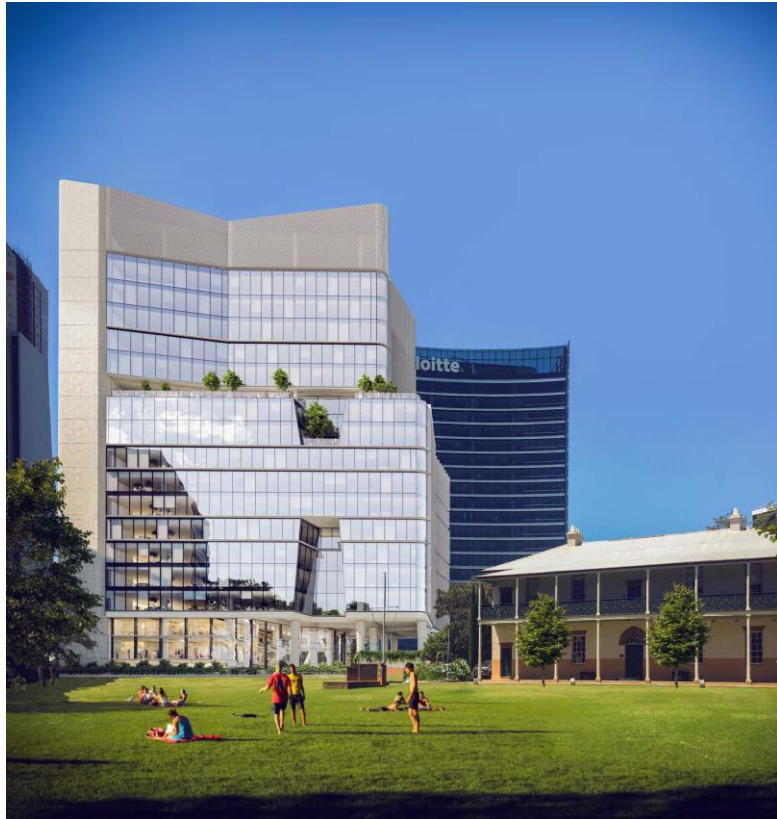




environmental management
pty ltd

CONSTRUCTION WASTE MANAGEMENT PLAN WESTERN SYDNEY CAMPUS



REVISION NUMBER:

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REPORT DATE:

11/04/2019

SUBMITTED TO:

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DISCLAIMER

This report is based on information provided by Solutions Consulting. To that extent this report relies on the accuracy of the information provided to the consultant. This report is not a substitute for legal advice on the relevant environmental related legislation, which applies to businesses, contractors or other bodies. Accordingly, EcCell Environmental will not be liable for any loss or damage that may arise out of this project.

DOCUMENT CONTROL

ISSUE NUMBER	DATE	AUTHOR	REVIEW	APPROVED BY
DRAFT 1	29/03/2019	Patrick Nolan	Jo Drummond	Jo Drummond

INTRODUCTION

The purpose of the Construction Waste Management Plan (CWMP) is to comply to the Parramatta Waste Management Guidelines for new Development Applications 2016.

The State Significant Development Application (SSDA) submitted to the Department of Planning and Environment (DPE) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&AA Act 1979) for a mixed-use tertiary educational and commercial development at 2-6 Hassall Street, Parramatta, also known as the Western Sydney University (WSU) Innovation Hub.

This report has been prepared having regard to the Secretary's Environmental Assessment Requirements (SEAR) for the project by DPE, ref no SEAR 9670 issued on 9 November 2018.

The project is a commercial office fit-out a total of 28,087 m² Net Lettable Area (NLA) spread across 19 floors and will typically consist of an appropriate mix of agile, fixed, break out, studio, workshop, meeting and client areas.

PURPOSE

The Construction Waste Management Plan (CWMP) is to address demolition, excavation and construction waste including:

- details regarding how waste is to be minimised within a development;
- estimations of quantities and types of materials removed from the site;
- details regarding the types of waste and likely quantities of waste to be produced;
- details of reusing or recycling methods for waste either on-site or off-site;
- targets for recycling;
- facilities verification systems for retaining waste dockets from appropriately licensed facility;
- measures to reuse or recycle at least 80% of construction and demolition waste,

PROJECT PROFILE PROJECT PROFILE

The project is proposed to incorporate the following:

- Basement Carpark;
- Ground – Entry foyer, retail/café tenancies, plantrooms and loading dock;
- Podium Levels 01 & 02 – Commercial tenancy;
- Low Rise Levels 03 to 11– Commercial tenancy;
- Mid-level plant room;
- High Rise Levels 12 to 17 - Commercial tenancy; and
- Roof Level 18 - Plantroom.

