CONSTRUCTION WASTE MANAGEMENT SUB-PLAN (CWMSP)

Darcy Road Public School

February 2024

TAYLOR

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Project Plan Information

Project Name: Darcy Road Public School

Project Address: 98A Darcy Road, Wentworthville NSW 2145

Revision Information

Rev Date	Revision Description	PM's Initials (Acceptance of Changes)
06/09/2023	Issued for SSDA Approval	FS
22/11/2023	SI Planning Review	FS
12/01/2024	New draft Condition requirements applied	FS
16/02/2024	RPI Review	FA

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APPENDICES:

1. Introduction

1.1. DESCRIPTION OF THE WORKS

This report has been prepared on behalf of the NSW Department of Education (DoE) and School Infrastructure NSW (SINSW) to support the State Significant Development Application (SSD-49073460) for the upgrade of Darcy Road Public School.

Darcy Road Public School is located at 98A Darcy Road, Wentworthville within the Parramatta Local Government Area. Darcy Road Public School comprises 11 separate allotments, which have a combined area of 23,531m2, forming an irregular and consolidated development parcel. The legal description is outlined below:

- Lot 6-7 in DP 10955;
- Lot 1 in DP 782155;
- Lot A in DP 383734;
- Lot 1 in DP 122893;
- Lot 1 in DP 160134; and
- Lots 12-16 in DP 16811.

Darcy Road Public School is the subject site of this SSDA, however the extent of physical works is limited and is not located across the entire site. The subject site, and the extent of SSDA physical works are shown in Figure 1.1 below.

There is a separate planning approval for a temporary school and associated infrastructure to be located on/near the existing oval on the southeast of the site. Indicative location of the temporary school and associated infrastructure is shown below in Figure 1.1.

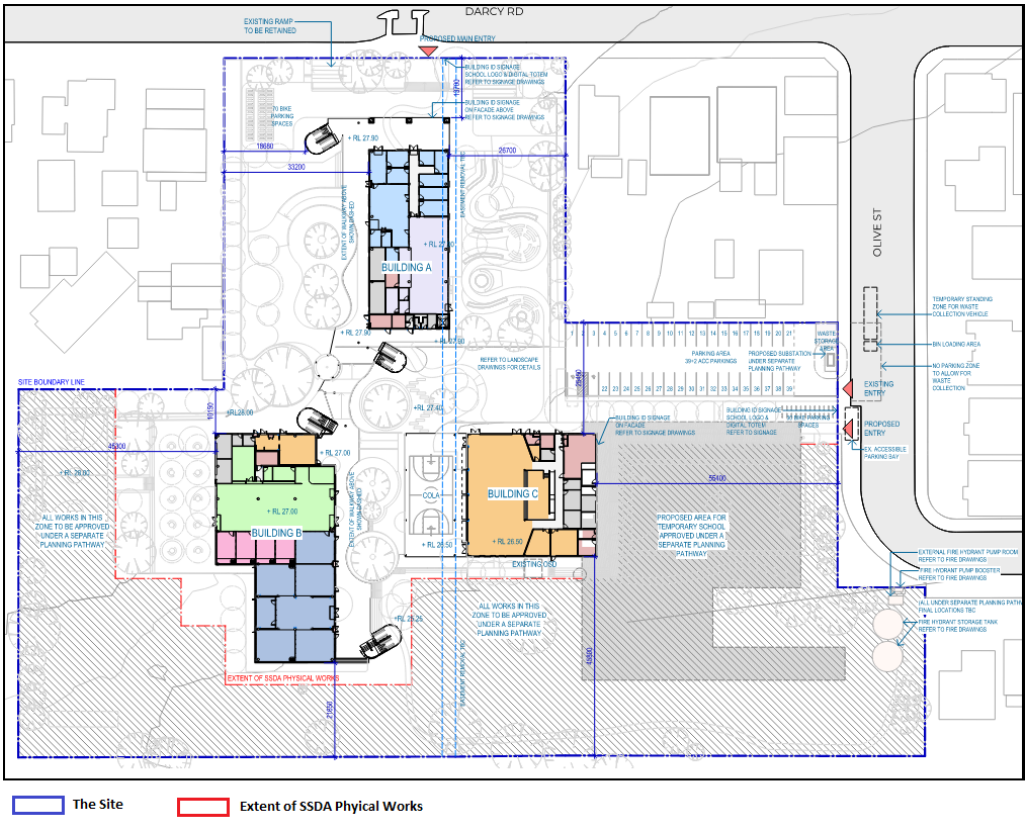


Figure 1.1 – Site Plan and the extent of SSDA physical works

The development application pathway for the project consists of an SSDA pursuant to section 4.36 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The project involves the upgrade of Darcy Road Public School to accommodate 1,000 students and 25 new permanent staff. The proposal includes the following:

- Demolition of all buildings associated with the existing school, except for the existing hall which will be retained and refurbished;
- Construction of a new school comprising two new interconnected buildings up to four storeys,
- Construction of new open spaces and landscaping;
- Refurbishment of the existing hall including demolition of existing ancillary features to the eastern side of the building and extension of the hall into the existing covered outdoor learning area; and
- Extension of the existing car park.

The existing hard courts and oval within the broader Darcy Road Public School are outside of the extent of SSDA physical works.

During the construction period, the majority of the school will be relocated to a temporary area using demountable buildings in accordance with a separate planning approval outside of the SSDA boundary.

Upon completion of the SSDA works, Darcy Road Public School proposes to accommodate 1,000 students, assisting in alleviating current enrolment pressures within the Parramatta LGA. Darcy Road Public School will contain high quality collaborative learning spaces and associated facilities, creating future focused education through new and sustainable buildings.

