

**NikauGroup**  
STRATEGIC DECONSTRUCTION & ENVIRONMENTAL

# CONTENTS

02 ▲ The Nikau Philosophy

04 ▲ The NikauGroup Story

06 ▲ NikauGroup Management Team

08 ▲ Evidence In Practice

## **Nikau Contractors Limited**

12 ▲ Scope and Expertise

14 ▲ Plant and Equipment

16 ▲ Case Study: Twinkle Toes

18 ▲ Nikau's Role in the Christchurch Recovery

18 ▲ Case Study: New Plymouth Power Station

22 ▲ Case Study: Holiday Inn Christchurch

## **Nikau Environmental Limited**

24 ▲ Scope and Expertise

26 ▲ Environmental Specialists

28 ▲ Case Study: Patea Freezing Works

30 ▲ Case Study: Pricewaterhousecoopers Building

32 ▲ Case Study: Meremere Power Station

34 ▲ Sponsorship and Community Involvement

36 ▲ Additional Projects and Endorsements

40 ▲ Key Contacts





# STRATEGIC DECONSTRUCTION & ENVIRONMENTAL

## THE NIKAU PHILOSOPHY

Every building marked for deconstruction has significance, either to the people who own it, or who lived or worked in it, or in whose neighbourhood it stands. It may represent a treasure in a city's heritage. Or the movie theatre you visited as a child. Or it could simply be the landmark on the skyline, the name of which we don't remember but could describe with our eyes closed.

Which is why NikauGroup is in the business of deconstruction, as opposed to demolition. Deconstruction is a highly considered process sympathetic to both the environmental and social implications associated with every necessary step. We believe that each aspect of the process involved in taking a building apart should be treated with respect – from the site appraisal, through to the salvage of precious relics or personal belongings, through to the dismantling itself.

NikauGroup is a solutions-driven company. Whatever the type and significance of your building, and whatever the challenges, you too will receive the benefits of our approach, our expertise, our extensive industry experience and the meticulous planning we bring to every job. We see the bigger picture, and it's always positive.









# THE NIKAUGROUP STORY

From modest origins as the small but capable Auckland company created by Directors Diana and John Stil more than three decades ago, NikauGroup has evolved to become a market leader in the nationwide construction and deconstruction industry. Today, our experience and depth of expertise across New Zealand's industrial, commercial and residential sectors is unparalleled.

Operations have expanded, both organisationally and geographically, as opportunities have arisen, and as such NikauGroup now includes two divisions: Nikau Contractors Ltd and Nikau Environmental Ltd

Nikau Contractors Ltd specialises in the most technical and complex areas of deconstruction. We have made a significant investment in highly specialised plant and equipment, which, along with our reputation for attention to detail and commitment to safety in the workplace, has enabled us to secure many large scale contracts – assisting Government agencies, local bodies, local iwis, developers, property owners and general contractors with demolition, site works and environmental projects.

Nikau Environmental Ltd was established specifically to further deliver upon our company philosophy. Our experience and commitment to preserving our country's precious landscape translates to the careful removal and disposal of materials and debris and every site clean up, whatever the size. We are also recognised nationally for being at the forefront of restricted and large scale asbestos removal and effective clearance of contaminated sites.

We are professionals. We offer peace of mind. Not only can you assume confidence in our innate respect for process and property, you can be assured that the health and safety of all personnel is of paramount importance to both our operations. We maintain the very highest of workplace standards on our sites. We're vigilant over ensuring all deconstruction work is undertaken in a secure, efficient and professional environment. NikauGroup also carries the highest and most comprehensive insurance policies of any deconstruction company in New Zealand and is certified to meet all regulatory requirements.

Effective working practices and codes of conduct have contributed to Nikau's growth and success. And earned us numerous industry awards over the years. And above all, brought customer satisfaction to our clients.



# NIKAU MANAGEMENT TEAM



## John Stil

DIRECTOR

Co-founding director of Nikau, John Stil is recognised as an industry leader, a visionary and a people's person. An unfaltering attention to detail and commitment to finding a complete solution to a client's problem are the hallmarks of this man. These are the very qualities that he looks for in his staff, be it at a very senior or junior level.

John is also a founding member of the NZ Demolition Contractors Association, most recently renamed the New Zealand Demolition and Asbestos Association (NZDAA), and a full member of the Recycling Operators of NZ (RONZ).

## Diana Stil

MANAGING DIRECTOR

As co-founder and co-director with her husband, Diana Stil is Managing Director of Nikau. Given her extensive practical and technical knowledge of the industry, the benefit of her 'hands on' involvement with the business is clear; ensuring that each and every project is planned and executed with the utmost precision and consideration for the broader impact of deconstruction activity. Diana's notable capabilities and business acumen have been formally recognised: she was the recipient of the prestigious 2012 Next NZ Businesswoman of the Year award.

As previous president of the New Zealand Demolition and Asbestos Industry, and given her experience and proven commitment to the welfare of her employees, Diana was invited to write the current industry best practice guidelines for this highly skilled removal work.

Many communities around the country have benefited from Diana's philanthropic side. She has a firm belief in giving back to the community, particularly in those ways that will ultimately benefit our youth and their development.

## Helina Stil

HEALTH AND SAFETY DIRECTOR

Helina Stil is yet another valuable cog in this incredibly focused family operation. Her role is to ensure Nikau's on-site safety management procedures are followed to the letter. Her commitment to safety in the workplace has seen her in part revolutionise industry standards.

Helina is a member of the New Zealand Institute of Safety Management (NZISM).





### **John Paul Stil**

SOUTH ISLAND DIRECTOR AND ESTIMATOR

John Paul Stil has over 15 years management experience in the industry. He has been involved in some of Nikau's more technically complex projects, including the Arc Furnace Demolition (Glenbrook), NRH 31 (Wellington), Hospital Griffens (Wellington) and numerous multi-storey deconstructions following the Christchurch earthquakes, including the PWC building.

