

# preliminary construction management report

Alexandria Park Community School Redevelopment

1 December 2017



# Contents

Contents.....	2
1. Introduction .....	3
1.1 Proposed Works .....	3
1.2 Site Description .....	4
2. Site Operations.....	5
2.1 Legislative Requirements .....	5
2.2 Hours of Operation.....	5
2.3 Public Safety, Amenity & Site Security.....	5
2.4 Neighbour Management .....	5
2.5 Construction Phasing Strategy.....	6
3. Environment & Amenity .....	7
3.1 Noise & Vibration.....	7
3.2 Dust .....	8
3.3 Odour Control .....	8
3.4 Vegetation Protection.....	8
3.5 Stormwater & Sediment Control.....	8
4. Traffic Management .....	9
4.1 Construction Entry & Exit .....	9
4.2 Pedestrian Protection.....	9
5. Waste & Materials Reuse.....	10
5.1 Storage of Dangerous Goods .....	10
5.2 Waste Management & Recycling Principles .....	10
5.3 Hazardous Materials Management.....	10
6. Services Disconnection .....	12

# 1. Introduction

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This Preliminary Construction Management Plan has been prepared by Savills Project Management on behalf of the NSW Department of Education (the 'Applicant'). It accompanies an Environmental Impact Statement (EIS) prepared in support of State Significant Development Application SSD 17\_8373 for the redevelopment of 'Alexandria Park Community School' at 7-11 Park Road, Alexandria (the 'Site').

The Works described in this preliminary Construction Management Plan will be carried out by a Head Contractor on behalf of the NSW Department of Education. Once the Head Contractor has been appointed, a comprehensive Construction Management Plan will be prepared by the Head Contractor with specific details and strategies for the management of activities on-site.

The NSW Department of Education will ensure that the Head Contractor complies with the minimum standards detailed in this Preliminary Construction Management Plan, as well as the requirements of the City of Sydney Council.

The Head Contractor's requirements outlined in this preliminary Construction Management Plan will be specifically included in the GC21 General Conditions of Contract, GC21 Preliminaries, GC21 Conditions of Tendering and GC21 Tender Schedules.

## 1.1 Proposed Works

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The EIS seeks development consent for the following works:

The redevelopment of the Alexandria Park Community School ('the School') will address issues of capacity for schools in the inner city areas of Sydney and is also driven by the population growth resulting from the large number of residential developments that are transforming the former industrial precincts of Zetland, Waterloo and Alexandria.

The new school has been briefed to accommodate up to 1,000 primary school students and up to 1,200 secondary school students on one campus in an integrated and fully connected school building.

Specifically, this project includes:

