

Improved Resource Recovery Through Practical Design:

Lessons from Two Ipswich Projects

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2026

ALTS Conference

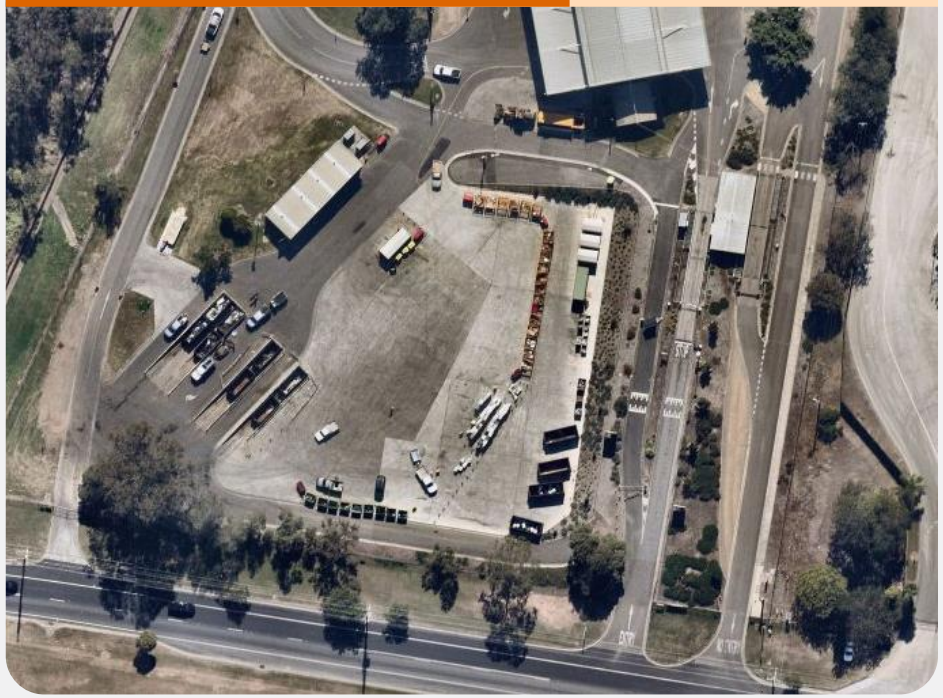
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SAME OBJECTIVES. VERY DIFFERENT SITES.

Each site has distinct constraints, but a common goal of enhancing resource recovery outcomes

RIVERVIEW RECYCLING AND REFUSE CENTRE — RETROFIT



SOUTHERN RESOURCE RECOVERY CENTRE — NEW FACILITY



One project focuses on improving an **existing facility**.
The other designs a facility from **day one.**

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COMPARE AND CONTRAST

RIVERVIEW RECYCLING AND REFUSE CENTRE — RETROFIT

Existing Infrastructure
Existing infrastructure fixed/too expensive to relocate

Existing Traffic Flows
Constrained by existing infrastructure and 1980s site design

Existing Customer Behaviour
Established site and customer behaviour

Value for money investment
Do not over-capitalise on existing infrastructure

SOUTHERN RESOURCE RECOVERY CENTRE — NEW FACILITY

Brownfield Site
Backfilled former underground and open cut coal mine. Complex geotechnical constraints to navigate

New Circulation and Sequence
Front-end Resource Recovery allowing visitors to recover materials and exit without entering the paid disposal area

Establish New Customer Behaviours
Opportunity to establish new behaviours, while recognising the value of consistency across Council's facilities

Future Growth Planning and Staging
Balance the design and initial operating scale to the long-term needs, especially in a very high population growth Council

Same Objectives, Different constraints, **Different Design Responses**

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DESIGN THE JOURNEY, NOT JUST THE FACILITY

The customer journey can influence resource recovery outcomes

1. SITE CIRCULATION	2. DECISION POINTS	4. RECOVERY OPPORTUNITIES	3. CONFLICT POINTS
As simple, intuitive and safe journey as practical to encourage customer participation.	Customer convenience or confusion may influence whether materials are recovered or disposed.	Clear, visible and convenient drop-off areas where resource recovery behaviours can be encouraged.	Minimise where customer movements, operations and traffic streams interact.