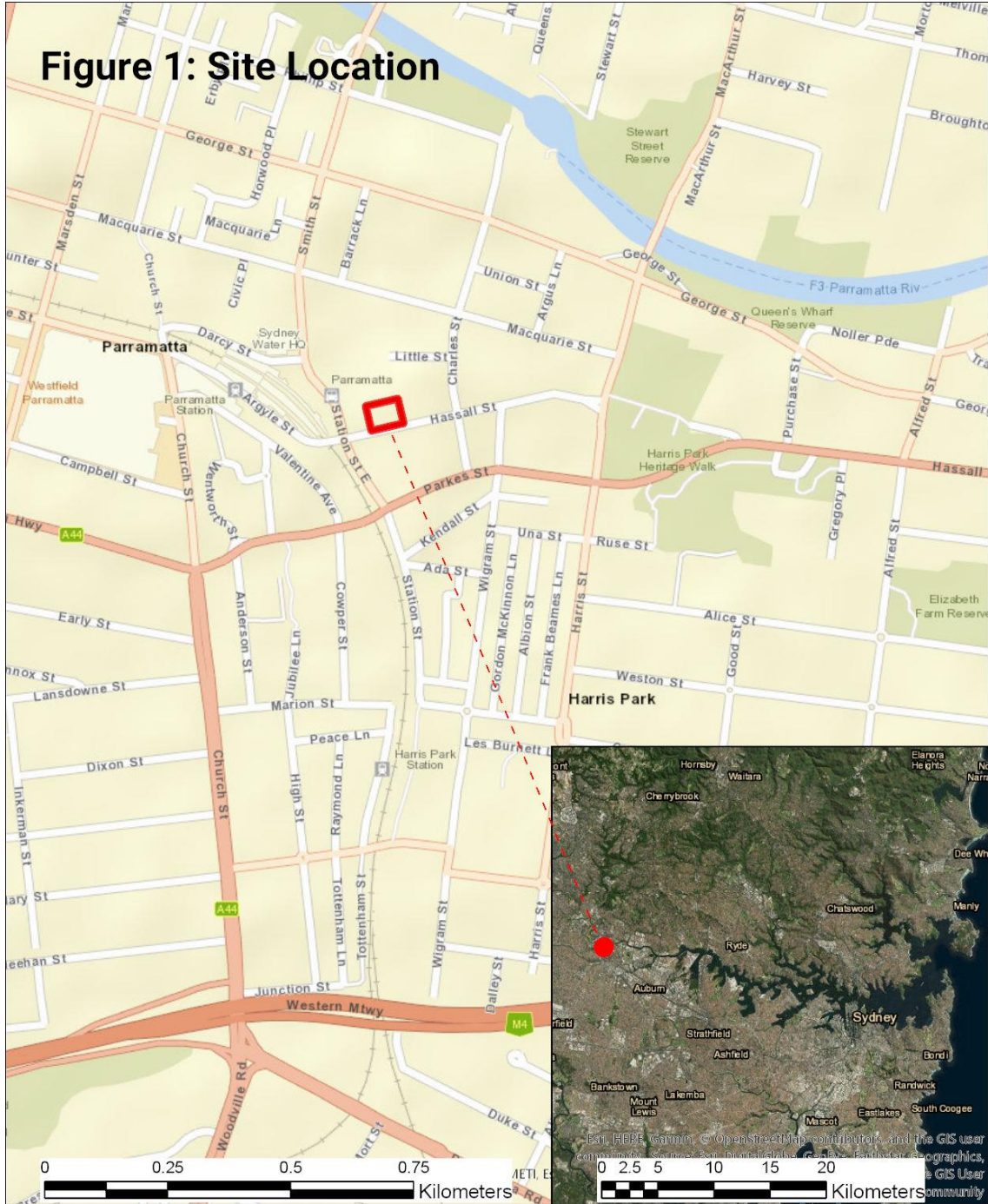
OBJECTIVES & TARGETS

The project objectives include:

- Meeting all waste management standards while ensuring the health and safety of the workers on the project.
- Maximising the quantities of materials diverted from landfill by reusing, recycling, reprocessing off-site, and returning to suppliers.

