

Spanbild case study: Lincoln RFH Building

NEW LAB FOR LINCOLN UNIVERSITY



Project: multi-purpose building for Lincoln University

Key deliverable: to provide flexible space to house modern research and teaching facility inside a 12-month period

Spanbild Projects involvement: design, engineer, produce and construct facility

Success measures: deliver building within tight project timeframe; create strong, multi-purpose state-of-the-art facility; offer potential for future re-use

When the Lincoln University faculty of Agriculture and Life Sciences (AGLS) needed a temporary replacement building for one of its departments – Wine, Food and Molecular biosciences (WFMB Dept) – finding a timely and cost-effective solution was high on the list of priorities for one of Christchurch’s most reputable educational establishments.

Bruce Stewart, property manager at the university, says they explored various options before deciding to build with Spanbild. “After we lost the use of the Hilgendorf Wing, which contained our laboratories, teaching spaces and a large percentage of our offices, including the postgraduate study space, we needed a temporary replacement facility as quickly as possible.

“Essentially, Spanbild provided a shell of a building, which enabled us to do the appropriate fit-out. Spanbild was the most cost-effective option and the company was able to deliver the building in a relatively quick timeframe.”

The university’s Hilgendorf wing was vacated after structural assessments revealed potential risk factors caused by seismic events. The new AGLS facility was completed in February 2013. “To my understanding, at that time it was the largest building Spanbild had ever had to design and engineer.”

“A fully operational scientific state-of-the-art lab facility was produced inside a 12-month period. From our perspective, it’s great to be able to achieve that – you wouldn’t get that going through a normal build programme.”

Bruce Stewart
Lincoln University Property
Manager

Case study



Spanbild Projects general manager Tim Blake says while the design for the new building was unique to the Lincoln project the company drew on a range of experience in creating large-scale commercial premises.

“This project had a number of individual requirements, ranging from the speed of the build to the needs of the occupants in the way they planned to fit-out the space as a specialised research facility.

“However, the Spanbild engineering team was able to draw on a range of proven designs – as well as the systems and processes that had enabled us to respond to a number of rapid-build projects in the post-earthquake period – to create a solution that met all Lincoln University’s needs.”

The new building was not only fast and cost-effective to construct, Bruce says, it also provides other long-term options. “This type of building has potential alternative use in the future, once another science facility is available. Also, the fit-out is able to be re-utilised in a new building. The furniture is of a modular design, and other parts of the fit-out could also be used in another situation.”

The AGLS building is used by a number of students and staff at the university and the building contains a number of very specialised labs and containment facilities for carrying out research.

“The building design provides us with a large ceiling space so we could install a suspended ceiling throughout. Above that, a platform was constructed, upon which a large percentage of the building’s services, mechanical and electrical plant is located. This negated the need to provide for additional building footprint to located these services.”

Arrow International project managed all the building’s requirements and construction. Bruce was impressed with the collaboration. “Communication between Spanbild and Arrow was very smooth. We also brought an architectural designer on board, who added elements of design to complement the building.

“Working with Spanbild and the design team to coordinate everything, from window placement to the external doors, all went very well.

“This type of building allowed the design to work and gave us plenty of opportunity to come up with what we needed. It also gave us the room to do to it all without the restrictions of other building designs, such as pillars.”

