



Development and Construction matters

The Government last month provided updated information on its **Public Housing Plan 2020-2024** about the location and number of additional public housing places planned between now and to June 2024.

Kāinga Ora – Homes and Communities will deliver the vast majority of the additional 8,000 homes announced in Budget 2020, which will mean consistency of construction activity over the next few years.

Kāinga Ora is delivering the largest number of new state homes in decades to help meet the rising demand in many locations.

Over the past three years, we have accelerated the pace and scale of new homes being built and **our large scale development projects**.

Our extensive civils programme of work to prepare build-ready land has now set up a large and sustainable pipeline of housing delivery. In Auckland we have 34 hectares of land currently under development in our large scale projects, totalling more than 120 superlots.

This delivery is supported by the funding and decision-making mechanisms and frameworks we've put in place in recent years.

Through capacity and long-term contracts, we are strengthening our partnerships with our build and development partners, with flow-on surety of work for their sub-contractors and suppliers.

The use of innovative approaches like offsite manufacturing is seeing more homes built more quickly and Kāinga Ora is financing its activities by raising capital through its **bond issues**.

In the seven months until the end of January 2021, Kāinga Ora delivered more than 1,300 newly built homes and demolished more than 300 old state houses, paving the way for redevelopment of our land for more public housing.

We currently have more than 3,600 homes under construction or contracted to be built, with over 4,500 homes in the planning stage.

With demand for public housing continuing to grow, we are always looking for ways to do more.

Our priorities

- › **Delivering the Public Housing Plan**
- › **Investing in innovation**
- › **Facilitating stormwater upgrades**
- › **Reducing waste on site**

Message from our land development, construction and urban planning leaders

The announcements from the Government during February that the country was shifting alert levels were timely reminders of how quickly the COVID-19 situation can change. We've been here before and each time we experience an alert level change we get better at responding and we also learn more about how we can best support one another.

Please continue to refer to the **CHASNZ website** for the latest COVID-19 construction protocols. As always, feel free to reach out to your Kāinga Ora contact person if you have questions.

New site clearance panel

Our work in sustainability, as outlined in **Building Momentum – our construction plan for future homes**, puts greater focus on reusing and recycling materials when clearing land for development and during construction.

Kāinga Ora recently set a target of diverting 80% of materials from landfill across our developments in Auckland, with diversion targets for other regions to follow. We have also established a

national target to relocate 7% of state houses from development areas.

We will soon be seeking applicants for a new site clearance panel, made up of three sub categories; house relocation, deconstruction and demolition contractor panels. As part of this, existing demolition contracts will be amended to include requirements for waste minimisation and broader outcomes.

A notice will be posted on Tenderlink in coming weeks asking for applicants for the new sub categories. Existing panellists will be contacted to transfer over to the new contract, and will have the option of applying for new sub categories. If you have any questions, please contact our Procurement team at panels@kaingaora.govt.nz.

Renewing and upgrading older buildings

Kāinga Ora is renewing and upgrading some of our older buildings through our Complex Remediation Programme. Work is now complete on some **1960s 'star block' apartments in Maitland Street in Dunedin**, which included new roofing,

insulation, double-glazing, bathroom and kitchen facilities. The second stage of the project will start in March and take about a year to complete.

A key challenge for the programme is enhancing the thermal performance of existing concrete structures, which did not historically have insulation. We're looking at some solutions that are relatively new for New Zealand.

Our contractor is working with a specialist to install insulation onto the exterior of a complex at Jackson Street, Wellington, with a new cladding system added to protect the insulation layer. Lessons learned from this project will be rolled out to other remediation projects, including other star blocks in the Wellington region and elsewhere.

More than 270 homes have been refurbished. About 100 additional retrofit units are underway with plans for 1,100 more to be completed over the next 18 months across New Zealand.

Please keep in touch and sign your colleagues up to receive this bulletin by emailing updates@kaingaora.govt.nz.