The completed Darcy Road Public School will offer:

- facilities that are readily accessible and flexible to meet the demands of an evolving curriculum in line with future-focused learning principles
- flexible and well-connected teaching and learning spaces that enable a variety of teaching and learning practices
- spaces that are engaging and supportive for students and teachers
- technology-rich settings with an emphasis on mobility and flexibility
- a healthy and environmentally sustainable environment
- innovative, connected outdoor spaces that enable play and collaborative learning
- connected open space, creating a welcoming and accessible school with indoor and outdoor teaching and learning opportunities

New teaching spaces will incorporate principles of energy efficiency and ecologically sustainable development

(ESD) including:

- passive design principles
- thermal performance and comfort
- natural lighting
- water and recycling management

1.2. OVERVIEW

This Construction Waste Management Plan (CWMP) has been prepared in accordance with the conditions of the Stage Significant Development Approval SSD-49073460 and Condition B16 of the development consent.

A Construction Waste Management Plan (CWMP) had been prepared by EcCell Environmental Management in January 2023, to support a State Significant Development Application (SSD 49073460) for the upgrade of Darcy Road Public School. This document has been prepared based on the information provided in the above-mentioned CWMP and has been developed to further details.

The development application pathway for the project consists of an SSDA pursuant to section 4.36 of the Environmental Planning and Assessment Act 1979 (EP&A Act).

This report addresses the relevant Secretary's Environmental Assessment Requirements (SEARs), State Significant Development Application (SSDA), and Parramatta City Council Conditions.

Table 1 - Secretary's Environmental Assessment Requirements (SEAR's) Requirement

SEARs Item	Report Reference
Identify, quantify, and classify the likely waste streams to be generated during construction.	Section 7 Project Phase
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 5 Waste Management Strategies
Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Section 5 Waste Management Strategies
Provide a hazardous materials survey of existing aboveground buildings that are proposed to be removed or altered.	SLR Consulting Australia Pty Ltd Hazardous Building Material Survey Report October 2022

Table 2 - State Significant Development Application (SSD - 49073460)

SSDA	Report Reference
B16. The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the procedures for the management of waste including the following: (a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use for materials to remain; (b) information regarding the recycling and disposal locations.	This Document Construction Waste Management SUB-Plan
B28. Prior to the commencement of the removal of any waste material from the site, the Applicant must notify the TfNSW Traffic Management Centre of the truck route(s) to be followed by trucks transporting waste material from the site."	
C29. All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.	Appendix A
C30. All waste generated during construction must be assess, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).	Section 7 Project Phase

C31. The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.	CEMP
C32. The Applicant must record the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction.	Section 7 Project Phase
C33. The Applicant must ensure that the removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility is in accordance with the requirements of the relevant legislation, codes, standards and guidelines	Section 5 Waste Management Strategies Management of Hazardous Waste
AN11.The Applicant must consult with SafeWork NSW concerning the handling of any asbestos waste that may be encountered during construction. The requirements of the Protection of the Environment Operations (Waste) Regulation 2014 with particular reference to Part 7 – 'Transportation and management of asbestos waste' must also be complied with."	

Table 3 - Parramatta City Council DCP Control Plan 2011

COUNCIL CONDITIONS 8	Report Reference
8.2 (a)The type and volume of all waste materials and the appropriate destination for each type of waste identified.	Section 7 Project Phase
8.2 (b)non-recyclable waste and containers are to be regularly, collected and disposed of at a licensed disposal site. Frequency of collection should be identified.	Section 7 Project Phase
8.2 (c) No burning or burying of waste is permitted on the site	Section 5 Waste Management Strategies
8.2 (d) Any bulk garbage bins delivered by authorized waste contractors are to be placed and kept within the property boundary.	Section 5 Waste Management Strategies
8.3 All waste (including hazardous materials) must be stored appropriately on site by the head contractor and disposed of by a licensed waste contractor at a licensed facility which can receive such waste	Section 5 Waste Management Strategies Management of Hazardous Waste

2. Project Location

The project site is Darcy Road Public School (DRPS). It is located at: 98A Darcy Road in Wentworthville, NSW, within the Local Government Area (LGA) of the City of Parramatta. DRPS is bound by Darcy Road to the north, Olive Street to the east and residential housing to the south and west. The site is approximately 4 km northwest of Parramatta CBD and 23 km north west of Sydney CBD.

Figure 2.1 - Site Location

3. Purpose and objectives

3.1. PURPOSE

The purpose of the Construction Waste Management Sub Plan (CWMSP) is to address and satisfy conditions of SSD 49073460 highlighted in Table 2 of this report.

The Construction Waste Management Sub Plan (CWMSP) will outline the procedures for effectively managing waste, including the following aspects:

a. Recording of quantities of each type of waste generated during construction.

    a. Classification for materials to be removed and

    b. Validation for materials to remain use.

b. Providing information regarding recycling and disposal facilities;

c. Ensuring that waste will be assess, classified, and managed in accordance with the legislative requirements and guidelines;

d. Delineate the communication process with relevant authorities: Traffic NSW and SafeWork NSW.

3.2. OBJECTIVES

The Objectives of the CWMSP Include:

a) Identify, quantify, and classify waste streams to be generated during construction.

b) Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.

c) To ensure storage and collection of waste is designed and managed having appropriate regard to space, location, amenity and ongoing management of waste management facilities.

d) Describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste.

e) To maximise reuse and recycling of construction materials and materials from development.

f) To encourage building design techniques in general which minimise waste generation.

g) To minimise the amount of waste being deposited to landfill with targets to reuse or recycle at least 90% of construction and demolition waste as per Green Star requirements.

