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CONSTRUCTION WASTE MANAGEMENT PLAN

WILTON JUNCTION, NSW 2571

New primary school at Wilton Junction

Prepared for:	The NSW Department of Education
Date Prepared:	February 2025
Revision:	1.3
Wollondilly Shire Council Development Application #:	ТВА



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Introduction

This Construction Waste Management Plan (CWMP) has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (DoE) for the construction and operation of the new primary school at Wilton Junction (the activity).

The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the Environmental Planning and Assessment Act 1979 (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

This document has been prepared in accordance with the Guidelines for Division 5.1 assessments (the Guidelines) by the Department of Planning, Housing and Infrastructure (DPHI) as well as the Addendum Division 5.1 guidelines for schools. The purpose of this report is to outline how waste from the construction of the activity is managed.



Site Description

The current street address is 200 Fairway Drive, Wilton, 2571, NSW. The site forms part of the northern portion of Lot 1063 in Deposited Plan 1289197) that was previously subdivided by Landcom. The site is approximately 3.4ha hectares in size and is located within Wilton Junction which is part of the North Wilton Precinct.

As a result of precinct wide rezonings, the surrounding locality is transitioning from a semi-rural residential area to a highly urbanised area with new low to medium density residential development with supporting services. North Wilton Precinct is approximately 85km south-west of the Sydney CBD, 30km north-west of Wollongong and 30km southwest of Campbelltown-Macarthur Strategic Centre. The precinct is located on the interchange with the Hume Highway, which connects the Southern Highlands with the Sydney metropolitan region to the northeast and Canberra to the south-west.

The proposed school site does not currently have road access, however Landcom is expected to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Proposed Road 14 located on the eastern boundary of the site will ultimately provide future access to the site. The site contains several patches of remnant native vegetation particularly within the northern portion of the site. The central part of the site has been predominantly cleared and consists of grassland. An aerial photograph of the site is provide at **Figure 1**.

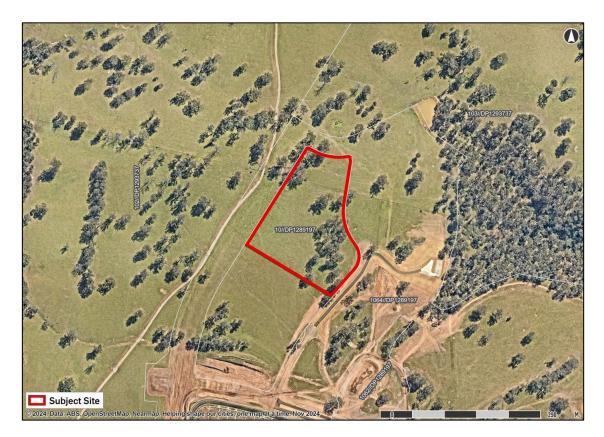


Figure 1: Aerial Photograph of the Site (Urbis, 2024)



Proposed Activity Description

The proposed activity is for the construction of a new primary school at Wilton Junction which will accommodate up to 552 students and 35 staff. Additionally, the proposal includes an integrated preschool which will capacity for up to 60 students and 7 staff. In total, the new school will support up to 612 students and 42 staff.

The new school includes general and support learning spaces, a library, administrative areas and a staff hub. Core facilities include a standalone school hall and canteen, two carparks, and a sports court.

Specifically, this proposal includes the following:

- Construction of a 3-storey learning hub which includes:
 - 24x General Learning Spaces
 - 3 x Support Learning Spaces
 - Staff hub including administrative areas and library.
 - Integrated public pre-school.
- Standalone hall and COLA with outside of school hours care (OSHC).
- Associated landscaping including sports court and separate outdoor play space for the preschool.
- Associated site utilities and services including installation of new 1500 kVA padmount substation and a new main switchboard.
- Main car park to the south of the site with 33 car spaces (including one accessible space).
- Separate car park for pre-school located to the north of the school with 18 spaces (including one accessible space).
- Main school pedestrian entrance proposed off Road 14.
- Earthworks.

The proposed site plan is attached as Figure 2.



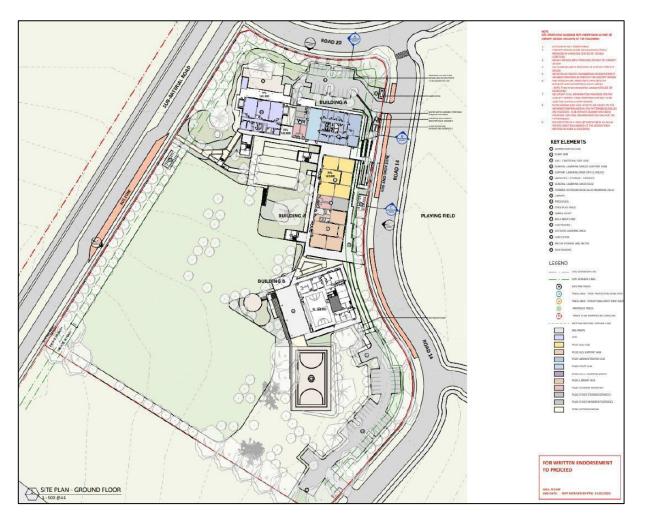


Figure 2: Proposed Site Plan (PTW, 2025)

In the course of preparing this WMP, the subject site and its environs have been inspected, plans of the activity examined, and all relevant council requirements and documentation collected and analysed.

