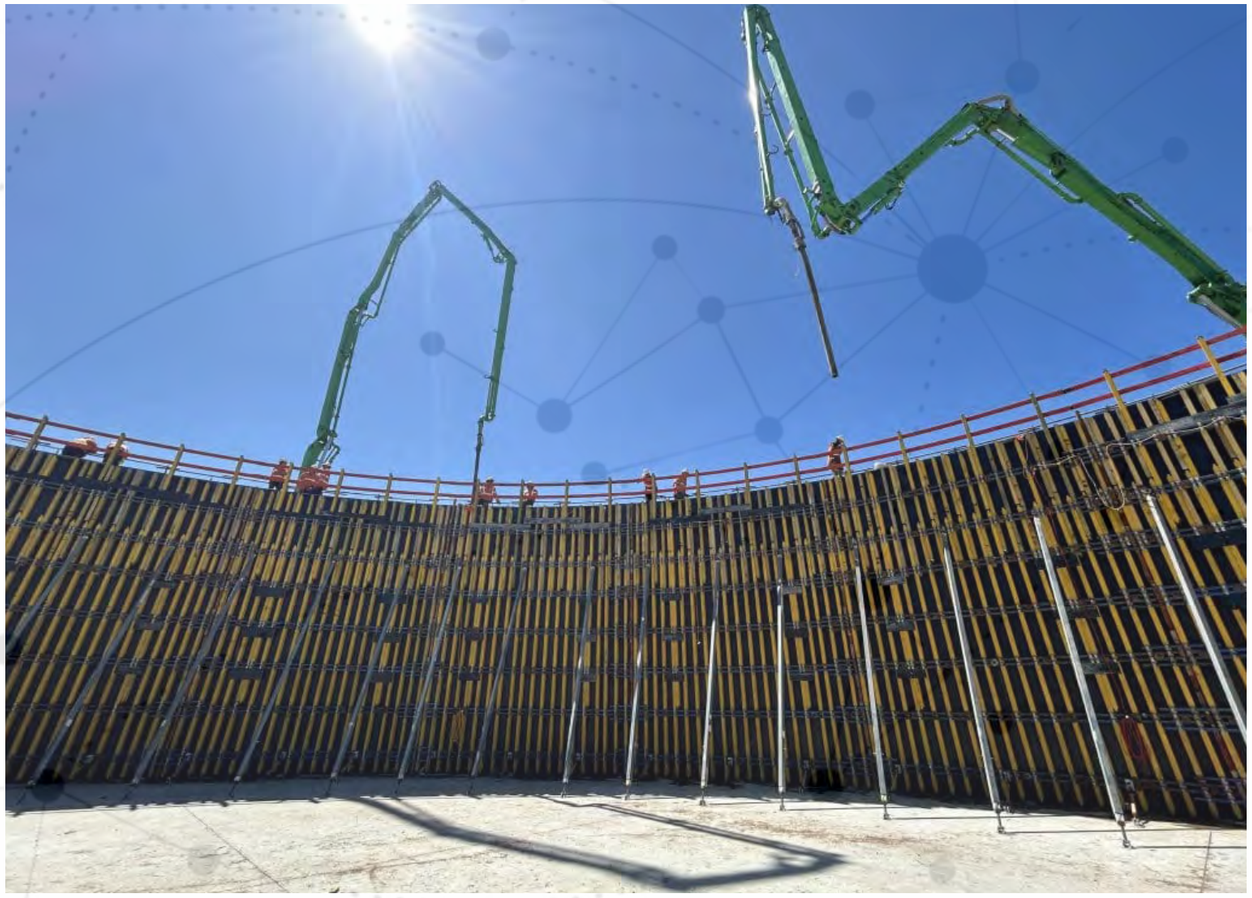
17,000+
PASSIONATE PROFESSIONALS

THE ADVANTAGE OF OUR GLOBAL NETWORK:

- **Specialist expertise:** Access to an extensive network of technical specialists and complementary services.
- **Connected thinking:** Shared knowledge, innovation and international experience to inform better solutions.
- **Greater capacity:** Additional resources and flexibility to support projects of increasing scale and complexity.
- **Seamless delivery:** Integrated expertise coordinated through established local teams, relationships and a single point of contact.

Smart Solutions. Sustainable Outcomes. Strong Partnerships.