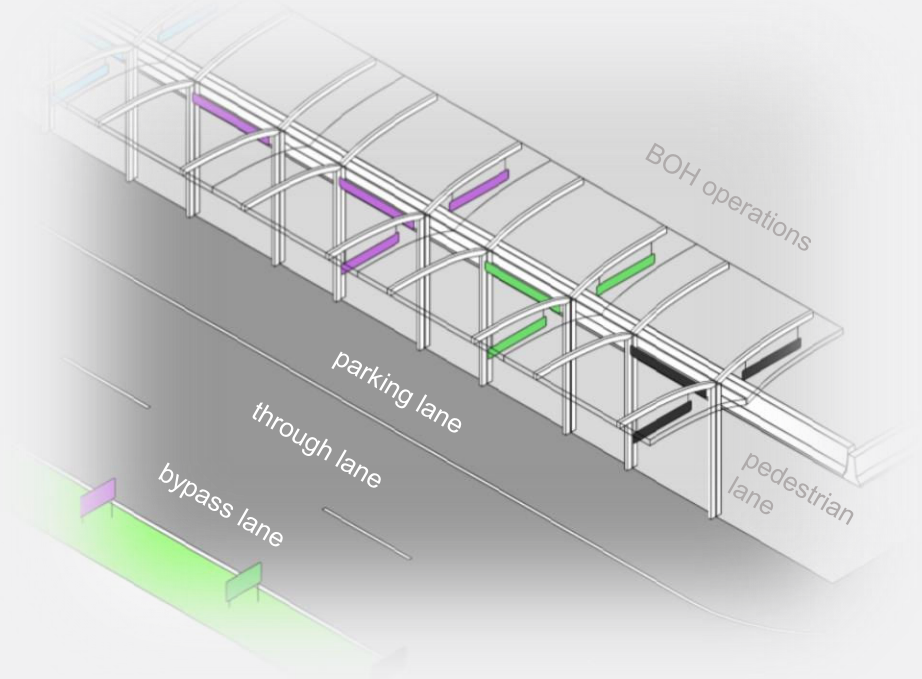
Resource recovery outcomes are affected by **what the customers see**, **when they see it** and **how easily they can act.**

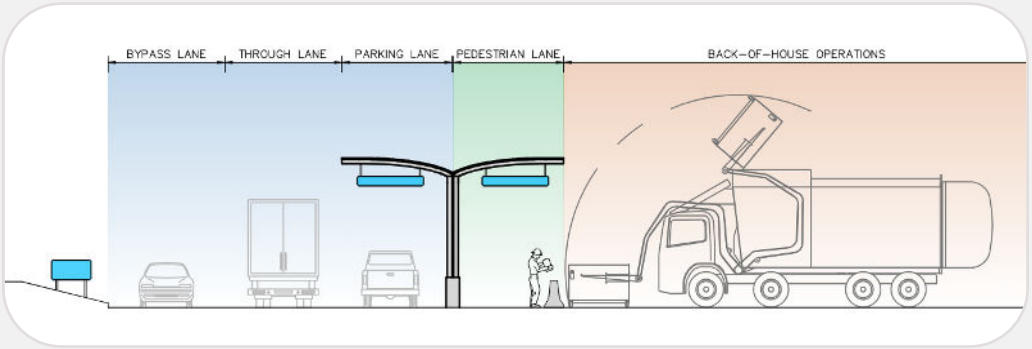
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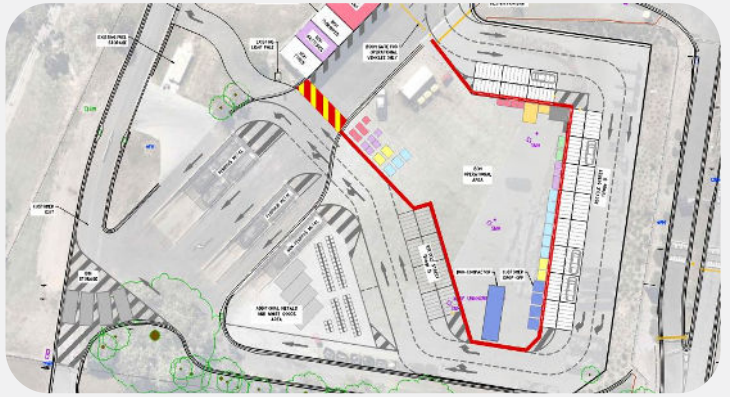
RIVERVIEW FOCUS