4. Legislative Requirements and Guidelines

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
- Waste Classification) Guidelines (EPA, 2014)
- NSW Department of Planning and Environment, Secretary's Environmental Assessment Requirements (SEARs)
- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Parramatta City Council DCP Control Plan 2011, Appendixes A8.1 Waste Management
- DECCW's Waste Classification Guidelines (2008)
- Green Building Council of Australia (GBCA) Green Star 5 Star Rating

5. Waste Management Strategies

The waste management strategy for the project will operate over the design, procurement, and construction of the project as shown on the table below:

Table 4 - Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
Design	

• Use of modular components in design • Use of prefabricated components in design • Design for materials to standard sizes • Design for operational waste minimization	• Architect & Engineer • Architect, Builder, Subcontractors. • Architect, Subcontractors • Architect & Builder
Procurement	
• Select recycled and reprocesses materials • Select components that can be reused after deconstruction	• Architect, Engineer, Builder & Subcontractors • Architect, Engineer & Builder
Pre-construction	
• Waste management plan to be reviewed & approved prior to construction. • Contract a Waste Contractor	• Builder • Waste Contractor
Construction on-site	
• Use the avoid, reuse, reduce, recycle principles • Minimization 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	• Builder & Waste Contractor • Sub-contractors • Builder & Sub-contractor • Waste Contractor • Builder & Waste Contractor • Builder

5.1. ON SITE WASTE MANAGEMENT AND STORAGE REQUIREMENTS

There will be a designated waste storage area for the disposal and storage of construction waste prior to collection. This area will be located conveniently for the construction work team to use the bins as well as for waste contractors to collect. An indicative location has been provided in Appendix A.

Other requirements include:

- Construction waste storage is contained wholly within the site.
- The routes for movement of waste between work site and waste storage area are to be kept obstruction-free.
- The routes for movement of bins and waste between storage and collection points are marked in the site drawing and will be kept obstruction-free (if waste is moved between the waste storage area(s).
- The waste bin collection point provided will be accessible for waste collection vehicles. There are no obstructions to turning or reversing, pulling up vehicles and lifting bins.
- Access for waste collection vehicles will not be compromised by construction-related activities vehicles or other consequences of construction staging.
- All waste not being reused on site will be removed during, or at the completion of, the construction stage.
- No waste will be left on site unless it is part of valid reuse on site, which is integral to and in place in the design.
- To manage noise levels, collection of waste from the construction site will only occur during hours approved for construction work, but ideally before or after school hours.
- All vehicles entering or leaving the site must have their loads covered.
- All vehicles, before leaving the site, to be cleaned of dirt, sand, and other materials, to avoid tracking these materials onto public roads.
- At the completion of the works, the work-site is left clear of waste and debris.

- Non-recyclable waste and containers are to be regularly, collected and disposed of at a licensed disposal site. Waste will be collected daily where applicable.
- No burning or burying of waste is permitted on the site.
- Any bulk garbage bins delivered by authorized waste contractors are to be placed and kept within the property boundary.
- All waste (including hazardous materials) must be stored appropriately on-site by the head contractor and disposed of by a licensed waste contractor at a licensed facility, which can receive such waste.

5.2. REUSE OF DEMOLITION, EXCAVATION AND CONSTRUCTION MATERIALS

Construction Materials and off-cuts can be reused on-site. An area within the materials lay-down area will be allocated for the storage of materials to be reused.

These items include;

- Plastic buckets
- Timber crates
- Timber off cuts
- Paint brushes and rollers (Wrapped in plastic to maintain moisture)
- Plasterboard offcuts
- Cardboard boxes
- Clean fill will be reused on-site after verification by soil testing and Waste Classification.

5.3. MANAGEMENT OF HAZARDOUS WASTE

In accordance with Hazardous Building Material Survey Report provided by SLR Consulting Australia Pty Ltd dated October 2022, asbestos affected materials have been identified in 14 of 16 permanent buildings. All identified hazardous materials will be removed in accordance with relevant standards, codes, and guidelines. The disposal of the Hazmat waste material will be by plastic lined bin/truck to an EPA approved and licensed landfill facility. All disposal dockets will be filled.

A detailed site investigations has been undertaken by ADE Consulting Group Pty Ltd and SLR Consulting Australia Pty Ltd of both building and in-ground contamination, with no in-ground asbestos finding within 8 borehole samples taken from site. Based on the undertaken investigations the likelihood of presence of hazardous material on site is very low therefore there is no requirement for having a remediation action plan in place. On an event of any contamination finding during the works, the Unexpected Finds Protocol shall be followed as per section 5.4 of this plan.

