



NSW Department Of Education
Waitara Public School
Preliminary Construction Management Plan

August 2017

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1. Introduction

1.1 Background

The Department of Education is carrying out a major upgrade of Waitara Public School.

As part of the planning and development of the design for the school, concept designs have been prepared by GHD for the school buildings and associated infrastructure to support the school operations.

As the proposed development comprises an educational establishment and has a Capital Investment Value (CIV) in excess of \$30 million it is categorised as State Significant Development (SSD) for the purposes of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Therefore an Environmental Impact Statement (EIS) is required.

Think Planners, which is preparing the EIS, sought Secretary's Environmental Assessment Requirements (SEARs) from the NSW Department of Planning and Environment, and these were issued on 12 July 2017.

This Waste Management Plan addresses the key requirements of the SEARs, as well as taking into account other requirements outlined in the Hornsby Development Control Plan (DCP) 2013, and project specific ESD objectives.

1.2 State significant development application

The specific elements that this State Significant Development Application seeks approval for are as follows:

- Removal of 13 demountable spaces and 11 Modular Design Range buildings
- Construction of 37 permanent teaching spaces/ homebases
- Construction of core facilities including a hall, canteen and library

Three new buildings comprising a four-storey building on the corner of Myra Street and Edgeworth David Avenue and two three storey buildings along the Edgeworth David Avenue are proposed to be constructed.

The school has an existing equivalent student population of 760. After the additional classrooms are added, it will have teaching equivalent space for 874 students. However sufficient facilities will be provided to future proof the school and allow for 1,000 students if needed.

1.3 SEARs requirements

The SEARs requirements for the EIS for construction management are addressed as follows:

Table 1 SEARs requirements

SEARs requirements	Where addressed
Preliminary Construction Management Plan, inclusive of a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures.	Project description – Section 2 Construction staging – Section 2.3 Environmental management - Section 3 Vehicle routes - Section 4.2 Size of vehicles - Section 4.3 Hours of operation – Section 2.4

1.4 Reliance

This report: has been prepared by GHD for the NSW Department of Education and may only be used and relied on by the NSW Department of Education for the purpose agreed between GHD and the NSW Department of Education as set out in section 1.5 of this report.

GHD otherwise disclaims responsibility to any person other than the NSW Department of Education arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

1.5 Purpose of this report

Information presented herein is to support the Waitara Public School Environmental Impact Statement (EIS), by responding to the SEARs requirements.

2. Project description

2.1 Site description

The proposed development includes:

- Demolition of a number of buildings, as outlined in Table 2 below
- Removal of demountable buildings
- One main building on three levels
- Landscaping and paving works

The structures to be demolished in the location of the new building, and their approximate areas (from scaling off the plan) are listed in Table 2. A copy of the demolition plan is provided in Appendix A.

Table 2 Estimated building areas and demolition waste quantities

	Building	Approximate area (m ²)
A	Admin	406
B	HB	140
D	HB	289
	COLA	144
F	Hall/canteen	476
G	SP Program	260
H	After school	184
J	HB	360
K	Kindergarten	96
	COLA	286
	Total	2,641

Source: Site Demolition Plan

2.2 Site layout

The part of the site layout where the main building would be constructed is shown on Figure 1. The plan also shows the location of temporary school buildings to enable the school to continue operating whilst the new building is being constructed.

2.3.3 Services

- Provision of services to the site including sewerage connection, water, gas, telecommunications

2.3.4 Buildings

- Excavations associated with building foundations and slabs
- Provision of below ground building services including plumbing and drainage
- Building slab construction
- Building framing
- Walls, windows and roofing
- Internal services (power, lighting)
- Internal fit out of buildings

2.3.5 Roadways

- Laying stormwater drainage pipes and placing pits
- Constructing kerbs and gutters for roads
- Paving of carparks

2.3.6 Landscaping and external works

- Utilisation of stored topsoil for garden beds
- Planting
- Paving of pedestrian areas
- Landscaping of site

2.4 Hours of operation for construction

The proposed working hours for this project are as follows:

Monday to Friday- 7:00 am to 5:00 pm

Saturdays- 7:00 am to 1:00 pm

Sundays and Public Holidays - No work

If required, after hours permits will be sought from the relevant authorities.