Improving an existing facility

- Cost effective solution
- Design around existing footprint and infrastructure
- One way traffic flow through Recycle Street
- Emphasis on clear direction, signage, colour coding
- Weather protection for improved customer experience
- Effective Back-of-House (BOH) operations – no additional staffing
- Customer vehicle, pedestrian and BOH separation







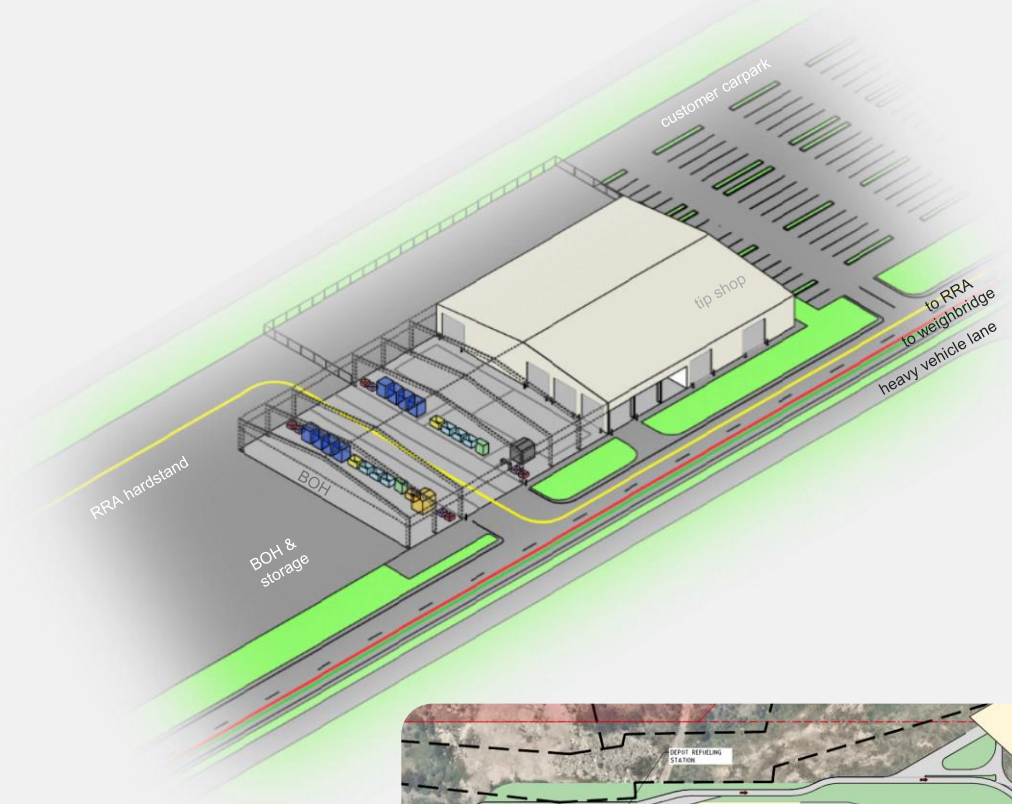
Value came from changing the sequence rather than rebuilding the entire facility.

