PROJECT MAUNGA
BASE HOSPITAL REDEVELOPMENT

PROJECT MAUNGA STAGE TWO

MAY 2022 | UPDATE #4

Kia ora and welcome to an information packed edition of the Project Maunga newsletter.

The last few months of a building project are always exciting because its the time when you can really start to see what the finished building will look like. We have two projects nearing completion on campus - check out the update and photographs below.

Design work is in full swing for the new Taranaki Cancer Centre, and the prepartory work for construction will soon be underway.

Over at the enabling works for the New East Wing Building, which will be housing many of the acute services at Base Hospital once open, the team are installing the screw piles – essentially the anchors of the building. More pictures and updates below!

To build big things, you need big machines, and we are looking forward to two such cranes coming on site in the next few weeks. The first is a 400 tonne behemoth, which will be instrumental in stress-testing the screw piles to ensure they perform to the required level. The second is a 45m tall tower crane, which will be part of the New Plymouth landscape for the next 18 months.

I hope you enjoy this update on Project Maunga Stage 2.

Nga mihi

Jesse Jardine
Programme Director

Taking learning out of the classroom

The building work taking place at Taranaki Base Hospital as part of Project Maunga Stage 2 is providing a wonderful learning opportunity for local students – and the project team are happy to contribute their time, knowledge and expertise too.

Nathan Hawkins, project manager for Leigh's Construction, was dedicated enough to come to work during a weeks' holiday to give a tour of the NEWB site along with structural manager, John Gilleece and H&S manager Lesley Johnson for a group of construction management, quantity surveying and architectural technology students from WITT.

Tutor Mei-Chin Lin said: "Project Maunga is the second biggest vertical building project within New Zealand at this moment and so is a wonderful case study for our students learning about 5W4H thinking.

"Unfortunately, due to COVID-19 restrictions and the current construction stage (enabling works stage), there were limitations to what we could view, so we are looking forward to a repeat visit in the future.

"In the meantime, the timelapse is one of the ways we are able to monitor the construction progress which is very cool and helpful."

5W4H is a planning approach which uses *who, what, when, where, why* and *how* to help identify and approach the challenges a project presents.

Nathan said: "Project Maunga is providing a great deal of learning opportunities for a number of groups, and for these students being able to see how a project goes from a design on a page to an actual construction site to, eventually, a finished building, is invaluable.

"As a previous student myself, getting out on site and seeing the practical application of the concepts we were learning was something I loved to do."

WITT site visit

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TARANAKI
District Health Board

Building the workforce of the future

A building project the size of Project Maunga involves a great deal of future planning of not only how the work will be done, but also who will do it.

The construction industry is booming at the moment, but building companies are struggling to find the skilled workers they need to keep up with demand.

And with Project Maunga Stages 3 and 4 already being planned, where the future workforce is coming from is a very real consideration for the team.

But there is a solution, and Katrina Mayo from WITT/Te Pūkenga (pictured) is helping to put it into action.

“Essentially what we need to do is bring more people into the building industry, ensure they get the right training and skills, and put clear professional development pathways in place,” she says. “The construction business is undergoing a bit of a transformation itself at the moment with the introduction of a working charter that signals a change of culture for the industry.

It is putting staff wellbeing on the priority list, with good business practices, investment in skills, development opportunities and qualifications, and looking to encourage those from less traditional building backgrounds to enter the profession.

“I am looking forward to working with the Project Maunga team to bring in apprentices and trainees that will become the workforce of the future for them.”

Nathan Hawkins, project manager for Leighs Construction, wholeheartedly supports this approach saying: “On other projects, we have seen young trainees coming in green and nervous on their first day, spending their entire apprenticeships with us and by the time the project is complete they are fully qualified and confident with the skills we need as an industry for future construction work.”

Katrina works closely with the Ministry of Social Development and the Ministry of Business, Innovation and Employment to not only encourage people into the industry, but support employers too.

“Small building businesses haven’t got the time to implement an apprenticeship programme, or a budget that can send them on the courses they need to complete to get their formal qualifications,” explains Katrina. “But I can help them to access the funding and existing programmes that enables them to take those new to the industry on, train them up and future proof their business.

“By bringing a regular stream of new people in, we can maintain a healthy balance of experienced workers and those learning the job.”

Diversity is another important element to Katrina’s role, particularly when it comes to getting women on the tools, and progressing young Māori and Pasifica workers from labourers to skilled professionals in leadership roles.

“Bringing women into the industry in areas other than admin can be a challenge, but once they are on site and working the reaction is one of ‘oh they are just like us, and they are great’ from the men,” she laughs.

MEET THE TEAM

Andy Warner

Infrastructure manager Andy Warner may be a new addition to the Project Maunga team, but he is no stranger to the Base Hospital campus.

Andy has worked for Taranaki DHB as a contractor for 14 years supporting the engineering team in various roles, working on several projects and the day-to-day, keeping all the hospital buildings and systems were running as they should.