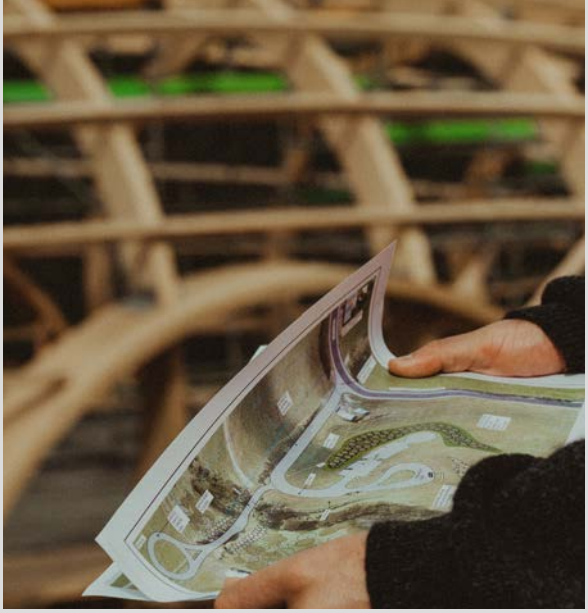






WHAKAMĀHERE

PLANNING AND RESOURCE MANAGEMENT



Guiding you to a successful consenting outcome.

BTW's Planning and Resource Management specialists provide clients with comprehensive project insights that not only inform decision making and provide a clear pathway through the consent application process, they also help to reduce financial risk and maximise a project's potential and value.

APPLICATION/SERVICES INCLUDE:

- Feasibility studies
- Resource consent applications
- Environmental impact assessment
- Community consultation
- Archaeological authorities
- Policy planning
- Project management



TAIAO

ENVIRONMENT

Helping property owners gain consents and meet regulations and corporate responsibilities.

Our Environment team apply specialist knowledge and environmental testing tools with integrity, gaining trust and respect from clients of various backgrounds including Iwi and Hapū, private landowners, decision-makers and industry stakeholders.

BTW's highly specialised environmental services provide landowners with required environmental compliance and management plans, environmental monitoring and reporting, Health, Safety and Environmental auditing, ecological assessments and reporting, and asbestos surveys and management plans.

APPLICATION/SERVICES INCLUDE:

- Environmental management and compliance plans.
- Groundwater investigation and reporting services.
- Pre-purchase due diligence assessments
- HAIL assessment (Hazardous Activities and Industries List)
- Preliminary Site Investigation (PSI)
- Detailed Site Investigation (DSI)
- Remedial Action Plans (RAP)
- Site Validation Reporting (SVR)
- Site Management Plans (SMP)
- Health, Safety and Environment audit and gap analysis reporting
- Ecological assessments and reporting
- Asbestos survey and management plans
- Continuous monitoring solutions

KAIPŪKAHANGA METARAHI

CIVIL AND THREE WATERS ENGINEERING



Providing cost-effective solutions with intelligent civil and three waters engineering.

Delivering successful outcomes for our clients means meeting code requirements and using intelligent design to produce fit for purpose and fit for budget designs.

At BTW, our Engineering Team is led by Chartered Professional Engineers who are able to give our clients the confidence of certified engineering solutions for General Civil, Three Waters, Environmental, Traffic, and Transportation Engineering projects that require a single component or all required Civil Engineering Services.

APPLICATION/SERVICES INCLUDE:

- Civil Engineering Design, including optioneering of concept solutions, earthworks, and civil infrastructure design.
- Water and Wastewater Design, including reticulation modelling and design, treatment solutions, storage solutions, and general infrastructure design.
- Environmental Stormwater Design, including pond/wetland design, stormwater attenuation solutions, erosion and sediment control solutions, and provision of environmentally sensitive management solutions.
- Traffic and Transportation Design, including traffic assessments, road and pavement design, and carpark/accessway design.

KAIPŪKAHANGA
HANGANGA

STRUCTURAL ENGINEERING



Creativity and precision to shape your build.

Any landowner or commercial tenant looking to make better use of their site can leverage our skillset to successfully implement new structures or improve existing ones.

BTW Engineers are dynamic professionals, drawing on an extensive, collective expertise and knowledge base to provide innovative solutions for safe structures that maintain good longevity.

We are objective and think laterally to overcome challenges that site and project requirements may serve up.

For a new build, an alteration, extension or strengthening, BTW's integrated design services team can make it happen safely with smart solutions that are fit for purpose and to code standards.

