



CONSULTANTS

Unit 10, Level 1  
1 Maitland Place  
NORWEST NSW 2153

BAULKHAM HILLS NSW  
1755

T 02 9634 6311  
F 02 9438 5398

---

ENGINEERS

MANAGERS

INFRASTRUCTURE  
PLANNERS

DEVELOPMENT  
CONSULTANTS

# Old Bathurst Road Emu Plains

## Waste Management Plan

**Prepared for: Penrith City Council**

**Document no: NSW211637 - WMP**

**Revision no: 01**

## Disclaimer

This Report has been prepared in accordance with the scope of services described in the agreement between ACOR Consultants Pty Ltd ] and the Client. The Report relies upon data, surveys, measurements and results based on instructions from, and in consultation with, the Client. Except as otherwise stated, ACOR Consultants Pty Ltd has not attempted to verify the accuracy or completeness of any information provided by the Client. If the information is subsequently determined to be false, inaccurate or incomplete then it is possible that changes may be required to the Report. Changes in circumstances or facts, the passage of time, manifestation of latent conditions or impacts of future events may also impact on the accuracy, completeness or currency of the information or material set out in this Report. This Report has been prepared solely for use by the Client, ACOR Consultants Pty Ltd ] accepts no responsibility for its use by any third parties without the specific authorisation of ACOR Consultants Pty Ltd . ACOR Consultants Pty Ltd reserves the right to alter, amend, discontinue, vary or otherwise change any information, material or service at any time without subsequent notification. All access to, or use of, the information or material is at the user's risk and ACOR Consultants Pty Ltd accepts no responsibility for the results of any actions taken on the basis of information or material provided, nor for its accuracy, completeness or currency. For the reasons outlined above, however, no other warranty or guarantee, whether expressed or implied, is made as to the data, observations and findings expressed in this Report, to the extent permitted by law.

## Revisions

Revision	Description	Date	Prepared by	Approved by	Signature
01	DA submission	4 Apr 22	SAG		

## COPYRIGHT

This document, including the concepts and information contained within it, are the property of ACOR Consultants Pty Ltd or any of its related or associated entities. Use or copying of this document in whole or in part without the written permission of ACOR Consultants Pty Ltd constitutes an infringement of copyright. No part of this document may be copied, reproduced, adapted, transmitted or stored in a retrieval system in any form or by any means without written permission or unless otherwise permitted under the Copyright Act 1968. Removal or modification of any copyright or other proprietary protection from this document will be a breach of copyright.

© ACOR Consultants Pty Limited

All intellectual property and copyright reserved.

## Table of Contents

1	Introduction .....	4
2	Requirements .....	4
2.1	Section 5.1 A. Controls .....	4
2.2	Section 5.2. Development Specific Controls .....	4
3	Proposal for the site .....	5
4	Waste management.....	7
4.1	5.3.1 Site management .....	7
4.2	5.3.2. Selection of Building Materials.....	10
4.3	5.3.3. Designing for Waste Minimisation .....	10
4.4	5.3.4. Siting and Design of Waste Storage and Collection Areas .....	11
4.5	5.3.5 Management of Waste Storage and Collection Areas .....	12
4.6	5.4. Hazardous Waste Management.....	12
4.7	On-Site Sewage Management.....	12
5	Conclusion .....	12

## Appendices

Appendix A Waste Management Plan.....	13
---------------------------------------	----

## List of Figures

Figure 1 Most recent Nearmap image of the site.....	5
Figure 2 Proposed subdivision layout.....	6
Figure 3 Waste management storage .....	11

## List of Tables

Table 1 DCP Section 5.3.1 .....	7
Table 2 Waste materials from subdivision construction .....	9

## 1 Introduction

Penrith City Council is preparing a development application over the site at 158-164 Old Bathurst Road, Emu Plains for the creation of a new industrial subdivision consisting of 40 industrial lots, 1 lot for stormwater infrastructure together with associated site works, roads, and street landscaping. As part of the suite of reports to support the DA, Council requires the preparation of a Waste Management Plan (WMP). This is set out in the Council's DCP, Penrith Development Control Plan 2014 in chapter C5 Waste Management.

