Proposed ancillary works at Narrabeen North Public School in a mapped coastal wetland area - Waste Management Plan

A Submission to School Infrastructure NSW (SINSW), NSW Department of Education

18th January 2023

MRA Consulting Group

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Disclaimer

This report has been prepared by MRA Consulting Group for School Infrastructure NSW, NSW Department of Education. MRA (ABN 13 143 273 812) does not accept responsibility for any use of, or reliance on, the contents of this document by any third party.

In the spirit of reconciliation MRA Consulting Group acknowledges the Traditional Custodians of country throughout Australia and their connection to land, sea and community. We pay our respects to Aboriginal and Torres Strait Islander peoples and to Elders past, present and emerging.

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Glossary

Terminology	Definition
AS	Australian Standard
C&D	Construction and Demolition
C&I	Commercial and Industrial
DA	Development Application
DC	Development Consent
DCP	Development Control Plan
DoE	Department of Education
EFSG	Educational Facilities Standards and Guidelines
EPA	Environment Protection Authority
LGA	Local Government Area
MGB	Mobile Garbage Bin
MSW	Municipal Solid Waste (also referred to as domestic or residential waste)
NNPS	Narrabeen North Public School
NBC	Northern Beaches Council
NEP	Narrabeen Education Precinct
PDCP	Pittwater Development Control Plan 2014
PLEP	Pittwater Local Environmental Plan 2014
SINSW	Schools Infrastructure New South Wales
WARR	Waste Avoidance and Resource Recovery
WMP	Waste Management Plan
WNDCP	Waste Not Development Control Policy

1 Introduction

MRA Consulting Group (MRA) was engaged by School Infrastructure NSW (SINSW) to prepare a Waste Management Plan (WMP) related to the proposed development at Narrabeen North Public School (NNPS), a Department of Education facility, at 6 Namona Street, North Narrabeen (the site). The site is situated in the Northern Beaches Council (NBC) Local Government Area (LGA).

The proposed Narrabeen Education Precinct development includes redevelopment of Narrabeen North Public School (NNPS). The Public School has been identified by the NSW Department of Education (DoE) as requiring upgrade works. This development will provide Core 28 with Core 35 facilities Narrabeen North Public School (NNPS), catering for current enrolment.

The design focus at NNPS is to upgrade the core facilities to support the delivery of modern pedagogy. Additionally the design focus will address some of the key asset condition issues of learning spaces to allow for improved education outcomes.

This WMP addresses the requirements of the Consent Authority and conforms to the following reference documents:

- The *Pittwater Local Environmental Plan 2014* (PLEP 2014).
- The *Pittwater 21 Development Control Plan* (PDCP).
- The Northern Beaches Council *Waste Management Plan (2016)* policy document.
- The Northern Beaches Council *Waste Management Guidelines (2016)* policy document.

Consideration has also been given to the following supplementary documents in the preparation of this plan:

- NSW EPA's *Better Practice guide for Resource Recovery in New Developments (2019)*.

This WMP has been prepared to inform the development design and assist in the delivery of better practice waste management, promoting sustainable outcomes at the demolition, construction and operational phases of the development. The WMP addresses waste generation and storage associated with the demolition, construction and ongoing occupation of the proposed development.

The PDCP 2014 (Section C1.12) Waste Management objectives include:

- To facilitate sustainable waste management in a manner consistent with the principles of Ecologically Sustainable Development.
- To encourage environmentally protective waste management practices on construction and demolition sites which include:
    - Sorting of waste into appropriate receptors (source separation, reuse and recycling) and ensure appropriate storage and collection of waste and to promote quality design of waste facilities;
    - Adoption of design standards that complement waste collection and management services offered by Council and private service providers;
    - Building designs and demolition and construction management techniques which maximises avoidance, reuse and recycling of building materials and which will minimise disposal of waste to landfill; and
    - Appropriately designed waste and recycling receptors are located so as to avoid impact upon surrounding and adjoining neighbours and enclosed in a screened off area.
- To encourage the ongoing minimisation and management of waste handling in the future use of premises.
- To ensure waste storage and collection facilities complement waste collection and management services, offered by Council and the private service providers and support on-going control for such standards and services.
- To minimise risks to health and safety associated with handling and disposal of waste and recycled material and ensure optimum hygiene.
- To minimise any adverse environmental impacts associated with the storage and collection of waste.
- To discourage illegal dumping.

2 Background

2.1 Development Description

Narrabeen North Public School (NNPS) forms part of the Narrabeen Education Precinct.