APPLICATION/SERVICES INCLUDE:

- Design of new buildings and structural infrastructure
- Structural Strengthening – Design and Documentation to ensure your project meets New Zealand building code standards.
- Seismic assessments
- Retaining wall design services to stabilise slopes and improve land usability.
- Project management and site supervision
- Soil tests and foundational design





GEOTECHNICAL SERVICES

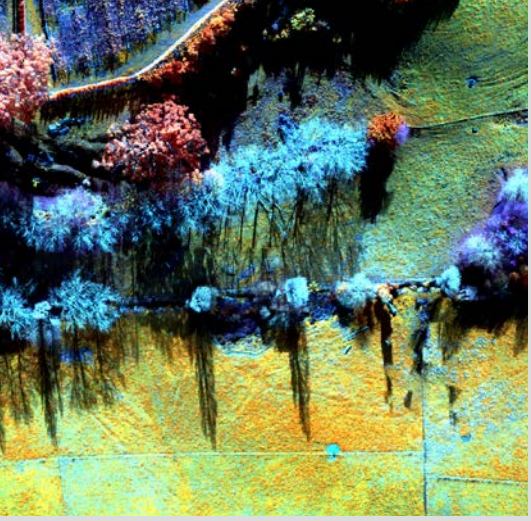
Knowing where you stand.

Having a good understanding of the ground beneath your feet with soil and rock mechanics is a vital starting point for any civil, infrastructure or building project.

BTW's civil engineering team have specialist geotechnical professionals and intelligent investigative technology to allow us to investigate subsurface geologic conditions and provide clients with intelligent solutions.

APPLICATION/SERVICES INCLUDE:

- Geotechnical site walkover, investigation, and characterisation
- Geotechnical Assessment Reporting
- Pre-purchase geotechnical desktop studies, suitability, and feasibility studies
- Foundation design recommendations
- Slope stability assessment, risk analysis and stabilisation
- Geological and engineering geological mapping
- Geotechnical construction monitoring and certification
- Slope instrumentation and monitoring
- Settlement instrumentation and monitoring
- Settlement and liquefaction analysis
- Ground water monitoring







THREE WATERS INFRASTRUCTURE

WAI EYE
kanohi hōmiromiro

Innovation to protect and manage water.

WAI EYE, Kanohi Hōmiromiro (an eye for detail), is BTW's integrated water infrastructure assessment programme, combining UAV technology, remote sensing, IoT monitoring, and environmental science. Developed in partnership with councils and water suppliers, Wai-eye aligns with Te Mana o Te Wai, the national framework that places the health and wellbeing of water at the centre of decision-making.

Our multidisciplinary team of engineers, environmental scientists, surveyors, and UAV pilots work together to deliver insights that help asset managers plan smarter, act faster, and protect communities.

Wai-eye transforms complex data into simple, interactive dashboards. Instead of lengthy reports, asset managers gain clear, accessible tools that support confident, evidence-based decision-making.

APPLICATIONS INCLUDE:

Stormwater network surveys and calibration: Asset surveys of culverts, basins, gullies, and pipelines, LiDAR surveys of large catchments, and installation of basin level sensors for model calibration and early warning systems. We also complete model verification surveys, including building floor level capture and UAV thermal imaging.

Leak detection: UAV-mounted thermal, multispectral, and imaging sensors combined with water pressure, flow, and physio-chemical analysis locate leaks in pipelines, canals, and reservoirs quickly and effectively.

Wetlands protection: Remote sensing combined with on-the-ground environmental assessments identifies, delineates, and monitors wetlands to ensure these vital ecosystems are safeguarded and restored.

Wastewater monitoring: Portable arrays of level, flow, and rainfall sensors, paired with IoT telemetry and statistical analysis, identify inflow and infiltration issues for smarter renewals and reduced environmental impacts.

At BTW, we see water as a shared responsibility. We work alongside councils, Iwi, Hapū, landowners, and communities to protect and enhance this most vital resource, combining technical expertise with cultural awareness and local knowledge.



KAITOHU WHENUA

SURVEYING

Providing clarity and confidence so you can maximise value and yields.

BTW provides end-to-end services including subdivision and land development, mapping, UAV (unmanned aerial vehicles), engineering surveying, 3D laser scanning and BIM (Building Information Modelling).

APPLICATION/SERVICES INCLUDE:

- Property boundary surveys
- Small and large-scale subdivisions, both urban and rural
- Project management and construction supervision for land development projects
- Topographic surveys for architectural design
- As built surveys
- Paddock areas and analysis work
- Aerial imagery and the location of existing services such as three waters and gas lines.
- Monitoring and deformation surveys, both on and offshore
- Geodetic / Control surveys
- Construction set-out and machine guidance
- Cross-lease and Unit Title surveys
- Easement surveys
- Māori land plans
- Reserve and waterway protection, land access maps, and land management
- Landslip and flood damage mapping.
- Earthworks monitoring to keep projects on track





3D LASER SCANNING

Saving time, money and materials is made possible.

A streamlined process with improved outcomes is made possible with 3D laser scanning – a new and innovative technology which is revolutionising survey data capture techniques and is challenging traditional thinking.

Having accurate and up-to-date as-built information can reduce construction costs, shorten design and construction timelines and result in little or no Requests for Information.