5.4. UNEXPECTED FIND PROTOCOL

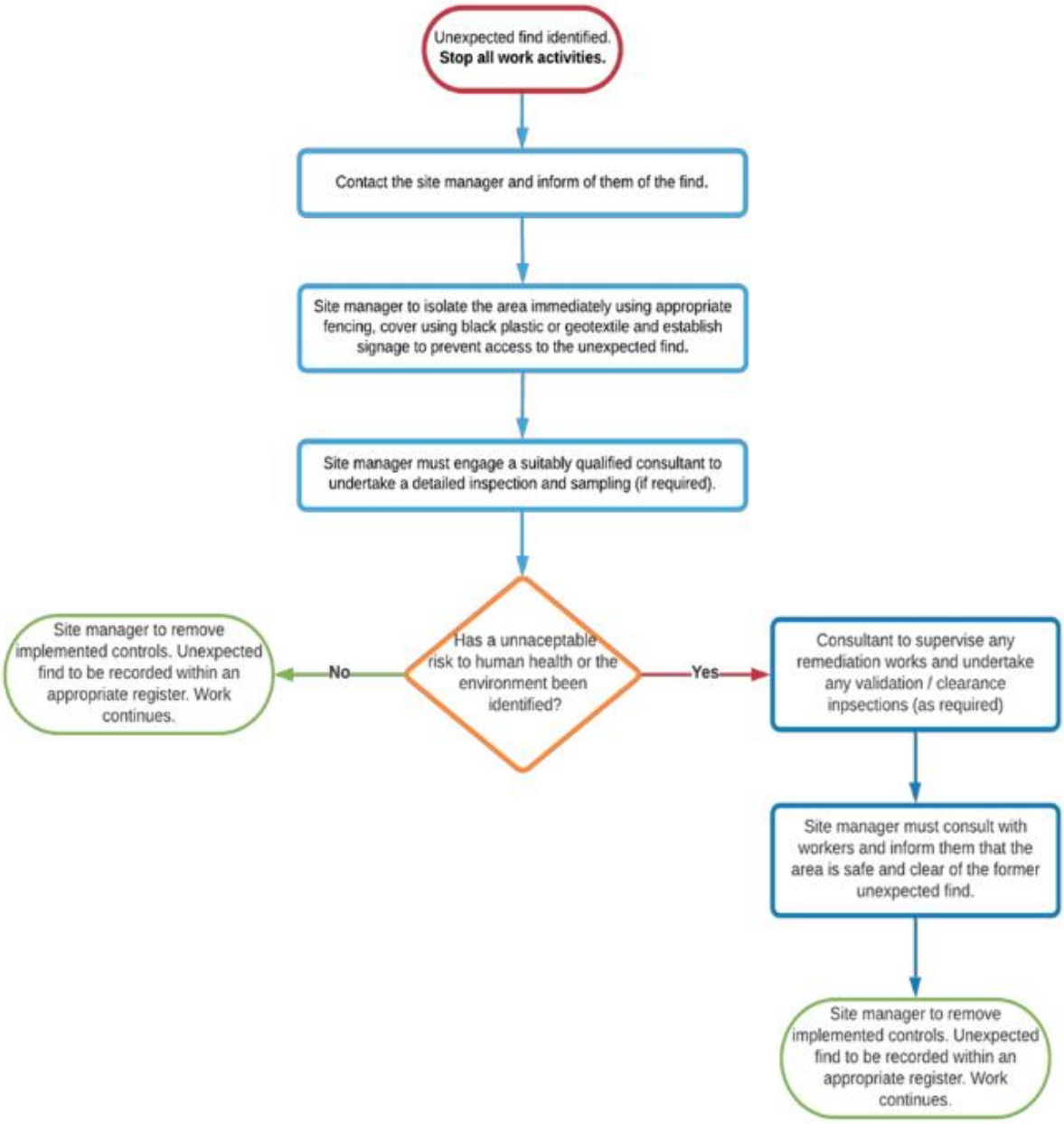
An unexpected find can be defined as:

- Any unanticipated archaeological discovery e.g., aboriginal relics, items of significance, etc.;
- Buried or surface asbestos containing materials (Bonded, Friable or other);
- Buried waste materials e.g., medical waste, contaminated waste, etc.;
- Septic or underground storage tanks;
- Animal burial pits; or
- Discoloured and odorous soils and groundwater/seepage.

Should an unexpected find of potential contamination be encountered during the works, the following procedure should be followed:

- Identified finding by worker;

- Cease work as soon as safe to do so and move clear of the finding;
- Do not tamper or attempt to remove the finding;
- Contact Construction Management immediately;
- Site Management to delineate an exclusion or quarantine zone around the area using fencing and or appropriate barriers and signage;
- Preliminary assessment of the find and need for immediate management controls;
- Further assessment and/or remediation works are required and how such works are to be undertaken in accordance with contaminated site regulations and guidelines;
- Any unexpected finds must be documented, and records of volumes and types of materials identified removed from the site must be kept on file;
- Receipt documentation from the licensed facility confirming volume received.



6. Construction Waste Management Principles

6.1. WASTE MANAGEMENT HIERACHY

The following principles of the waste management hierarchy will be used as a guiding principle in accordance with the Waste Avoidance & Resource Recovery Act 2001:

The waste hierarchy outlines a process for waste management which aims to implement effective use of resources and minimise waste in accordance with EPA's NSW Waste Avoidance and Resource Recovery Strategy 2014-21.