### **Michael Stil**

NORTH ISLAND DIRECTOR AND ESTIMATOR

With a degree in Environmental Engineering and years of practical experience as an excavator operator, Michael's industry knowledge adds breadth and depth to the company. He's now very much part of Nikau's 'think tank', assuming responsibility for tender submissions and multi-million dollar contracts.

### **Janine Stil**

ADMINISTRATIVE DIRECTOR

Nikau delivers a totally seamless organisational service, consistent right through to the administrative aspects of the company. Janine Stil heads the team in this aspect of the operations.

# EVIDENCE IN PRACTICE

We couldn't claim to be nationally recognised as industry leaders or to uphold superior working practices unless we could back it up; that, we can. NikauGroup is accredited to AS/NZS4804, AS3806 and AS/NZS4360 standards. We provide Government agencies with Health and Safety consultation services. And our senior management team has been instrumental in the development of the guidelines and legislation that will drive the future of safe deconstruction in New Zealand.

Deconstruction is a demanding industry that requires a very specific set and range of skills, in particular to ensure the safe execution of a complex brief. We are all too aware that our workplace is an environment where a substandard approach has potentially fatal consequences.

Our emphasis on Health and Safety and the need for outstanding working practices has secured our position as the preferred demolition and asbestos clearance contractor to most of New Zealand's Government agencies and regulatory bodies, including the New Zealand Defence Force, the Department of Labour, Housing New Zealand and some of the country's largest companies, including Fonterra.

## **Award-winning Health and Safety systems**

While it may be a legal requirement in New Zealand to provide a training and onsite supervision structure, unlike in Britain and Europe the deconstruction and demolition industry in New Zealand so far remains unregulated. However, NikauGroup has long identified the need for a Health and Safety regime that incorporates stringent hazard identification and management, incident reporting and investigation, and support services for staff.

It also includes the effective training and supervision of all our personnel to ensure their roles and responsibilities are performed correctly and safely. We place high value on the capability and expertise of our people, and encourage them to develop and enhance their skills and knowledge through the New Zealand Contracting Industry Training Organisation (NZCITO) training programmes. All senior site supervisors are required to hold a wide range of national certifications and qualifications. Our commitment to personnel development and our own company standards is reinforced through the provision of a stable, well-balanced, fair and safe working environment at all times.

The Health and Safety system must also have complete management support in order to be effective. Our health, safety and injury prevention systems are therefore constantly evolving, and in no time other than our experience in Christchurch's seismically active environment, which has heralded the requirement for rigorous evacuation procedures, has the importance of relevant and competent working practices been greater.









NikauGroup has been nationally recognised and awarded for our health, safety and wellbeing systems which include the following critical factors:

- ▲ Absolute dedication and support from senior management, essentially leading by example
  - ▲ A nationwide safety team made up of 12 highly trained and experienced persons and regular reporting to the national manager
  - ▲ Award-winning documented policies and procedures which includes a documented and systematic auditing, monitoring and review system for all work places and forms the basis for the company's comprehensive Health and Safety management system
  - ▲ Direct Health and Safety roles and responsibilities for all persons in the company
  - ▲ Clear pathways for communication throughout the organisation on matters of Health and Safety onsite and at a regional and national level
  - ▲ Reporting, recording and investigation of incidents, with a focus on identification and analysis of trends
  - ▲ Systems and policies in place for post incident investigation, review and management, with an emphasis on injured persons returning back to gainful employment as soon as possible
- High expectations for excellent

- ▲ Health and Safety management for all sub-contractors, with regular reviews and assessments
- ▲ A comprehensive health monitoring programme for all personnel involved in hazardous works, including asbestos removal
- ▲ Assessment of new plant and equipment utilisation within work places and their impact on the safety and health of the operators and other personnel
- ▲ Health and Safety is addressed during applications for employment and represents a significant element of employment contracts and disciplinary processes

NikauGroup has also won a multitude of both national and regional Health and Safety awards in New Zealand, including:

#### **Safety Awards 2004 Certificate of Merit**

for Best First Time Entrant for achieving high standards in accordance with the Health and Safety in Employment Act

#### **Safety Awards 2005 Overall winner**

Overall excellence in maintaining the safety standards required by the Health and Safety in Employment Act on the Meremere Power Station demolition

#### **Safety**

##### **Awards 2005**

Certificate of Excellence in Category B (turnover up to \$10 million)

For excellence in maintaining the safety standards required by the Health and Safety in Employment Act on the Meremere Power Station demolition

##### **Safety Awards 2007**

##### **Certificate of Excellence in Category B (projects \$500,000 - \$2 million)**

For excellence in maintaining the safety standards required by the Health and Safety Employment Act on the Bledisloe Wharf Crane Dismantling Project

##### **Safety Awards 2008**

##### **Certificate of Excellence in Category C (projects \$2 million - \$10 million)**

For excellence in maintaining the safety standards required by the Health and Safety in Employment Act on the New Zealand Steel SPO Safety and Sanitary Project

##### **Accident Compensation Corporation Corporation WSMP (Workplace Safety Management Program)**

Tertiary Accreditation (highest rating)  
Held by NikauGroup since 2004





## WORLD DEMOLITION AWARDS 2012

FINALIST  
CONTRACTOR OF THE YEAR  
CONTRACT OF THE YEAR  
HEALTH & SAFETY TRAINING

## WORLD DEMOLITION AWARDS 2013

WINNER  
CONTRACTOR OF THE YEAR

## WORLD DEMOLITION AWARDS 2014

FINALIST  
CONTRACT OF THE YEAR - OVER US\$1.5 MILLION  
SAFETY & TRAINING AWARD  
INDUSTRIAL DEMOLITION AWARD

## WORLD DEMOLITION AWARDS 2015

FINALIST  
SAFETY & TRAINING AWARD  
INDUSTRIAL DEMOLITION AWARD

### The Application of Expertise

The Christchurch experience led NikauGroup to demonstrate the true extent of our capabilities.

With the unprecedented nature and enormous scale of the task there has been no tried and tested formula for effecting the city's vast deconstruction undertaking. It has therefore been a challenge that has demanded both innovation and the greatest expertise. NikauGroup has applied relevant skills, strategies and the benefit of decades of experience to co-ordinate the necessary approach and successful delivery of each and every charge.

