

Traffix Group

Waste Management Plan

Proposed Commercial Development
148 Rouse Street, Tenterfield NSW

Prepared for
Shun Hung Pty Ltd

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1. Introduction

Traffix Group has been engaged by Shun Hung Pty Ltd to undertake a Waste Management Plan for the proposed commercial development at 148 Rouse Street, Tenterfield NSW.

This Waste Management Plan (WMP) is intended to act as a guideline for the proposed development and may be subject to the ongoing updates, post-development.

2. Proposal

The proposal is for a commercial development comprising of several uses including a medical centre, pharmacy, childcare centre, bowling alley, cinema and associated cafés.

A breakdown of the development uses is provided in Table 1.

Table 1: Proposed Development Schedule

Use	Size
Cinema (4 cinemas) Associated Café	Approx. 287 seats 115.4m ²
Childcare Centre	184.0m ² (internal areas)
Bowling Alley Associated Café	154.5m ² 142.7m ²
Pharmacy	180.0m ²
Medical Centre	392.7m ²

Waste Collection Facilities

An external bin storage bin storage areas is provided for the development within the on-site carpark. This arrangement will require the removal of 2 of the on-site car spaces.

Waste collection is to be undertaken on-site within the car parking accessway along the relevant building frontage by a private contractor using up to an 8.8m long Rear-Loader vehicle.

A copy of the development plans prepared by Mills Gorman Architects is attached at Appendix A to this report.

3. Waste Management Plan

3.1. Waste Generation

The following table sets out the expected waste generation for the proposed commercial development.

Table 2: Waste Generation Rates

Waste Source	Garbage	Recycling
Cinema ⁽¹⁾ (Assembly – Entertainment)	0.25L/seat/screening	0.5L/seat/screening
Café ⁽²⁾	215L / 100m ² floor area / day	130L / 100m ² floor area / day
Childcare Centre ⁽²⁾	250L / 100m ² floor area /day	250L / 100m ² floor area /day
Bowling Alley ⁽¹⁾ (Assembly – Recreation)	50L / 100m ² floor area /day	50L / 100m ² floor area /day
Pharmacy/Chemist ⁽²⁾	185L / 100m ² floor area /day	60L / 100m ² floor area /day
Medical Centre ⁽²⁾	35L / 100m ² floor area /day	10L / 100m ² floor area /day
Notes: 1. The waste generation rates are based on <i>Waste Management Guidelines</i> by Randwick City Council, noting that no guidelines have been provided by Tenterfield Shire Council. 2. The waste generation rates are based on <i>Better Practice Guide for Waste Management in Multi-unit Dwellings</i> by Department of Environment & Climate Change NSW.		

Based on the above, an estimate of the total waste generated by the proposed development is detailed in Table 3.

Table 3: Expected Waste Generation for the proposed use

Waste Source		Size	Garbage	Recycling
Cinema	Cinema ⁽¹⁾	Approx. 287 seats	2,009L per week	402L per week
	Café	115.4m ²	1,737L per week	1,050L per week
	Sub-total		3,746L per week	1,452L per week
Childcare Centre		184.3m ²	461L per week	461L per week
Bowling Alley	Bowling Alley	154.5m ²	386L per week	77L per week
	Café	142.7m ²	2,147L per week	1,298L per week

Waste Source		Size	Garbage	Recycling
	Sub-total		2,534L per week	1,376L per week
Medical Component	Medical Centre	392.7m ²	962L per week	275L per week
	Pharmacy	180.0m ²	2,331L per week	756L per week
	Sub-total		3,293L per week	1,031L per week
TOTAL WASTE GENERATED			10,996L per week	4,320L per week
Notes: 1. An average of 4 screenings per cinema are expected to show per day. The cinema is to operate 7 days per week. 2. All tenancies are to operate 7 days per week.				

Alternative Waste Streams

We have given consideration of additional waste streams including Cardboard and FOGO in order to reduce landfill or help separate commingled recycling.

In this regard we have estimated:

- FOGO – 20-30% of total garbage waste
- Paper and Cardboard – 20-30% of recycling waste

3.2. Waste Equipment

Based on those rates previously specified, the following provides a summary of the waste storage requirements and the frequency of collection.

