



Proposed Residential Development at 205-209 Grange Avenue, Marsden Park

Waste Management Plan- ISSUE D

Prepared by: Design Cubicle Pty Ltd
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2. OUTLINE OF PROPOSAL

Site Address: 205 - 209 Grange Avenue, Marsden Park

Applicant: M Development Group Pty Ltd
c/o Design Cubicle Pty Ltd
44 Sorrell Street, North Parramatta, 2151

Phone: (02) 9683 2778

Buildings and other structures currently on the site:

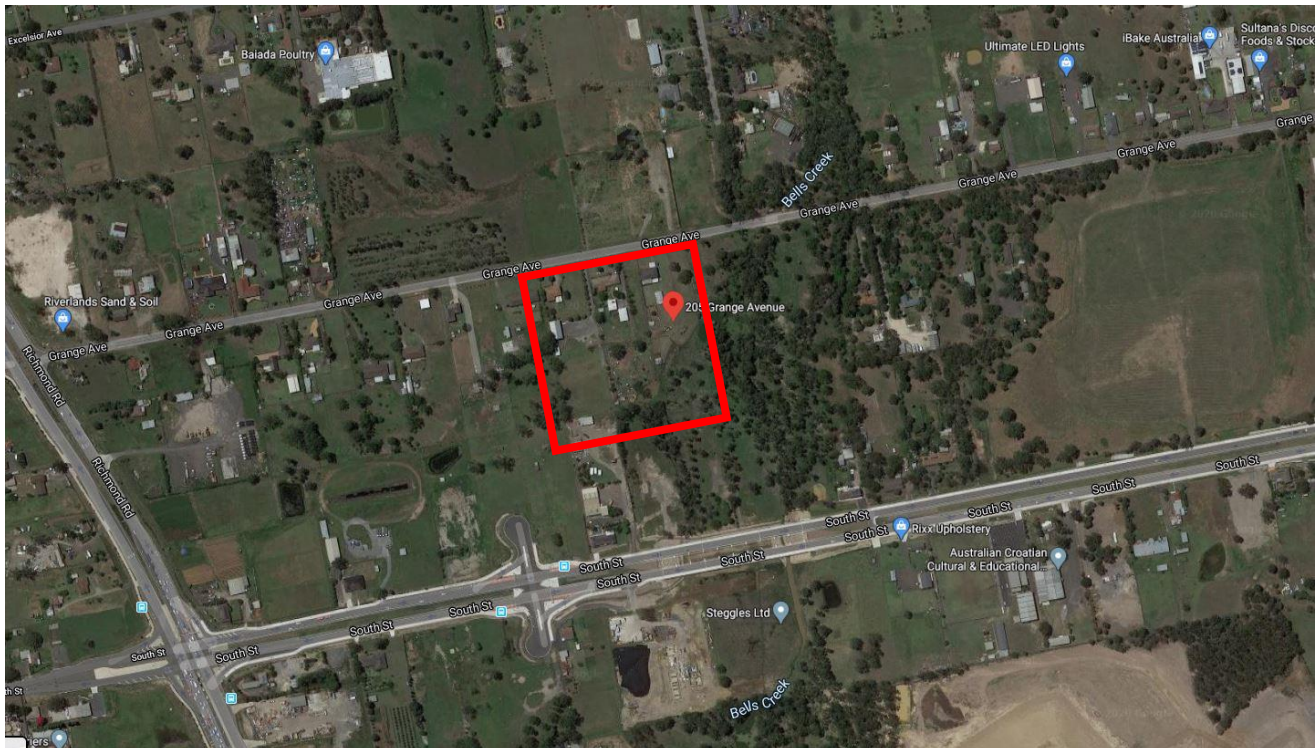
- 3 x single storey Brick Dwellings with Tile Roof
- 8 x metal sheds

Brief description of proposal:

Proposed three x 4 storey Residential Development complexes with two levels of basement car parking. The buildings are comprised of 176 fully dedicated residential apartments.

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

Signature of Applicant: _____ Date: _____



3. DEMOLITION

This is the stage with the greatest potential for waste minimization, particularly in Sydney where there are high levels of development, relatively high tipping charges and where alternative quarry materials are located on the outskirts.

The application considers if it is possible to re-use existing building materials, or parts therefore, for the proposed use. With careful on-site sorting and storage and by staging work programs, it is possible to re-use many materials, either on-site or off. Instead of simply pulling down a building, this waste management plan encourages the practice of recycling on site. This could require a number of colour-coded or clearly labelled bins on-site rather than one size fits all.