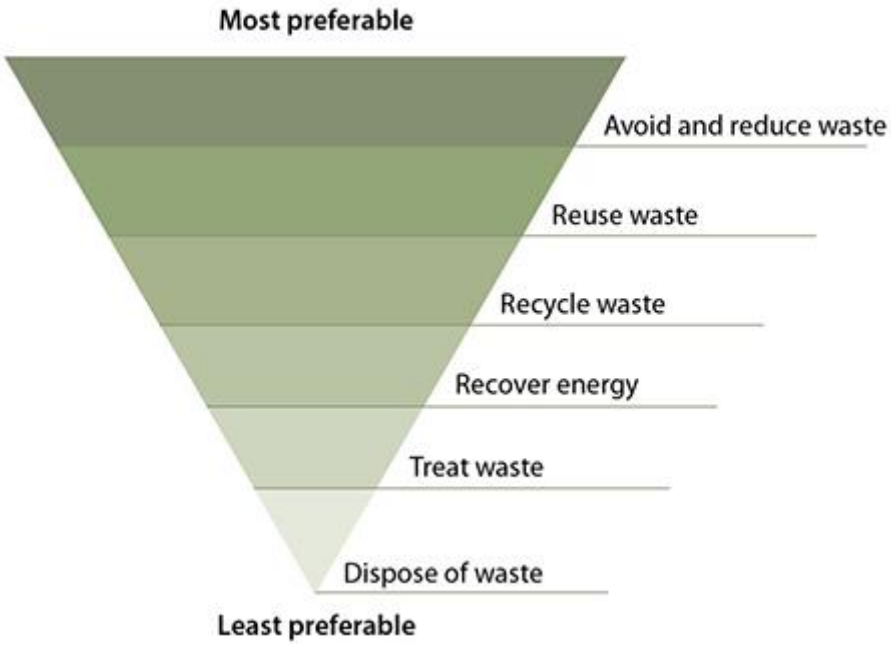


Figure 5-1- Waste Management Hierarchy

Avoid and Reduce

Minimise the production of waste materials in the construction process by:

- Assessing and taking into consideration the resultant waste from different design and construction options
- Purchasing materials that will result in less waste, which have minimal packaging, are pre-cut or fabricated.
- Not over ordering products and materials

Reuse

Ensure that wherever possible, materials are reused either on site or offsite.

- Identify all waste products that can be reused.
- Put systems in place to separate and store reusable items.
- Identify the potential applications for reuse both onsite and offsite and facilitate reuse.

Recycling

Identify all recyclable waste products to be produced on site.

- Provide systems for separating and stockpiling of recyclables.

- Provide clear signage to ensure recyclable materials are separated.
- Process the material for recycling either onsite or offsite.

Note: In some cases, it may be more economical to send the unsorted waste to specialised waste contractors who will separate and recycle materials at an offsite location.

Disposal

Waste products which cannot be reused or recycled will be removed and disposed of.

The following will need to be considered:

- Ensure the chosen waste disposal contractor complies with regulatory requirements.
- Implement regular collection of bins.

6.2. LIQUID WASTE

Liquid waste may be produced on site for environmental control measures such as:

- Site and vehicle cleaning
- Dust control waste.

The following measures will be taken to minimise the impact of liquid waste:

- Ensure water is used in moderation and no taps are left continuously running.
- Use any grey water produced on site for irrigation or for dust suppression.
- Only discharge clean water into storm water

6.3. STORMWATER POLLUTION PREVENTION

All actions will be undertaken to avoid pollution entering stormwater drains and for litter generation.

The following will be initiated:

i. Prior to commencement of any works a Safe Work Method Statement will be completed and reviewed to determine potential for stormwater pollution and/or litter generation

ii. The proponent (contractor) will need to develop a management strategy to manage the potential for these issues to be realised.

iii. Site inspections will be conducted during the working day to monitor potential for stormwater pollution generation and where identified, works will cease until appropriate controls are implemented.

iv. Waste water and storm water will be managed and disposed of in accordance with Water Authority requirements.

6.4. LITTER MANAGEMENT

i. Daily site inspections will be conducted to identify litter, remedy the situation, and investigate the cause so as to reduce the potential for the issue to occur in the future.

ii. Sufficient quantities of bins (and/or bin space), will be made available so as to avoid dumping of materials outside bins.

iii. All waste/recycling bins will have covers to ensure that wastes cannot be blown out during windy conditions. This will also apply to relevant stocks of materials to be used in construction.

iv. Personnel will be allocated the role of litter management in that they will periodically inspect the site and surrounds for litter and if identified collect and dispose of it.

6.5. RECORDS

Records will be kept of all wastes and recyclables generated and either used on site or transported off–site during the construction stages of the development.

It will be a condition of appointment that all waste/recycling contractors involved in the construction stages provide these records, and that they also contain details of the facilities that the materials are transported to.

During the construction phase, Waste and Recycling Register will be used and maintained to record the actual quantities of generated waste and recycling during construction work. At the end of the month, the quantities are to be reported in the KPI Monthly Report. A sample of Waste and Recycling Register has been provided in Appendix B.

These records will be made available to Council on request.

6.6. WASTE/RECYCLABLES STORAGE (ON-SITE)

All waste and recycling materials will be stored in bins provided by the appointed contractor(s). These bins will be appropriately coloured and signed to indicate what materials are to be deposited into them and located so as to maximise the recovery of reusable/recyclable materials.

As construction activities progress, the designated bins will be moved so as to maximise the collection of materials that will be diverted from landfill. This will also involve relocating signage advising as to correct waste management.

6.7. WASTE/RECYCLABLES TREATMENT (ON-SITE)

There will be no treatment of wastes or recyclables on-site except for possible removal of contaminants prior to forwarding to off-site recyclers.

6.8. WASTE AND RECYCLING SITES

The sites listed below are to be used during the removal process of the materials produced during the demolition of the structure.

Brick and Concrete

- Kimbriki Resource Recovery Center – Kimbriki
- Concrete Recyclers – Camellia

Timber and lining materials

- Cleanaway Waste
- Bingo Waste Services
- Blacktown Waste Facility
- Thors Hammer ACT – Recycled timber.
- Kelso Floorboard Recovery.

Copies of all waste recycling and landfill waste dockets will be made available to the Clients Representative if required.

The removal of Waste Material will be carried out in accordance with this Construction Waste Management Plan.