The gravity of the situation and the exceptional circumstances that require outstanding performance is implicit. Best practice is applied companywide – from the apprentice on the job site to senior management.

### A Position of Authority

Reinforcing Nikau's commitment to continuous improvement to all operational fields, Managing Director Diana Stil and other members of the senior management team provide frequent consultation services to Government agencies in matters involving Health and Safety. They also sit on development and review boards for industry policy and legislative reviews. This includes refining international practice standards to meet New Zealand conditions and the business environment. Diana Stil has

also held the position of president of the New Zealand Demolition and Asbestos Association (NZDAA).

Best Practice Guidelines for Demolition: NikauGroup has been instrumental in the implementation and development of the Best Practice Guidelines for Demolition. This document was produced after the Department of Labour requested assistance in updating the Approved Code of Practice (ACOP).

Launched in November 2011, the guidelines contain crucial information on the correct and safe procedures for carrying out deconstruction work in secure, efficient and professional environments. Drawing on events such as the Christchurch earthquakes, the guidelines also include comprehensive information on the deconstruction of dangerous and damaged structures and the environmental remediation of contaminated sites. It's aimed at deconstruction and demolition contractors, Government agencies, construction and consulting companies, engineers and any other professionals involved in deconstruction within New Zealand.

The background is a dark, industrial scene featuring a large, circular metal component, possibly a pipe or a large wheel, with a bright, intense light source on the right side, likely a welding torch, creating a massive spray of bright orange and yellow sparks. Overlaid on the left side of the image is a large, white, geometric pattern consisting of a grid of squares, each divided into four triangles by a diagonal line, creating a complex, crystalline structure.

**NIKAU  
CONTRACTORS  
LIMITED**





# SCOPE AND EXPERTISE

We not only offer comprehensive expertise in the safe and efficient deconstruction of almost every structure imaginable, including industrial, commercial and residential buildings. Our involvement in the necessary wide-scale deconstruction exercise following the devastating Christchurch earthquake means we have more experience in the deconstruction of significant buildings than any other demolition company in New Zealand. We're also experienced, skilled and equipped with the right people and machinery to respond to the most difficult situations including emergencies and disaster recovery.

Nikau offers full service. Deconstruction is a highly involved business that requires big picture thinking, planning and execution; the footprint for impact extends beyond the day the building is removed and beyond the property boundaries. Hence Nikau's specific services range from service location and disconnections, to consent applications, to traffic management planning, site preparation and development, and to asbestos and hazardous material remediation.

Our management and operating teams include specialists renowned for deconstruction methodology design and establishing the guidelines for procedures under which deconstruction companies in New Zealand operate. The Christchurch experience has further refined our capabilities and reinforced our reputation for success in highly technical and complex projects.

- ▲ Commercial and domestic structures
- ▲ Multi-storey buildings
- ▲ Bridges (including removal of underwater structures)
- ▲ Service stations
- ▲ Under and above ground storage tanks
- ▲ Factories
- ▲ Refineries
- ▲ Port facilities
- ▲ Inner city structures
- ▲ Timber processing and milling facilities



# PLANT AND EQUIPMENT

NikauGroup is well equipped for even the most technical and complex projects. We utilise the latest technology, and as part of our long term commitment to Christchurch we have made a significant investment in a range of highly specialised plant and equipment, including one of the largest and most impressive pieces of machinery in the world. We do whatever it takes to get the job done, and done according to our philosophy.

## **Excavators and Ultra High Reach Machinery**

NikauGroup has a fleet of over 24 heavy-duty deconstruction excavators from 0.9 to 220 tonnes. Twinkle Toes, with a reach of 65-metres, is the largest piece of demolition equipment in the Southern Hemisphere and the third largest in the world.

We also have the most extensive range of heavy-duty rock breakers and multi-task attachments in New Zealand.

## **Concrete Cutting**

NikauGroup has a one of the largest range of versatile concrete cutting and drilling equipment available in New Zealand including, floor, wall and wire saws.

## **Skid Steer Loaders**

Skid steers are nimble and highly manoeuvrable, and effective for confined areas that excavators cannot reach.

## **Trucks**

Our fleet of heavy-duty workhorses are suitable for the removal of debris, rubble, and contaminated materials. For efficiency and a prompt and responsible service, all large trucks are equipped with GPS tracking systems.

## **Cranes**

NikauGroup is the only deconstruction company in New Zealand to have our own crane and man cages; an advantage that allows us to offer a greater range of services.

## **Skip and hook bins, transporters and trailers**

We hold a wide variety of specialist trailers and bins ranging from 3m<sup>3</sup> to 54m<sup>3</sup> for the efficient extraction of materials and waste. Our clients also enjoy the benefit of our heavy haulage transportation, which allows us to move our heavy machinery throughout New Zealand on demand.

## **Access Equipment**

Heavy-duty track elevated work platforms provide personnel with safe and effective access into difficult areas.