## 2 Requirements

Within C5 Waste Management the following applies:

### 2.1 Section 5.1 A. Controls

- 1) Applicants are to submit a Waste Management Plan when lodging a development application for:
  - c) Subdivision of land and/or buildings
- 2) The Waste Management Plan must be supported by scaled waste management drawings that are to assist in demonstrating compliance with the provisions of this Plan.
- 3) A Waste Management Plan will also be required for applications for a Complying Development Certificate. NOTE: this paragraph is not relevant to this proposal
- 4) The Waste Management Plan enables Council (or the Certifying Authority) to assess the waste likely to be generated by the development and ensure that appropriate actions are taken so as to properly manage the generation, storage and disposal of wastes.
- 5) The Waste Management Plan must include details of:
  - a) The types and volumes of wastes and recyclables likely to be generated as a result of the development
  - b) How waste and recyclables will be stored and treated on site
  - c) How the residual non-reusable or non-recyclable wastes and recyclables are to be disposed of and
  - d) How ongoing waste management will operate once the development is complete (for the life of the development)

### 2.2 Section 5.2. Development Specific Controls

Within this section are contained the objectives of the Waste Management Plan, which are:

- a) To minimise waste generation for a number of specific development types by providing specific controls for these types
- b) To maximise re-use and recycling of materials through appropriate provision and design of waste recycling areas for each development type
- c) To ensure the appropriate storage and collection of waste from each development type
- d) To ensure new developments can be serviced efficiently and effectively by Council's standard waste service

Point d) will be achieved through the adoption of Council's DCP for industrial subdivisions. The roads provided can accommodate the movement through the site of B-doubles, so the movement of Council's waste collection vehicles will not be an issue since they are a lot smaller than B-doubles.

This WMP will address the requirements contained in C5 Waste Management. There are no specific controls for industrial subdivisions. The requirement for subdivisions is covered in the general controls within Section 5.3. These site management issues will be dealt with below.

### 3 Proposal for the site

The site at Old Bathurst Road was previously used as a concrete pipe manufacturing facility operated by Rocla. This use was continuous for about 50 years until this activity ceased recently and the site was acquired by Penrith City Council.

A separate DA is being submitted for the demolition of the structures currently existing on the site.

An aerial image of the site can be seen at *Figure 1*, below.



Figure 1 Most recent Nearmap image of the site

The proposed layout for the site is shown at *Figure 2*, below.





Figure 2 Proposed subdivision layout

## 4 Waste management

### 4.1 5.3.1 Site management

Within Section 5.3.1 Site management the following issues are required to be addressed in *Table 1*, below.

Table 1 DCP Section 5.3.1

ID a	ID i	Text from DCP	Proposal for site
a)		Minimising site disturbance and eliminating unnecessary excavation	<p>Only necessary excavation is proposed on the site to:</p> <ol style="list-style-type: none"> <li>1. Create the shape of the surface that will facilitate drainage of the site</li> <li>2. Excavate to install stormwater drainage conduits</li> <li>3. Excavate to install other conduits for services including sewer, water electrical and communications infrastructure</li> <li>4. Excavate to install retaining walls as required</li> <li>5. Excavate to install water quality improvement ponds</li> </ol>
b)		Where applicable, stripping topsoil from areas subject to excavation and storing it on site for re-use	There is no topsoil on the site as most of it has been replaced with hard surfaces which are being demolished under the demolition DA which is separate to this DA for subdivision and has its own WMP
c)		Identifying all waste likely to result from the works on site and opportunities for the re-use or recycling of materials	See <i>Table 2</i> , below for details
d)		Where construction is proposed, determining	
	i.	Opportunities for the use of prefabricated components and recycled materials	<p>Prefabricated components include</p> <ol style="list-style-type: none"> <li>1. all conduit materials which encompass both pipes and culverts will be prefabricated</li> <li>2. Components of the site infrastructure including drainage pits, sewer manholes, water quality control elements such as gross pollutant traps</li> <li>3. Retaining walls where required will be prefabricated off-site wherever possible</li> </ol>
	ii.	Approximate volumes of materials to be used and incorporating these volumes into a purchasing policy so that the correct quantities are purchased	The QS report contains approximate volumes of materials. These will be further refined as the detailed design development progresses after DA is granted