7. PROJECT PHASE

7.1. DEMOLITION

Type of material on Site	Estimated Volume (m^3) or Weight (t) (Most Favorable → Least)			On-Site Treatment	Off-Site Treatment	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal/ Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Brick, Brick-veneer, Concrete, Block, Wall Tiles & Cement		520 m^3		Co-mingle waste collection	TBA	TBA
Roof Tiles		110 m^3		Co-mingle waste collection	TBA	TBA
Sheet & Structural Metal		490 m^3		Stockpiled on-site and separated for recycling off-site	TBA	TBA
Electricals, Aircon & Fixtures and Fittings		90 m^3		Co-mingle waste collection	TBA	TBA
Plasterboard		280 m^3		Co-mingle waste collection	TBA	TBA
Glass		20 m^3		Co-mingle waste collection	TBA	TBA
Tree Timber & Lumbar, Floors, Beams and Plywood	120 m^3	155 m^3		Stockpiled on-site for chipping and reuse in landscaping or recycled off-site	TBA	TBA
Timber Fencing		60 m^3		Stockpiled on-site and separated for recycling off-site	TBA	TBA
Pallets	*50 Units			Stockpiled for return to the supplier	TBA	TBA
Asphalt		12 m^3		Co-mingle waste collection	TBA	TBA
General Waste			420 m^3	Co-mingle waste collection	TBA	TBA
Asbestos Contaminated Material in Permanent Buildings			320 m^3	Asbestos contaminated waste will be isolated tested and transferred to a licensed facility where it's disposed of	TBA	TBA

Sub Total	**120 m³**	**1737 m³**	**740 m³**	
Total	**2597 m³**			

Narrative:
There is a substantial amount of demolition generated from buildings on-site. There are six types of structure built on-site; brick veneer, brick and block, concrete, fibre cement clad, concrete frame and timber

In their recent assessment, SLR Consulting Australia Pty Ltd found fourteen of the permanent buildings are affected by asbestos contaminated material totalling 779 m², consisting mostly of Flat AC sheeting, that is to be stripped out from the walls, ceilings and gables of existing buildings before demolition.

To minimise the threat of asbestos dust being released into the atmosphere and the associated OH&S impacts, it is likely that this material will not be compacted on-site, creating up to 40% of negative space by volume in bins, but that will depend on the extraction crew's methodology.

7.2. EXCAVATION

Type of material on Site	Estimated Volume (m³) or Weight (t) (Most Favorable → Least)			On-Site Treatment	Off-Site Treatment	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal/ Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Trees & Shrubs Roots	80 m³			Separated to a designated truck to be chipped and reused on garden	TBA	Recycled
Cut		4950 m³		Separated to a designated stockpile and taken off-site		
Fill	1050 m³			Separated to a designated stockpile and reuse on-site or recycle off-site	TBA	Reused
Excavated Contaminated fill	Testing found no asbestos in-ground				N/A	N/A
Sub Total	**1,130 m³**	**4,950 m³**		NB: Hazmat investigation with results of in-ground testing of asbestos types and volumes by contractor ADE Consulting Group found no asbestos in 8 bore holes onsite.		
Total	**6,080 m³**					

Narrative:
TTW estimated the Cut and Fill on-site as; Cut at 4950 m³ and the Fill at 1050 m³, totaling 6080 m³. The overall 'risk' of the asbestos is 'low' with the rating of both the building materials - rated as 'good' and the in-ground asbestos – rated as 'low', with remediation of the building materials rated a 'low priority'. These buildings may have further unseen polluted areas and the in-ground contamination but beyond expectations. If any contamination is encountered the required steps as per Unexpected Find Protocol to be followed. Landscaping is to be undertaken by Urbis and soil sampling is part of their evaluation process prior to reusing Fill on-site as well as Fill used in foundation work.

7.3. CONSTRUCTION

Type of material on Site	Estimated Volume (m^3) or Weight (t) (Most Favorable → Least)			On-Site Treatment	Off-Site Treatment	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal/ Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Brick, Brick-veneer, Concrete, Block, Wall Tiles & Cement		410 m^3		Co-mingle waste collection	TBA	TBA
Metals		275 m^3		Stockpiled on-site and separated for recycling off site	TBA	TBA
Timber Off-Cuts	100 m^3	180 m^3		Separate and stockpile on-site to chip and reuse or recycle	TBA	TBA
Cardboard		320 m^3		Co-mingle waste collection	TBA	TBA
Plasterboard		380 m^3		Co-mingle waste collection	TBA	TBA
Containers, Plastics, Plastic Packaging		80 m^3		Co-mingle waste collection	TBA	TBA
Pallets And Reels	150 units			Co-mingle waste collection	TBA	TBA
Liquid Waste			600 liters	Separate onsite and send off-site for dilution and separation	TBA	TBA
General Waste			325 m^3	Co-mingle waste collection	TBA	TBA
Sub Total	**100 m^3**	**1645 m^3**	**325 m^3**	NB: The 150 'units' are pallets and reels returned to the suppliers. The 600 liters are an estimated paint and render washout.		
Total	**2070 m^3**					

Narrative:
There are still options include potential to reuse the in-ground infrastructure including plumbing, pipe work, cables and drainage, which will impact waste volumes. Additionally, during excavation there is potential to reuse cut and fill that's still being tested. In the construction phase there is also options open to designers where waste volumes can be reduced by using certain design elements including pre-cast concrete, modular components including pre-cast slabs, panels, pre-cut timber and pre-cut plasterboard. Most waste will be co-mingled and taken over a weighbridge to be separated and recycled off-site at a licensed waste facility by a licensed waste contractor, but some materials may be stockpiled and reused on-site. Metal may be separated and placed into a metal only bin on-site and sent to a metal recycler. Concrete slurry will be allowed to dry on-site and go into mixed waste.

8. Contracts and purchasing

Each subcontractor working on the site will be required to adhere to this Waste Management Plan.