Cinema & Café (Total of 287 seats between the 4 cinemas, and average of 4 screenings per day per cinema) Please notify if this is incorrect.

- 2 x 1,100L bins for **garbage** (collected twice per week).
- 2 x 240L bins for **FOGO** (collected once per week).
- 2 x 660L bins for **commingled recycling** (collected once per week).
- 2 x 240L bins for **paper & cardboard** (collected once per week).

Childcare Centre (184.33m²)

- 1 x 240L bin for **garbage** (collected once per week).
- 1 x 240L bin for **FOGO** (collected once per week).
- 1 x 240L bin for **commingled recycling** (collected once per week).
- 1 x 240L bin for **paper & cardboard** (collected once per week).

Pharmacy & Medical Centre

- 2 x 1,100L bins for **garbage** (collected once per week).
- 1 x 240L bin for **commingled recycling** (collected once per week).
- 1 x 240L bin for **paper & cardboard** (collected once per week).
- 1 x 240L bin for **medical waste** (collected on demand).

Bowling Alley & Café (internal floor area of café has been assessed as per your instruction given that the outdoor area is to serve as a seating arrangement for takeaway café purchases).

- 2 x 660L bins for **garbage** (collected once per week).
- 4 x 240L bins for **FOGO** (collected once per week).
- 1 x 1,100L bin for **commingled recycling** (collected once per week).
- 2 x 240L bin for **paper & cardboard** (collected once per week).

Details of the suggested bin locations are provided in the following figure.

