

Frasers Property Australia
Frasers Edmondson Park Town Centre
Waste Management Plan

March 2016

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1. Introduction

1.1 Frasers Edmondson Park Town Centre

The proposed Edmondson Park development covers 25.16 hectares and is adjacent to the new Edmondson Park railway station in Western Sydney. Previously part of the Ingleburn Army Camp, the site is at the eastern edge of the South West Growth Centres area.

Based on the indicative concepts that have been prepared to support the Concept Plan Modification, the Frasers Town Centre development may have about 912 dwellings across four precincts, a mixed use village-style retail and commercial heart near the rail-bus interchange including community uses.

This report has been prepared to support the Frasers Modification to the Edmondson Park South Concept Plan and sets out how the waste could be managed in the Town Centre. More detailed waste management requirements will be considered as part of the future detailed development applications in accordance with the principles in this report.

1.2 Town Centre Core

The retail area in the Town Centre Core is expected to cover approximately 38,000 m² and include two supermarkets, food and speciality outlets, a tavern, community centre, child care and commercial space.

Waste will be generated from the high-rise residential buildings and the commercial/retail areas.

The Town Centre Core development will be divided into four quadrants. An indicative number of residential dwellings and retail/commercial space in each quadrant, based on the indicative concepts that have been prepared to support the Concept Plan Modification, are shown in Table 1 below.

Table 1 Number of apartments and retail/commercial floor area by quadrant

Quadrant	Orientation	Name	Number of Residential Apartments	Approximate Retail/Commercial SIGFA (m ²)
1	North East	Supermarket	250	22,164
2	South East	Market	110	10,596
3	South West	DDS	443	11,307
4	North West	Cinema	189	832
Total			992	44,899

A waste and recycling system will be installed in public areas that complies with the NSW State Government's Better Practice Guide for Public Place Recycling and uses NSW Government official waste and recycling signage.

1.3 Residential Precincts

Outside the Town Centre Core are three low-rise residential precincts to the south and east.

Residential accommodation in the form of several types of 1-, 2-, 3- and 4- bedroom dwellings are proposed in these areas. The number of dwellings in each residential are shown in Table 2 below.

Table 2 Residential types and numbers

Residential Building Types	Number of Dwellings per Module	Total Number of Dwellings		
		RP1	RP2	RP3
Mews Module Type 1	3	120	111	102
Mews Module Type 2	3	48	15	0
Mews Module Type 3	1	3	5	2
Mews Module Type 4	3	126	117	102
Mews Module Type 5	3	0	0	18
Townhouses	2	50	44	18
Other	1	0	7	4
Total		347	299	246

The Module buildings generally feature three dwellings within each building over two levels.

1.4 Scope and limitations

This report has been prepared by GHD for Frasers Property Australia and may only be used and relied on by Frasers Property Australia for the purpose agreed between GHD and the Frasers Property Australia as set out this report.

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2. Town Centre Core

2.1 Commercial/Retail

2.1.1 Waste Quantities

The mixture of retailers and commercial operations proposed and the area each will occupy over all four quadrants is shown in Table 3 below along with estimates of the amounts of garbage and recycling that may be produced.

Table 3 Retail/commercial Uses, areas and garbage and recycling generation

Use	Approximate SIGFA (m ²)	Garbage per Week (m ³)	Recycling per Week (m ³)
Childcare	3,127	2.4	2.4
Cinema	3,061	17.6	17.6
Commercial	3,979	11.1	13.1
Gym	2,250	1.7	1.7
Market Hall	1,756	4.4	1.0
Medical	1,038	2.5	0.4
Pavilion	2,124	5.9	7.0
Specialty	13,291	37.2	43.7
Supermarket	8,050	78.9	78.9
Total	38,676	161.7	165.9

2.1.2 Waste Handling

Two compactors are proposed to be located in the main loading dock which is situated on the basement level of the North-East Quadrant. One compactor will be for garbage and the other for cardboard. Based on the quantities estimated in Table 3 and assuming each compactor has a capacity of 25 m³, each would need to be emptied on average twice every three weeks. An area of at least 84 m² would be required to accommodate these compactors. Enough heavy vehicle manoeuvring space would also be required and overhead clearance of up to 6 m to allow them to be safely and efficiently serviced.

