WASTE MANAGEMENT PLAN

DEMOLITION, CONSTRUCTION AND USE OF PREMISES

Outline of Proposal

SITE ADDRESS:	**198 Bennett Road, St Clair**
APPLICANT'S NAME AND ADDRESS / PHONE/ WEBSITE:	**B A I N I D E S I G N** ABN 51 068 732 593 1B Villiers street Parramata, NSW 2150 Phone + 61 2 9188 8250 info@bainidesign.com.au www.bainidesign.com.au Sydney, Australia
BUILDINGS AND OTHER STRUCTURES CURRENTLY ON THE SITE:	The property contains a brick house.
BRIEF DESCRIPTION OF PROPOSAL:	Proposal of a childcare facility containing 58 kids and basement parking.

The details provided on this form are the intentions of managing waste relating to this project.

Date:14/04/2021

Table of Contents

1. Introduction

A waste management plan and report is required for the proposed development to support the design during demolition, excavation, construction and service conditions, along with achieving the objectives to promote sustainable operation of the development. The development achieves the waste management objectives set out in the council codes as well as any statutory requirements. The details which will be addressed include:

- a description of the site and details of the development proposal;
- reuse, recycling and disposal of materials during demolition, excavation, construction and service conditions;
- a review of the design features of the proposed waste management system for compliance with relevant codes, standards and regulations; and
- identification of procedures for on-going waste management.

Figure 1.1: Subject site (Source: Google Earth)

2. Property Description

The proposed new development will involve demolition of the existing structure and the construction of a child care centre within a site area of approximately 916m^2 with 1 basement, 1 ground floor and 1 first floor. Car parking is proposed on the basement level with entry from Coonawarra Drive and exit from Bennett Road. A total of 3 indoor play areas and an outdoor play area are proposed on the ground floor to accommodate 58 children.

The proposed development is bounded by:

- 3 Coonawarra Drive on the East,
- 203 Bennett Road on the West,
- 196 Bennett Road the North,
- 200 Bennett Road on the South.

3. Project Proposal

Waste storage and transportation will be managed during demolition, excavation and construction stages as well as in service conditions. Waste produced from these stages will be reused or recycled as appropriate, or disposed using certified waste collection contractors.

The management of waste during service conditions of the development will involve the child care manager maintaining waste storage and recycling area located on site, with the collection of general waste and recycling primarily involving a private waste contractor. It is proposed that a total of 3 x 240L garbage bins and 3 x 240L recycling bins are provided. The child care manager will transfer all the bins to kerb side where they will be collected by the private waste contractor.

4. Demolition & Excavation

Materials from the demolition stage shall be reused, recycled or disposed in accordance with the provisions outlined in this WMP and the requirements of the Protection of the Environment Operations (Waste) Regulation 2014.

Where possible, waste materials should be managed so most materials will be reused or recycled, with only a small proportion of waste going to landfill.

Prior to any demolition works, a suitably qualified inspector shall conduct inspection of asbestos construction materials (ACMs) on the existing structures to be demolished. The inspector shall certify to council in writing if the asbestos materials are less than 10m^2. If more than 10m^2, a licensed asbestos remover shall conduct the asbestos removal and tipping. In the latter case, the name, address and asbestos license number of the remover, as well as the name and address of the licensed landfill where all asbestos will be taken shall be informed to the council. All records covering All records covering the

transport and tipping of any asbestos construction materials or any asbestos contaminated materials must be maintained on site for the inspection of a Council officer or other Principal Certifying Authority.

Asbestos-contaminated soils must be wetted down. All asbestos waste must be transported in a part of the vehicle that is covered and leak-proof; and disposed of at a landfill site that can lawfully receive it. The project manager will ensure a unique consignment number is created and report to EPA using WasteLocate if over 100 kilograms or 10 square meters of asbestos is being disposed of. No asbestos waste is disposed to general waste or recycle bin; or reuse, recycle or illegally dumped.

4.1 Managing Materials from Demolition

Table 1 below details the amount of material that is estimated to be produced from the demolition stage, as well as the planned reuse, recycling or disposal plans.