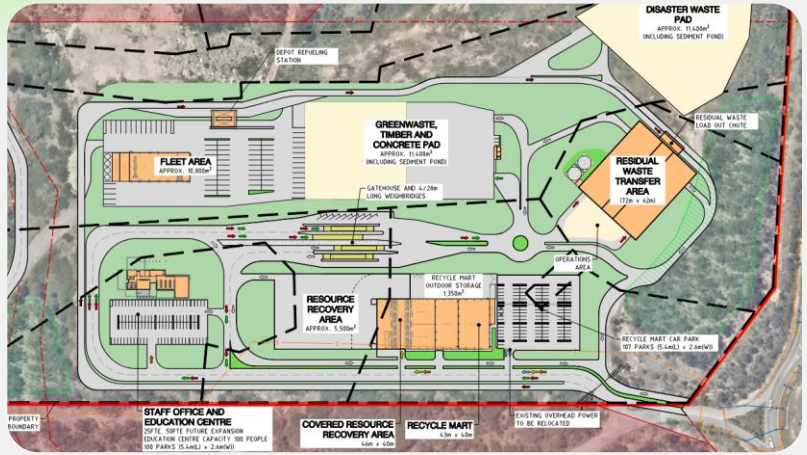
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SRRC FOCUS

Establishing the Sequence from Day One

- Resource Recovery Area (RRA) located upfront prior to paid entry. Direct exit if only dropping off recyclables
- Staged development in-line with budget and growth forecast:
- Stage1: Open area & simple structures
- Stage 2: Primary drop-off area within building and integration with Tip Shop
- Spatial allocation for additional waste streams / capacity
- Integration and space allocation for tip shop item drop-off, Tip Shop Workshop and adjacent resale area





The ‘Brownfield’ site provided more flexibility, but every additional feature had to demonstrate operational value.