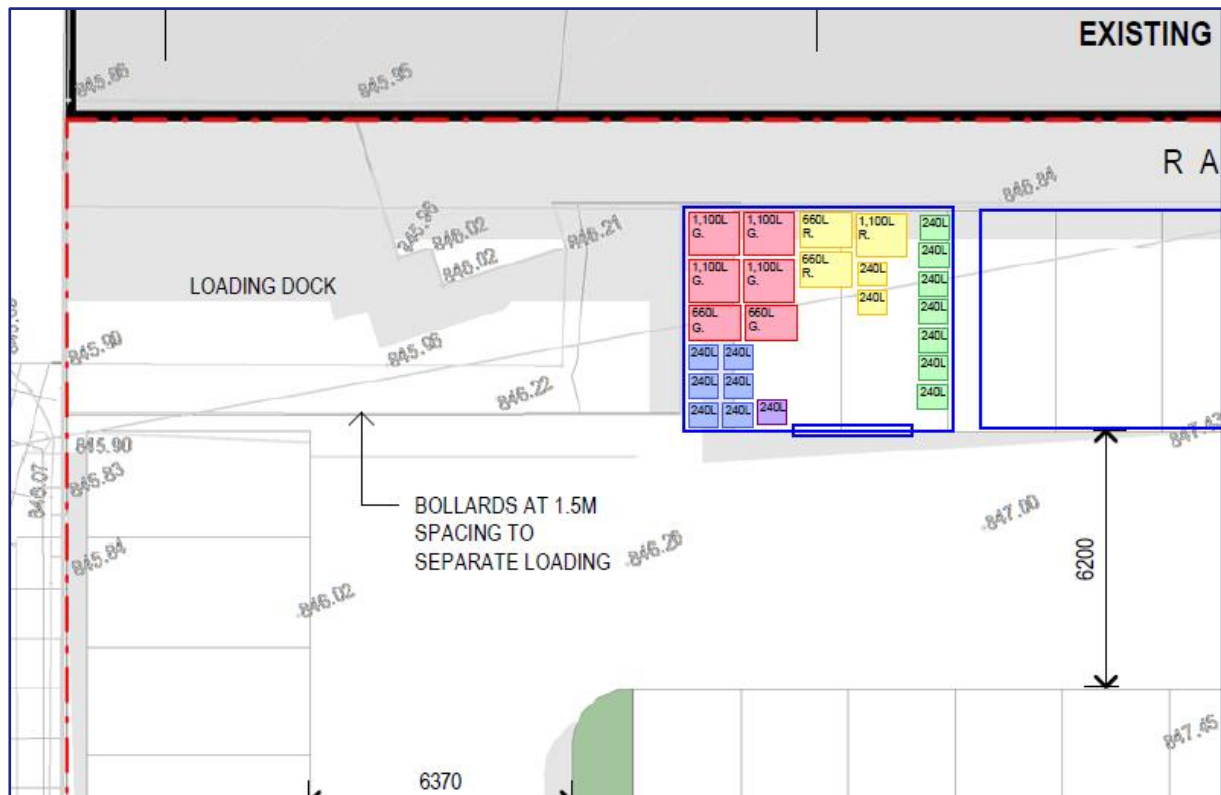


Figure 1: Suggested Bin Enclosure Location

Table 4: Bin details and colours

Waste Stream	Bin Capacity	Dimensions (H x W x D) (Note 1)	Bin Lid Colour (Note 2)	Bin Body Colour (Note 2)
Garbage	1,100L 660L	1,330 x 1,240 x 1,070mm 1,200 x 1,260 x 780mm	Red	Dark Green
Recycling	240L 1,100L	1,060 x 585 x 730mm 1,330 x 1,240 x 1,070mm	Yellow	Dark Green
Paper & cardboard	1,100L	1,330 x 1,240 x 1,070mm	Blue	Dark Green
FOGO	240L	1,060 x 585 x 730mm	Lime Green	Dark Green

Notes:

- Bin capacity and dimensions are provided as an indicative dimension, sourced from Bin Supplier, 'Sulo'.
- Bin lid and body colours are based on the bin colour scheme set out within the *Better Practice Guide for Waste Management and Recycling in Multi-unit Developments*.

3.3. Waste Systems

The waste management systems of the proposed development comprise of the following components:

- Immediate smaller bins to temporarily store garbage and recyclable waste prior to transferring to the Mobile Garbage Bins (MGB) within the bin store,
- MGBs, and
- Bin Store Area.

3.3.1. Waste Streams

The waste generated by the proposed development will be separated and managed into the following waste streams, as detailed below.

Table 5: Waste Streams

Waste Type	Waste Management
Garbage	Staff shall place general landfill waste in tied plastic bags and dispose of the bagged garbage directly to the specific bins within the ground level bin store.
Commingled Recycling	Staff shall dispose of loose recyclable items directly to the specific bin within the ground level bin store. Cardboard items shall be folded appropriately.
Cardboard	The gym will generate negligible cardboard waste. Any cardboard shall be disposed of via the commingled recycling bin.
Hard Waste	Staff shall dispose of hard waste via a private contractor on a required basis.
Green Waste	The property manager will be responsible for the collection and disposal of any garden organics via a landscape maintenance contractor.
Medical Waste	Specialist medical waste generated by the medical centre use would be collected by private contractor as required. Bins for this waste would be stored internally thin the medical centre and manually collected as required.
Other	Staff shall dispose of electric waste including batteries, phones, computers etc via a private contractor on a required basis or a nearby recycling facility.

3.3.2. Bin Storage Areas and Access

Bins will be stored appropriately near the loading bay within the tenancy. Pedestrian access to the bin storage is available internally.

Indicative locations for the bins are illustrated in **Error! Reference source not found..**

3.3.3. Signage

Appropriate signage will be displayed on the bins, within the bin storage area as illustrated in Figure 2.

The signage will assist in guiding and encouraging staff of the proposed development to dispose of waste correctly into the appropriate waste streams.



Figure 2: Waste Signage Examples

3.4. Waste Collection Arrangements and Vehicle Access

A private contractor will be engaged to collect waste via an 8.8m long Rear-Loader vehicle.

The waste truck will prop temporarily within the loading bay and transfer the bins from the bin store rooms to the waste truck.

Suitable access is available directly from Crown Street in order for this activity to occur as required with no amendments to the existing crossover serving this bay required.

4. Amenity Impacts

It is the responsibility of the property manager to carry out the ongoing maintenance of all waste areas to minimise the following amenity impacts.

Ventilation/Odour Prevention

For developments using forced ventilation or air-conditioning system, adequate ventilation will be provided within the bin store area in accordance with AS1668.2 to ensure waste-related odours are minimised. Bin store areas will be frequently cleaned to prevent the retainment of odours.