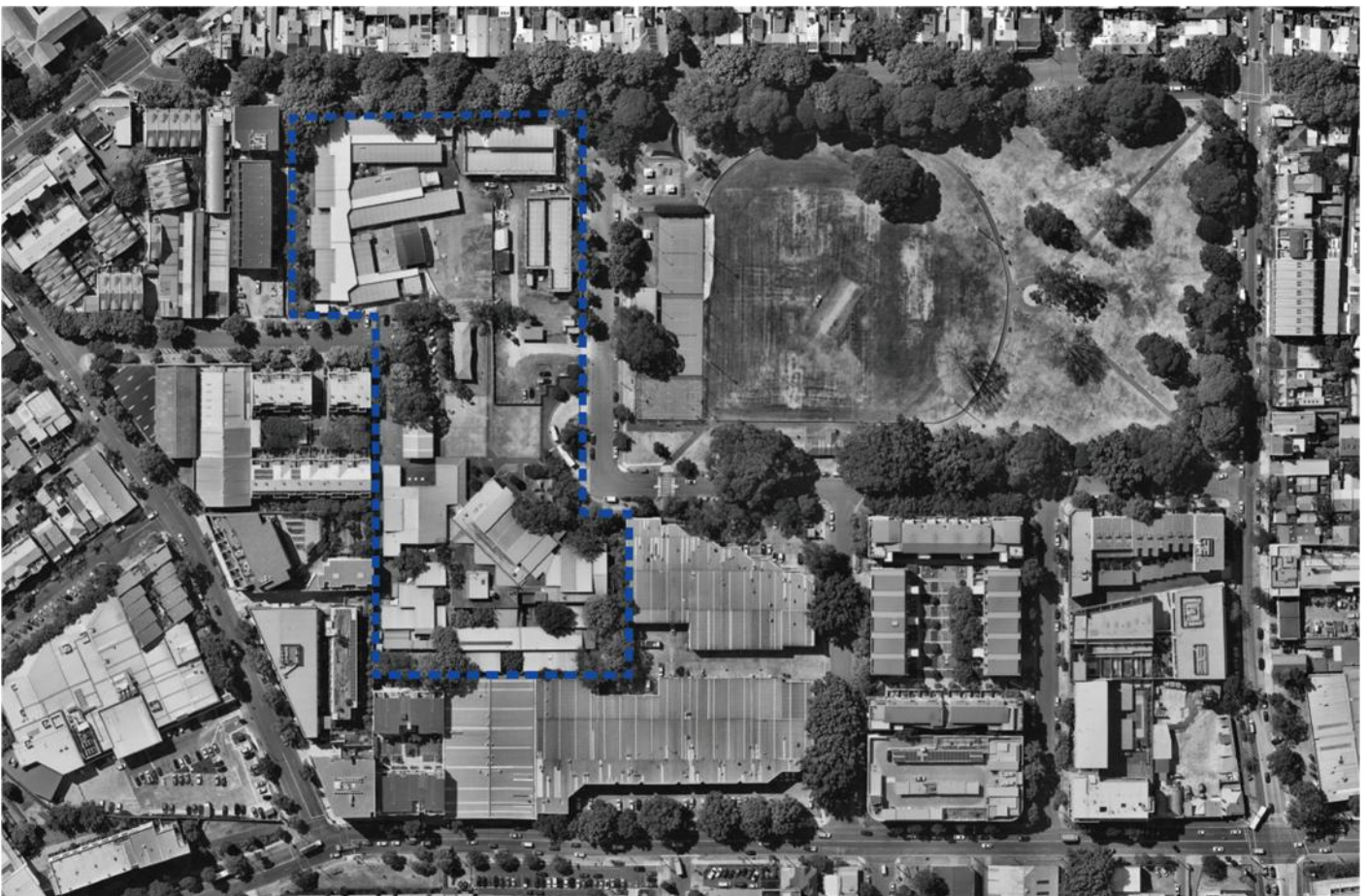
- Demolition of all existing buildings on-site, including the temporary pop-up schools;
- Remediation of specific areas of the site containing contaminated fill;
- Construction of multiple school buildings of up to five stories, arranged along the western and southern parts of the site comprising:
  - Classroom home bases;
  - Collaborative learning spaces;
  - Specialist learning hubs;
  - Learning support spaces;
  - Offices for teachers and administrative staff;
  - Library; and
  - Student canteen.
- Construction of a sports hall and multiple outdoor sports courts;
- An all-weather multipurpose synthetic sports field;
- Informal play spaces and Covered Outdoor Learning Space or COLA;
- A community centre;

- A pre-school for 39 children;
- Site landscaping including green links, community garden and open space;
- Construction of a new on-site car park and associated vehicular access point off Belmont Street; and
- Augmentation and construction of ancillary infrastructure and utilities as required.

## 1.2 Site Description

The subject site is located within the City of Sydney LGA in the suburb of Alexandria. The proposed development site covers an area of approximately 2.7ha.

The site is defined by Buckland St to the north; Park Road and an industrial lot to the east; the rear of industrial and residential lots to the south; and a shared pedestrian path connecting Belmont Street and Buckland Street and residential lots to the west.



*Figure 1 – Alexandria Park Community School site area*

## 2. Site Operations

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### 2.1 Legislative Requirements

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The Works will be undertaken in accordance with the following legislative requirements and any others that must be complied with in undertaking the Works as required:

- Work Health and Safety Regulation
- NSW Environmental Protection Agency

### 2.2 Hours of Operation

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The hours of demolition and construction (including the delivery of materials to and from site) will be in accordance with the "Interim Construction Noise Guideline", DECC 2009:

- Monday to Friday - 7.00am and 6.00pm
- Saturday - 8.00am to 1.00pm
- No work on Sundays or public holidays
- Out of hours works may be required from time to time and a separate application will be made by the Contractor to seek approval
- Deliveries of heavy machinery may be required out of the proposed hours of operation to conform to the overriding requirements of the Roads & Maritime Services (RMS).