The Head Contractor will ensure each subcontractor:

- Takes practical measures to prevent waste being generated from their work.
- Implements procedures to ensure waste resulting from their work will be actively managed and where possible recycled, as part of the overall site recycling strategy or separately as appropriate
- Ensures that the right quantities of materials are ordered, minimally packaged and where practical prefabricated. Any oversupplied materials are returned to the supplier.
- Implements source separation of off cuts to facilitate reuse, resale, or recycling.

The Site Manager will be responsible for:

- Ensuring there is a secure location for on-site storage of materials to be reused on site, and for separated materials for recycling off site.
- Engaging appropriate waste and recycling contractors to remove waste and recycling materials from the site.
- Co-coordinating between subcontractors, to maximise on site reuse of materials.
- Monitoring of bins on a regular basis by site supervisors to detect any contamination or leakage.
- Ensuring the site has clear signs directing staff to the appropriate location for recycling and stockpiling station/s. And that each bin/skip/stockpile is clearly sign posted
- Proving training to all site employees and subcontractors in regard to the WMP as detailed in section 6 below.

Should a subcontractor cause a bin to be significantly contaminated, the Site Manager will be advised by a non-conformance report procedure. The offending subcontractor will then be required to take corrective action, at their own cost. The non-conformance process would be managed by the Head Contractors' Quality Management Plan.

9. Training and Education

All site employees and sub-contractors will be required to attend a site-specific induction that will outline the components of the WMP and explain the site specific practicalities of the waste reduction and recycling strategies outlined in the WMP.

All employees are to have a clear understanding of which products are being reused/recycled on site and where they are stockpiled. They are also to be made aware of waste reduction efforts in regard to packaging.

The site manager will post educational signage regarding the recycling activities on site in breakout areas, lunchrooms etc.

10. Review and Improvement

10.1. CONTINUOUS IMPROVEMENT

Continuous improvement of this Plan will be achieved by the ongoing evaluation of environmental management performance against environmental policies, objectives and targets for the purpose of identifying opportunities for improvement.

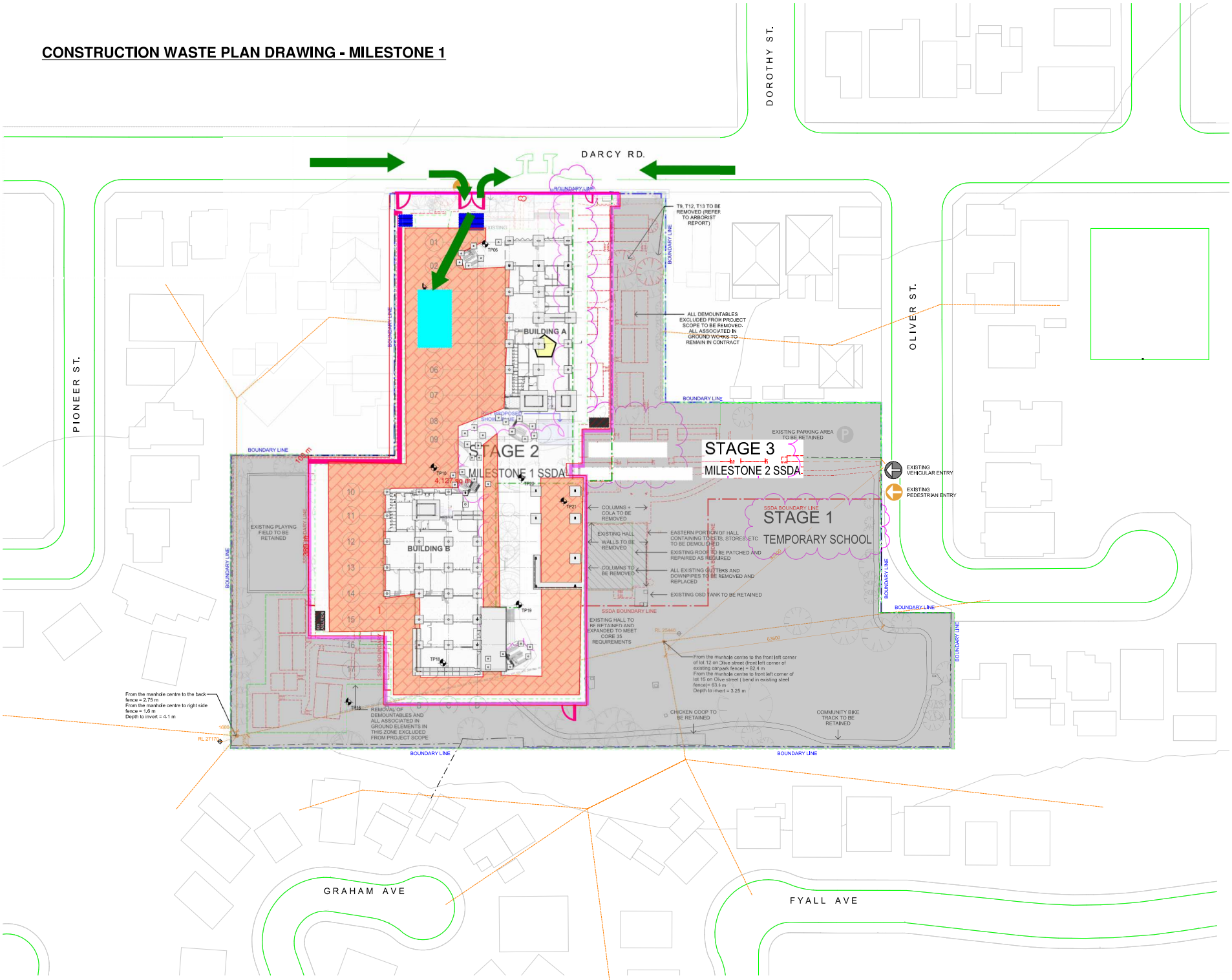
The continuous improvement process will be designed to:

- Identify areas of opportunity for improvement of environmental management and performance
- Determine the cause or causes of non-conformances and deficiencies.
- Develop and implement a plan of corrective and preventative action to address any non-conformances and deficiencies.
- Verify the effectiveness of the corrective and preventative actions.
- Document any changes in procedures resulting from process improvement.
- Make comparisons with objectives and targets.