The Designated Development (DD) seeks consent for the following works at NNPS within a mapped Coastal Wetlands:

- Removal of eight (8) trees;
- New accessible pedestrian pathways;
- New substation on Namona Street frontage along with associated conduit connections;
- New fire hydrant booster and associated conduit connections;
- New hard and soft landscaping including planting of 12 new trees.

The proposed development does not seek to increase staff or student numbers.

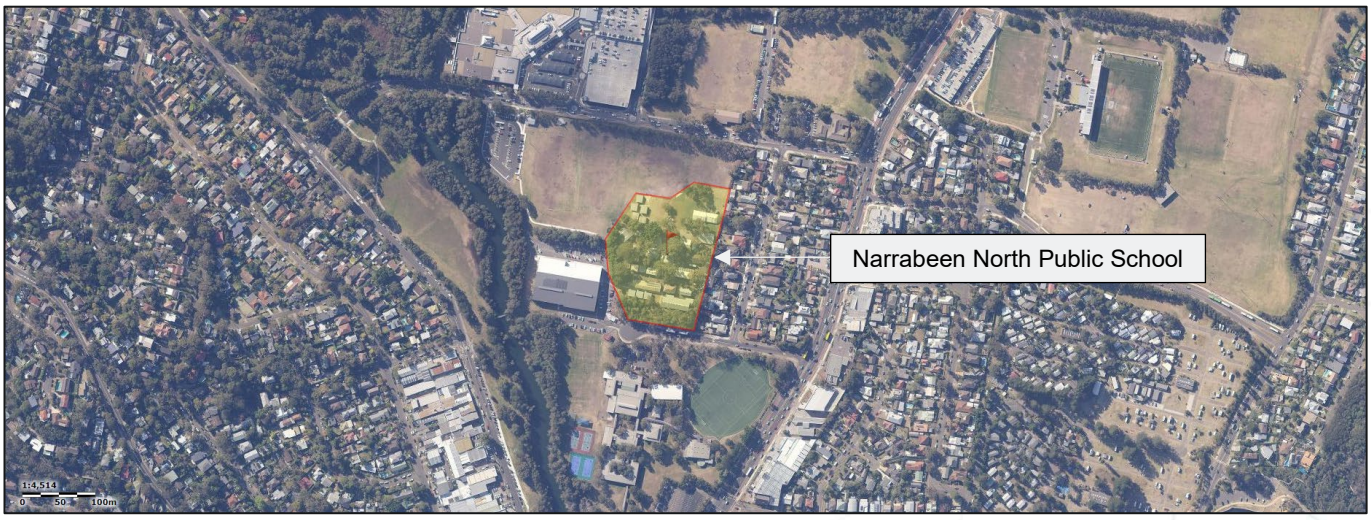
2.2 Location

The subject sites is located within a mapped Coastal Wetlands area of Narrabeen North Public School (NNPS) at 6 Namona Street, North Narrabeen and falls within the local government area of Northern Beaches Council.

Narrabeen North Primary School (NNPS) is located on the northern side of Namona Street, North Narrabeen and is legally described as Lot 3 Deposited Plan (DP) 1018621. NNPS is surrounded by residential dwellings to the east, grassed sporting fields (Warriewood Valley Sportsground) to the north and Northern Beaches Indoor Sports Centre to the west. NNPS contains two (2) Binishell domes (Block A and Block B) which are identified as a local heritage item under the *Pittwater Local Environmental Plan 2014*. The two (2) Binishell Domes are listed as State significant on DoE's Section 170 Heritage and Conservation Register. The Double Binishell Dome (Block B) is listed on the State Heritage Register (SHR). Narrabeen Sports High School (NSHS) is located on the southern side of Namona Street.

The following is an aerial view of the NNPS site and surrounds (Figure 1).

Figure 1: Aerial view of site and surrounds



Source: Sixmaps, 2022.

