



Waste Management Plan

New Development at:

54 Terry Road Rouse Hill, NSW

(For Demolition and Construction activities)

18 JUNE 2018

Prepared for
Prisma Rouse Hill Developments Pty Limited,

Approval:



.....
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.....
Technical Reviewer

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Introduction

Prisma Rouse Hill Developments Pty Limited commissioned Sullivan-ES to prepare this Waste Management Plan (WMP) for the new development at 54 Terry Road, Rouse Hill NSW; henceforth referred to as 'the site'.

The following information identifies the site.

Information	Details
Address	54 Terry Road Rouse Hill NSW 20
Property Area	Development Area = 13,462.46 m ²
Title Identification	Lot 132 in DP 208203
Land use zone	Zoned R2
Development Type	43 Townhouses – Torrens Title.

At present this large site is vacant. The site is currently occupied by an old house and three sheds.

1.1 Objectives

The overarching goal of this WMP is to affect the principles and uphold the objects of environmental regulation within NSW, in particular the Waste Avoidance and Resource Recovery Act (WARR Act) 2001. This can be achieved by meeting the following objectives:

- Documenting the waste types and details of wastes to be managed during demolition, construction and operation of the site.
- Align methods and procedures of waste management with legislation and regulatory needs.

The WMP is a document that allows consent authorities to assess the details of waste generation and the proposed waste management practices for a development. As such, the WMP should provide the following information:

- the volume and type of waste generated during construction and demolition;
- how waste is to be stored on site;
- method of disposal of recyclable and residual waste; and
- ongoing management.

1 Introduction

1.2 Waste Management Hierarchy

The WARR Act 2001 established a hierarchical approach to resource management as such:

- I. Avoidance including action to reduce the amount of waste generated by households, industry and all levels of government
- II. Resource recovery including reuse, recycling, reprocessing and energy recovery, consistent with the most efficient use of the recovered resources
- III. Disposal including management of all disposal options in the most environmentally responsible manner.

The waste management practices documented in this WMP have been developed to align with the statute hierarchy listed above. Where possible, the WMP and site management practices will strive to minimise the generation of waste to the extent practicable.

Overview of Waste Management

A site plan is presented in Appendix A – **Figure 1**.

2.1 Demolition

Demolition will be guided by the principles of the Blacktown Councils Development Control Plan (DCP) 2015 and waste management policies. Public and worker safety is a priority and all required safety equipment and requirements are to be incorporated into this plan as part of the Demolition and Construction contract.

Establishment

Demolition will commence by protecting and securing the site, installing safety fencing and entry gates off Terry Road followed by removing all landscape items trees, plants and grass that are not required from the Development site only. All existing services have been located by previous survey and they are to be protected, so that no damage will occur to any existing site services. Note that the site is in two parts (1) the Development Site = 13,465.46 M2 and (2) the RE1 zoned part near the Second Ponds Creek = 7,403.81 M2. This smaller site will be weeded and any rubbish removed and left in its natural bushland state.

Sequence of Work

Demolition can start in all areas – the house and the three minor sheds and any other structure not required. All demolition will commence with the manual removal of all visual items that can be reused, sold or recycled such as roof sheeting, plumbing taps and pipes, toilet and bathroom fittings, doors and windows, PVC and steel pipes and carpet. Once these items are removed machines can assist with the removal and dismantling of the roof and internal timbers. The walls would come down progressively with the rest of the demolition and bricks recovered and recycled, lastly the foundations. All services to be protected would be checked and or sealed and secured for later connections.

All concrete and bricks that are to be reused as granular fill would at this stage be track rolled and broken up to a manageable size and stored on site for future temporary access road use. Timbers that are to be recycled would be de-nailed, sorted and stored on site for future use or ready for removal to the recycling centres.

Offsite Management and Recycling Destinations.

The recycling yards are at the Community Recycling Centre Gate 3, 96 Dunheved Circuit St Marys (47327777) and the various SITA / SUES Recycling Centres and also at 29 Powers Rd Seven Hills (contact 1300651116). The appointed contractor is to ring and enquire which recycling materials will be taken by them. The landfill/ waste processing Facility site is called the UR-3R at Eastern Creek this will take Food and Garden waste as well. Green waste – including trees can be removed also to Seven Hills.

