SOUTHBASE

Rapid deployment of OSM SOLUTIONS

Introduction

Established in 2013, Southbase has developed into an industry leader in New Zealand on delivering Modular projects within live environments in a Design and Construct capacity. Leveraging digital technology and technical expertise to design for manufacture and assembly (dfMA) we are able to provide high quality construction planning, supported by 4D methodologies to deliver a high-quality construction ready designs that have minimal impact on stakeholders and users.

Rapid Deployment:

We have a proven design team experienced in rapid delivery and consenting, ensuring quick project initiation and approvals.

Our volumetric offsite manufactured buildings enable foundation and site works to proceed concurrently with the building's construction, significantly compressing timelines.

We offer "ready-to-go" designs, further streamlining the planning phase.

High Quality:

We employ advanced QA techniques, utilising digital technology throughout the manufacturing process to ensure superior quality.

Our buildings are designed and delivered by a team with vast experience in critical sectors like health, ensuring specialised requirements are met.

Flexible:

Our designs allow for the layout to be modified and buildings to be relocatable, providing adaptable solutions for evolving needs.

The absence of structural bracing components within the structure permits internal walls to be easily moved, offering greater internal layout flexibility.

Both the building and foundations can be reused on another site, maximising long-term value.

Our structure and cladding are designed for a 50-year lifespan, demonstrating durability and sustainability.

Standardised:

We can repeat the same design across multiple sites nationwide, ensuring consistency and efficiency.

No changes are required to the structure or fit-out for different sites, simplifying replication.

We have multiple "ready-to-go" foundation solutions to suit diverse site conditions.

Fast Commissioning:

We prioritise pre-commissioning buildings where possible to minimise onsite disruption.

Our approach includes single onsite connections to existing infrastructure, speeding up the final commissioning phase and reducing impact on operations, particularly crucial for sensitive environments like hospitals.

National Partner:

As a single delivery partner, we can deliver nationally across multiple sites, offering streamlined project management for our clients.

We maintain exclusivity with modular suppliers for both the North and South Islands, ensuring consistent access to high-quality OMB solutions across New Zealand.

Nationwide experience

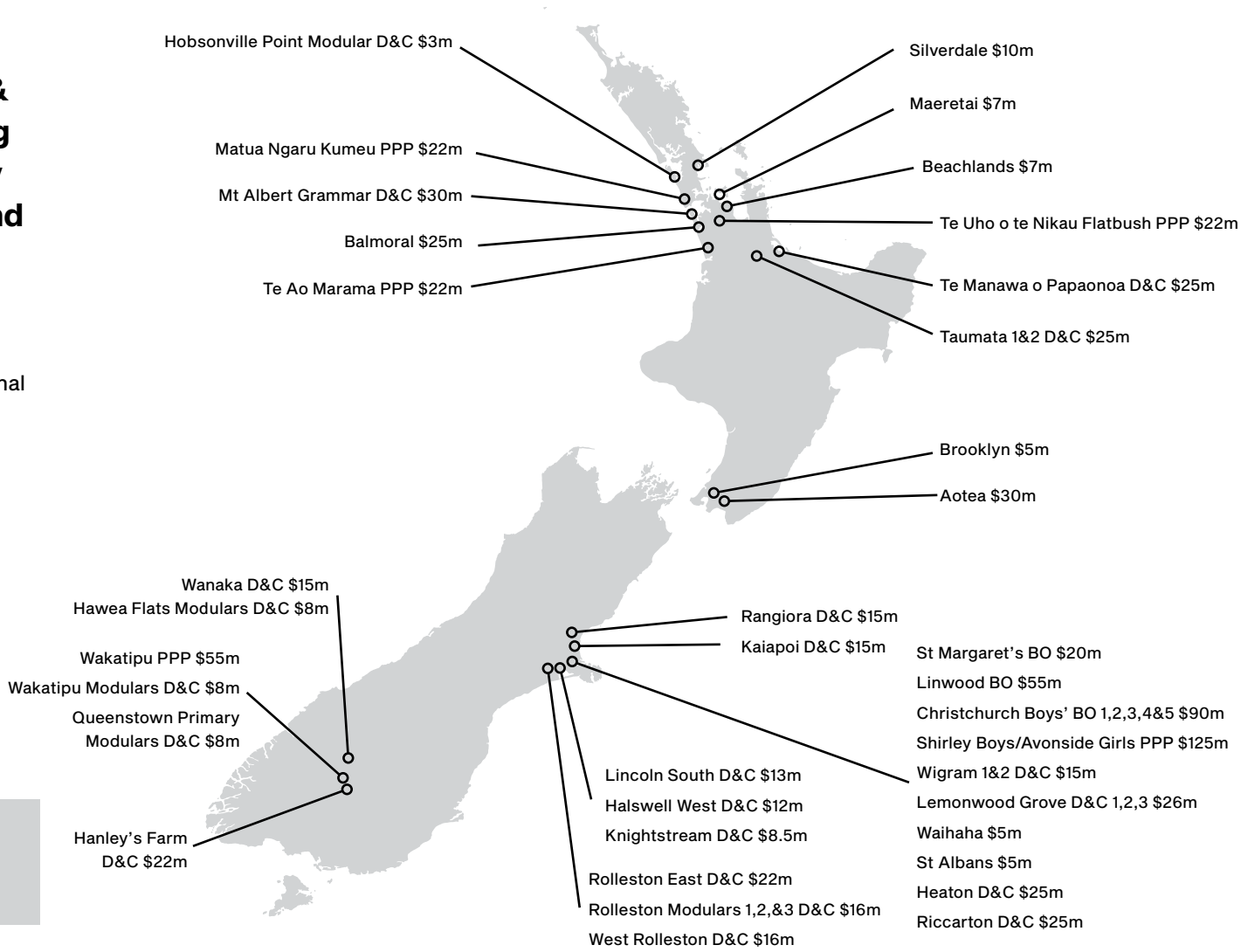
For the last 10 years Southbase has been successfully delivering projects using repeatable design & OSM technology under a managing contractor model to deliver rapidly deployed infrastructure on time and on budget as outlined through our MOE relationship Nationwide.