2.3 Zoning and Land Use

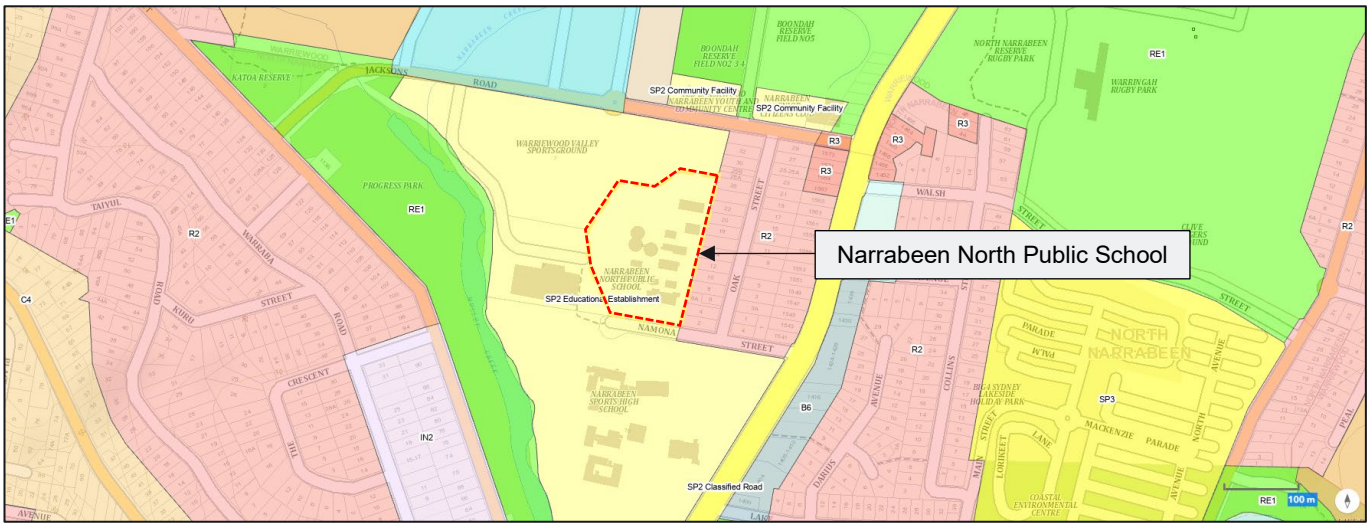
The site is zoned SP2 – Education Establishment in the PLEP 2014 (see Figure 2). Educational facilities are permitted with consent in the zone, which is defined by the following objectives:

- To provide for infrastructure and related uses.

- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

Surrounding land use zones are R2 – Low Density Residential, R3 – Medium Density Resident, RE1 – Public Recreation, SP2 – Classified Road and SP2 – Community Facility.

Figure 2: Land Use Zoning LEP map



Source: ePlanning spatial viewer, 2022.

2.4 Assumptions

This report is a Waste Management Plan (WMP) forming part of the development documentation and assumes:

- Drawings and information that have been used in waste management planning for this WMP are the final reference/indicative design set for the development plan from the project architect, Design Inc dated 14 November 2022;
- The NSW EPA's *Better practice guide for Resource Recovery in Residential Developments* (2019) outlines waste generation rates and services available for new developments which have been considered in the preparation of this report; and
- This WMP is a living document and therefore, waste management equipment and systems described in this report are subject to change based on future operations and available technology.

3 Demolition and Construction Waste

Construction activities at the site will generate a range of construction and demolition (C&D) wastes. Throughout the development process, all materials will be reused and recycled where possible, minimising the disposal (landfilling) of materials other than those that are contaminated or unsuitable for reuse or recycling processes.

Waste storage during construction operations will involve some stockpiling and separation of reusable material, as well as placement of skip bins for the separation of construction materials for recycling. A skip bin for residual waste or contaminated material will also be made available at the site for disposal where necessary. Skip bins may require alternative placement across construction operations to facilitate the safe and efficient storage of materials and will be retained within property boundaries to avoid illegal dumping.

A waste storage area shall be designated by the demolition and construction contractor and shall be sufficient to store the various waste streams expected during operations. Waste storage areas will be kept clear to maintain vehicular access and shall also be kept tidy to encourage separation of waste materials and for WHS reasons. A potential location for skip bins and material stockpiles has been identified in Appendix B.

Waste management principles, management measures and facilities in use on the site shall be included as part of the site induction for all personnel working on the site.

3.1 Demolition

No major demolition works are proposed as part of this application. Had major demolition works been proposed, waste materials volumes would have been estimated and management options would have been proposed for materials reuse, recycling, and disposal in line with the DCP.

Table 1 below describes appropriate management methods for the various materials related to demolition or deconstruction works. Whilst no major demolition works are required to facilitate the school expansion, earthworks and preliminary site preparation works will be required, and have been included in the table.

Table 1: Demolition waste material by volume

Type of waste generated		Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Concrete		Minor	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. C&D processor: crushing and recycling for recovered products (aggregates).
Bricks/pavers		Minor	✓	✓	-	On site: cleaned and separated wherever possible for reuse or to enhance resource recovery. C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.
Tiles	Roof	N/A	✓	✓	-	On site: cleaned and separated wherever possible for reuse or to enhance resource recovery. C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.
	Interior	N/A	✓	✓	-	
Timber (engineered/ treated)		N/A	-	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse. C&D processor: recovery and recycling for recovered product (e.g. mulch) or organics processing.
Metals (ferrous and non-ferrous)		N/A	-	✓	-	Onsite: to be separated wherever possible to enhance resource recovery. C&D processor: metals recovery and recycling.
Plasterboard		N/A	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse.