2 Overview of Waste Management

Ground Contamination

The site was subject to a Stage 1 contamination investigation that found the site to be fairly clear however additional site inspections should be required during excavation to fill information gaps and unexpected finds with a Remedial Action Plan (RAP). The RAP must be followed such that the site can be signed-off by the appointed EPA Contaminated Land Site Auditor to meet the DA conditions.

Asbestos and other Hazardous Materials

The HazMat report compiled by others presents the results of hazardous materials in the existing buildings. Asbestos and the like are to be removed by an asbestos removalist licenced by SafeWork NSW. Refer to the HazMat report for further details.

2.2 Construction

Site Management

The construction would be managed by an experienced building contractor who would have the resources on site to fully supervise and direct all phases of the buildings construction and can reduce waste on site by good housekeeping management skills. As the construction of the Townhouses will be commenced in grouped zones which will be subject to sales, there will be sufficient space on site for all construction activities, storage for recycle material, builders materials and site sheds.

Location of the site establishment will have sufficient areas for the temporary storage and loading for materials to be removed to the recycling centres. Builders sheds are to have sufficient bins available for workers to take their rubbish both food scraps and recyclable, the building contractor will engage Council or other to provide this type of rubbish removal.

All building material waste - offcuts from timbers, bricks, concrete blocks, roofing, tiles. paving, pipes and cement droppings etc are to be cleaned up daily, removed to bins or skips conveniently located on site which are easily accessible for trucks to load and remove. A clean site is a safe site.

Packaging is always a problem and must be removed to separate bins for recycling - cardboard, paper, plastics, steel, aluminium, timber and the various paint and other product tins. Timber pallets are to be removed as soon as they are empty and stacked for transport to the appropriate supplier for reuse.

Currently in construction there is little concrete waste as measurements for concrete supply are accurate and contained within the bounds of the formwork.

Brick and concrete block offcuts can be crushed on site and reused for granular filling behind any low retaining walls and the like to reduce hydraulic pressure behind structures. This crushed material is also greatly used as hard stand for temporary tracks over wet areas that would become muddy and impede access for construction vehicles.

2 Overview of Waste Management

The Sequence of Construction work could be as follows but will be finalised with the successful building contractor – this work follows the removal of green waste and demolition – Refer to the Construction Management Plan.

1. Place security fences and all environmental protection devices.
2. Grade and compact the site. Survey and Setout all key items.
3. Trench and lay Sewer and Drainage systems including all pits.
4. Box out all roads, compact and test – remove and replace any soft areas. Re-compact.
5. Supply, place and compact road subbase course.
6. Commence foundation piers and ground slabs for all townhouses
7. Construct and complete the grouped zoned Townhouses.
8. Trench and lay All other Services – All Water supply, Power and Communications.
9. Construct all Kerb and Guttering to all the site.
10. Construct all Footpaths, Driveways, Landscaping and Road Lighting.
11. Supply, Lay, compact the final road base and complete the final seal.
12. During the construction stage all nuisance noise, dust and vibration is reduced.
13. Inspect and register all defects for builder to rectify.
14. Hand over project to developer and Residents.

BLACKTOWN CITY COUNCIL

This Waste Management Plan proposal is to be submitted when required by Council's "Site Waste Management and Minimisation" Development Control Plan

WASTE MANAGEMENT PLAN

Proposed Development Townhouse Development

Site Address: 54 Terry Road - Rouse Hill

Applicant's Name and Address: Prisma Rouse Hill Developments Pty Ltd

..... PO Box 504 Freshwater 2095

Telephone: 92643188 Facsimile:

Mobile:

Buildings and other structures currently on site:

..... Old vacant house and three metal sheds
..... all dilapidated.

Brief description of proposal:

..... To subdivide into 44 lots, construct all roads and
..... essential services and 43 town houses.

The details on this form are intentions for managing waste related to this project.

Privacy Note: Personal information provided on this form will be used by Council officers only for processing purposes.

Signature of Applicant:  Date: 18/6/2018

Waste Inventory and Management

The WMP addresses three stages of works for development of the site comprising Demolition, Construction, and Operation. The tables below present details on the three stages, and the expected waste and management protocols for each. This information was estimated by means of a site inspection on xxxxxxxxxxxx 2018. All estimates are solid measurements with no bulking factor allowances. These estimates are not to be used for anything other than this WMP to assist assessment against the Blacktown Council's Objectives of the Guidelines. All Recycling Centres and landfill locations are found on the Blacktown Council's web site.