Table 1: Management of demolition materials

Materials on-site		**Reuse and recycling**		
Type of Material	**Estimated volume (m^3) or area (m^2) or weight (t)**	**On-site** How materials will be reused or recycled on-site	**Off-site** Contractor and recycling outlet	**Disposal** Contractor and landfill site
Timber	20m^3	Reuse for formwork, landscaping, shoring	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127
Concrete	15m^3	N/A	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	Nil to landfill
Bricks/Pavers	20m^3	Clean & reuse for landscaping, bricks in good condition used for internal walls	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	Nil to landfill
Roof tiles	10m^3	Brake up and use as fill, aggregate	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	Nil to landfill
Plasterboard	20m^3	Break up and use in landscaping	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127
Metals	10m^3	N/A	SUEZ Auburn	SUEZ Auburn

			Old Hill Link, Sydney Olympic Park NSW 2127	Old Hill Link, Sydney Olympic Park NSW 2127
Green waste	25m^3	Separated, chipped and stored on site for reuse in landscaping	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127

4.2 Managing Materials from Excavation

Excavated materials from the Excavation stage shall be reused, recycled or disposed in accordance with the provisions outlined in this WMP and the requirements of the Protection of the Environment Operations (Waste) Regulation 2014. Table 2 below details the amount of material that is estimated to be produced from the demolition stage, as well as the planned reuse, recycling or disposal plans.

Table 2: Management of Excavated materials

Materials on-site		**Reuse and recycling**		**Disposal**
Type of Material	**Estimated volume (m^3) or area (m^2) or weight (t)**	**On-site** How materials will be reused or recycled on-site	**Off-site** Contractor and recycling outlet	Contractor and landfill site
Excavated material	150m^3	Reuse for backfilling, landscaping	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127

4.3 Site Operation and Management

The site operation will be managed to reduce waste creation and maximise reuse and recycling by setting waste management requirements in contracts with sub-contractors, on-going checks by supervisors on site and the use of clear signage at designated waste areas.

In addition, the project team leader will:

- Liaise with contractors to identify areas where they can reduce waste and reuse materials in their respective trades
- Meet local, state and federal waste minimisation legislation and environmental standards
- Prevent pollution and damage to the environment
- Protect the safety and health or our employees and the public

Waste will be separated and stored onsite for reuse and recycling through maintaining separate areas for sorted wastes with one area for recyclables and another area for waste going to landfill. Utilising selective deconstruction rather than straight demolition will ensure that good quality material can be reused or recycled.

5. Construction

Materials that are not used in the construction stage shall be reused, recycled or disposed in accordance with the provisions outlined in this WMP and the requirements of the Protection of the Environment Operations (Waste) Regulation 2014.

Where possible, waste materials should be managed so most materials will be reused or recycled, with only a small proportion of waste going to landfill.

5.1 Managing Waste Materials from Construction

Table 3 below details the amount of waste material that is estimated to be produced from the construction stage, as well as the planned reuse, recycling or disposal plans.

Table 3: Management of waste construction materials

Materials on-site		**Reuse and recycling**		
Type of Material	**Estimated volume (m^3) or area (m^2) or weight (t)**	**On-site** How materials will be reused or recycled on-site	**Off-site** Contractor and recycling outlet	**Disposal** Contractor and landfill site
Timber	15m^3	N/A	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127
Concrete	20m^3	N/A	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	Nil to landfill
Bricks/Pavers	20m^3	Clean & reuse for landscaping, bricks in good condition used for internal walls	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	Nil to landfill
Roof tiles	5m^3	Brake up and use as fill, aggregate	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	Nil to landfill

Plasterboard	10m^3	Break up and use in landscaping	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127	SUEZ Auburn Old Hill Link, Sydney Olympic Park NSW 2127

5.2 Construction Design and Management

Waste avoidance has been incorporated into the design by incorporating as much detail as possible within the design, and using pre-fabricated materials to ensure a reduction in waste generated on-site. Materials purchased will be checked against previously known quantities required to build similar projects, and adjusted as construction progresses for this particular project. Reduction in waste can also be achieved through the reuse of building materials in good condition from the demolition phase.

