

The new Regional Science & Innovation Centre for UC

The first of two buildings, the RISC will add 25,000m² to the University of Canterbury's College of Science. An innovation hub will enable close collaboration with industry to explore opportunities for connecting basic research with applied.



In this joint venture with John Jones Steel Ltd, D&H Steel Construction was delighted that the engineering group, Beca, called for the use of Buckling-Restrained Braces. Beca's Technical Director, Andre Kirstein, said: "BRBs (painted red in the above render), have become recognised for the re-assurance they provide against strong seismic activity."



Architects Jasmx were very positive and their design celebrates BRBs rather than hiding them. UC's Pro-Vice-Chancellor (Science), Professor Wendy Lawson, compliments "the flexibility built into the learning spaces that will make the most of modern teaching methods and technologies."



The central atrium contains a large, social stair that can be used for presentations and other gatherings. "D&H Steel Construction has been engaged in much of the new and re-building that's taken place in Christchurch," says General Manager Wayne Carson. "The RISC innovation hub offers students frequent interaction with industry, and that will surely increase their employability upon graduation. We wish them success."

Key D&H People: 09 839 7250

Wayne Carson General Manager Ext 205
Dean Pouwhare Operations Manager Ext 217
Mike Thompson Detailing Manager Ext 204
John Frederickson CWBs & BRBs Ext 219

Colin Ross Contracts Manager Ext 237
Richard Hine Contracts Manager Ext 225
Amy Knowles Document Control Ext 221

Mark McKeown Estimating Ext 206
Jamie Moxon Estimating Ext 215
Kevin Thomas Procurement Ext 210
Adele Hikuroa Accounts Ext 212

AIAL Raises Atrium Roof in P



Auckland International Airport Limited (AIAL) sees many big lifts but usually performed by aircraft taking off in a matter of seconds. This one took three weeks and was performed by a 550 tonne crawler crane, which of course never left the tarmac.

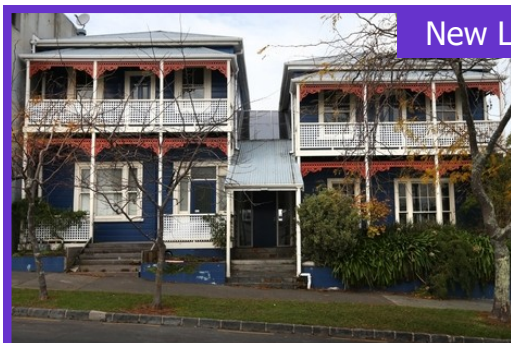
It was engaged to lift 10 large trusses fabricated by D&H Steel. These ranged from 26 metres to 50 metres in length and weighed 12 tonnes and 32 tonnes respectively. For a tower crane to lift one truss of 32 tonnes would require it to be divided into seven small sections.

A great deal of temporary work was also needed to support each section, which, in turn, would increase the time needed for the project's completion. AIAL accepted that one of its busiest stands would need to be shut but wanted to be able to re-open it in three weeks! The precise target date was 20 November 2016 - the day/night that the busy Xmas traffic starts moving.

In a nutshell, these large trusses form the new Atrium roof— an integral part of AIAL's expansion plans to increase its passenger handling from the current

14.5-million to an expected 24-million by 2025. Because of their length, D&H Steel allocated half of its factory workshop—one entire side—to the fabrication process. A total of 27 finished and painted units were delivered to the site for the final bolting assembly on the apron, airside.

From this position, the trusses were lifted to the roof each morning between 1.00am and 4.00am. This three hour window offered the best hope of low wind; even a heavy steel truss can behave like a sail in a severe wind gust.