3D data capture and the use of cloud point data rather than gathering single point data, enables BTW to provide clients with an unprecedented amount of accurate, high quality data in an efficient and user friendly manner and ensures that every detail is recorded.

After using 3D laser scanning instrumentation at your site, precise scan data is used to create 2D and 3D views and models in AutoCAD and Revit. These models are used for design, consenting and compliance purposes and by owners, stakeholders and consultant teams to inform their work, and better understand and manage asset lifecycles.

APPLICATION/SERVICES INCLUDE:

- Accurate as-built documentation of a facility for redesign and refurbishment projects, or for updating existing plant documentation in 3D.
- As-is Condition surveys for structures such as roads, railways, bridges, tunnels and buildings which require accurate and detailed datasets.
- As-built and as-is conditions for Mechanical/Electrical/Plumbing services and structures (BIM).
- Heritage buildings or historic site preservation and 3D visualisation.
- Determination of plumbness of structural elements such as beams, columns, walls or floors.
- Monitoring of structures, coastal erosion or deformation.
- Production of high resolution topographical maps which generate 2D and 3D CAD views enabling measurement of distances, areas, and volumes.
- Production of 3D modelled objects from as-built point cloud data.





UAV SERVICES

Smart, safe, and adaptable aerial solutions.

At BTW, our UAV capability is a strategic enabler of smarter, safer, and more sustainable outcomes. Certified by the Civil Aviation Authority (CAA), our pilots bring not only technical expertise but also sound judgement and a commitment to safety, ensuring high-quality data capture in even the most challenging environments.

Turning data into actionable insights

Our fleet includes UAV platforms equipped with high-resolution cameras, multispectral sensors, LiDAR, thermal imaging, and water sensors. These technologies are powerful, but it's our multidisciplinary team – surveyors, engineers, geospatial specialists, and environmental scientists – who transform data into actionable insights that drive better decisions and long-term value.

We deliver tailored UAV solutions across asset inspections, construction monitoring, quarry management, forestry mapping, and archaeological surveys. Our rapid mobilisation capability ensures timely data collection in high-risk or inaccessible locations, reducing hazards and accelerating access to critical information. This supports improved efficiency, enhanced asset management, and stronger environmental and cultural outcomes.

Innovation and collaboration for the future

BTW's commitment to innovation is reflected in our investment in AI, automation, and smart platforms. By embedding UAVs into integrated workflows and engaging early with Iwi, Hapū, landowners, councils, and communities, we co-design solutions that are culturally respectful, environmentally responsible, and future-ready.





UAV ASSET INSPECTION

Detailed insights without the risks.

BTW uses advanced UAV platforms to safely and precisely inspect critical infrastructure. Our certified pilots capture high-resolution imagery using optical and digital zoom cameras, providing detailed views without the need for physical access.

Capabilities include orthomosaic (plan view) imagery, immersive 360° visuals, and targeted flat images, revealing even the smallest details, such as ignitors on flare stacks. This level of visibility supports access risk assessments, maintenance planning, compliance verification, and operational decision-making.

What sets BTW apart is the way we turn images into practical insight leveraging digital platforms. Our inspection team works alongside asset owners, engineers, and operators to highlight priorities, flag emerging risks, and guide maintenance strategies. The result is more than a report. BTW delivers actionable intelligence that helps extend asset life, meet compliance obligations, and keep people safe.





LiDAR

High-definition mapping from the air.

LiDAR provides a safe and efficient alternative to ground-based surveying, that reduces risk, improves access, and gives clients confidence with data-driven decision-making.

BTW's UAV-mounted LiDAR systems deliver fast, highly accurate 3D data for projects across infrastructure, environment, and land management.

By emitting laser pulses and measuring their reflections, LiDAR creates dense point clouds that can be processed into Digital Terrain Models (DTMs) and Digital Surface Models (DSMs). Our systems capture hundreds of thousands of points per second, providing a high level of detail to produce datasets ideal for flood modelling, forestry, topographic mapping, and infrastructure monitoring.

With integrated high-resolution imaging, point clouds can be colourised and converted into realistic 3D models. Real-time data viewing and streamlined post-processing ensure rapid turnaround and cost-effective results.





DIGITAL SOLUTION PLATFORMS

Turning data into actionable insights.

BTW transforms UAV outputs into practical tools that clients can rely on. Our Geospatial and Digital Solutions team integrates aerial data into customised Geographic Information Systems (GIS), creating cloud-based dashboards and viewers that give virtual access to project environments anytime, anywhere.