ID a	ID i	Text from DCP	Proposal for site
	iii.	Delivery arrangements of materials so that materials are delivered 'as needed' to prevent the degradation of materials through weathering and moisture damage	<p>Products for civil construction are usually delivered "just in time" as they are expensive and often have long lead times.</p> <p>The materials themselves are weatherproof and are exposed to the environment throughout the course of their life cycle often for over 100years.</p>
	iv.	Opportunities to return excess materials to the supplier or manufacturer;	Excess materials are valuable and will be returned to suppliers or used on other projects by the contractor
e)		Considering the method of demolition to be utilised so that selective deconstruction is implemented, enabling effective recycling of materials	This is covered in the separate DA for demolition
f)		Identifying the area(s) on site to be used for the storage of materials, separating the areas for recycling and disposal (giving consideration to access, slope, drainage, location of waterways, stormwater outlets and vegetation)	See waste management plan drawing associated with this WMP
g)		Ensuring that separated materials are to be kept uncontaminated to guarantee the highest possible reuse value	This will form part of the contractor's Construction and Environment Management Plan (CEMP)
h)		Considering where excess fill material will be disposed of, the quantity and quality of the excess material and the method of transport to be used	It is anticipated that there will be no excess fill to be disposed off-site. The need to import material will limit the need for export of excess material off-site.
i)		Identifying and providing measures to prevent the occurrence of windblown litter, dust and stormwater pollution	This will form part of the contractor's Construction and Environment Management Plan (CEMP)
j)		Where applicable, ensuring that:	
	i.	Contractors are arranged for the transport, processing and disposal of waste and recycling	This will form part of the contractor's Construction and Environment Management Plan (CEMP)
	ii.	Evidence, such as weighbridge dockets and invoices for waste disposal or recycling services, is retained and available for presentation to Council Officers upon request	This evidence will be retained as it will form the basis of authorising contractor payments during the construction contract



Any material that cannot be re-used on site will be disposed of at Cleanaway Kemps Creek Resource Recovery Park (Cleanaway) at 1725 Elizabeth Drive Kemps Creek, or other site as authorised when the civil contractor is appointed.

Table 2 Waste materials from subdivision construction

SECTION 2: CONSTRUCTION OF SUBDIVISION				
Materials		Destination		
		Re-use and recycling		Disposal
Material	Estimated volume (m <sup>2</sup> or m <sup>3</sup> )	ON-SITE* Specify proposed re-use or on-site recycling	OFF-SITE Specify contractor and recycling facility	Specify contractor and landfill site
Excavation (eg soil, rock)	Import 70,000m <sup>3</sup> of soil to raise site levels to ensure the drainage strategy works	Material on site will be re-shaped towards attaining site levels to ensure site stormwater drainage	NA	Cleanaway
Green waste	556 trees to be removed which is approximately 6000m <sup>3</sup> of mulch	118,059m <sup>2</sup> needs to be stabilised after earthworks so the mulch can be used for this purpose. 6000m <sup>3</sup> will cover the lots to the thickness of about 50mm across the site excluding lot 32. Lot 32 will be subject to a different landscape solution to the Landscape Architect's details.	NIL	NIL
Bricks	No bricks to be used in the construction of the subdivision	NA	NA	NA
Concrete		Excess concrete will be returned to the plant	NA	NA

## SECTION 2: CONSTRUCTION OF SUBDIVISION

Materials		Destination		
		Re-use and recycling		Disposal
Material	Estimated volume (m <sup>2</sup> or m <sup>3</sup> )	ON-SITE* Specify proposed re-use or on-site recycling	OFF-SITE Specify contractor and recycling facility	Specify contractor and landfill site
Timber (Please specify type/s)	The only timber to be used will in in formwork construction	Will be re-used on other projects by the contractor	NA	NA
Plasterboard	Not used in subdivision works	NA	NA	NA
Metals (Please specify type/s)	Reinforcing steel	Mostly used on-site	Minor off-cuts to be sent to recycling	To be included in contractor's CEMP
Other - offcuts from pipes	20m <sup>3</sup>	NA	Usable off-cuts to be re-used on site where possible	Excess to be sent to recycling if possible or landfill if not possible - to be addressed in the contractor's CEMP or to Cleanaway

### 4.2 5.3.2. Selection of Building Materials

Construction materials for the site will be selected to satisfy the specifications and requirements of Penrith City Council. Since the hard construction of roads, pavements, stormwater pipelines, etc will become the assets of Penrith City Council the agreement of the assets team will be required for any departures from their standards. Any innovations will be tackled after DA assessment so as not to protract the assessment of the DA for the industrial subdivision.

Other constructions for sewer and water reticulation, communications, electricity will all need to be done to satisfy the requirements of Sydney Water, Endeavour Energy and NBN. Again, there is little opportunity for innovative materials selection for these utility assets.

### 4.3 5.3.3. Designing for Waste Minimisation

As much of the components of the civil works as possible will be selected for prefabrication. Elements such as reinforced concrete box culverts (RCBCs) will be pre-cast to suit design requirements. Other elements such as pipelines will be designed for utilisation of whole pipe lengths wherever possible.