APPENDIX A: CONSTRUCTION WASTE MANAGEMENT PLAN DRAWINGS

CONSTRUCTION WASTE PLAN DRAWING - MILESTONE 1

TAYLOR



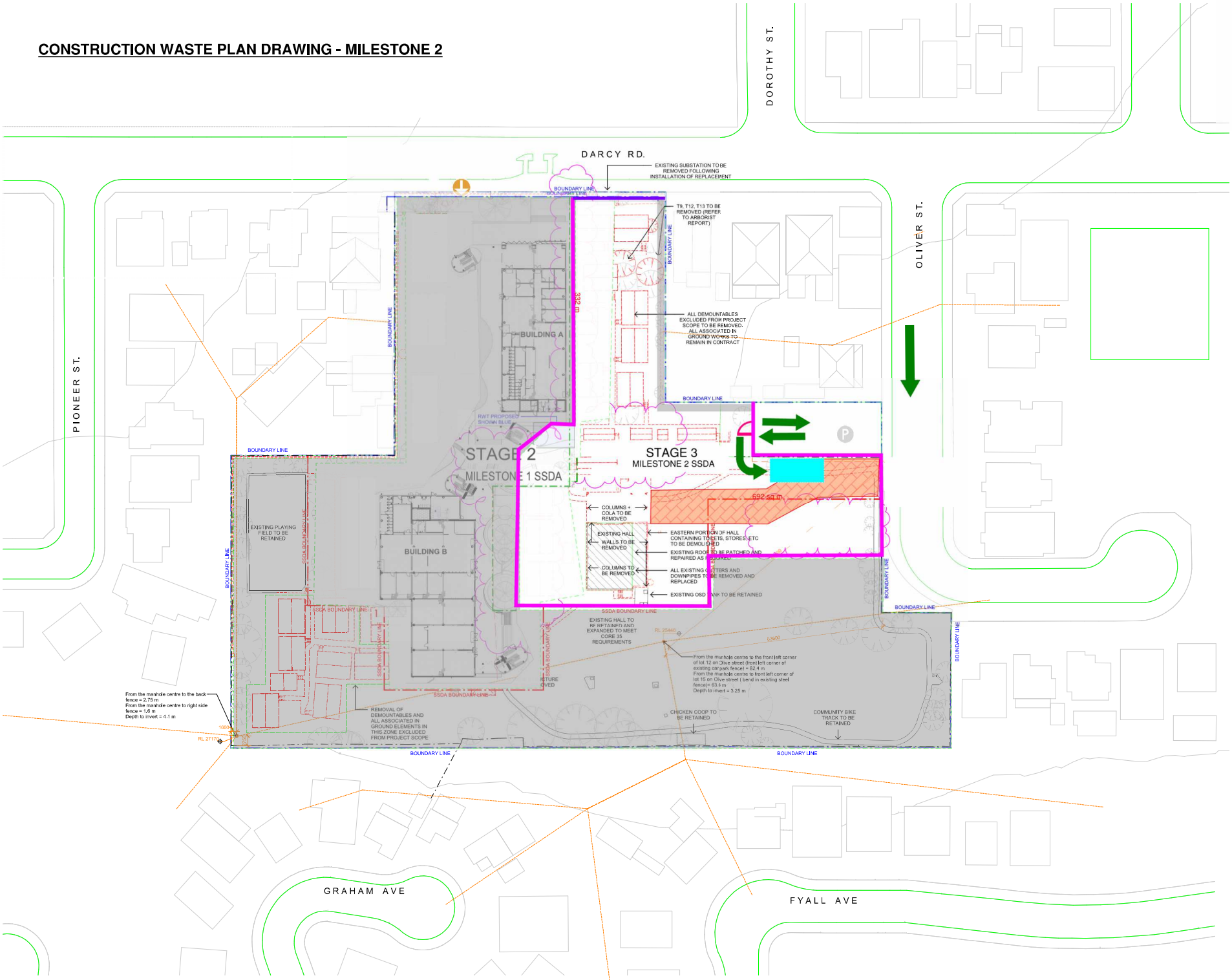
LEGEND

- STREET ACCESS
- THE ENTRANCE
- WASTE STORAGE AREA
- HOARDING

NOTE:

The designated area may be revised as works progress onsite.

CONSTRUCTION WASTE PLAN DRAWING - MILESTONE 2



LEGEND

- STREET ACCESS
- THE ENTRANCE
- WASTE STORAGE AREA
- HOARDING

NOTE:

The designated area may be revised as works progress onsite.

APPENDIX B: WASTE AND RECYCLING REGISTER

WASTE AND RECYCLING REGISTER

QSE-R-16

Waste Management Details							
Date	**Material Description**	**Classification** (refer to Asbestos Management Procedure SE-OP-02)	**Removed to: (General Waste (landfill) or Recycling Facility**	**Waste Contractor/Docket Number (Name of Company)**	**Quantity (tons or m3)**		
					Quantity	**Unit**	
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3
						T	M3

Please use this form to track all wastes taken off site. At the end of the month, the quantities are to be reported in the KPI Monthly Report

Thank you

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