6. Management of Waste

6.1 Design Requirements

The following from **PENRITH CITY COUNCIL** is adopted:

Subdivision shall be designed and constructed so that upon completion:
b) Located away from primary street frontages, where applicable;
c) Suitably screened from public areas so as to reduce the impacts of noise, odour and visual amenity; and to be caused by the storage and collection of waste.
a) Dry recyclables including containers, paper, cardboard and toners for printers and photocopiers should be separated from other waste, for recycling;
b) Food scraps should be placed in specialised containment bins and collected on a regular basis (particularly where large volumes of perishable wastes are generated);
c) Refrigerated garbage rooms should be provided where there are large quantities of perishable wastes and infrequent collections; and
d) Clinical or hazardous and liquid waste should be placed in specialised containment bins and collected by specialised services.
5) Grease traps must be provided where there is a likelihood of liquid waste entering the drainage systems (contact Sydney Water to obtain trade waste requirements).
a) The design makes it difficult for all tenants to have ready access to a collection point; or b) The site characteristics restrict vehicle entry.
7) Where a communal facility exists, each tenant should have a designated area which is clearly signposted.
8) Should a collection vehicle be required to enter the property, the driveway and manoeuvring area must be suitable for a collection vehicle in terms of both its strength and design.
9) The system for waste management must be compatible with the collection service(s) to

be used whether Council or private contractor.
10)Swept paths demonstrating adequate manoeuvring area are to be provided with the application.

The waste generated and required number of bins is shown in Table 4.

Table 4: Calculations for waste/recycling storage space required

Service type	GFA (m^2	Generated waste (L/week)
General waste	240	240x3=720
Recycling (all types)		240x3=720

6.1.1 Collection frequency and bins required

To service the generation of waste/recycling expected from the proposed development, the following number of bins and frequency of collection is outlined in the Table 5 below.

Table 5: Waste collection service requirements

Service type	Number of containers	Collection frequency
General waste	1 x 140L	Weekly
Recycling (alltypes)	1 x 240L	Fortnightly