Many items for construction do not have any packaging so that will be a saving in waste generation. Where there is waste from packaging this will be disposed of in accordance with this WMP.

#### 4.4 5.3.4. Siting and Design of Waste Storage and Collection Areas

Since this WMP applies only to the subdivision construction, the provision of waste facilities for each new lot created will occur at the DA stage for each of the new lots.

This WMP provides for storage of waste as shown on the WMP at *Appendix A*. An extract from that plan is shown below at *Figure 3*. Note that the proposed bins shown are drawn to scale on the drawing in *Appendix A*.

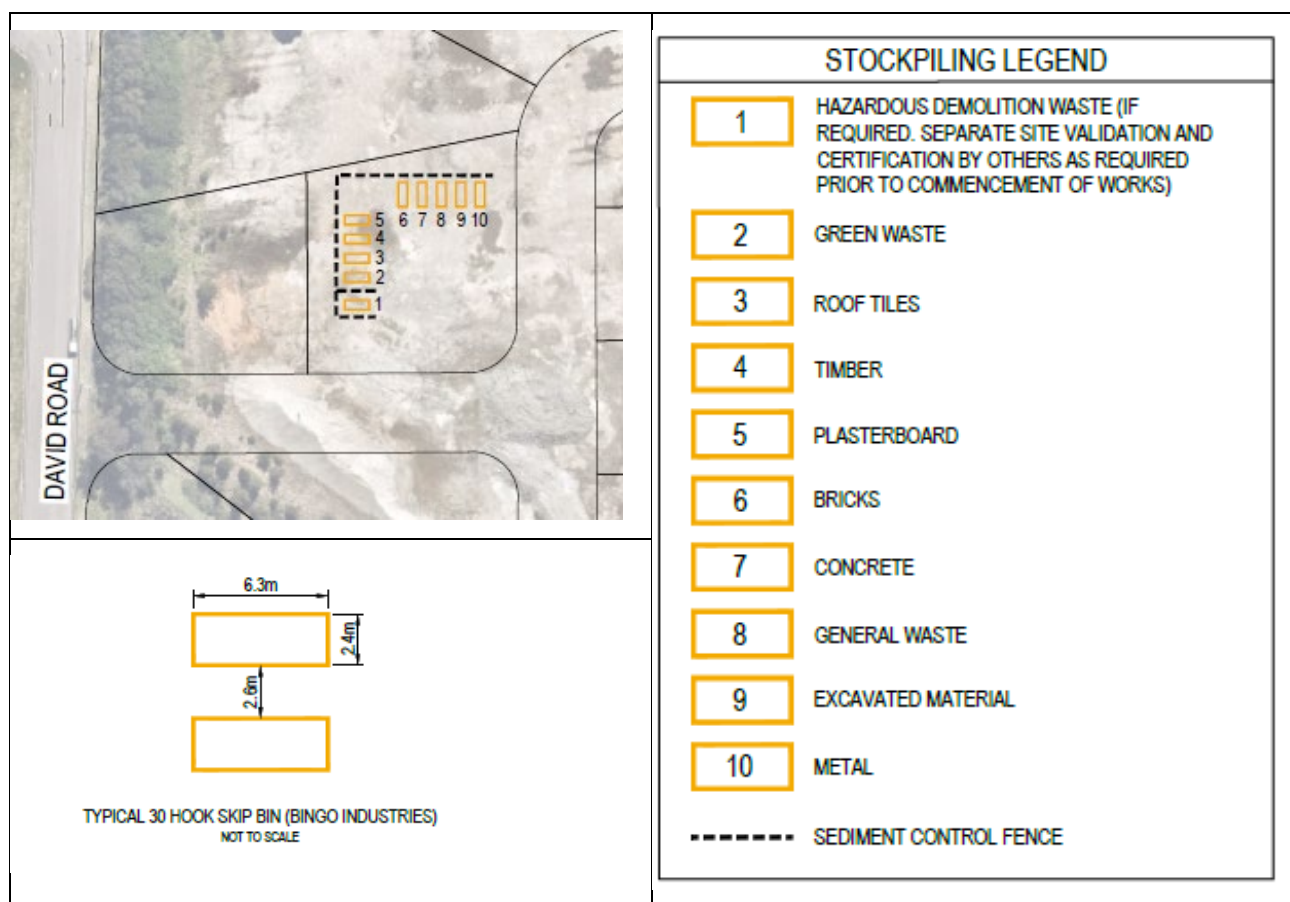


Figure 3 Waste management storage

The provision of bins will be adjusted to be in accordance with the civil constructor's CEMP. This WMP will be used as the basis for the provision of storage bins. While it is not anticipated that there will be green waste (other than trees to be removed), roof tiles, timber, plasterboard, and bricks, there is always the possibility on these old industrial sites that even after demolition has taken place that additional materials are encountered during bulk earthworks.