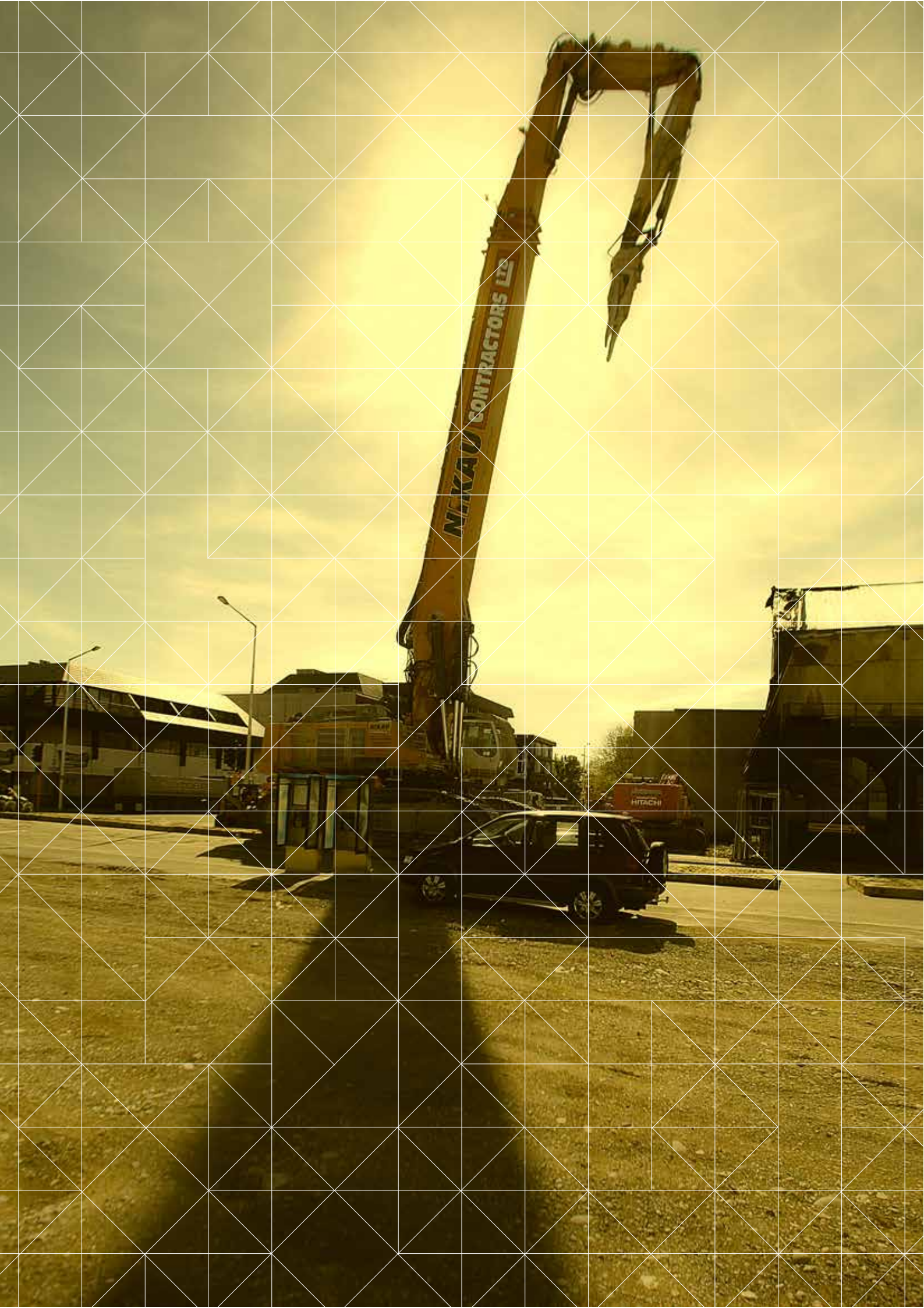
## **Scaffolding**

For the safest working environment NikauGroup provides a tube and coupler and pre-fabricated scaffolding, including mobile scaffolding.











## CASE STUDY: TWINKLE TOES

Since arriving from England in late 2011, the biggest high-reach excavator in the Southern Hemisphere, 'Twinkle Toes', has revolutionised the face of deconstruction in New Zealand, enabling projects to be completed quicker, safer and more efficiently.

Originally nicknamed 'The Beast', the 220-tonne excavator has so far played strategic roles in two mammoth deconstruction projects – firstly that of the earthquake-damaged Holiday Inn Hotel Complex and City Centre in Christchurch and then the majority of the mothballed New Plymouth Power Station in Taranaki. Twinkle Toes is changing the face of deconstruction in New Zealand.

Twinkle Toes eliminates the need for time-consuming floor-by-floor deconstruction as it is capable of systematically deconstructing buildings as high as 22 storeys. It is twice as fast as traditional methods, deconstructing a 17-storey building in just 40 hours. This also means less time required on site and less reliance on other resources.

The machine is exceptionally safe and includes a full fire and dust suppression system, tilt cab and video cameras. It also requires only one operator, meaning there is no need for other personnel to be exposed on site. Its giant hydraulic shear and the totally controlled deconstruction makes Twinkle Toes ideal for working in confined spaces such as the Christchurch central business district or parts of the former New Plymouth power station site.

### See Twinkle Toes in action

<https://vimeo.com/47426998>

<https://vimeo.com/134798624>

<https://vimeo.com/77767202>



## NIKAU'S ROLE IN THE CHRISTCHURCH RECOVERY

When the magnitude 6.3 earthquake struck Christchurch on February 2011, the Nikau team immediately headed south from our base in the North Island to volunteer our help. That day we packed our bags, loaded our machinery onto the ferries and brought desperately needed expertise to the rescue operation. We stayed.

In those first days we worked with Urban Search and Rescue, the Police, and the Army, searching collapsed buildings for people who were trapped, and recovering bodies. It was traumatic and dangerous and the aftershocks were continuous but we were motivated. NikauGroup is a family business with a strong Maori heritage. We offered a Karakia, or spiritual prayer, to the families of the victims; this has remained a daily ritual at all Nikau's city sites.

Following the initial rescue period there was a considerable amount of

work to be done in and around the city, in clearance, remediation, and including the retrieval of personal effects; our respect for people and place made it a mission to recover as many of these as we could.

These were difficult days but they were positive too. Sharing these events with the people of Christchurch and Canterbury confirmed Nikau's commitment to the region and to the rebuild of Christchurch.











## CASE STUDY: NEW PLYMOUTH POWER STATION

The deconstruction of much of the former New Plymouth Power Station in Taranaki was Nikau's largest single deconstruction project yet undertaken in New Zealand in terms of size and value. And Nikau worked hard developing practical and achievable solutions to some unique hazards encountered during the 18-month job.

The sheer size and scope of the project, unprecedented in New Zealand, meant that any and every possible hazard that could be present on a deconstruction site was encountered.

So NikauGroup worked hard achieving the best outcomes for Port Taranaki, which now owns the majority of the former gas-fired power station site, in terms of deconstruction, the storage, processing and sale of recyclable scrap material, as well as the careful disposal of non-recyclable material such as using waste concrete as fill. The project included the complete gutting of the 165m by 40m, 20-storey turbine hall for reuse, including the backfilling of trenches and cooling pits and the complete deconstruction of the adjacent boiler house. The former 600MW power station used to have five identical turbines and five identical top-hung boilers.