With our GIS platforms, clients can:

- Monitor terrain changes and vegetation health
- Detect water leaks and identify wetlands
- Inspect and track infrastructure assets
- Visualise and interact with project environments virtually

These interactive tools make complex datasets intuitive and easy to use, enabling collaboration and faster decision-making. By combining UAV technology with geospatial expertise, BTW ensures data is captured and translated into clear, actionable insights that improve transparency, planning, and resource allocation.

Spatial Data Services – supporting smarter projects.

Spatial data services are used across many industries to manage large datasets and present information that improves collaboration and problem solving. BTW's application of technology enhances transparency and supports better planning and resource allocation.

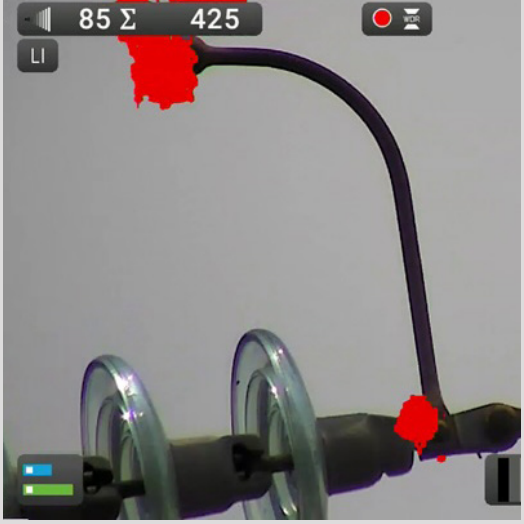
Our GIS Specialists collect and map data that can be shared with stakeholders, analysed spatially, and used to provide well-informed recommendations – leading to smarter decisions for your project.

Our expertise stems from surveying and engineering, but extends to managing complex data systems and designing bespoke software when existing solutions are unavailable or need added functionality.

Bespoke software and in-house solutions: BTW's Software Development Group provides mapping solutions that support our full range of services and develops specific project or task solutions as required.

Llama, DataPoint and customised ArcGIS web applications are a few of the software solutions that play an integral role in BTW's professional service delivery and in adding value for our clients.





ELECTRICITY NETWORK SURVEYING

KAHA HIKO EYE
kanohi hōmiromiro

Plan with precision, efficiency, optimisation and safety.

BTW carries out surveys of transmission lines to locate electrical (kaha hiko) discharge (corona) and arc imaging effectively and efficiently.

This is achieved using Unmanned Aerial Vehicle (UAV)-mounted thermal, corona and digital camera sensors. This data is then packaged up into a simple online dashboard for asset managers to view and interact with.

This modern delivery platform is a significant improvement upon traditionally lengthy reports which collect dust and hide data.

APPLICATION/SERVICES INCLUDE:

- Used by network operators (transmission and distribution networks) for geolocating poles, lines and insulators, and identifying any corona discharges, damage and contamination.

HIGH PRECISION MAPPING: UAV LiDAR can provide highly accurate and detailed three-dimensional maps of the power lines and surrounding environment, enabling precise mapping and measurements.

EFFICIENT DATA COLLECTION: UAVs equipped with LiDAR can quickly and efficiently cover large areas, reducing the time and resources required for data collection compared to traditional methods.

VEGETATION MANAGEMENT: LiDAR can effectively detect and analyse vegetation near power lines, helping utilities identify potential hazards and plan for vegetation management to prevent outages and improve safety.

GEOLOCATION OF COMPONENTS: LiDAR data facilitates the geolocation of specific components along power lines, making it easier to identify and address issues during maintenance and inspections.

DATA STORAGE FOR COMPARISONS: LiDAR data can be stored for future comparisons, allowing utilities to track changes over time, detect movements, and assess the condition of power line assets.

ENHANCED SAFETY: Conducting inspections with UAV LiDAR reduces the need for manual inspections in challenging or hazardous terrain, enhancing safety for personnel.

OPTIMISED PLANNING AND DESIGN: The detailed information captured by UAV LiDAR aids in optimised planning and design of power line projects, contributing to better infrastructure development.





BUILDING INFORMATION MODELLING (BIM)

Smart technology that improves the process and the outcome.