Other facilities and equipment for separation, storage and compaction of recoverable materials will also be housed in this area. Materials for separation and recovery might include polystyrene, recyclable containers, plastic bags and film, food and organic waste. Additional space would also be required for the positioning of this equipment and to safely use it.

Tenants would bring their garbage and recycling to the compactors in wheeled bins, trolleys or bags. It is understood that there will be a network of back of house areas that will allow tenants to access the main waste area without the need for significant travel through public areas.

Cleaners and facilities management staff would supervise and manage the waste storage area and operate any plant or machinery.

2.2 Residential

2.2.1 Waste Quantities

Table 4 below shows the number of apartments in each quadrant and the total garbage and recycling capacity allowances in each case. Liverpool City Council specifies that for each apartment, 80 L of capacity must be allowed for garbage and 80 L for recycling, per week.

Table 4 Number of apartments and total garbage and recycling capacity allowances

Quadrant	Orientation	Number of Residential Apartments	Total Garbage Capacity Allowance (m ³)	Total Recycling Capacity Allowance (m ³)
1	North East	250	20.0	20.0
2	South East	110	8.8	8.8
3	South West	443	35.4	35.4
4	North West	189	15.1	15.1
Total		992	79.3	79.3

2.2.2 Waste Handling

Each building will feature chutes for garbage and recycling running through all floors and into which residents will place the appropriate material. Garbage and recycling will be collected in 1100 L wheeled bins located in a dedicated basement room at the base of the chutes. Waste will be compacted but recyclables will not.

Bins will be taken by cleaners or facilities management staff to a central collection point in each building, or shared by adjacent buildings, at which Council vehicles will empty them. Cleaners or facilities management staff will manage the rotation of full and empty bins, keep waste areas clean and operate plant and machinery.

Details of the number of apartments in each building in each quadrant is not yet clear, an estimate of the total number of bins for each quadrant is shown in Table 5 below.

Table 5 Number of 1100 L garbage and recycling bins by quadrant

Quadrant	Orientation	Total Garbage Bins	Total Recycling Bins
1	North East	14	14
2	South East	10	10
3	South West	18	18
4	North West	1	1
Total		43	43

3. Residential Precincts

3.1 Waste Quantities

Each household in Liverpool City Council area is entitled to one 140 L bin for garbage, one 240 L bin for recyclables and one 240 L bin for garden organics. Because no dwellings have lawns or gardens of any significance, issuing of 240 L bins to every household for garden organics will not be necessary. Instead, a small enclosure for two 240 L bins for garden organics will be constructed at the end of each block. This will enable residents to dispose of small quantities of garden organics. Council will distribute all bins at the time residents first occupy their dwellings.

3.2 Waste Handling

Residents will dispose of their garbage and recycling in the individual bins stored on their own properties. A storage area for this purpose and large enough to accommodate two 240 L wheelie bins has been included in the design of each dwelling.

Residents will place their bins on the kerbside immediately outside their dwellings for collection by Council's contractor on the day scheduled for this area. In the case of most dwellings this will be at the front of their property. In the case of townhouses, this will be at the rear of their property. The only other exceptions will be in RP1 where the spaces between the front of some buildings and the nearest road are occupied by parks and it will not be safe or convenient for residents to take their bins across the park to the road. Residents in these dwellings will wheel their bins along a footpath outside the front of their properties to the nearest road to the north or south of their residences.

Council uses side-lift collection vehicles to empty kerbside bins. The largest of these, the recycling collection vehicle, is about 10 m long. Council has advised that all corners and turning areas will be designed to accommodate heavy vehicles up to 12.5 m long. GroupGSA has advised that the Mews and other roads are rated for heavy vehicles.

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