3.1 Demolition Stage

Table 3-1 Waste Management – Demolition Stage

Material Onsite			Destination	
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Excavated soil – topsoil and grass. - Mixed and stockpiled to decompose	269 m3	If VENM this good soil mix can be reused on site	If VENM ¹ - the residue not required can be reused on another site as topsoil. All soil materials <u>must</u> be tracked by an EPA approved method. Transport dockets must be filed as evidence of removal.	If not VENM - nearest landfill at UR-3R Eastern Ck under appropriate waste classification ² . All soil materials <u>must</u> be tracked by an EPA approved method. Weighbridge dockets must be filed as evidence of disposal.

¹ Virgin Excavated Natural Material (POEO Act 1997).
² NSW EPA, Waste Classification Guidelines Part 1: Classifying Waste, Nov 2014.

3 Waste Inventory and Management

Material Onsite		Destination		
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Green waste: approx.. Trees/shrubs/grass	83 m ³	Small branches, leaves and shrubs chipped for mulch	Large trunks to be reused for timber and taken to Suez Seven Hills	Nil
Bricks	0 m ³	Nil	Nil	Nil
Concrete - house, shed and on ground	23 m ³	Crush and reuse as granular fill.	Nil.	Nil
Timber – roof, walls – house and sheds	14.6 m ³	Timber studs, roof and ceiling timbers reused for shoring and formwork	Other timber – recycled at St Marys.	Nil
Cladding board	4,0 m ³	Nil	Refer hazardous material report	Refer Hazmat report
Metals – reo, pipes and all miscellaneous found.	8.3 t	Nil	Reo bar, pipes etc to be recycled Suez Seven Hills.	Nil
Other: Carpet and floor tiles	1,0 m ³	Nil	All non-reusable.	Landfill at Eastern Ck.
Pavers	0 m ³	Nil	Nil	Nil

3 Waste Inventory and Management

Material Onsite		Destination		
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Windows	Refer to offsite list	Nil	Recycle - second hand store: 12 windows all need new glass.	Nil
Doors	Refer to offsite list	Nil	Recycle - second hand store. 6 internal/external doors	Nil
Sinks	2 off	Nil	No cost sale or recycle Suez Seven Hills.	Nil
Metal Roof and shed walls steel sheets and water tanks	3.0 m ³	Reuse some for shoring	Reuse/recycle Suez Seven Hills.	Nil
Roof tiles stored on site	1.5 m ³	Crush and use for temp access.	Nil	Nil
PVC	1.0 m ³	Nil	Nil	Nil
Miscellaneous items	Refer to offsite list	Nil	Recycle, toilets/bath/ sinks go to second hand store	Landfill Eastern Ck - all other such as mattresses, HWS,

3 Waste Inventory and Management

Material Onsite			Destination	
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Plumbing fittings	2 sets	Nil	Second hand store	Nil
Other	Nil	Nil	Nil	Nil
Other	Nil	Nil	Nil	Nil
Soil remediation	0 m ³	Nil	Nil	Nearest landfill Eastern Ck under appropriate waste classification. All soil materials <u>must be tracked</u> by an EPA approved method. Weighbridge dockets must be filed as evidence of disposal.
Asbestos and other hazardous materials	Types, locations and quantities as shown in HazMat report.	Nil	Nil	Landfill Eastern Ck. Removal and disposal <u>must be</u> conducted by a SafeWork NSW licenced person/business

3 Waste Inventory and Management

3.2 Construction Stage

Table 3-2 Waste Management – Construction Stage

Material Onsite		Destination		
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Bulk earthworks: Excavated – road, services trenches, foundations and piers.	3,202 m ³	Filling of old dam and some low areas at bottom end of the development site	If VENM - reuse on another site as fill. Nil All soil materials must be tracked by an EPA approved method. Transport docket must be filed as evidence of removal. Nil	If not VENM - nearest landfill Eastern Ck under appropriate waste classification. Nil All soil materials must be tracked by an EPA approved method. Weighbridge dockets must be filed as evidence of disposal. Nil
Concrete block offcuts	9 m ³	Crushed, reused as granular fill	Nil	Nil
Brick offcuts	11 m ³	Crushed, reused as granular fill	Nil	Nil
Concrete – surplus	6 m ³	Reuse as granular fill.	Nil	Nil
Timber: Formwork and framing	7 m ³	Reused for support edging formwork	Nil	Left over goes to Landfill Eastern Ck.
Plasterboard	8 m ³	Potential reuse for some areas	Recycled (Boral)	Nil