But the iconic 198m-high chimney, still one of tallest structures in New Zealand, remains, though particular care had to be taken to ensure no damage to the structure during the deconstruction and removal of ducting to the chimney from the boiler house. Care also had to be taken as there were live high-voltage cables running the length of the turbine hall that could not be damaged during deconstruction.

NikauGroup salvaged and marketed, on behalf of Port Taranaki, a total of about 24,000 tonnes of various recyclable commodities, the most common being about 23,000 tonnes of scrap steel that was processed for resale. Most of this was exported from the port in ships' cargoes, although some was taken off-site for resale in Taranaki or further afield within New Zealand.

About 900 tonnes of higher value non-ferrous scrap – such as aluminium, copper, various alloys and stainless steel – was also resold, with NikauGroup using metal analysers to analyse this material, with better grades of alloys fetching better prices. The New Plymouth project is the latest and certainly the biggest power station deconstruction project NikauGroup has undertaken. Earlier projects include the deconstruction of the former Stratford Power station further south in Taranaki and the old Meremere Power Station on the banks of the Waikato River.

### Watch the video:

<https://vimeo.com/77768153>

# CASE STUDY: HOLIDAY INN CHRISTCHURCH

Initial engineering assessments of the 18 storey Holiday Inn hotel structure and city centre deemed the structure safe for traditional methods of deconstruction, however, as works commenced, it became evident that this was not to be the case.

Surrounded by historical buildings and construction sites, the Holiday Inn City Centre structure was not initially deemed a high risk building slated for deconstruction.

With a carpark basement facility, 16 concrete and steel tubular constructed floors and a final two steel framed and copper roofed penthouse and services area, the Holiday Inn had only just finished refurbishments prior to the February 2011 Christchurch Earthquake.

Extensive assessments by Engineers concluded that the structure was safe to work on and based on these assessments, traditional deconstruction commenced with two teams working from the top and the bottom of the structure stripping out internal linings, furnishings and fixtures and the cut and crane of the steel and copper roof structure. A hazardous material survey was conducted during this time to verify no asbestos or other materials present within the structure.

To assist with safe access for deconstruction crews, Nikau installed over \$NZD60,000.00 worth of propping to the stairwells to provide further structure protection - these could not be saved.

The client also required that the basement remain undamaged from the deconstruction and sited within the basement was a valuable

transformer that fed many of the surround properties. However, shortly after the strip out and retrieval began, the severity of the damage was uncovered and with only the two lowest levels stripped and the roof partially removed, the Holiday Inn was issued with a Section 34 from CERA - deeming it a high risk of structural collapse and no further works could be completed on the structure.

A change of methodology was required and fast to reduce any risk to the surrounding properties.

Twinkle Toes was tracked rolled approximately 1.5km's from her site at the Farmers Carpark on Colombo Street to Manchester Street to immediately start mechanical deconstruction of the structure.

Sequencing of the deconstruction had to be meticulously planned to prevent any uncontrolled collapse of the building.

The result was over 20,000 tonnes of dirty demolition material - concrete, steel, furnishings, soft furnishings, paper, insulation all mixed together and it was through sharp thinking that these materials were screened and processed onsite to reduce waste to landfill - a result which could have potentially cost the Client millions of dollars.

**Watch the video:**

<https://vimeo.com/77767202>









**NIKAU  
ENVIRONMENTAL  
LIMITED**





# SCOPE AND EXPERTISE

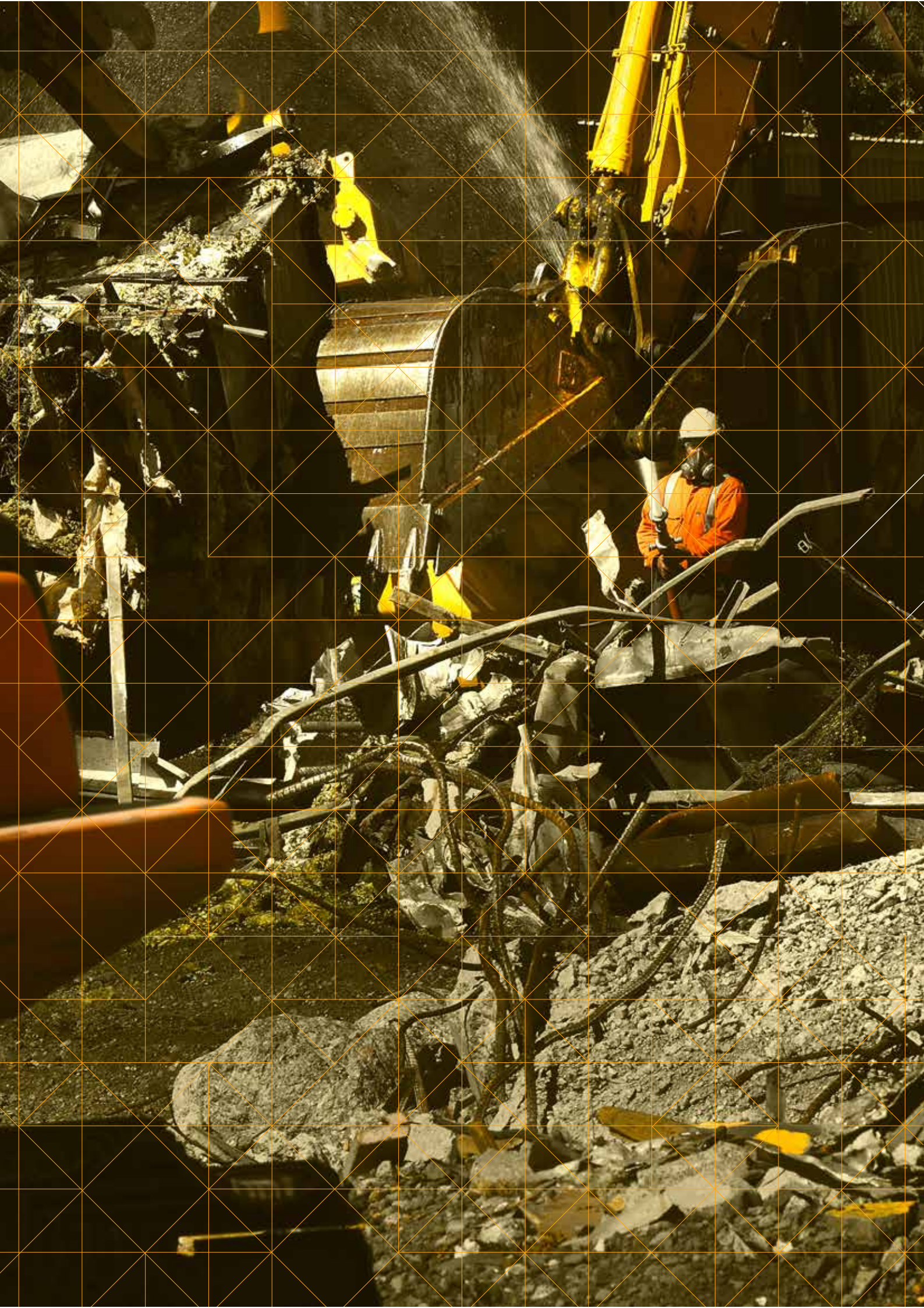
We mean what we say and we say what we mean. NikauGroup is actively committed to protecting the environment and preserving New Zealand's landscape for the generations to come. Nikau Environmental Ltd brings our philosophy to life. We provide highly specialised services that translate to a staunch approach to waste minimisation, recycling, green practices, and remediation of contaminated sites, for any size of site.