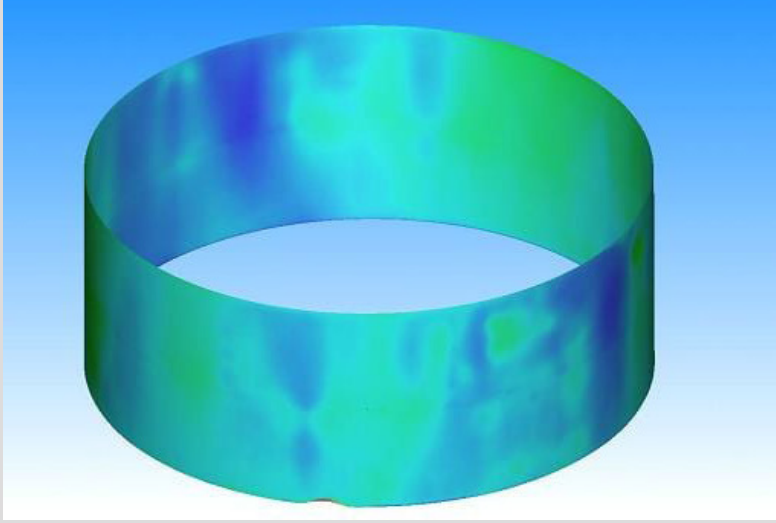
BTW maps the environment for clients, by pairing intelligence with innovation. Leveraging multiple information sources, BTW uses Building Information Modelling (BIM) to create intelligent, all-encompassing 3D models that accurately present the geospatial and functional characteristics of our projects.

Throughout a project's entire duration BIM, Virtual and Mixed Reality technology allows for streamlined collaboration and the sharing of complex information across the different design services and construction teams. BIM models also allow clients to visualise a building, space or infrastructure asset before work commences, leading to improved decision making and, in many instances, reduced costs.

APPLICATION/SERVICES INCLUDE:

- Planning
- Surveying
- Subdivision and land developments
- An ideal resource for all multi-phase construction projects





STRUCTURE AND TANK DEFORMATION

SURVEY AND ANALYSIS

Monitoring program to suit any situation.

Adopting highly precise survey techniques while integrating innovative technologies, provides BTW the ability to assess critical tank infrastructure. The submillimetre approach taken by BTW while large tanks are in service verses being empty provides critical information, reporting, and evidence to asset owners to ensure compliance with the appropriate standards.

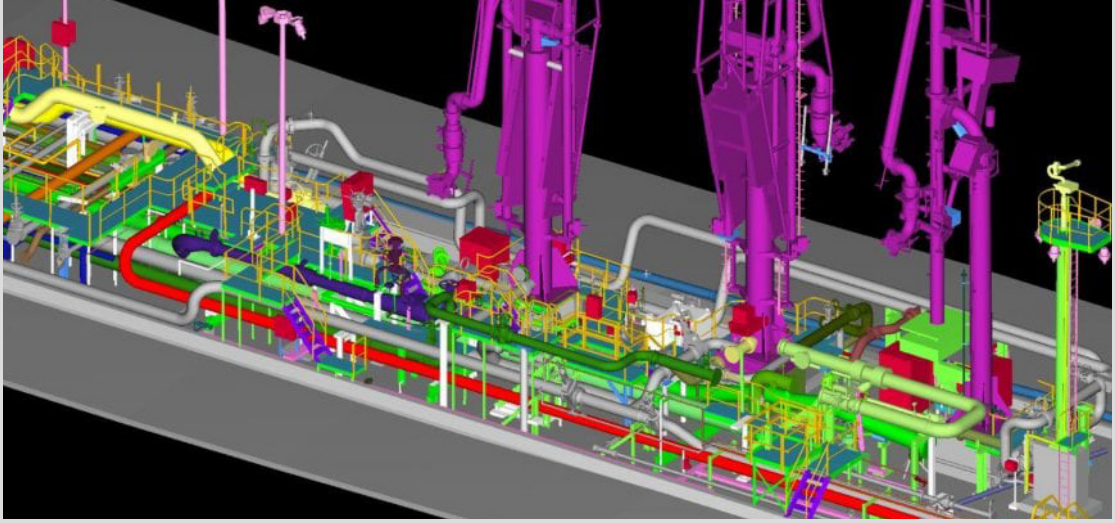
This is a critical exercise required to ensure regular maintenance of the integrity of tanks after they have been in service and addresses inspection, repair, alteration, relocation or reconstruction.

Geodetic/Control and Monitoring Surveying

BTW has the expertise and experience to establish permanent survey control marks on site and accurately measure, verify and certify X, Y, Z positions for annual deformation surveys. BTW utilises a series of innovative survey software/programs and survey principals as certified by Licensed Cadastral Surveyors competent in geodetic surveying methodologies.

OUTCOMES FROM THESE TYPES OF SURVEYS ARE:

- Rigid body tilt
- Out of plane deflection
- Edge settlement
- Bottom settlement
- Outside shell settlement
- Inside shell settlement
- Tank deformation colormap
- Geodetic/Control and Monitoring Surveying



FACILITIES AND PLANT EQUIPMENT

Plan your project with confidence.

The advantages of having accurate and up-to-date as-built information is often evident in the success of a project, with reduced design and construction time, reduced construction costs and no re-work.