### 2.3 Public Safety, Amenity & Site Security

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Appropriate hoarding/fencing (as specified in Australian Standards and WorkCover requirements) will be installed to prevent public access and to maintain security to the area of the Works.

Vehicular access/egress gates will be erected as required. These gates will be manned by qualified traffic supervisors at the times of vehicular access and egress to the Site.

The Works will be staged. At various times, different portions of the site will be fenced. These protection measures will be reviewed at the time of contract award for the Works to ensure alignment with proposed preferred construction methodologies and to ensure that the safety of staff and students of the operational school and general public is maintained at all times during the Works.

The Head Contractor will need to comply with their duty under WHS management in accordance with the legislative requirements listed in Section 2.1 of this document.

### 2.4 Neighbour Management

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From the commencement of construction until completion of the Works, the Head Contractor will be required to maintain a community liaison officer on the project. This officer will be contactable by both a mobile phone and email and the contact details will be clearly advertised on site hoardings, community updates and the like. The Head Contractor will be required to maintain a register of complaints and to report on the status of complaints on a monthly basis. For complaints that cannot be addressed by the Head Contractor, these will be presented to the appointed representative from the NSW Department of Education for resolution of the issues and for decisions to be made.

## 2.5 Construction Phasing Strategy

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Delivery of the project will be undertaken in sequential phases to maintain an operational school on the Park Road Campus for the entire duration of the rebuild. Phasing will involve enabling works separate to this application followed by three main construction phases for the new building and external works. These phases are defined as follows:

- Enabling Works – Construction of 2 temporary demountable schools on Buckland Street side of the school (not part of this application);
- Phase 1 – Demolition of the existing Park Road building and construction of the southern part of the new building, including new COLA and associated external works;
- Phase 2 – Demolition of temporary school 1 and construction of the remaining part of the new building, carpark and two outdoor sport courts;
- Phase 3 – Demolition of temporary school 2 and construction of the new synthetic sports field and completion of the entry forecourt.

Refer to Architectural plans for construction extent during each phase.

## 3. Environment & Amenity

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The Head Contractor undertaking the Works will be required to submit for review a comprehensive Environmental Management Plan (EMP) to ensure that all elements of the plan meet all statutory requirements, and requirements as set out in Clause 6: Environmental Protection in the GC21 Preliminaries document.

The environmental performance of the Head Contractor will be monitored throughout the Works. The following specific environmental management principles will be implemented on site:

### 3.1 Noise & Vibration

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All practicable measures will be taken to reduce the noise arising from the Works. Noise from the Site shall not exceed the limits set out in the Interim Construction Noise Guidelines, DECC 2009 (ICNG) and NSW Industrial Noise Policy, EPA 2000. No machine work will occur outside normal working hours unless approval has been given by the consent authority.

The following measures are proposed with reference to the ICNG:

- Use Noise Management Levels (NML's) to identify demolition, excavation and construction noise sources or scenarios that require engineering controls or administrative management;
- Promote clear understanding of ways to identify and minimize noise from construction works;
- Focus on applying all feasible and reasonable work practices to minimize construction noise impacts;
- Provide flexibility in the selection of site-specific and reasonable work practices to minimize noise impacts;
- Encourage construction/ demolition work to be undertaken within approved standard hours where reasonably practicable with noise that is audible to other premises. Approval is required for works undertaken outside standard hours; and
- The use of noise reduction techniques including, but not limited to, barriers, enclosures and silencers shall be employed to ensure compliance with construction and demolition noise criteria.

The benchmarks used to assess vibration impacts due to the construction works are documented in the Acoustic Assessment Report, prepared by Wilkinson Murray. This Acoustic Assessment Report documents recommendations and requirements for mitigation of noise and vibration during construction. This report forms part of the SSD application

The noise mitigation treatment proposed by the Head Contractor will be included in the detailed Construction Management Plan. The following project-specific mitigation measures will need to be included in the plan:

- Checking of compliant maintenance regimes and statutory supervision of all equipment, such as making sure all trucks and machinery involved in the Works are checked for defective exhaust systems and general servicing.
- Installation of localised noise barriers between piling rigs and western residences;
- Selection of quietest feasible construction equipment;
- Use of rock saws and ripping in preference to rock breakers if rock removal is required (unlikely);
- Localised treatment, such as barriers, shrouds and the like around fixed plant, such as pumps, generators and concrete pumps;
- Provision of respite periods, particularly on Saturdays; and
- Trial testing of vibration levels where equipment is identified as having the potential to exceed the human comfort criteria.