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Glass	N/A	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. Glass recycler: recovery and recycling.
Fixtures and fittings	N/A	✓	✓	-	On site: reuse wherever possible or return to manufacturer. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Floor coverings	N/A	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Garden organics (Vegetation)	5-10m^3	✓	✓	-	Garden organic waste from landscaping. Organics processor: storage on-site (from minor excavations) processing for recovered product (e.g. mulch or other blended recovered fines) or organics treatment.
Residual waste (general refuse)	10-20m^3	-	-	✓	Separate recyclables where possible and disposal at principal licensed waste facility.
Hazardous/ special waste (e.g. spills and contaminated wastes)	Unknown	-	-	✓	Management by a licensed asbestos and site hygienist should hazardous or special waste be found at the site.
Asphalt	Unknown	-	✓	-	On site: to be separated wherever possible to enhance resource recovery. C&D processor: crushing and recycling for recovered products (aggregates).

3.2 Construction

The Designated Development (DD) seeks consent for the following works at NNPS within the mapped Coastal Wetlands area:

- Removal of eight (8) trees;
- New accessible pedestrian pathways;
- New substation on Namona Street frontage along with associated conduit connections;
- New fire hydrant booster and associated conduit connections;
- New hard and soft landscaping including planting of 12 new trees.

Table 2 outlines indicative volume to weight conversion factors for common construction materials.

Table 2: Building waste material by percentage and conversion factor for volume and weight

Building waste material	Tonnes per m^3	Waste as % of the total material ordered
Bricks	1	5-10%
Concrete	2.4	3-5%
Tiles	0.75	2-5%
Timber	0.5	5-7%
Plasterboard	-	5-20%
Ferrous metal	2.4	-

Source: Parramatta Waste Management Plan Application Template 2017.

Table 3 outlines the expected construction waste quantities for materials through construction of the proposed new development in addition to the appropriate management methods for each material type.

The information below presents multiple options for materials reuse, recycling and disposal where applicable (e.g. return to manufacturer, recycled at construction and demolition (C&D) processor, or disposed to landfill if contaminated).

Table 3: Construction waste material by volume

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Excavation material	Minor	✓	✓	-	On site: testing (if necessary) for contamination and stockpiling of material for reuse as fill material. Reuse onsite for backfilling or landscaping. C&D processor: reuse/ recycling of VENM and ENM Landfill if contaminated.
Concrete	Minor	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. C&D processor: crushing and recycling for recovered products (aggregates).
Bricks/pavers	Minor	✓	✓	-	On site: cleaned and separated wherever possible for reuse or to enhance resource recovery. C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.
Tiles (Interior)	N/A	✓	✓	-	On site: cleaned and separated wherever possible for reuse or to enhance resource recovery. C&D processor: recovery for reuse where possible, crushing and recycling for recovered aggregate products.
Timber (engineered/ treated)	N/A	-	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse. C&D processor: recovery and recycling for recovered product (e.g. mulch) or organics processing.
Metals (ferrous and non-ferrous)	N/A	-	✓	-	Onsite: to be separated wherever possible to enhance resource recovery. C&D processor: metals recovery and recycling.

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Plasterboard	N/A	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse.
Glass	N/A	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. Glass recycler: recovery and recycling.
Fixtures and fittings	N/A	✓	✓	-	On site: reuse wherever possible or return to manufacturer. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Floor coverings	N/A	✓	✓	-	On site: to be separated wherever possible to enhance resource recovery. Reuse: surplus and offcut material returned to manufacturer for reuse where possible. C&D processor: recovery and recycling.
Garden organics (Vegetation)	Minor	✓	✓	-	Garden organic waste from landscaping. Organics processor: storage on-site (from minor excavations) processing for recovered product (e.g. mulch or other blended recovered fines) or organics treatment.
Containers (cans, plastic, glass)	Minor	-	✓	-	Commercial contractor: recycling.
Paper/ cardboard	Minor	-	✓	-	Commercial contractor: segregation of paper, cardboard or other streams.

Type of waste generated	Quantity	Reuse	Recycling	Disposal	Methods for reuse, recycling and disposal
Residual waste (general refuse)	Minor	-	-	✓	Separate recyclables where possible and disposal at principal licensed waste facility.
Hazardous/ special waste (e.g. spills and contaminated wastes)	Unknown	-	-	✓	Management by a licensed asbestos and site hygienist should hazardous or special waste be found at the site.

3.3 Waste Contractors and Facilities

To ensure best practice waste management, appropriate contractors and facilities have been proposed based on their location and service offerings (Table 4).