3 Waste Inventory and Management

Material Onsite		Destination		
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Metals: loose Piping and Reo bar	0.6 m ³	Reo offcuts used in concrete pours as required.	Piping offcuts to be recycled At St Marys	Nil
External Cladding timber Sheet off cuts	6 m ³	Nil	Recycled St Marys	Nil
Purlin offcuts	0 m ³	Nil	Nil	Nil
PVC pipe - loose	1.1 m3	Nil	Recycled St Marys	Nil
Tiles and pavers	5 m ³	Minimal reuse as temporary vehicle access.	Nil	Nil
Insulation	Nil	All measured to size	Nil	Nil
Roofing	0 m ³	Larger offcuts matching required sizes can be reused.	Nil	Nil
Plastic wrap and packaging, timber and metal – bulked.	9 m ³	Nil	Pallets returned to supplier. Metals to St Marys for recycling.	All other to Eastern Ck.
General refuse (site workers)	240L/day	Nil	Recycle bins placed at site sheds for sorting metal/plastic/paper. Removed with other recyclables.	Removed via council garbage trucks as organised by builder.

3 Waste Inventory and Management

Material Onsite		Destination		
Type	Estimated Amount	Reuse & Recycling		Disposal
		Onsite	Offsite	
Miscellaneous offcuts	0 m ³	Nil	Nil	Nil

3 Waste Inventory and Management

3.3 Operational Stage

Table 3-3 Waste Management – Operational Stage ((REFER TO WASTE REPORT BY ELEPHANTS FOOT))

Waste Type	Estimated Quantities per week	Onsite Storage/ Treatment	Destination
General non-putrescible and putrescible	L	Waste bins	Kerbside collection
Paper/cardboard	L	Recycle bin	Kerbside collection
Plastic	L	Recycle bin	Kerbside collection
Glass	L	Recycle bin	Kerbside collection
Metal	L	Recycle bin	Kerbside collection
Organic/vegetation matter	L	Onsite composite	Nil

Waste Sorting ((REFER TO REPORT BY ELEPHANTS FOOT))

Waste will be initially sorted by residents of individual units in kitchen cupboard or pantry bins. Waste and recycling bins are in the basement garbage storeroom. Refer to the attached plan showing bin locations in the townhouses.

- (((Refer to Waste Report by Elephants Foot.)))

Ongoing Management of Waste

4.1 Residential

Ongoing management of the waste will be by the individual owners of each townhouse – each kitchen will have under-bench bins for normal waste and recyclable material, garbage and recycling bins are stored within the property in specific locations minimising visibility of the bins from public view – refer to the architectural and landscape plans. Blacktown Council have a Waste Management Service Charter – Blacktown City 2025 which sets out all requirements. Council has a weekly garbage service for households.

4.2 Development Governance

The special conditions of the Blacktown Council Waste Management Service Charter will spell out how garbage is managed, garbage times and other items of interest for the householder. Blacktown Council contact details for Waste is set out below, the resident can contact council for any waste problems that may arise.

Blacktown City Council – phone 9839 6000 – fax 9831 1961 – Email council@blacktown.nsw.gov.au

Civic Centre – 62 Flushcombe Road Blacktown.

((REFER TO OPERATIONAL WASTE MANAGEMENT REPORT BY ELEPHANTS FOOT.))

References

Blacktown City Development Control Plan 2015.

Blacktown Councils Waste Management Service Charter – Blacktown City 2025.

Environmental Planning and Assessment Regulation 2000.

NSW EPA, Waste Classification Guidelines Part 1: Classifying Waste, Nov 2014.

Protection of the Environment Operations Act 1997.

Safe Work and Environments, “Hazardous Materials Survey & Management Plan,
2014

RAP – to be issued if required.

Waste Avoidance and Resource Recovery Act 2001.