This WMP has been prepared based on the following information:

- Architectural Plans provided by PTW Architects;
- NSW Department of Education Waste Handbook;
- NSW EPA Better Practice guide for resource recovery in residential developments.

In the course of preparing this WMP, the subject site and its environs have been inspected, plans of the development examined, and all relevant council requirements and documentation collected and analysed.

This WMP has been prepared based on the following information:

- Civil Plans provided by PTW Architects;
- NSW Department of Education Waste Handbook;
- NSW EPA Better Practice guide for resource recovery in residential developments.



Background and Existing Conditions

The current street address is 200 Fairway Drive, Wilton, 2571, NSW. The site forms part of the northern portion of Lot 1063 in Deposited Plan 1289197 that was previously subdivided by Landcom. The site is approximately 3.4ha in size and is located within Wilton Junction which is part of the North Wilton Precinct.

As a result of precinct wide rezonings, the surrounding locality is transitioning from a semi-rural residential area to a highly urbanised area with new low to medium density residential development with supporting services. North Wilton Precinct is approximately 85km south-west of the Sydney CBD, 30km north-west of Wollongong and 30km southwest of Campbelltown-Macarthur Strategic Centre. The precinct is located on the interchange with the Hume Highway, which connects the Southern Highlands with the Sydney metropolitan region to the northeast and Canberra to the south-west.

The proposed school site does not currently have road access, however Landcom is expected to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Proposed Road 14 located on the eastern boundary of the site will ultimately provide future access to the site. The site contains several patches of remnant native vegetation particularly within the northern portion of the site. The central part of the site has been predominantly cleared and consists of grassland.

Proposed Activity

The proposed activity consists of the construction of a new primary school at Wilton Junction. The site is currently vacant, so no demolition is required. The new school will have a total area for up to 612 students and 42 staff. The site plans are shown below in **Appendix A**.



Waste Management Principles

When dealing with waste, the following hierarchy has been adopted from the Australian National Waste Policy, prioritising from top to bottom:



Avoid/Reduce

Particularly during the construction phase, avoidance of waste will be achieved through:

- Selecting design options with the most efficient use of materials; and
- Selecting materials with minimal wastage, such as prefabricated materials.

<u>Reuse</u>

Some of the materials encountered in the demolition and construction stages can be recovered and reused both on-site and off-site. This will be practised wherever possible. Reusable materials shall be appropriately stored to avoid damage from weather or machinery.

<u>Recycle</u>

Similarly, many materials from the demolition and construction stages will be recyclable. These materials will be identified prior to demolition, and a system incorporated to efficiently separate reusable materials, recyclable materials, and disposable materials. Recyclable materials shall be appropriately stored to avoid damage from weather or machinery. Details and receipts verifying the recycling of these materials shall be kept present on site at all times.

Recover/Treat

Processing of waste to recover resources, including energy, may be an option, with many waste companies processing demolition and construction waste before disposal. Some waste may also be treated to reduce its environmental impact before disposal.



<u>Disposal</u>

The waste disposal contractor chosen for the job will comply with Council's DCP. Details and receipts verifying the disposal of these materials shall be kept present on site at all times.

<u>Handling</u>

When handling waste on-site, the system (including bin placement, volumes, and access) shall be designed with the following factors in mind:

- Safety (highest priority);
- Ease of use; and
- Aesthetics.

Stockpiling

Waste sorting areas on-site during demolition and construction shall be adequately maintained. The material (demolition material, excavation material, construction material and waste) stockpiling area shall always remain within the site boundary and relocate during different demolition and construction stages as necessary. The waste area shall be largely located at the front of the site to provide access for waste collection vehicles via the site construction entrance. This is to maintain easy access and removal of waste. The stockpiling area shall not infringe on access to the site however, hoardings shall bind the site perimeter; therefore, the waste shall not be visible from the street.



Construction Stage

The proposed site is currently undeveloped, so no demolition of any structures is required. Excavation and stabilisation of the site is required to accommodate the construction of the primary school.

Construction Works

The following measures shall be considered during the construction stage in order to save resources and minimise waste:

Purchasing Policy – i.e., ordering the right quantities of materials and prefabrication of materials where possible"

- Reusing formwork;
- Minimising site disturbance, limiting unnecessary excavation;
- Careful source separation of off cuts to facilitate re-use, resale, or efficient recycling;
- Co-ordination/sequencing of various trades.