Table 4: Waste service contractors and facilities

Role	Details
Recommended Waste Collection Contractor	The following are local skip bin operators for consideration in the management of excavation and construction waste for the site: • North Shore Skip Bins; • Northern Beaches Skip Bins; • Brown Bros. Skip Bins; and • Ku-ring-gai Skip Bins. Or another supplier as elected by the building contractor.
Principal Off-Site Recycler	The following are local C&D processing facilities for consideration in the management of C&D waste generated at the site: • Davis Earthmoving & Quarrying Pty Ltd, Terrey Hills; • Kimbriki Resource Recovery Centre, Terrey Hills; and • Any Rubbish, Ingleside. Or another appropriate facility as elected by the waste management contractor.
Principal Licensed Landfill Site	• Greenwood Landfill & Waste Recovery Facility Or other appropriate facility as elected by the waste management contractor.

3.4 Site Documentation

This WMP will be retained on-site during the excavation and construction phases of the development, along with other waste management documentation (e.g. contracts with waste service providers).

Responsibility for the WMP, waste documentation and processes during the excavation and construction phases will be with the site manager or builder.

A logbook that records waste management and collection will be maintained on site, with entries including:

- Time and date of collections;
- Description of waste and quantity;
- Waste/processing facility that will receive the waste; and
- Vehicle registration and company name.

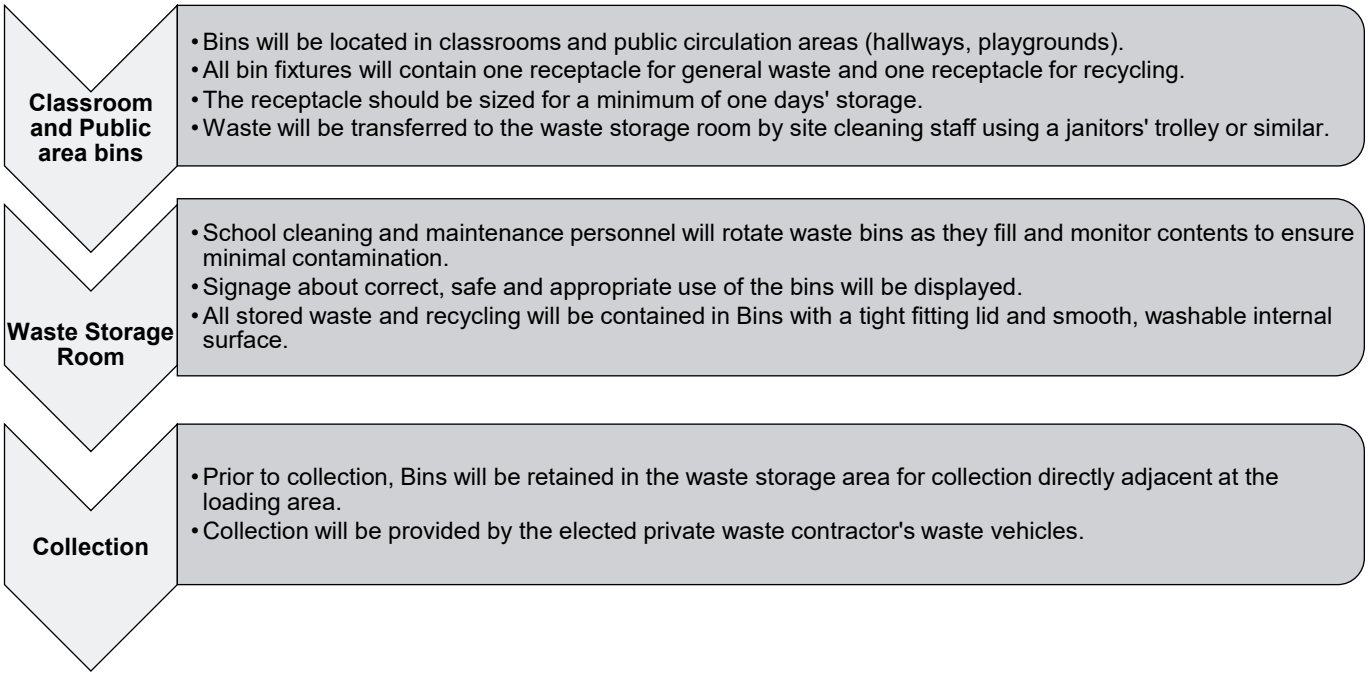
Waste management documentation, the logbook and associated dockets and receipts must be made available for inspection by an authorised Council Officer at any time during site works.

4 Waste Management Systems

4.1 Waste Disposal and Recycling Method

The flow of waste goes from generation to collection through several steps (Figure 3).