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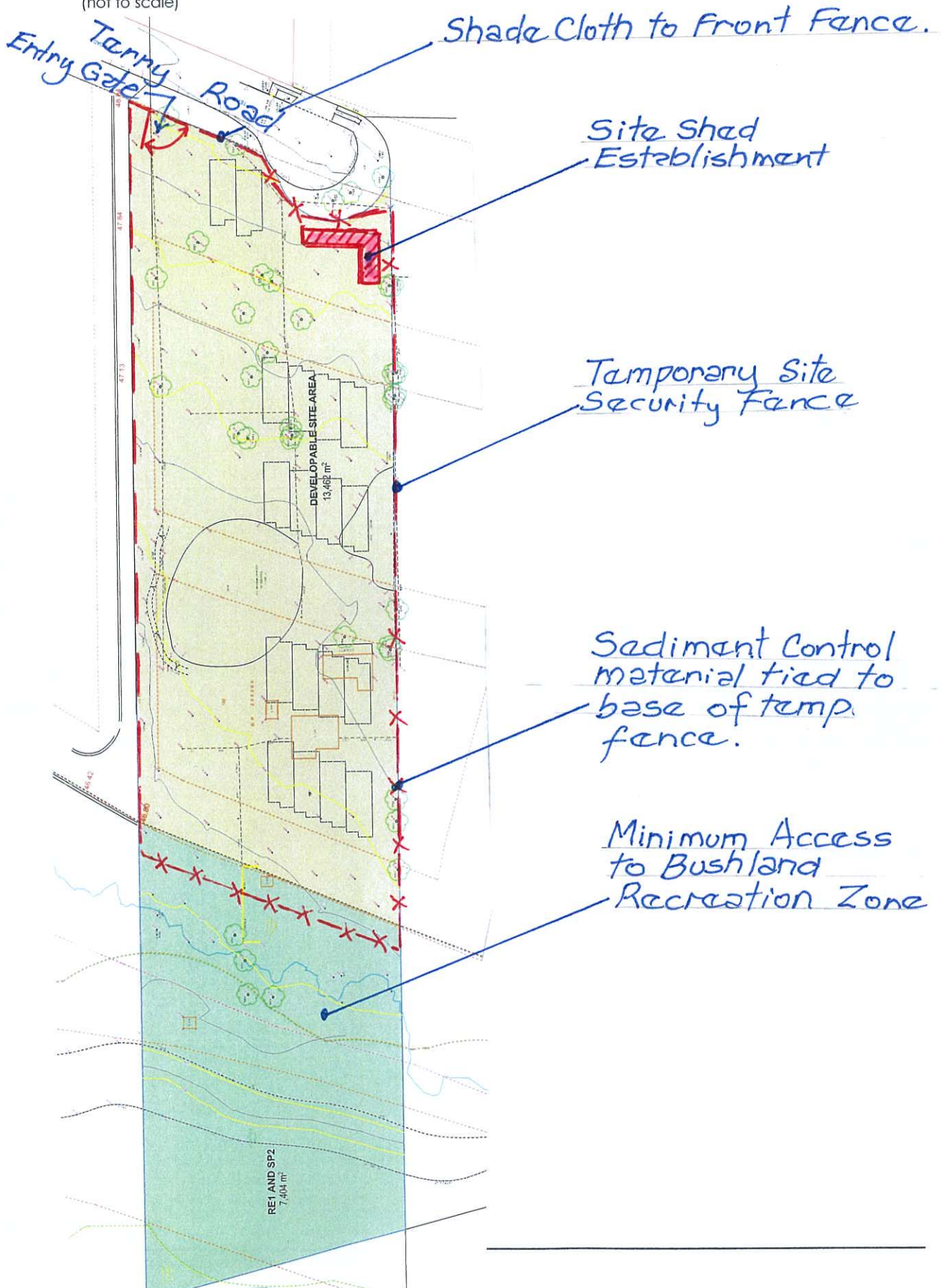