- Location of on-site storage space for materials (for re-use) and containers for recycling and disposal will be directed on site by the builder
- Vehicle access to the site and to storage and container areas will be directed on site by the builder

MATERIALS ON-SITE		DESTINATION		
Type of Material	Estimated Vol. (m3) or Area (m2)	RE-USE AND RECYCLING		DISPOSAL
		ON-SITE	OFF-SITE	Proposed contractor/ landfill site
Excavation material	Nil	Nil	Nil	Nil
Green waste	345m ³	Separated. Some chipped and stored on-site for re-use on landscaping.	Remainder to Aust. Native Landscapes P/L Badgerys Creek	Nil
Bricks	76m ³	Clean and re-use lime mortar bricks for fill	Concrete mortar bricks to Brandown Crushing & Recycling Co.	Nil
Concrete	270m ³	Crush concrete for temporary driveway	Concrete to Brandown Crushing & Recycling Co.	Nil
Timber – hardwood / pine	55m ³	Re-use for formwork and studwork. Chip remainder for use in landscaping.	To stockpile at Brandown transfer station, by approved waste contractor	Nil
Weatherboard/ Fibro	Nil	Break-up and remove from site	To Brandown Recycling Facilities	Nil
Plasterboard	28m ³	Break-up and remove from site	To Brandown Recycling Facilities	Nil
Metals – zinc / aluminium	76m ³	Nil	To Selland Parker Metal Recyclers	Nil
Tiles, glass, plastics (inc. roof tiles)	97m ³	Broken tiles for fill on-site. Recycle glass.	Remainder to Brandown Recycling Facilities	Nil
Kitchen cupboards, sink, & stove	x 3	Nil	To Brandown Recycling Facilities	Nil
Bathtub vanity and closet pan	x 3	Nil	To Brandown Recycling Facilities	Nil
Asbestos	Where found	Nil	To Kari & Ghossayn Land Fill by approved waste contractor	Kari & Ghossayn Waste Depot Clifton Ave, Kemps Creek

Note: Details of site area to be used for on-site separation, treatment and storage (including weather protection) are to be directed on site by the builder.

4. CONSTRUCTION

The following measures should have been considered when looking to save resources and minimise waste at the construction stage:

- Purchasing Policy – considering measures such as ordering the right quantities of materials and prefabrication of materials where possible;
- Reusing formwork;
- Minimising site disturbance, limiting unnecessary excavation;
- Careful source separation of off-cuts to facilitate re-use, re-sale or efficient recycling; and
- Co-ordination / sequencing of various trades

The following details are to be directed by the builder on site:

- Location of temporary storage space
- Location of Waste Storage and recycling area(s), garbage and recycling room
- Site office
- Access for vehicles
- Lunch shed
- Amenities shed

The allocated Waste Storage and recycling Area can be flexible in size and layout to cater for future changes in use. The size can be calculated on the basis of estimated waste generation rates and proposed bin sizes.

MATERIALS ON-SITE		DESTINATION		
Type of Material	Estimated Vol. (m3) or Area (m2)	RE-USE AND RECYCLING		DISPOSAL Proposed contractor/ landfill site
		ON-SITE	OFF-SITE	
Excavation material	41,500m ³	Covered in section as part of demolition	To Kari & Ghossayn Land Fill (excess excavation)	Nil
Green waste	15m ³	Covered in section as part of demolition	Remainder to Aust. Native Landscapes P/L Badgerys Creek	Nil
Bricks	7.5m ³	Use for fill behind retaining walls	Remainder to Brandown Crushing & Recycling Co.	Nil
Concrete	8m ³	Use for fill behind retaining walls & temporary access pathways	Remainder to Brandown Crushing & Recycling Co.	Nil
Timber – oregon / pine / timber pallets / particle board finishes	6.5m ³	Chip for use in landscaping	Remainder to Aust. Native Landscapes P/L Badgerys Creek	Nil
Plasterboard	10m ³	Re-use where required	Remainder to Boral Recycling 3 Thackery St, Camellia 2142	Nil
Metals – copper / aluminium	4.5m ³	Nil	To Selland Parker Metal Recyclers for re-use	Nil
Other – electrical fittings, reject trade-ins, PVC plastics, cardboard,etc	10m ³	Nil	Nil	To Collex Recycling Waste Contractors

Note: Details of site area to be used for on-site separation, treatment and storage (including weather protection) are to be directed on site by the builder.