New Lease of life for Pollen Street Apartments



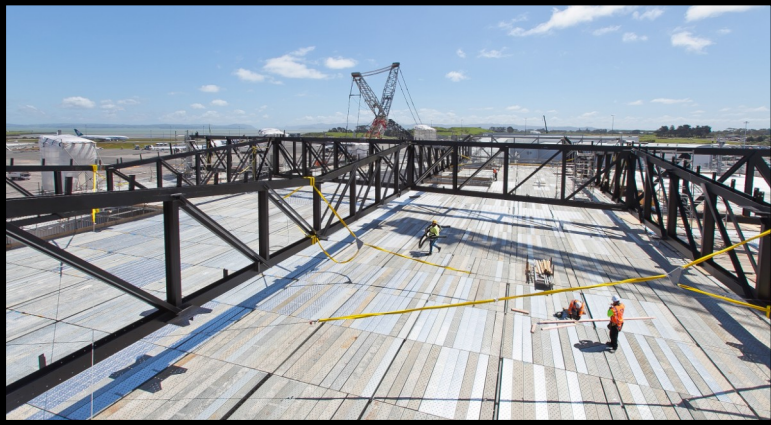
The two-storey villas in Ponsonby were built separately in 1905 and later joined. With their original integrity long gone, they were demolished and replaced by Pollen Street Apartments. Coping with the challenge of minimal setting down space, D&H's riggers made quick progress with the steel gravity structure. Pre-cast panels were then connected. "It's a fast yet efficient construction," says our Site

Supervisor, Matt Sinclair. "Six levels, including underground parking, 22 apartments with 16 different unit types." Each unit has glazing on two sides and a covered, timber-decked balconies. It's boutique building only 150— metres from Ponsonby Road. Some would say Ponsonby is arguably one of Auckland's trendiest locations. Those living there say: **"There is no argument!"**

The drone photographs of Sistema give some impression of the factory's 51,000



Readiness for Soaring Traffic



D&H's Contracts Manager on AIAL is Richard Hine. "The plan," explains Richard, "was to lift our 10 trusses in 10 days, but allowance had to be made for bad weather. And although in terms of traffic, the three-hour window was relatively quiet, aircraft did land and their passengers had to be able to walk to their baggage pick-up carousel. D&H personnel worked closely with the main contractor, Fletcher Construction, who had people deployed as spotters to ensure no lifting was in progress as passengers came through.

"In fact there were several nights when poor weather made lifting trusses impossible. And on one evening, the night of the Kaikoura earthquake, the crawler crane wobbled, halting operations and raising the already high level of caution. Meanwhile, beneath the existing roof, scaffolding was erected in preparation for the roof's replacement (see insert above).

"I'm pleased to report," says Richard

Hine (middle above) "that the crawler crane completed its work in the extremely tight window,

and D&H Steel succeeded in meeting the deadline required by AIAL. I'd like to thank all of our team who made sure we delivered, including our Detailing

Manager, Mike Thompson, (on my right), and Detailer, David Haines (on my left). Experience is D&H Steel's strength."



Vulcan Steel Expands into Bond Street, Christchurch



When this project started, the weather was co-operating, and Site Supervisor Jimmy Noble was enjoying the good progress. It was "just another big shed, familiar work you might say. But towards the end of 2016, the weather became very changeable, with strong winds and heavy rain. We sometimes had to be content with lifting smaller frames, for safety reasons. That's how it was at Bond Street. Then along came a series of earthquakes, adding another dimension to our Health & Safety. As a Site Supervisor, you have to be ready for the unexpected so that we get the job done safely and finish on time."



m² and elegant offices. D&H Steel fabricated and installed 1,860 tonnes of steel.



Eight D&H Steel Teams Succeed

Team Name	<u>Stiff Fingers</u>	<u>Baroc</u>	<u>Babagi</u>	<u>Tritanium</u>
Team No.	4007	4008	4009	4010
Kayaker	Dean Pouwhare	Rob Sullivan	Neil Gillespie	Will Hand
Cyclist	Andy Moore	Caitlin Sullivan	Marty Baker	Glenden Friary
Runner	Shara Carson	Tina Cox	Ngaire Baker	Amy Knowles
Combined Time	16:56:11	15:54:12	14:55:02	16.07.24



Some of the kayaks about to leave D&H Steel Construction and head for the South Island.



