

Appendix 18: Mitigation Measures

1.1 Introduction

Part 5 of the Environmental Planning & Assessment Act 1979 provides for certain works to be undertaken as development without consent.

To ensure that the development activity, being the demolition/removal of an existing building and installation of a two-storey portable classroom building and associated works at 5 Malvina Street, Ryde (Ryde Secondary College) are carried out in accordance the provisions of Part 5 of the EP&A Act, **Section 1.2** identifies the plans / documents (and any amendments approved under Part 5) which have been relied upon for the purposes of this assessment.

Section 1.2.1-1.2.5, 1.3, 1.4, 1.5 and 1.6 of Appendix 18 sets out the mitigation measures that are to be implemented during the demolition and construction phases and during the post construction operational usage of the building to ensure impacts are minimised and / or avoided.

1.2 Details of the Activity

The documents appended to the REF are authorised for the carrying out of works as development without consent. The activity will be implemented in accordance with the plans and documents listed in **Table 1** as amended by any of the undermentioned identified requirements.

Table 1 Identified requirements			
Architectural Drawings prepared by Bennett and Trimble			
Number	Rev	Name of Plan	Date
REF-A01	01	Cover	07/09/2022
REF-A02	01	Context	07/09/2022
REF-A03	01	Site Analysis	07/09/2022
REF-A04	01	Existing Site Plan	07/09/2022
REF-A05	02	Proposed Site Plan	07/10/2022
REF-A06	02	GA – Landscape Plan	07/10/2022
REF-A07	02	GA – Ground Level	07/10/2022
REF-A08	02	GA – Level 1	07/10/2022
REF-A09	02	GA – Roof	07/10/2022
REF-A10	03	Elevations 1	07/10/2022
REF-A11	03	Elevations 2	07/10/2022
REF-A12	02	Long Section	07/10/2022
REF-A13	02	Short Sections	07/10/2022
REF-A14	02	External Views 1	07/10/2022
REF-A15	02	External Materials	09/09/2022
REF-A16		Shadow Diagrams – June 21	07/09/2022
Survey Plan prepared by CMS Surveyors			
Number	Issue	Name of Plan	Date
21164	I	Sheet 1	3-7/03/2022
21164	I	Sheet 2	3-7/03/2022
21164	I	Sheet 3	3-7/03/2022
21164	I	Sheet 4	3-7/03/2022
21164	I	Sheet 5	3-7/03/2022
21164	I	Sheet 6	3-7/03/2022
21164	I	Sheet 7	3-7/03/2022
21164	I	Sheet 8	3-7/03/2022
21164	I	Sheet 9	3-7/03/2022

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Table 1 Identified requirements		
Other Supporting Documents		
Document	Prepared By	Date
Access Statement	Accessible Building Solutions	29/08/2022
Acoustic Report	PKA Acoustic Consulting	09/09/2022
Arboricultural Impact Assessment	Redgum Horticultural	21/09/2022
Architectural Design Report	Bennett and Trimble	07/09/2022
BCA Capability Statement	Group DLA	25/08/2022
Bush Fire Assessment Report	Australian Bushfire Consulting Services	20/08/2022
Civil Engineering Design Report	Henry & Hymas	09/09/2022
Construction Management Plan	Lipman	26/08/2022
Flora and Fauna Assessment Report	Narla Environmental	12/09/2022
Preliminary Site Investigation	Douglas Partners	19/08/2022
Building Services Infrastructure Report	Intrax Projects	28/08/2022
Transport Statement	Ason Group	08/09/2022
Construction Waste Management Plan	EcCell Environmental Management	08/09/2022

In the event of any inconsistency between the approved plans and supporting documentation, the approved plans prevail. In the event of any inconsistency between the approved plans and a stated mitigation measure, the mitigation measure prevails.

1.2.1 Amendment Tracking

Where amendments to the approved plans are required, an amendments register is required to be prepared which discusses the proposed changes and demonstrates how these changes will result in development that is substantially the same as that assessed in this REF.

1.2.2 Compliance with the Building Code of Australia and Australian Standard

All building work is to be undertaken in accordance with the Building Code of Australia and referenced Australian Standards.

1.2.3 Access for People with Disabilities

The works must be designed and constructed to provide access and facilities for people with a disability in accordance with the BCA. Prior to the issue of a Crown Certificate, the Certifying Authority must ensure that evidence of compliance from an appropriately qualified person is provided and that the requirements are referenced on any certified plans.

1.2.4 Maximum Increase in Student Capacity

The maximum allowable increase in student capacity as part of this development is 136 students. A total of 7 demountable buildings (or equivalent to 124 student capacity) are to be removed prior to the issue of a Completion Certificate.

1.2.5 Maximum Increase in Staff Capacity

The maximum allowable increase in staff capacity as part of this development is 10 staff.

1.3 Mitigation Measures to be Implemented Prior to Works Commencing

1.3.1 Crown Certificate

Works cannot commence on site until a Crown Certificate has been issued by a Certifying Authority.