- Disposal of no more than 20% of residual waste materials to a licensed landfill in accordance with both regulatory and legal requirements.
- The diversion from landfill of 80% of construction waste by weight, to meet the criteria of the NSW State Government’s waste legislation, waste policy settings and regulatory regime.

INDICATIVE SITE LOCATION



Legend:
 Site Location

Notes:
 Spatial Reference
 Datum: WGS 1984
 Projection: Mercator Auxiliary Sphere
 Date: 21/02/2019

RESPONSE TO SEARS

The CWMP is required by the Secretary’s Environmental Assessment Requirements (SEARs) for SSD 18_9354. This table identifies the SEARs and relevant reference within this report.

Table 1 – SEARs and Relevant Reference

SEARs Item	Report Reference
Classification of the waste.	Page 6/7/8
Estimates / details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance.	Page 6/7/8
Handling of waste including measures to facilitate segregation and prevent cross contamination.	Page 4
Management of waste including estimated location and volume of stockpiles.	Page 6/7/8
Waste minimization and reuse.	Page 4
Lawful disposal or recycling locations for each type of waste;	Page 3
Contingencies for the above, including managing unexpected waste volumes.	Page 3

LEGISLATIVE REQUIREMENTS AND GUIDELINES AND CONDITIONS

Relevant key legislation and guidelines applicable to the project include:

- Protection of the Environment Operations Act 1997
- Protection of the Environment (General) Operations Act 1998
- Waste Avoidance and Resource Recovery Act 2014
- Protection of the Environment Operations (Waste) Regulation 2014
- NSW Department of Planning and Environment, Secretary’s Environmental Assessment Requirements (SEARs).
- Protection of the Environment Operations Act 1997
- Parramatta Waste Management Guidelines for new Development Applications 2016.

SERVICING ARRANGMENTS

The current legislation determines that the generator of waste is the owner of the waste until the waste crosses a calibrated weighbridge into a licensed facility. Waste contractors employed by construction contractors are the primary transporters of waste off-site, accordingly, waste contractors will be required to provide verifiable monthly reports on waste reused, reprocessed or recycled (diverted from landfill) or waste sent to landfill. Disposal dockets will be required to be kept on file. These reports have a direct bearing on the generator’s compliance with the relevant regulations.

The CWMP will be implemented on site throughout including singularly or collectively the demolition, excavation and construction phases.

A Waste Data File must be maintained on-site and all entries are to include:

- The classification of the waste
- The time and date of material removed

- A description of and the volume of waste collected
- The location and name of the waste facility that the waste is transferred to
- The vehicle registration and the name of the waste contractor’s company
- Disposal dockets

The Waste Data File will be made available for inspection to any authorized officer at any time during the life of the site works. At the conclusion of site works, the designated person will retain all waste documentation and make this validating documentation available for inspection.

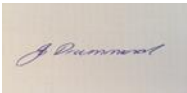
WASTE MANAGEMENT STRATEGIES

The waste management strategy for the project will operate over the design, procurement, and construction including fit out of the project and is detailed in Table 2.

Table 2 - Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
<p><u>Design:</u> Use of modular components in design Use of prefabricated components in design Design for materials to standard sizes Design for operational waste minimisation</p>	<p>Architect & Engineer Architect, Builder, Subcontractors. Architect, Subcontractors Architect & Builder</p>
<p><u>Procurement:</u> Select recycled and reprocesses materials Components that can be reused after deconstruction</p>	<p>Architect, Engineer, Builder & Sub Contractors Architect, Engineer & Builder</p>
<p><u>Pre-construction:</u> Waste management plan to be reviewed & approved prior to construction. Contract a Waste Contractor</p>	<p>Builder Waste Contractor</p>
<p><u>Construction on-site:</u> Use the avoid, reuse, reduce, recycle principles Minimisation of recurring packaging materials Returning packaging to the supplier Separation of recycling of materials off site Audit & monitor the correct usage of bins Audit and monitor the Waste Contractor</p>	<p>Builder & Waste Contractor Sub-contractors Builder & Sub-contractor Waste Contractor Builder & Waste Contractor Builder</p>