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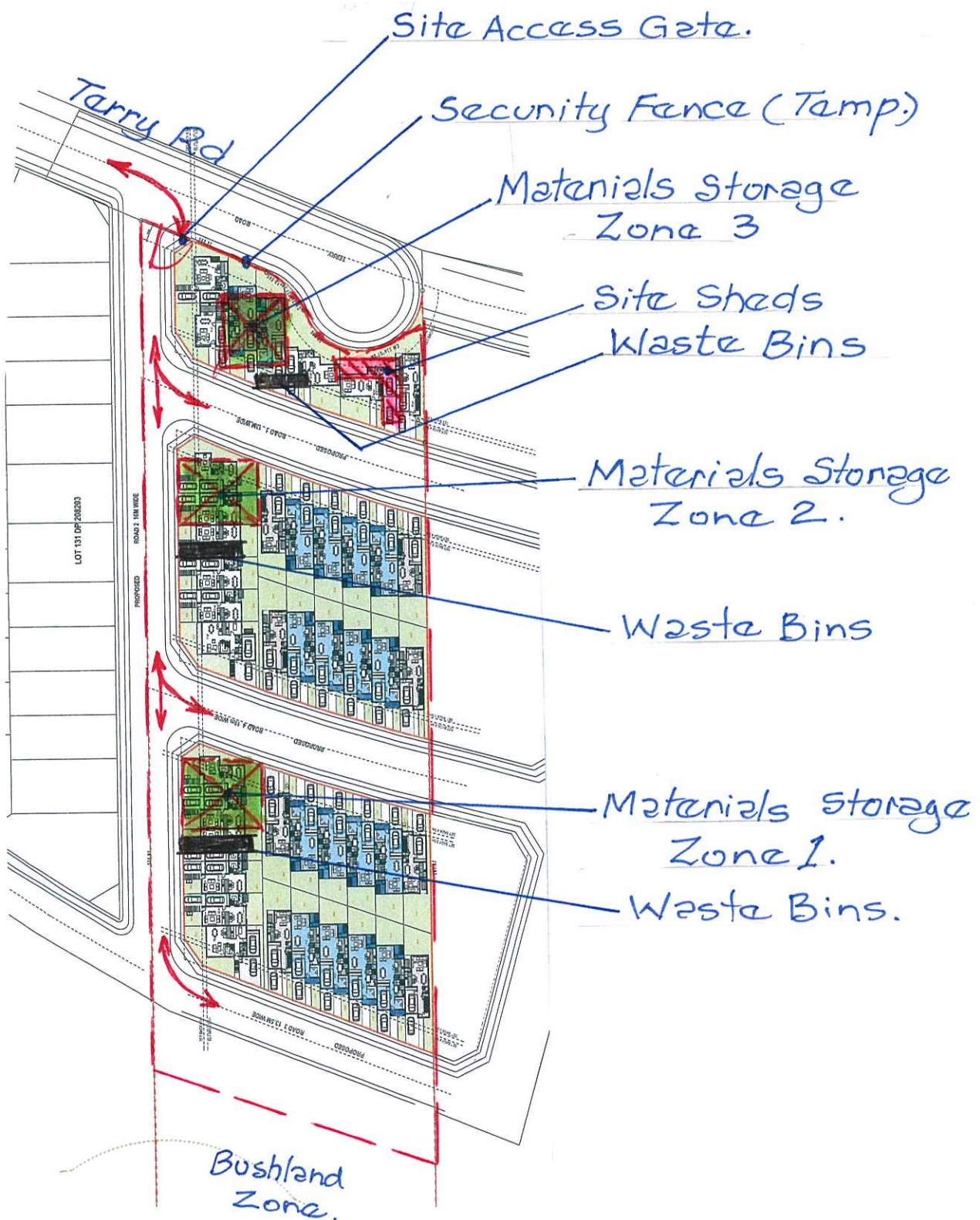
Appendix A Figures