The PPP Expansion design has been generated through refinement and expertise built from a national delivery programme of schools:

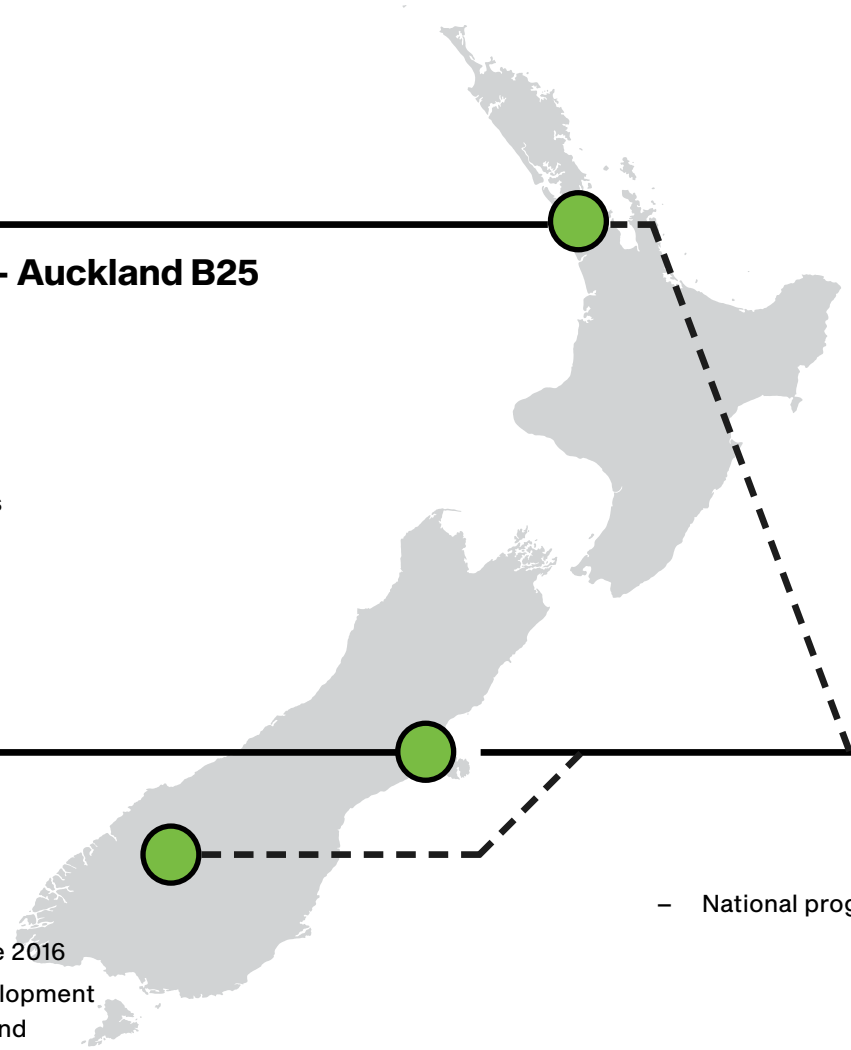
- 50+ School Projects
- 10+ YR MOE Relationship
- 800+ Teaching Spaces
- 1-3 Levels
- Volumetric Modular
- Panelised Modular
- Repeatable Design
- Build Only, D&C, ECI & PPP Contracts
- Live School Environment