Now he describes himself as the communications conduit between the project team, the construction teams and the DHB to ensure that everything is done correctly ready for when the buildings are commissioned.

Andy Warner continued...

"These new buildings are going to be helping to care for the people of Taranaki for a long time, so it is crucial that everything works smoothly and will endure over time," he says. "It's challenging work that keeps me on my toes.

"But I am really enjoying being part of the Project Maunga team as they are all great people working together to a common goal."

One of the drivers behind Project Maunga is the Seismic Risk Management Plan, which ensures that hospital buildings and systems can provide emergency care in the immediate aftermath of a natural disaster such as an earthquake.

"This is a real challenge because we have to integrate the new systems, such as power, water, computer data cable etc, with the existing network – and do it in a way that keeps the place running in the meantime," he says

"We do a lot of things after hours when the campus isn't as busy, which means quite a few very early mornings for me to make sure things all run smoothly."

A project of this size is subject to many different pressures and challenges, especially in the COVID-19 environment which has seen supply chain issues for materials, escalating costs, workforce sickness impacting projects and businesses across the world.

"It certainly makes the working day an interesting one," laughs Andy. "But I am very much enjoying the role no matter what gets thrown at us."

MEET THE TEAM

Cathy Thomson

New hospital buildings need new hospital equipment, and Cathy Thomson is in charge of the shopping list.

Cathy has joined the Project Maunga Stage 2 team as the clinical procurement coordinator – but she is a familiar face on campus as she has been a part of Taranaki DHB for more than 25 years.

"I started as a nurse at Hāwera Hospital – and to give other nurses some idea of how long ago that was we were the first hospital in New Zealand to introduce the Pyxis automated drug management machine" she laughs.

Cathy worked in different departments including the Emergency Department before heading into nurse management. She then joined Project Maunga Stage 1 as clinical procurement coordinator.

"I am very proud of that fact that the team delivered Stage 1 on time and on budget, and it was a great learning platform," she says.

She was then seconded back to Hāwera Hospital as manager and stayed for five and half years, and now she has re-joined the team for Stage 2.

Cathy's role is more than just buying items off a list, as she has to abide by government rules of procurement and ensure that she is buying the right equipment to future proof as health requirements change.

"I also have to be fiscally responsible – in short make sure I am getting the best bang for every buck. We are also looking at a Green Star rating for the New East Wing Building, so I have to keep in mind the environmental impact and sustainability of the equipment we use."

She also works with staff looking at what improvements can be made to clinical processes to enhance patient experience and outcomes.

"You can't just move a department into a new building and continue with the same way of doing things," she explains. "For example, going from a four-bed ward to single rooms requires a different way of doing things so we can be efficient.

"New equipment will also change some of the processes so together

we need to look at how everything works, how our doctors and nurses carry out their patient care, and make sure we have new processes ready to go. It is challenging work because you have to evaluate even a slight change in practice to be sure it doesn't lead to unwanted or unexpected consequences."

She says she loves being part of a team, especially in a place where everyone knows everyone and people help and support each other.

'I really can't see me working anywhere else," she says with a chuckle.

PROGRESS UPDATE

Renal Building

We are really beginning to see what the renal building will look like once all the scaffolding is taken away – and it's going to be stunning.

The external cladding going up is created from reclaimed telephone poles which is machined to order by New Zealand company LMA Timbers.

Using hardwood cladding provides a virtually maintenance-free, durable, sustainable and cost-effective finish to the exterior walls.

Work inside is also progressing as we move closer to the unit opening later this year.

NEWB

AMBULANCE BAY

The arrival of the pre-cast concrete panels at the beginnning of April for the new ambulance bay was an exciting moment because for the first time the build went up instead of down!

The panels are huge – measuring between 3.9m x 6.7m (high) to 5.8m x 4.8m (high) – and weigh on average around 10 – 12 tonnes with the biggest tipping 17 tonnes.

It was lucky that senior site manager Philip 'He-Man' King was available to hold them up as they were put into place – thanks Philip!

BASE ISOLATORS

Ensuring our new state of the art hospital can withstand seismic activity has been a crucial and defining element to the design and planning of the new buildings. It is exciting to see these plans becoming reality with the delivery of the base isolators, which will be the focus of the New East Wing Building's foundations, absorbing earth tremors so the building itself moves as little as possible.

PHOTO: www.latteygroup.co.nz

SCREW PILING

Screw piling is well underway by Lattey's Engineering. Because the top level of Taranaki geography is considered 'soft' by building standards, foundations for NEWB need to reach more than 25m down, and this system is the best solution.

The piles are made of round hollow steel and equipped with helices, and are installed by winding them into the ground, pretty much like you would a screw into a piece of wood – hence their name.

Once the screw piles have been installed, they will be filled with concrete, thereby increasing their load-bearing capacity.

Screw piles are very quiet to install, especially when compared to pile driving, and there is very little vibration – which is good news for the hospital and local residents.

PHOTO: www.latteygroup.co.nz