The location of the waste sorting area will be within the civil contractor's compound and so will be fenced and lit for security.

#### **4.5      5.3.5 Management of Waste Storage and Collection Areas**

During the civil works construction, the civil contractor will be the responsible party for all activity on the site. As such they will be responsible for all administration of waste, signposting of access to the waste area, and signage for each bin.

#### **4.6      5.4. Hazardous Waste Management**

It is not anticipated that any hazardous waste will be encountered, however, there will be a hazardous waste protocol established in the civil works contract to cover the circumstance of unexpected finds. This will be supported by the engagement of a contamination specialist for the site works phase. Currently this specialist is JBS & G, who have compiled the reports for the site on all aspects of land and water contamination.

#### **4.7      On-Site Sewage Management**

The site is currently serviced by Sydney Water's sewerage system. During construction all waste will either be disposed of using Sydney Water's assets, or a separate temporary facility for construction will be installed within the civil contractor's compound.

### **5      Conclusion**

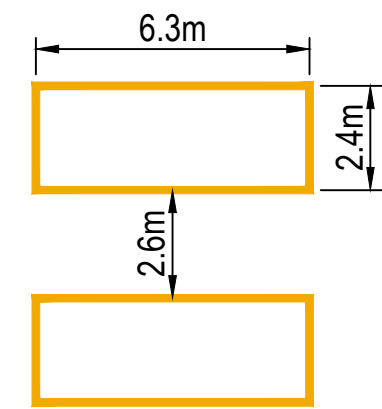
This Waste Management Plan has been prepared to demonstrate to council that a plan is in place to satisfy the requirements of council's DCP part C5 Waste Management.

This plan will be further refined within the appointed contractor's CEMP, which be a contractual requirement with Penrith City.

## Appendix A Waste Management Plan



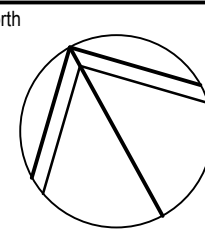
STOCKPILING LEGEND	
1	HAZARDOUS HOUSE DEMOLITION WASTE (IF REQUIRED, SEPARATE SITE VALIDATION AND CERTIFICATION BY OTHERS AS REQUIRED PRIOR TO COMMENCEMENT OF WORKS)
2	GREEN WASTE
3	ROOF TILES
4	TIMBER
5	PLASTERBOARD
6	BRICKS
7	CONCRETE
8	GENERAL WASTE
9	EXCAVATED MATERIAL
10	METAL
-----	SEDIMENT CONTROL FENCE



This aerial map illustrates a proposed land development project. The map shows a large area divided into numerous lots, with specific sections labeled MC01, MC03, and MC04. A legend in the upper left corner identifies the lot numbers 1 through 10, which are highlighted in yellow. The map also shows surrounding infrastructure, including Old Bathurst Road, David Road, and a railway line. The project area is situated between these roads and the railway line, with a large body of water visible to the right.

SCALE 1:1000 @ A1  
SCALE 1:2000 @ A3

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

[illegible]

Client	
--------	--

601 HIGH STREET  
PENRITH, NSW 2750  
PHONE : (02) 4732 7777



PLANNER

LEVEL 10, 70 PITT STREET  
SYDNEY, NSW 2000  
PHONE : (02) 9249 4100



ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

ACOR Consultants Pty Ltd

Unit 10, Level 1, No.1 Maitland Place  
Baulkham Hills NSW 2153  
T +61 2 9634 6311



Project	
---------	--

## EMU PLAINS INDUSTRIAL PARK

158-164 OLD BATHURST ROAD  
EMU PLAINS, NSW 2750

Drawing Title
---------------

WASTE MANAGEMENT PLAN

Drawn UF	Date MAR 2022	Scale 1:1000	A1	Q.A. Check KP	Date 29.03.22
Designed VG	Project No. NSW211637			Dwg. No. C11.001	Issue A

Apr 05, 2022 - 12:41pm  
U192.168.62\synergy\Projects\NSW211637\Drawings\CAD\CIV\Drawings\NSW211637-SHT-0A-C11.001.dwg