Noise Reduction

The waste facilities will comply with BCA and AS2107 acoustic requirements. Private waste collection will follow Council's and EPA guidelines to ensure acoustic impact is minimised.

Collection days and times will be determined following the confirmation of a specific private waste collection contractor by the property manager. Waste collection times should comply with the EPA Noise Control Guidelines (Publication 1254):

- *Collections occurring once a week should be restricted to the hours 6:30am – 8pm Monday to Saturday, 9am – 8pm Sunday and public holidays*
- *Collections occurring more than once a week should be restricted to the hours 7 am – 8pm Monday to Saturday, 9am – 8pm Sunday and public holidays*

Vermin Prevention & Washing Facilities

All access doors and bin lids will be kept closed at all times to prevent vermin access to the bin storage area.

Appropriate washing facilities including water supply and hose will be provided for the regular washing of the bins and bin store area by the property manager. Alternatively, an external waste bin cleaning contractor can be engaged for the washing of bins and waste areas.

Litter Management and Stormwater Pollution

The waste areas will be secured to prevent any unauthorised use of waste areas. Waste areas will be monitored by the property manager to ensure that bins are not overfilled and any spillage resulting from waste collection is appropriately addressed.

5. Ongoing Maintenance and Suitable Initiatives

5.1. Maintenance Management

Further to the occupation of the proposed development, it is the responsibility of the property manager for the ongoing operation and maintenance of the Waste Management Plan.

The property manager will ensure that maintenance work and upgrades are carried out on the waste areas and components of the waste system. When required, the property manager will engage an appropriate contractor to conduct maintenance services, replacements or upgrades.

All ongoing costs are to be fully met by the property manager.

5.2. Waste Management Rules

It will be the responsibility of the property manager to ensure all staff are provided with the relevant information and materials regarding the waste management system and sustainability strategies of the proposed development.

Relevant information will be provided at the waste areas to ensure that all users will operate and maintain safe practice when utilising the waste facilities.

5.3. Monitoring and Review

This Waste Management Plan should be monitored and reviewed on a regular basis to ensure that it meets the regulatory requirements and the expected waste generation rates outlined in Section 3.1. The property manager will be responsible for monitoring the Waste Management Plan. Where required, the property manager should undertake a waste audit to identify any modifications and/or improvements to the waste management system.