Key:
D&C - Design & Construct
PPP - Public Private Partnership
BO - Build Only

Southbase has completed 26 D&C projects and 5 PPP projects as demonstrated in the following image:



Proven delivery in rapid deployment of OSM solutions



Short Term Rapid Roll Growth – Auckland B25

- $25m Project
- Completed on budget
- 10 Schools across Auckland
- True collaboration
- Designed, consented and built in 6 months
- 46 Teaching spaces for 1,300 kids
- OMB, repeatable design

OCHT (Otautahi Community Housing Trust) development

- $20.5 million Project
- Largest project undertaken by OCHT since 2016
- Largest community housing provider development currently under construction in New Zealand
- 90 homes in 14 separate blocks
- Completed ahead of programme for SP1 and SP3

National Modular Programme

- $15m project
- National programme across Auckland, Queenstown & Christchurch
- Designed, consented & built in 6 months
- Low-carbon, lightweight timber-framed design
- Circular design solution with relocatable buildings
- Constructed in live education environments
- 4D staging plans ensured safety & no major incidents

Short Term Rapid Roll Growth – Auckland B25

Client
Ministry of Education / Crown Infrastructure Delivery

Location
Auckland, New Zealand

Dates
Sep 2024 – Feb 2025

Contract Value
$25m

Contract
PCSA to a NZS3916 D&C

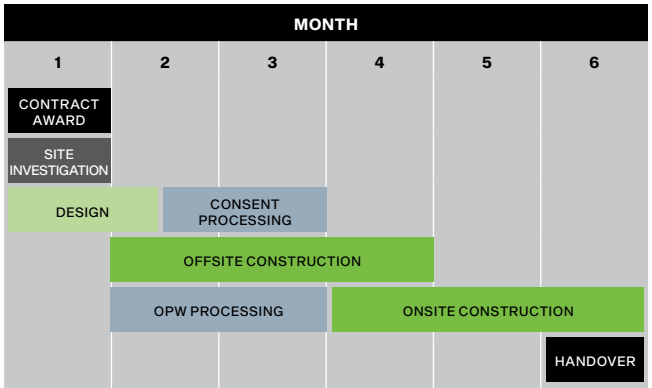
Scope
Delivery to design, consent and build 46 teaching spaces, across 10 Auckland school sites to accommodate 1,300 kids.

Sustainable Construction Practices
The buildings were inherently low-carbon being light-weight timber framed. Steel microscrew piles were used for the foundations with timber posts. This eliminated the need for concrete foundations and allowed for the buildings to be relocated in the future, providing a circular design solution.

Live Environment
All modular classrooms were delivered before the school day started, to minimise disruption to learners and increase onsite safety. Virtual 4D staging plans were used for effective communication with all stakeholders.

Health & Safety
Over 36,000 hours worked across 10 sites with no major health and safety incidents.

Quality
All sites were delivered in a defect free state and exceeded expectations of the Ministry of Education, Crown Infrastructure Delivery and other stakeholders.



National Modular Programme

Client
Ministry of Education

Location
Auckland, Queenstown, Christchurch – National

Dates
July 2020 - Dec 2020

Contract Value
$15 million

Contract
NZS3916 D&C

Scope

Our first rollout of Modular Classrooms in Hobsonville Point Primary School, Wakatipu High School and Rolleston College. The modular classrooms had been designed to ensure consistency from one project to another meaning that the design and teaching spaces are known from the outset which provides efficiencies in the fabrication and installation.