### 3.2 Dust

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To control dust generation where necessary, water will be sprayed at the source of origin and surrounding areas to prevent airborne dust particles migrating into the surrounding environment. Management of dust prevention is to be developed by the Head Contractor and agreed by the project stakeholders.

Additional precautions that will be implemented during the Works include the covering of all haulage trucks with tarpaulins, and monitoring of weather conditions (including wind). Management and contingency plans will be developed to prevent any foreseeable impacts from dust.

### 3.3 Odour Control

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Odour problems will be minimal for demolition activity on site. All plant and machinery involved in the Works will be regularly serviced and checked for exhaust emissions and catalytic converters.

### 3.4 Vegetation Protection

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The Head Contractor upon appointment will be required to prepare a detailed site-specific Construction Management Plan. This Plan will need to demonstrate the measures that will protect trees and vegetation being retained under the development works. Vegetation protection should be in accordance with Australian Standard 4970-2009, Protection of Trees on Development Sites. Where branch pruning works are required, works should be carried out in accordance with Australia Standard AS 4373-2007 Pruning of Amenity Trees and the works are to be undertaken by an experienced and qualified arborist.

Recommendations and requirements for vegetation protection are documented in the Arborist Report produced by Redgum Horticultural and it forms part of the SSD Application.

### 3.5 Stormwater & Sediment Control

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As a minimum, the erosion and sediment controls for the Works shall be designed, installed and maintained in accordance with the requirements of Managing Urban Stormwater: Soils and Construction "The Blue Book" 2004 (4th edition).

Reference should be made to the Stormwater Management Plan produced by Woolacotts Consulting Engineers as part of the SSD Application for stormwater and sediment control.

Drainage of surface run-off will be allowed to flow along existing contours (down slope) with the existing drainage system on-site of kerbs, gutters, gully pits, pipes and stormwater runoff passing through installed filtration systems prior to being discharged off-site.

The site will be continually cleaned of rubble to minimise possible sediment flow during rainfall periods. Stormwater kerbs and drainage lines will have sediment controls in the form of hay bales or sedimentation socks.

Stormwater grate inlets surrounding works areas will be covered with geotextile fabric to allow water to enter into drains whilst retaining sediments.

Should external surface run-off flow into works areas, it may need to be diverted (using hay bales) to reduce sediment transportation. All drainage control devices will be regularly checked particularly during heavy rainfall periods.

The Head Contractor will be required to prepare a detailed Stormwater Management Plan which will cover all aspects of stormwater and sediment management and control during construction.



## 4. Traffic Management

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As part of its Construction Management Plan, the Head Contractor will be required to submit a Construction Traffic Management Plan for approval prior to commencement of the works. A preliminary Construction Pedestrian Traffic Management Plan (CPTMP) has been prepared by Arup as part of the SSD Application.

During construction, the following vehicles & equipment may be used:

- bulldozers, backhoes and excavators;
- articulated and heavy rigid trucks;
- mobile cranes;
- concrete delivery trucks;
- concrete pumps;
- man and material hoists;
- scissor and boom lifts, and
- forklift trucks.

### 4.1 Construction Entry & Exit

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Details of service vehicle movements including likely arrival and departures routes have been assessed within the Preliminary Construction Traffic Management Plan produced by Arup as part of the SSD Application.

Construction vehicles would be restricted the state road network and vehicles will likely originate from this network, with movements along local streets prohibited. It is envisaged the main construction entry point will be off Belmont Street. The primary construction vehicle access to the site will be via Belmont Street, where no student drop-offs and pick-ups will be allowed. The pedestrian entry to the temporary school will be closed, reducing the conflict between pedestrians and vehicles.

Service vehicle access via Park Road will be restricted during school peak periods between 8am – 9:30am & 2:30pm – 3:30pm.

Note that construction vehicles will not be permitted to use Buckland Street.

A detailed list of mitigation measures for vehicle movements is included in the Preliminary Construction Traffic Management Plan produced by Arup as part of the SSD Application.

### 4.2 Pedestrian Protection

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Temporary hoarding appropriate to the interaction between pedestrians and construction works (as per WorkCover requirements and Australian Standards) will be constructed to prevent unauthorised access to the Site.