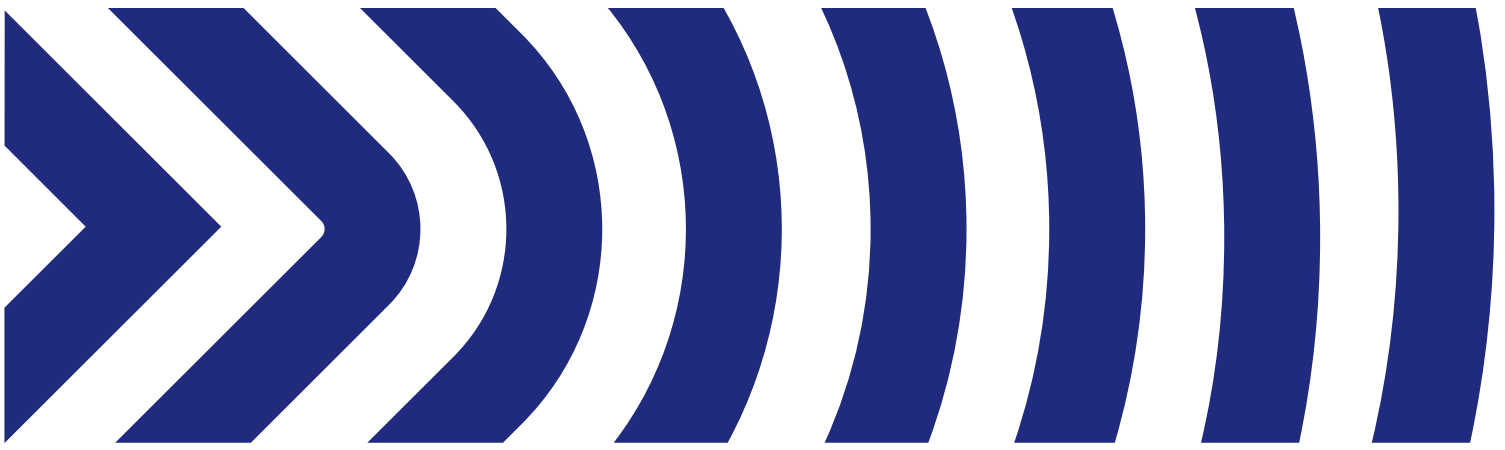
6. Contact Information

Below is a list of common waste collection service contractors and waste equipment suppliers. The property manager is not obligated to procure goods/services from the following suppliers and reserves the right to choose their own preferred suppliers. Traffic Group does not make representations for the goods/services provided by the suppliers listed below.

Table 6: Supplier Contact Information

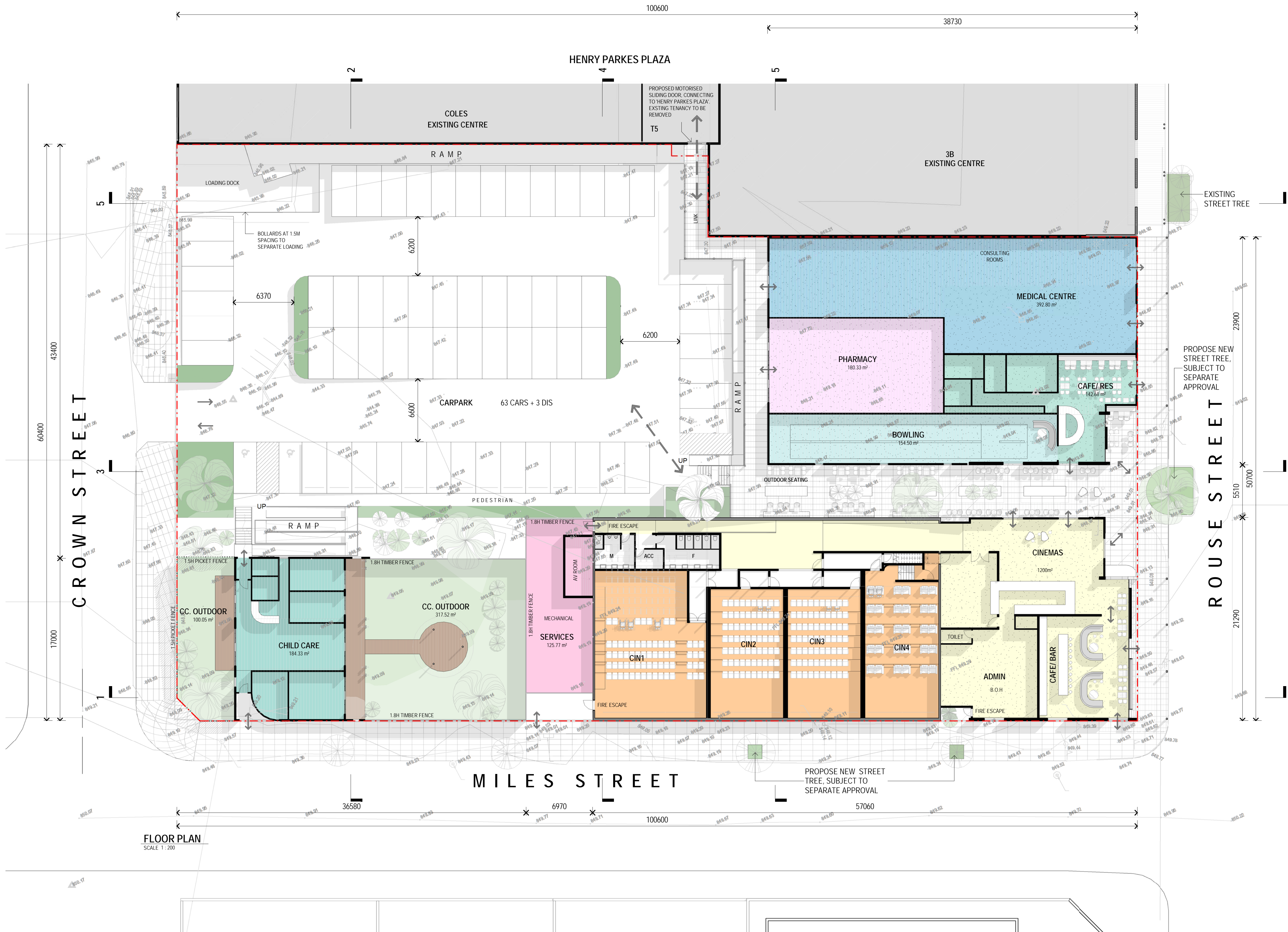
Service Type	Business Name	Phone	Website
Private Waste Collectors	SUEZ	13 13 35	www.suez.com.au
	Cleanaway	13 13 39	www.cleanaway.com.au
	Veolia	13 29 55	www.veolia.com/anz
	Waste Wise Environmental	1300 550 408	www.wastewise.com.au
	Kartaway	1300 362 362	www.kartaway.com.au
	iDump	1300 443 867	www.idump.com.au
	Waste Ninja (organics)	1300 648 088	www.wasteninja.com.au
E-Waste Collection	TechCollect	1300 229 837	www.techcollect.com.au
	ToxFree	1300 869 373	www.toxfree.com.au