1.3.2 Long Service Levy

Works shall not commence until the Certifying Authority is satisfied the required levy payable under Section 34 of the Building and Construction Industry Long Service Payments Act 1986

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has been paid. The levy must be paid by the person liable, as specified in Section 38 of the Building and Construction Industry Long Service Payments Act 1986.

1.3.3 Council Notification

City of Ryde Council shall be advised in writing of the date it is intended to commence work, including demolition. A minimum period of seven (7) days notification shall be given.

1.3.4 Notification to occupiers of adjoining land

Adjoining land owners shall be advised in writing of the date it is intended to commence work, including demolition. A minimum period of seven (7) days notification shall be given.

1.3.5 Construction Management Plan (CMP)

Prior to the commencement of work, including demolition works, a Construction Management Plan (CMP) is to be submitted to the Certifying Authority for approval.

The CMP must satisfy:

- Legislative requirements and relevant non-statutory policies
- Specific environmental construction mitigation measures described in this REF
- Requirements outlined in any relevant approvals, permits or licences
- NS174C Environmental Handbook.

The CMP must include, but not be limited to, the following:

1. Details of:
 - (a) hours of work;
 - (b) 24-hour contact details of site manager;
 - (c) community consultation and complaints handling.
2. Construction traffic and pedestrian management plan (refer to Transport Statement prepared by Ason Group dated 8 September 2022).
3. Construction noise and vibration management
4. Construction waste management
5. Demolition work plans
6. Asbestos management plan
7. Erosion and sediment control plan and maintenance protocols.
8. An unexpected finds protocol for contamination and associated communications procedure
9. Waste classification (for materials to be removed) and validation (for materials to remain) be undertaken to confirm the contamination status in these areas of the site
10. Emergency Management Plan including ensuring workers are aware of flood and bush fire risk.

1.3.6 Utilities and Services

- (i) Prior to commencement of any demolition activities, any services near the works site which may be impacted by the works are to be accurately located.
- (ii) Dial Before You Dig should be contacted prior to the commencement of any works.
- (iii) Prior to commencement of works, and if required, an application for a compliance certificate is to be made to Sydney Water or other evidence of Sydney Water's non-

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objection to the commencement of work on the basis of service availability is to be provided.

1.3.7 Works in the Road Reserve

Any works within the road reserve requires approval under Section 138 of the Roads Act 1993. This includes a road opening permit for a temporary construction access.

1.3.8 Construction Parking

Prior to the commencement of works, including demolition, a Construction Worker Transportation Strategy (CWTS) is to be submitted to the Certifier. The CWTS must detail the provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimise demand for parking in nearby public and residential streets or public parking facilities.

1.3.9 Tree Protection Measures

Tree protection measures for all trees likely to be affected by the proposed works are required to be installed by a Level 5 Arborist prior to commencement of any works on the site. Tree protection measures are to be installed in accordance with the Arborist Report prepared by Redgum Horticultural and dated 21 September 2022.

1.4 Mitigation Measures to be implemented during Demolition and Construction

1.4.1 Site Notice

A site notice must be prominently displayed in a prominent position at the site during construction to inform the public of project details, and must satisfy the following requirements:

1. The site notice(s) must be durable and weatherproof and must be displayed throughout the works period;
2. Include details of the approved hours of work, the name of the builder, Certifier, structural engineer, site/project manager, the responsible managing company (if any), its address and 24-hour contact phone number for any inquiries must be displayed on the site notice(s); and
3. The site notice(s) must be mounted at eye level on the perimeter hoardings/fencing and must state that unauthorised entry to the site is not permitted.

1.4.2 No Obstruction of Public Way

Building materials, machinery, vehicles, refuse, skip bins or the like must not be stored or placed in the public way (outside of any approved construction works zone).

1.4.3 Implementation of CMP and Sub Plans

The demolition and construction works are to be undertaken in accordance with the approved CMP (referred to in **Mitigation Measure 1.3.5** above).

1.4.4 Demolition

Demolition work must comply with the demolition work plans required by Australian Standard AS 2601-2001 The demolition of structures (Standards Australia, 2001) and endorsed by a suitably qualified person.

1.4.5 Works Hours

Works may only be carried out between the following hours:

- (a) 7am and 6pm, Mondays to Friday.
- (b) 7am to 5pm, Saturdays
- (c) No work may be carried out on Sundays or public holidays.

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(d) Deliveries may occur outside the hours of demolition and construction referred to Condition 1.4.5(a) above, but not before 6.30am or after 6.30pm.

(e) No truck movements during school zones times.

1.4.6 Demolition and Construction Noise Limits

The development must be undertaken in a manner to achieve the noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009).

All feasible and reasonable noise mitigation measures must be implemented and any activities that could exceed the construction noise management levels must be identified and managed in accordance with the management and mitigation measures identified in the approved Construction Management Plan.