D&H team members flew to Christchurch and relaxed, glad that all their training and preparation was over.



Eight 6-be... duration. a total of 4... ccess in due... showers th... daunting y...



Team 4016, named **Lost in Space**, had Mike Thompson on the bike, pictured above crossing the Taipo River on the 55km cycle leg, Day 1. On Day 2 the cyclists competed in a 15km road sprint and would later have the honour of finishing the race with a 70km ride across the Canterbury Plains.



Running for **Lost in Space** is Stuart McClatchy, seen above picking his way down the boulder-strewn Mingha Valley on his 33km mountain run. It's mainly off trail, with the rocky river bed often the only direct line of descent.



“Our catch cry at D&H is **Performance When Performance Counts**, and that was certainly the case with everyone involved in the 2017 Coast to Coast, competitors and supporters. I couldn’t be more proud of how organised and efficient the team was in carrying out our 243km mission from the Kumara beach on the West Coast, up Deception valley, through Goat Pass in the Southern Alps, then down the Waimakariri River and across the Canterbury plains to New Brighton beach in Christchurch.

“As team-building events go, this was right up there, physically demanding on competitors and logistically demanding on supporters. From my perspective, one of the most satisfying aspects was the motivation of more than 30 D&H staff, with some family members and a few associates as “ring ins”, as they cooperated and supported each other throughout the three days. Some demonstrated leadership, others sheer willingness and hard work. Getting people and gear from Auckland to Christchurch, into camper vans, to 4.00am starts, and all the requirements that had to be met at tran-

sitions, from nutrition, food and drink to the bikes, kayaks and ancillary gear that had to be in the right place at the right time, all with the ultimate aim of ensuring every one of our team members reached their finish lines—this was truly **Performance When Performance Counts**.

“I found it very encouraging for the future of our business to see many staff members take up the challenges of the Coast to Coast and excel in an environment that is quite outside their comfort zones. Some, for example, had



Successful in 2017 Coast-to-Coast



Men of Steel
4015
Jared Pouwhare
Wayne Peachy
Mark McKeown
17:17:47

Lost in Space
4016
Bruce Leslie
Mike Thompson
Stuart McClutchy
15:45:22

S'thern Discomfort
4100
Wayne Wheeler
Daniel Ward
Richard Hine
14:27:32

Peaked Too Late
4012
Tim Jones
Kevin Craner
Joe Lee
16:38:17



...th campervans would be home for the Competitors and support crew made 40. They'd all be celebrating their suc- e course. Meanwhile, between the rain e scenery was spectacular, sometimes et inspiring.



Team 4015 called themselves **Men of Steel**, but Mark McKeown's left leg didn't rust—it bled as he smiled for the camera. Jared Pouwhare (in kayak) showed the Waimakariri rapids the respect they deserved, and at the finish Wayne Peachy and his team-mates were delighted. They did find the offer of only two light ales a little amusing. Engineer and Custom Welded Beams Manager, John Frederickson (insert) gave his all in Support Logistics and earned his home-flight sleep.

... previously done very little running, yet they took on and conquered a mountain run that rises up 1200 vertical metres and descends, crosses rivers up to 20 times, obliging runners to battle over and around rocks and boulders before they reach the transition at Arthurs Pass, follow the Goat Pass and after 33kms, smile with deep satisfaction. Some of our paddlers were new to kayaking and had to train to meet the minimum level of proficiency. They spent in excess of five hours travelling 72kms down

the Waimakariri, some with more swims than others in a very cold, technically challenging alpine river. They could argue that bikers had the easier challenge, but it had three phases, starting with 55kms from Kumara to Deception Valley, then on day two, a 15km sprint to Whites Bridge and then the final 70kms leg, pedaling into a howling Easterly wind to reach the finish at New Brighton Pier. Meanwhile, staff back at the D&H office in Auckland had our backs, keeping the wheels of the business turning and monitoring our progress on the big screen with GPS trackers.