WASTE MANAGEMENT PLAN APPLICATION

PROJECT:				
Commercial Development				
ADDRESS:				
6 Hassa Il Street,Parrammatta				
OWNERS:				
Charter Hall				
Details of Applicant				
Thomas Lay SOLUTIONS CONSULTING L14, 5 MARTIN PLACE, SYDNEY NSW 2000 Thomas.lay@solutionsconsulting.com.au				
Description of buildings and other structures currently on the site:				
Three level block of residential units				
Brief description of proposal:				
Basement Carpark; Ground – Entry foyer, retail/café tenancies, plantrooms and loading dock; Podium Levels 01 & 02 – Commercial tenancy; Low Rise Levels 03 to 11– Commercial tenancy; Mid-level plant room; High Rise Levels 12 to 17 - Commercial tenancy; and Roof Level 18 - Plantroom.				
If materials / waste is reused on site or off site, how will it be re-used:				
Reuse area will be established by the builder for steel,plasterboard,plastic drums and pallets				
	Name	Signed	Contact Number	Date
Prepared by :	Jo Drummond		0412214233	29/03/2019

PROJECT PHASE

DEMOLITION

Material Type on Site	Estimated Weight (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse tonnes	Recycling tonnes	Landfill Disposal tonnes	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Recycling Outlet or Landfill site
Concrete, Brick & Ashphelt	Nil	2,910.90	Nil	Stockpiling and loading	Allams	Concrete Recyclers Camella
Metal	Nil	59.40	Nil	Stockpiling and loading	Allams	Sydney Metal Traders
Mixed Waste	Nil	77.61	2.49	Stockpiled and loading	Allams	Bingo industries Recycling Centre Auburn
Hazardous	Nil	Nil	9.34	Separataed and loading	Allams	Suez Kemps Creek
SUB TOTAL	Nil	3,047.90	11.83			
Total	3,059.74					
Narrative: Recycling rate: 99%						

EXCAVATION

Material Type on Site	Estimated By volume (m ³) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse m ³	Recycling m ³	Landfill Disposal m ³	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Recycling Outlet or Landfill site
General Solid Waste/special waste			1,100 m ³	Stockpile, load and transport	Sydney Recycling Park	Clifton Ave, Kemps Creek
Excavated Natural Material	14,650 m ³			Stockpile, load and transport		TBA
Total Excavated Material:	15,750 m³,					
<p>Narrative: The excavation phase of the project identified approximately 15,750 m³ of excavated material. Approximately 7% of the total (general and special waste), was sent to land fill and 93% will be reused off site.</p>						

CONSTRUCTION

Material Type on Site	Estimated by volume(m ³) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse m ³	Recycling m ³	Landfill Disposal m ³	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Recycling Outlet or Landfill site
Masonry: Brick, Block Work, render and Tiles		452 m ³		Co-mingled Bins	TBA	Crushed for road base
Metals: steel, reo, Tin, iron		284 m ³		Co-mingled Bins	TBA	Scrap Metal Dealer for smelting
Timber off-cuts		585 m ³		Co-mingled Bins	TBA	Recycled for woodchips and mulch
Cardboard		652 m ³		Co-mingled Bins	TBA	Recycled into cardboard packaging
Plasterboard		605 m ³		Co-mingled Bins	TBA	Recycled as soil conditioner
Containers: plastics, plastic packaging		312 m ³		Co-mingled Bins	TBA	Recycled into further plastic
Pallets and Reels	250 units			Co-mingled Bins	TBA	Returned to the supplier
Liquid Waste			65 m ³	Seperated Container/Bin	TBA	Transferred to licenced landfill
General Waste			650 m ³	Co-mingled Bins	TBA	Transferred to licenced landfill
Sub Total	250 units	2,890 m³	717 m³			
TOTAL	3,607 m³			Plus 250 units of reels and pallets returned to suppliers		
<p>Narrative: *As the contracts for all contractors have not been let there are still those including the waste contractor To Be advised (TBA). *All waste will be co-mingled and taken for off-site separation and reuse or recycling except Pallets and Reels.</p>						

CONSTRUCTION WASTE PATHWAY



LEGEND

-  Traffic Direction
-  Waste Collection Area
-  Site Location

Notes:

Date: 29/03/2019