1.4.7 Unexpected Finds Protocol – Aboriginal Heritage

In the event that surface disturbance identifies a new Aboriginal object, all works must halt in the immediate area to prevent any further impacts to the object(s). A suitably qualified archaeologist and the registered Aboriginal representatives must be contacted to determine the significance of the objects. The site is to be registered in the Aboriginal Heritage Information Management System (AHIMS) which is managed by EES Group and the management outcome for the site included in the information provided to AHIMS. The Applicant must consult with the Aboriginal community representatives, the archaeologists and EES Group to develop and implement management strategies for all objects/sites. Works shall only recommence with the written approval of EES Group.

1.4.8 Unexpected Finds Protocol – Historic Heritage

If any unexpected archaeological relics are uncovered during the work, then all works must cease immediately in that area and the NSW Heritage Division contacted. Depending on the possible significance of the relics, an archaeological assessment and management strategy may be required before further works can continue in that area. Works may only recommence with the written approval of the NSW Heritage Division.

1.4.9 Unexpected Finds Protocol – Contaminated Material

If unexpected contaminated material is encountered during the works, all work shall cease, the site will be secured and a safe work method statement(s) and appropriate documented practices would be implemented to ensure the site is suitable for its use in accordance with the approved Construction Management Plan (**Mitigation Measure 1.3.5**).

1.4.10 Flora and Fauna

- (i) All vehicles, equipment, footwear and clothing must be clean and free of weed propagules prior to entering the site and any weeds that are removed during the construction phase are to be disposed of appropriately.
- (iii) If any injured fauna species are found during the demolition or construction periods, works must stop immediately so that the injured animal can be taken to a vet or wildlife carer. All handling of fauna species should be conducted by an Ecologist or appropriately trained wildlife carer.

1.4.11 Contamination

If lead-based paint is to be impacted, a hazardous materials removalist or contractor who comply with the requirements for paint stabilisation described in the AS4361.2.2017 will be required to be engaged.

Formal waste classification of any soils prior to off-site disposal (e.g., once stockpiled) to confirm the previously provided preliminary in situ classification. Additionally, any assessment should consider higher sampling densities where asbestos containing materials are suspected to be present in any soils (e.g., within the footprint or near former demountable structures); and

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Development of an asbestos management plan / unexpected finds protocol for use during earthworks is to be provided in accordance with the outcomes of the Preliminary Site Investigation and incorporated within the CMP.

1.4.12 Bushfire Protection

Compliance with the relevant requirements of the New South Wales Rural Fire Service Bush Fire Safety Authority dated 14 October 2022 (**Appendix 23**).

1.5 Prior to Occupation

1.5.1 Completion Certificate

A Completion Certificate is to be issued by a Certifying Authority prior to the occupation of the buildings/works.

1.5.2 Compliance with BCA

Prior to occupation of the building, the certifying authority must confirm that the building satisfies the relevant provisions of the BCA.

1.5.3 External Walls and Cladding

Prior to the occupation of the building, the Certifying Authority must be provided with documented evidence that the products and systems used in the construction of external walls including finishes and claddings such as synthetic or aluminium composite panels comply with the requirements of the BCA.

1.5.4 Utilities and Services

Prior to the occupation of the building, a compliance certificate under the section 307 of the Water Management Act 2000 must be obtained (if required) and submitted to the Certifying Authority.

1.5.5 Fire Safety Certification

Prior to the occupation of the building a Fire Safety Certificate must be obtained for all the Essential Fire or Other Safety Measures forming part of this consent. A copy of the Fire Safety Certificate must be submitted to the relevant authority. The Fire Safety Certificate must be prominently displayed in the building.

1.5.6 Flood Emergency Plan

An appropriate emergency plan to assist in being prepared for, responding to and recovering from flooding is to be prepared. The NSW SES has a template which can assist in this process: <http://www.sesemergencyplan.com.au/>

1.5.7 Tree Replacement Planting

Tree replacement planting in accordance with the submitted Arborist Report (two (2) trees).

1.5.8 Bushfire Protection (Completion)

Compliance with the relevant requirements of the New South Wales Rural Fire Service Bush Fire Safety Authority dated 14 October 2022 (**Appendix 23**).

1.5.9 Removal of Demountables

Removal of demountables required by Mitigation Measure 1.2.4 of Appendix 18: Mitigation Measures.

1.5.10 Structural Inspection Certificate

Prior to the occupation of the building for the relevant parts of any refurbished building, a Structural Inspection Certificate or a Compliance Certificate must be submitted to the satisfaction of the Certifying Authority. A copy of the Certificate with an electronic set of final drawings (contact approval authority for specific electronic format) must be submitted to the approval authority.

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1.5.11 Noise Management

Installation of the noise management measures detailed in Mitigation Measure 1.6.2 below.

1.6 Operational Mitigation Measures

1.6.1 Bushfire Protection (On-going)

Compliance with the relevant requirements of the New South Wales Rural Fire Service Bush Fire Safety Authority dated 14 October 2022 (**Appendix 23**).

1.6.2 Noise Management

An acoustic barrier to be located around the northern boundary of the proposed plant area. The acoustic barrier must be 2.2m high, comprising a surface density of at least 9kg/m² and be of solid construction with no air gaps at the threshold or at any vertical junction.