"All in all this was the most satisfying company event I have ever been involved with, and I hope more staff will be involved in future years, whether it be Coast to Coast or any event that brings people together in a similar manner. To our people at D&H and Clearwater, to the family members and our associates, take pride in your participation and support. Together we have done well, and I thank you". **Mike Sullivan**
Managing Director (Individual Time: 17:06:31)



'Experience Our Strength'

Project Management
3-D & Shop Drawings
Fabrication
Protective Coatings
Site Management & Erection



ISO 3834 Part 2
Certificate No. 001NZ/2014

D&H was the first steel constructor in NZ to be awarded this International Quality Accreditation. We comply with ISO 3834 for the benefit of our clients.



We were also the first to acquire Steel Fabricator Certification - a quality management system under the auspices of the IIW (International Institute of Welding).

CUSTOM WELDED BEAMS

We manufacture all the commonly specified welded beam & column sections and provide a free design service for optimised, tapered portal frames. Our CWBs are made from G350 steel and welded on both sides.



The leading brand for Buckling-Restrained Braces made in New Zealand by D&H Steel Construction to calibrated & certified seismic ratings.



The late Nick Calavrias—a good friend & mentor

Nick Calavrias was riding his bike on the Taupo Expressway on Saturday, January 14, 2017, when he was struck by a car and killed. Mike Sullivan, D&H Steel Construction's CEO, described Nick as "my good friend and mentor, and we will miss him dearly."

Their friendship began in 1990, when Mike and Bob Haddon purchased Dixon and Haddon Structural Steel Ltd. The company was a major customer of Steel & Tube Limited, but after the 1987 share-market crash it was financially distressed. "Nick's business acumen saw the bigger picture," says Mike. "He wanted to help, rather than take the easier course of liquidating our business to recover its debt.

"In the early 90s structural steel had less than 5% of the construction market, so we created Steel Construction New Zealand (SCNZ) and gave it a goal to grow structural steel's share. Nick was very supportive and lobbied mills and merchants to add their support for a voluntary levy on structural steel purchases. We both joined the Executive of HERA, the Heavy Engineering Research Association, and ensured that SCNZ funding was ring-fenced to provide long-term security. When SCNZ became incorporated, we both took positions on its inaugural Executive. Nick was invaluable in setting up the business structure and putting rules in place to ensure good governance. The result is that structural steel today enjoys a 55% share of the construction market in Auckland. In Christchurch, it's now more than 80%.



Nick presenting a safety award to Abhishek Naidu in 2014

"When Nick retired from Steel and Tube in 2009, I invited him to help set up and chair a formal Board of Directors for D&H Steel. He accepted because he was passionate about the future of our industry and all the people it employs, particularly our Health & Safety. Thanks to his leadership, D&H has reduced its Lost Time Injuries from 16 per annum to 2 while at the same time doubling the manhours worked. His great service was recognised when, in 2010, he was made an Officer of the New Zealand Order of Merit. His citation read that he had 'contributed to keeping thousands of New Zealanders employed by sourcing locally made products over cheaper international alternatives'."

When Safety is Practised—and Rewarded

Senior Development Manager for Precinct Properties New Zealand Limited, Alain McKinney, says the company believes that Health & Safety in the construction industry deserve to have champions. "We are on a crusade to promote both, not just Safety," says Alain, "but ours is not a police state approach. We attend Toolbox Meetings to find out who shoulders the Health & Safety responsibility and takes the initiative to lead a team in achieving improvements. Then we surprise them with a financial reward."

That's exactly what happened to D&H Site Supervisor Jordan Brown (known as "JB"). Working on the conversion of a heritage warehouse that was to become the Wynyard Quarter's building we now know as Mason Brothers, JB was unaware that his supervision was being observed. "We used a crane inside the building," says JB, "to manoeuvre D&H beams around existing older steel. Ceiling heights went up to 8m and my crew of seven needed to maintain high safety levels. We had no incidents and nobody sick."



Site Supervisor Jordan Brown receives a voucher of appreciation from Precinct's Alain McKinney

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