Figure 3: Waste Flow



4.2 Collection Method and Loading Areas

Collection point for the waste service provider (WSP) and areas for handling and loading are as follows:

- Waste storage area and collection area are open to the sky and will not be impacted by any overhead obstructions for the purpose of waste collection (see Appendix A).
- Collection and loading from the waste storage area, providing convenient access for the collection of waste.
- Waste collections will be scheduled to occur outside of peak periods, typically between 7am and 8am or midday, to avoid times of high pedestrian and vehicle traffic associated with student drop-off or pick-up.
- Clear, safe, accessible, and convenient space is provided for handling of bins and loading of collection vehicles; and
- Identifiable areas where visitors and workers can recognize and avoid any risk associated with moving vehicles, and bin moving and handling.

Bins will be collected from the bin storage area directly by the waste service provider collection vehicle (see Appendix A) safely entering the site in a forward direction via Namona Street and completing a single reversing manoeuvre up to the waste storage area. It is expected that the current private waste contractor will be engaged for the collection of all waste streams at the site.

Bulk bins require collection by a front or rear lift collection vehicle which typically have a maximum height clearance of 3.5m (travel and operational height). The school will engage a commercial contractor and agree on a suitable waste servicing solution for the site, considering waste storage requirements and accessibility.

Table 5: Onsite collection point and loading requirements and specifications

Component	Requirements	Specification
Collection point	Collection points are to be located so that:	- Bins are wheeled no more than 75m from storage area. - All bins are presented in a single file with a minimum 30cm gap between bins. - Has a minimum height clearance of 4.2m from overhanging tree branches, power lines and other obstructions. - Collections are not undertaken in a 'No Stopping' zone.
Vehicle manoeuvring and loading space	Truck space for adequate lift clearance, manoeuvring and operation for a contractor collection vehicle	- The waste collection area is located away from any vehicle parking spaces or overhead obstacles.
Operating times	Appropriate collection times to limit noise and traffic disturbance	- Collection times will be arranged to ensure minimal disturbance to students, staff, pedestrians and visitors.

4.3 Waste Management System and Responsibilities

Site management and cleaning staff to enact and monitor day to day waste management operations. Should there be any issues that impact on the operational efficiency, safety and suitability of waste management, the site cleaning staff will inform management. Operation of the waste management system is the responsibility of school management and site cleaning staff.

Site management is responsible for:

- Use of this waste management plan to inform waste management operations, design and infrastructure;
- The provision of educational materials and information to visitors and staff on sorting methods for recycled waste, awareness of waste management procedures for minimisation and recovery;
- The provision of information to visitors and workers about waste management procedures;
- Maintaining appropriate signage in waste service areas and all waste management areas;
- Use of contracts to define the allocation of responsibilities with cleaners and building;
- Holding a valid and current contract with licensed collector(s) for waste and recycling collection and disposal;
- Encouraging waste avoidance and achievement of resource recovery targets;
- Providing operational management for delivery of waste objectives;
- Ensuring regular reinforcement of source separation and effective use of waste facilities; and
- Organising waste, recycling and bulky pick-ups by elected contractor for the site/building.

Site cleaning staff duties include:

- Organising, maintaining and cleaning the waste storage areas;
- Arranging access to bins on collection days and to liaise with the WSP for operational issues;
- Cleaning and exchanging all bins; and
- Monitoring any vermin and pest issues and arranging appropriate controls (traps or fumigating) and maintenance of doors or other points of potential entry.

The building management and site cleaning staff are also responsible for ensuring that workplace safety requirements according to WorkCover NSW Occupational Health and Safety are upheld.

4.4 Waste Storage Areas

The waste areas will provide centralised storage that has adequate capacity to receive and store the maximum likely generation of waste and recycling between collection times. The proposed waste storage area will be an open space with suitable access for disposal and collection purposes, and storage space to accommodate the bins required to service the site. The waste storage area will be developed with the following considerations:

- Signage for safety and waste bin identification;
- Safety precautions, staff training and signage for plant;
- Floor made of concrete or other approved solid, impervious material that can be cleaned easily;
- Grading and draining to an approved drainage fitting located in the room to facilitate bin washing;
- Adequate supply of water with hose cock as close as practicable; and
- Suitable construction including limited entry to prevent vermin and vandalism.

4.5 Signage and Education

Signage that promotes resource recovery, waste minimisation, safety and amenity follows the Australian Standard for safety signs for the occupational environment (Standards Australia, 1994).

Signage will be designed to consider language and non-English speaking backgrounds, vision impairment and accessibility. Illustrative graphics must form a minimum 50% of the area of the signage. Signage is to be prominently posted in the waste room indicating:

- Details regarding acceptable recyclables;
- Recyclables are to be decanted loose (not bagged)
- *No standing* and *danger* warnings apply to the area surrounding the waste storage area;
- Contact details for arranging the disposal of bulky items;
- The area is to be kept tidy.

