

## Case study

### Spanbild case study: St John

## AMBULANCE HUB NEW ZEALAND FIRST



**Project:** Developing an ambulance hub, the first of its kind in New Zealand, for a charitable organisation

**Key deliverable:** Managing construction on a working site and meeting codes

**Spanbild Projects' involvement:** Design, engineering, manufacture and assembly oversight

**Success measures:** Completed in very short time frame with considerable cost savings

Constructing a one-of-a-kind ambulance hub for St John highlights not only the value of Spanbild Projects' production and engineering capabilities but also its ability to build innovative structures. The St John central city ambulance hub is the first of its kind in New Zealand and will act as a logistics facility, servicing ambulance stations or "spokes" across the city.

### A one-of-a-kind project

Past projects, local networks and connections have helped to forge what is likely to be a long-standing partnership between St John and Spanbild Projects.

Because of this partnership, this year Spanbild Projects tackled a multi-million-dollar project unlike any other, participating in the building a one-of-a-kind ambulance hub in the centre of Christchurch.

St John South Island property and facilities manager Mel Eade says the \$5million make-ready hub will particularly cater to paramedics out in the field, with ambulances starting and finishing their day at the hub on the corner of Durham and St Asaph streets.

"The paramedics will jump into a vehicle and go out on the road and be posted in different suburbs around Christchurch in order to improve response time," Mel explains.

The idea of the hub is that it will act as an ambulance processing building. The paramedics will come in with their vehicles, where they will be cleaned and decontaminated, before they're sent back out on the road.

"This gives our paramedics more time in the field, so they're doing what they're trained – and paid – to do, and we have dedicated cleaning teams whose job it is to make sure the vehicles are safe to use."

The first of its kind in New Zealand, there are similar hub models overseas which were redesigned in order to be safer; limiting the reversing of vehicles on site, having different contamination zones and work-flow through the building.

Spanbild Projects general manager Tim Blake says the company's unique capabilities made them an ideal partner for the job.

"This is a critical part of the city's health infrastructure requiring both structural strength and modern, cost-effective flexible design," says Tim Blake. "We were very pleased to be selected to play a part in a project that reflected our ability to design, engineer, manufacture and support key components of this build."



DESIGN AND ENGINEERING

Client advisor Tessa Smith, of Co-Create – a company that focuses on client representation, and design management and facilitation – got the ball rolling, introducing Spanbild Projects to St John.



In the pipeline for two years, Tessa knew the project was an exceptionally important one, and as a result, required the knowledge and expertise of a reputable firm.

“Spanbild were there right from the beginning, talking through the construction side of things – how to build it and its build-ability – as well as dimensions and actually helping with the clients. They’ve been there right throughout the entire process,” Tessa says.

In her role Tessa acted as representation for St John, discussing things with the architect, passing on briefs and managing the day to day running of the project.

Following Spanbild Projects’ introduction, Southbase were then brought on as the main contractor.

A leading construction company, Southbase has worked on key building projects within the Christchurch rebuild programme, including the bus interchange and Hagley Oval.

Site manager Gareth Anderson said Southbase had a good working relationship with Spanbild, despite not having collaborated before.

“Everything went to plan; it was the first kind of this type of building that they had done so there were a few design things we had work through but they all got sorted out pretty quickly, Gareth says.

The materials too, were well suited to the build and the kit-set nature of the build meant things ran smoothly.

The frame was made of cold-rolled steel which not only was able to be manufactured quickly, it also cut down on assembly time as the frame was bolted together, rather than welded, explains Spanbild Projects senior project manager Geoff Newman.

“It took about four weeks to assemble the whole thing, whereas with hot-rolled steel it would have been considerably longer,” he says.

Spanbild Projects also commissioned the manufacture of all the necessary brackets and other fittings, with some embedded into the concrete foundation. All of the materials and components required were fabricated at the company’s Christchurch manufacturing base or sourced through its nationwide network of leading suppliers.

“The engineering and the structure and the concrete floor all had to work together, and because of this needed be designed by the same engineer, so we utilised the depth of resource available to us within the Spanbild group head office engineering and design team.

“I think the engineers prepared everything really well, it was very easy to pick up and run with.”



Not your standard build

Operating as an emergency base, the ambulance hub had to meet Importance Level 4 (IL4) building specifications and be designed to stand up to just about anything that might be thrown at it.

“Spanbild designed it so that spec was met, and then it was peer reviewed,” Mel explains.

This was the first time Spanbild had to work to such specifications, and Geoff said he understood it was the first IL4 building that had been built using cold-rolled steel. “It’s a bit of a milestone really.”

Complete at the end of October 2016, the facility was given a full fit-out by St John, to be operational in early 2017.

Depending on how well the ambulance hub services Christchurch, there is potential for other hubs to be built elsewhere in New Zealand.

“We’re looking at Auckland as the next central location,” Mel says.

“They won’t really work in smaller centres unfortunately, so it’s only Auckland and Christchurch where the hubs would be viable at the moment, as we don’t operate in Wellington.”

And Spanbild Projects could be first in line to complete the work, if the hub model is expanded.

“It just makes sense, I found Spanbild really good to deal with, especially Tim as he was very open and honest. I appreciate that type of approach,” Mel says.

Geoff says there is also a possibility that Spanbild will get to work on St John’s smaller ambulance bays or “spokes” around the city.

“I think there are 23 scattered around, they can house a couple of ambulances and are equipped with living quarters and that sort of thing.”



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### Close Partnership

All parties involved worked together on the design and execution of St John's ambulance hub, beginning with initial meetings between St John and Spanbild Projects, before Southbase was also introduced to the project.

From Spanbild Projects' perspective, Geoff says not only was he pleased with the overall outcome of the project, but also the company's relationship with St John and Southbase.

"Really, that's the important part – developing positive partnerships."

Gareth credits Geoff's involvement throughout the build process, saying he was always available when Southbase needed him.

"Geoff was down on site every day and was easily accessible by phone. The engineering team were easily accessible too."

Tessa agrees, highlighting St John's positive relationship with Spanbild Projects.

"Spanbild's general manager Tim Blake, in particular, was excellent on the communication front and all the other guys were good too – everyone was there when you needed them."

Tim Blake says Spanbild Projects are exceptionally proud to be involved in providing a building that not only supports the incredible work St John does throughout the city, but plays an important role in protecting the health and saving the lives of Cantabrians.

"This has meant a lot to all our team. The relationships, the communication and achieving the results the team at every level were after was extremely important to us. We were committed to achieving the best results and are very happy with what we've been able to achieve working alongside a very talented team."