Estimating Waste Quantities

There are many simple techniques to estimate volumes of construction and demolition waste. The sequence of steps provided below can be used as a guide:

- 1) Quantify materials for the project;
- 2) Use margins normally allowed in ordering;
- 3) Copy these amounts of waste into your waste management plan.

When estimating waste generation, the following percentages can be used as a "rule of thumb" practice, as shown in the below **Table 1**.

Materials	Percentage of Waste / Total Materials Ordered	
Timber	5-7%	
Plasterboard	5-20%	
Concrete	3-5%	
Bricks	5-10%	
Tiles	2-5%	

Table 1: Estimating Waste Levels



Subsequently, the following **Table 2** illustrates how to convert volumes of material to their respective weights. This information is particularly important during material storage and transportation stages.

Materials
Timber = 0.5 tonnes per m ³
Concrete = 2.4 tonnes per m ³
Bricks = 1.5 tonnes per m ³
Tiles = 0.75 tonnes per m ³
Steel = 2.4 tonnes per m ³

Table 2: Converting Volume into Weight

Wastage Types and Handling

Waste volumes produced during the construction of the proposed development is estimated in the following **Table 3**. Detailed waste volumes will be provided by the contractor at the construction certificate stage. Where possible, materials shall be reused or recycled, with disposal being the last resort. The destination of all recycled and disposed material shall be announced upon selecting the waste collectors and recyclers.

The arrangements for all reused, recycled and disposed waste shall be tracked and recorded, and all receipts shall be held on-site. The following table details estimated waste from the construction phase of the development.

It is noted that the quantities of materials detailed in this section are estimates only, based on current industry standards and quantity analysis, and may vary due to the prevailing nature of construction constraints, weather conditions, and any other unforeseeable activities associated with the demolition and construction of the buildings, which are beyond the control of the developer, including but not being limited to theft, accidents, and other acts of misadventure. Notwithstanding any of the above, the developer will provide Council with all details in relation to any major variations in this regard.

The developer will keep a written record of all documentation associated with the transportation, disposal and processing of all materials associated with the construction of all structures on site.

Construction Phase

If sound construction management practices are in place, then waste volumes should be minimised with the majority of the waste being recyclable. Greater detail will be provided but the contractor at the CC stage. The following **Table 3** details estimates for waste during the construction phase of the development.



Table 3: Wast	Types During	Construction
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Materials on Site	Waste Estimate - Volume (m ³) or Weight (T)	On-Site Reuse	Off-Site Recycling	Off-Site Disposal (Accordance with NSW EPA)
Timber	5m ³	Re-use for formwork and studwork, landscaping, shoring 20-30%	70-80%	<10%
Metals	5m ³	0%	95%	5%
Plaster Board	3m ³	0%	100%	0%
Concrete	2m ³	0%	100%	0%
Bricks & Roof Tiles	5m ³	0%	100%	0%
Packaging & Residual Waste	16m ³	0% 50%		50%
Excavated material and overburden	3,000m³	Yes. Keep and reuse topsoil for landscaping. Store on site. Use some for support of retaining walls (Excavated Materials are only to be used if the material is not contaminated or has been remediated in accordance with any requirements specified by any Environmental Consultancy engaged to carry out any contamination assessment of excavated material).	100%	0%
Green Waste	30m ³	To be separated. Chipped and stored on site for re-use in landscaping. 90%	10%	0%

It is expected that the construction waste, apart from the excavated material, will be collected in demolition and construction skip bins placed adjacent to the construction site within the sedimentation and erosion control at the site. The mixed construction waste should be sent to an EPA licenced waste reprocessing facility which should be able to achieve >80% recovery of materials.

The construction waste reuse/recycling/disposal information will be confirmed at CC Stage.



Mitigation Measures

The following mitigation measures (**Table 4**) are recommended to minimise the environmental impacts of waste during the operation of the school.

Project Stage	Mitigation Measure	Reason for Mitigation Measure	Section of Report
Construction	The waste management measures outlined in the Construction Waste Management Plan (January 2025) shall be implemented.	To avoid impacts resulting from the stockpiling of waste and to ensure construction waste is handled in accordance with industry standards.	Whole Report
Construction	Construction waste is minimised in the design of the school with measures like smart purchasing and prefabrication where possible.	To minimise the generation of construction waste, and the associated greenhouse, material and energy use.	Construction Stage – Construction Works

Table 4: Mitigation Measures

Conclusion

The NSW Department of Education will ensure sound construction management principles are adhered to ensuring the waste produced by the activity are minimised as much as practicable and that all Council requirements are met. Subject to the adoption of the mitigation measures in this waste management plan the construction of the proposed new school will not have significant environmental impacts from the perspective of waste. It is considered that:

1. The extent and nature of potential impacts of waste management are low and will not have significant impact on the locality, community and/or the environment; and

2. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment.

The proposed new school plans are shown below in **Appendix A**.



Appendix A: Site Plan