Patrick Dougherty
General Manager
Construction and
Innovation



Caroline McDowall
General Manager
Commercial



Mark Fraser
General Manager
Urban Development
and Delivery



Katja Lietz
General Manager
Urban Planning
and Design

Kāinga Ora ramps up OSM programme

Building Momentum identifies innovation as a top priority in the build space. As part of our commitment to this, Kāinga Ora is expanding its innovation unit to help boost New Zealand's offsite manufacturing (OSM) capabilities. Heading the Building Sustainability, Innovation and Standards team is **Rohan Bush**, in the newly-created role of Director.

"Kāinga Ora is committed to significantly increasing OSM capability and capacity in New Zealand. New jobs are being created to support research and innovation partnerships," Rohan says.

Currently, about 12 percent of state homes under construction or in design utilise OSM techniques. A further seven market projects are also at various stages of development and include a range of housing types from terraced housing to large apartment buildings.

To help further boost the industry, Kāinga Ora will be expanding its OSM pilot programme, enabling the organisation to trial and evaluate more new products, design solutions, building methodologies and offsite techniques.

A standout pilot is the 18-home **Busby Street development** in Blockhouse Bay, Auckland, built by Miles Construction. The three-storey walk-up apartment buildings combine a mix of OSM technology, including Cross Laminated Timber (CLT) panels from Xlam. Engineered light timber frame panels and factory-built bathroom pods from Concision are also used.

"These types of projects are critical and provide us with valuable learnings moving forward," said Concision General Manager Tony Whale. "The backing of Kāinga Ora provides us with long-term certainty and the ability to improve and refine our processes."



The Busby Street project utilises bathroom pods, manufactured light timber frame panels, CLT structural panels and air-stairs.

In another show of commitment, Kāinga Ora is also developing an offsite plan to help drive innovation and output.

Key to success will be collaboration and cooperation. To that end, Kāinga Ora will share learnings from new pilot programmes with industry and sector players. Forging innovative partnerships with industry, academia and other stakeholders will also be a priority.

To participate in Building Momentum's success, please get in touch with interest and feedback via buildingmomentum@kaingaora.govt.nz

'Boring' work provides essential stormwater upgrade

A 150-metre long underground tunnel marks the completion of significant stormwater improvements as part of the **Northcote Development** in Auckland.

This project represents a partnership between Kāinga Ora, civil works alliance partner **Piritahi** and Auckland Council's Healthy Waters. The infrastructure upgrade will protect the suburb during heavy rainfall events and significantly reduce major flooding issues for Northcote.

"With around 1500 new homes being built in the Northcote Development, the whole stormwater network needed to be upgraded," says Project Manager Umesh Daya.

"It was a necessity to enable growth in the area and to future-proof the suburb for generations to come."

Several different stormwater options were considered, but the most feasible solution was using a tunnel boring machine (TBM) to install an underground drainage system.

It was also considered the safest, most cost-effective and efficient solution. It ensured disruption to neighbouring residents was minimised, while allowing the tunnel to follow the preferred path.

In September 2020, the 40-tonne TBM arrived in Northcote and was lowered into a seven-metre deep hole in the ground to start its 150-metre journey and enable 2.1-meter diameter stormwater pipes to be laid.



The tunnel boring machine is lowered into a seven-metre deep hole.

A special rock apron is being built at the outlet, to slow the flow of water during heavy rainfall. The rock apron uses 600 tonnes of basalt taken from works within another Kāinga Ora large-scale project in the **Ōwairaka** neighbourhood.

This will help to maintain the natural flow and ecology of the stream and prevent erosion from high volumes of water.

The underground tunnel is just one part of much wider stormwater improvements in Northcote.

"These largely unseen, underground projects are critical to the future resilience of the growing suburb," Umesh adds.



24 HOUR SUPPORT LINE 0800 111 315

FREE TEXTING 5353

WEBSITE www.mates.net.nz