Nikau's programme is specific. The delivery of international industry best practices includes best strategy, planning, preparation, formula, machinery and extends to every member of Nikau's staff. It defines us. Nikau Environmental Ltd is now nationally recognised as leaders in our field and at the forefront of innovation in restricted and large-scale asbestos removal and site clearance.

It's a qualification that can be undisputed. Nikau's involvement with the extensive deconstruction task in Christchurch has refined our capabilities, and reinforced our reputation for effective and safe solutions for identification, management, removal and remediation of contaminated substances hazardous to health. We offer particular expertise in the treatment of asbestos and contaminated soils. We also provide comprehensive consultancy in all aspects of recycling of rubble and deconstructed materials.

The Christchurch experience created the benchmark and the imperative for respect and commitment to people and place. NikauGroup is not only fully certified to meet all regulatory requirements, our remediation services are focused on exceeding all regulatory standards to ensure the safety of our staff, the people of the place, and the long term safety of the environment. We have been instrumental in the implementation and development of the Best Practice Guidelines for Demolition, which includes crucial information on the correct and safe procedures for hazardous environments. And we back it up. We're also the only asbestos removal contractor in New Zealand to have successfully obtained Asbestos Insurance to \$100,000, in addition to our comprehensive Public Liability and Vehicle Insurances.







# ENVIRONMENTAL SPECIALISTS

**Recycling Depot, Christchurch** The extensive programme of deconstruction throughout Christchurch, and the resulting accumulation of residual materials, has led to the establishment of a state-of-the-art recycling depot in Christchurch. Significant investment has been made in specialist and purpose-built equipment designed to separate, screen, and recycle everything from plastics, to concrete, to timber, to carpet. Consideration has also been extended to dust control measures. This represents a logical step for NikauGroup and is part of our commitment to reducing the environmental impact of our operations.

## **Green Practices**

Green practices dedicated to the preservation of our land and our vision for our future environment are in keeping with Nikau's Kitiaitanga; our philosophy of guardianship. A sensitive approach is particularly relevant with regard to the social impact that deconstruction has on the people of the city. It means we work responsibly in consideration of the present and long-term effects of our operations. This includes minimising the damage at the deconstruction phase in order to maximise recoverable materials for use elsewhere at a later date; infinitely more desirable than arbitrary disposal of useful, valuable or historically relevant materials.

## **Asbestos**

Asbestos was incorporated in a number of materials used in the construction, cladding and thermal or acoustic

insulation of offices, factories and houses and in a wide range of products. A highly toxic substance that presents a hazard to health, asbestos was banned from importation in New Zealand under the Customs Import Prohibition (Asbestos) Order 1984. NikauGroup specialises in the effective treatment and removal of all types of materials containing asbestos. We also provide consultancy services, and asbestos surveys. NikauGroup is a member of the New Zealand Demolition and Asbestos Association (NZDAA), and has also helped to develop guidelines for deconstruction involving asbestos, as per Scope and Expertise.

## **Site Remediation**

NikauGroup provides full site remediation services for the effective and safe removal of contaminants from sites affected by operations and activities such as manufacturing and storage of chemicals and fuels, uncontrolled demolition, construction waste deposits, treatment operations and fertiliser components. We work in conjunction with territorial authorities and Government bodies to prevent long term negative effects of contaminants and contaminated soil on the surrounding communities, human health, flora and fauna, while monitoring processes used in identifying and tracking such contamination. Nikau's working practices are focused on exceeding regulatory standards in order to ensure absolute results and the safety of all personnel.

## CASE STUDY: PATEA FREEZING WORKS

In 2008 the structure of a redundant freezing works in Patea was severely damaged by arson. The presence of asbestos and hazardous materials required strategic deconstruction, removal and site remediation. For this project NikauGroup was nominated as a finalist in the Ministry of the Environment's National Environmental Awards.

It's the perfect example of how our two divisions complement each other to achieve the best and greenest outcome for the client. It involved intensive consultation with our client, South Taranaki District Council, as well as other parties including iwi and the community of Patea to communicate the nature of the operations and effect the most successful outcome all round.