BTW clients are able to use point cloud data or a 3D model to carry out pipe route analysis and clash detection and allow for accurate pipe scanning and modelling with 3D inspection tools that compare design v as-built. The use of this technology means you can be sure before installation, that new pipe work will fit first time.

BTW has an experienced 3D laser scanning team with over 50 years experience on Petrochemical and Industrial sites around New Zealand and abroad.

APPLICATION/SERVICES INCLUDE:

- Plant and Facility Models
- Piping as-builts
- Pipe Routes
- Clash Detection
- 3D Inspection (design v as-built)





360 CAMERA CAPTURE AND HOSTING

From site to screen – accurate, secure, accessible.

Having remote visual access to your asset when geographically challenged provides significant economic, financial and safety benefits.

BTW's ability to capture ground and aerial 360-degree images (panoramic) while hosting a customised BTW web platform with secure access has been significantly valuable to many of BTW's clients over the years, excusing them of entering sites. They say a picture tells 1000 words. When BTW enters the site to complete the capture a lot of information is gathered, and a true representation of the asset is stored.

When the site changes, BTW can efficiently re-access the site to re-capture parts or in full to ensure the most up-to-date information is available online.

APPLICATION/SERVICES INCLUDE::

- Asset owners and investors
- Contractors
- Designers
- HSE inductions
- Auditors
- Marketing
- Progress claims



PŪNGAO

ENERGY

Understanding the need for accuracy and delivering with certainty.

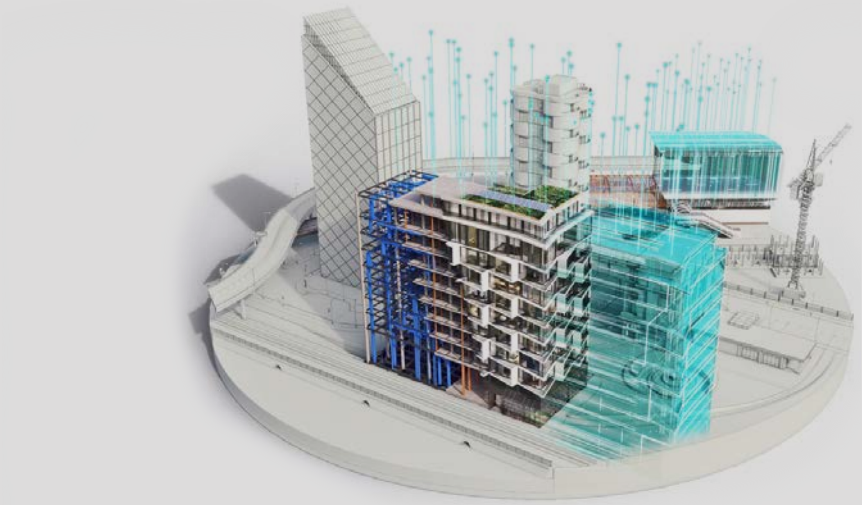
BTW's Energy Team have the specialist skills, knowledge and experience to support renewable energy and downstream projects, as well as project management for all aspects of seismic surveys and wellsite developments.

Providing professional services to the energy sector is what our company was founded on, and today our ability to manage stakeholder engagement and delivery services and solutions across the complexities and various stages of energy projects remains a key focus for our operations.

From community engagement, advising on cultural and environmental aspects, planning and consent requirements through to project management – being a mulitdisplcinary service provider with strong relationships, BTW's on the ground team are well placed guiding clients, both with existing sites, and newly developed solar, wind, geothermal projects alongside hydrogen, petroleum and natural gas infrastructure.

APPLICATION/SERVICES INCLUDE:

- Site mapping, Iwi/Community/Landowner consultation and liaison, Preparation of Assessment of Environmental Effects, Traffic Engineering, Resource Consenting, Environmental and consent compliance monitoring, Survey control and survey set out during construction, Civil Engineering Design, Deformation Monitoring, Project Management.
- Land Access and Project Permitting
- Production Facility Services, including; Feasibility studies for site selection, Geotechnical Investigations.
- Seismic Survey Services
- Wellsite Development
- Wellsite Maintenance
- Pipelines



CENTRALISED DOCUMENT MANAGEMENT

BTW's Centralised Document Management Platform is a cloud based system and a central source of truth to store all project information.