Service Type	Business Name	Phone	Website
Equipment Supplier	Sulo Australian (bin supplier)	(02) 4348 8188	www.sulo.com.au
	Electrodrive (tug supplier)	1300 934 471	www.electrodrive.com.au
	Warequip (tug supplier)	1800 337 711	www.warequip.com.au
	Wastech Engineering (compactors & chutes)	1800 465 465	www.wastech.com.au
	Elephants Foot (compactors & chutes)	1300 435 374	www.elephantsfoot.com.au
	ASI JD MacDonald (chutes)	1800 023 441	www.jdmacdonald.com.au
	Eco-safe Technologies (odour control system)	1300 135 039	www.eco-safe.com.au
Bin Washing Services	The Bin Butlers	1300 788 123	www.thebinbutlers.com.au
	WBCM Environmental Australia	1300 800 621	www.wbcm-aust.com.au



Appendix A

Development Plans



FLOOR PLAN
SCALE 1 : 200

LEGEND

- ADMIN
- BOWLING
- CAFE/ BAR
- CAFE/ RES
- CC. OUTDOOR
- CHILD CARE
- CIN1
- CIN2
- CIN3
- CIN4
- CINEMAS
- EXISTING CENTRE
- MEDICAL CENTRE
- PHARMACY
- PR. LOUNGE
- SERVICES

AREA SCHEDULE (TOTAL)

CARPARK/ LANDSCAPE	2280.61 m²
LANEWAY/ LANDSCAPE	404.25 m²
CINEMAS	1195.34 m²
PHARMACY/ MEDICAL/ CAFE/ BOWLING	904.52 m²
SERVICES	147.11 m²
CHILD CARE	695.01 m²
TOTAL SITE AREA	5626.85 m²

(CHILD CARE AREA INCLUDING STAIR AND RAMP)

AREA SCHEDULE (BREAK DOWN)

ADMIN	94.61 m²
BOWLING	154.50 m²
CAFE/ BAR	100.50 m²
CAFE/ RES	142.68 m²
CC. OUTDOOR	317.52 m²
CC. OUTDOOR	100.05 m²
CHILD CARE	184.33 m²
CIN1	169.12 m²
CIN2	103.21 m²
CIN3	103.21 m²
CIN4	123.95 m²
CINEMAS	128.14 m²
CINEMAS	109.89 m²
MEDICAL CENTRE	392.80 m²
PHARMACY	180.33 m²
PR. LOUNGE	46.23 m²
SERVICES	125.77 m²

No.	Revision or reason for issue	Date
1	DA SUBMISSION	06.09.21

Client
CHRIS HSU

Project
CINEMAS

Address
148 ROUSE ST, TENTERFIELD

Title
PROPOSED GROUND FLOOR PLAN

Date	06.09.21	Drawn	TP
Scale on A1	1 : 200		

Drawing No.
DA03