The severity, types and high levels of contamination on site meant that every aspect of the undertaking was conducted under strict Occupational Safety and Health Service (OSH) requirements – the work included the careful removal of friable asbestos cement cladding, asbestos insulation and remediation of asbestos contaminated soils. Despite the extent of the project it was completed successfully in just eight months. The results were exceptional. A high volume of materials, soils and aggregate were remediated from contamination, recycled and then utilised to contour the land. This land has been tested and cleared for agricultural use and is to be leased out as grazing land to a local farm.

The success of this project extended beyond the scope of the undertaking. NikauGroup identified an opportunity to make a direct contribution to the Patea community. Through Work and Income New Zealand, we were pleased to provide contracts and training in machine operations, truck driving and general site works to many of the local residents.

*"Nikau is an experienced and competent company. They managed the contract professionally. I would have no hesitation in recommending them for any future deconstruction work or for work on contaminated sites."*

**Viv Eyberg**  
Projects Manager  
South Taranaki District Council



# CASE STUDY: PRICEWATERHOUSECOOPERS BUILDING

In the February 2011 Christchurch earthquake, the 22-storey PriceWaterhouseCoopers (PWC) building sustained damage too great to warrant the cost of repair. A total mass of 30,000 tonnes, it was the largest building in New Zealand ever to be deconstructed. Severe structural damage a quarter of the way up was only one of the many problems that together presented a considerable challenge.

Other key factors impacting the design of the deconstruction methodology included significant ground subsidence at one corner of the building, glass facades on all sides and a single level basement located below the ground water table. It was also located within close proximity of a structure that was to be retained.

The solution was an innovative and multi-faceted approach. It was based on methods employed to construct the tower, but in reverse, with a strictly phased five-step execution:

## **Phase One: Stabilisation of Levels 5, 6, and 7**

Securing the building for entry required propping and bracing as well as remediation works to the damaged columns and beams.

## **Phase Two: Soft Strip, Curtain Walling and Cut & Crane**

Deleterious materials were removed from the building, sequenced from the top downwards. Damaged floors were completed by hand to avoid use of heavy machinery and a number of key safety measures were employed throughout to ensure stability of the building. A curtain walling process that uses a framing system to harness the glass of the external envelope of the structure allowed for safe removal of the glass. Cut and crane

methodology removed the upper section of the building, floor by floor, to a height that would allow for effective deconstruction in the next phase.

## **Phase Three: Ultra High Reach Deconstruction**

With the upper portion of the building safely removed the residual strength of the lower portion was optimised for efficient deconstruction using Twinkle Toes, Nikau's 65-metre high reach excavator.

## **Phase Four: Substructure Removal**

The removal of the substructure dictated an orderly and progressive approach, with material progressively cleared, processed and re-incorporated into the site. Minimisation of movement in the sheet pile wall was critical.

## **Phase Five: Backfill**

Suitable material was spread, levelled and compacted in layers and tested with nuclear dry testing.

Despite the extreme complexity of the project, continued seismic activity and heightened safety challenges, NikauGroup succeeded in delivering a safe and highly efficient programme of deconstruction.

## **Watch the video:**

<https://vimeo.com/77768153>









## CASE STUDY: MEREMERE POWER STATION

Decommissioned in 1991 after 33 years of operation, the Meremere Power Station was New Zealand's first thermal power station. A coal-fired mammoth, its 40m high boiler house and six huge boilers had in its day produced an output of 210MW. This represented the single largest comprehensive asbestos removal and deconstruction project in the history of the nation at the time.

There were no cooling towers as the use of the Waikato River for cooling had eliminated the need, and a new use had been found for the remaining buildings. However, the deconstruction of the boiler house and boilers, and the presence of asbestos, had presented the client, Genesis Energy, with a considerable challenge.

NikauGroup was appointed, in conjunction with Tonkin and Taylor consultants, to effect a solution. The necessary procedures impacted the length of time to complete the project, which took almost two years, and included firstly sealing the entire building to contain the asbestos hazard before a strategy could be implemented. Over 10,000 tonnes of asbestos were subsequently removed.

The deconstruction of the boilers – top hung and each weighing an incredible 1000 tonnes – meant they had to be dismantled from the bottom up, as opposed to the normal approach of top down, using a gas cutting plant. This impressive operation required the removal of the boilers from their location and lowering them to the ground.

The health and safety of personnel was paramount throughout the project, which involved close monitoring and regular site audits from the Department of Labour. Nikau's experience in deconstruction and asbestos removal, combined with the expertise of a skilled workforce, ensured the project was a complete success.



# SPONSORSHIP AND COMMUNITY INVOLVEMENT

Nikau takes the notion of corporate responsibility seriously. Consistent with our philosophy of preparing the way for the future, we have been involved in numerous projects around the country.

**Ellerslie International Flower  
Show Exhibit  
Sponsorship of Gold Medal  
Winning Garden  
— “Fresh Start, New Growth”**

*“Nikau has been an incredibly supportive sponsor for my exhibit in the Starlight Marquee. The team totally related to my brief, and provided some spectacular materials that I would never have been able to access without their help. Fortunately, they put a lot of work into sorting all the materials on each demolition location before transporting them off site for recycling, so I was able to find most of the stone, timber and steel that I needed for the structural components of the garden without too much trouble. The buildings that the materials came from were special to me, so I am very grateful to Nikau for their generosity.”*

**Dan Rutherford**  
Landscape & Sculptor

**Sponsorship of a special garden  
at Our Lady of Fatima School in  
Mairehau, Christchurch**

*Nikau was proud to roll up our sleeves and help the 18 children of Room 11 at Our Lady of Fatima School create a very special garden as a memorial for the victims of the February earthquake and for Father Paul Duncan, their beloved parish priest, who died in 2011. We provided paving stones and matai timber recycled from the buildings deconstructed in the CBD. The timber was used to build two beautiful memorial seats. It was a privilege to help the students bring their vision, and their garden, to life.*  
*“Nikau was tremendous. It was such a wonderful gesture and it’s so symbolic to get this timber from the Christchurch CBD. Mark Soper and Mark Tumahai from Nikau worked alongside the children; their hands-on approach was the best part of the project.”*