Standard signage requirements and guidance for application apply (see Appendix C).

4.6 Prevention of Pollution and Litter Reduction

To minimise dispersion of litter and prevent pollution (to water and land via contamination of runoff, dust and hazardous materials), building management and the site cleaning staff will also be responsible for:

- Maintenance of open and common site areas;
- Ensuring waste room is well maintained and kept clean;
- Securing the waste storage area from vandalism and the escape of litter;
- Identification and appropriate disposal of goods with hazardous material content (paints, e-waste, fluorescent tubes);
- Taking action to prevent dumping and unauthorised use of waste areas; and
- Requiring contractors to clean up any spillage that may occur during waste servicing or other work.

5 References

Australian Building Codes Board (2016) National Construction Code (NCC).

Australian Department of Sustainability, Environment Water, Population and Communities (2011) Construction and Demolition Waste Guide - Recycling and Re-use Across the Supply Chain.

Australian Standards 4123.7 Mobile Waste Containers

Department of Environment and Climate Change (2008) NSW Model Waste Not DCP Chapter.

Department of Environment, Climate Change & Water (2010) House deconstruction fact sheet: Bricks and concrete removal.

Department of the Environment (2016) Working together to reduce food waste in Australia, Australian Government.

Northern Beaches Council Waste Management Guidelines 2016.

Northern Beaches Council Waste Management Plan 2016.

Pittwater 21 Development Control Plan

Pittwater Local Environmental Plan 2014

NSW Department of Education (2014) Educational Facilities Standards and Guidelines.

NSW EPA (2012) Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities.

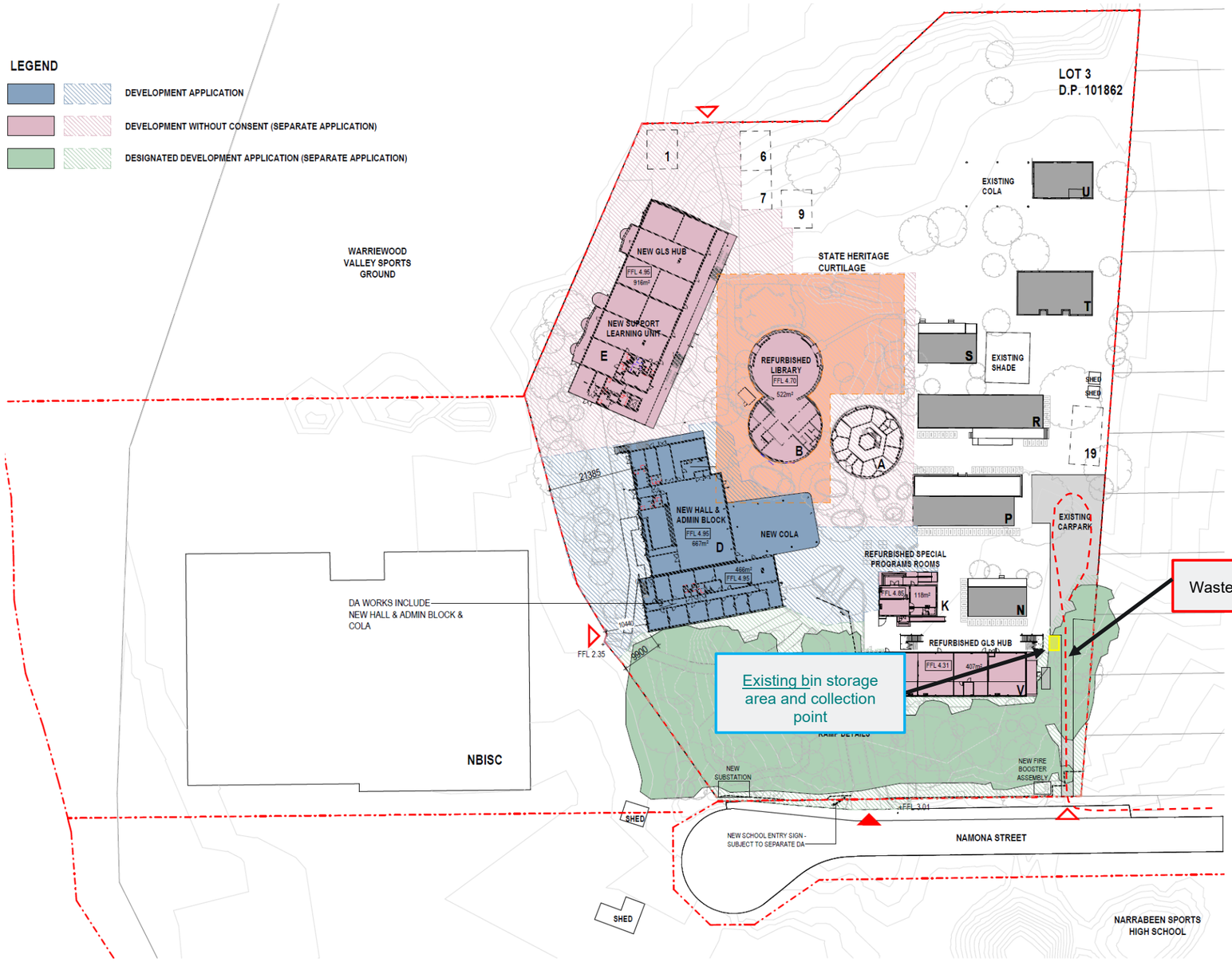
NSW EPA (2014) NSW Waste Avoidance and Resource Recovery Strategy 2014-21.