5. PROPOSED ONGOING WASTE MANAGMENT

Proposed design of facilities for ongoing waste and recycling management:

TYPE OF WASTE TO BE GENERATED	EXPECTED VOLUME PER WEEK	PROPOSED ON-SITE STORAGE & TREATMENT FACILITIES	DESTINATION
Example: glass, paper, food waste, off cuts, etc	Litre or m ³	Waste storage & recycling area	- Recycling - Disposal - Specify contractor
A. RECYCLABLES: 1. Home paper / cardboard waste 2. Glass, aluminium and plastic (bottles) PER UNIT TOTAL	60 litres approx. 20 litres approx. 80 litres approx.	There is to be a 1 x central garbage area located in the Basement Level serviced by MGB storage. This between Block B and C	To be collected by Council
B. NON-RECYCLABLES: 1. Foodscraps, etc 2.Other plastics (eg. wrapping) 3. Unrecyclable waste PER UNIT TOTAL	120 litres approx. 80 litres approx. <u>40 litres approx</u> 240 litres approx.	There is to be a 1 x central garbage areas located in the Basement Level serviced by MGB storage. This is between Block B and C.	To be collected by Council
SUMMARY (proposed 176 units) Required: 80 litres approx per unit for recycling (collected weekly) 240 litres approx per unit for garbage (collected weekly)	14080L Recycling 42240 L Garbage	Provide: 59 x 240 litre recycle MGB bins (weekly collection) 13 x 1100 litre garbage MGB bins (thrice weekly collection)	To be collected by Council To be collected by Council

BULKY WASTE STORAGE:

TYPE OF WASTE TO BE GENERATED	MIN. AREA REQUIRED	PROPOSED ON-SITE STORAGE & TREATMENT FACILITIES	DESTINATION
Example: glass, paper, food waste, off cuts, etc	m ²	Waste storage & recycling area	- Recycling - Disposal - Specify contractor
BULKY WASTE: For Larger items such as mattresses, as well as for bulky cardboard waste	4m ² / 40 units & 1m ² / 20 units (or part thereof)	There is to be 1 x central enclosed bulky waste storage area located in the basement level, with min. 1.5m wide doorways.	To be collected by Council
SUMMARY (proposed 176 units)	Min. 7m ²	There is to be 1 x central enclosed bulky waste storage area located in the basement level, with min. 1.5m wide doorways. It is between Block B and C.	To be collected by Council

BIN TUG AND TROLLEY SPECIFICATION-

The Project is spread out over a large area. This requires a Bin tug trolley to move bins from temporary holding areas in Block A, B and C to loading area between Block B and C. It is proposed to have two of these Bin tug trolleys. One for Block A and another one for Block B and C.

The specifications for these are as follows-(Emoveit- Cushman Tow Tug 8K or equivalent- Source- <https://emoveit.com.au/product/cushman-tug-8k>)

CAPACITY 3636kg (8000lb)

MOTOR 48V AC/ 8 Kw

SEAT/S 1

- 3636kg (8,000-lb) towing capacities
- 0.45-sq-m (4.9-sq-ft) cargo deck
- 48V AC Electric Drivetrain

Dimensions

OVERALL LENGTH 193cm (76in)

OVERALL WIDTH 87.6cm (34.5in)

OVERALL HEIGHT (TILER) 94cm (37in)

WHEEL BASE 133.4cm (52.5in)

WHEEL TRACK N/A Front / 75cm (29.7 in) Rear

CARGO DECK MATERIAL HIP Board

Power

POWER SOURCE 36 Volt, DC

HORSEPOWER (KW) Continuous 6.7hp (5kw); Peak 15.4hp (11.5kw)

ELECTRICAL SYSTEM 48V

BATTERY (QTY/TYPE) Six, 8V Deep Cycle

BATTERY CHARGER 48V DC On-Board, 1000W

KEY OR PEDAL START Pedal

SPEED CONTROLLER 350 AMP AC Programmable. SRO Capable
 DRIVE TRAIN Motor Shaft Direct Drive GEAR SELECTION
 GEAR SELECTION Dash Mounted (Key Switch)
 REAR AXLE RATIO 17.05

Steering & Suspension

STEERING Handlebar. Optional steering wheel
 FRONT SUSPENSION Torsion Block (Front) / Coil Over Shock
 SERVICE BRAKE 2 Wheel Hydraulic, Drum
 PARKING BRAKE Torsion Block (Front) / Coil Over Shock SERVICE BRAKE
 TIRES USA Trail 4.80 x 8 (Load Ran



LOCATION OF BULKY WASTE AREAS-

Block A- A bulky waste space of 7 Sqm is proposed in North East corner of Block A. This is temporary holding area for Block A. On collection day this waste will be moved to Bulky waste area near loading bay.

