

INNOVATION, SUSTAINABILITY + DIGITAL IN PRACTICE

ISDIP

ISDIP 042	Waste Minimisation at Eastern Busway	
Date	February 2023	
Business Unit	Construction	
Project & Region	Eastern Busway - Auckland	
ISC Themes	<ul style="list-style-type: none">• Management and Governance• Using Resources• Emissions, Pollution and Waste• People and Place• Innovation	

1 What Happened?

The Eastern Busway Alliance (EBA) is building a new busway in East Auckland for Auckland Transport (AT). Part of the project requires demolition of approximately 100 houses. Traditionally a team would engage a demolition contractor to demolish the houses in bulk and send the waste to landfill – an efficient but ultimately wasteful method. Project teams are today being held to a higher standard with regards to reuse, recycling, and diversion from landfill.



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2 What Are We Doing Differently?

Eastern Busway leads the way in material reuse and diversion from landfill.

The Alliance, consisting of AT, Fletcher Construction, Acciona, AECOM and Jacobs, has a diverse range of sustainability objectives. The team has been putting sustainability into action with a dedicated approach to site clearance. The targets include 5% of houses to be relocated, and 80% of the materials to be diverted from landfill and an ambitious 3% target for material to be reused. The material reuse focus has been a successful way of demonstrating the team's commitment early in the project.

Sarah Lindberg, Alliance Sustainability lead, has led the small team managing this work. The on-site success started well before a digger arrived on-site. Through Sarah's guidance the Alliance has set itself dedicated project targets, including a target to redirect recovered material from landfill and provide new uses for valuable resources. The first action was to engage the whole team into this new way of working, with material reuse being a topic of discussion from board and leadership meetings through to weekly stand-ups, last-planner meetings, and site discussions. Other key skill sets and support include **Tamara Yeabsley** from the procurement team who worked with Sarah to ensure the approach was embedded into procurement and undertook detailed analysis of the submissions to engage a combination of subcontractors in a way which would maximise relocation and diversion from landfill while staying within budget. The last piece of the puzzle was having a dedicated resource, **Claude Dewerse**, to work with the demolition contractors and material receivers, to identify and remove obstacles to material reuse; and **Lucila Haddad** who has been collecting material reuse data.

This work has seen a range of great community outcomes, setting a great example for future projects.

Claude recently shared an overview of the impact his team is making at a Fletcher Lunch and Learn, a valuable distribution of learning from the project. He outlined the traditional challenges with material recovery, which includes having the time and funds in the programme for safe deconstruction, and a market to take the resources.

"It is great to see the difference a dedicated approach can make, and Claude's expertise and passion can clearly be seen in the results," says Sarah. "Not many projects operate at this scale, so this project has the ability to grow the networks, contractors, and market for reused materials. That makes a significant contribution to future efforts in this space."

Projects need to be aware of the opportunities right from the commencement of planning to allow time and be able to set up the right relationships to undertake the work. Equally, it can be challenging to store the materials for prolonged periods, so having a market and network for their distribution is important.

Claude outlined several of the key contributing relationships, including:

- Nikau and Yakka (the main demolition contractors) – buy-in from the subcontractors is key to getting site access for the reuse specialists. Regular contact during the week also serves to keep material reuse opportunities front-of-mind, provides a chance to discuss new material recovery opportunities or barriers, and helps with keeping on top of material reuse data collection.

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- Jacobs Demolition – working with Nikau and Yaka Demolition, this specialist contractor has been recovering native timber flooring and floor joists which is a valuable taonga.
- Auckland Second Hand Carpets – a unique small company that reuses and repurposes carpet and underlay for sale.
- Onehunga Community Recycling Centre (OCRC) – Auckland Council opened this facility in 2022 to divert good material from landfill. The OCRC team are inducted to the site, which has been invaluable to have them able to recover materials such as windows, insulation and timber.
- Ara Skills – experiences for students interested in construction have been provided, with students recovering materials and using it for carpentry experience.

Jacobs Demolition



 Eastern Busway

Auckland Second Hand Carpets



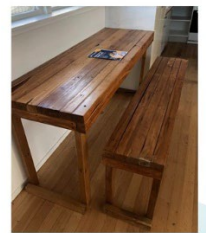
 Eastern Busway

Onehunga Community Recycling Centre (OCRC)



 Eastern Busway

Ara Skills



 Eastern Busway

The team's dedicated efforts have been highly successful to date. Of note, the team has been able to achieve over 20% of house relocations, a significant improvement on its target.

In addition to the main housing material reuse partners, the project has been able to support and serve the local community:

- Timber from native trees such as Titoki have been provide to local Iwi for Māori carving.
- Plants and landscaping material has been recovered with the help of local community gardening groups, and subsequently provided to community groups' projects.
- Material has been provided for local community residents, charities, and hobbyists.

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Recovery of this material has allowed the Alliance to connect with, and give back to, the local community in a very practical and tangible way.

Trees from William Roberts Extension



Titoki for Māori carving



Wood for wood turning

Oak and Grevillea - milling for furniture timber



Plants and gardens



Plant recovery



Community Garden
429 Tamaki Drive

Wiseguys Community Housing

- 60 sets of curtains for 6 houses
- 2 windows and frames for house renovation
- 3 washing lines
- Plants to beautify gardens



Materials for local residents

- Bricks for 3 different local residents
- Wood for making an electric guitar
- A sink for a day-care mud-kitchen
- Tongue and groove flooring for making tables



The Lunch and Learn session recording can be viewed here: [BPC, Higgins, Fletcher Construction Lunch and Learn 2023-20230202_120209-Meeting Recording \(1\).mp4](#)

3 More Information