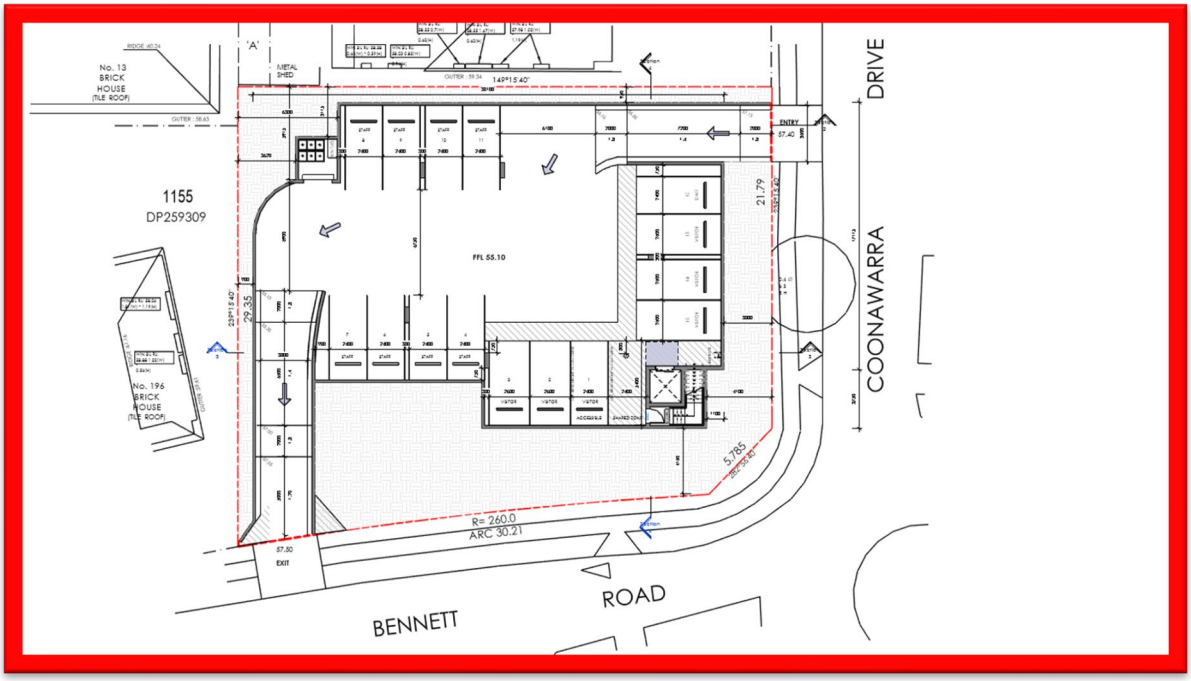
6.2 Design Detail

6.2.1 Overall waste and recycling storage and servicing within the complex

Waste service will be provided by a private waste contractor. Waste and recycling storage area is proposed on the ground level outdoors. The bin storage area is approximately $3m^2$ which can accommodate all required bins of $2.6m^2$. However, bins shall be placed to allow sufficient manoeuvring.

The child care manager will take responsibility for transportation of mobile bins to the kerbside where they will be collected by the private waste contractor. The bin transportation path is approximately 30m with max. 1:20 gradient which complies with the requirement from Penrith City Council "Waste Management Guidelines" for commercial developments as shown in C5 Waste Management.

Figure 6.1 Proposed bin storage area and transportation path



Bin storage area and transportation path are shown in Figure 6.1 below.

Bins shall be placed to minimise the impacts on traffic on the road and not block access to driveways and pedestrian footpaths.

6.2.1 Green waste

The child care manager shall contact private a private contractor to service green waste if required.

6.2.2 Bulky waste

No bulky waste storage area is required due to the nature of the development. However, if required, the child care manager shall contact a private contractor to service bulky waste

6.3 Further Design Requirements

Other design details that will be required as per Council and other relevant regulations are listed below:

- Waste water in waste storage areas discharge to sewer, with a cold water tap to facilitate cleaning of floor waste
- Waste storage is aesthetically pleasing and integrated with overall design
- Floors and walls are to be finished with a smooth, impervious and easily cleaned material
- Cavities and penetrations are to be sealed to prevent access to vermin
- Inclusion of signage to guide correct usage of facilities in compliance with AS1319
- Building management/caretaker will take responsibility for the provision of bin servicing and transport as well as maintaining waste areas
- Storage is of adequate size to store the required number of bins Amenities are easily accessible to occupants, but not for non-occupants to discourage illegal dumping
- Ventilation complying with AS1668, with ventilation openings located close to ceiling and floor and away from windows of dwellings
- All lighting and electrical components will be built to comply with standards and building regulations

6.4 On-going Waste Management

The on-going management of waste on-site will be stipulated with conditions set out in the conditions presented to occupants before they use the facility. The child care manager will transport the bins to and from the storage area for collection and clean the waste area at a regular interval of once a week.

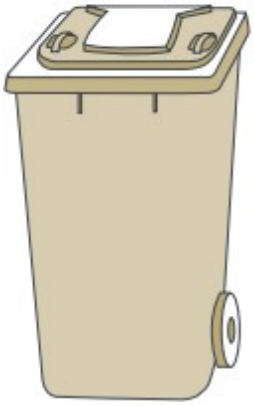
Each unit will be supplied with a collection area suitable for one day's storage of waste and recycling. The occupants must bag their waste before depositing into waste bins; however, recycling must not be bagged.

Signage and written information will be provided, so the occupants are aware of how to use and manage the waste and recycling services.

Appendix A – Signage used in waste storage areas

Appendix B – Indicative Bin Sizes

Mobile containers with a capacity from 80L to 360L with two wheels



Bin Type	80 Litre MGB	120 Litre MGB	140 Litre MGB	240 Litre MGB	360 Litre MGB
Height	870 mm	940 mm	1065 mm	1080 mm	1100 mm
Depth	530 mm	560 mm	540 mm	735 mm	885 mm
Width	450 mm	485 mm	500 mm	580 mm	600 mm

Source: Department of Environment & Climate Change NSW