2.5 Construction programme

The anticipated length of construction is 27 months.

3. Environmental management (by Contractor)

3.1 Public safety

Signage and fencing will be used to restrict access to the site.

Work on site will be undertaken in accordance with the requirements of Workcover NSW as well as relevant standards and codes of practice.

Contractors will be required to undertake site inductions prior to entering the site. On-site safety briefings will be held as the site works proceed.

3.2 Dust control

An Air Quality Management Plan will be implemented to minimise dust emissions during construction works. This will include measures such as watering down roads and short term stockpiles, and temporary revegetation of long term stockpiles.

3.3 Stormwater

An erosion and sediment control plan will be implemented on site. This will include establishing stormwater drainage systems to divert clean stormwater around cleared areas and construction of temporary berms to prevent excess stormwater run off to adjacent residential sites. A preliminary sediment and erosion control plan is provided in Appendix B.

3.4 Noise and vibration

A Construction Noise Management Plan will be implemented on site. This will include a number of mitigation measures including:

Construction hours and notification

Noise generating construction activities should be undertaken in accordance with the Interim Construction Noise Guideline (DECC, 2009). The standard hours for construction work should be in accordance with the Guideline:

- 7:00 am – 6:00 pm Monday to Friday
- 8:00 am – 1:00 pm Saturdays
- no work on Sundays or Public Holidays.

Work outside normal hours should only comprise:

- the delivery of materials outside normal hours requested by police or other authorities for safety reasons
- emergency work to avoid the loss of lives and/or property

Residences within 500 m of the site should be notified as to the timing and duration of the construction works and provided with a contact phone number for any complaints or concerns during the construction period.

Site inductions

Inductions for the work crew would include the specific noise issues and mitigation measures required for the site. The induction would include:

- all relevant standard noise mitigation measures
- relevant licence and approval conditions
- permissible hours of work
- location of any sensitive receivers that may exceed the construction noise management level
- construction employee parking areas
- designated loading/ unloading areas and procedures
- site opening/closing times (including deliveries)
- behavioural practices that minimise noise: such as avoiding dropping materials from height and avoiding metal to metal contact on material.

Other measures

The distance between plant and equipment and any sensitive receiver should be maximised where practicable.

Vehicles, plant and equipment would be regularly maintained and kept in good operating condition. Machines found to produce excessive noise should be removed from site or stood down until repairs or modifications can be made.

Vibration

Should any buildings be identified that are located within the structural damage vibration buffer distances, a property condition report should be prepared for the premises before and after undertaking the work.

Compliance vibration monitoring should also be undertaken during high vibration generating activities where buildings are located within the structural damage buffer distances to confirm vibration criteria are not exceeded.

3.5 Traffic

A Construction Traffic Management Plan will be prepared by the contractor once appointed to identify the proposed vehicular routes, points of access/egress and vehicular and pedestrian controls. A preliminary version of this plan is provided in Section 4.

3.6 Waste

A Waste Management Plan has already been produced for this project. According to the plan, wastes generated on site would be managed and minimised by a combination of waste planning and on site controls.

3.6.1 Waste planning

Waste planning activities will include:

- Designing buildings to minimise on site cutting of components, and maximising on site assembly tasks
- Careful ordering of materials such as sand and building products to match quantities with amounts required, and on time ordering rather than having materials stored on site for months before being used
- Segregating materials and providing weather protection for stored materials on site, to maximise their fitness for use

- Bringing in material such as sand in large bags rather than as bulk loads, to enable excess materials to be easily picked up and used at other sites
- Encouraging bulk handling and use of reusable and returnable containers
- At the time of tendering, advise contractors and sub-contractors and suppliers of the requirements to minimise waste on site
- Include provision in the tender documentation for the client to monitor the use of waste and recycling bins on site
- Development of a Construction Waste Management Plan by the main site contractor, which includes all of the above elements