ENVIRONMENTAL PROTECTION MEASURES AND SEDIMENT CONTROL

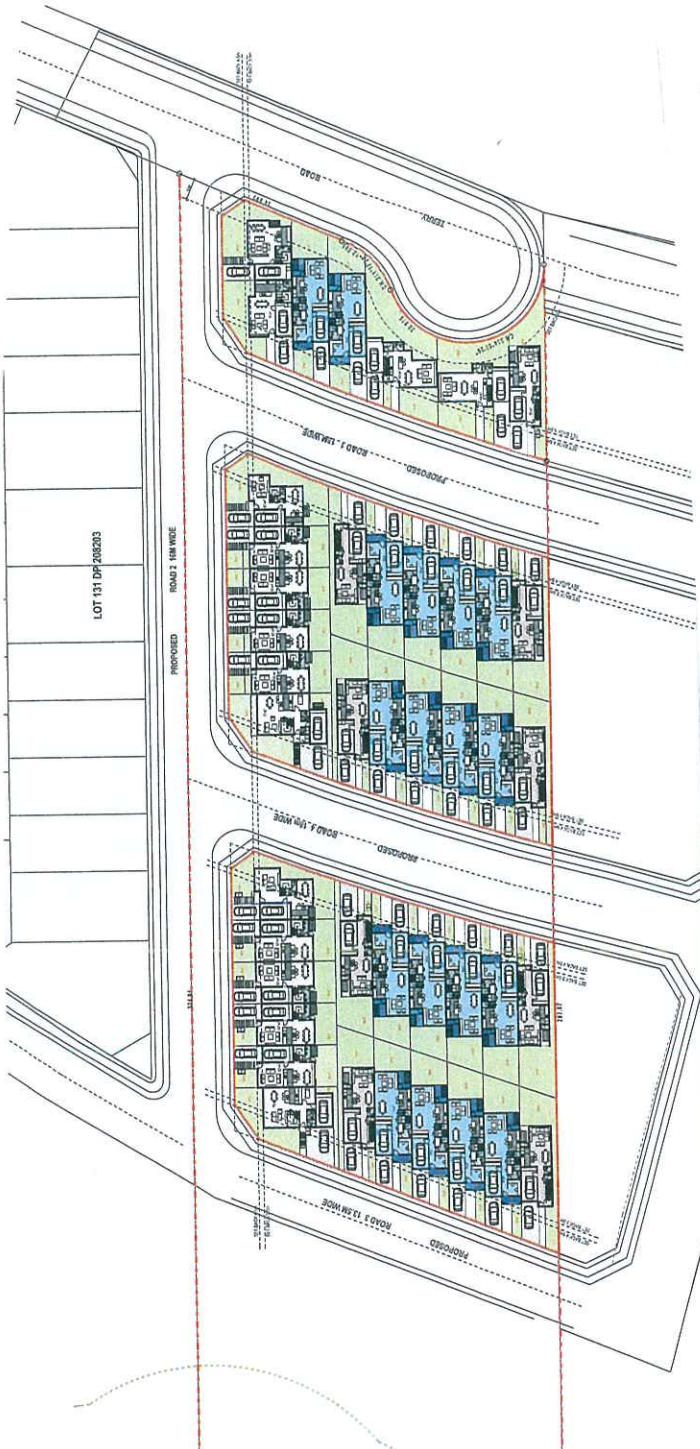
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Site Establishment & Materials
Handling Areas.



Townhouse Setout. 43 off



TOWNHOUSE TYPE 2_4 BED +

GROUND FLOOR	57.0 SQM
FIRST FLOOR	63.0 SQM
TOTAL	120 SQM
GARAGE	19 SQM
ALFRESCO	0 SQM
TOTAL	139.0 SQM
LOT AREA	200.0 SQM
TOTAL	



TOWNHOUSE TYPE 4_ 4 BED

GROUND FLOOR	62.0 SQM
FIRST FLOOR	63.0 SQM
TOTAL	125.0 SQM
GARAGE	17.0 SQM
ALFRESCO	0.0 SQM
TOTAL	142.0 SQM
LOT AREA	163.0 SQM
TOTAL	



PRISMA ROUSE HILL
DEVELOPMENT PTY LTD

Rev	Revision Description	Chk.	Date
A	Issued for Information	SG	22/04/2018

DO NOT SCALE from this drawing. Use given dimensions only.
 Check all dimensions on the job prior to commencement of shop
 drawings or fabrication. Any discrepancies are to be referred to
 the Architect/Engineer/Designer prior to commencement of work.

TOWNHOUSE TYPE 2_4 BED +

GROUND FLOOR	78.0 SQM
FIRST FLOOR	84.0 SQM
TOTAL	162.0 SQM
GARAGE	19.0 SQM
ALFRESCO	9.0 SQM
TOTAL	190.0 SQM
LOT AREA	195.0 SQM
TOTAL	



TOWNHOUSE TYPE 4_ 4 BED

GROUND FLOOR	77.0 SQM
FIRST FLOOR	53.0 SQM
TOTAL	130 SQM
GARAGE	17.0 SQM
ALFRESCO	0 SQM
TOTAL	147.0 SQM
LOT AREA	256.8 SQM
TOTAL	



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Nominated Architect: Stephen Jamison NSW ARB Reg No
5108

TYPICAL PLAN TOWNHOUSE TYPE 1 -

4 TYPICAL PLAN TOWNHOUSE TYPE 1 - *Bin Locations*

Scales	Date	Drawn	Checked	Project No.
NTS	22/06/2018	SG	NJ	6618