Sustainable Construction Practices

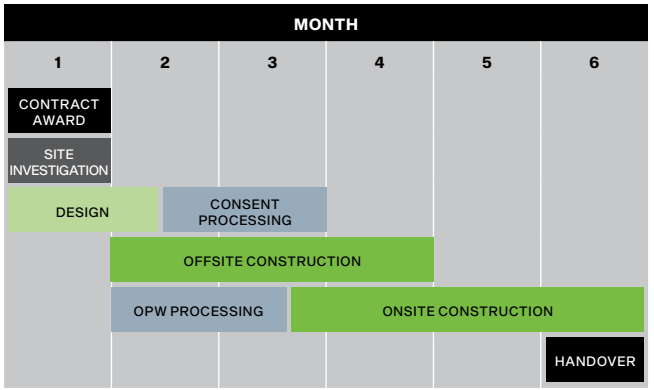
The buildings were inherently low-carbon being light-weight timber framed. Steel microscrew piles were used for the foundations with timber posts. This eliminated the need for concrete foundations and allowed for the buildings to be relocated in the future, providing a circular design solution

Live Environment

All sites were constructed in live education environments, detailed logistic planning and approval processed were adhered to ensure that the safety of the students as well as the public.

Health & Safety

4D staging plans were used to communicate with local authorities, Ministry of Education and the school for the transport and delivery of the modular units. Leading to no major incidents onsite.



OCHT Brougham Street Development

Client
Otautahi Community Housing Trust (OCHT)

Location
Christchurch

Dates
Construction Start: January 2020 - May 2021

Contract Value
$20.5m

Contract
NZS3916 D&C

Scope

This development is the largest project undertaken by OCHT since its establishment in 2016, and it is currently the largest community housing provider development under construction in New Zealand. The project includes 14 separate blocks of units, divided into three separable portions, totalling 90 homes. These homes consist of:

- 70 x 1-bedroom units
- 14 x 2-bedroom units
- 3 x 3-bedroom units
- 3 x 4-bedroom units

All units come with either a balcony or courtyard, landscaping, communal areas, and car parking. The units are designed to be warm and dry, achieving a Homestar 7 design rating. They feature higher levels of insulation, thermally broken windows, heat pumps in each unit, smart hot water cylinders, mechanical ventilation systems, and high acoustic standards. The units are all 2-storey timber-framed dwellings, and offsite prefabrication was used for rapid construction. Wall panels were provided with pre-fixed RAB and pre-drilled holes for services. Floor cassettes and roof cassettes were prefabricated into one assembly offsite for each unit and then craned into place. Universal design principles were considered, allowing several units to be easily converted to full accessibility as needed.

The design incorporates features to help with tenant management and foster community. The site is divided into three communities, each with its own entrance and distinctive roof colour. Communal spaces, children's play areas, and general landscaping are positioned to maximise passive surveillance and encourage community interaction. Each unit has a fenced yard to balance tenant privacy.

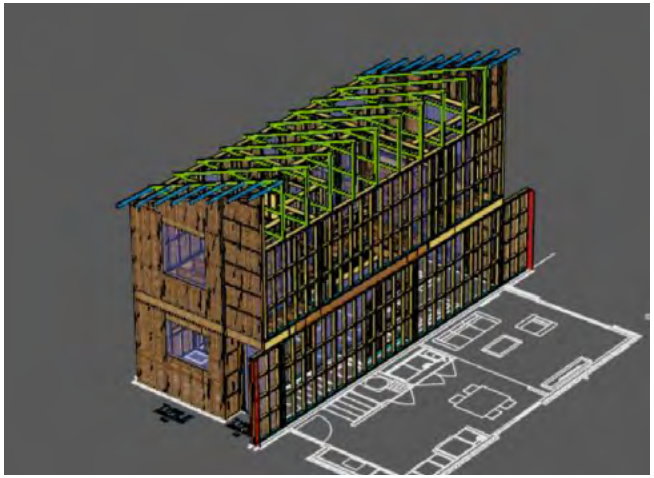
The dwellings are predominantly clad with brick veneer, with the remainder in metal cladding, ensuring longevity and minimising maintenance for OCHT. Level access is provided around the buildings for cleaning and future maintenance. Located on Brougham Street, a busy state highway with many truck movements to Lyttleton Port, the dwellings incorporate acoustic mitigation measures, including cladding selection, laminated glass, and internal linings and insulation.

Sustainable Construction Practices

The units were constructed using offsite prefabrication, allowing for a rapid build. Wall panels were provided with pre-fixed RAB and pre-drilled holes for services. Floor and roof cassettes were prefabricated into single assemblies offsite and then craned into place. The dwellings are primarily clad with brick veneer and metal cladding, chosen for longevity and to minimise ongoing maintenance requirements.

Quality

The client was very satisfied with the overall quality of the development. Southbase handed over all 90 units internally defect-free at practical completion.



SOUTHBASE

Determined to deliver

southbase.co.nz