3.6.2 On site controls

On site controls would include:

- Implementation by the main site contractor of a Construction Waste Management Plan
- Segregating wastes generated on site, using different skip bins for recycling and waste, with separate bins for different recyclable materials
- Discussion about the site's waste management and recycling policies and practices with employees and subcontractors during site inductions and tool box talks
- Ensuring all waste disposal bins are clearly marked
- Keeping records of quantities of waste and recycled materials disposed of, and the destinations of these materials
- Ensuring that wastes are only disposed to licenced facilities

4. Preliminary Construction Traffic Management Plan

4.1 Scope

The SEARs require a Preliminary Construction Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures to be prepared. This section of the Construction Plan provides preliminary information on these aspects of the project.

4.2 Vehicle routes

The school is located on Edgeworth David Avenue. As this is a busy road, it is expected that construction access would be from Myra Street and Highland Avenue, however vehicles would use arterial roads such as Edgeworth David Avenue to access these roads. Edgeworth David Avenue can be accessed from the Pacific Highway.

4.3 Size and number of trucks

Typical truck sizes used for this type of project are:

- 19.5 m 'Truck and Dog' combination
- 19 m Articulated Vehicle
- 12.5 m Heavy Rigid Vehicle

The roads used for site access should be able to accommodate these sized vehicles. The number of heavy vehicles is not known at this stage, but will vary throughout the project, depending upon which works are being undertaken.

4.4 Access arrangements

A traffic controller may be positioned at the site access points on Myra Street and Highland Avenue to ensure pedestrian safety as vehicles enter and leave the site.

4.5 Parking

The contractor would establish a site compound with some on-site parking. Workers may be encouraged to ride share and take other steps to minimise the number of vehicles that require parking.