Block B - A bulky waste space of 15 Sqm is proposed in North East corner of Block B. This opens up into the loading bay. Additional Bulky waste is provided of 10 Sqm at the back of the loading bay of the truck.

Block C- A bulky waste space of 8 Sqm is proposed in North West corner of Block C. This opens up into the loading bay.

LOCATION OF TEMPORARY BIN HOLDING AREAS/ WASTE ROOMS-

This being a large project, a number of temporary Bin holding areas are proposed in each block. All the bins from these temporary bin holding areas are proposed to be moved to Loading bay Bin area for collection, between block B and C.

Block A- In Block A, two temporary bin holding areas are proposed in Basement 2 (Level 17.4). One bin room of size 8.8m x 4.3m is proposed towards South West corner for 4 x 1100 L Refuse bins and 17 x 240 L Recycle bins. Second bin room of size 10m x 7m is located towards North East corner for 6 x 1100L Refuse bins and 24 x 240 L Recycle bins.

Block B- In Block B, temporary bin holding area is proposed in Basement 1 (Level 17.95). One bin room of size 8.8m x 4.3m is proposed towards South West corner for 4 x 1100 L Refuse bins and 17 x 240 L Recycle bins.

Block C- In Block C, temporary bin holding area is proposed in Basement 1 (Level 17.95). One bin room of size 6.2m x 2.8m is proposed near Southern central lift space for 2 x 1100 L Refuse bins and 7 x 240 L Recycle bins.

TRANSPORTATION OF WASTE FROM INTERIM WASTE ROOMS TO MAIN COLLECTION POINT- Transportation of Bins will be done using Bin tug and trolley. The specification of the same are as specified earlier.

PHYSICAL TREATMENT OF WASTE ROOMS/ LOADING AREAS-

Waste room construction must comply with the minimum standards as outlined in the Holroyd Development Control Plan 2013, in order to minimise odours, deter vermin, protect surrounding areas, and make it a user-friendly and safe area.

The NSW Better Practice Guide for Resource Recovery in Residential Developments (2019) also states that better practice bin storage areas should achieve more than the minimum compliance requirements, which are as follows:

- Ensuring BCA compliance, including ventilation. Where required, ventilation system must comply with AS1668.4-2012 The use of ventilation and air conditioning in buildings.
- Ensuring storage areas are well lit (sensor lighting preferred) and have lighting available 24 hours a day.
- Provision of bin washing facilities, including taps for hot and cold water provided through a centralised mixing valve. The taps must be protected from bins and be located where they can be easily accessed even when the area is at bin capacity.
- Floor constructed of concrete at least 75mm thick.
- Floor graded so that any water is directed to a sewer authority approved drainage connection to ensure washing bins and/or waste storage areas do not discharge flow into the stormwater drain.
- Provision of smooth, cleanable and durable floor and wall surfaces that extend up the wall to a height equivalent to any bins held in the area.
- Ensuring ceilings are finished with a smooth-faced non-absorbent material capable of being cleaned.
- All surfaces (walls, ceiling and floors) finished in a light colour.

Additional Considerations For Waste Rooms-

- Waste room floor to be sealed with a two-pack epoxy;
- All corners coved and sealed 100mm up, this is to eliminate build-up of dirt;
- Tap height and light switch height of 1.6m;
- Storm water access preventatives (grate);
- All walls painted with light colour and washable paint;
- Equipment electric outlets to be installed 1700mm above finished floor level;
- Optional automatic odour and pest control system installed
- If 660L or 1100L bins are utilised, 2 x 820mm (minimum) double-doors must be used;
- All personnel doors are hinged, lockable and self-closing;
- Conform to the Building Code of Australia, Australian standards and local laws; and
- Childproofing and public/operator safety shall be assessed and ensured
- Waste and recycling rooms must have their own exhaust ventilation system either;

NOTE: Details of on-site waste management facilities should be constructed or provided for as per plans and specifications, Council requirements & strata plan requirements.

In addition:

1. The Strata Management will prepare an Environmental Management System addressing home waste and recycling. This will include expectations and achievable objectives for sorting and separating waste. Also a regular waste audit should be implemented.
2. An information kit for tenants followed up every 12 months.
3. The waste storage and recycling area will be located as approved by Council.
4. The tenant will be responsible for transferring refuse to the allocated bin storage Area and the Body Corporate responsible for keeping the area clean and tidy.
5. Compost areas are to be maintained where allocated.
6. Rainwater tanks are to be regularly checked and maintained where provided.
7. Clear signage for sorting rubbish disposal is to be placed in bin storage areas.
8. Residents will be responsible for booking Bulk waste with council.