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SAME PRINCIPLES, DIFFERENT PHYSICAL ANSWERS

CUSTOMER BEHAVIOUR

Riverview
adapt established patterns

SRRC
establish new patterns

RESOURCE RECOVERY

Riverview
improve visibility and sequence

SRRC
embed recovery in the complete journey

SAFETY

Riverview
target existing conflicts

SRRC
separate movements by design

FUTURE CHANGE

Riverview
retain practical options

SRRC
allow staged development



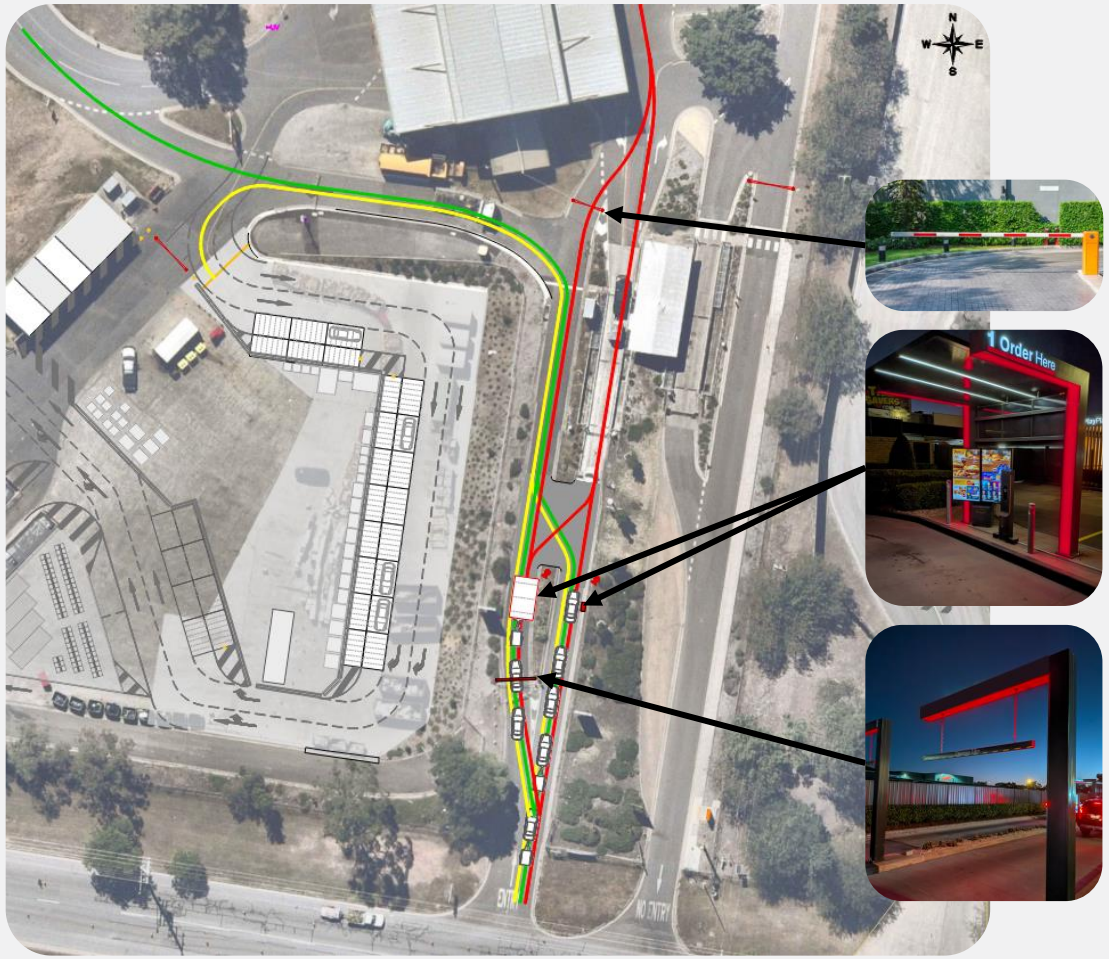
Different constraints demanded different solutions, but the **underlying design principles remained consistent**.

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THE TECHNOLOGY QUESTION STARTED WITH QUEUEING



PROBLEM:

Entry queueing and throughput

CONCEPT:

Remotely assisted tap-and-go payment

TEST:

Integrate established systems

LESSON:

Investigate the operating model before committing infrastructure

Lesson: investigate the operating model before committing infrastructure

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SUMMARY

1

The best resource-recovery solution is not necessarily the largest investment. It is the design that makes better customer and operational outcomes easier to achieve.

2

Riverview and SRRC produced different physical answers because their constraints were different. What remained consistent was the objectives to improve resource recovery participation, safety, and customer experience.

3

Good practice is not a standard layout. It is a consistent method for responding to context.

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FIVE QUESTIONS TO ASK ON ANY PROJECT

1. Where does the customer first need to make a decision?
2. Can decision points be separated from conflict points?
3. Is recovery easier to understand than disposal?
4. Does the customer solution also work for BOH operations?
5. What future change would be difficult to accommodate?

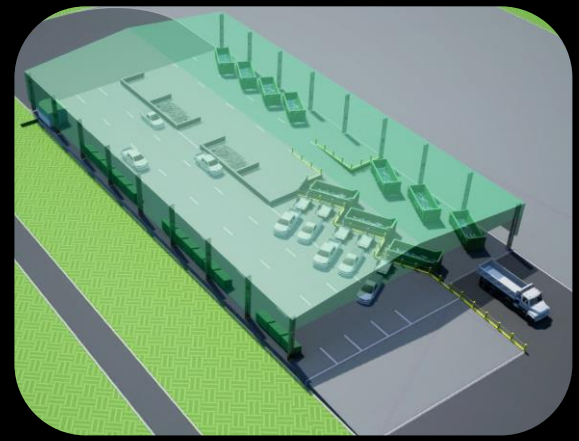
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thank you

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