4.6 Traffic control measures

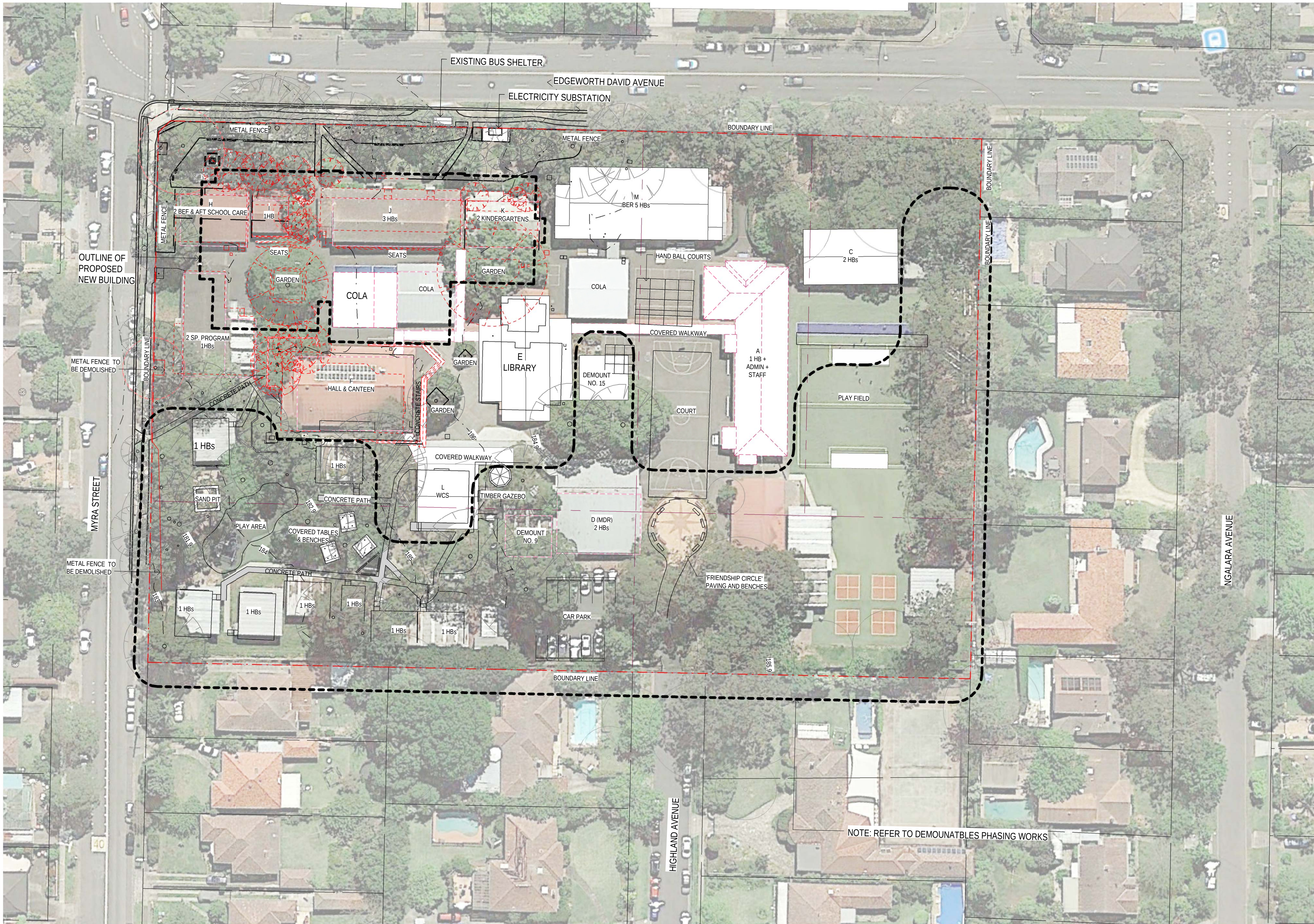
A final Construction Traffic Management Plan that meets all of the requirements of AS 2890.2, AS 1742.3, *RMS Traffic Control at Work Sites Manual* will be prepared before work commences on site.

5. References

GHD, NSW Department of Education, Waitara Public School Waste Management Plan August 2017

Appendices

Appendix A – Site demolition plan



LEGEND

TO BE DEMOLISHED

EXISTING BUILDING

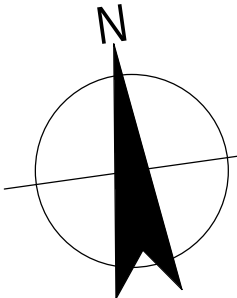
EXISTING TREES

TREES TO BE REMOVED

SITE PLAN - DEMOLITION
SCALE 1: 400

DEVELOPMENT APPLICATION

No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing	Drawn	Job Manager	Project Director	Date
A	ISSUED FOR DEVELOPMENT APPLICATION		AA	CS*	SM*	24.07.2017



GHDWOODHEAD

Level 15, 133 Castlereagh St Sydney NSW 2000 Australia
T 61 2 9239 7100 F 61 2 9239 7199
E sydmail@ghd.com W www.ghd.com

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Drawn	A. ARIMADO	Designer	S. BUZNAN
Drafting Check		Design Check	A. MILLER
Approved (Project Director)	P. MACCHIA	Nominated / Responsible Architect	
Scale	As indicated	This Drawing must not be used for Construction unless signed as Approved	

Client	NSW DEPARTMENT OF EDUCATION		
Project	WAITARA PUBLIC SCHOOL REDEVELOPMENT		
Title	SITE DEMOLITION PLAN		
Original Size	A1	Drawing No:	21-26108 -WA- DA-AR-0110
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Appendix B – Erosion and sediment control plan

GHD

Level 15

133 Castlereagh Street

T: 61 2 9239 7100 F: 61 2 9239 7199 E: sydmall@ghd.com

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Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	D Gamble	A Montgomery	<i>On File</i>	<i>M. Dean</i>		24/8/17

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