Pedestrians will be diverted and controlled by traffic controllers as necessary. They will control pedestrians as well as vehicles. Authorised personnel will be directed through the B-class hoarding along the street frontages.

As the main site entrance will be at the end of Belmont Street, the interaction with pedestrians is expected to be limited.

The Head Contractor will need to produce a detailed Traffic Management Plan which addresses pedestrian and vehicle activities at or near the site.

## 5. Waste & Materials Reuse

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### 5.1 Storage of Dangerous Goods

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Dangerous goods (such as petrol, diesel, oxy-acetylene, oils, glues etc) will be stored in a lockable compound with sufficient ventilation in accordance with relevant codes of practice and standards. Material safety data sheets on all of these flammable and potentially harmful liquids will be provided by the Head Contractor undertaking the Works.

### 5.2 Waste Management & Recycling Principles

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Demolition and removal of in-ground services will be required on site.

Where possible any material generated from the Works will be recycled apart from selected soft demolition materials and hazardous materials such as asbestos, lead-based paints, phenols and polychlorinated biphenyls (PCB). The Head Contractor will be required to achieve compliance with the EPA guidelines.

The following measures are adopted to encourage the management and reduction of waste to minimize the loss of natural resources and landfill space:

- Emphasise the importance of recycling and waste reduction;
- Encourage the use of recycled materials where it is reasonably practical;
- Minimise the use of packaging materials and recycle packaging materials where possible;
- Waste concrete to be sent to a concrete recycling plant where possible;
- Separate removed native vegetation from general construction waste, mulched and stockpiled for re-use; and
- Non-recyclable general waste will be disposed at an approved waste disposal facility.

References should be made to the City of Sydney Council's waste management guidelines. The Head Contractor must comply with the requirements as set out in the GC21 Preliminaries document (Section 6.3 – Waste Management) in its waste management practices.

### 5.3 Hazardous Materials Management

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A detailed Site Investigation Report and Remedial Action Plan has been produced by Coffey as part of the SSD Application. The report records hazardous materials including bonded asbestos cement sheeting, lead and vapour intrusion and provides recommendations for handling the hazardous materials identified.

#### 5.3.1 Hazardous Materials Audit

A licensed demolition contractor and/ or Head Contractor are to inspect the site to determine the presence of any hazardous materials in accordance with the requirements of AS2601.

#### 5.3.2 Hazardous Materials Management Plan

- A Hazardous Materials Management Plan will be prepared in accordance with the requirements of AS2601 prior to the commencement of any demolition works;
- The removal, handling and disposal of asbestos materials are to be undertaken only by an appropriately licensed contractor and in accordance with the requirements of the NSW WorkCover Authority and the NSW Office of Environment and Heritage (NSW OEH);
- All asbestos and other hazardous materials are to be appropriately contained and disposed of at a facility holding the appropriate licence issued by the NSW OEH; and



- A sign displaying the words 'DANGER ASBESTOS REMOVAL IN PROGRESS' is to be displayed on sites where buildings to be demolished contain asbestos materials.

Any hazardous materials discovered during the Works should be dealt with by the Head Contractor in accordance with the requirements set out in the GC21 Preliminaries document (Section 5.6 – Hazardous Substances).

## 6. Services Disconnection

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In general terms the following principles will be adopted when disconnecting services:

- Services impacts on the existing temporary school facilities will be done with full coordination, development and input with the client and its relevant stakeholders and will only proceed with approval via a Disruption Notice process;
- Impacts on the existing temporary school will be kept to a minimum, which may, on occasion, result in 'out of hours' work. At all time, safety will be paramount and student/staff/visitor safety, access and security maintained;
- If the Head Contractor proposes to carry out 'out of hours' work, the Head Contractor must provide details of the time and frequency of such work. No work will occur outside normal working hours unless approval has been given by the consent authority. It is anticipated that such work will be kept to a minimum;
- All Service authorities will be consulted prior to the Works commencing to ascertain lead times and correct termination locations;
- All termination works will be undertaken in accordance with design engineers' specifications and instructions;
- All termination works will be undertaken by suitably licensed contractors;
- Any termination works that impact on adjoining owners will be notified and will be undertaken out of hours to minimise impact; and
- The Head Contractor must comply with the requirements as set out in the GC21 Preliminaries document (Section 5.4 – Existing Services) for locating and dealing with the existing services.