NSW EPA (2014) Waste Classification Guidelines.

NSW EPA (2019) Better Practice Guide for Resource Recovery in Residential Developments.

Sustainable Schools NSW (2018) Waste – Accessed at: https://www.sustainableschoolsnsw.org.au/teach/waste

Appendix A Site Plans



0000 - GENERAL & SITE INFORMATION

No	DATE	REVISIONS	BY
A	18/08/2022	DA SUBMISSION	JO
B	23/08/2022	DA SUBMISSION	JO

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PROJECT
NARRABEEN EDUCATION PRECINCT
NAMONA ST, NORTH NARRABEEN NSW 2101

DETAILS

DRAWN	JO	SCALE
CHECKED	RF	
APPROVED	Approver	As indicated @ A1

TITLE
NEW SITE PLAN - SCHOOL - GROUND FLOOR

DRAWING NUMBER	REVISION
DA-P-0521	B

Appendix B Storage Location for C&D Waste and Material Stockpiles

Figure 4: Potential C&D waste material skip bin location

Source: SixMaps, 2022.

Appendix C Standard Signage

Waste Signage

Signs for garbage, recycling and organics bins should comply with the standard signs promoted by the NSW Office of Environment and Heritage (NSW OEH 2008b).

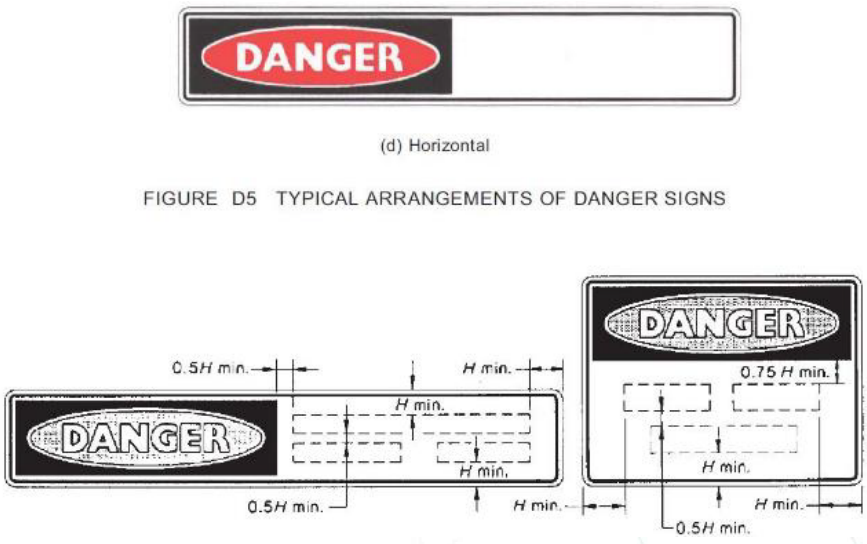
Standard symbols for use in signage, bin facade and educational materials are promoted through the NSW Environment Protection Authority. They are available for download from the NSW EPA website (NSW EPA 2016b), in black and white and colour versions. The Australian Standard series AS 4123 (Part 7) details colours for mobile waste containers (Standards Australia 2008).

Figure 5: Examples of standard signage for bin uses

Safety Signs

The design and use of safety signs for waste and recycling rooms and enclosures should comply with AS 1319 (Standards Australia 1994). Safety signs should be used to regulate, and control safety related to behaviour, warn of hazards and provide emergency information, including fire protection information. Below are some examples. Clear and easy to read 'NO STANDING' and 'DANGER' warning signs must be fixed to the external face of each waste and recycling room where appropriate.

Figure 6: Example and layout of safety signage



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