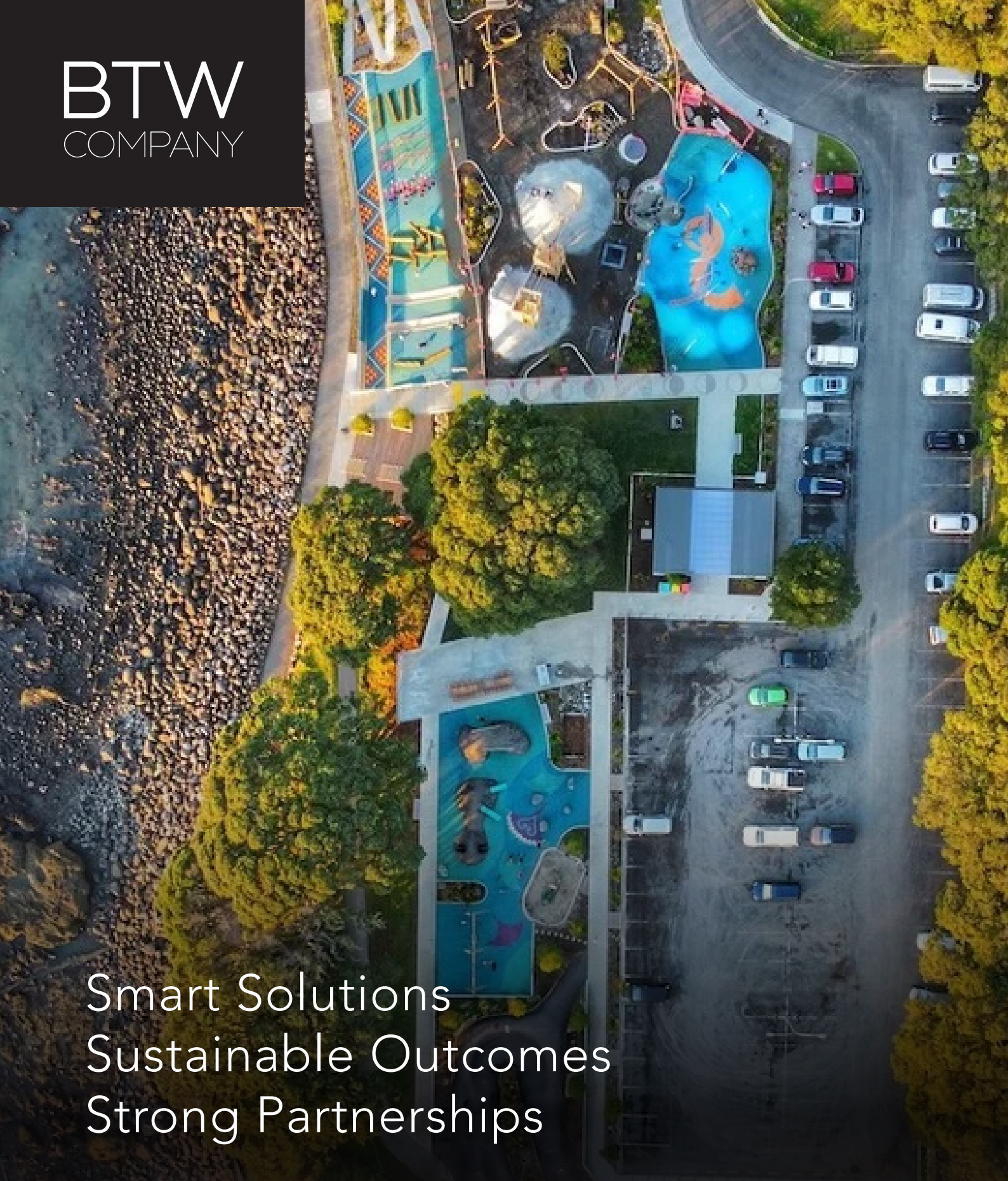
This cloud base document management improves accuracy by reducing errors and rework, streamlines review and approval workflows, aligns team members, and makes project scheduling easier.

This system provides the asset owner a common data environment, and management and control of the entire project team. Having the ability to organise and share files confidently and securely to stakeholders allows project teams to stay ahead of changing conditions and issues.

WHO USES THIS PLATFORM:

- Property owners and Asset Managers
- Project Managers and Team Leaders
- All members of a project team looking to track the project lifecycle
- Architects and Designers
- Engineers and Contractors
- Fabricators and Builders
- BIM and VDC Managers, Drafters, and Detailers
- Any project team member needing visibility across the full lifecycle

BTW
COMPANY



Smart Solutions
Sustainable Outcomes
Strong Partnerships

SURVEYING | ENGINEERING | PLANNING | ENVIRONMENT

Get in touch 0800 289 787 info@btw.nz **www.btw.nz**

Ngāmotu – New Plymouth
179-181 Courtenay St
New Plymouth 4340

Kirikiriroa – Hamilton
517 Anglesea St
Hamilton 3240

Taupō
55 Kaimanawa St
Taupō 3330

Whāingaroa – Raglan
1 Wainui Rd
Raglan 3225

Taumarunui
35 Morero St
Taumarunui 3920