**Denis Aberhart**  
Principal  
Our Lady of Fatima School

**Canterbury Rugby Football Union  
Sponsorship**

*Nikau is very pleased to have been invited to be the new sponsor of Canterbury Rugby Football Union (CRFU).*  
*“Nikau has been outstanding for our city. The team has been helping people get back on their feet from day one, and they’re committed to the rebuild of Christchurch. That’s significant and it’s why we invited Nikau on the board of Canterbury Rugby Football Union. We are really looking forward to working with Nikau in the ITM Cup season.”*

**Amelia Kininmonth**  
CRFU



### **Retrievals and Donations to Christchurch's Schools**

*"Nikau and its team have demonstrated their commitment to Christchurch. For instance, they've helped schools here by retrieving and donating unwanted items, at their own cost, from demolished buildings. Many schools were badly affected by the earthquakes and Nikau donated many items of unwanted furniture and equipment, some almost brand new and in good condition, and arranged for delivery to the schools in need. These items would otherwise have been discarded. Although it would be easier and more cost effective simply to dump them, Nikau has spent considerable time and effort making sure they went to good use. All the schools involved have told me how they have benefitted and just how grateful they are for the kindness."*

**Anthony Richards**  
Director of Tomorrow's  
Schools Today  
(Mooted Publications)



# ADDITIONAL PROJECTS AND ENDORSEMENTS

The following projects have helped to define Nikau, from both a deconstruction and environmental operations perspective.

**Project:**

Britomart Central Post Office, Auckland

**Client:**

Downer Construction Ltd

**Brief:**

The Central Post Office in Auckland is a landmark heritage building. This project is one of the largest asbestos removals Nikau has ever undertaken. It included the removal of materials such as lagging, contaminated concrete and decorative plaster, as well as waterproofing membrane and insulation material. As well as a high volume of asbestos-related materials, the challenge included the absolute accuracy and care required to avoid causing damage to this historic structure, prior to its redevelopment as Auckland's central transport depot.

**Project:**

Timeball Station, Lyttelton

**Client:**

New Zealand Historic Places Trust

**Brief:**

Lyttelton's Timeball Station was a rare piece of maritime history listed as a World Heritage site, with one of only five working timeball mechanisms in the world. Following irreparable damage in the February earthquake Nikau was engaged to salvage both the timeball mechanism and the stone buildings, and categorise and register each stone, nail and timber beam before packaging for storage and eventual re-construction. Careful preparation included consultation with heritage stone masons, archaeologists and engineers. Rock falls from the cliffs above and the continuing deterioration of the structure presented real risks and priority was given to safety of personnel. Despite its eventual collapse in the June earthquake 80% of the structure was safely retrieved. The timeball mechanism is now one of Canterbury Museum's most treasured possessions.

**Project:**

Devonport Naval Base

**Client:**

Ministry of Defence

**Brief:**

Nikau was commissioned to remove all internal services, plant, equipment and backfill the bulk fuel storage tunnels beneath a residential area located at the Devonport Naval Base in the North Shore of Auckland. It involved working underground in confined spaces with highly hazardous substances, including petrol, and required particularly stringent working practices to ensure the health and safety of the personnel. Nikau consulted the local community and the Naval Base to fully communicate the nature of the operations and obtain consent from both parties. This project was not only an underground deconstruction, but also a very specialised civil engineering project, unique in Australasia. Nikau was presented with an Award of Excellence by the Minister of Defence and received an ARC (Auckland Regional Council) endorsed Environmental Award, for innovative management, in what were difficult environmental conditions.

**Project:**

Wellington Hospital

**Client:**

Mainzeal

**Brief:**

The vast five storey brick, concrete and timber structure built in the early 1900s had been added to extensively over time. It included asbestos-containing materials that necessitated complete removal and decontamination prior to careful deconstruction, which was then effected using a variation of manual, cut and crane, and mechanical methods. Nikau succeeded in salvaging the ornate stonework façade now at the entrance to the new Hospital, and achieved an impressive 98% recycling rate through processing onsite. As well as recognition for environmental practices and personal thanks from the Capital and Coast District Health Board's CEO, Nikau was the first ever contractor working on any Capital and Coast District Health Board site to receive a commendation for Health and Safety excellence from OSH.





# KEY CONTACTS

## **Head Office and Sales**

Nikau Contractors Ltd  
355 Church Street  
Penrose  
Auckland

P +64 9 636 5917  
or 0800 66 99 11  
F +64 9 636 5918  
E [admin@nikaugroup.com](mailto:admin@nikaugroup.com)

## **Christchurch**

20 Calgary Place  
Hornby  
Christchurch

P +64 3 929 0466  
F +64 3 929 0472

## **Australia - Melbourne**

192 Dohertys Road  
Laverton North  
Melbourne  
Victoria 3026

## **John Stil**

DIRECTOR  
E [john.stil@nikaugroup.com](mailto:john.stil@nikaugroup.com)  
P +64 021 719 902

## **Diana Stil**

MANAGING DIRECTOR  
E [diana@nikaugroup.com](mailto:diana@nikaugroup.com)  
P +64 021 399 190

## **Bruce Hodgson**

GENERAL MANAGER  
E [bruce.hodgson@nikaugroup.com](mailto:bruce.hodgson@nikaugroup.com)  
P +64 027 801 4643

## **John Paul Stil**

DIRECTOR AND ESTIMATOR  
E [jp.stil@nikaugroup.com](mailto:jp.stil@nikaugroup.com)  
P +64 021 719 921

## **Michael Stil**

DIRECTOR AND ESTIMATOR  
E [mjstil@nikaugroup.com](mailto:mjstil@nikaugroup.com)  
P +64 027 453 7845

## **Helina Stil**

HEALTH AND SAFETY DIRECTOR  
E [helina.stil@nikaugroup.com](mailto:helina.stil@nikaugroup.com)  
P +64 021 719 055

## **Janine Stil**

ADMINISTRATIVE DIRECTOR  
E [admin@nikaugroup.com](mailto:admin@nikaugroup.com)  
P +64 9 636 5917

[www.nikaugroup.com](http://www.nikaugroup.com)

# NikauGroup

STRATEGIC DECONSTRUCTION & ENVIRONMENTAL