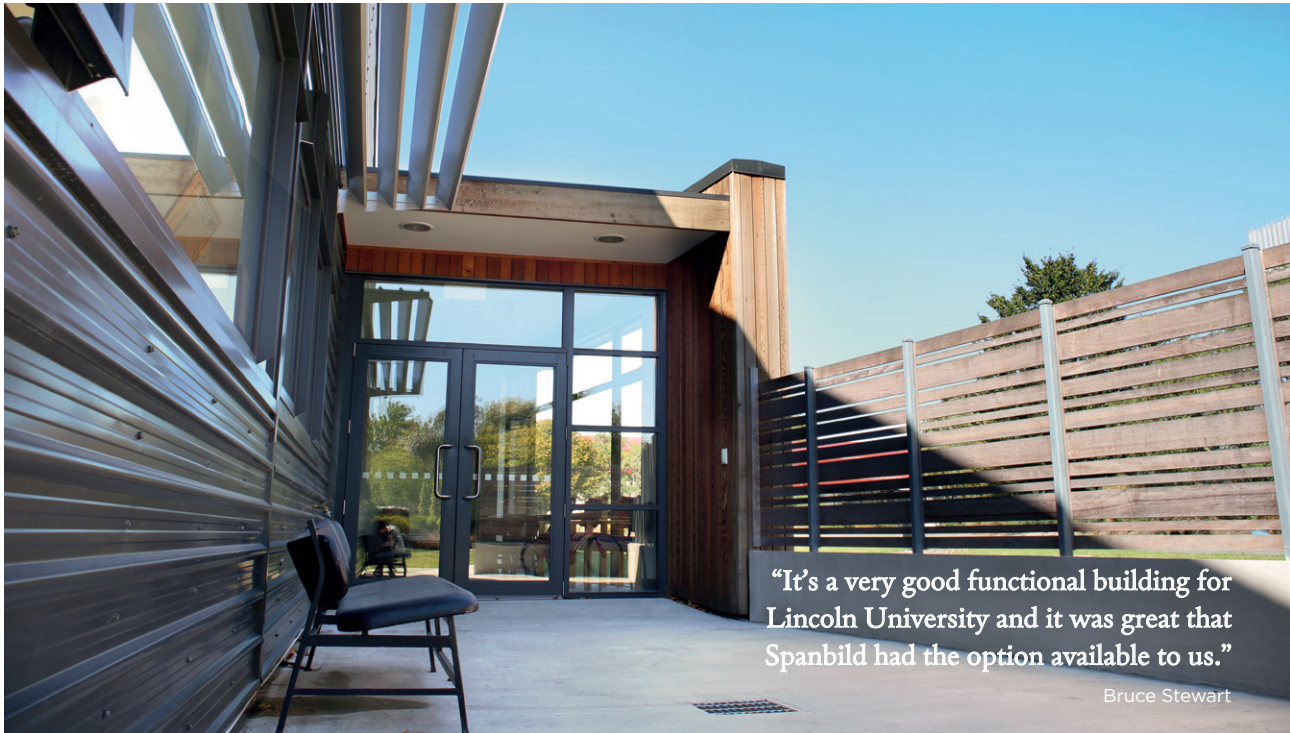
Arrow International senior project manager Grant Mckenzie says he was also impressed with the speed at which the building was constructed.

“We started design in April and the first sod of earth was turned in June 2012. We completed the handover of that building on 18 January 2013, so it was very rapid. That was one of the key elements of the project – Spanbild structures could go up quickly.”

Grant says the design of the steel-framed structure and the construction methods used by Spanbild, also enabled the fit out to proceed more efficiently.

“Once the concrete slab was down, they’d use that slab to lay out the steel and set it up. Then all of a sudden, you’ve got nearly half the building up. As soon as half the roof was on we could start doing the fit-out inside – so from that perspective it was beneficial to the overall construction programme timeline.”





The two companies also established a good working relationship, with Grant impressed with the level of responsiveness from the Spanbild project management team.

"One thing I would say is that I would be quite comfortable in going back to Spanbild to procure a large building or a number of portable buildings.

"Because I know that with the team they have got there now and the knowledge they have gained, they would be in line with what we are trying to achieve in terms of the construction programme, quality, pricing, and health and safety standards."

Grant believes the versatility of the building, both from a structural and design perspective, has meant the temporary Life Sciences facility provides a welcoming working environment for Lincoln University staff, with elements like window shades, angled corridors and internal light-wells accenting a very well-designed space.

"They love the new building, because in the Hilgendorf building, they had to travel up and down between levels with all their research gear. Whereas this new building is one level and so easy to get through - they enjoy the environment due to the versatility of this building."

According to Bruce Stewart there has been a lot of positive feedback from people who had previously only associated Spanbild with farming and agriculture constructions.

"We are very pleased with the outcome - it met all of the objectives and key components we required," Bruce said.



Case study

Spanbild projects – DESIGN, MANUFACTURE, BUILD



Tim Blake says the Spanbild team has been very proud of everything that was achieved for Lincoln and Arrow International.

"The new building is a fantastic showcase of what our design, engineering, production and construction teams can achieve – particularly when working in partnership with project management experts like Arrow.

"Lincoln provided us with the opportunity to create a versatile new building that not only works extremely well as a replacement premises for the university's internationally-renowned research units, but will also provide opportunities for a range of additional uses once their permanent building programme is completed."



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